



REQUEST FOR PROPOSAL

FOR

TSTC DRAINAGE IMPROVEMENTS

for Waco Campus

TEXAS STATE TECHNICAL COLLEGE

RFP No.: RFP 18-RB-04253003

SUBMITTAL DUE DATE:

Friday, April 13, 2018 at 2:00 P.M. CST

Prepared By:

Rachel Brown,

CTPM, CTCM

Senior Buyer

Texas State Technical College

2650 E. End Blvd. S.

Marshall, Texas 78550

Phone: 903-923-3225

rachel.brown@tstc.edu

Project Physical Address:

Texas State Technical College

3801 Campus Drive

Waco, Texas 76705



REQUEST FOR PROPOSAL COVER SHEET

RFP: 18-RB-42530003 TSTC DRAINAGE IMPROVEMENTS For Waco Campus

The enclosed REQUEST FOR PROPOSAL (RFP) and accompanying documents are for your convenience in submitting a bid for ***"RFP: 18-RB-42530003 Drainage Improvements"***.

Sealed Offers shall be received no later than:

Friday, April 13, 2018 at 2:00 p.m. Central Standard Time

PLEASE MARK ENVELOPE: "RFP: 18-RB-4250003 DRAINAGE IMPROVEMENTS"

DELIVER OFFER TO:

PHYSICAL ADDRESS FOR COURIERS & HAND DELIVERIES

RACHEL BROWN, CTPM, CTCM
SENIOR BUYER-PURCHASING DEPARTMENT
ADMINISTRATIVE BUILDING
TEXAS STATE TECHNICAL COLLEGE
2650 EAST END BLVD S.
MARSHALL, TEXAS 75672

MAILING ADDRESS**

RACHEL BROWN, CTPM, CTCM
SENIOR BUYER-PURCHASING DEPARTMENT
ADMINISTRATIVE BUILDING
TEXAS STATE TECHNICAL COLLEGE
2650 EAST END BLVD S.
MARSHALL, TEXAS 75672

**US Postal Service mailing address

The U.S. mail may not deliver to the physical address shown above. Respondents who prefer to use the U.S. mail may submit their offers using the U.S. Postal Service mailing address shown below.

HOWEVER, packages delivered by the U.S. Postal Service to Texas State Technical College mailing address are subject to delays that may cause a response to be rejected due to missing a solicitation receipt deadline. Responses delivered to the mailing address are routed through the mailroom and may not reach the required location in time for the bid / offer opening.

Respondents using the U.S. mail should take this possible delay into account when using the U.S. mail.

TEXAS STATE TECHNICAL COLLEGE
RETURN LABEL

*******LATE BIDS CANNOT BE ACCEPTED*******

SEALED INVITATION TO BID

RFP#:	18-RB-42530003
OPENING DATE:	FRIDAY, APRIL 13, 2018
OPENING TIME:	2:00 P.M. CENTRAL STANDARD TIME
RFP DESCRIPTION:	DRAINAGE IMPROVEMENT SERVICES

RETURN OFFER TO:	PHYSICAL ADDRESS:
	PURCHASING DEPARTMENT
	ADMIN. BLDG – RACHEL BROWN
	TSTC
	2650 EAST END BLVD S
	MARSHALL, TEXAS 75672

DATED MATERIAL – DELIVER IMMEDIATELY

PLEASE CUT OUT AND AFFIX THE RFP LABEL ABOVE TO THE
OUTER MOST ENVELOPE OF YOUR RESPONSE TO HELP
ENSURE PROPER DELIVERY!

*******LATE BIDS CANNOT BE ACCEPTED*******



BIDDER CERTIFICATION

RFP: 18-RB-42530003 DRAINAGE IMPROVEMENTS

LEGAL NAME OF CONTRACTING COMPANY

FEDERAL I.D. # (COMPANY OR CORPORATION)

SOCIAL SECURITY # (INDIVIDUAL)

TELEPHONE NUMBER

FASCIMILIE NUMBER

CONTACT PERSON

TITLE

COMPLETE MAILING ADDRESS

CITY & STATE

ZIP CODE

COMPLETE STREET ADDRESS

CITY & STATE

ZIP CODE

EMAIL ADDRESS

CERTIFICATION

By my signature hereon, I certify that I have read each and every page of the RFP and attachments. Further, I agree that if my bid is accepted, I shall fully comply in strict accordance with the RFP and the provisions attached herein for the amounts shown on the accompanying Bid Sheet. I am aware that, once accepted by Texas State Technical College, my bid becomes a binding Contract in accordance with the provisions herein of the aforementioned Contract documents, and that I will not be permitted to attempt enforcements of any other Contract or Contract Provisions.

Signature

Date

Typewritten or Printed Name

Title

Statement of No Bid

If you do not intend to bid, please return this form immediately to:

rachel.brown@tstc.edu

We, the undersigned, have declined to bid on Bid/ Proposal# _____

Reason:

_____ Specifications too tight', geared toward one brand or manufacturer (explain)

_____ Insufficient time to respond

_____ Specifications unclear (explain)

_____ We do not offer this product or an equivalent

_____ Our product schedule does not permit us to perform

_____ Unable to meet specifications

_____ Unable to meet bond requirements

Remarks:

We understand this if this "Statement of No Bid" is not executed and returned, our name may be deleted from the list of Qualified bidders.

Company Name: _____

Address: _____

City/State/Zip: _____

Phone: _____

Signature: _____

REQUEST FOR BID PACKAGE CHECKLIST

RFP: 18-RB-42353003 DRAINAGE IMPROVEMENTS

Item checked below represent components, which compromise and are applicable to this bid package, and shall be included with the response. Respondents are asked to review the package to be sure that all applicable parts are included. If any portion of the package is missing, notify the Texas State Technical College Purchasing Department immediately.

It is the bidders' responsibility to be thoroughly familiar with all requirements and specifications. Be sure you understand the following before you return your bid packet. Failure to provide these items may result in rejection of bid.

1. **Cover Sheet**
2. **Package Checklist**
3. **Instruction to Bidders**
4. **Offer Sheet – Must be signed (IN INK) by an authorized representative of the Bidder having the Authority to bind the firm in a contract.**
5. **Standard Terms and Conditions**
6. **Special Requirements**
7. **Bidder / Offer Affirmation**
8. **SDNS / Blocked Persons Affirmation**
9. **Addendum**
10. **Conflict of Interest Questionnaire – Form (CIQ)**
11. **Insurance Requirements**
12. **Return Label**
13. **Attachments: The document below are hereby attached and made part of this package.**
 - Vendor Data Sheet (Offer information and W-9 Form must be completed and returned with offer)

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General Information

1.1 Purpose of the Request

Texas State Technical College (TSTC) (“Owner”) is soliciting competitive sealed proposals (“Proposals”) for TSTC Drainage Improvements on the TSTC Waco campus. (“Project”), in accordance with the terms, conditions, and requirements set forth in this Request for Proposals (“RFP”). This RFP and the Respondent’s submission will be referenced and form part of the Contract Purchase Order issued to the successful Respondent.

1.2 Conflicts of Interest

Actual and Perceived Conflicts

By submitting a Proposal, Respondent represents and warrants that neither it nor its employees and subcontractors have an actual or potential conflict of interest in entering a contract with Owner. Respondent also represents and warrants that entering a contract with Owner will not create the appearance of impropriety. In its Proposal, respondent must disclose any existing or potential conflict of interest that it might have in contracting with Owner. The requirement to disclose any actual or potential conflict of interest will continue during the term of the contract, and will survive until the end of the recordkeeping requirements. The Owner will decide, in its sole discretion, whether an actual or perceived conflict should result in disqualification or contract termination.

Current and Former Employees

In addition to the disclosures required above, respondent must also disclose any of its personnel who are current or former officers or employees of the Owner or who are related, within the third degree of consanguinity (as defined by Texas Government Code 573.023) or within the second degree by affinity (as defined by Texas Government Code 573.025), to any current or former officers or employees of the Owner.

Respondents must comply with all applicable Texas and federal laws and regulations relating to the hiring of former state employees. Such “revolving door” provisions generally restrict former agency heads from communicating with or appearing before the agency on certain matters for two years after leaving the agency. The revolving door provisions also restrict some former employees from representing clients on matters that the employee participated in during state service or matters that were in the employees’ official responsibility. Respondent, by signing this solicitation, certifies that it has complied with all applicable laws and regulations regarding former state employees.

Respondent must identify each employee who works for more than one staffing company at any facility and ensure that the employee’s cumulative weekly hours worked at all state facilities through any one staffing company does not exceed 40 hours per week.

1.3 Submission of Proposal

Pursuant to the provisions of Texas Government Code Title 10 Subtitle D Chapter 2156.121-2158.127, sealed proposals will be received until the date and time established for receipt. After, receipt, only the names of respondents will be made public. Prices and other proposal details will only be divulged after the contract award, if one is made.

TSTC will receive Proposals until Friday, April 13, 2018 at 2:00 P.M. central standard time. Proposals must be time-stamped by TSTC before the hour and date specified. Proposals that are received late will be returned to the respondent unopened.

Proposals will not be received by telephone, fax, or email. Proposals will only be received at the location described below:

**Rachel Brown, CTPM, CTCM
Texas State Technical College
Administrative Building
265 E. End Blvd. S
Marshall, Texas 75672**

Submit one (1) original hard copy and one (1) identical electronic copy of the Proposal and all of its contents. The original Proposal should contain the mark “original” on the Proposal Cover Page. The electronic copy shall be submitted in a USB/Flash Drive or in a CD in the same envelope as the hard-copy original proposal. Proposer must include signatures on both hard copy and electronic copy.

Proposal must be enclosed in a sealed envelope (box or container) addressed as described above. The envelope must clearly identify the RFP number, submittal due date, and the name and return address of the respondent. Proposal and any other information submitted by respondents in response to this RFP shall become the property of the TSTC.

Failure to comply with all requirements contained in this RFP may result in the rejection of the Proposal that are qualified with conditional clauses, alterations, items not called for in the RFP, or irregularities of any kind are subject to rejection.

Properly submitted Proposals will be opened publicly and the names of the respondents will be read aloud. Proposal cannot be altered or amended after opening time. Proposal cannot be withdrawn after opening time without written approval by TSTC based on a written request to withdraw.

Late received Proposals will be returned to the respondent.

1.4 Key Events Schedule

Issuance of RFP.....	Tuesday, March 20, 2018
Pre-Bid Conference and Walk-Through.....	Thursday, March 29, 2018 at 10:00 A.M.
Deadline for Submittal of Questions.....	Friday, April 6, 2018, 11:00 A.M.
Submittal.....	Friday, April 13, 2018, 2:00 P.M.
Proposal Opening.....	Friday, April 13, 2018, 2:30 P.M.
Evaluation& Award (tentative).....	Friday, April 13, 2018 to April 30, 2018

1.5 Clarifications and Interpretations

All questions regarding this RFP must be submitted in writing to Rachel Brown of Procurement Operations, at rachel.brown@tstc.edu **no later than April 6, 2108 at 2:00 PM any clarifications or interpretations of this RFP that materially affect or change its requirements will be issued by TSTC as an addendum.** Addendums can be viewed at <http://esbd.cpa.state.tx.us/> or <http://www.tstc.edu/procurement/home> . All such addenda are issued by TSTC before the Proposals are due as part of the RFP and respondents shall acknowledge receipt of each addendum to the RFP in its Proposal.

Respondents obtaining this RFP are responsible for notifying TSTC that they are in receipt of this RFP and intend to respond. Please send the respondent's name, contact person, address, phone number, fax number, and email to Ratchel Brown, Senior Buyer for Procurement Operations, at rachel.brown@tstc.edu. This information is required in the event addenda are issued. **It is the responsibility of all respondents to obtain addenda in a timely manner. Respondents shall acknowledge receipt of each addendum to the RFP in the Proposal.**

Upon issuance of the RFP, besides written inquiries as described above, other employees and representatives of TSTC will not answer questions or otherwise discuss the contents of the RFP with any potential consultant's representatives. Failure to observe this restriction may result in disqualification of any subsequent response. This restriction does not preclude discussions with TSTC for the purpose of conducting business unrelated to this RFP.

1.6 Evaluation Process

TSTC may select the Proposal that offers the "best value" for the institution based on the published selection criteria and on its ranking evaluation. TSTC may first attempt to negotiate a contract with the selected respondent. TSTC may discuss with the selected respondent options for a scope or time modification and any price change associated with the modification. If TSTC is unable to reach a contract with the selected respondent, TSTC may formally end negotiations with that respondent and proceed to the next "best value" respondent in the order of the selection ranking until a contract is reached or all Proposals are rejected. TSTC is not obligated to select the Respondent offering the most attractive economic terms if that Respondent is not the most advantageous to TSTC overall, as determined by TSTC.

1.7 Exceptions to RFP

The Respondent shall explicitly set forth in this section any assumptions regarding, or exceptions to, any part of this RFP, including the Attachments, noting the specific RFP section number or Attachment Letter. If there are no exceptions, the Respondent shall explicitly state that the Respondent takes no exception to any part of this RFP. **Any exception may result in this RFP not being awarded to the Respondent.**

1.8 Bidding Requirements

Proposal prices must be firm for TSTC acceptance for 90 days from the submittal due date and the RFP Document Submission shall be irrevocable from the close of the call until acceptance by TSTC or the passage of a period of 90 days, whichever shall occur first.

1.9 No Reimbursement for Costs

Respondent acknowledges and accepts that any costs incurred from Respondent's participation in this RFP process shall be at the sole risk and responsibility of the Respondent.

1.10 Taxes

TSTC is exempt from taxes pursuant to the provisions of the *Texas Tax Code*, Chapter 151. Do not include tax in the Proposal. Excise Tax Exemption Certificates are available upon request.

1.11 Reservation of Rights

TSTC may evaluate the Proposal based on the anticipated completion of all or any portion of the Project. TSTC reserves the right to divide the Project into multiple parts, to reject any and all Proposals and re-solicit for new Proposals, or to reject any and all Proposals and temporarily or permanently abandon the Project. TSTC makes no representations, written or oral, that it will enter into any form of agreement with any respondent to this RFP for any project and no such representation is intended or should be construed by the issuance of this RFP.

1.12 Texas Public Information Act

All information, documentation, and other materials submitted in response to this RFP are considered non-confidential and/or non-proprietary and are subject to public disclosure under the Texas Public Information Act (*Texas Government Code*, Chapter 552.001, *et seq.*) after the solicitation is completed. TSTC strictly complies with all statutes, court decisions, and opinions of the Texas Attorney General with respect to disclosure of public information.

1.13 Equal Opportunity

The Respondent must be an equal opportunity employer. No person shall be discriminated against in employment because of race, color, religion, gender, national origin, disability, or age.

1.14 Accuracy of Information

TSTC and its officers, directors, employees and agents assume no responsibility for the accuracy of the information in this document. Should dispute arise regarding the meaning or intent of the Contract Documents, the decision of the TSTC shall be final and binding upon the Contractor.

1.15 Invoices

Original invoices must be submitted monthly in connection with all payments. To be a proper invoice that may be accepted and paid, the invoice must include the following information and/or attachments; Name and address of the Respondent, Respondent's invoice remittance address, Purchase order number authorizing the services, and Detailed breakdown of monthly total price for services to include operating expense plus labor for man-hours worked including, as applicable, the time period, guard's individual hours, signed time sheets as supporting documentation, and any other related documentation to show proof of hours documented for payment. Invoices should be received no later than the (15) fifteenth day of every month. Each invoice is subject to review and approval by TSTC before payment will be processed. Normal payment processing time for services which have been completed, delivered to, and approved by TSTC is thirty (30) calendar days after receipt of a valid, uncontested invoice. TSTC will incur no penalty for late payment if payment is made in thirty (30) or fewer days from receipt of goods or services and an uncontested invoice. Payments shall be made consistent with Chapter 2251, Texas Government Code. Any invoice that does not comply with the minimum requirements stated above may not be considered valid and may be subject to rejection and/or return to the contractor. Invoices shall be submitted on approved AIA schedule of value and certified by the contractor and Engineer.

Invoices shall be submitted by mail to:
Texas State Technical College
Accounts Payable
3801 Campus Drive
Waco, Texas 76705

1.16 Insurance

Contractor will obtain and maintain in force for the duration of the contract and any extensions thereof, at Contractor's sole expense, and to cause its agents, suppliers and permitted subcontractors (if any) to maintain at their sole expense the following insurance coverage for the duration of the contract, in at least the amounts specified:

Workers Compensation:	Statutory Limits	
General Liability:	Each occurrence	\$1,000,000
	Personal Injury	\$1,000,000
	General Aggregate	\$2,000,000
	Product Liability	\$1,000,000
	EBL	\$1,000,000
Automobile Liability	Each Accident	\$1,000,000
Umbrella Liability	Each Occurrence	\$5,000,000
Professional Liability	Each Occurrence	\$5,000,000
All other insurance required by state or federal law		

All policies (except Workers' Compensation) shall name TSTC as an Additional Insured. A Waiver of Subrogation in favor of TSTC and thirty (30) day notice of cancellation is required on all policies. Certificates of insurance verifying the foregoing requirements shall be provided to TSTC prior to commencement of any services under the contract. If a policy contains deductible provisions, Contractor shall be responsible for payment of the deductible amount for any claim(s) or the pursuit of any claim(s) or asserted claim(s) against TSTC, its agents, employees or representatives.

CONTRACTOR ACKNOWLEDGES AND UNDERSTANDS THAT TSTC DOES NOT MAINTAIN AND WILL NOT OBTAIN INSURANCE OF ANY TYPE TO PROTECT CONTRACTOR AGAINST ANY LOSS, DAMAGE OR INJURY THAT MAY IN ANY WAY RESULT FROM CONTRACTOR'S PERFORMANCE OF THE SERVICES.

1.17 Indemnification

THE CONTRACTOR FOR ITSELF, ITS SUCCESSORS, SERVANTS, EMPLOYEES, AGENTS, OFFICERS, DIRECTORS, SUBCONTRACTORS AND ASSIGNS SHALL AT ALL TIMES INDEMNIFY AND HOLD HARMLESS TSTC, ITS OFFICERS, DIRECTORS, SUCCESSORS, ASSIGNS, AGENTS, SERVANTS AND EMPLOYEES FROM ANY AND ALL CLAIMS, DEMANDS, CAUSES OF ACTION, DAMAGES, COSTS, EXPENSES, LEGAL FEES AND DISBURSEMENTS AND OBLIGATIONS OF ANY NATURE WHATSOEVER, KNOWN OR UNKNOWN, IN LAW OR IN EQUITY, WHETHER BASED UPON, OCCASIONED BY, ARISING OUT OF, OR ATTRIBUTABLE TO THE CONTRACTOR'S CONTRACT WITH TSTC OR ANY SERVICES PROVIDED, OR ANY PRIVILEGE GRANTED OR ACTION TAKEN OR THING DONE OR MAINTAINED BY VIRTUE OF THE EXISTENCE OF THE SAID CONTRACT OR THE EXERCISE OF ANY RIGHT ARISING THEREUNDER.

1.18 HISTORICALLY UNDERUTILIZED BUSINESSES SUBMITTAL REQUIREMENTS

It is the policy of Texas State Technical College to promote and encourage contracting and subcontracting opportunities for Historically Underutilized Businesses (HUB) in all contracts. Accordingly, TSTC has adopted the State's policy on Utilization of Historically Underutilized Businesses. The Policy applies to all contracts with an expected value of \$100,000 or more. If TSTC determines that subcontracting opportunities are probable, then a HUB Subcontracting Plan is a required element of the Qualifications and Proposal. Failure to submit a required HUB Subcontracting Plan will result in rejection of the Qualifications and Proposal.

1.18.1 Statement of Probability

Texas State Technical College, has determined that subcontracting opportunities are probable in connection with this procurement solicitation. Therefore, a HUB Subcontracting Plan (HSP) is required as a part of the respondent's Qualifications and Proposal. HUB plans should be submitted at the time of the RFP. A HUB Subcontracting Plan (**Included as a separate attachment**) must be filled out and returned with the Proposal to be considered responsive. **If the Proposal does not include a HUB Subcontracting Plan, it shall be rejected as a material failure to comply with advertised specifications. The HUB Subcontracting plan will need to be updated as subcontracts are awarded in the RFP process.**

1.19 Alternative Dispute Resolution

To the extent that Chapter 2260, *Texas Government Code*, as it may be amended from time to time ("Chapter 2260"), will be applicable to the Contract and is not preempted by other applicable law, the dispute resolution process provided for in Chapter 2260 shall be used, as further described herein, by TSTC and Contractor to attempt to resolve any claim for breach of contract made by Contractor.

1.20 Confidential Information

All information owned, possessed or used by TSTC that is communicated to, learned, developed or otherwise acquired by Contractor in the performance of services for TSTC, that is not generally known to the public, will be confidential and Contractor will not, beginning on the date of first association or communication between TSTC and Contractor and continuing throughout the term of the contract and any time thereafter, disclose, communicate or divulge, or permit disclosure, communication or divulgence, to another or use for Contractor's own benefit or the benefit of another, any confidential information, unless required by law.

Except when defined as part of the Services, Contractor will not make any press releases, public statements, or advertisement referring to the Services or the engagement of Contractor as an independent contractor of TSTC in connection with the Services, or release any information relative to the Services for publication, advertisement or any other purpose without the prior written approval of TSTC. Contractor will obtain assurances similar to those contained in this Section from persons, contractors, and subcontractors retained by Contractor.

1.21 Governing Law

The contract and all of the rights and obligations of the parties hereto and all of the terms and conditions hereof will be construed, interpreted and applied in accordance with and governed by and enforced under the laws of the State of Texas.

1.22 Licenses, Permits, Taxes, Fees, Laws and Regulations

Contractor warrants that it will obtain, maintain in effect, and pay the cost for all licenses, permits, or certifications that may be necessary for Contractor's performance of the contract.

Contractor will be responsible for the payment of all taxes, excises, fees, payroll deductions, employee benefits (if any), fines, penalties or other payments required by federal, state, or local law or regulation in connection with Contractor's performance of the contract.

Contractor will comply with, and will be responsible for requiring its officers and employees to comply with, all applicable federal, state, and local laws and regulations, and the rules and regulations of TSTC.

2. Scope of Services

2.1 Overview

Texas State Technical College (TSTC) ("Owner") is soliciting statements of proposals ("Proposals") for TSTC Drainage Improvements in Waco, Texas ("Project"), in accordance with the terms, conditions, and requirements set forth in this Request for Proposals ("RFP").

2.2 Contractor Responsibilities

The purpose of this Request for Proposals (RFP) is to engage a Proposer to furnish materials, labor, and equipment required to complete this project in accordance with the plans and specifications developed by Walker Partners, LLC.

2.3 Documentation

Monitoring the performance of service will be completed based upon contract negotiations.

2.4 Contract Administration

Selby Holder will be the Contract Manager for this project.

2.5 Change or Addition to Scope of Services

TSTC, without invalidating the contract, may make changes by altering, adding to, or deduction from the Scope of Services at any time during the term of the contract in order to meet current TSTC needs. The Contract pricing shall be adjusted accordingly, upon mutual agreement between TSTC and Contractor. Should TSTC request additional services during the term of the Contract, an agreement to provide these services at the same price as quoted will be understood as included in the Respondent's submission.

3. Proposal Format

3.1 Cover Page

The Proposal Cover Page, Attachment A, should be the first page of your Proposal. The Proposal Cover Page must be signed by a person authorized to sign for Respondent.

3.2 Execution of Offer

The Execution of Offer Pages, Attachment B, should be the second page of your Proposal. **The Execution of Offer must be signed by a person authorized to sign for Respondent and submitted with RFP.**

3.3 Table of Contents

A Table of Contents should be the third page of your Proposal. The Table of Contents shall give page numbers for each section of the Proposal. Number all pages of the Proposal sequentially using Arabic numerals (1, 2, 3, etc.).

3.4 Proposal Contents

Responses to this RFP must address the following:

The proposal should be no more than 20 (twenty) 8 1/2" x 11" typed pages. The Cover Page, Execution of Offer, Table of Contents and Cover Letter will not be counted in the twenty page limit. The proposal should clearly set forth:

- 1) the proposer's organizational and financial stability and ability to perform, 2) the proposer's experience on similar projects, 3) the proposer's experience with and knowledge of local conditions related to construction of this project, 4) the proposer's recent, within the past 5 years, references from similar completed projects.

Insurance

Proposer will provide proof of insurance within 10 days of award. Proposer not providing or meeting TSTC's minimum requirements will not be included for consideration of the award of the project.

References

- a. Provide information required on the following tables:

TABLE 1 – GENERAL INFORMATION		Open Cut	Prime or Sub (circle one)	
A. COMPANY DATA				
Organization Doing Business:				
Business Address:				
Telephone Number:				
Fax Number:				
Form of Business:	Corporation	Partnership	Individual	Joint Venture
IF A CORPORATION				
Date of Incorporation:				
State Incorporated:				
President's Name:				
Vice President's Name:				
IF A PARTNERSHIP				
Date of Organization:				
Type	General	Limited		
IF AN INDIVIDUAL				
Name:				
Business Address:				
IF A JOINT VENTURE				
Name of Manager:				
Name of Firm:				
Name of Individual Companies:				
B. BUSINESS INFORMATION				
Current Number of Full Time Employees:		Past Year's Revenues:		
Average Number of Projects Annually:		Average Construction Cost of Project:		
C. DIVISION OF WORK BETWEEN CONTRACTOR AND SUBCONTRACTORS				
1. List work that will be provided by Proposer (Prime Contractor) using its own resources.				
2. List work that will be provided by Subcontractors on this project.				

TABLE 1 – GENERAL INFORMATION		Trenchless		Prime or Sub (circle one)	
A. COMPANY DATA					
Organization Doing Business:					
Business Address:					
Telephone Number:					
Fax Number:					
Form of Business:		Corporation	Partnership	Individual	Joint Venture
IF A CORPORATION					
Date of Incorporation:					
State Incorporated:					
President's Name:					
Vice President's Name:					
IF A PARTNERSHIP					
Date of Organization:					
Type		General		Limited	
IF AN INDIVIDUAL					
Name:					
Business Address:					
IF A JOINT VENTURE					
Name of Manager:					
Name of Firm:					
Name of Individual Companies:					
B. BUSINESS INFORMATION					
Current Number of Full Time Employees:			Past Year's Revenues:		
Average Number of Projects Annually:			Average Construction Cost of Project:		
C. DIVISION OF WORK BETWEEN CONTRACTOR AND SUBCONTRACTORS					
1. List work that will be provided by Proposer (Prime Contractor) using its own resources.					
2. List work that will be provided by Subcontractors on this project.					

TABLE 2 – SIMILAR PROJECTS COMPLETED WITHIN LAST 5 YEARS				
REFERENCE PROJECT 1				
Project Description				
Owner	Project Name	Contract Amount	Date Completed	% Change Orders
Owner's Reference Information				
Name	Title	Organization	Telephone	E-Mail
Engineer's Reference Information				
Name	Title	Company	Telephone	E-Mail
REFERENCE PROJECT 2				
Project Description				
Owner	Project Name	Contract Amount	Date Completed	% Change Orders
Owner's Reference Information				
Name	Title	Organization	Telephone	E-Mail
Engineer's Reference Information				
Name	Title	Company	Telephone	E-Mail
REFERENCE PROJECT 3				
Project Description				
Owner	Project Name	Contract Amount	Date Completed	% Change Orders
Owner's Reference Information				
Name	Title	Organization	Telephone	E-Mail
Engineer's Reference Information				
Name	Title	Company	Telephone	E-Mail

TABLE 2 – SIMILAR PROJECTS COMPLETED WITHIN LAST 5 YEARS				
REFERENCE PROJECT 1				
Project Description				
Owner	Project Name	Contract Amount	Date Completed	% Change Orders
Owner's Reference Information				
Name	Title	Organization	Telephone	E-Mail
Engineer's Reference Information				
Name	Title	Company	Telephone	E-Mail
REFERENCE PROJECT 2				
Project Description				
Owner	Project Name	Contract Amount	Date Completed	% Change Orders
Owner's Reference Information				
Name	Title	Organization	Telephone	E-Mail
Engineer's Reference Information				
Name	Title	Company	Telephone	E-Mail
REFERENCE PROJECT 3				
Project Description				
Owner	Project Name	Contract Amount	Date Completed	% Change Orders
Owner's Reference Information				
Name	Title	Organization	Telephone	E-Mail
Engineer's Reference Information				
Name	Title	Company	Telephone	E-Mail

TABLE 3 – PROPOSED KEY PERSONNEL	
PROJECT MANAGER	
Name of Project Manager	
Years of Experience as PM	
Number of Similar Projects as PM with this company	
Number of Similar Projects with other companies (PM)	
Current Assignments	
% of time dedicated to this project	
PROJECT SUPERINTENDENT	
Name of Superintendent	
Years of Experience as Superintendent	
Number of Similar Projects as Super with this company	
Number of Similar Project with other companies (Super)	
Current Assignments	
% of time dedicated to this project	

TABLE 4 – PROPOSED KEY PERSONNEL		Trenchless
PROJECT MANAGER		
Name of Project Manager		
Years of Experience as PM		
Number of Similar Projects as PM with this company		
Number of Similar Projects with other companies (PM)		
Current Assignments		
% of time dedicated to this project		
PROJECT SUPERINTENDENT		
Name of Superintendent		
Is Superintendent certified in writing by manufacturer of the pipe bursting system as having successfully completed training?		
Does Superintendent have a minimum 3 years of field installation experience operating and maintaining all pipe bursting equipment to be used?		
Years of Experience as Superintendent		
Number of Similar Projects as Super with this company		
Number of Similar Project with other companies (Super)		
Current Assignments		
% of time dedicated to this project		

- b. Describe your firm’s past performance on other contracts for any of the Texas State Technical College locations.

4. Proposal Selection Criteria

The evaluation of the Proposals shall be based upon the requirements described in the RFP. All the properly submitted Proposals will be reviewed, evaluated, and ranked by the Owner.

An evaluation team from TSTC will evaluate the Proposal. The evaluation of Proposal and the selection of a respondent will be based on the information provided by Respondent in its Proposal. TSTC may give consideration to additional information if TSTC deems such information relevant.

The criteria to be considered by TSTC in evaluating Proposal and selecting a Contractor will be those factors listed below:

Threshold Criteria Not Scored:

- Ability of TSTC to comply with laws regarding Historically Underutilized Businesses; and
- Ability of TSTC to comply with laws regarding purchases from persons with disabilities.

	Scored Criteria:	Points:
1.	Financial and Organizational stability and ability to perform	10%
2.	Project teams' experience including sub consultants on similar projects	20%
3.	Knowledge and experience with local conditions related to construction	15%
4.	Experience on similar technical education projects and experience with TSTC or relative owners	15%
5.	References on previous projects	5%
6.	Proposed Cost and Completion Time	15%
7.	Completeness and Organization of Request for Proposal	5%
8.	Proposal must be signed and dated by an Authorized Representative	5%
	Total	100%

5. Attachments for this RFP

Attachment A – Proposal Cover Page

Attachment B – Execution of Offer

(Must be submitted with Proposal)

Attachment C – Terms & Conditions

Attachment D – Conflict of Interest

(Must be submitted with Proposal)

Attachment E – Sample Agreement between Owner and Contractor

Attachment F – Plans and Specifications

Attachment G – HUB Subcontracting Plan **(Must be submitted with Proposal as a separate attachment)**

Attachment H – General Conditions

Attachment I - Project Specifications

Attachment A - Proposal Cover Page

TEXAS STATE TECHNICAL COLLEGE
TSTC DRAINAGE IMPROVEMENTS
FOR WACO
RFP No.: 18-RB-42530003

FIRM NAME: _____

ADDRESS: _____

CITY, STATE, ZIP _____

TELEPHONE: _____ FAX: _____

E-MAIL: _____

FEDERAL EMPLOYER ID #: _____ or SS # (if sole owner): _____

TEXAS CHARTER # IF APPLICABLE: _____

IS YOUR COMPANY A HUB VENDOR? _____ WHAT CATEGORY? _____

Pricing: Based on best approach for the project. Please provide on an additional sheet the breakdown or details for lump sum total of the task listed on Proposal Form. (I.E. Bulk Material, Rental Equipment – If applicable, Labor, Miscellaneous Material, and etc.)

Total Lump Sum for Completion of Project: \$ _____

I certify to (a) the completeness, veracity, and accuracy of the information provided in the Proposal; and (b) the authority to bind the proposer to the terms and conditions set forth in this RFP. Signing a proposal with a false statement is a material breach of contract and shall void the submitted proposal or any resulting contract and the respondent shall be removed from all bids lists.

Firm name: _____

By: _____

Printed Name: _____

Title: _____

Date: _____

Attachment B – Execution of Offer

**TEXAS STATE TECHNICAL COLLEGE
TSTC DRAINAGE IMPROVEMENTS
FOR WACO
RFP No.: 18-RB-42530003**

NOTE TO RESPONDENTS: SUBMIT ENTIRE SECTION WITH RESPONSE.

THIS EXECUTION OF OFFER MUST BE COMPLETED, SIGNED, AND RETURNED WITH THE RESPONDENT'S PROPOSAL. FAILURE TO COMPLETE, SIGN AND RETURN THIS EXECUTION OF OFFER WITH THE PROPOSAL MAY RESULT IN REJECTION OF THE PROPOSAL.

SIGNING A FALSE STATEMENT MAY VOID THE SUBMITTED PROPOSAL OR ANY AGREEMENTS OR OTHER CONTRACTUAL ARRANGEMENTS, WHICH MAY RESULT FROM THE SUBMISSION OF RESPONDENT'S PROPOSAL, AND THE RESPONDENT MAY BE REMOVED FROM ALL PROPOSER LISTS. A FALSE CERTIFICATION SHALL BE DEEMED A MATERIAL BREACH OF CONTRACT AND, AT OWNER'S OPTION, MAY RESULT IN TERMINATION OF ANY RESULTING CONTRACT OR PURCHASE ORDER.

- A. By signature hereon, Respondent acknowledges and agrees that (1) this RFP is a solicitation for Proposals and is not a contract or an offer to contract; (2) the submission of Proposals by Respondent in response to this RFP will not create a contract between the Owner and Respondent; (3) the Owner has made no representation or warranty, written or oral, that one or more contracts with the Owner will be awarded under this RFP; and (4) Respondent shall bear, as its sole risk and responsibility, any cost which arises from Respondent's preparation of a response to this RFP.
- B. By signature hereon, Respondent offers and agrees to furnish to the Owner the products and/or services more particularly described in its Proposals, and to comply with all terms, conditions and requirements set forth in the RFP documents and contained herein.
- C. By signature hereon, Respondent affirms that he has not given, nor intends to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor or service to a public servant in connection with the submitted Proposal.
- D. By signature hereon, a corporate Respondent certifies that it is not currently delinquent in the payment of any Franchise Taxes due under Chapter 171, Texas Tax Code, or that the corporate Respondent is exempt from the payment of such taxes, or that the corporate Respondent is an out-of-state corporation that is not subject to the Texas Franchise Tax, whichever is applicable.
- E. By signature hereon, the Respondent hereby certifies that neither the Respondent nor the firm, corporation, partnership or Owner represented by the Respondent, or anyone acting for such firm, corporation, or institution has violated the antitrust laws of this state, codified in Section 15.01, et. seq., Texas Business and Commerce Code, or the Federal antitrust laws, nor communicated directly or indirectly the Qualifications made to any competitor or any other person engaged in such line of business.
- F. By signature hereon, Respondent represents and warrants that:

1. Respondent is a reputable company regularly engaged in providing products and/or services necessary to meet the terms, conditions and requirements of the RFP;
 2. Respondent has the necessary experience, knowledge, abilities, skills, and resources to satisfactorily perform the terms, conditions and requirements of the RFP;
 3. Respondent is aware of, is fully informed about, and is in full compliance with all applicable federal, state and local laws, rules, regulations and ordinances;
 4. Respondent understands (i) the requirements and specifications set forth in this RFP and (ii) the terms and conditions set forth in the Contract under which Respondent will be required to operate;
 5. Respondent, if selected by the Owner, will maintain insurance as required by the Contract;
 6. All statements, information and representations prepared and submitted in response to this RFP are current, complete, true and accurate. Respondent acknowledges that the Owner will rely on such statements, information and representations in selecting the successful Respondent. If selected by the Owner as the successful Respondent, Respondent will notify the Owner immediately of any material change in any matters with regard to which Respondent has made a statement or representation or provided information.
- G. By signature hereon, Respondent certifies that the individual signing this document and the documents made part of the RFP is authorized to sign such documents on behalf of the company and to bind the company under any agreements or other contractual arrangements, which may result from the submission of Respondent's Proposal.
- H. By signature hereon, Respondent certifies that if a Texas address is shown as the address of the Respondent, Respondent qualifies as a Texas Resident Respondent as defined in Rule 1 TAC 111.2.
- I. By signature hereon, Respondent certifies as follows:
1. "Under Section 231.006, Texas Family Code, the vendor or applicant certifies that the individual or business entity named in this contract, RFP, or application is not ineligible to receive the specified grant, loan, or payment and acknowledges that this contract may be terminated and payment may be withheld if this certification is inaccurate."
 2. "Under Section 2155.004, *Texas Government Code*, the vendor or applicant certifies that the individual or business entity named in this RFP or contract is not ineligible to receive the specified contract and acknowledges that this contract may be terminated and payment withheld if this certification is inaccurate."
 3. "Under Section 2254.004, *Texas Government Code*, the vendor or applicant certifies that each individual or business entity which is an engineer or Engineer proposed by Respondent as a member of its team was selected based on demonstrated competence and qualifications only."
- J. By signature hereon, Respondent certifies that no relationship, whether by relative, business associate, capital funding agreement or by any other such kinship exist between Respondent and an employee of any Texas State Technical College component, or Respondent has not been an employee of any Texas State Technical College component within the immediate twelve (12) months prior to your RFP

response. All such disclosures will be subject to administrative review and approval prior to the Owner entering into any contract with Respondent.

- K. By signature hereon, Respondent affirms that no compensation has been received for participation in the preparation of the specifications for this RFP. (Ref. Section 2155.004 Texas Government Code).
- L. Respondent represents and warrants that all articles and services quoted in response to this RFP meet or exceed the safety standards established and promulgated under the Federal Occupational Safety and Health Law (Public Law 91-596) and its regulations in effect or proposed as of the date of this solicitation.
- M. By signature hereon, Respondent signifies his compliance with all federal laws and regulations pertaining to Equal Employment Opportunities and Affirmative Action.
- N. By signature hereon, Respondent agrees to defend, indemnify, and hold harmless the State of Texas, all of its officers, agents and employees from and against all claims, actions, suits, demands, proceedings, costs, damages, and liabilities, arising out of, connected with, or resulting from any acts or omissions of Respondent or any agent, employee, subcontractor, or supplier of Respondent in the execution or performance of any agreements or other contractual arrangements which may result from the submission of Respondent's Proposal.
- O. By signature hereon, Respondent agrees that any payments that may become due under any agreements or other contractual arrangements, which may result from the submission of Respondent's Proposal, will be applied towards any debt including, but not limited to, delinquent taxes and child support that is owed to the State of Texas.
- P. By signature hereon, Respondent certifies that no member of the Board of Regents of Texas State Technical College, or the Executive Officers of Texas State Technical College or its component institutions, has a financial interest, directly or indirectly, in the transaction that is the subject of the contract.

Execution of Offer: RFP No.:18-RB-4253003
TSTC DRAINAGE IMPROVEMENTS
FOR WACO

The Respondent must complete, sign and return this Execution of Offer as part of their submittal response. The Respondent’s company official(s) who are authorized to commit to such a submittal must sign submittals. Failure to sign and return this form will subject the submittal to disqualification.

The undersigned, having carefully examined the specifications, drawings, and related documents entitled:

TSTC DRAINAGE IMPROVEMENTS

All as prepared by Walker Partners, LLC. 600 W. Austin Ave. Waco, Texas 76701 as well as all other conditions affecting the cost and/or execution of the work, proposes to furnish all materials, labor, and equipment necessary to complete the work in accordance with said documents, of which this proposal is a part, for the following sum:

Item No.	Description	Est Qty	Units	Unit Price	Total Amount
GENERAL CONDITIONS					
0.01	MOBILIZATION	1	LS	_____	_____
0.02	STORMWATER POLLUTION PREVENTION PLAN	1	LS	_____	_____
0.03	STORMWATER POLLUTION PREVENTION IMPLEMENTATION	1	LS	_____	_____
GENERAL CONDITIONS SUBTOTAL CONSTRUCTION COST (BASE BID)				_____	
AREA 3: MEYERS LANE TO CONCORD - CONCRETE CHANNEL (BASE BID)					
3.01	CLEARING (METHOD B)	250	LF	_____	_____
3.02	EXCAVATION (CHANNEL) (METHOD A)	46	CY	_____	_____
3.03	BERMUDA BROADCAST SEEDING (METHOD A)	560	SY	_____	_____
3.04	5-INCH CONCRETE RIPRAP	1,228	SY	_____	_____
3.05	4" ROAD GRAVEL (COURSE AGGREGATE TYPE A3)	1,228	SY	_____	_____
AREA 3 SUBTOTAL CONSTRUCTION COST (BASE BID)				_____	
AREA 4: MEYERS LANE TO CONCORD - EARTHEN CHANNEL (BASE BID)					
4.01	CLEARING (METHOD B)	845	LF	_____	_____
4.02	EXCAVATION (CHANNEL) (METHOD A)	597	CY	_____	_____
4.03	BERMUDA BROADCAST SEEDING (METHOD A)	4,955	SY	_____	_____
4.04	SOIL RETENTION BLANKET (CL 1) (TY A)	4,955	SY	_____	_____
AREA 4 SUBTOTAL CONSTRUCTION COST (BASE BID)				_____	

AREA 5: CAMPUS DRAINAGE CHANNEL (BASE BID)

5.01	REMOVE CONCRETE PILOT CHANNEL	170	LF	-	_____
5.02	DITCH GRADING	170	LF	-	_____
5.03	5-INCH CONCRETE RIPRAP	520	SY	-	_____
5.04	BERMUDA BROADCAST SEEDING (METHOD A)	380	SY	-	_____
5.05	4" ROAD GRAVEL (COURSE AGGREGATE TYPE A3)	520	SY	-	_____

AREA 5 SUBTOTAL CONSTRUCTION COST (BASE BID) _____

TOTAL CONSTRUCTION COST (BASE BID) _____

TOTAL CALENDAR DAYS TO COMPLETE BASE BID WORK _____

ADDITIVE ALTERNATE 1 - AREA 1: CARSWELL DRAINAGE CHANNEL (MID-CAMPUS)

A1.01	REMOVE CONCRETE PILOT CHANNEL	555	LF	-	_____
A1.02	BERMUDA BROADCAST SEEDING (METHOD A)	1,270	SY	-	_____
A1.03	CONCRETE PILOT CHANNEL	570	LF	-	_____
A1.04	4" ROAD GRAVEL (COURSE AGGREGATE TYPE A3)	255	SY	-	_____

AREA 1 TOTAL CONSTRUCTION COST (ADDITIVE ALTERNATE 1) _____

TOTAL CALENDAR DAYS TO COMPLETE ADD. ALTERNATE 1 WORK _____

ADDITIVE ALTERNATE 2 - AREA 5: CAMPUS DRAINAGE CHANNEL

A2.01	REMOVE CONCRETE PILOT CHANNEL	410	LF	-	_____
A2.02	DITCH GRADING	445	LF	-	_____
A2.03	5-INCH CONCRETE RIPRAP	1,680	SY	-	_____
A2.04	BERMUDA BROADCAST SEEDING (METHOD A)	910	SY	-	_____
AS.05	4" ROAD GRAVEL (COURSE AGGREGATE TYPE A3)	1,680	SY	-	_____

AREA 5 TOTAL CONSTRUCTION COST (ADDITIVE ALTERNATE 2) _____

TOTAL CALENDAR DAYS TO COMPLETE ADD, ALTERNATE 2 WORK _____

(**Note:** All amounts shall be shown in both written and figure form. In case of discrepancy between the written amount and the figure, the written amount will govern. For alternates, check whether it is an add, deduct or no change.)

We have included, in the Proposal sum, all material and contingency allowances described in Section 01200 – PRICE AND PAYMENT PROCEDURES.

If the contract is bid with alternates, TSTC reserves the right to select any combination of alternates and will then compare all bids using the selected alternates. If the amount of the bids exceeds the funds available to finance the contract, TSTC may (i) reject all bids or (ii) may award the contract based on the base bid with such deductions as produces a net total which is available within the available funds.

The undersigned acknowledges receipt of addenda to the Drawings and Project Manual as follows:

No. _____ Date _____ No. _____ Date _____ No. _____ Date _____

No. _____ Date _____ No. _____ Date _____ No. _____ Date _____

(The Proposer is to fill in I.D. Number and date of each thereby acknowledging receipt of Addenda).

If awarded the contract, the undersigned agrees to commence work under this contract (See Notice to Proceed) and to substantially complete the project within _____ (Proposer to fill in days) calendar days from said commencement date, unless modified by change order.

Proposer agrees to pay the Owner \$500.00 per day, as liquidated damages, for each day the substantial completion of this project extends beyond the stipulated substantial completion date.

If notified of the acceptance of this proposal within thirty (30) days of the time set for the opening of

proposals, proposer agrees within ten (10) days of notification, to execute a contract in the form of the Standard Form of Agreement Between Owner and Contractor where the Basis of Payment Is a Stipulated Sum, as amended for the above work, for the above stated compensation.

Respectfully Submitted,

Respondent's Name: _____

Respondent's State of Texas Tax Account No.: _____
(This 11 digit number is mandatory)

If a Corporation:

Respondent's State of Incorporation: _____

Respondent's Charter No: _____

Identify each person who owns at least 25% of the Respondent's business entity by name:

(Name)

(Name)

(Name)

(Name)

Submitted and Certified By:

(Respondent's Name)

(Title)

(Street Address)

(Telephone Number)

(City, State, Zip Code)

(Fax Number)

(Authorized Signature)

(Date)

Attachment C: Terms and Conditions

ITEMS BELOW APPLY TO AND BECOME A PART OF TERMS AND CONDITIONS OF RFP, ANY EXCEPTIONS THERE TO MUST BE IN WRITING.

A. BIDDING REQUIREMENTS

1. Proposers must comply with all rules, regulations and statutes relating to purchasing in the State of Texas in addition to the requirements of this form.
2. RFP should be submitted on this form. RFP must be time stamped at ordering agency on or before the hour and date specified for the RFP opening.
3. Late and/or unsigned RFP will not be considered under any circumstances. Person signing RFP must have the authority to bind the firm in a contract.
4. RFP should give Payee ID Number, full firm name and address of proposer on the face of this form. Enter in the space provided, if not shown. Additionally, firm name should appear on each continuation page of a RFP, in the block provided in the upper right hand corner. The Payee ID Number is the taxpayer number assigned and used by the Comptroller of Public Accounts of Texas. If this number is not known, complete the following:

Enter Federal Employer's Identification Number

Sole owner should also enter Social Security Number

5. RFP cannot be altered or amended after opening time. Alterations made before opening time should be initialed by proposer or his authorized agent. No RFP can be withdrawn after opening time without approval by TSTC based on an acceptable written reason.
6. TSTC reserves the right to accept or reject all or any part of any kind, waive minor technicalities and award the RFP to best serve the interests of TSTC.
7. Consistent and continued tie bidding could cause rejection of RFP by TSTC and/or investigation for antitrust violations.
8. TSTC shall not be responsible for failure of electronic equipment or operator error. Late illegible, incomplete, or otherwise non-responsive RFP'S will not be considered.

B. VENDOR ASSIGNMENTS

Vendor hereby assigns to ordering agency any and all claims for overcharges associated with this contract arising under the antitrust laws of the United States 15 U.S.C.A. Section 1, et seq. (1973), and the antitrust laws of the State of Texas, TEX. Bus. & Comm. Code Ann. Sec. 15.01, et seq. (1967). Inquiries pertaining to RFPs must give the requisition number, codes, and opening date.

C. BIDDER AFFIRMATION

Signing this RFP with a false statement is a material breach of contract and shall void the submitted RFP or any resulting contracts, and the vendor shall be removed from all bid lists.

1. The proposer has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted RFP.
2. Neither the proposer nor the firm, corporation, partnership, or institution represented by the proposer, or anyone acting for such firm, corporation or institution has violated the antitrust laws of this State or the Federal Antitrust Laws (see section 9, above), nor communicated directly or indirectly the RFP made to any competitor or any other person engaged in such line of business.
3. Pursuant to Section 2155.004 Government Code the proposer has not received compensation for participation in the preparation of the specifications for this RFP.
4. Pursuant to Section 231.006(d), Family Code (relating to child support), the proposer certifies that the individual or business entity named in this RFP is not ineligible to receive this specified payment and acknowledges that this contract may be terminated and payment may be withheld if this certification is inaccurate.
5. Under Section 2155.004 Government Code the proposer certifies that the individual or business entity named in this RFP is not ineligible to receive the specified contract and acknowledges that this contract may be terminated and/or payment withheld if this certification is inaccurate.
6. The Contractor shall defend, indemnify, and hold harmless TSTC, all of its officers, agents and employees from and against all claims, actions, suits, demands, proceedings, costs, damages, and liabilities, arising out of, connected with, or resulting from any acts or commissions of contractor or any agent, employee, subcontractor, or supplier of contractor in the execution or performance of this contract.
7. Proposer agrees that any payments due under this will be applied towards any debt, including but not limited to delinquent taxes and child support that is owed to the State of Texas.
8. Proposer certifies that they are in compliance with section 669.003 of the Government Code, relating to contracting with executive head of a State agency. If section 669.003 applies proposer will complete the following information in order for the RFP to be evaluated:

Name of Former executive: _____

Name of State agency: _____

Date of separation from State agency: _____

Date of Employment with proposer: _____

9. Proposer agrees to comply with government Code 2155.4441, pertaining to service contract use of products in the State of Texas.

11. Pursuant to Section 231.006©, Family Code,

RFP must include names and Social Security Numbers of each person with at least 25% ownership of the business entity submitting the RFP. Attach name & social security numbers for each person. This information must be provided prior to contract award.

12. NOTE TO PROPOSER:

Any terms and conditions attached to a RFP will not be considered unless specifically referred to on this RFP form and may result in disqualification of the RFP. The dispute resolution process provided for in chapter 2260 of the Texas Government Code must be used by the ordering agency and the contractor to attempt to resolve all disputes arising under this contract. Any legal actions must be filed in McLennan County or Travis County, Texas will be the proper place of venue for suit on or in respect of the any future Agreement.

13. BEST VALUE CRITERIA

- the quality, availability, and adaptability of the supplies, materials, equipment, or contractual services to the particular use required;
- the number and scope of conditions attached to the RFP;
- the ability, capacity, and skill of the proposer to perform the contract or provide the service required;
- whether the proposer can perform the contract or provide the service promptly, or within the time required, without delay or interference;
- the character, responsibility, integrity, reputation, and experience of the proposer;
- proximity of the proposer's office to the site, and is there a firm principal at the local office, and how much of the design work will be done at the local office;
- related to the above, how close are the proposer's sub-consultants to the site, and are there firm principals at the local sub-consultants' offices, and how much of the design work will be done at the local sub-consultants' offices;
- the quality of performance of previous contracts or services;
- any previous or existing noncompliance by the proposer with specification requirements relating to time of submission of specified data such as samples, models, drawings, certificates, or other information; the sufficiency of the financial resources and ability of the proposer to perform the contract or provide the service;
- and the ability of the proposer to provide future maintenance, repair parts, and service for the use of the contract.
- The purchase price:
- Any relevant criteria specifically listed in the RFP or request for proposals.

PAYMENT BOND

SuretyBondNo. _____

STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF

§

That we, _____, as
Principal, and _____, as
Surety, are hereby held and firmly bound unto the State of Texas as Obligee in the penal
sum of _____
(\$ _____) for the payment whereof, the said Principal and Surety bind themselves, their
heirs, executors, administrators, and successors, jointly and severally, firmly by these
presents.

The conditions of this obligation are such that whereas the Principal entered into a
certain contract, hereto attached, and made a part hereof, with the State of Texas, acting by
and through the Board of Regents of Texas State Technical College System for and on
behalf of _____,
_____, dated _____

(Project No. _____).

NOW, THEREFORE, the condition of this obligation is such that, if the Principal shall
promptly make payments to all claimants as defined in Section 2253.021, Texas Government
Code, as amended, of all persons supplying labor and materials in the prosecution of the
work provided for in said contract, then this obligation shall be null and void, but otherwise it
shall remain in full force and effect.

In the event that the Principal fails to promptly pay when due persons who have
supplied labor, materials, or supplies used in the performance of the said contract, the Surety
will, upon receipt of notice from the State of Texas or a claim in the form required by law,
satisfy all undisputed balances due, and make arrangements satisfactory to the interested
parties to resolve all amounts disputed in good faith, but in no event shall the liability of the
Surety for the Principal's failure to promptly pay for labor, materials, or supplies exceed the
penalty of this bond.

This Surety agrees to pay the State of Texas upon demand all loss and expense,
including attorney's fees, incurred by the State of Texas by reason or on account of any
breach of this obligation by Surety.

Provided further, that this bond is made and entered into for the protection of all
claimants supplying labor and material in the prosecution of the work provided for in said
Contract, and all such claimants shall have a direct right of action under the bond as provided
in Section 2253.021, Texas Government Code, as amended. If any legal action is filed upon
this bond, venue shall be in the county where the said Contract is to be performed.

By signature hereon, if the amount of this bond exceeds \$100,000, then the Surety attests that at the time the bond was executed (and Surety shall provide the Obligee with evidence of the following):

- (1) it was a holder of a certificate of authority from the United States Secretary of the Treasury to qualify as a surety on obligations permitted or required under federal law; or
- (2) had reinsured any liability in excess of \$100,000 by a reinsurer holding a certificate of authority from the United States Secretary of the Treasury.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals this _____ day of _____ in the year _____, the name and corporate seal of each corporate party being hereto affixed, and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

(SEAL)

Principal

ATTEST:

By: _____

By: _____

(Typed Name and Title)

(Typed Name and Title)

(SEAL)

Surety

ATTEST:

By: _____

By: _____

(Typed Name and Title)

(Typed Name and Title)

Surety's Texas Local Recording Agent or Resident Agent:

Surety's Home Office Agent or Servicing Agent:

(Signature)

Name: _____

(Typed Name)

Title: _____

License No. _____

Attachment D - Conflict of Interest Questionnaire

CONFLICT OF INTEREST QUESTIONNAIRE For vendor or other person doing business with local governmental entity	FORM CIQ
<p>This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session.</p> <p>This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person meets requirements under Section 176.006(a).</p> <p>By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.</p> <p>A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.</p>	<p style="text-align: center; margin: 0;">OFFICE USE ONLY</p> <p style="margin: 5px 0 0 5px;">Date Received</p>
<p>1 Name of person who has a business relationship with local governmental entity.</p>	
<p>2 <input type="checkbox"/> Check this box if you are filing an update to a previously filed questionnaire.</p> <p style="margin-left: 40px;">(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)</p>	
<p>3 Name of local government officer with whom filer has employment or business relationship.</p> <p style="text-align: center; margin: 10px 0 0 100px;">_____</p> <p style="text-align: center; margin: 0 0 0 100px;">Name of Officer</p> <p style="margin-top: 10px;">This section (item 3 including subparts A, B, C & D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.</p> <p>A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire?</p> <p style="margin-left: 40px;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?</p> <p style="margin-left: 40px;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?</p> <p style="margin-left: 40px;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>D. Describe each employment or business relationship with the local government officer named in this section.</p>	
<p>4</p> <p style="margin-top: 20px;">_____</p> <p style="margin-left: 40px;">Signature of person doing business with the governmental entity</p> <p style="margin-left: 300px;">_____</p> <p style="margin-left: 280px;">Date</p>	

Attachment E – SAMPLE AGREEMENT BETWEEN OWNER AND CONTRACTOR

CONTRACT NO. _____

This Agreement is made the 1st day of May, in the year 2017, by and between _____, hereinafter called the Contractor, and Texas State Technical College (TSTC), an institution of higher education and an agency of the State of Texas, hereinafter called the Owner.

WITNESSETH, that the Contractor and the Owner, for the consideration hereinafter named, agree as follows:

ARTICLE 1. SCOPE OF WORK: The Contractor shall furnish all of the materials and perform all of the work shown on the drawings and described in the specifications for the project entitled “**TSTC Water & Wastewater Line Replacement**” in Waco, Texas” (Project No. _____). The Construction Drawings and Specifications were prepared by TSTC Waco physical Plant. TSTC’s 2012 Uniform General Conditions (UGC) are incorporated by reference for all purposes, and attached hereto as **Exhibit 1**. The Contractor shall do everything required by this Agreement, the Uniform General Conditions, the Special Conditions, the Addenda, the Specifications, the Drawings, the Proposal (attached as **Exhibit 2**, including any unit prices stated therein), and the Historically Underutilized Business (HUB) Subcontracting Plan (attached as **Exhibit 3, if applicable**)

ALTERNATES: The following Alternate Proposals, fully described in the Specifications, are included as a part of this Contract: NONE

ARTICLE 2. TIME OF COMPLETION: The Owner shall provide a Notice to Proceed in which a date for commencement of the work shall be stated; such commencement date shall be 10 or more days after the date of the notice. The Contractor shall achieve substantial completion of the work within Twenty One (21) calendar days after such commencement date; as such completion date may be extended by approved Change Orders. The time set forth for completion of the work is an essential element of the Contract.

ARTICLE 3. THE CONTRACT SUM: The Owner shall pay the Contractor for performance of the Contract, subject to additions and deductions provided therein, the sum of **XXXX XXXX** Dollars and No Cents (\$XX.xxxx), and make payment on account as hereinafter provided.

ARTICLE 4. HUB SUBCONTRACTING PLAN: The Owner has adopted a Policy on Utilization of Historically Underutilized Business ("Policy"), which is incorporated herein by reference. Contractor, as a provision of the Agreement must comply with the requirements of the Policy and adhere to the HUB Subcontracting Plan submitted with Contractor's Proposal and attached as **Exhibit 3**. No changes to the HUB Subcontracting Plan can be made by the Contractor without the prior written approval of the Owner in accordance with the Policy.

ARTICLE 5. DEFAULT: Owner may, by written notice of default to the Contractor terminate this Agreement, in whole or in part, for cause if the Contractor fails to perform in full compliance with the contract requirements, through no fault of Owner. Owner will provide a thirty (30) day written notice of termination to the Contractor (delivered by certified mail, return receipt requested) of intent to terminate, and Owner will provide the Contractor with an opportunity for consultation with Owner prior to termination.

ARTICLE 6. LIQUIDATED DAMAGES: For each consecutive calendar day after the substantial completion period set forth in Article 2 above that any work, including the correction of deficiencies found during the final testing and inspection, is not completed, the amount of Five Hundred Dollars (\$500) will be deducted

from the money due or becomes due the Contractor, not as a penalty but as liquidated damages representing the parties' estimate at the time of contract execution of the damages which the Owner will sustain for late completion.

ARTICLE 7. CERTIFICATION OF NO ASBESTOS CONTAINING MATERIALS OR WORK:

The Contractor shall provide a certification statement, included with each materials submittal, stating that no asbestos containing materials or work is included within the scope of the proposed submittal.

The Contractor shall insure that Texas Department of Health licensed individuals, consultants or companies are used for any required asbestos work including asbestos inspection, asbestos abatement plans/specifications, asbestos abatement, asbestos project management and third-party asbestos monitoring.

The Contractor shall provide at Substantial Completion, a notarized affidavit to the Owner and the Engineer stating that no asbestos containing materials or work was provided, installed, furnished or added to the Project.

The Contractor shall take whatever measures he deems necessary to insure that all employees, suppliers, fabricators, materialmen, subcontractors, or their assigns, comply with this requirement.

All materials used on this Project shall be certified as non-Asbestos Containing Building Materials (ACBM). The Contractor shall insure compliance with the following acts from all of his subcontractors and assigns:

Asbestos Hazard Emergency Response Act (AHERA—40 CFR 763-99 (7));

National Emission Standards for Hazardous Air Pollutants (NESHAP—EPA 40 CFR 61, National Emission Standard for Asbestos)

Texas Asbestos Health Protection Rules (TAHRP—Tex. Admin. Code Title 25, Part 1, Ch. 295C, Asbestos Health Protection)

Every subcontractor shall provide a notarized statement that no ACBM has been used, provided, or left on this Project.

The Contractor shall provide, in hard copy and electronic form, all necessary material safety data sheets (MSDS) of all products used in the construction of the Project to the Texas Department of Health licensed inspector or Project Engineer who will compile the information from the MSDS and, finding no asbestos in any of the product, make a certification statement.

At Final Completion the Contractor shall provide a notarized certification statement per TAC Title 25 Part 1, Ch. 295.34, par. c.1 that no ACBM was used during construction of the Project.

ARTICLE 8. INDEPENDENT CONTRACTOR: Both parties hereto, in the performance of this contract, shall act in an individual capacity and not as agents, employees, partners, joint ventures or associates of one another. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purpose whatsoever. The Contractor shall be responsible for providing all necessary unemployment and workers' compensation insurance for the Contractor's employees.

ARTICLE 9. INSURANCE: The Contractor shall procure and maintain, at its expense, during the term of the contract or any extensions thereof, insurance as listed below. Insurance shall be written by companies

acceptable to Owner and authorized to do business in the State of Texas. Policies shall include terms and provisions indicated below. The Contractor shall provide and furnish evidence of the following insurance:

Workers Compensation – Minimum coverage for employer liability in the amount of One Million Dollars (\$1,000,000.00) per occurrence and One Million Dollars (\$1,000,000.00) annual aggregate;

Business Automobile Liability Insurance - Minimum coverage for employer liability in the amount of One Million Dollars (\$1,000,000.00) per occurrence;

Comprehensive General Liability - Minimum coverage for employer liability in the amount of One Million Dollars (\$1,000,000.00) per occurrence and Two Million Dollars (\$2,000,000.00) annual aggregate.

Contractor shall obtain and maintain in full force at all times during the term of this contract insurance coverage naming the State of Texas, acting through Texas State Technical College Waco, as an additional insured and loss payee on its policies described above.

Each policy of required insurance shall provide for ten (10) days written notice of cancellation to Owner and include the following provisions: “It is a condition of this policy that the Company shall furnish written notice to Texas State Technical College Waco, 3801 Campus Drive, Waco, Texas 76705 ten (10) days in advance of any reduction in, or cancellation of this policy.”

Insurance shall be effective and evidence of acceptable insurance furnished to Owner prior to commencing any operations under this Agreement.

ARTICLE 10. BONDS: Contractor is required to tender to Owner, prior to commencing the Work, performance and payment bonds, as required by Chapter 2253, *Texas Government Code*.

Each bond shall be executed by a corporate surety or sureties authorized to do business in the State of Texas and acceptable to Owner, on Owner’s form, and in compliance with the relevant provisions of the *Texas Insurance Code*. If any bond is for more than ten (10) percent of the surety’s capital and surplus, Owner may require certification that the company has reinsured the excess portion with one or more reinsurers authorized to do business in the State. A reinsurer may not reinsure for more than ten (10) percent of its capital and surplus. If a surety upon a bond loses its authority to do business in the State, Contractor shall, within thirty (30) days after such loss, furnish a replacement bond at no added cost to Owner.

Contractor shall provide Performance and Payment bonds before the execution of this Agreement. Each bond shall be accompanied by a valid power of attorney (issued by the surety company and attached, signed and sealed with the corporate embossed seal, to the bond) authorizing the attorney-in-fact who signs the bond to commit the company to the terms of the bond, and stating any limit in the amount for which the attorney can issue a single bond.

IF FOR ANY REASON A STATUTORY PAYMENT OR PERFORMANCE BOND IS NOT HONORED BY THE SURETY, CONTRACTOR SHALL FULLY INDEMNIFY AND HOLD OWNER HARMLESS OF AND FROM ANY COSTS, LOSSES, OBLIGATIONS OR LIABILITIES IT INCURS AS A RESULT.

ARTICLE 11. ACCEPTANCE OF BID OR AWARD OF CONTRACT: By signing this Agreement, the undersigned certifies as follows:

Assignment. This Agreement is a personal service contract for the services of Construction, and Contractor’s

interest in this Agreement, duties hereunder and/or fees due hereunder may not be assigned or delegated to a third party.

Records of expenses pertaining to Additional Services and services performed on the basis of a Worker Wage Rate or Monthly Salary Rate shall be kept on the basis of generally accepted accounting principles and in accordance with cost accounting standards promulgated by the Federal Office of Management and Budget Cost Accounting Standards Board and shall be available for audit by the Owner or the Owner's authorized representative on reasonable notice.

Family Code Child Support Certification. Pursuant to Section 231.006, Texas Family Code, Contractor certifies that it is not ineligible to receive the specified grant, loan or payment and acknowledges that this contract may be terminated and payment may be withheld if this certification is inaccurate.

Background Checks. Contractor is required to do a Department of Public Safety background check on each and every person on the project site. The Contractor also ensures that any employees or assigns that are noted on the Department of Public Safety background reporting are in compliance with federal laws and the laws of the State of Texas.

Access and Identification. All personnel, while on the project site, must have all of the following:

1. A valid State of Texas ID or driver's license.
2. A photo ID bearing:
 - a. the name of the company for which the individual works,
 - b. the individual's name,
 - c. a recent photo of the individual.

Sexual Offender Search. TSTC recognizes that some sexual offenders, after having served their sentence, are no longer considered to be a threat to society, and the State of Texas has approved them to work in Higher Educational environments. The Respondent ensures that it, and all of its subcontractors and assigns that will be on TSTC property have been searched on the Texas Public Sex Offender Registry. The Contractor also ensures that any employees or assigns that are on the Texas Public Sex Offender Registry or any other state or federal sexual offender registry are in compliance with federal laws and the laws of the State of Texas regarding sexual offenders. The Texas Public Sex Offender Registry website is: <https://records.txdps.state.tx.us/SexOffender>. The National Sex Offender Public Website is: <http://www.nsopw.gov/>. Any employees, subcontractors, or assigns that are shown on the sexual offender registries must be documented. Documentation shall include explanation and verification of any employees, assigns or subcontractors that appear on the sexual offender lists; and show that those on the lists have met the requirements of the State of Texas to work on the property of higher education facilities.

Eligibility Certification. Pursuant to Section 2155.004, Texas Government Code, Contractor certifies that the individual or business entity named in this Agreement is not ineligible to receive the award of or payments under this Agreement and acknowledges that this Agreement may be terminated and payment withheld if this certification is inaccurate.

Franchise Tax Certification. A corporate or limited liability company Contractor certifies that it is not currently delinquent in the payment of any Franchise Taxes due under Chapter 171 of the Texas Tax Code, or that the corporation or limited liability company is exempt from the payment of such taxes, or that the corporation or limited liability company is an out-of-state corporation or limited liability company that is not subject to the Texas Franchise Tax, whichever is applicable.

Payment of Debt or Delinquency to the State. Pursuant to Sections 2107.008 and 2252.903, Texas Government Code, Contractor agrees that any payments owing to Contractor under this Agreement may be

applied directly toward any debt or delinquency that Contractor owes the State of Texas or any agency of the State of Texas regardless of when it arises, until such debt or delinquency is paid in full.

Entire Agreement; Modifications. This Agreement supersedes all prior agreements, written or oral, between Contractor and Owner and shall constitute the entire Agreement and understanding between the parties with respect to the Project. This Agreement and each of its provisions shall be binding upon the parties and may not be waived, modified, amended or altered except by a writing signed by Contractor and Owner.

Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together will constitute one and the same agreement. Signatures to this Agreement transmitted by facsimile transmission, by electronic mail in "portable document format" (.pdf) form, or by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, will have the same effect as physical delivery of the paper document bearing the original signature.

Captions. The captions of paragraphs in this Agreement are for convenience only and shall not be considered or referred to in resolving questions of interpretation or construction.

Governing Law and Venue. This Agreement and all of the rights and obligations of the parties and all of the terms and conditions shall be construed, interpreted and applied in accordance with and governed by and enforced under the laws of the State of Texas without reference to its conflicts of law provisions. The county where the Project is located shall be the sole place of venue for any legal action arising from or related to this Agreement or the Project in which the Owner is a party.

Waivers. No delay or omission by either party in exercising any right or power arising from non-compliance or failure of performance by the other party with any of the provisions of this Agreement shall impair or constitute a waiver of any such right or power. A waiver by either party of any covenant or condition of this Agreement shall not be construed as a waiver of any subsequent breach of that or of any other covenant or condition of the Agreement.

Binding Effect. This Agreement shall be binding upon and inure to the benefit of the parties and their respective permitted assigns and successors.

Appointment. Owner hereby expressly reserves the right from time to time to designate by notice to Contractor a representative(s) to act partially or wholly for Owner in connection with the performance of Owner's obligations. Contractor shall act only upon instructions from the designated representative(s) unless otherwise specifically notified to the contrary.

Records. Records of Contractor's costs, reimbursable expenses pertaining to the Project and payments shall be available to Owner or its authorized representative during business hours and shall be retained for four (4) years after final Payment or abandonment of the Project, unless Owner otherwise instructs Contractor in writing.

Notices. All notices, consents, approvals, demands, requests or other communications relied on by the parties shall be in writing. Written notice shall be deemed to have been given when delivered in person to the designated representative of the Contractor or Owner for whom it is intended; or sent by U. S. Mail to the last known business address of the designated representative; or transmitted by fax machine to the last known business fax number of the designated representative. Mail notices are deemed effective upon receipt or on the third business day after the date of mailing, whichever is sooner. Fax notices are deemed effective the next business day after faxing.

Severability. Should any term or provision of this Agreement be held invalid or unenforceable in any respect,

the remaining terms and provisions shall not be affected and this Agreement shall be construed as if the invalid or unenforceable term or provision had never been included.

Illegal Dumping. The Contractor shall ensure that it and all of its Subcontractors and assigns prevent illegal dumping of litter in accordance with Title 5, Texas Health and Safety Code, Chapter 365.

Conflict of Interest. Contractor certifies that no member of the Board of Regents of Texas State Technical College, the Owner, or Executive Officers, including component institutions, has a financial interest, directly or indirectly, in the transaction that is the subject of this contract.

Antitrust. Contractor represents and warrants that neither Contractor nor any firm, corporation, partnership, or institution represented by Contractor, or anyone acting for such firm, corporation or institution has (1) violated the antitrust laws of the State of Texas under Tex. Bus. & Com. Code, Chapter 15, or the federal antitrust laws; or (2) communicated directly or indirectly the Proposal to any competitor or any other person engaged in such line of business during the procurement process for this contract.

Ethics Matters. No Financial Interest. Contractor and its employees, agents, representatives and subcontractors have read and understand TSTC's Purchasing Authority Policy (FA 1.16) available at <http://www.tstc.edu/governance/fa>, TSTC's Fraudulent Use of Assets and Resources Police (GA 1.15) available at <http://www.tstc.edu/governance/ga>, TSTC's Ethics and Standards of Conduct Policy (HR 2.1.12) available at <http://www.tstc.edu/governance/hr>, Texas Government Code 2261.252 and all applicable state ethics laws. Neither Contractor nor its employees, agents, representatives or subcontractors will assist or cause TSTC employees to violate TSTC's Policies or any applicable state ethics law or rule. Contractor represents and warrants that no member of the Board of Regents of TSTC has a direct or indirect financial interest in the transaction that is the subject of this Agreement.

ARTICLE 12. INDEMNIFICATION

CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE STATE OF TEXAS, ITS OFFICERS AND EMPLOYEES, AND TEXAS STATE TECHNICAL COLLEGE WACO, THE TEXAS STATE TECHNICAL COLLEGE SYSTEM, IT OFFICERS, REGENTS, EMPLOYEES AND CONTRACTORS, FROM AND AGAINST ALL CLAIMS, ACTIONS, SUITS, DEMANDS, PROCEEDINGS, COSTS, DAMAGES, AND LIABILITIES, INCLUDING WITHOUT LIMITATION ATTORNEYS' FEES AND COURT COSTS, ARISING OUT OF, CONNECTED WITH, OR RESULTING FROM ANY ACTS OR OMISSIONS OF CONTRACTOR OR ANY AGENT, EMPLOYEE, SUBCONTRACTOR, OR SUPPLIER OF CONTRACTOR IN THE EXECUTION OR PERFORMANCE OF THIS CONTRACT. CONTRACTOR SHALL COORDINATE ITS DEFENSE WITH THE TEXAS ATTORNEY GENERAL AS REQUESTED BY TEXAS STATE TECHNICAL COLLEGE WACO.

THIS PARAGRAPH IS NOT INTENDED TO AND SHALL NOT BE CONSTRUED TO REQUIRE CONTRACTOR TO INDEMNIFY OR HOLD HARMLESS THE STATE OR TEXAS STATE TECHNICAL COLLEGE WACO OR TEXAS STATE TECHNICAL COLLEGE SYSTEM FOR ANY CLAIMS OR LIABILITIES RESULTING FROM THE NEGLIGENT ACTS OR OMISSION OF TEXAS STATE TECHNICAL COLLEGE WACO, TEXAS STATE TECHNICAL COLLEGE SYSTEM OR ITS EMPLOYEES.

ARTICLE 13. BREACH OF CONTRACT CLAIMS:

- (a) To the extent that Chapter 2260, *Texas Government Code*, as it may be amended from time to time ("Chapter 2260"), is applicable to this Agreement and is not preempted by other applicable law, the

dispute resolution process provided for in Chapter 2260 shall be used, as further described herein, by Owner and Contractor to attempt to resolve any claim for breach of contract made by Contractor:

- i. Contractor's claims for breach of this Agreement that the parties cannot resolve pursuant to other provisions of this Agreement or in the ordinary course of business shall be submitted to the negotiation process provided in subchapter B of Chapter 2260. To initiate the process, Contractor shall submit written notice, as required by subchapter B of Chapter 2260, to Owner in accordance with the notice provisions in this Contract. Contractor's notice shall specifically state that the provisions of subchapter B of Chapter 2260 are being invoked, the date and nature of the event giving rise to the claim, the specific Agreement provision that Owner allegedly breached, the amount of damages Contractor seeks, and the method used to calculate the damages. Compliance by Contractor with subchapter B of Chapter 2260 is a required prerequisite to Contractor's filing of a contested case proceeding under subchapter C of Chapter 2260. The Chief Business Officer of Owner, or such other officer of Owner as may be designated from time to time by Owner by written notice thereof to Contractor in accordance with the notice provisions in this Contract, shall examine Contractor's claim and any counterclaim and negotiate with Contractor in an effort to resolve such claims.
 - ii. If the parties are unable to resolve their disputes under subparagraph (a.) of this section, the contested case process provided in subchapter C of Chapter 2260 is Contractor's sole and exclusive process for seeking a remedy for any and all of Contractor's claims for breach of this Agreement by Owner.
 - iii. Compliance with the contested case process provided in subchapter C of Chapter 2260 is a required prerequisite to seeking consent to sue from the Legislature under Chapter 107 of the Texas Civil Practices and Remedies Code. The parties hereto specifically agree that (1) neither the execution of this Agreement by Owner nor any other conduct, action or inaction of any representative of Owner relating to this Agreement constitutes or is intended to constitute a waiver of Owner's or the state's sovereign immunity to suit and (2) Owner has not waived its right to seek redress in the courts.
- (b) The submission, processing and resolution of Contractor's claim is governed by the published rules adopted by the Texas Attorney General pursuant to Chapter 2260, as currently effective, hereafter enacted or subsequently amended. Owner and Contractor agree that any periods set forth in this Agreement for notice and cure of defaults are not waived.

ARTICLE 14. TEXAS PUBLIC INFORMATION ACT: Notwithstanding any provisions of this Agreement to the contrary, the Contractor understands that Owner will comply with the Texas Public Information Act, Chapter 552, *Texas Government Code*, as interpreted by judicial opinions and opinions of the Attorney General of the State of Texas. Owner agrees to notify Contractor of a request for information related to Contractor's work under this Agreement. The Contractor will cooperate with Owner in the production of documents responsive to the request. The Contractor may request that Owner seek an opinion from the Attorney General of the State of Texas. However, Owner will not honor Contractor's request for an opinion if the request is not based upon a reasonable interpretation of the Texas Public Information Act. Additionally, the Contractor will notify Owner's General Counsel of receipt of any third party requests for information that was provided by the State of Texas for use in conducting this Agreement. This Agreement and all data and other information generated or otherwise obtained in the performance of its responsibilities under this Agreement may be subject to the Texas Public Information Act. Contractor agrees to maintain the confidentiality of information received from the State of Texas during the performance of this Agreement, including information which discloses confidential personal information particularly, but not limited to, social security numbers.

BY SIGNING THE SIGNATURE PAGE BELOW, the Parties have executed and bound themselves to this Agreement as of the day and year first above written.

SIGNATURE PAGE

(SEAL)

ATTEST:

CONTRACTOR:

By: _____
(original signature)

(name and title printed)

By: _____
(original signature)

(name and title printed)

(company name printed)

Date: _____

Date: _____

CONTENT PREPARED BY:

TSTC:

By: _____
(original signature)

By: _____
(original signature)

Name: Selby Holder
Title: Director of Facilities

Name: Kevin Dorton
Title: Vice President of Administrative
Services, TSTC Waco

Date: _____

Date: _____

FORM APPROVED:

By: _____
(original signature)

Susan Shafer
Associate General Counsel
Texas State Technical College Waco

Date: _____

Attachment F – PLANS AND SPECIFICATIONS

Due to the size of the file, plans will not be attached to this request for proposal. Below is a link to download the plans if interested in submitting for this proposal



HUB Subcontracting Plan (HSP) QUICK CHECKLIST

While this HSP Quick Checklist is being provided to merely assist you in readily identifying the sections of the HSP form that you will need to complete, it is very important that you adhere to the instructions in the HSP form and instructions provided by the contracting agency.

➤ **If you will be awarding all of the subcontracting work you have to offer under the contract to only Texas certified HUB vendors, complete:**

- Section 1 - Respondent and Requisition Information
- Section 2 a. - Yes, I will be subcontracting portions of the contract.
- Section 2 b. - List all the portions of work you will subcontract, and indicate the percentage of the contract you expect to award to Texas certified HUB vendors.
- Section 2 c. - Yes
- Section 4 - Affirmation
- GFE Method A (Attachment A) - Complete an Attachment A for each of the subcontracting opportunities you listed in Section 2 b.

➤ **If you will be subcontracting any portion of the contract to Texas certified HUB vendors and Non-HUB vendors, and the aggregate percentage of all the subcontracting work you will be awarding to the Texas certified HUB vendors with which you do not have a continuous contract* in place for more than five (5) years meets or exceeds the HUB Goal the contracting agency identified in the "Agency Special Instructions/Additional Requirements", complete:**

- Section 1 - Respondent and Requisition Information
- Section 2 a. - Yes, I will be subcontracting portions of the contract.
- Section 2 b. - List all the portions of work you will subcontract, and indicate the percentage of the contract you expect to award to Texas certified HUB vendors and Non-HUB vendors.
- Section 2 c. - No
- Section 2 d. - Yes
- Section 4 - Affirmation
- GFE Method A (Attachment A) - Complete an Attachment A for each of the subcontracting opportunities you listed in Section 2 b.

➤ **If you will be subcontracting any portion of the contract to Texas certified HUB vendors and Non-HUB vendors or only to Non-HUB vendors, and the aggregate percentage of all the subcontracting work you will be awarding to the Texas certified HUB vendors with which you do not have a continuous contract* in place for more than five (5) years does not meet or exceed the HUB Goal the contracting agency identified in the "Agency Special Instructions/Additional Requirements", complete:**

- Section 1 - Respondent and Requisition Information
- Section 2 a. - Yes, I will be subcontracting portions of the contract.
- Section 2 b. - List all the portions of work you will subcontract, and indicate the percentage of the contract you expect to award to Texas certified HUB vendors and Non-HUB vendors.
- Section 2 c. - No
- Section 2 d. - No
- Section 4 - Affirmation
- GFE Method B (Attachment B) - Complete an Attachment B for each of the subcontracting opportunities you listed in Section 2 b.

➤ **If you will not be subcontracting any portion of the contract and will be fulfilling the entire contract with your own resources (i.e., employees, supplies, materials and/or equipment), complete:**

- Section 1 - Respondent and Requisition Information
- Section 2 a. - No, I will not be subcontracting any portion of the contract, and I will be fulfilling the entire contract with my own resources.
- Section 3 - Self Performing Justification
- Section 4 - Affirmation

***Continuous Contract:** Any existing written agreement (including any renewals that are exercised) between a prime contractor and a HUB vendor, where the HUB vendor provides the prime contractor with goods or service, to include under the same contract for a specified period of time. The frequency the HUB vendor is utilized or paid during the term of the contract is not relevant to whether the contract is considered continuous. Two or more contracts that run concurrently or overlap one another for different periods of time are considered by CPA to be individual contracts rather than renewals or extensions to the original contract. In such situations the prime contractor and HUB vendor are entering (have entered) into "new" contracts.



HUB Subcontracting Plan (HSP)

In accordance with Texas Gov't Code §2161.252, the contracting agency has determined that subcontracting opportunities are probable under this contract. Therefore, all respondents, including State of Texas certified Historically Underutilized Businesses (HUBs) must complete and submit this State of Texas HUB Subcontracting Plan (HSP) with their response to the bid requisition (solicitation).

NOTE: Responses that do not include a completed HSP shall be rejected pursuant to Texas Gov't Code §2161.252(b).

The HUB Program promotes equal business opportunities for economically disadvantaged persons to contract with the State of Texas in accordance with the goals specified in the 2009 State of Texas Disparity Study. The statewide HUB goals defined in 34 Texas Administrative Code (TAC) §20.13 are:

- **11.2 percent for heavy construction other than building contracts,**
- **21.1 percent for all building construction, including general contractors and operative builders' contracts,**
- **32.9 percent for all special trade construction contracts,**
- **23.7 percent for professional services contracts,**
- **26.0 percent for all other services contracts, and**
- **21.1 percent for commodities contracts.**

- - Agency Special Instructions/Additional Requirements - -

*In accordance with 34 TAC §20.14(d)(1)(D)(iii), a respondent (prime contractor) may demonstrate good faith effort to utilize Texas certified HUBs for its subcontracting opportunities if the total value of the respondent's subcontracts with Texas certified HUBs meets or exceeds the statewide HUB goal or the agency specific HUB goal, whichever is higher. When a respondent uses this method to demonstrate good faith effort, the respondent must identify the HUBs with which it will subcontract. If using existing contracts with Texas certified HUBs to satisfy this requirement, only the aggregate percentage of the contracts expected to be subcontracted to HUBs with which the respondent **does not** have a **continuous contract*** in place for **more than five (5) years** shall qualify for meeting the HUB goal. This limitation is designed to encourage vendor rotation as recommended by the 2009 Texas Disparity Study.*

SECTION 1: RESPONDENT AND REQUISITION INFORMATION

a. Respondent (Company) Name: _____ State of Texas VID #: _____

Point of Contact: _____ Phone #: _____

E-mail Address: _____ Fax #: _____

b. Is your company a State of Texas certified HUB? - Yes - No

c. Requisition #: _____ Bid Open Date: _____

(mm/dd/yyyy)

Enter your company's name here: _____ Requisition #: _____

SECTION 2: RESPONDENT'S SUBCONTRACTING INTENTIONS

After dividing the contract work into reasonable lots or portions to the extent consistent with prudent industry practices, and taking into consideration the scope of work to be performed under the proposed contract, including all potential subcontracting opportunities, the respondent must determine what portions of work, **including contracted staffing, goods and services will be subcontracted**. Note: In accordance with 34 TAC §20.11, a "Subcontractor" means a person who contracts with a prime contractor to work, to supply commodities, or to contribute toward completing work for a governmental entity.

- a. Check the appropriate box (Yes or No) that identifies your subcontracting intentions:
 - **Yes**, I will be subcontracting portions of the contract. (If **Yes**, complete Item b of this SECTION and continue to Item c of this SECTION.)
 - **No**, I will not be subcontracting any portion of the contract, and I will be fulfilling the entire contract with my own resources, including employees, goods and services. (If **No**, continue to SECTION 3 and SECTION 4.)
- b. List all the portions of work (subcontracting opportunities) you will subcontract. Also, based on the total value of the contract, identify the percentages of the contract you expect to award to Texas certified HUBs, and the percentage of the contract you expect to award to vendors that are not a Texas certified HUB (i.e., Non-HUB).

Item #	Subcontracting Opportunity Description	HUBs		Non-HUBs
		Percentage of the contract expected to be subcontracted to HUBs with which you do not have a continuous contract* in place for more than five (5) years .	Percentage of the contract expected to be subcontracted to HUBs with which you have a continuous contract* in place for more than five (5) years .	Percentage of the contract expected to be subcontracted to non-HUBs.
1		%	%	%
2		%	%	%
3		%	%	%
4		%	%	%
5		%	%	%
6		%	%	%
7		%	%	%
8		%	%	%
9		%	%	%
10		%	%	%
11		%	%	%
12		%	%	%
13		%	%	%
14		%	%	%
15		%	%	%
Aggregate percentages of the contract expected to be subcontracted:		%	%	%

(Note: If you have more than fifteen subcontracting opportunities, a continuation sheet is available online at <https://www.comptroller.texas.gov/purchasing/vendor/hub/forms.php>.)

- c. Check the appropriate box (Yes or No) that indicates whether you will be using **only** Texas certified HUBs to perform **all** of the subcontracting opportunities you listed in SECTION 2, Item b.
 - **Yes** (If **Yes**, continue to SECTION 4 and complete an "HSP Good Faith Effort - Method A (Attachment A)" for **each** of the subcontracting opportunities you listed.)
 - **No** (If **No**, continue to Item d, of this SECTION.)
- d. Check the appropriate box (Yes or No) that indicates whether the aggregate expected percentage of the contract you will subcontract **with Texas certified HUBs** with which you **do not** have a **continuous contract*** in place with for **more than five (5) years**, **meets or exceeds** the HUB goal the contracting agency identified on page 1 in the **"Agency Special Instructions/Additional Requirements."**
 - **Yes** (If **Yes**, continue to SECTION 4 and complete an "HSP Good Faith Effort - Method A (Attachment A)" for **each** of the subcontracting opportunities you listed.)
 - **No** (If **No**, continue to SECTION 4 and complete an "HSP Good Faith Effort - Method B (Attachment B)" for **each** of the subcontracting opportunities you listed.)

***Continuous Contract:** Any existing written agreement (including any renewals that are exercised) between a prime contractor and a HUB vendor, where the HUB vendor provides the prime contractor with goods or service under the same contract for a specified period of time. The frequency the HUB vendor is utilized or paid during the term of the contract is not relevant to whether the contract is considered continuous. Two or more contracts that run concurrently or overlap one another for different periods of time are considered by CPA to be individual contracts rather than renewals or extensions to the original contract. In such situations the prime contractor and HUB vendor are entering (have entered) into "new" contracts.

Enter your company's name here: _____

Requisition #: _____

SECTION 2: RESPONDENT'S SUBCONTRACTING INTENTIONS (CONTINUATION SHEET)

This page can be used as a continuation sheet to the HSP Form's page 2, Section 2, Item b. Continue listing the portions of work (subcontracting opportunities) you will subcontract. Also, based on the total value of the contract, identify the percentages of the contract you expect to award to Texas certified HUBs, and the percentage of the contract you expect to award to vendors that are not a Texas certified HUB (i.e., Non-HUB).

Item #	Subcontracting Opportunity Description	HUBs		Non-HUBs
		Percentage of the contract expected to be subcontracted to HUBs with which you do not have a continuous contract* in place for more than five (5) years.	Percentage of the contract expected to be subcontracted to HUBs with which you have a continuous contract* in place for more than five (5) years.	Percentage of the contract expected to be subcontracted to non-HUBs.
16		%	%	%
17		%	%	%
18		%	%	%
19		%	%	%
20		%	%	%
21		%	%	%
22		%	%	%
23		%	%	%
24		%	%	%
25		%	%	%
26		%	%	%
27		%	%	%
28		%	%	%
29		%	%	%
30		%	%	%
31		%	%	%
32		%	%	%
33		%	%	%
34		%	%	%
35		%	%	%
36		%	%	%
37		%	%	%
38		%	%	%
39		%	%	%
40		%	%	%
41		%	%	%
42		%	%	%
43		%	%	%
Aggregate percentages of the contract expected to be subcontracted:		%	%	%

**Continuous Contract: Any existing written agreement (including any renewals that are exercised) between a prime contractor and a HUB vendor, where the HUB vendor provides the prime contractor with goods or service under the same contract for a specified period of time. The frequency the HUB vendor is utilized or paid during the term of the contract is not relevant to whether the contract is considered continuous. Two or more contracts that run concurrently or overlap one another for different periods of time are considered by CPA to be individual contracts rather than renewals or extensions to the original contract. In such situations the prime contractor and HUB vendor are entering (have entered) into "new" contracts.*

Enter your company's name here: _____	Requisition #: _____
---------------------------------------	----------------------

SECTION 3: SELF PERFORMING JUSTIFICATION (If you responded "No" to SECTION 2, Item a, you must complete this SECTION and continue to SECTION 4.) If you responded

"No" to SECTION 2, Item a, in the space provided below **explain how** your company will perform the entire contract with its own employees, supplies, materials and/or equipment.

SECTION 4: AFFIRMATION

As evidenced by my signature below, I affirm that I am an authorized representative of the respondent listed in SECTION 1, and that the information and supporting documentation submitted with the HSP is true and correct. Respondent understands and agrees that, if awarded any portion of the requisition:

- The respondent will provide notice as soon as practical to all the subcontractors (HUBs and Non-HUBs) of their selection as a subcontractor for the awarded contract. The notice must specify at a minimum the contracting agency's name and its point of contact for the contract, the contract award number, the subcontracting opportunity they (the subcontractor) will perform, the approximate dollar value of the subcontracting opportunity and the expected percentage of the total contract that the subcontracting opportunity represents. A copy of the notice required by this section must also be provided to the contracting agency's point of contact for the contract no later than ten (10) working days after the contract is awarded.
- The respondent must submit monthly compliance reports (Prime Contractor Progress Assessment Report – PAR) to the contracting agency, verifying its compliance with the HSP, including the use of and expenditures made to its subcontractors (HUBs and Non-HUBs). (The PAR is available at <https://www.comptroller.texas.gov/purchasing/docs/hub-forms/ProgressAssessmentReportForm.xls>).
- The respondent must seek approval from the contracting agency prior to making any modifications to its HSP, including the hiring of additional or different subcontractors and the termination of a subcontractor the respondent identified in its HSP. If the HSP is modified without the contracting agency's prior approval, respondent may be subject to any and all enforcement remedies available under the contract or otherwise available by law, up to and including debarment from all state contracting.
- The respondent must, upon request, allow the contracting agency to perform on-site reviews of the company's headquarters and/or work-site where services are being performed and must provide documentation regarding staffing and other resources.

Signature	Printed Name	Title	Date (mm/dd/yyyy)
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Reminder:

- If you responded "Yes" to SECTION 2, Items c or d, you must complete an "HSP Good Faith Effort - Method A (Attachment A)" for each of the subcontracting opportunities you listed in SECTION 2, Item b.
- If you responded "No" SECTION 2, Items c and d, you must complete an "HSP Good Faith Effort - Method B (Attachment B)" for each of

the subcontracting opportunities you listed in SECTION 2, Item b.

HSP Good Faith Effort - Method A (Attachment A)

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Enter your company's name here: _____ Requisition #: _____

IMPORTANT: If you responded "Yes" to **SECTION 2, Items c or d** of the completed HSP form, you must submit a completed "HSP Good Faith Effort - Method A (Attachment A)" for each of the subcontracting opportunities you listed in **SECTION 2, Item b** of the completed HSP form. You may photo-copy this page or download the form at <https://www.comptroller.texas.gov/purchasing/docs/hub-forms/hub-sbcont-plan-qfe-achm-a.pdf>

SECTION A-1: SUBCONTRACTING OPPORTUNITY

Enter the item number and description of the subcontracting opportunity you listed in SECTION 2, Item b, of the completed HSP form for which you are completing the attachment.

Item Number: Description: _____

SECTION A-2: SUBCONTRACTOR SELECTION

List the subcontractor(s) you selected to perform the subcontracting opportunity you listed above in SECTION A-1. Also identify whether they are a Texas certified HUB and their Texas Vendor Identification (VID) Number or federal Employer Identification Number (EIN), the approximate dollar value of the work to be subcontracted, and the expected percentage of work to be subcontracted. When searching for Texas certified HUBs and verifying their HUB status, ensure that you use the State of Texas' Centralized Master Bidders List (CMBL) - Historically Underutilized Business (HUB) Directory Search located at <http://mycpa.cpa.state.tx.us/tpasscblsearch/index.jsp>. HUB status code "A" signifies that the company is a Texas certified HUB.

Company Name	Texas certified HUB	Texas VID or federal EIN <small>Do not enter Social Security Numbers. If you do not know their VID / EIN, leave their VID / EIN field blank.</small>	Approximate Dollar Amount	Expected Percentage of Contract
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%

REMINDER: As specified in SECTION 4 of the completed HSP form, if you (respondent) are awarded any portion of the requisition, you are required to provide notice as soon as practical to all the subcontractors (HUBs and Non-HUBs) of their selection as a subcontractor. The notice must specify at a minimum the contracting agency's name and its point of contact for the contract, the contract award number, the subcontracting opportunity they (the subcontractor) will perform, the approximate dollar value of the subcontracting opportunity and the expected percentage of the total contract that the subcontracting opportunity represents. A copy of the notice required by this section must also be provided to the contracting agency's point of contact for the contract no later than ten (10) working days after the contract is awarded.

HSP Good Faith Effort - Method B (Attachment B)

Enter your company's name here: _____ Requisition #: _____

IMPORTANT: If you responded “No” to **SECTION 2, Items c and d** of the completed HSP form, you must submit a completed “HSP Good Faith Effort - Method B (Attachment B)” for **each** of the subcontracting opportunities you listed in **SECTION 2, Item b** of the completed HSP form. You may photo-copy this page or download the form at <https://www.comptroller.texas.gov/purchasing/docs/hub-forms/hub-sbcont-plan-gfe-achm-b.pdf>.

SECTION B-1: SUBCONTRACTING OPPORTUNITY

Enter the item number and description of the subcontracting opportunity you listed in SECTION 2, Item b, of the completed HSP form for which you are completing the attachment.

Item Number: _____ Description: _____

SECTION B-2: MENTOR PROTÉGÉ PROGRAM

If respondent is participating as a Mentor in a State of Texas Mentor Protégé Program, submitting its Protégé (Protégé must be a State of Texas certified HUB) as a subcontractor to perform the subcontracting opportunity listed in **SECTION B-1**, constitutes a good faith effort to subcontract with a Texas certified HUB towards that specific portion of work.

Check the appropriate box (Yes or No) that indicates whether you will be subcontracting the portion of work you listed in SECTION B-1 to your Protégé.

- Yes (If Yes, continue to SECTION B-4.)
- No / Not Applicable (If No or Not Applicable, continue to SECTION B-3 and SECTION B-4.)

SECTION B-3: NOTIFICATION OF SUBCONTRACTING OPPORTUNITY

When completing this section you MUST comply with items **a, b, c and d**, thereby demonstrating your Good Faith Effort of having notified Texas certified HUBs and trade organizations or development centers about the subcontracting opportunity you listed in SECTION B-1. Your notice should include the scope of work, information regarding the location to review plans and specifications, bonding and insurance requirements, required qualifications, and identify a contact person. When sending notice of your subcontracting opportunity, you are encouraged to use the attached HUB Subcontracting Opportunity Notice form, which is also available online at <https://www.comptroller.texas.gov/purchasing/docs/hub-forms/HUBSubcontractingOpportunityNotificationForm.pdf>.

Retain supporting documentation (i.e., certified letter, fax, e-mail) demonstrating evidence of your good faith effort to notify the Texas certified HUBs and trade organizations or development centers. Also, be mindful that a working day is considered a normal business day of a state agency, not including weekends, federal or state holidays, or days the agency is declared closed by its executive officer. The initial day the subcontracting opportunity notice is sent/provided to the HUBs and to the trade organizations or development centers is considered to be “day zero” and does not count as one of the seven (7) working days.

- a.** Provide written notification of the subcontracting opportunity you listed in SECTION B-1, to three (3) or more Texas certified HUBs. Unless the contracting agency specified a different time period, you must allow the HUBs at least seven (7) working days to respond to the notice prior to you submitting your bid response to the contracting agency. When searching for Texas certified HUBs and verifying their HUB status, ensure that you use the State of Texas’ Centralized Master Bidders List (CMBL) - Historically Underutilized Business (HUB) Directory Search located at <http://mycpa.cpa.state.tx.us/tpasscmbsearch/index.jsp>. HUB status code “**A**” signifies that the company is a Texas certified HUB.
- b.** List the **three (3) Texas certified HUBs** you notified regarding the subcontracting opportunity you listed in SECTION B-1. Include the company’s Texas Vendor Identification (VID) Number, the date you sent notice to that company, and indicate whether it was responsive or non-responsive to your subcontracting opportunity notice.

Company Name	Texas VID <small>(Do not enter Social Security Numbers.)</small>	Date Notice Sent <small>(mm/dd/yyyy)</small>	Did the HUB Respond?
			<input type="checkbox"/> - Yes <input type="checkbox"/> - No
			<input type="checkbox"/> - Yes <input type="checkbox"/> - No
			<input type="checkbox"/> - Yes <input type="checkbox"/> - No

- c.** Provide written notification of the subcontracting opportunity you listed in SECTION B-1 to two (2) or more trade organizations or development centers in Texas to assist in identifying potential HUBs by disseminating the subcontracting opportunity to their members/participants. Unless the contracting agency specified a different time period, you must provide your subcontracting opportunity notice to trade organizations or development centers at least seven (7) working days prior to submitting your bid response to the contracting agency. A list of trade organizations and development centers that have expressed an interest in receiving notices of subcontracting opportunities is available on the Statewide HUB Program’s webpage at <https://www.comptroller.texas.gov/purchasing/vendor/hub/resources.php>.
- d.** List **two (2) trade organizations or development centers** you notified regarding the subcontracting opportunity you listed in SECTION B-1. Include the date when you sent notice to it and indicate if it accepted or rejected your notice.

Trade Organizations or Development Centers	Date Notice Sent <small>(mm/dd/yyyy)</small>	Was the Notice Accepted?
		<input type="checkbox"/> - Yes <input type="checkbox"/> - No
		<input type="checkbox"/> - Yes <input type="checkbox"/> - No

(Attachment B)

HSP Good Faith Effort - Method B (Attachment B) Cont.

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Enter your company's name here: _____ Requisition #: _____

SECTION B-4: SUBCONTRACTOR SELECTION

Enter the item number and description of the subcontracting opportunity you listed in **SECTION 2, Item b**, of the completed HSP form for which you are completing the attachment.

- a. Enter the item number and description of the subcontracting opportunity for which you are completing this Attachment B continuation page.

Item Number: _____ Description: _____

- b. List the subcontractor(s) you selected to perform the subcontracting opportunity you listed in **SECTION B-1**. Also identify whether they are a Texas certified HUB and their Texas Vendor Identification (VID) Number or federal Employer Identification Number (EIN), the approximate dollar value of the work to be subcontracted, and the expected percentage of work to be subcontracted. When searching for Texas certified HUBs and verifying their HUB status, ensure that you use the State of Texas' Centralized Master Bidders List (CMBL) - Historically Underutilized Business (HUB) Directory Search located at <http://mycpa.cpa.state.tx.us/tpasscmbsearch/index.jsp>. HUB status code "A" signifies that the company is a Texas certified HUB.

Company Name	Texas certified HUB	Texas VID or federal EIN <small>Do not enter Social Security Numbers. If you do not know their VID / EIN, leave their VID / EIN field blank.</small>	Approximate Dollar Amount	Expected Percentage of Contract
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%
	<input type="checkbox"/> - Yes <input type="checkbox"/> - No		\$	%

- c. If any of the subcontractors you have selected to perform the subcontracting opportunity you listed in **SECTION B-1** is not a Texas certified HUB, provide written justification for your selection process (attach additional page if necessary):

REMINDER: As specified in SECTION 4 of the completed HSP form, if you (respondent) are awarded any portion of the requisition, you are required to provide notice as soon as practical to **all** the subcontractors (HUBs and Non-HUBs) of their selection as a subcontractor. The notice must specify at a minimum the contracting agency's name and its point of contact for the contract, the contract award number, the subcontracting opportunity it (the subcontractor) will perform, the approximate dollar value of the subcontracting opportunity and the expected percentage of the total contract that the subcontracting opportunity represents. A copy of the notice required by this section must also be provided to the contracting agency's point of contact for the contract no later than ten (10) working days after the contract is awarded.



HUB Subcontracting Opportunity Notification Form

In accordance with Texas Gov't Code, Chapter 2161, each state agency that considers entering into a contract with an expected value of \$100,000 or more shall, before the agency solicits bids, proposals, offers, or other applicable expressions of interest, determine whether subcontracting opportunities are probable under the contract. The state agency I have identified below in **Section B** has determined that subcontracting opportunities are probable under the requisition to which my company will be responding.

34 Texas Administrative Code, §20.14 requires all respondents (prime contractors) bidding on the contract to provide notice of each of their subcontracting opportunities to at least three (3) Texas certified HUBs (who work within the respective industry applicable to the subcontracting opportunity), and allow the HUBs at least seven (7) working days to respond to the notice prior to the respondent submitting its bid response to the contracting agency. In addition, at least seven (7) working days prior to submitting its bid response to the contracting agency, the respondent must provide notice of each of its subcontracting opportunities to two (2) or more trade organizations or development centers (in Texas) that serves members of groups (i.e., Asian Pacific American, Black American, Hispanic American, Native American, Woman, Service Disabled Veteran) identified in Texas Administrative Code, §20.11(19)(C).

We respectfully request that vendors interested in bidding on the subcontracting opportunity scope of work identified in **Section C, Item 2**, reply no later than the date and time identified in **Section C, Item 1**. Submit your response to the point-of-contact referenced in **Section A**.

SECTION A: PRIME CONTRACTOR'S INFORMATION

Company Name: _____	State of Texas VID #: _____
Point-of-Contact: _____	Phone #: _____
E-mail Address: _____	Fax #: _____

SECTION B: CONTRACTING STATE AGENCY AND REQUISITION INFORMATION

Agency Name: _____	_____
Point-of-Contact: _____	Phone #: _____
Requisition #: _____	Bid Open Date: _____ (mm/dd/yyyy)

SUBCONTRACTING OPPORTUNITY RESPONSE DUE DATE, DESCRIPTION, REQUIREMENTS AND RELATED INFORMATION

1. Potential Subcontractor's Bid Response Due Date:

If you would like for our company to consider your company's bid for the subcontracting opportunity identified below in Item 2, we must receive your bid response no later than _____ on _____.

Central Time Date (mm/dd/yyyy)

In accordance with 34 TAC §20.14, each notice of subcontracting opportunity shall be provided to at least three (3) Texas certified HUBs, and allow the HUBs at least seven (7) working days to respond to the notice prior to submitting our bid response to the contracting agency. In addition, at least seven (7) working days prior to us submitting our bid response to the contracting agency, we must provide notice of each of our subcontracting opportunities to two (2) or more trade organizations or development centers (in Texas) that serves members of groups (i.e., Asian Pacific American, Black American, Hispanic American, Native American, Woman, Service Disabled Veteran) identified in Texas Administrative Code, §20.11(19)(C).

(A working day is considered a normal business day of a state agency, not including weekends, federal or state holidays, or days the agency is declared closed by its executive officer. The initial day the subcontracting opportunity notice is sent/provided to the HUBs and to the trade organizations or development centers is considered to be "day zero" and does not count as one of the seven (7) working days.)

2. Subcontracting Opportunity Scope of Work:

3. Required Qualifications:	<input type="checkbox"/>	- Not Applicable
4. Bonding/Insurance Requirements:	<input type="checkbox"/>	- Not Applicable
5. Location to review plans/specifications:	<input type="checkbox"/>	- Not Applicable

Attachment H

**2012 Uniform General and Supplementary General Conditions
For
Texas State Technical College Building Construction Contracts**

TABLE OF CONTENTS

Article 1.	Definitions
Article 2.	Wage Rates and Other Laws Governing Construction
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Article 13.	Warranty and Guarantee
Article 14.	Suspension and Termination
Article 15.	Dispute Resolution
Article 16.	Miscellaneous

Article 1. Definitions

Unless the context clearly requires another meaning, the following terms have the meaning assigned herein.

- 1.1 *Application for Payment* means Contractor's monthly partial invoice for payment that includes any portion of the Work that has been completed for which an invoice has not been submitted and performed in accordance with the requirements of the Contract Documents. The Application for Payment accurately reflects the progress of the Work, is itemized based on the Schedule of Values, bears the notarized signature of Contractor, and shall not include subcontracted items for which Contractor does not intend to pay.
- 1.2 *Application for Final Payment* means Contractor's final invoice for payment that includes any portion of the Work that has been completed for which an invoice has not been submitted, amounts owing to adjustments to the final Contract Sum resulting from approved change orders, and release of remaining Contractor's retainage.
- 1.3 *Architect/Engineer (A/E)* means a person registered as an architect pursuant to Tex. Occ. Code Ann., Chapter 1051, as a landscape architect pursuant to Tex. Occ. Code Ann., Chapter 1052, a person licensed as a professional engineer pursuant to Tex. Occ. Code Ann., Chapter 1001, and/or a firm employed by Owner or Design-Build Contractor to provide professional architectural or engineering services and to exercise overall responsibility for the design of a Project or a significant portion thereof, and to perform the contract administration responsibilities set forth in the Contract.
- 1.4 *Baseline Schedule* means the initial time schedule prepared by Contractor for Owner's information and acceptance that conveys Contractors' and Subcontractors' activities (including coordination and review activities required in the Contract Documents to be performed by A/E and ODR), durations, and sequence of work related to the entire Project to the extent required by the Contract Documents. The schedule clearly demonstrates the critical path of activities, durations and necessary predecessor conditions that drive the end date of the schedule. The Baseline Schedule shall not exceed the time limit current under the Contract Documents.
- 1.5 *Certificate of Final Completion* means the certificate issued by A/E that documents, to the best of A/E's knowledge and understanding, Contractor's completion of all Contractor's Punchlist items and pre-final Punchlist items, final cleanup and Contractor's provision of Record Documents, operations and maintenance manuals, and all other Close-Out documents required by the Contract Documents.
- 1.6 *Change Order* means a written modification of the Contract between Owner and Contractor, signed by Owner, Contractor and A/E.

- 1.7 *Close-Out Documents* mean the product brochures, submittals, product/equipment maintenance and operations instructions, manuals, and other documents/warranties, record documents, affidavit of payment, release of lien and claim, and as may be further defined, identified, and required by the Contract Documents.
- 1.8 *Contract* means the entire agreement between Owner and Contractor, including all of the Contract Documents.
- 1.9 *Contract Date* is the date when the agreement between Owner and Contractor becomes effective.
- 1.10 *Contract Documents* mean those documents identified as a component of the agreement (Contract) between Owner and Contractor. These may include, but are not limited to, Drawings; Specifications; General, Supplementary General, and Special Conditions; and all pre-bid and/or pre-proposal addenda.
- 1.11 *Contract Sum* means the total compensation payable to Contractor for completion of the Work in accordance with the terms of the Contract.
- 1.12 *Contract Time* means the period between the start date identified in the Notice to Proceed with construction and the Substantial Completion date identified in the Notice to Proceed or as subsequently amended by a Change Order.
- 1.13 *Contractor* means the individual, corporation, limited liability company, partnership, firm, or other entity contracted to perform the Work, regardless of the type of construction contract used, so that the term as used herein includes a Construction Manager-at-Risk or a Design-Build firm as well as a general or prime Contractor. The Contract Documents refer to Contractor as if singular in number.
- 1.14 *Construction Documents* mean the Drawings, Specifications, and other documents issued to build the Project. Construction Documents become part of the Contract Documents when listed in the Contract or any Change Order.
- 1.15 *Construction Manager-at-Risk*, in accordance with Tex. Educ. Code § 51.782, means a sole proprietorship, partnership, corporation, or other legal entity that assumes the risk for construction, rehabilitation, alteration, or repair of a facility at the contracted price as a general contractor and provides consultation to Owner regarding construction during and after the design of the facility.
- 1.16 *Date of Commencement* means the date designated in the Notice to Proceed for Contractor to commence the Work.
- 1.17 *Day* means a calendar day unless otherwise specifically stipulated.

- 1.18 *Design-Build* means a project delivery method in which the detailed design and subsequent construction is provided through a single contract with a Design-Build firm; a team, partnership, or legal entity that includes design professionals and a builder. The Design-Build Project delivery shall be implemented in accordance with Tex. Educ. Code § 51.780.
- 1.19 *Drawings* mean that product of A/E which graphically depicts the Work.
- 1.20 *Final Completion* means the date determined and certified by A/E and Owner on which the Work is fully and satisfactorily complete in accordance with the Contract.
- 1.21 *Final Payment* means the last and final monetary compensation made to Contractor for any portion of the Work that has been completed and accepted for which payment has not been made, amounts owing to adjustments to the final Contract Sum resulting from approved change orders, and release of Contractor's retainage.
- 1.22 *Historically Underutilized Business (HUB)* pursuant to Tex. Gov't Code, Chapter 2161, means a business that is at least 51% owned by an Asian Pacific American, a Black American, a Hispanic American, a Native American and/or an American Woman; is an entity with its principal place of business in Texas; and has an owner residing in Texas with proportionate interest that actively participates in the control, operations, and management of the entity's affairs.
- 1.23 *Notice to Proceed* means written document informing Contractor of the dates beginning Work and the dates anticipated for Substantial Completion.
- 1.24 *Open Item List* means a list of work activities, Punchlist items, changes or other issues that are not expected by Owner and Contractor to be complete prior to Substantial Completion.
- 1.25 *Owner* means the State of Texas, and any agency of the State of Texas, acting through the responsible entity of the State of Texas identified in the Contract as Owner.
- 1.26 *Owner's Designated Representative (ODR)* means the individual assigned by Owner to act on its behalf and to undertake certain activities as specifically outlined in the Contract. ODR is the only party authorized to direct changes to the scope, cost, or time of the Contract.
- 1.27 *Project* means all activities necessary for realization of Owner's desired building or other structure, including all ancillary and related work. This includes design, contract award(s), execution of the Work itself, work by Owner's forces and/or other contractors, and fulfillment of all Contract and warranty obligations.
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- 1.28 *Progress Assessment Report (PAR)* means the monthly compliance report to Owner verifying compliance with the HUB subcontracting plan (HSP).
- 1.29 *Proposed Change Order (PCO)* means a document that informs Contractor of a proposed change in the Work and appropriately describes or otherwise documents such change, including Contractor's response of pricing for the proposed change.
- 1.30 *Punchlist* means a list of items of Work to be completed or corrected by Contractor before Final Completion. Punchlists indicate items to be finished, remaining Work to be performed, or Work that does not meet quality or quantity requirements as required in the Contract Documents.
- 1.31 *Record Documents* mean the drawing set, Specifications, and other materials maintained by Contractor that documents all addenda, Architect's Supplemental Instructions, Change Orders, and posting and markings that record the as-constructed conditions of the Work and all changes made during construction.
- 1.32 *Request for Information (RFI)* means a written request by Contractor directed to A/E or ODR for a clarification of the information provided in the Contract Documents or for direction concerning information necessary to perform the Work that may be omitted from the Contract Documents.
- 1.33 *Samples* mean representative physical examples of materials, equipment, or workmanship used to confirm compliance with requirements and/or to establish standards for use in execution of the Work.
- 1.34 *Schedule of Values* means the detailed breakdown of the cost of materials, labor, and equipment necessary to accomplish the Work as described in the Contract Documents, submitted by Contractor for approval by Owner and A/E.
- 1.35 *Shop Drawings* mean the drawings, illustrations, schedules, performance charts, brochures, and other data prepared by Contractor or its agents which detail a portion of the Work.
- 1.36 *Site* means the geographical area of the location of the Work.
- 1.37 *Special Conditions* mean the documents containing terms and conditions which may be unique to the Project. Special Conditions are a part of the Contract Documents and have precedence over the Uniform General Conditions and Supplementary General Conditions.
- 1.38 *Specifications* mean the written product of A/E that establishes the quality and/or performance of products utilized in the Work and processes to be used, including testing and verification for producing the Work.

- 1.39 *Subcontractor* means a business entity that enters into an agreement with Contractor to perform part of the Work or to provide services, materials or equipment for use in the Work.
- 1.40 *Submittal Register* means a list provided by Contractor of all items to be furnished for review and approval by A/E and Owner and as identified in the Contract Documents, including anticipated sequence and submittal dates.
- 1.41 *Substantial Completion* means the date determined and certified by Contractor, A/E, and Owner when the Work, or a designated portion thereof, is sufficiently complete, in accordance with the Contract, so as to be operational and fit for the use intended.
- 1.42 *Supplementary General Conditions* mean procedures and requirements that modify the Uniform General Conditions. Supplementary General Conditions, when used, have precedence over the Uniform General Conditions.
- 1.43 *Unit Price Work* means the Work, or a portion of the Work, paid for based on incremental units of measurement.
- 1.44 *Unilateral Change Order (ULCO)* means a Change Order issued by Owner without the complete agreement of Contractor, as to cost and/or time.
- 1.45 *Work* means the administration, procurement, materials, equipment, construction and all services necessary for Contractor, and/or its agents, to fulfill Contractor's obligations under the Contract.
- 1.46 *Work Progress Schedule* means the continually updated time schedule prepared and monitored by Contractor that accurately indicates all necessary appropriate revisions as required by the conditions of the Work and the Project while maintaining a concise comparison to the Baseline Schedule.

Article 2. Wage Rates and Other Laws Governing Construction

2.1 Environmental Regulations. Contractor shall conduct activities in compliance with applicable laws and regulations and other requirements of the Contract relating to the environment and its protection at all times. Unless otherwise specifically determined, Owner is responsible for obtaining and maintaining permits related to stormwater run-off. Contractor shall conduct operations consistent with stormwater run-off permit conditions. Contractor is responsible for all items it brings to the Site, including hazardous materials, and all such items brought to the Site by its Subcontractors and suppliers, or by other entities subject to direction of Contractor. Contractor shall not incorporate hazardous materials into the Work without prior written approval of Owner, and shall provide an affidavit attesting to such in association with request for Substantial Completion inspection.

2.2 Wage Rates. Contractor shall not pay less than the wage scale of the various classes of labor as shown on the prevailing wage schedule provided by Owner in the bid or proposal specifications. Specified wage rates are minimum rates only. Owner is not bound to pay any claims for additional compensation made by any Contractor because the Contractor pays wages in excess of the applicable minimum rate contained in the Contract. The prevailing wage schedule is not a representation that qualified labor adequate to perform the Work is available locally at the prevailing wage rates.

2.2.1 Notification to Workers. Contractor shall post the prevailing wage schedule in a place conspicuous to all workers on the Project Site and shall notify each worker, in writing, of the following as they commence work on the Contract; the worker's job classification, the established minimum wage rate requirement for that classification, as well as the worker's actual wage. The notice must be delivered and signed in acknowledgement of receipt by the worker and must list both the wages and fringe benefits to be paid or furnished for each classification in which the worker is assigned duties. When requested by Owner, Contractor shall furnish evidence of compliance with the Texas Prevailing Wage Law and the addresses of all workers.

2.2.1.1 Contractor shall submit a copy of each worker's wage-rate notification to ODR with the application for progress payment for the period during which the worker was engaged in activities on behalf of the Project.

2.2.1.2 The prevailing wage schedule is determined by Owner in compliance with Tex. Gov't Code, Chapter 2258. Should Contractor at any time become aware that a particular skill or trade not reflected on Owner's prevailing wage schedule will be or is being employed in the Work, whether by Contractor or by Subcontractor, Contractor shall promptly inform ODR of the proposed wage to be paid for the skill along with a justification for same and ODR shall promptly concur with or reject the proposed wage and classification. Contractor is responsible for determining the most appropriate wage for a particular skill in relation to similar skills or trades identified on the prevailing wage schedule. In no case shall any worker be paid less than the wage indicated for laborers.

2.2.2 Penalty for Violation. Contractor, and any Subcontractor, will pay to the State a penalty of sixty dollars (\$60.00) for each worker employed for each day, or portion thereof, that the worker is paid less than the wage rates stipulated in the prevailing wage schedule.

2.2.3 Complaints of Violations.

2.2.3.1 Owner's Determination of Good Cause. Upon receipt of information concerning a violation, Owner will conduct an investigation in accordance with Tex. Gov't Code, Chapter 2258 and make an initial determination as to whether good cause exists that a violation occurred. Upon making a good cause finding, Owner will retain the full amounts claimed by the claimant or claimants as the difference between wages paid and wages due under the prevailing wage schedule and any supplements thereto, together with the applicable penalties, such amounts being subtracted from successive progress payments pending a final decision on the violation.

2.2.3.2 No Extension of Time. If Owner's determination proves valid that good cause existed to believe a violation had occurred, Contractor is not entitled to an extension of time for any delay arising directly or indirectly from the arbitration procedures.

2.3 Venue for Suits. The venue for any suit arising from the Contract will be in a court of competent jurisdiction in Travis County or McLennan County, Texas, or as may otherwise be designated in the Supplementary General Conditions.

2.4 Licensing of Trades. Contractor shall comply with all applicable provisions of State law related to license requirements for skilled tradesmen, contractors, suppliers and/or laborers, as necessary to accomplish the Work. In the event Contractor, or one of its Subcontractors, loses its license during the term of performance of the Contract, Contractor shall promptly hire or contract with a licensed provider of the service at no additional cost to Owner.

2.5 Royalties, Patents and Copyrights. Contractor shall pay all royalties and license fees, defend suits or claims for infringement of copyrights and patent rights, and shall hold Owner harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specification or other documents prepared by Owner or A/E. However, if Contractor has reason to believe that the required design, process, or product is an infringement of a copyright or patent, Contractor shall be responsible for such loss unless such information is promptly furnished to A/E.

2.6 State Sales and Use Taxes. Owner qualifies for exemption from certain State and local sales and use taxes pursuant to the provisions of the Tex. Tax Code, Chapter 151. Upon request from Contractor, Owner shall furnish evidence of tax exempt status. Contractor may claim exemption from payment of certain applicable State taxes by complying with such procedures as prescribed by the State Comptroller of Public Accounts. Owner acknowledges not all items

qualify for exemption. Owner is not obligated to reimburse Contractor for taxes paid on items that qualify for tax exemption.

Article 3. General Responsibilities of Owner and Contractor

3.1 Owner's General Responsibilities. Owner is the entity identified as such in the Contract and referred to throughout the Contract Documents as if singular in number.

3.1.1 Preconstruction Conference. Prior to, or concurrent with, the issuance of Notice to Proceed with construction, a conference will be convened for attendance by Owner, Contractor, A/E and appropriate Subcontractors. The purpose of the conference is to establish a working understanding among the parties as to the Work, the operational conditions at the Project Site, and general administration of the Project. Topics include communications, schedules, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, maintain required records and all other matters of importance to the administration of the Project and effective communications between the Project team members.

3.1.2 Owner's Designated Representative. Prior to the start of construction, Owner will identify Owner's Designated Representative (ODR), who has the express authority to act and bind Owner to the extent and for the purposes described in the various Articles of the Contract, including responsibilities for general administration of the Contract.

3.1.2.1 Unless otherwise specifically defined elsewhere in the Contract Documents, ODR is the single point of contact between Owner and Contractor. Notice to ODR, unless otherwise noted, constitutes notice to Owner under the Contract.

3.1.2.2 All directives on behalf of Owner will be conveyed to Contractor and A/E by ODR in writing.

3.1.2.3 Owner will furnish or cause to be furnished, free of charge, the number of complete sets of the Drawings, Specifications, and addenda as provided in the Supplementary General Conditions or Special Conditions.

3.1.3 Owner Supplied Materials and Information.

3.1.3.1 Owner will furnish to Contractor those surveys describing the physical characteristics, legal description, limitations of the Site, Site utility locations, and other information used in the preparation of the Contract Documents.

3.1.3.2 Owner will provide information, equipment, or services under Owner's control to Contractor with reasonable promptness.

3.1.4 Availability of Lands. Owner will furnish, as indicated in the Contract, all required rights to use the lands upon which the Work occurs. This includes rights-of-way and easements for access and such other lands that are designated for use by Contractor. Contractor shall comply with all Owner identified encumbrances or restrictions specifically related to use of lands so furnished. Owner will obtain and pay for easements for permanent structures or permanent changes in existing facilities, unless otherwise required in the Contract Documents.

3.1.5 Limitation on Owner's Duties.

3.1.5.1 Owner will not supervise, direct, control or have authority over or be responsible for Contractor's means, methods, technologies, sequences or procedures of construction or the safety precautions and programs incident thereto. Owner is not responsible for any failure of Contractor to comply with laws and regulations applicable to the Work. Owner is not responsible for the failure of Contractor to perform or furnish the Work in accordance with the Contract Documents. Except as provided in Section 2.5, Owner is not responsible for the acts or omissions of Contractor, or any of its Subcontractors, suppliers or of any other person or organization performing or furnishing any of the work on behalf of Contractor.

3.1.5.2 Owner will not take any action in contravention of a design decision made by A/E in preparation of the Contract Documents, when such actions are in conflict with statutes under which A/E is licensed for the protection of the public health and safety.

3.2 Role of Architect/Engineer. Unless specified otherwise in the Contract between Owner and Contractor, A/E shall provide general administration services for Owner during the construction phase of the project. Written correspondence, requests for information, and Shop Drawings/submittals shall be directed to A/E for action. A/E has the authority to act on behalf of Owner to the extent provided in the Contract Documents, unless otherwise modified by written instrument, which shall be furnished to Contractor by ODR, upon request.

3.2.1 Site Visits.

3.2.1.1 A/E will make visits to the Site at intervals as provided in the A/E's Contract with Owner, to observe the progress and the quality of the various aspects of Contractor's executed Work and report findings to Owner.

3.2.1.2 A/E has the authority to interpret Contract Documents and inspect the Work for compliance and conformity with the Contract. Except as referenced in Paragraph 3.1.5.2, Owner retains the sole authority to accept or reject Work and issue direction for correction, removal or replacement of Work.

3.2.2 Clarifications and Interpretations. It may be determined that clarifications or interpretations of the Contract Documents are necessary. Upon direction by ODR, such clarifications or interpretations will be provided by A/E consistent with the intent of the Contract Documents. A/E will issue these clarifications with reasonable promptness to Contractor as A/E's supplemental instruction ("ASI") or similar instrument. If Contractor believes that such clarification or interpretation justifies an adjustment in the Contract Sum or the Contract Time, Contractor shall so notify Owner in accordance with the provisions of Article 11.

3.2.3 Limitations on Architect/Engineer Authority. A/E is not responsible for:

3.2.3.1 Contractor's means, methods, techniques, sequences, procedures, safety or programs incident to the Project, nor will A/E supervise, direct, control or have authority over the same;

3.2.3.2 The failure of Contractor to comply with laws and regulations applicable to the furnishing or performing the Work;

3.2.3.3 Contractor's failure to perform or furnish the Work in accordance with the Contract Documents; or

3.2.3.4 Acts or omissions of Contractor, or of any other person or organization performing or furnishing any of the Work.

3.3 Contractor's General Responsibilities. Contractor is solely responsible for implementing the Work in full compliance with all applicable laws and the Contract Documents and shall supervise and direct the Work using the best skill and attention to assure that each element of the work conforms to the Contract requirements. Contractor is solely responsible for all construction means, methods, techniques, safety, sequences, coordination and procedures.

Contractor shall visit the Site before commencing the Work and become familiar with local conditions such as the location, accessibility and general character of the Site and/or building.

3.3.1 Project Administration. Contractor shall provide Project administration for all Subcontractors, vendors, suppliers, and others involved in implementing the Work and shall coordinate administration efforts with those of A/E and ODR in accordance with these general conditions, Division 1 of the Specifications and other provisions of the Contract, as well as outlined in the pre-construction conference.

3.3.1.1 Contractor's Management Personnel. Contractor shall employ a competent person or persons who will be present at the Project Site during the progress of the Work to supervise and oversee the Work. The competent persons are subject to the approval of ODR. Contractor shall not change approved staff

during the course of the Project without the written approval of ODR unless the staff member leaves the employment of Contractor. Contractor shall provide additional quality control, safety and other staff as stated in the Contract Documents.

3.3.3 Labor. Contractor shall provide competent, suitably qualified personnel to survey, lay-out, and construct the Work as required by the Contract Documents and shall maintain good discipline and order at the Site at all times.

3.3.4 Services, Materials and Equipment. Unless otherwise specified, 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, and all other facilities, incidentals, and services necessary for the construction, performance, testing, start-up, inspection and completion of the Work.

3.3.5 Contractor General Responsibility. For Owner-furnished equipment or material that will be in the care, custody and control of Contractor, Contractor is responsible for damage or loss.

3.3.6 Non-Compliant Work. Should A/E and/or ODR identify Work as non-compliant with the Contract Documents, A/E and/or ODR shall communicate the finding to Contractor, and Contractor shall correct such Work at no additional cost to Owner. The approval of Work or the failure to find non-compliant Work by either A/E or ODR does not relieve Contractor from the obligation to comply with all requirements of the Contract Documents.

3.3.7 Subcontractors. Contractor shall not employ any Subcontractor, supplier or other person or organization, whether initially or as a substitute, against whom Owner shall have reasonable objection. Owner will communicate such objections in writing within ten (10) days of receipt of Contractor's intent to use such Subcontractor, supplier, or other person or organization. Contractor is not required to employ any Subcontractor, supplier or other person or organization to furnish any of the Work to whom Contractor has reasonable objection. Contractor shall not substitute Subcontractors without the acceptance of Owner.

3.3.7.1 All Subcontracts and supply contracts shall be consistent with and bind the Subcontractor and suppliers to the terms and conditions of the Contract Documents, including provisions of the Contract between Contractor and Owner.

3.3.7.2 Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with

Contractor, and shall require all Subcontractors, suppliers and other persons and organizations performing or furnishing any of the Work to communicate with Owner only through Contractor. Contractor shall furnish to Owner a copy, at Owner's request, of each first-tier subcontract promptly after its execution. Contractor agrees that Owner has no obligation to review or approve the content of such contracts and that providing Owner such copies in no way relieves Contractor of any of the terms and conditions of the Contract, including, without limitation, any provisions of the Contract which require the Subcontractor to be bound to Contractor in the same manner in which Contractor is bound to Owner.

3.3.8 Continuing the Work. Contractor shall carry on the Work and adhere to the progress schedule during all disputes, disagreements, or alternative resolution process with Owner. Contractor shall not delay or postpone any Work because of pending unresolved disputes, disagreements or alternative resolution process, except as Owner and Contractor may agree in writing.

3.3.9 Cleaning. Contractor shall at all times keep the Site and the Work clean and free from accumulation of waste materials or rubbish caused by the construction activities under the Contract. Contractor shall ensure that the entire Project is thoroughly cleaned prior to requesting Substantial Completion inspection and again upon completion of the Project prior to the final inspection.

3.3.10 Acts and Omissions of Contractor, its Subcontractors and Employees. Contractor shall be responsible for acts and omissions of its employees and all Subcontractors, their agents and employees. Owner may, in writing, require Contractor to remove from the Project any of Contractor's or its Subcontractor's employees whom ODR finds to be careless, incompetent, unsafe, uncooperative, disruptive or otherwise objectionable.

3.3.11 Indemnification of Owner. Contractor covenants and agrees to FULLY INDEMNIFY and HOLD HARMLESS Owner and the elected and appointed officials, employees, directors, volunteers, and representatives of Owner, individually or collectively, from and against any and all costs, claims, liens, damages, losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, liability and suits of any kind and nature, including but not limited to personal or bodily injury, death, or property damage, made upon Owner directly or indirectly arising out of, resulting from, or related to Contractor's activities under this Contract, including any acts or omissions of Contractor or any agent, officer, director, representative, employee, consultant or the Subcontractor of Contractor, and their respective officers, agents, employees, directors and representatives while in the exercise of the performance of the rights or duties under this Contract. The indemnity provided for in this paragraph does not apply to any liability resulting from the negligence of the Owner, its officers or employees,

separate contractors or assigned contractors, in instances where such negligence causes personal injury, death or property damage. IN THE EVENT CONTRACTOR AND OWNER ARE FOUND JOINTLY LIABLE BY A COURT OF COMPETENT JURISDICTION, LIABILITY WILL BE APPORTIONED COMPARATIVELY IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS, WITHOUT WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO THE STATE UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW.

3.3.11.1 The provisions of this indemnification are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

3.3.11.2 Contractor shall promptly advise Owner in writing of any claim or demand against Owner or against Contractor which involves Owner and known to Contractor and related to or arising out of Contractor's activities under this Contract.

3.3.12 Ancillary Areas. Contractor shall operate and maintain operations and associated storage areas at the Site of the Work in accordance with the following:

3.3.12.1 All Contractor operations, including storage of materials and employee parking upon the Site of Work shall be confined to areas designated by Owner.

3.3.12.2 Contractor may erect, at its own expense, temporary buildings that will remain its property. Contractor shall remove those buildings and associated utility service lines upon completion of the Work, unless Contractor requests and Owner provides written consent that it may abandon such buildings and utilities in place.

3.3.12.3 Contractor shall use only established roadways or construct and use such temporary roadways as may be authorized by Owner. Contractor shall not allow load limits of vehicles to exceed the limits prescribed by appropriate regulations or law. Contractor shall provide protection to road surfaces, curbs, sidewalks, trees, shrubbery, sprinkler systems, drainage structures and other like existing improvements to prevent damage, and shall repair any damage thereto at the expense of Contractor.

3.3.12.4 Owner may restrict Contractor's entry to the site to specifically assigned entrances and routes.

3.3.13 Separate Contracts. Owner reserves the right to award other contracts in connection with the Project under the same or substantially similar contract terms, including those portions related to insurance and waiver of subrogation. Owner reserves the right to perform operations related to the Project with Owner's own forces.

3.3.14 Under a system of separate contracts, the conditions described herein continue to apply except as may be amended by Change Order.

3.3.15 Contractor shall cooperate with other contractors or forces employed on the Project by Owner, including providing access to the Site, integration of activities within Contractor's Work Schedule, and Project information as requested.

3.3.16 Owner shall be reimbursed by Contractor for costs incurred by Owner which are payable to a separate contractor because of delays, improperly timed activities, or defective construction by Contractor. Owner will equitably adjust the Contract by Change Order for costs incurred by Contractor because of delays, improperly timed activities, damage to the Work or defective construction by a separate contractor.

Article 4. Historically Underutilized Business (HUB) Subcontracting Plan

4.1 General Description. The purpose of the Historically Underutilized Business (HUB) program is to promote equal business opportunities for economically disadvantaged persons (as defined by Tex. Gov't. Code, Chapter 2161) to contract with the State of Texas in accordance with the goals specified in the State of Texas Disparity Study. The HUB program annual procurement utilization goals are defined in 34 T.A.C. § 20.13 (b).

4.1.1 State agencies are required by statute to make a good faith effort to assist HUBs in participating in contract awards issued by the State. 34 T.A.C. § 20.13(b) outlines the State's policy to encourage the utilization of HUBs in State contracting opportunities through race, ethnic and gender neutral means.

4.1.2 A Contractor who contracts with the State in an amount of \$100,000.00 or greater is required to make a good faith effort to award subcontracts to HUBs in accordance with 34 T.A.C. § 20.14(a)(2)(A) by submitting a HUB subcontracting plan within twenty-four (24) hours after the bid or response is due and complying with the HUB subcontracting plan after it is accepted by Owner and during the term of the Contract.

4.2 Compliance with Approved HUB Subcontracting Plan. Contractor, having been awarded this Contract in part by complying with the HUB program statute and rules, hereby covenants to continue to comply with the HUB program as follows:

4.2.1 Prior to adding or substituting a Subcontractor, promptly notify Owner in the event a change is required for any reason to the accepted HUB subcontracting plan.

4.2.2 Conduct the good-faith effort activities required and provide Owner with necessary documentation to justify approval of a change to the approved HUB subcontracting plan.

4.2.3 Cooperate in the execution of a Change Order or such other approval of the change in the HUB subcontracting plans as Contractor and Owner may agree to.

4.2.4 Maintain and make available to Owner upon request business records documenting compliance with the accepted HUB subcontracting plan.

4.2.5 Upon receipt of payment for performance of Work, submit to Owner a compliance report, in the format required by Owner, that demonstrates Contractor's performance of the HUB subcontracting plan.

4.2.6 Promptly and accurately explain and provide supplemental information to Owner to assist in Owner's investigation of Contractor's good-faith effort to fulfill the HUB subcontracting plan and the requirements under 34 T.A.C. § 20.14(a)(1).

4.3 Failure to Demonstrate Good-Faith Effort. Upon a determination by Owner that Contractor has failed to demonstrate a good-faith effort to fulfill the HUB subcontracting plan or any Contract covenant detailed above, Owner may, in addition to all other remedies available to it, report the failure to perform to the Comptroller of Public Accounts, Texas Procurement and Support Services Division, Historically Underutilized Business Program and may bar Contractor from future contracting opportunities with Owner.

Article 5. Bonds and Insurance

5.1 Construction Bonds. Contractor is required to tender to Owner, prior to commencing the Work, performance and payment bonds, as required by Tex. Gov't. Code, Chapter 2253. On Construction Manager-at-Risk and Design-Build Projects, the Owner shall require a security bond, as described in Subsection 5.1.2 below.

5.1.1 Bond Requirements. Each bond shall be executed by a corporate surety or sureties authorized to do business in the State of Texas and acceptable to Owner, on Owner's form, and in compliance with the relevant provisions of the Texas Insurance Code. If any bond is for more than ten (10) percent of the surety's capital and surplus, Owner may require certification that the company has reinsured the excess portion with one or more reinsurers authorized to do business in the State. A reinsurer may not reinsure for more than ten (10) percent of its capital and surplus. If a surety upon a bond loses its authority to do business in the State, Contractor shall, within thirty (30) days after such loss, furnish a replacement bond at no added cost to Owner.

5.1.1.1 A performance bond is required if the Contract Sum is in excess of One Hundred Thousand Dollars (\$100,000.00). The performance bond is solely for

the protection of Owner. The performance bond is to be for the Contract Sum to guarantee the faithful performance of the Work in accordance with the Contract Documents. The form of the bond shall be approved by the Office of the Attorney General of Texas. The performance bond shall be effective through Contractor's warranty period.

5.1.1.2 A payment bond is required if the Contract price is in excess of Twenty-Five Thousand Dollars (\$25,000.00). The payment bond is to be for the Contract Sum and is payable to Owner solely for the protection and use of payment bond beneficiaries. The form of the bond shall be approved by the Office of the Attorney General of Texas.

5.1.2 Security Bond. The security bond provides protection to Owner if Contractor presents an acceptable guaranteed maximum price ("GMP") to Owner but is unable to deliver the required payment and performance bonds within the time period stated below.

5.1.3 When Bonds Are Due.

5.1.3.1 Security bonds are due before execution of a Construction Manager-at-Risk or Design-Build Contract.

5.1.3.2 Payment and performance bonds are due before execution of a contract on competitively bid or competitively sealed proposal projects or before execution of a GMP proposal on Construction Manager-at-Risk projects or Design-Build projects.

5.1.4 Power of Attorney. Each bond shall be accompanied by a valid power of attorney (issued by the surety company and attached, signed and sealed with the corporate embossed seal, to the bond) authorizing the attorney-in-fact who signs the bond to commit the company to the terms of the bond, and stating any limit in the amount for which the attorney can issue a single bond.

5.1.5 Bond Indemnification. The process of requiring and accepting bonds and making claims thereunder shall be conducted in compliance with Tex. Gov't Code, Chapter 2253. IF FOR ANY REASON A STATUTORY PAYMENT OF PERFORMANCE BOND IS NOT HONORED BY THE SURETY, CONTRACTOR SHALL FULLY INDEMNIFY AND HOLD OWNER HARMLESS OF AND FROM ANY COSTS, LOSSES, OBLIGATIONS OR LIABILITIES IT INCURS AS A RESULT.

5.1.6 Furnishing Bond Information. Owner shall furnish certified copies of the payment bond and the related Contract to any qualified person seeking copies who complies with Tex. Gov't. Code § 2253.026.

5.1.7 Claims on Payment Bonds. Claims on payment bonds must be sent directly to Contractor and his surety in accordance with Tex. Gov't. Code § 2253.041. All payment bond claimants are cautioned that no lien exists on the funds unpaid to Contractor on such Contract, and that reliance on notices sent to Owner may result in loss of their rights against Contractor and/or his surety. Owner is not responsible in any manner to a claimant for collection of unpaid bills, and accepts no such responsibility because of any representation by any agent or employee.

5.1.8 Payment Claims when Payment Bond not Required. The rights of Subcontractors regarding payment are governed by Tex. Prop. Code §§ 53.231-53.239 when the value of the Contract between Owner and Contractor is less than Twenty-Five Thousand Dollars (\$25,000.00). These provisions set out the requirements for filing a valid lien on funds unpaid to Contractor as of the time of filing the claim, actions necessary to release the lien, and satisfaction of such claim.

5.1.9 Sureties. A surety shall be listed on the U.S. Department of the Treasury's Listing of Approved Sureties maintained by the Bureau of Financial Management Service (FMS), www.fms.gov/c570, stating companies holding Certificates of Authority as acceptable sureties on Federal bonds and acceptable reinsuring companies (FMS Circular 570).

5.2 Insurance Requirements. Contractor shall carry insurance in the types and amounts indicated in this Article for the duration of the Contract. The required insurance shall include coverage for Owner's property prior to construction, during construction and during the warranty period. The insurance shall be evidenced by delivery to Owner of certificates of insurance executed by the insurer or its authorized agent stating coverages, limits, expiration dates and compliance with all applicable required provisions. Upon request, Owner, and/or its agents, shall be entitled to receive without expense, copies of the policies and all endorsements. Contractor shall update all expired policies prior to submission for monthly payment. Failure to update policies shall be reason for withholding of payment until renewal is provided to Owner.

5.2.1 Contractor, consistent with its status as an independent contractor, shall provide and maintain all insurance coverage with the minimum amounts described below until the end of the warranty period unless otherwise stated in Owner's Supplementary General Conditions or Special Conditions. Failure to maintain insurance coverage, as required, is grounds for suspension of Work for cause pursuant to Article 14. The Contractor will be notified of the date on which the Builder's Risk insurance policy may be terminated by any means deemed appropriate by Owner.

5.2.2 Coverage shall be written on an occurrence basis by companies authorized and admitted to do business in the State of Texas and rated A-, VII or better by A.M. Best Company or similar rating company or otherwise acceptable to Owner.

5.2.2.1 Insurance Coverage Required.

5.2.2.1.1 Workers' Compensation. Insurance with limits as required by the Texas Workers' Compensation Act and Employer's Liability Insurance with limits of not less than:

\$1,000,000.00 each accident;

\$1,000,000.00 disease each employee; and

\$1,000,000.00 disease policy limit.

Policies must include (a) Other States Endorsement to include Texas if business is domiciled outside the State of Texas, and (b) a waiver of all rights of subrogation in favor of Owner.

5.2.2.1.2 Commercial General Liability Insurance, including premises, operations, independent contractor's liability, products and completed operations and contractual liability, covering, but not limited to, the liability assumed under the indemnification provisions of this Contract, fully insuring Contractor's (or Subcontractor's) liability for bodily injury (including death) and property damage with a minimum limit of:

\$1,000,000.00 per occurrence;

\$2,000,000.00 general aggregate;

\$2,000,000.00 products and completed operations aggregate; and

Coverage shall be on an "occurrence" basis.

The policy shall include coverage extended to apply to completed operations and explosion, collapse, and underground hazards. The policy shall include endorsement CG2503 Amendment of Aggregate Limits of Insurance (per project) or its equivalent.

If the Work involves any activities within fifty (50) feet of any railroad, railroad protective insurance as may be required by the affected railroad, written for not less than the limits required by such railroad.

5.2.2.1.3 Asbestos Abatement Liability Insurance, including coverage for liability arising from the encapsulation, removal, handling, storage, transportation, and disposal of asbestos containing materials, if the Work or the Project includes asbestos containing materials.

The combined single limit for bodily injury and property damage will be a minimum of \$1,000,000.00 per occurrence.

Specific requirement for claims-made form: Required period of coverage will be determined by the following formula: continuous coverage for life of the Contract, plus one (1) year (to provide coverage for the warranty period), and an extended discovery period for a minimum of five (5) years which shall begin at the end of the warranty period.

Employer's liability limits for asbestos abatement will be:

\$1,000,000.00 each accident;

\$1,000,000.00 disease each employee; and

\$1,000,000.00 disease policy limit.

If this Contract is for asbestos abatement only, the All-Risk Builder's Risk or All-Risk Installation Floater is not required.

Article 6. Construction Documents, Coordination Documents, and Record Documents

6.1 Drawings and Specifications.

6.1.1 Copies Furnished. Contractor will be furnished, free of charge, the number of complete sets of the Drawings, Specifications and addenda as provided in the Supplementary General Conditions or Special Conditions. Additional complete sets of Drawings and Specifications, if requested, will be furnished at reproduction cost to the entity requesting such additional sets. Electronic copies of such documents will be provided to Contractor without charge.

6.1.2 Ownership of Drawings and Specifications. All Drawings, Specifications and copies thereof furnished by A/E are to remain A/E's property. These documents are not to be used on any other project, and with the exception of the Contract record set and electronic versions needed for warranty operations, are to be returned to the A/E, upon request, following completion of the Work.

6.1.3 Interrelation of Documents. The Contract Documents as referenced in the Contract between Owner and Contractor are complementary, and what is required by one shall be as binding as if required by all.

6.1.4 Resolution of Conflicts in Documents. Where conflicts may exist within the Contract Documents, the documents shall govern in the following order: (a) Change Orders, addenda, and written amendments to the Contract; (b) the Contract; (c) Drawings; (d) Specifications (but Specifications shall control over Drawings as to quality of materials and installation); and (e) other Contract Documents. Among other

categories of documents having the same order of precedence, the term or provision that includes the latest date shall control. Contractor shall notify A/E and ODR for resolution of the issue prior to executing the Work in question.

6.1.5 Contractor's Duty to Review Contract Documents. In order to facilitate its responsibilities for completion of the Work in accordance with and as reasonably inferable from the Contract Documents, prior to commencing the Work, Contractor shall examine and compare the Contract Documents, information furnished by Owner, relevant field measurements made by Contractor and any visible or reasonably anticipated conditions at the Site affecting the Work. This duty extends throughout the construction phase prior to commencing each particular work activity and/or system installation.

6.1.6 Discrepancies and Omissions in Drawings and Specifications.

6.1.6.1 Promptly report to ODR and to A/E the discovery of any apparent error, omission or inconsistency in the Contract Documents prior to execution of the Work.

6.1.6.2 It is recognized that Contractor is not acting in the capacity of a licensed design professional, unless it is performing as a Design-Build firm.

6.1.6.3 It is further recognized that Contractor's examination of Contract Documents is to facilitate construction and does not create an affirmative responsibility to detect errors, omissions or inconsistencies or to ascertain compliance with applicable laws, building codes or regulations, unless it is performing as a Design-Build firm or a Construction Manager-at-Risk.

6.1.6.4 When performing as a Design-Build firm, Contractor has sole responsibility for discrepancies, errors, and omissions in the Drawings and Specifications.

6.1.6.5 When performing as a Construction Manager-at-Risk, Contractor has a shared responsibility with A/E for discovery and resolution of discrepancies, errors, and omissions in the Contract Documents. In such case, Contractor's responsibility pertains to review, coordination, and recommendation of resolution strategies within budget constraints.

6.1.6.6 Contractor has no liability for errors, omissions, or inconsistencies unless Contractor knowingly failed to report a recognized problem to Owner or the Work is executed under a Design-Build or Construction Manager-at-Risk Contract as outlined above. Should Contractor fail to perform the examination

and reporting obligations of these provisions, Contractor is responsible for avoidable costs and direct and/or consequential damages.

6.1.6.7 Owner does not warrant or make any representations as to the accuracy, suitability, or completeness of any information furnished to Contractor by Owner or its representatives.

6.2 Requirements for Record Documents. Contractor shall:

6.2.1 Maintain at the Site one copy of all Drawings, Specifications, addenda, approved submittals, Contract modifications, and all Project correspondence, and shall keep current and maintain Drawings and Specifications in good order with postings and markings to record actual conditions of Work and show and reference all changes made during construction. Contractor shall provide Owner and A/E access to these documents at their request.

6.2.2 Maintain the Record Documents which reflect the actual field conditions and representations of the Work performed, whether it be directed by addendum, Change Order, or otherwise. Contractor shall make available the Record Documents and all records prescribed herein for reference and examination by Owner and its representatives and agents.

6.2.3 Update the Record Documents at least monthly prior to submission of periodic partial pay estimates. Failure to maintain current Records Documents constitutes cause for denial of a progress payment otherwise due.

6.2.4 Prior to requesting Substantial Completion inspection, Contractor shall furnish a copy of its marked-up Record Documents and a preliminary copy of each instructional manual, maintenance and operating manual, parts catalogue, wiring diagrams, spare parts, specified service warranties, and like publications, and parts for all installed equipment, systems, and like items as described in the Contract Documents.

6.2.5 Once determined acceptable by ODR with input from A/E, provide one (1) reproducible copy and one (1) electronic media copy in a format acceptable to the ODR of all Record Documents, unless otherwise specified by the Supplementary General Conditions or Special Conditions.

6.2.6 Contractor shall be responsible for updating the Record Documents for all Contractor initiated documents and changes to the Contract Documents due to coordination and actual field conditions, including RFIs.

6.2.7 A/E shall be responsible for updating the Record Documents for any addenda, Change Orders, A/E supplemental instructions and any other alterations to the Contract Documents generated by A/E or Owner.

Article 7. Construction Safety

7.1 General. It is the duty and responsibility of Contractor and all of its Subcontractors to be familiar with, enforce, and comply with all requirements of Public Law No. 91-596, 29 U.S.C. § 651 et. Seq., the Occupational Safety and Health Act of 1970 (OSHA), and all amendments thereto. Contractor shall prepare a safety plan specific to the Project and submit it to ODR and A/E prior to commencing Work. In addition, Contractor and all of its Subcontractors shall comply with all applicable laws and regulations of any public body having jurisdiction for safety of persons or property to protect them from damage, injury, or loss and erect and maintain all necessary safeguards for such safety and protection.

7.2 Notices. Contractor shall provide notices as follows:

7.2.1 Notify owners of adjacent property, including those that own or operate utility services and/or underground facilities, and utility owners, when prosecution of the Work may affect them or their facilities, and cooperate with them in the protection, removal, relocation and replacement, and access to their facilities and/or utilities.

7.2.2 Coordinate the exchange of material safety data sheets (MSDSs) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in connection with laws and regulations. Contractor shall maintain a complete file of MSDSs for all materials in use on the Site throughout the construction phase and make such file available to Owner and its agents as requested.

7.3 Emergencies. In any emergency affecting the safety of persons or property, Contractor shall act to minimize, mitigate, and prevent threatened damage, injury or loss. Contractor shall:

7.3.1 Have authorized agents of Contractor respond immediately upon call at any time of day or night when circumstances warrant the presence of Contractor to protect the Work or adjacent property from damage or to take such action pertaining to the Work as may be necessary to provide for the safety of the public.

7.3.2 Give ODR and A/E prompt notice of all such events.

7.3.3 If Contractor believes that any changes in the Work or variations from Contract Documents have been caused by its emergency response, promptly notify Owner within seventy-two (72) hours of the emergency response event.

7.3.4 Should Contractor fail to respond, Owner is authorized to direct other forces to take action as necessary and Owner may deduct any cost of remedial action from funds otherwise due Contractor.

7.4 Injuries. In the event of an incident or accident involving outside medical care for an individual on or near the Work, Contractor shall notify ODR and other parties as may be directed promptly, but no later than twenty-four (24) hours after Contractor learns that an event required medical care. Contractor shall:

7.4.1 Record the location of the event and the circumstances surrounding it, by using photography or other means, and gather witness statements and other documentation which describes the event.

7.4.2 Supply ODR and A/E with an incident report no later than thirty-six (36) hours after the occurrence of the event. In the event of a catastrophic incident (one fatality or three workers hospitalized), barricade and leave intact the scene of the incident until all investigations are complete. A full set of incident investigation documents, including facts, findings of cause, and remedial plans shall be provided within one (1) week after occurrence, unless otherwise directed by legal counsel. Contractor shall provide ODR with written notification within one week of such catastrophic event if legal counsel delays submission of the full report.

7.5 Environmental Safety. Upon encountering any previously unknown potentially hazardous material, or other materials potentially contaminated by hazardous material, Contractor shall immediately stop work activities impacted by the discovery, secure the affected area, and notify ODR immediately.

7.5.1 Contractor shall bind all Subcontractors to the same duty.

7.5.2 Upon receiving such notice, ODR will promptly engage qualified experts to make such investigations and conduct such tests as may be reasonably necessary to determine the existence or extent of any environmental hazard. Upon completion of this investigation, ODR will issue a written report to Contractor identifying the material(s) found and indicate any necessary steps to be taken to treat, handle, transport or dispose of the material.

7.5.3 Owner may hire third-party contractors to perform any or all such steps.

7.5.4 Should compliance with ODR's instructions result in an increase in Contractor's cost of performance, or delay the Work, Owner will make an equitable adjustment to the Contract Sum and/or the time of completion, and modify the Contract in writing accordingly.

7.6 Trenching Plan. When the Project requires excavation which either exceeds a depth of four (4) feet, or results in any worker's upper body being positioned below grade level, Contractor is required to submit a trenching plan to ODR prior to commencing trenching operations unless an engineered plan is part of the Contract Documents. The plan is required to be prepared and sealed by a professional engineer registered in the State of Texas, and hired or employed by Contractor or Subcontractor to perform the Work. Said engineer cannot be anyone who is otherwise either directly or indirectly engaged on this Project.

Article 8. Quality Control

8.1 Materials and Workmanship. Contractor shall execute Work in a good and workmanlike manner in accordance with the Contract Documents. Contractor shall develop and provide a quality control plan specific to this Project and acceptable to Owner. Where Contract Documents do not specify quality standards, Contractor shall complete and construct all Work in compliance with generally accepted construction industry standards. Unless otherwise specified, Contractor shall incorporate all new materials and equipment into the Work under the Contract.

8.2 Testing.

8.2.1 Owner is responsible for coordinating and paying for routine and special tests required to confirm compliance with quality and performance requirements, except as stated below or otherwise by the Contract Documents.

8.2.2 Contractor shall provide the following testing as well as any other testing required of Contractor by the Specifications:

8.2.2.1 Any test of basic material or fabricated equipment included as part of a submittal for a required item in order to establish compliance with the Contract Documents.

8.2.2.2 Any test of basic material or fabricated equipment offered as a substitute for a specified item on which a test may be required in order to establish compliance with the Contract Documents.

8.2.2.3 Preliminary, start-up, pre-functional and operational testing of building equipment and systems as necessary to confirm operational compliance with requirements of the Contract Documents.

8.2.2.4 All subsequent tests on original or replaced materials conducted as a result of prior testing failure.

8.2.3 All testing shall be performed in accordance with standard test procedures by an accredited laboratory, or special consultant as appropriate, acceptable to Owner. Results of all tests shall be provided promptly to ODR, A/E and Contractor.

8.2.4 Noncompliance (Test Results). Should any of the tests indicate that a material and/or system does not comply with the Contract requirements, the burden of proof remains with Contractor, subject to:

8.2.4.1 Contractor selection and submission of the laboratory for Owner acceptance.

8.2.4.2 Acceptance by Owner of the quality and nature of tests.

8.2.4.3 All tests taken in the presence of A/E and/or ODR, or their representatives.

8.2.4.4 If tests confirm that the material/systems comply with Contract Documents, Owner will pay the cost of the test.

8.2.4.5 If tests reveal noncompliance, Contractor will pay those laboratory fees and costs of that particular test and all future tests, of that failing Work, necessary to eventually confirm compliance with Contract Documents.

8.2.4.6 Proof of noncompliance with the Contract Documents will make Contractor liable for any corrective action which ODR determines appropriate, including complete removal and replacement of noncompliant work or material.

8.2.5 Notice of Testing. Contractor shall give ODR and A/E timely notice of its readiness and the date arranged so that ODR and A/E may observe such inspection, testing or approval.

8.2.6 Test Samples. Contractor is responsible for providing Samples of sufficient size for test purposes and for coordinating such tests with their Work Progress Schedule to avoid delay.

8.2.7 Covering Up Work. If Contractor covers up any Work without providing Owner an opportunity to inspect, Contractor shall, if requested by ODR, uncover and recover the Work at Contractor's expense.

8.3 Submittals.

8.3.1 Contractor's Submittals. Contractor shall submit with reasonable promptness consistent with the Project Schedule and in orderly sequence all Shop Drawings, Samples, or other information required by the Contract Documents, or subsequently required by Change Order. Prior to submitting, Contractor shall review each submittal for general compliance with Contract Documents and approve submittals for review by A/E and Owner by an approval stamp affixed to each copy. Submittal data presented without Contractor's stamp of approval will be returned without review or comment. Any delay resulting from Contractor's failure to certify approval of the Submittal is Contractor's responsibility.

8.3.1.1 Contractor shall within twenty-one (21) days of the effective date of the Notice to Proceed with construction, submit to ODR and A/E a submittal schedule/register, organized by specification section, listing all items to be furnished for review and approval by A/E and Owner. The list shall include Shop Drawings, manufacturer's literature, certificates of compliance, materials Samples, materials colors, guarantees, and all other items identified throughout the Specifications.

8.3.1.2 Contractor shall indicate the type of item, Contract requirements reference, and Contractor's scheduled dates for submitting the item along with the requested dates for approval from A/E and Owner. The Submittal Register shall indicate the projected dates for procurements of all included items and shall be updated at least monthly with actual approval and procurement dates.

Contractor's Submittal Register must be reasonable in terms of the review time for complex submittals. Contractor's submittal schedule must be consistent with the Work Progress Schedule and identify critical submittals, and must show and allow a minimum of fifteen (15) days duration after receipt by A/E and ODR for review and approval. If re-submittal is required, an additional fifteen (15) day minimum review time is allowed. Contractor will submit the updated Submittal Register with each request for progress payment. Owner may establish routine review procedures and schedules for submittals at the preconstruction conference and/or elsewhere in the Contract Documents. If Contractor fails to update and provide the Submittal Register as required, Owner may, after seven (7) days notice to Contractor, withhold a reasonable sum of money that would otherwise be due Contractor.

8.3.1.3 Contractor shall coordinate the Submittal Register with the Work Progress Schedule, and not schedule Work requiring a submittal to begin prior to scheduling review and approval of the related submittal. Contractor will revise and/or update both schedules monthly to ensure consistency and current Project data. Contractor will provide to ODR the updated Submittal Register and Work Progress Schedule with each application for progress payment, and will refer to requirements for the Work Progress Schedule for inclusion of procurement activities therein. Regardless, the Submittal Register shall identify dates submitted and returned and shall be used to confirm status and disposition of particular items submitted, including approval or other action taken and other information not conveniently tracked through the Work Progress Schedule.

8.3.1.4 By submitting Shop Drawings, Samples or other required information, Contractor represents that it has determined and verified all applicable field measurements, field construction criteria, materials, catalogue numbers and

similar data, and has checked and coordinated each Shop Drawing and Sample with the requirements of the Work and the Contract Documents.

8.3.2 Review of Submittals. A/E and ODR review is only for conformance with the design concept and the information provided in the Contract Documents. Responses to submittals will be in writing. The approval of a separate item does not indicate approval of an assembly in which the item functions. The approval of a submittal does not relieve Contractor of responsibility for any deviation from the requirements of the Contract unless Contractor informs A/E and ODR of such deviation in a clear, conspicuous and written manner on the submittal transmittal and at the time of submission, obtains Owner's written specific approval of the particular deviation.

8.3.3 Correction and Resubmission. Contractor shall make any corrections required to a submittal and resubmit the required number of corrected copies promptly so as to avoid delay, until submittal approval, and direct attention in writing to A/E and ODR, when applicable, to any new revisions other than the corrections requested on previous submissions.

8.3.4 Limits on Shop Drawing Review. Contractor shall not commence any Work requiring a submittal until review of the submittal under Subsection 8.3.2. Contractor shall construct all such Work in accordance with reviewed submittals. Comments incorporated as part of the review in Subsection 8.3.2 of Shop Drawings and Samples is not authorization to Contractor to perform extra work or changed work unless authorized through a Change Order. A/E's and ODR's review, if any, does not relieve Contractor from responsibility for defects in the Work resulting from errors or omissions of any kind on the submittal, regardless of any approval action.

8.3.5 No Substitutions Without Approval. ODR and A/E may receive and consider Contractor's request for substitution when Contractor agrees to reimburse Owner for review costs and satisfies the requirements of this section. If Contractor does not satisfy these conditions, ODR and A/E will return the request without action except to record noncompliance with these requirements. Owner will not consider the request if Contractor cannot provide the product or method because of failure to pursue the Work promptly or coordinate activities properly. Contractor's request for a substitution may be considered by ODR and A/E when:

8.3.5.1 The Contract Documents do not require extensive revisions; and

8.3.5.2 Proposed changes are in keeping with the general intent of the Contract Documents and the design intent of A/E and do not result in an increase in cost to Owner; and

8.3.5.3 The request is timely, fully documented, properly submitted and one or more of the following apply:

8.3.5.3.1 Contractor cannot provide the specified product, assembly or method of construction within the Contract Time;

8.3.5.3.2 The request directly relates to an “or-equal” clause or similar language in the Contract Documents;

8.3.5.3.3 The request directly relates to a “product design standard” or “performance standard” clause in the Contract Documents;

8.3.5.3.4 The requested substitution offers Owner a substantial advantage in cost, time, energy conservation or other considerations, after deducting additional responsibilities Owner must assume;

8.3.5.3.5 The specified product or method of construction cannot receive approval by an authority having jurisdiction, and ODR can approve the requested substitution;

8.3.5.3.6 Contractor cannot provide the specified product, assembly or method of construction in a manner that is compatible with other materials and where Contractor certifies that the substitution will overcome the incompatibility;

8.3.5.3.7 Contractor cannot coordinate the specified product, assembly or method of construction with other materials and where Contractor certifies they can coordinate the proposed substitution; or

8.3.5.3.8 The specified product, assembly or method of construction cannot provide a warranty required by the Contract Documents and where Contractor certifies that the proposed substitution provides the required warranty.

8.3.6 Unauthorized Substitutions at Contractor’s Risk. Contractor is financially responsible for any additional costs or delays resulting from unauthorized substitution of materials, equipment or fixtures other than those specified. Contractor shall reimburse Owner for any increased design or contract administration costs resulting from such unauthorized substitutions.

8.4 Field Mock-Up.

8.4.1 Mock-ups shall be constructed prior to commencement of a specified scope of work to confirm acceptable workmanship.

8.4.1.1 As a minimum, filed mock-ups shall be constructed for roofing systems, exterior veneer/finish systems, glazing systems, and any other Work requiring a mock-up as identified throughout the Contract Documents. Mock-ups for systems not part of the Project scope shall not be required.

8.4.1.2 Mock-ups may be incorporated into the Work if allowed by the Contract Documents and if acceptable to ODR. If mock-ups are freestanding, they shall remain in place until otherwise directed by Owner.

8.4.1.3 Contractor shall include field mock-ups in their Work Progress Schedule and shall notify ODR and A/E of readiness for review sufficiently in advance to coordinate review without delay.

8.5 Inspection During Construction.

8.5.1 Contractor shall provide sufficient, safe, and proper facilities, including equipment as necessary for safe access, at all reasonable times for observation and/or inspection of the Work by Owner and its agents.

8.5.2 Contractor shall not cover up any Work with finishing materials or other building components prior to providing Owner and its agents an opportunity to perform an inspection of the Work.

8.5.2.1 Should corrections of the Work be required for approval, Contractor shall not cover up corrected Work until Owner indicates approval.

8.5.2.2 Contractor shall provide notification of at least five (5) working days or otherwise as mutually agreed, to ODR of the anticipated need for a cover-up inspection. Should ODR fail to make the necessary inspection within the agreed period, Contractor may proceed with cover-up Work, but is not relieved of responsibility for Work to comply with requirements of the Contract Documents.

Article 9. Construction Schedules

9.1 Contract Time. **TIME IS AN ESSENTIAL ELEMENT OF THE CONTRACT.** The Contract Time is the time between the dates indicated in the Notice to Proceed for commencement of the Work and for achieving Substantial Completion. The Contract Time can be modified only by Change Order. Failure to achieve Substantial Completion within the Contract Time or as otherwise agreed to in writing will cause damage to Owner and may subject Contractor to liquidated damages as provided in the Contract Documents. If Contractor fails to achieve Final Completion in a reasonable time after Substantial Completion, Contractor shall be responsible for Owner's damages including, but not limited to, additional inspection, project management, and maintenance cost to the extent caused by Contractor's failure to achieve Final Completion.

9.2 Notice to Proceed. Owner will issue a Notice to Proceed which shall state the dates for beginning Work and for achieving Substantial Completion of the Work.

9.3 Work Progress Schedule. Refer to Supplementary Conditions, Special Conditions and Division 1 of the Specifications for additional schedule requirements. Unless indicated otherwise in those documents, Contractor shall submit its initial Work Progress Schedule for the Work in relation to the entire Project not later than twenty-one (21) days after the effective date of the Notice to Proceed to ODR and A/E. Unless otherwise indicated in the Contract Documents, the Work Progress Schedule shall be computerized Critical Path Method (CPM) with fully editable logic. This initial schedule shall indicate the dates for starting and completing the various aspects required to complete the Work, including mobilization, procurement, installation, testing, inspection, delivery of Close-Out Documents and acceptance of the Work of the Contract. When acceptable to Owner, the initially accepted schedule shall be the Baseline Schedule for comparison to actual conditions throughout the Contract Duration.

Note: This article pertains to construction phase schedules. Additional requirements for design phase scheduling for Construction Manager-at-Risk and Design-Build contracts are outlined in Division 1 Project Planning and Scheduling Specifications.

9.3.1 Schedule Requirements. Contractor shall submit electronic and paper copy of the initial Work Progress Schedule reflecting accurate and reliable representations of the planned progress of the Work, the Work to date if any, and Contractor's actual plans for its completion. Contractor shall organize and provide adequate detail so the schedule is capable of measuring and forecasting the effect of delaying events on completed and uncompleted activities.

9.3.1.1 Contractor shall resubmit the initial schedule as required to address review comments from A/E and ODR until such schedule is accepted as the Baseline Schedule.

9.3.1.2 Submittal of a schedule, schedule revision or schedule update constitutes Contractor's representation to Owner of the accurate depiction of all progress to date and that Contractor will follow the schedule as submitted in performing the Work.

9.3.2 Schedule Updates. Contractor shall update the Work Progress Schedule and the Submittal Register monthly, as a minimum, to reflect progress to date and current plans for completing the Work, while maintaining the original schedule as Baseline Schedule, and shall submit paper and electronic copies of the update to A/E and ODR as directed, but as a minimum with each request for payment. Owner has no duty to make progress payments unless accompanied by the updated Work Progress Schedule. The Work Progress Schedule must show the anticipated date of completion reflecting all extensions of time granted through Change Order as of the date of the update. Contractor may

revise the Work Progress Schedule when in Contractor's judgment it becomes necessary for the management of the Work. Contractor shall identify all proposed changes to schedule logic to Owner and A/E via an executive summary accompanying the updated schedule for review prior to final implementation of revisions into a revised Baseline Schedule. Schedule changes that materially impact Owner's operations shall be communicated promptly to ODR and shall not be incorporated into the revised Baseline Schedule without ODR's consent.

9.3.3 The Work Progress Schedule is for Contractor's use in managing the Work and submittal of the schedule, and successive updates or revisions are for the information of Owner and to demonstrate that Contractor has complied with the requirements for planning the Work. Owner's acceptance of a schedule, schedule update or revision constitutes Owner's agreement to coordinate its own activities with Contractor's activities as shown on the schedule.

9.3.3.1 Acceptance of the Work Progress Schedule, or update and/or revision thereto, does not indicate any approval of Contractor's proposed sequences and duration.

9.3.3.2 Acceptance of a Work Progress Schedule update or revision indicating early or late completion does not constitute Owner's consent, alter the terms of the Contract, or waive either Contractor's responsibility for timely completion or Owner's right to damages for Contractor's failure to do so.

9.3.3.3 Contractor's scheduled dates for completion of any activity or the entire Work do not constitute a change in terms of the Contract. Change Orders are the only method of modifying the Substantial Completion Date(s) and Contract Time.

9.4 Ownership of Float. Unless otherwise indicated in the Contract Documents, Contractor shall develop its schedule, pricing, and execution plan to provide a minimum of ten (10) percent total float at acceptance of the Baseline Schedule. Float time contained in the Work Progress Schedule is not for the exclusive benefit of Contractor or Owner, but belongs to the Project and may be consumed by either party. Before Contractor uses any portion of the float, Contractor must submit a written request to do so to the Owner and receive Owner's written authorization to use the float. Owner's approval shall not be unreasonably withheld.

9.5 Completion of Work. Contractor is accountable for completing the Work within the Contract Time stated in the Contract, or as otherwise amended by Change Order.

9.5.1 If, in the judgment of Owner, the Work is behind schedule and the rate of placement of Work is inadequate to regain scheduled progress to insure timely completion of the entire Work or a separable portion thereof, Contractor, when so

informed by Owner, shall immediately take action to increase the rate of Work placement by:

- 9.5.1.1 An increase in working forces;
- 9.5.1.2 An increase in equipment or tools;
- 9.5.1.3 An increase in hours of work or number of shifts;
- 9.5.1.4 The expedited delivery of materials; and/or
- 9.5.1.5 Other action proposed if acceptable to Owner.

9.5.2 Within ten (10) days after such notice from ODR, Contractor shall notify ODR in writing of the specific measures taken and/or planned to increase the rate of progress. Contractor shall include an estimate as to the date of scheduled progress recovery and an updated Work Progress Schedule illustrating Contractor's plan for achieving timely completion of the Project. Should ODR deem the plan of action inadequate, Contractor shall take additional steps or make adjustments as necessary to its plan of action until it meets with ODR's approval.

9.6 Modification of the Contract Time.

9.6.1 Delays and extensions of time as hereinafter described are valid only if executed in accordance with provisions set forth in Article 11.

9.6.2 When a delay defined herein as excusable prevents Contractor from completing the Work within the Contract Time, Contractor is entitled to an extension of time. Owner will make an equitable adjustment and extend the number of days lost because of excusable delay or Weather Days, as measure by Contractor's Progress Schedule. All extensions of time will be granted in calendar days. In no event, however, will an extension of time be granted for delays that merely extend the duration of non-critical activities, or which only consume float without delaying the Project's Substantial Completion date(s).

9.6.2.1 A "Weather Day" is a day on which Contractor's current schedule indicates Work is to be done, and on which inclement weather and related Site conditions prevent Contractor from performing seven (7) hours of Work between the hours of 7:00 a.m. and 6:00 p.m. Weather Days are excusable delays. When weather conditions at the Site prevent Work from proceeding, Contractor shall immediately notify ODR for confirmation of the conditions. At the end of each calendar month, Contractor shall submit to ODR and A/E a list of Weather Days occurring in that month, along with documentation of the impact on critical activities. Based on confirmation by ODR, any time extension granted will be

issued by Change Order. If Contractor and Owner cannot agree on the time extension, Owner may issue a ULCO for fair and reasonable time extension.

9.6.2.2 Excusable Delay. Contractor is entitled to an equitable adjustment of the Contract Time, issued via Change Order, for delays caused by the following:

9.6.2.2.1 Errors, omissions, and imperfections in design, which A/E corrects by means of changes in the Drawings and Specifications.

9.6.2.2.2 Unanticipated physical conditions at the Site, which A/E corrects by means of changes to the Drawings and Specifications or for which ODR directs changes in the Work identified in the Contract Documents.

9.6.2.2.3 Changes in the Work that affect activities identified in Contractor's schedule as "critical" to completion of the entire Work, if such changes are ordered by ODR or recommended by A/E and ordered by ODR.

9.6.2.2.4 Suspension of Work for unexpected natural events (sometimes called "acts of God"), civil unrest, strikes or other events which are not within the reasonable control of Contractor.

9.6.2.2.5 Suspension of Work, for convenience of ODR, which prevents Contractor from completing the Work within the Contract Time.

9.6.3 Contractor's relief in the event of such delays is the time impact to the critical path as determined by analysis of Contractor's schedule. In the event that Contractor incurs additional costs because of the excusable delays other than described in Subparagraph 9.6.2.2.4 and within the reasonable control of Owner, the Contract price and Contract Time are to be equitably adjusted by Owner pursuant to the provisions of Article 11.

9.7 No Damages for Delay. An extension of the Contract Time shall be the sole remedy of Contractor for delays in performance of the Work, whether or not such delays are foreseeable, except for delays caused solely by acts of Owner that constitute intentional interference with Contractor's performance of the Work and then only to the extent such acts continue after Contractor notifies Owner in writing of such interference. For delays caused by act(s) other than the sole intentional interference of Owner, Contractor shall not be entitled to any compensation or recovery of any damages including, without limitation, consequential damages, lost opportunity costs, impact damages, loss of productivity, or other similar damages.

Owner's exercise of any of its rights or remedies under the Contract including, without limitation, ordering changes in the Work or directing suspension, rescheduling, or correction of the Work, shall not be construed as intentional interference with Contractor's performance of the Work, regardless of the extent or frequency of Owner's exercise of such rights or remedies.

9.8 Concurrent Delay. When the completion of the Work is simultaneously delayed by an excusable delay or a delay arising from a cause not designated as excusable, Contractor may not be entitled to a time extension for the period of concurrent delay.

9.9 Other Time Extension Requests. Time extensions requested in association with changes to the Work directed or requested by Owner shall be included with Contractor's proposed costs for such change. Time extensions requested for inclement weather are covered by Paragraph 9.6.2.1 above. If Contractor believes that the completion of the Work is delayed by a circumstance other than for changes directed to the Work or weather, they shall give ODR written notice, stating the nature of the delay and the activities potentially affected, within five (5) days after the onset of the event or circumstance giving rise to the excusable delay. Contractor shall provide sufficient written evidence to document the delay. In the case of a continuing cause or delay, only one notice of claim is necessary. Contractor shall state claims for extensions of time in numbers of whole or half days.

9.9.1 Within ten (10) days after the cessation of the delay, Contractor shall formalize its request for extension of time in writing to include a full analysis of the schedule impact of the delay and substantiation of the excusable delay. All changes to the Contract Time or made as a result of such claims is by Change Order, as set forth in Article 11.

9.9.2 No extension of time releases Contractor or the Surety furnishing a performance or payment bond from any obligations under the Contract or such bond. Those obligations remain in full force until discharge of the Contract.

9.9.3 Contents of Time Extension Requests. Contractor shall provide with each Time Extension Request a quantitative demonstration or description of the impact of the delay on Project completion time, based on the Work Progress Schedule. Contractor shall include with Time Extension Requests a reasonably detailed narrative setting forth:

9.9.3.1 The nature of the delay and its cause and the basis of Contractor's claim of entitlement to a time extension.

9.9.3.2 Documentation of the actual impacts of the claimed delay on the critical path indicated in Contractor's Work Progress Schedule, and any concurrent delays.

9.9.3.3 Description and documentation of steps taken by Contractor to mitigate the effect of the claimed delay, including, when appropriate, the modification of the Work Progress Schedule.

9.9.4 Owner's Response. Owner will respond to the Time Extension Request by providing to Contractor written notice of the number of days granted, if any, and giving its reason if this number differs from the number of days requested by Contractor.

9.9.4.1 Owner will not grant time extensions for delays that do not affect the Contract Substantial Completion date.

9.9.4.2 Owner will respond to each properly submitted Time Extension Request within fifteen (15) days following receipt. If Owner cannot reasonably make a determination about Contractor's entitlement to a time extension within that time, Owner will notify Contractor in writing. Unless otherwise agreed by Contractor, Owner has no more than fifteen (15) additional days to prepare a final response. If Owner fails to respond within forty-five (45) days from the date the Time Extension Request is received, Contractor's request for a time extension shall be deemed rejected by Owner.

9.10 Failure to Complete Work Within the Contract Time. **TIME IS AN ESSENTIAL ELEMENT OF THE CONTRACT.** Contractor's failure to substantially complete the Work within the Contract Time or to achieve Substantial Completion as required will cause damage to Owner. These damages may be liquidated by agreement of Contractor and Owner, in the amount per day as set forth in the Contract Documents.

9.11 Liquidated Damages. Owner may collect liquidated damages due from Contractor directly or indirectly by reducing the Contract Sum in the amount of liquidated damages stated in the Supplementary General Conditions or Special Conditions.

Article 10. Payments

10.1 Schedule of Values. Contractor shall submit to ODR and A/E for acceptance a Schedule of Values accurately itemizing material and labor for the various classifications of the Work based on the organization of the specification sections and of sufficient detail acceptable to ODR. The accepted Schedule of Values will be the basis for the progress payments under the Contract.

10.1.1 No progress payments will be made prior to receipt and acceptance of the Schedule of Values, provided in such detail as required by ODR, and submitted not less than twenty-one (21) days prior to the first request for payment. The Schedule of Values shall follow the order of trade divisions of the Specifications and include itemized costs for general conditions, costs for preparing Close-Out Documents, fees, contingencies, and

Owner cash allowances, if applicable, so that the sum of the items will equal the Contract price. As appropriate, Contractor will assign each item labor and/or material values, the subtotal thereof equaling the value of the Work in place when complete.

10.1.1.1 Owner requires that the Work items be inclusive of the cost of the Work items only. Any contract markups for overhead and profit, general conditions, etc., shall be contained within separate line items for those specific purposes which shall be divided into at least two (2) lines, one (1) for labor and one (1) for materials.

10.1.2 Contractor shall retain a copy of all worksheets used in preparation of its bid or proposal, supported by a notarized statement that the worksheets are true and complete copies of the documents used to prepare the bid or proposal. Contractor shall make the worksheets available to ODR at the time of Contract execution. Thereafter, Contractor shall grant Owner during normal business hours access to said copy of worksheets at any time during the period commencing upon execution of the Contract and ending one year after final payment.

10.2 Progress Payments. Contractor will receive periodic progress payments for Work performed, materials in place, suitably stored on Site, or as otherwise agreed to by Owner and Contractor. Payment is not due until receipt by ODR or his designee of a correct and complete Pay Application in electronic and/or hard copy format as set forth in Supplementary General Conditions, Special Conditions, and certified by A/E. Progress payments are made provisionally and do not constitute acceptance of work not in accordance with the Contract Documents. Owner will not process progress payment applications for Change Order Work until all parties execute the Change Order.

10.2.1 Preliminary Pay Worksheet. Once each month that a progress payment is to be requested, the Contractor shall submit to A/E and ODR a complete, clean copy of a preliminary pay worksheet or preliminary pay application, to include the following:

10.2.1.1 Contractor's estimate of the amount of Work performed, labor furnished, and materials incorporated into the Work, using the established Schedule of Values;

10.2.1.2 An updated Work Progress Schedule including the executive summary and all required schedule reports;

10.2.1.3 HUB subcontracting plan Progress Assessment Report as required in Paragraph 4.2.5.1;

10.2.1.4 Such additional documentation as Owner may require as set forth in the Supplementary General Conditions or elsewhere in the Contract Documents; and

10.2.1.5 Construction payment affidavit.

10.2.2 Contractor's Application for Payment. As soon as practicable, but in no event later than seven (7) days after receipt of the preliminary pay worksheet, A/E and ODR will meet with Contractor to review the preliminary pay worksheet and to observe the condition of the Work. Based on this review, ODR and A/E may require modifications to the preliminary pay worksheet prior to the submittal of an Application for Payment, and will promptly notify Contractor of revisions necessary for approval. As soon as practicable, Contractor shall submit its Application for Payment on the appropriate and completed form, reflecting the required modifications to the Schedule of Values required by A/E and/or ODR. Contractor shall attach all additional documentation required by ODR and/or A/E, as well as an affidavit affirming that all payrolls, bills for labor, materials, equipment, subcontracted work and other indebtedness connected with Contractor's Application for Payment are paid or will be paid within the time specified in Tex. Gov't Code, Chapter 2251. No Application for Payment is complete unless it fully reflects all required modifications, and attaches all required documentation including Contractor's affidavit.

10.2.3 Certification by Architect/Engineer. Within five (5) days or earlier following A/E's receipt of Contractor's formal Application for Payment, A/E will review the Application for Payment for completeness and forward it to ODR. A/E will certify that the application is complete and payable, or that it is incomplete, stating in particular what is missing. If the Application for Payment is incomplete, Contractor shall make the required corrections and resubmit the Application for Payment for processing.

10.3 Owner's Duty to Pay. Owner has no duty to pay Contractor except on receipt by ODR of: 1) a complete Application for Payment certified by A/E; 2) Contractor's updated Work Progress Schedule; and 3) confirmation that Contractor has maintained and updated the Record Documents kept at the Site.

10.3.1 Payment for stored materials and/or equipment confirmed by Owner and A/E to be on-site or otherwise properly stored is limited to eighty-five percent (85%) of the scheduled value for the materials or equipment, whichever is less.

10.3.2 Retainage. Owner will withhold from each progress payment, as retainage, five percent (5%) of the total earned amount, the amount authorized by law, or as otherwise set forth in the Supplementary General Conditions or Special Conditions. Retainage is managed in conformity with Tex. Gov't Code, Chapter 2252, Subchapter B.

10.3.2.1 Contractor shall provide written consent of its Surety for any request for reduction or release of retainage.

10.3.2.2 At least sixty-five percent (65%) of the Contract or such other discrete Work phase as set forth in Subsection 12.1.6 or Work package delineated in the Contract Documents must be completed before Owner can consider a retainage reduction or release.

10.3.2.3 Contractor shall not withhold retainage from their Subcontractors and suppliers in amounts that are any percentage greater than that withheld in its Contract with Owner under this subsection, unless otherwise acceptable to Owner.

10.3.3 Price Reduction to Cover Loss. Owner may reduce any Application for Payment, prior to payment to the extent necessary to protect Owner from loss on account of actions of Contractor including, but not limited to, the following:

10.3.3.1 Defective or incomplete Work not remedied;

10.3.3.2 Damage to Work of a separate Contractor;

10.3.3.3 Failure to maintain scheduled progress or reasonable evidence that the Work will not be completed within the Contract Time;

10.3.3.4 Persistent failure to carry out the Work in accordance with the Contract Documents;

10.3.3.5 Reasonable evidence that the Work cannot be completed for the unpaid portion of the Contract Sum;

10.3.3.6 Assessment of fines for violations of prevailing wage rate law; or

10.3.3.7 Failure to include the appropriate amount of retainage for that periodic progress payment.

10.3.4 Title to all material and Work covered by progress payments transfers to Owner upon payment.

10.3.4.1 Transfer of title to Owner does not relieve Contractor and its Subcontractors of the sole responsibility for the care and protection of materials and Work upon which payments have been made until final acceptance, or the restoration of any damaged Work, or waive the right of Owner to require the fulfillment of all the terms of the Contract.

10.4 Progress Payments. Progress payments to Contractor do not release Contractor or its Surety from any obligations under the Contract.

10.4.1 Upon Owner's request, Contractor shall furnish manifest proof of the status of Subcontractor's accounts in a form acceptable to Owner.

10.4.2 Pay estimate certificates must be signed by a corporate officer or a representative duly authorized by Contractor.

10.4.3 Contractor must provide copies of bills of lading, invoices, delivery receipts or other evidence of the location and value of such materials in requesting payment for materials.

10.4.4 For purposes of Tex. Gov't. Code, § 2251.021(a)(2), the date the performance of service is complete is the date when ODR approves the Application for Payment.

10.5 Off-Site Storage. With prior approval by Owner and in the event Contractor elects to store materials at an off-site location, Contractor must abide by the following conditions unless otherwise agreed in writing by Owner:

10.5.1 Store materials in a commercial warehouse meeting the criteria stated below.

10.5.2 Provide insurance coverage adequate not only to cover materials while in storage, but also in transit from the off-site storage areas to the Project Site. Copies of duly authenticated certificates of insurance, made out to insure Texas State Technical College Waco must be filed with Owner's representative.

10.5.3 Inspection by Owner's representative is allowed at any time. Owner's inspectors must be satisfied with security, control, maintenance and preservation measures.

10.5.4 Materials for this Project are physically separated and marked for the Project in a sectioned-off area. Only materials which have been approved through the submittal process are to be considered for payment.

10.5.5 Owner reserves the right to reject materials at any time prior to final acceptance of the complete Contract if those materials do not meet Contract requirements, regardless of any previous progress payment made.

10.5.6 With each monthly payment estimate, submit a report to ODR and A/E listing the quantities of materials already paid for and still stored in the off-site locations.

10.5.7 Make warehouse records, receipts and invoices available to Owner's representatives, upon request, to verify the quantities and their disposition.

10.5.8 In the event of Contract termination or default by Contractor, the items in storage off-site, upon which payment has been made, will be promptly turned over to Owner or Owner's agents at a location near the jobsite as directed by ODR. The full provisions of performance and payment bonds on this Project cover the materials off-site in every respect as though they were stored on the Project Site.

10.6 Time for Payment by Contractor Pursuant to Tex. Gov't Code § 2255.022

10.6.1 Contractor who receives a payment from a governmental entity shall pay Subcontractor the appropriate share of the payment not later than the tenth (10th) day after the date the Contractor receives payment.

10.6.2 The appropriate share is overdue on the eleventh (11th) day after the date the Contractor receives the payment.

Article 11. Changes

11.1 Change Orders. A Change Order issued after execution of the Contract is a written order to Contractor, signed by the Vice President of Administrative and Financial Services at Texas State Technical College Waco, Contractor, and A/E, authorizing a change in the Work or an adjustment in the Contract Sum or Contract Time. The Contract Sum and the Contract Time can only be changed by Change Order. A Change Order signed by Contractor indicates his agreement therewith, including the adjustment in the Contract Sum and/or the Contract Time. The Vice President of Administrative and Financial Services may issue a written authorization for Contractor to proceed with Work of a Change Order in advance of final execution by all parties in accordance with Section 11.9.

11.1.1 Owner, without invalidating the Contract and without approval of Contractor's Surety, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, and the Contract Sum and the Contract Time will be adjusted accordingly. All such changes in the Work shall be authorized by Change Order or ULCO, and shall be performed under the applicable conditions of the Contract Documents. If such changes cause an increase or decrease in Contractor's cost of, or time required for, performance of the Contract, an equitable adjustment shall be made and confirmed in writing in a Change Order or ULCO.

11.1.2 Owner and Contractor acknowledge and agree that the Specifications and Drawings may not be complete or free from errors, omissions and imperfections and that they may require changes or additions in order for the Work to be completed to the satisfaction of Owner, therefore, any minor errors, omissions or imperfections in the Specifications or Drawings, or any changes in or additions to the Specifications or Drawings to correct minor errors or omissions or the Work ordered by Owner shall not constitute or give rise to any claim, demand or cause of action of any nature whatsoever

in favor of Contractor, whether for breach of Contract or otherwise. However, should the nature of the errors or omissions necessitate substantial changes in the Work such that a Change Order is appropriate, Owner shall be liable to Contractor for the sum stated to be due Contractor in any Change Order approved and signed by both parties. The sum established in any Change Order, together with any extension of time contained in said Change Order, shall constitute full compensation to Contractor for all costs, expenses and damages to Contractor for the changes in the Work described in the Change Order, as permitted under Tex. Gov't Code, Chapter 2260.

11.1.3 Procedures for administration of Change Orders shall be established by Owner and stated in Supplementary General Conditions, Special Conditions, or elsewhere in the Contract Documents.

11.1.4 No verbal order, verbal statement, or verbal direction of Owner or his duly appointed representative shall be treated as a change under this article or entitle Contractor to an adjustment.

11.1.5 Contractor agrees that Owner or any of its duly authorized representatives shall have access and the right to examine any directly pertinent books, documents, papers, and records of Contractor. Further, Contractor agrees to include in all its subcontracts a provision to the effect that Subcontractor agrees that Owner or any of its duly authorized representatives shall have access to and the right to examine any directly pertinent books, documents, papers and records of said Subcontractor relating to any claim arising from the Contract, whether or not the Subcontractor is a party to the claim. The period of access and examination described herein which relates to appeals under the Disputes article of the Contract, litigation, or the settlement of claims arising out of the performance of the Contract shall continue until final disposition of such claims, appeals, or litigation.

11.2 Unit Prices. If unit prices are stated in the Contract Documents or subsequently agreed upon and if the quantities originally contemplated in setting the unit prices are so changed in a Proposed Change Order that application of the agreed unit prices to the quantities of Work proposed will cause substantial inequity to Owner or Contractor, the applicable unit prices shall be equitably adjusted as provided in the Supplementary General Conditions or Special Conditions or as agreed to by the parties and incorporated into a Change Order.

11.3 Claims for Additional Costs.

11.3.1 If Contractor wished to make a claim for an increase in the Contract Sum not related to a requested change, it shall give to Owner and A/E written notice thereof within twenty-one (21) days after the occurrence of the event or discovery of any conditions giving rise to such claim. Contractor must notify Owner and A/E before proceeding to execute any Work considered to add additional cost or time, except in an emergency

endangering life or property in which case Contractor shall act in accordance with Subsection 7.2.1, and failure to provide the required notice will invalidate any subsequent notice or claim for additional cost or time from Work. If Owner and Contractor cannot agree on the amount of the adjustment in the Contract Sum, it shall be determined as set forth under Article 15. Any change in the Contract Sum resulting from such claim shall be authorized by a Change Order or a ULCO.

11.3.2 If Contractor claims that additional cost is involved because of, but not limited to, 1) any written interpretation of the Contract Documents, 2) any order by Owner to stop the Work pursuant to Article 14 where Contractor was not at fault, or 3) any written order for a minor change in the Work issued pursuant to Section 11.4, Contractor shall make such claim as provided in Subsection 11.3.1.

11.3.3 Should Contractor or his Subcontractors fail to call attention of A/E to discrepancies or omissions in the Contract Documents, but claim additional costs for corrective Work after Contract award, Owner may assume intent to circumvent competitive bidding for necessary corrective Work. In such case, Owner may choose to let a separate Contract for the corrective Work, or issue a ULCO to require performance by Contractor. Claims for time extensions or for extra cost resulting from the delayed notice of patent Contract Document discrepancies or omissions will not be considered by Owner.

11.4 Minor Changes. A/E, with concurrence of ODR, will have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of Contract Time. Such changes shall be effected by written order which Contractor shall carry out promptly and record on the Record Documents.

11.5 Concealed Site Conditions. Contractor is responsible for visiting the Site and being familiar with local conditions such as the location, accessibility, and general character of the Site and/or building. If, in the performance of the Contract, subsurface, latent, or concealed conditions at the Site are found to be materially different from the information included in the Contract Documents, or if unknown conditions of an unusual character are disclosed differing materially from the conditions inherent in Work of the character shown and specified, ODR and A/E shall be notified in writing of such conditions before they are disturbed. Upon such notice, or upon its own observation of such conditions, A/E, with the approval of ODR, will promptly make changes in the Drawings and Specifications as they deem necessary to conform to the different conditions, and any increase or decrease in the cost of the Work, or in the time within which the Work is to be completed, resulting from such changes will be adjusted by Change Order, subject to the prior approval of ODR.

11.6 Extension of Time. All changes to the Contract Time shall be made as a consequence of requests as required under Section 9.6, and as documented by Change Order as provided under Section 11.1.

11.7 Administration of Change Order Requests. All changes in the Contract shall be administered in accordance with procedures approved by Owner, and when required, make use of such electronic information management system(s) as Owner may employ.

11.7.1 Routine changes in the construction Contract shall be formally initiated by A/E by means of a Proposed Change Order (PCO) form detailing requirements of the proposed change for pricing by Contractor. This action may be preceded by communications between Contractor, A/E and ODR concerning the need and nature of the change, but such communications shall not constitute a basis for beginning the proposed Work by Contractor. Except for emergency conditions described below, approval of Contractor's cost proposal by A/E and ODR will be required for authorization to proceed with the Work being changed. Owner will not be responsible for the cost of Work changed without prior approval and Contractor may be required to remove Work so installed.

11.7.2 All proposed costs for change order Work must be supported by itemized accounting of material, equipment and associated itemized installation costs in sufficient detail, following the outline and organization of the established Schedule of Values, to permit analysis by A/E and ODR using current estimating guides and/or practices. Photocopies of Subcontractor and vendor proposals shall be furnished unless specifically waived by ODR. Contractor shall provide written response to a change request within twenty-one (21) days of receipt.

11.7.3 Any unexpected circumstance which necessitates an immediate change in order to avoid a delay in progress of the Work may be expedited by verbal communication and authorization between Contractor and Owner, with written confirmation following within twenty-four (24) hours. A limited scope not-to-exceed estimate of cost and time will be requested prior to authorizing Work to proceed. Should the estimate be impractical for any reason, ODR may authorize the use of detailed cost records of such Work to establish and confirm the actual costs and time for documentation in a formal Change Order.

11.7.4 Emergency changes to save life or property may be initiated by Contractor alone (see Section 7.3) with the claimed cost and/or time of such Work to be fully documented as to necessity and detail of the reported costs and/or time.

11.7.5 The method of incorporating approved Change Orders into the parameters of the accepted Schedule of Values must be coordinated and administered in a manner acceptable to ODR.

11.8 Pricing Change Order Work. Adjustments in the Contract Sum and Contract Time resulting from a change in the Work or otherwise authorized by the terms of the Contract shall be determined by mutual agreement of the parties or, in the case of a ULCO, by the Contractor's cost of labor, material, equipment, and reasonable overhead and profit, unless the parties agree on another method for determining the cost or credit. The amounts that Contractor and/or its Subcontractor adds to a Change Order for profit and overhead will be considered by Owner before approval is given. The amounts established hereinafter are the maximums that are acceptable to Owner.

11.8.1 For Work performed by its forces, Contractor will be allowed its actual costs paid for materials, the total amount of its actual wages paid for labor, plus its actual cost paid for State and Federal payroll taxes and for workers' compensation and comprehensive general liability insurance, plus its actual additional bond and builders risk insurance cost if the change results in an increase in the premium paid by Contractor. To the total of the above costs, Contractor will be allowed to add a percentage as noted below to cover overhead and profit combined. Overhead shall be considered to include insurance other than mentioned above, field and office supervisors and assistants, including safety and scheduling personnel, use of small tools, incidental job burdens, and general Home Office expenses, and no separate allowance will be made therefor.

Allowable percentages for overhead and profit on changes will not exceed fifteen percent (15%) if the total of self-performed Work is less than or equal to \$10,000, ten percent (10%) if the total of self-performed Work is between \$10,000 and \$20,000, and seven and one half percent (7 ½%) if the total of self-performed Work is over \$20,000, for any specific change priced.

11.8.2 For subcontracted Work each affected Subcontractor shall figure its costs, overhead and profit as describe above for Contractor's Work, all Subcontractor costs shall be combined, and to that total Subcontractor cost to Contractor will be allowed to add a maximum mark-up of ten percent (10%) if the total of all subcontracted Work is less than or equal to \$10,000, seven and one half percent (7 ½%) if the total of all subcontracted Work is between \$10,000 and \$20,000, and five percent (5%) if the total of Subcontractor Work is over \$20,000.

11.8.3 On changes involving both additions and deletions, percentages for overhead and profit will be allowed only on the net addition. Owner does not accept and will not pay for additional Contract costs identified as indirect or consequential damages or as damages caused by delay.

11.8.4 For Contracts based on a Guaranteed Maximum Price (GMP), the Construction Manager-at-Risk or Design Builder shall NOT be entitled to a percentage mark-up on any Change Order Work unless the Change Order increases the Guaranteed Maximum Price.

11.9 Unilateral Change Order (ULCO). Owner may issue a written ULCO directing a change in the Work prior to reaching agreement with Contractor on the adjustment, if any, in the Contract price and/or the Contract Time.

11.9.1 Owner and Contractor shall negotiate for appropriate adjustments, as applicable, to the Contract Sum or the Contract Time arising out of a ULCO. As the changed Work is performed, Contractor shall submit its costs for such Work with its Application for Payment beginning with the next Application for Payment within thirty (30) days of the issuance of the ULCO. The Parties reserve their rights to dispute the ULCO amount, subject to Article 15.

11.10 Finality of Changes – Contractor. Upon execution of a Change Order and/or a ULCO by Owner, Contractor and A/E, all costs and time issues claimed by Contractor regarding that change are final and not subject to increase.

11.11 Finality of Changes – Owner. All Change Orders are subject to audit by Owner or its representative at any time in accordance with Article 16.4 and Change Order amounts may be adjusted lower as a result of such audit.

Article 12. Project Completion and Acceptance

12.1 Closing Inspections.

12.1.1 Substantial Completion Inspection. When Contractor considers the entire Work or part thereof Substantially Complete, it shall notify ODR in writing that the Work will be ready for Substantial Completion Inspection on a specific date. Contractor shall include with this notice Contractor's Punchlist to indicate that it has previously inspected all the Work associated with the request for inspection, noting items it has corrected and including all remaining Work items with date scheduled for completion or correction prior to Final Inspection. The failure to include any items on this list does not alter the responsibility of Contractor to complete all Work in accordance with the Contract Documents. If any of the items on this list prevents the Project from being used as intended, Contractor shall not request a Substantial Completion Inspection. Owner and its representatives will review the list of items and schedule the requested inspection, or inform Contractor in writing that such an inspection is premature because the Work is not sufficiently advanced or conditions are not as represented on Contractor's list.

12.1.1.1 Prior to the Substantial Completion Inspection, Contractor shall furnish a copy of its marked-up Record Documents and a preliminary copy of each instructional manual, maintenance and operating manual, parts catalogue, wiring diagrams, spare parts, specified written warranties, and like publications or parts for all installed equipment, systems, and like items as described in the Contract Documents. Delivery of these items is a prerequisite for requesting the Substantial Completion Inspection.

12.1.1.2 On the date requested by Contractor, or as mutually agreed upon pending the status of the Open Items List, A/E, ODR, Contractor, and other Owner representatives as determined by Owner will jointly attend the Substantial Completion Inspection, which shall be conducted by ODR or its delegate. If ODR concurs with the determination of Contractor and A/E that the Work is Substantially Complete, ODR will issue a Certificate of Substantial Completion to be signed by A/E, Owner and Contractor establishing the date of Substantial Completion and identifying responsibilities for security, insurance and maintenance. A/E will provide with this certificate a list of Punchlist items (the pre-final Punchlist) for completion prior to Final Inspection. If Owner occupies the Project upon determination of Substantial Completion, Contractor shall complete all corrective Work at the convenience of Owner, without disruption to Owner's use of the Project for its intended purposes.

12.1.2 Final Inspection. Contractor shall complete the list of items identified on the pre-final Punchlist prior to requesting a Final Inspection. Unless otherwise specified, or otherwise agreed in writing by the Parties as documented on the Certificate of Substantial Completion, Contractor shall complete and/or correct all Work within thirty (30) days of the Substantial Completion Date. Upon completion of the pre-final Punchlist work, Contractor shall give written notice to ODR and A/E that the Work will be ready for Final Inspection on a specific date. Contractor shall accompany this notice with a copy of the updated pre-final Punchlist indicating resolution of all items. On the date specified or as soon thereafter as is practicable, ODR, A/E and Contractor will inspect the Work. A/E will submit to Contractor a final Punchlist of open items that the inspection team requires corrected or completed before final acceptance of the Work.

12.1.2.1 Contractor will correct or complete all items on the final Punchlist before requesting Final Payment. Unless otherwise agreed to in writing by the Parties, Contractor will complete this work within seven (7) days of receiving the final Punchlist. Upon completion of the final Punchlist, Contractor will notify A/E and ODR in writing stating the disposition of each final Punchlist item. A/E, Owner and Contractor shall promptly inspect the completed items. When the Punchlist is complete, and the Contract is fully satisfied according to the Contract Documents, ODR will issue a certificate establishing the date of Final Completion. Completion of all Work is a condition precedent to Contractor's right to receive Final Payment.

12.1.3 Annotation. Any Certificate issued under this Article may be annotated to indicate that it is not applicable to specified portions of the Work, or that it is subject to any limitations as determined by Owner.

12.1.4 Purpose of Inspection. Inspection is to determine the completion of the Work, and does not relieve Contractor of its overall responsibility for completing the Work in a

good and competent fashion, in compliance with the Contract. Work accepted with incomplete Punchlist items or failure of Owner or other Parties to identify Work that does not comply with the Contract Documents or is defective in operation or workmanship does not constitute a waiver of Owner's rights under the Contract or relieve Contractor of its responsibility for performance of warranties.

12.1.5 Additional Inspections.

12.1.5.1 If Owner's inspection team determines that the Work is not substantially complete at the Substantial Completion Inspection, ODR or A/E will give Contractor written notice listing cause(s) of the rejection. Contractor will set a time for completion of incomplete or defective Work acceptable to ODR. Contractor shall complete or correct all Work so designated prior to requesting a second Substantial Completion Inspection.

12.1.5.2 If Owner's inspection team determines that the Work is not complete at the Final Inspection, ODR or A/E will give Contractor written notice listing the cause(s) of the rejection. Contractor will set a time for completion of incomplete or defective Work acceptable to ODR. Contractor shall complete or correct all Work so designated prior to again requesting a Final Inspection.

12.1.5.3 The Contract contemplates three (3) comprehensive inspections: the Substantial Completion Inspection, the Final Completion Inspection, and the inspection of completed final Punchlist items. The cost to Owner of additional inspections resulting from the Work not being ready for one or more of these inspections is the responsibility of Contractor. Owner may issue a ULCO deducting these costs from Final Payment. Upon Contractor's written request, Owner will furnish documentation of any costs so deducted. Work added to the Contract by Change Order after Substantial Completion Inspection is not corrective Work for purposes of determining timely completion, or assessing the costs of additional inspections.

12.1.6 Phased Completion. The Contract may provide, or Project conditions may warrant, as determined by ODR, that designated elements or parts of the Work be completed in phases. Where phased completion is required or specifically agreed to by the Parties, the provisions of the Contract related to closing inspections, occupancy, and acceptance apply independently to each designated element or part of the Work. For all other purposes, unless otherwise agreed by the Parties in writing, Substantial Completion of the Work as a whole is the date on which the last element or part of the Work completed receives a Substantial Completion Certificate. Final Completion of the Work

as a whole is the date on which the last element or part of the Work completed receives a Final Completion Certificate or notice.

12.2 Owner's Right of Occupancy. Owner may occupy or use all or any portion of the Work following Substantial Completion, or at any earlier stage of completion. Should Owner wish to use or occupy the Work, or part thereof, prior to Substantial Completion, ODR will notify Contractor in writing and identify responsibilities for security, insurance and maintenance. Work performed on the premises by third parties on Owner's behalf does not constitute occupation or use of the Work by Owner for purposes of this Article. All Work performed by Contractor after occupancy, whether in part or in whole, shall be at the convenience of Owner so as not to disrupt Owner's use of or access to occupied areas of the Project

12.3 Acceptance and Payment.

12.3.1 Request for Final Payment. Following the certified completion of all Work, including all final Punchlist items, cleanup, and the delivery of Record Document, Contractor shall submit a certified Application for Final Payment to include all sums held as retainage, and forward to A/E and ODR for review and approval.

12.3.2 Final Payment Documentation. Contractor shall submit, prior to or with the Application for Final Payment, final copies of all Close-Out documents, maintenance and operating instructions, guarantees and warranties, certificates, Record Documents, and all other items required by the Contract. Contractor shall submit evidence of return of access keys and cards, evidence of delivery to Owner of attic stock, spare parts, and other specified materials. Contractor shall submit a consent of surety to Final Payment form and an affidavit that all payrolls, bills for materials and equipment, subcontracted work and other indebtedness connected with the Work, except as specifically noted, are paid or will be paid after payment from Owner or otherwise satisfied within the period of time required by Tex. Gov't Code, Chapter 2251. Contractor shall furnish documentation establishing payment or satisfaction of all such obligations, such as receipts, releases, and waivers of claims and liens arising out of the Contract. Contractor may not subsequently submit a claim on behalf of a Subcontractor or vendor unless Contractor's affidavit notes that claim as an exception.

12.3.3 Architect/Engineer Approval. A/E will review a submitted Application for Final Payment promptly, but in no event later than ten (10) days after its receipt. Prior to the expiration of this deadline, A/E will either: 1) return the Application for Final Payment to the Contractor with corrections for action and resubmission; or 2) accept it, note A/E's approval, and send the approved Application for Final Payment to Owner.

12.3.4 Offsets and Deductions. Owner may deduct from the Final Payment all sums due from Contractor. If the Certificate of Final Completion notes any Work remaining, incomplete, or defects not remedied, Owner may deduct the cost of remedying such

deficiencies from the Final Payment. On such deduction, Owner will identify each deduction, the amount, and the explanation of the deduction on or by the twenty-first (21st) day after Owner's receipt of an approved Application for Final Payment. Such offsets and deductions shall be incorporated via a final Change Order, including a ULCO as may be applicable.

12.3.5 Final Payment Due. Final Payment is due and payable by Owner, subject to all allowable offsets and deductions, on the thirtieth (30th) day following Owner's approval of the Application for Final Payment. If Contractor disputes any amount deducted by Owner, Contractor shall give notice of the dispute on or before the thirtieth (30th) day following receipt of Final Payment. Failure to do so will bar any subsequent claim for payment of amounts deducted.

12.3.6 Effect of Final Payment. Final Payment constitutes a waiver of all claims by Owner, relating to the condition of the Work, except those arising from:

12.3.6.1 Faulty or defective Work appearing after Substantial Completion (latent defects);

12.3.6.2 Failure of the Work to comply with the requirements of the Contract Documents;

12.3.6.3 Terms of any warranties required by the Contract, or implied by law;

12.3.6.4 Claims arising from personal injury or property damage to third parties.

12.3.7 Waiver of Claims. Final Payment constitutes a waiver of all claims and liens by Contractor except those specifically identified in writing and submitted to ODR prior to the Application for Final Payment.

12.3.8 Effect on Warranty. Regardless of approval and issuance of Final Payment, the Contract is not deemed fully performed by Contractor and closed until the expiration of all warranty periods.

Article 13. Warranty and Guarantee

13.1 Contractor's General Warranty and Guarantee. Contractor warrants to Owner that all Work is executed in accordance with the Contract, complete in all parts and in accordance with approved practices and customs, and of the required finish and workmanship. Contractor further warrants that unless otherwise specified, all materials and equipment incorporated in the Work under the Contract are new. Owner may, at its option, agree in writing to waive any failure of the Work to conform to the Contract, and to accept a reduction in the Contract price for the cost

of repair or diminution in value of the Work by reason of such defect. Absent such a written agreement, Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute and is not waived by any inspection or observation by Owner, A/E, or others, by making any progress payment or final payment, by the use or occupancy of the Work or any portion thereof by Owner, at any time any repair or correction of such defect made by Owner

13.2 Warranty Period. Except as may be otherwise specified or agreed, Contractor shall repair all defects in materials, equipment, or workmanship appearing within one year from the date of Substantial Completion of the Work. If Substantial Completion occurs by phase, then the warranty period for the Work performed for each phase begins on the date of Substantial Completion of that phase, or as otherwise stipulated on the Certificate of Substantial Completion for that particular phase.

13.3 Limits on Warranty. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

13.3.1 Modification or improper maintenance or operation by persons other than Contractor, Subcontractors, or any other individual or entity for whom Contractor is not responsible, unless Owner is compelled to undertake maintenance or operation due to the neglect of Contractor.

13.3.2 Normal wear and tear under normal usage after acceptance of the Work by Owner.

13.4 Events Not Affecting Warranty. Contractor's obligation to perform and complete the Work in a good and workmanlike manner in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or will constitute a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

13.4.1 Observations by Owner and/or A/E;

13.4.2 Recommendation to pay any progress or Final Payment by A/E'

13.4.3 The issuance of a Certificate of Substantial Completion or any payment by Owner to Contractor under the Contract Documents;

13.4.4 Use or occupancy of the Work or any part thereof by Owner;

13.4.5 Any acceptance by Owner or any failure to do so;

13.4.6 Any review of a Shop Drawing or sample submittal; or

13.4.7 Any inspection, test or approval by others.

13.5 Separate Warranties. If a particular piece of equipment or component of the Work for which the Contract requires a separate warranty is placed in continuous service before Substantial Completion, the warranty period for that equipment or component will not begin until Substantial Completion, regardless of any warranty agreements in place between suppliers and/or Subcontractors and Contractor. ODR will certify the date of service commencement in the Certificate of Substantial Completion.

13.5.1 In addition to Contractor's warranty and duty to repair, Contractor expressly assumes all warranty obligations required under the Contract for specific building components, systems and equipment.

13.5.2 Contract may satisfy any such obligation by obtaining and assigning to Owner a complying warranty from a manufacturer, supplier or Subcontractor. Where an assigned warranty is tendered and accepted by Owner which does not fully comply with the requirements of the Contract, Contractor remains liable to Owner on all elements of the required warranty not provided by the assigned warranty.

13.6 Correction of Defects. Upon receipt of written notice from Owner, or any agent of Owner designated as responsible for management of the warranty period, of the discovery of a defect, Contractor shall promptly remedy the defect(s) and provide written notice to Owner and/or its designated agent indicating action taken. In case of emergency where delay would cause serious risk of loss or damage to Owner, or if Contractor fails to remedy within thirty (30) days, or within another period agreed to in writing, Owner may correct the defect and be reimbursed the cost of remedying the defect from Contractor or its Surety.

13.7 Certification of No Asbestos Containing Materials or Work. Contractor shall ensure compliance with the Asbestos Hazard Emergency Response Act (AHERA – 40 C.F.R. § 763-99(7)) from all Subcontractors and materials suppliers, and shall provide a notarized certification to Owner that all equipment and materials used in fulfillment of their Contract duties are non Asbestos Containing Building Materials (ACBMs). This certification must be provided no later than Contractor's Application for Final Payment.

Article 14. Suspension and Termination

14.1 Suspension of Work for Cause. Owner may, at any time without prior notice, suspend all or any part of the Work, after reasonable observation and/or investigation, Owner determines it is necessary to do so to prevent or correct any condition of the Work which constitutes an immediate safety hazard or which may reasonably be expected to impair the integrity, usefulness or longevity of the Work when completed.

14.1.1 Owner will give Contractor a written notice of suspension for cause, setting forth the reason for the suspension and identifying the Work suspended. Upon receipt of such notice, Contractor shall immediately stop the Work so identified. As soon as practicable

following the issuance of such a notice, Owner will initiate and complete a further investigation of the circumstances giving rise to the suspension, and issue a written determination of the findings.

14.1.2 If it is confirmed that the cause was within the control of Contractor, Contractor will not be entitled to an extension of time for delay resulting from the suspension. If the cause is determined not to have been within the control of Contractor, and suspension has prevented Contractor from completing the Work within the Contract Time, the suspension is an excusable delay and a time extension will be granted through a Change Order.

14.1.3 Suspension of Work under this provision will be no longer than is reasonably necessary to remedy the conditions giving rise to the suspension.

14.2 Suspension of Work for Owner's Convenience. Upon seven (7) days written notice to Contractor, Owner may at any time without breach of the Contract suspend all or any portion of the Work for a period of up to sixty (60) days for its own convenience. Owner will give Contractor a written notice of suspension for convenience, which sets forth the number of suspension days for which the Work, or any portion of it, will remain suspended and the date on which the suspension of Work will cease.

14.3 Termination by Owner for Cause.

14.3.1 Upon thirty (30) days written notice to Contractor and its Surety, Owner may, without prejudice to any right or remedy, terminate the Contract and take possession of the Site and of all materials, equipment, tools, construction equipment, and machinery thereon owned by Contractor under any of the following circumstances:

14.3.1.1 Persistent or repeated failure or refusal, except during complete or partial suspensions of work authorized under the Contract, to supply enough properly skilled workmen or proper materials;

14.3.1.2 Persistent disregard of laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, including ODR;

14.3.1.3 Persistent failure to prosecute the Work in accordance with the Contract, and to ensure its completion with the time, or any approved extension thereof, specified in the Contract;

14.3.1.4 Failure to remedy defective Work condemned by ODR;

14.3.1.5 Failure to pay Subcontractors, laborers, or material suppliers pursuant to Tex. Gov't Code, Chapter 2251;

14.3.1.6 Persistent endangerment to the safety of labor or of the Work;

14.3.1.7 Failure to supply or maintain statutory bonds or to maintain required insurance, pursuant to the Contract;

14.3.1.8 Any material breach of the Contract; or

14.3.1.9 Contractor's insolvency, bankruptcy, or demonstrated financial inability to perform the Work.

14.3.2 Failure by Owner to exercise the right to terminate in any instance is not a waiver of the right to do so in any other instance.

14.3.3 Upon receipt of a termination notice, Contractor or its Surety has thirty (30) days to cure the reason(s) for the termination or demonstrate to the satisfaction of Owner that Contractor is prepared to remedy the condition(s) upon which the notice of termination was based with diligence and promptness. If Owner is satisfied that Contractor or its Surety can remedy the reasons for the termination and complete the Work as required, the notice of termination shall be rescinded in writing by Owner and the Work shall continue without an extension of time.

14.3.4 If, at the conclusion of the thirty (30) day cure period, Contractor or its Surety is unable to demonstrate to the satisfaction of Owner Contractor's ability to remedy the reason(s) for the termination, Owner may immediately terminate the employment of Contractor, make alternative arrangements for completion of the Work, and deduct the cost of completion from the unpaid Contract Sum.

14.3.4.1 Owner's cost to complete the Work includes, but is not limited to, fees for additional services by A/E and other consultants, and additional contract administration costs.

14.3.4.2 Owner will make no further payment to Contractor or its Surety unless the costs to complete the Work are less than the Contract balance, in which case the difference shall be paid to Contractor or its Surety. If such costs exceed the unpaid balance, Contractor or its Surety will pay the difference to Owner.

14.3.4.3 This obligation for payment survives the termination of the Contract.

14.3.4.4 Owner reserves the right in termination for cause to take assignment of all the Contracts between Contractor and its Subcontractors, vendors, and suppliers. ODR will promptly notify Contractor of the

contracts Owner elects to assume. Upon receipt of such notices, Contractor shall promptly take all steps necessary to effect such assignment(s).

14.4 Conversion to Termination for Convenience. In the event that any termination of Contractor for cause under Section 14.3 is later determined to have been improper, the termination shall automatically convert to a termination for convenience under Section 14.5 and Contractor's recovery for termination shall be strictly limited to the payments allowable under Section 14.5.

14.5 Termination for Convenience of Owner. Owner reserves the right, without breach, to terminate the Contract prior to, or during the performance of the Work, for any reason. Upon such an occurrence, the following shall apply:

14.5.1 Owner will notify Contractor and A/E in writing specifying the reason for and the effective date of the Contract termination. The notice may also contain instructions necessary for the protection, storage, or decommissioning of incomplete work or systems, and for safety.

14.5.2 Upon receipt of the notice of termination, Contractor shall immediately proceed with the following obligations, regardless of any dispute in determining or adjusting any amounts due at that point in the Contract:

14.5.2.1 Stop all work.

14.5.2.2 Place no further subcontracts or orders for materials or services.

14.5.2.3 Terminate all subcontracts for convenience.

14.5.2.4 Cancel all materials and equipment orders as applicable.

14.5.2.5 Take appropriate action that is necessary to protect and preserve all property related to the Contract which is in the possession of Contractor.

14.5.3 When the Contract is terminated for Owner's convenience, Contractor may recover from Owner payment for all Work executed. Contractor may not claim lost profits or lost business opportunities.

14.6 Termination by Contractor. If the Work is stopped for a period of ninety (90) days under an order of any court or other public authority having jurisdiction, or as a result of an act of government, such as a declaration of a national emergency making materials unavailable, through no act or fault of Contractor or Subcontractor or their agents or employees or any other persons performing any of the Work under a contract with Contractor, then Contractor may,

upon thirty (30) additional days written notice to ODR, terminate the Contract and recover from Owner payment for all Work executed, but not lost profits or lost business opportunities. If the cause of the Work stoppage is removed prior to the end of the thirty (30) day notice period, Contractor may not terminate the Contract.

14.7 Settlement on Termination. When the Contract is terminated for any reason, at any time prior to one hundred eighty (180) days after the effective date of termination, Contractor shall submit a final termination settlement proposal to Owner based upon recoverable costs as provided under the Contract. If Contractor fails to submit the proposal within the time allowed, Owner may unilaterally determine the amount due to Contractor because of the termination and pay the determined amount to Contractor.

Article 15. Dispute Resolution

15.1 To the extent that Chapter 2260, *Texas Government Code*, is applicable to this Agreement and is not preempted by other applicable law, the dispute resolution process provided for in Chapter 2260 and the related rules adopted by the Texas Attorney General pursuant to Chapter 2260, shall be used by TSTC and Contractor to attempt to resolve any claim for breach of contract made by Contractor that cannot be resolved in the ordinary course of business. The Chief Business Officer of TSTC shall examine Contractor's claim and any counterclaim and negotiate with Contractor in an effort to resolve such claims. The parties hereto specifically agree that (i) neither the execution of this Agreement by TSTC nor any other conduct, action or inaction of any representative of TSTC relating to this Agreement constitutes or is intended to constitute a waiver of TSTC's or the state's sovereign immunity to suit; and (ii) TSTC has not waived its right to seek redress in the courts.

- a. To the extent that Chapter 2260, *Texas Government Code*, as it may be amended from time to time ("Chapter 2260"), is applicable to this Agreement and is not preempted by other applicable law, the dispute resolution process provided for in Chapter 2260 shall be used, as further described herein, by TSTC and Contractor to attempt to resolve any claim for breach of contract made by Contractor:
 - i. Contractor's claims for breach of this Agreement that the parties cannot resolve pursuant to other provisions of this Agreement or in the ordinary course of business shall be submitted to the negotiation process provided in subchapter B of Chapter 2260. To initiate the process, Contractor shall submit written notice, as required by subchapter B of Chapter 2260, to TSTC in accordance with the notice provisions in this Contract. Contractor's notice shall specifically state that the provisions of subchapter B of Chapter 2260 are being invoked, the date and nature of the event giving rise to the claim, the specific Agreement provision that TSTC allegedly breached, the

amount of damages Contractor seeks, and the method used to calculate the damages. Compliance by Contractor with subchapter B of Chapter 2260 is a required prerequisite to Contractor's filing of a contested case proceeding under subchapter C of Chapter 2260. The Chief Business Officer of TSTC, or such other officer of TSTC as may be designated from time to time by TSTC by written notice thereof to Contractor in accordance with the notice provisions in this Contract, shall examine Contractor's claim and any counterclaim and negotiate with Contractor in an effort to resolve such claims.

- ii. If the parties are unable to resolve their disputes under subparagraph (a.) of this section, the contested case process provided in subchapter C of Chapter 2260 is Contractor's sole and exclusive process for seeking a remedy for any and all of Contractor's claims for breach of this Agreement by TSTC.
 - iii. Compliance with the contested case process provided in subchapter C of Chapter 2260 is a required prerequisite to seeking consent to sue from the Legislature under Chapter 107 of the Texas Civil Practices and Remedies Code. The parties hereto specifically agree that (1) neither the execution of this Agreement by TSTC nor any other conduct, action or inaction of any representative of TSTC relating to this Agreement constitutes or is intended to constitute a waiver of TSTC's or the state's sovereign immunity to suit and (2) TSTC has not waived its right to seek redress in the courts.
- b. The submission, processing and resolution of Contractor's claim is governed by the published rules adopted by the Texas Attorney General pursuant to Chapter 2260, as currently effective, hereafter enacted or subsequently amended.
 - c. TSTC and Contractor agree that any periods set forth in this Agreement for notice and cure of defaults are not waived.

15.3 Nothing herein shall hinder, prevent, or be construed as a waiver of Owner's right to seek redress on any disputed matter in a court of competent jurisdiction.

15.4 Nothing herein shall waive or be construed as a waiver of the State's sovereign immunity.

Article 16. Miscellaneous

16.1 Supplementary General and Special Conditions. When the Work contemplated by Owner is of such a character that the foregoing Uniform General Conditions of the Contract cannot

adequately cover necessary and additional contractual relationships, the Contract may include Supplementary General and Special Conditions as described below:

16.1.1 Supplementary General Conditions may describe the standard procedures and requirements of contract administration followed by a contracting agency of the State of Texas. Supplementary General Conditions may expand upon matter covered by the Uniform General Conditions, where necessary, provided the expansion does not weaken the character or intent of the Uniform General Conditions. Supplementary General Conditions are of such a character that it is to be anticipated that a contracting agency of the State will normally use the same, or similar, conditions to supplement each of its projects.

16.1.2 Special Conditions shall relate to a particular Project and be unique to that Project but shall not weaken the character or intent of the Uniform General Conditions.

16.1.3 A Sanitary Sewer CCTV Report entitled Waco TSTC Campus CCTV was prepared by Burgess & Niple, Inc. in June of 2016, a copy of which and corresponding videos is available (from the Owner) upon request through the Engineer.

16.2 Federally Funded Projects. On Federally funded projects, Owner may waive, suspend or modify any Article in these Uniform General Conditions which conflicts with any Federal statute, rule, regulation or procedure, where such waiver, suspension or modification is essential to receipt by Owner of such Federal funds for the Project. In the case of any Project wholly financed by Federal funds, any standards required by the enabling Federal statute, or any Federal rules, regulations or procedures adopted pursuant thereto, shall be controlling.

16.3 Internet-Based Project Management Systems. At its option, Owner may administer its design and construction management through an Internet-based management system. In such cases, Contractor shall conduct communication through this media and perform all Project related functions utilizing this database system. This includes correspondence, submittals, Requests for Information, vouchers or payment requests and processing, amendments, Change Orders and other administrative activities.

16.3.1 Accessibility and Administration.

16.3.1.1 When used, Owner will make the software available via the Internet to all Project team members.

16.3.1.2 Owner shall administer the software.

16.3.2 Training. When used, Owner shall provide training to the Project team members.

16.4 Right to Audit.

16.4.1 Contractor understands that acceptance of funds under this Contract acts as acceptance of the authority of the State Auditor's Office, Owner, any successor agency and their representatives, including independent auditors, to conduct an audit or investigation in connection with these funds. Contractor further agrees to cooperate fully with any party conducting the audit or investigation, including providing all records requested.

16.4.2 Contractor shall maintain and retain supporting fiscal and any other documents relevant to showing that any payments under this Contract were expended in accordance with the terms of this Contract, the requirements of Owner, and with the laws and regulations of the State of Texas including, but not limited to, requirements of the Comptroller of the State of Texas and the State Auditor. Contractor shall maintain all such documents and other records relating to this Contract and Owner's property for a period of four (4) years after the date of submission of a request for Final Payment or until a resolution of all billing questions, whichever is later. Contractor shall make available at reasonable times and upon reasonable notice and for reasonable periods all documents and other information related to the Work of this Contract.

16.4.3 Contractor shall ensure that this clause concerning the authority to audit funds receive indirectly by subcontractors through the Contractor and the requirement to cooperate is included in any subcontract it awards.

END OF UNIFORM GENERAL CONDITIONS



DRAINAGE IMPROVEMENTS

PROJECT SPECIFICATIONS

FEBRUARY 9, 2018

PROJECT NUMBER 1-03084

Clark W. Gauier, P.E. 02/09/2018



SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Submittal procedures.
- B. Construction progress schedules.
- C. Proposed product list.
- D. Product data.
- E. Use of electronic CAD files of Project Drawings.
- F. Shop Drawings.
- G. Samples.
- H. Design data.
- I. Test reports.
- J. Certificates.
- K. Manufacturer's instructions.
- L. Manufacturer's field reports.
- M. Erection Drawings.
- N. Contractor review.
- O. Engineer review.

1.2 SUBMITTAL PROCEDURES

- A. Submittals shall be directly from the Contractor. Submittals from others (i.e., suppliers or subcontractors) shall not be accepted.
- B. Transmit each submittal on an Engineer accepted form.
- C. Sequentially number transmittal forms. Mark revised submittals with original number and sequential alphabetic suffix.
- D. Identify Project, Contractor, subcontractor and supplier; pertinent drawing and detail number, and specification section number, appropriate to submittal.

- E. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.
- F. Schedule submittals to expedite Project, and deliver to Engineer at business address. Coordinate submission of related items.
- G. For each submittal for review, allow 15 days excluding delivery time to and from Contractor.
- H. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of completed Work.
- I. Allow space on submittals for Contractor and Engineer review stamps.
- J. When revised for resubmission, identify changes made since previous submission.
- K. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.
- L. Submittals not requested will not be recognized or processed.
- M. Incomplete Submittals: Engineer will not review. Complete submittals for each item are required. Delays resulting from incomplete submittals are not the responsibility of Engineer.

1.3 CONSTRUCTION PROGRESS SCHEDULES

- A. Comply with Section 01 32 16 - Construction Progress Schedule (when required)

1.4 PROPOSED PRODUCT LIST

- A. Within 15 days after date of Notice to Proceed, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, indicate manufacturer, trade name, model or catalog designation, and reference standards.

1.5 PRODUCT DATA

- A. Product Data: Action Submittal: Submit to Engineer for review for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Submit electronic submittals via email as PDF electronic files.
- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

- E. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.6 ELECTRONIC CAD FILES OF PROJECT DRAWINGS

- A. Electronic CAD Files of Project Drawings: May only be used to expedite production of Shop Drawings for the Project. Use for other Projects or purposes is not allowed.
- B. Electronic CAD Files of Project Drawings: Distributed only under the following conditions:
 1. Use of files is solely at receiver's risk. Engineer does not warrant accuracy of files. Receiving files in electronic form does not relieve receiver of responsibilities for measurements, dimensions, and quantities set forth in Contract Documents. In the event of ambiguity, discrepancy, or conflict between information on electronic media and that in Contract Documents, notify Engineer of discrepancy and use information in hard-copy Drawings and Specifications.
 2. CAD files do not necessarily represent the latest Contract Documents, existing conditions, and as-built conditions. Receiver is responsible for determining and complying with these conditions and for incorporating addenda and modifications.
 3. User is responsible for removing information not normally provided on Shop Drawings and removing references to Contract Documents. Shop Drawings submitted with information associated with other trades or with references to Contract Documents will not be reviewed and will be immediately returned.
 4. Receiver shall not hold Engineer responsible for data or file clean-up required to make files usable, nor for error or malfunction in translation, interpretation, or use of this electronic information.
 5. Receiver shall understand that even though Engineer has computer virus scanning software to detect presence of computer viruses, there is no guarantee that computer viruses are not present in files or in electronic media.
 6. Receiver shall not hold Engineer responsible for such viruses or their consequences, and shall hold Engineer harmless against costs, losses, or damage caused by presence of computer virus in files or media.

1.7 SHOP DRAWINGS

- A. Shop Drawings: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. When required by individual Specification Sections, provide Shop Drawings signed and sealed by a professional Engineer responsible for designing components shown on Shop Drawings.
 1. Include signed and sealed calculations to support design.
 2. Submit Shop Drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
 3. Make revisions and provide additional information when required by authorities having jurisdiction.
- D. Submit number of reproductions Contractor requires, plus two copies Engineer will retain.

- E. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.8 SAMPLES

- A. Samples: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Samples for Selection as Specified in Product Sections:
 - 1. Submit to Engineer for aesthetic, color, and finish selection.
 - 2. Submit Samples of finishes, textures, and patterns for Architect/Engineer selection.
- C. Submit Samples to illustrate functional and aesthetic characteristics of products, with integral parts and attachment devices. Coordinate Sample submittals for interfacing work.
- D. Include identification on each Sample, with full Project information.
- E. Submit number of Samples specified in individual Specification Sections; Engineer will retain one Sample.
- F. Reviewed Samples that may be used in the Work are indicated in individual Specification Sections.
- G. Samples will not be used for testing purposes unless specifically stated in Specification Section.
- H. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.9 DESIGN DATA

- A. Submit for Engineer's knowledge as contract administrator or for Owner.
- B. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.10 TEST REPORTS

- A. Informational Submittal: Submit reports for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit test reports for information for assessing conformance with information given and design concept expressed in Contract Documents.

1.11 CERTIFICATES

- A. Informational Submittal: When specified in Technical Specifications, submit certification by manufacturer, installation/application Subcontractor, or Contractor to Engineer, in quantities specified for Product Data.

- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or product but must be acceptable to Architect/Engineer.

1.12 MANUFACTURER'S INSTRUCTIONS

- A. Informational Submittal: When specified in Technical Specifications, submit manufacturer's installation instructions for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing, to Engineer for delivery to Owner in quantities specified for Product Data.
- C. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.13 MANUFACTURER'S FIELD REPORTS

- A. Informational Submittal: Submit reports for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit report in duplicate within three days of observation to Engineer for information.
- C. Submit reports for information for limited purposes of assessing conformance with information given and design concept expressed in Contract Documents.

1.14 ERECTION DRAWINGS

- A. Informational Submittal: Submit Drawings for Engineer's benefit as Contract administrator or for Owner.
- B. Submit Drawings for information assessing conformance with information given and design concept expressed in Contract Documents.
- C. Data indicating inappropriate or unacceptable Work may be subject to action by Engineer or Owner.

1.15 CONTRACTOR REVIEW

- A. Review for compliance with Contract Documents and approve submittals before transmitting to Engineer.
- B. Contractor: Responsible for:
 - 1. Determination and verification of materials including manufacturer's catalog numbers.
 - 2. Determination and verification of field measurements and field construction criteria.
 - 3. Checking and coordinating information in submittal with requirements of Work and of Contract Documents.
 - 4. Determination of accuracy and completeness of dimensions and quantities.
 - 5. Confirmation and coordination of dimensions and field conditions at Site.

6. Construction means, techniques, sequences, and procedures.
 7. Safety precautions.
 8. Coordination and performance of Work of all trades.
- C. Stamp, sign or initial, and date each submittal to certify compliance with requirements of Contract Documents.
- D. Do not fabricate products or begin Work for which submittals are required until approved submittals have been received from Engineer.

1.16 ENGINEER REVIEW

- A. Do not make "mass submittals" to Engineer. "Mass submittals" are defined as six or more submittals or items in one day or 15 or more submittals or items in one week. If "mass submittals" are received, Engineer's review time stated above will be extended as necessary to perform proper review. Engineer will review "mass submittals" based on priority determined by Engineer after consultation with Owner.
- B. Informational submittals and other similar data are for Engineer's information, do not require Engineer's responsive action, and will not be reviewed or returned with comment.
- C. Submittals made by Contractor that are not required by Contract Documents may be returned without action.
- D. Submittal approval does not authorize changes to Contract requirements unless accompanied by Change Order, Field Order, or Work Change Directive.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 Section 31 10 10 – Clearing

- A. Product Data: Submit Data for herbicide. Indicate compliance with applicable codes for environmental protection.

3.2 Section 31 23 16 – Excavation

- A. Excavation Protection Plan: Describe sheeting, shoring, and bracing materials and installation required to protect excavations and adjacent structures and property; include structural calculations to support plan.

3.3 Section 31 25 12 – Storm Water Pollution Prevention

- A. Submit one copy of the SWP3 to Engineer for record retention purposes only. Engineer will not review or approve the SWP3.

3.4 32 13 13 – Concrete Paving and Miscellaneous Concrete

- A. Product Data:
 - 1. Submit data on concrete materials, joint filler, joint sealer, admixtures, and curing compounds.
 - 2. Joint Sealer: Manufacturer's Installation Instructions: Submit special procedures, surface preparation, and conditions requiring special attention.
- B. Submit Concrete Mix Design for each class of concrete from a batch plant that is currently certified by the National Ready Mixed Concrete Association. The Mix Designer shall be a licensed professional engineer registered in the State of Texas or a TxDOT approved Mix Designer. Concrete mix design date shall be no older than 12 months from current date (unless approval by Engineer) from the local TxDOT District and shall identify mix ingredients and proportions, including admixtures.
- C. Source Quality Control Submittals: Indicate results of shop factory tests and inspections.

3.5 Section 32 31 13 – Chain Link Fences and Gates

- A. Shop Drawings: Indicate plan layout, spacing of components, post foundation dimensions, hardware anchorage, gates, and schedule of components.
- B. Product Data: Submit data on fabric, posts, accessories, fittings and hardware.

3.6 Section 32 92 19 – Seeding

- A. Product Data: Submit data for seed mix, fertilizer, mulch, stabilizer and other accessories.

3.7 Section 32 92 23 – Sodding

- A. Product Data: Submit data for sod grass species, fertilizer, mulch, herbicide and other accessories.
- B. Submit minimum 10 oz sample of topsoil proposed. Forward sample to approved testing laboratory in sealed containers to prevent contamination.
- C. Test Reports: Indicate topsoil nutrient and pH levels with recommended soil supplements and application rates.

3.8 Section 33 01 30 – Frames, Grates, Rings, and Covers

- A. Product Data: Submit manhole covers and riser rings construction, features, configuration, dimensions, and manufacturer.
- B. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

3.9 Section 33 05 14 – Manholes and Structures

- A. Shop Drawings: Indicate structure locations, elevations, piping, conduit, and invert sizes and elevations of penetrations.

- B. Product Data: Submit manhole covers, component construction, features, configuration, dimensions and invert configuration.
- C. Submit the following prior to start of testing:
 - 1. Test procedures
 - 2. List of test equipment
 - 3. Testing sequence schedule
 - 4. Provisions for disposal of flushing and test water
 - 5. Certification of test gauge calibration
- D. Test Reports: Indicate results of manhole tests

END OF SECTION

SECTION 01 40 00 - QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Quality control.
- B. Tolerances.
- C. References.
- D. Labeling.
- E. Testing and inspection services.
- F. Manufacturers' field services.

1.2 QUALITY CONTROL

- A. Monitor quality control over suppliers, manufacturers, products, services, Site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Products, materials, and equipment may be subject to inspection by Engineer and Owner at place of manufacture or fabrication. Such inspections shall not relieve Contractor of complying with requirements of Contract Documents.
- E. Supervise performance of Work in such manner and by such means to ensure that Work, whether completed or in progress, will not be subjected to harmful, dangerous, damaging, or otherwise deleterious exposure during construction period.
- F. Perform work in accordance with Texas Department of Transportation's Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (latest Edition). Maintain one copy on site.

1.3 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' recommended tolerances and tolerance requirements in reference standards. When such tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.

- C. Adjust products to appropriate dimensions; position before securing products in place.

1.4 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current as of date for receiving Bids except where specific date is established by code.
- C. Obtain copies of standards and maintain on Site when required by product Specification Sections.
- D. When requirements of indicated reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- E. Neither contractual relationships, duties, or responsibilities of parties in Contract nor those of Engineer shall be altered from Contract Documents by mention or inference in reference documents.

1.5 LABELING

- A. Attach label from agency approved by authorities having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.
- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label:
 - 1. Model number.
 - 2. Serial number.
 - 3. Performance characteristics.
- C. Manufacturer's Nameplates, Trademarks, Logos, and Other Identifying Marks on Products: Not allowed on surfaces exposed to view in public areas, interior or exterior.

1.6 TESTING AND INSPECTION SERVICES

- A. Owner will employ and pay for specified services of an independent firm to perform testing and inspection.
- B. Independent testing firm will perform tests, inspections, and other services specified in individual Specification Sections and as required by Engineer. In the event of a conflict in the Contract Documents concerning sampling and testing frequency, the more stringent standard shall be enforced, unless otherwise approved by the Engineer.
 - 1. Laboratory: Authorized to operate in State of Texas.
 - 2. Laboratory Staff: Maintain full-time Professional Engineer on staff to review services.
 - 3. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to National Bureau of Standards or accepted values of natural physical constants.

- C. Testing, inspections, and source quality control may occur on or off Project Site. Perform off-Site testing as required by Engineer or Owner.
- D. Cooperate with independent testing firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
 - 1. Notify Engineer and independent testing firm 48 hours before expected time for operations requiring services.
 - 2. Make arrangements with independent testing firm and pay for additional Samples and tests required for Contractor's use.
- E. Testing and employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work according to requirements of Contract Documents.
- F. Retesting or re-inspection required because of nonconformance with specified or indicated requirements shall be performed by same independent testing firm on instructions from Engineer. Payment for retesting or re-inspection will be charged to Contractor by deducting testing charges from Contract Sum/Price.
- G. Independent Testing Firm Responsibilities:
 - 1. Test Samples of mixes submitted by Contractor.
 - 2. Provide qualified personnel at Site. Cooperate with Engineer and Contractor in performance of services.
 - 3. Perform indicated sampling and testing of products according to specified standards.
 - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 5. Promptly notify Engineer and Contractor of observed irregularities or nonconformance of Work or products.
 - 6. Perform additional tests required by Engineer.
 - 7. Attend preconstruction meetings and progress meetings.
- H. Material Testing Reports: After each test, Independent Testing Firm shall promptly submit two copies of testing reports to Engineer, Contractor, and other entities as directed, indicating observations and results of tests and compliance or noncompliance with Contract Documents. At a minimum, include the following information in testing reports:
 - 1. Date issued.
 - 2. Project title and number.
 - 3. Name of inspector/testing technician.
 - 4. Date and time of sampling or inspection.
 - 5. Identification of product and Specification Section.
 - 6. Location in Project.
 - 7. Type of inspection or test.
 - 8. Date of test.
 - 9. Results of tests.
 - 10. Compliance or noncompliance with Contract Documents.
 - 11. Special observations, if any.

Submit final report indicating correction of Work previously reported as noncompliant. Log all test results in an electronic spreadsheet for each test procedure and provide updated versions to Engineer at agreed upon time interval.

- I. Limits on Independent Testing Firm:

1. Independent Testing Firm may not release, revoke, alter, or enlarge on requirements of Contract Documents.
2. Independent Testing Firm may not approve or accept any portion of the Work.
3. Independent Testing Firm may not assume duties of Contractor.
4. Independent Testing Firm has no authority to stop the Work.

1.7 MANUFACTURER'S FIELD SERVICES

- A. When specified in individual Specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe Site conditions, conditions of surfaces and installation, quality of workmanship, startup of equipment, testing, adjusting, and balancing of equipment as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Engineer 30 days in advance of required observations. Observer is subject to approval of Engineer.
- C. Report observations and Site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturer's written instructions.
- D. Refer to Section 01 33 00 - Submittal Procedures, "Manufacturer's Field Reports" Article.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 Construction Material Lab Testing Matrix

Contractor or Owner Employed Inspection Services		
Construction Operation / Standard Specification	Applicable Testing	Frequency of Testing
Excavation 31 23 16	Laboratory Material Tests: ASTM D698 Compaction Density Tests: Minimum of 95% and less than 100% of maximum dry density	1 per 5000 SF
	Compaction Moisture Tests: ASTM D3017	1 per 5000 SF

Contractor or Owner Employed Inspection Services		
Construction Operation / Standard Specification	Applicable Testing	Frequency of Testing
	Shall be no less than optimum moisture to no greater than 3 percentage points above optimum moisture	
Concrete 32 13 13	<ol style="list-style-type: none"> 1. Strength Test Samples: <ol style="list-style-type: none"> a. Sampling Procedures: ASTM C172 b. Cylinder Molding and Curing Procedures: ASTM C31, Cylinder Specimens, standard cured. 2. Field Testing: <ol style="list-style-type: none"> a. Slump Test Method: ASTM C143 b. Air Content Test Method: ASTM C173 c. Temperature Test Method: ASTM C1064 3. Cylinder Compressive Strength Testing: <ol style="list-style-type: none"> a. Test Method: ASTM C39 	<p>Make 1 set (four cylinders) for each class of concrete placed.</p> <p>Class A and C – Make one set per every 25 CY or less</p> <p>Class P – Make one set for every 2500 SF or less</p> <p>Measure Slump, Air Content and Temperature for each set of cylinders.</p> <p>Average compressive strength of 3 consecutive test results equal or exceed specified compressive strength, and no individual strength test result falls below specified compressive strength by more than 500 psi.</p> <p>Test one cylinder at 7 days. Test two cylinders at 28 days. Retain one cylinder for 28 days for testing when requested by Engineer. Dispose remaining cylinders when testing is not required.</p>

Contractor Inspection Services			
Excavation 31 23 16			Request visual inspection of bearing surfaces by Engineer before installing subsequent work. The Engineer shall be notified not less than three working days prior to the visual inspection.

END OF SECTION

SECTION 31 10 00 - CLEARING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Removing and disposing of surface debris, rubbish, and other objectionable materials.
2. Removing and disposing of designated building slabs, paving, curbs, driveways, miscellaneous stone, brick, concrete, sidewalks, drainage structures, headwalls, safety end treatments, manholes, inlets, and abandoned railroad tracks.
3. Removing and disposing of designated fencing and signage.
4. Removing and disposing of designated trees, shrubs, and other plant life.
5. Removing and disposing of designated abandoned water and wastewater utilities and septic tanks.
6. Herbicide treatment
7. Excavating topsoil.

1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

A. Clearing:

1. Basis of Measurement: "Clearing," when included in the contract as a pay item, will be measured by the acre or by the linear foot (for the width of ROW and/or width of easement).
2. Basis of Payment: This item will be considered subsidiary to Section 31 23 16, "Excavation," unless included as a separate pay item in the contract. When included for payment, it shall be paid for at the unit price bid for "Clearing," which price shall be full compensation for all work herein specified, including the furnishing of all materials, equipment, tools, labor, hauling, legal disposal and incidentals necessary to complete the work. Herbicide shall be paid for herbicide application and furnishing equipment, material, labor, tools, re-treatment as necessary, and incidentals. Payment, when included as a contract pay item, will be made under the following:
 - a. Clearing (Method A) – Per Acre, Measured.
 - b. Clearing (Method B) – Per Linear Foot (width of ROW/width of easement), Plan Quantity.
 - c. Herbicide Treatment (Broadcast) – Per Lump Sum, Plan Quantity.
 - d. Herbicide Treatment (Basal Bark) – Per Lump Sum, Plan Quantity.
 - e. Herbicide Treatment (Cut-Stump) – Per Lump Sum, Plan Quantity.

1.3 QUALITY ASSURANCE

- A. Conform to applicable code for environmental requirements, disposal of debris, burning debris on site, and use of herbicides.
- B. Herbicide:
 1. License Requirements: Possess either a commercial pesticide applicator license from the Texas Department of Agriculture, or a Texas Structural Pest Control Service License. Provide documentation of license before beginning work. Conduct on-site supervision of

- all mixing, transporting, handling, spraying, and disposal of materials with licensed personnel.
- 2. Records: Document work in accordance with all Federal, State, and Local regulations. Submit a copy of the herbicide records on the next business day following application. Submit a final copy of all the herbicide application records upon completion of the work.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Herbicide: Furnish herbicide materials in accordance with Section 15 of the 2017 TxDOT Herbicide Operations Manual.
- B. Pathfinder II, Transline, & Capstone are applicable products that can be used in conjunction with each other, as shown in the drawings.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify existing plant life designated to remain is tagged or identified.
- C. Identify spoils site for placing removed materials.

3.2 PREPARATION

- A. Call Texas 811 service at 800-344-8377 not less than three working days before performing Work.
 - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Prior to commencing this work, erosion control measures shall be in place.

3.3 PROTECTION

- A. Locate, identify, and protect structures and utilities indicated to remain, from damage.
- B. Areas within the construction limits or as indicated shall be cleared of all trees, stumps, brush, etc. as defined above; except trees or shrubs indicated for preservation which shall be carefully trimmed as directed, and shall be protected from scarring, barking or other injuries during construction operations. Exposed ends of pruned limbs or scarred bark shall be pruned, trimmed and treated with an approved asphaltic material within 24 hours of the pruning or injury.

- C. Locate, protect, and maintain benchmarks, monuments, control points, and project engineering reference points. Re-establishment of disturbed or destroyed items shall be by a Registered Professional Land Surveyor (licensed in the state of Texas), at no additional cost to Owner.
- D. Construction equipment shall not be operated within the drip line of trees, unless indicated. Construction materials shall not be stockpiled under the canopies of trees. No excavation or embankment shall be placed within the drip line of trees until tree wells are constructed.

3.4 CLEARING

- A. Strip and remove from construction area all topsoil, organics, and vegetation to a minimum depth of 6 inches below the existing natural ground surface.
- B. Remove trees and shrubs within the construction limits unless noted otherwise in the Drawings. Remove stumps, main root ball, and root system. Holes remaining after the removal of all obstructions, objectionable materials, trees, stumps, etc. shall be backfilled with Select Fill and compacted in accordance with Section 31 23 23.
- C. Clear undergrowth and deadwood, without disturbing subsoil.
- D. Apply herbicide to remaining stumps to inhibit growth.

3.5 REMOVAL

- A. Remove surface debris, rock, and extracted trees, shrubs and other plant life from site, or as indicated on Drawings.
- B. Remove designated building slabs, paving, curbs, driveways, miscellaneous stone, brick, concrete, sidewalks, drainage structures, headwalls, safety end treatments, manholes, inlets, and abandoned railroad tracks as indicated on Drawings. Neatly saw cut edges at right angle to surface.
- C. Remove designated fencing and signage.
- D. Remove abandoned water and wastewater utilities and septic tanks. Indicated removal termination point for underground utilities on Record Documents.
- E. Continuously clean-up and remove waste materials from site. Do not allow materials to accumulate on site.
- F. Do not burn or bury materials on site. Leave site in clean condition.

3.6 HERBICIDE TREATMENT

- A. Season: Spray herbicide during active growing periods unless otherwise approved.
- B. Equipment: Furnish all equipment.
 - 1. Broadcast application: furnish self-propelled equipment tractor mounted or pulled spray rigs with a low center of gravity that allows safe traverse on a maximum 3:1 slope.

- Provide equipment capable of making uniform broadcast application calibrated at a rate between 20 and 40 gallons per acre (GPA).
2. Basal Bark and Cut Tree applications: Furnish sprayers with low volume spray tips (spray system 5500 adjustable spray tip X-1 or X-2, or approved equivalent).
 3. Personal Protection Equipment: Follow the manufacturer's label requirements for personal protection of employees.
- C. Work Methods: Apply approved herbicide in accordance with the manufacturer's label recommendations, as shown on the drawings or as approved. Add surfactant and blue dye marker at the manufacturer's recommended rate unless otherwise approved. Prepare herbicide solution to the rates shown on the drawing using procedures on the herbicide container label. Dispose of empty containers and unused chemical mixtures in accordance with the label directions and local, state, and federal regulations. Cease spraying operation immediately when wind or other environmental conditions cause off-target spray drift, leaves are wet, or rainfall is imminent. An inspection of the treated areas will be made not less than 14 days and no later than 30 days after the application. Re-treat areas in which the undesirable vegetation has not be controlled for no additional compensation. Repair and replace any damaged desirable vegetation or erosion as a result of negligent applications.
1. Broadcast application: spray undesirable vegetation by broadcasting with spray nozzels at the desired rate. Ensure nozzels spray consistent across the area being covered.
 2. Basal Bark treatment: apply herbicide solution with a low-volume, low pressure sprayer which thoroughly wets the lower 12-15 in. of stems on all sides, including the root collar area, but not to the point of run-off. Perform application at any time throughout the year, except when the stumps are wet from rainfall or dew prevents spraying to the base of the plant.
 3. Cut-stump treatment: cut plants parallel to the ground, not to exceed 2 in. above the ground line. Apply the herbicide solution with a low-volume, low-pressure sprayer which thoroughly wets the area adjacent to the cambium and bard around the entire circumference of the stump. Thoroughly wet the sides of the stump, but not to the point of run-off. Make the herbicide application within 1 hr. from the time each plant is cut. Dispose of removed materials and debris at appropriate off-site locations in accordance with local, state, and federal requirements.
- D. Engineer reserves the right to pay a partial payment of 50% of the lump sum price bid after the initial application is performed. The final 50% of the lump sum price bid will be paid after the inspection and required re-treatments have been completed and accepted.

3.7 TOPSOIL EXCAVATION

- A. Excavate topsoil from areas to be further excavated, relandscaped, regraded, or within the construction limits of a structure without mixing with foreign materials for use in finish grading.
- B. Do not excavate wet topsoil.
- C. Stockpile in area designated on site to a height which yields safe slope stability and protect from erosion. Remove excess topsoil not intended for reuse, from project.

END OF SECTION

SECTION 31 23 16 - EXCAVATION

PART 1 GENERAL

1.1 SUMMARY

- A. Description: This item shall consist of excavating and properly utilizing or otherwise satisfactorily disposing of all excavated material, of whatever character, within the limits of the work indicated and the constructing, compacting, shaping and finishing of all earthwork on the entire project in accordance with the specification requirements herein outlined and in conformity with the required lines, grades and typical cross sections indicated or as directed by the Engineer. **All excavation shall be unclassified and shall include all materials encountered regardless of their nature or the manner in which they are removed.**
- B. Section Includes:
1. Soil compaction.
 2. Excavating for structures and foundations.
 3. Excavating for paving, roads, and parking areas.
 4. Excavating for slabs-on-grade.
 5. Excavating for site structures.

1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Excavating Soil Materials:
1. Basis of Measurement: All accepted excavation will be measured by Method A, B, or C as follows:
 - a. Method A: Measurement of the volume of excavation in cubic yards. The plan quantities for excavation will be used as the measurement for payment of this item.
 - b. Method B: Measurement of the area in square yards of surface area excavated as indicated. The plan quantities will be used as the measurement for payment of this item.
 - c. Method C: Measurement of the volume of excavation in cubic yards by the average end areas. Cross sectional areas shall be computed from the existing ground section to the established line of the subgrade as indicated for the limits of the right of way or other work limits shown, including parkway slopes and sidewalk areas.
 2. Basis of Payment: This item will be paid for at the contract unit price bid for "Excavation," as provided under measurement Method A, B, or C as included in the bid, which price shall be full compensation for all work herein specified, including subgrade preparation, unless specified otherwise and the furnishing of all materials, equipment, tools, labor and incidentals necessary to complete the work. Payment will be made under one of the following:
 - a. Excavation (Method A) – Per Cubic Yard, Plan Quantity.
 - b. Excavation (Method B) – Per Square Yard, Plan Quantity.
 - c. Excavation (Method C) – Per Cubic Yard, Measured.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 PREPARATION

- A. Erosion control and tree protection measures shall be in place prior to commencing work.
- B. Construction equipment shall not be operated within the drip line of trees, unless indicated.
- C. Construction materials shall not be stockpiled under the canopies of trees. No excavation or embankment shall be placed within the drip line of trees until tree wells are constructed as indicated on the Drawings.
- D. Call Texas 811 service at 800-344-8377 not less than three working days before performing Work.
 - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- E. Call Local Municipality(ies) not less than 2 weeks before performing Work.
 - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- F. Notify utility company(ies) to remove and relocate utilities as indicated on the Drawings.
- G. Protect utilities indicated to remain from damage.
- H. Protect plant life, lawns, rock outcroppings and other features remaining as portion of final landscaping.
- I. Protect bench marks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

3.2 EXCAVATION

- A. All excavation shall be performed as specified herein and shall conform to the established alignment, grades and cross sections.
- B. Suitable excavated “on-site” materials (Subsoil Type S3) may be utilized, insofar as practicable and when the material meets the criteria outlined in Section 31 05 13 in constructing required embankments and “fill” areas. The construction of all embankments and “fill” areas shall conform to Section 31 23 23.
- C. Materials with a Plasticity Index (PI) greater than the surrounding materials or with a moisture content greater than 2 percent in excess of optimum shall be classified as unsuitable and must be manipulated to meet the above criteria before use or be removed.
- D. Unsuitable excavated materials or excavation in excess of that needed for construction shall be known as “Waste” and shall become the property of the Contractor. It shall become his sole responsibility to dispose of this material off the limits of the right of way in an environmentally sound manner at a permitted disposal site.

- E. Excavate subsoil to the final subgrade elevation(s) to accommodate structural foundations, slabs-on-grade, paving, site structures, and civil site facilities.
- F. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- G. Trim excavation. Remove loose matter.
- H. Remove lumped subsoil, boulders, and rock up to 1/3 cu yd measured by volume. Remove larger material as specified in Section 31 23 23.
- I. Notify Engineer of unexpected subsurface conditions.
- J. Correct areas over excavated with Structural Fill as specified in Section 31 23 23.
- K. Remove excess and unsuitable material from site.
- L. Stockpile subsoil in area designated on site to depth not exceeding 8 feet and protect from erosion.
- M. Repair or replace items indicated to remain damaged by excavation.

3.3 SUBGRADE PREPARATION FOR STRUCTURES AND PAVEMENTS

- A. After final subgrade elevation has been achieved, the exposed subgrade soils (subsoils) shall be scarified to a minimum depth of 6 inches. Compaction of the subsoil shall be to a minimum of 95% and less than 100% of its maximum dry density when determined in accordance with ASTM D698, Method D, Standard Proctor. The subsoil shall be no less than its optimum moisture to no greater than 3 percentage points above its optimum moisture content at the time of testing. The moisture content shall be maintained until subsequent construction activities commence.

3.4 FIELD QUALITY CONTROL

- A. Sections 01 40 00 - Quality Requirements.
- B. Request inspection of excavation, subgrade preparation, and density controlled fill operations in accordance with Section 31 23 23.

3.5 PROTECTION

- A. Prevent displacement or loose soil from falling into excavation; maintain soil stability.
- B. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.
- C. Protect structures, utilities and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth operations.

END OF SECTION

SECTION 31 25 12 – STORM WATER POLLUTION PREVENTION

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Documentation to be prepared and signed by Contractor before conducting construction operations, in accordance with the Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit Number TXR 150000, latest issue date (the Construction General Permit).
2. Implementation, maintenance inspection, and termination of storm water pollution prevention control measures including, but not limited to, erosion and sediment controls, storm water management plans, waste collection and disposal, off-site vehicle tracking, and other appropriate practices.
3. Review of the Storm Water Pollution Prevention Plan (SWP3) implementation in a meeting with Engineer prior to start of construction.

1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

A. Storm Water Pollution Prevention Plan:

1. Basis of Measurement: Lump Sum.
2. Basis of Payment: Payment for Storm Water Pollution Prevention Plan shall be made at the lump sum bid for "Storm Water Pollution Prevention Plan." Payment for all work prescribed under this item shall be full compensation for the Storm Water Pollution Prevention Plan including all preparation, submittals, notices, updates, and revisions.

B. Storm Water Pollution Prevention Plan Implementation:

1. Basis of Measurement: Lump Sum.
2. Basis of Payment: Includes all aspects of implementing the SWP3, from Notice of Intent through Notice of Termination.

1.3 REFERENCES

- A. Construction General Permit (TPDES No. TXR 150000).
- B. Clean Water Act.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with the SWP3 as per the submission of the Notice of Intent.
- B. Maintain one copy of the SWP3 document on site.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 SITE SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWP3)

- A. Fulfill all TPDES Construction General Permit (TXR 150000) requirements.
- B. Contractor shall fulfill the role of Primary Operator as defined by the TPDES Construction General Permit (TXR 150000) for this project.
- C. Prepare and submit all required documentation and pay all applicable fees to TCEQ required by the TPDES Construction General Permit (TXR 150000). This includes but is not limited to Notice of Intent, Site Notices, Notice of Termination, and Notification of MS4 Operator.
- D. SWP3:
 - 1. Prepare a SWP3 following Part III of the TPDES Construction General Permit (TXR 150000).
 - 2. Update or revise the SWP3 as needed during the construction following Part III, Section E of the TPDES Construction General Permit (TXR 150000).
 - 3. Submit the SWP3 and any updates or revisions to the Engineer for review and address comments prior to commencing, or continuing, construction activities.
 - 4. Conduct inspections in accordance with TPDES Construction General Permit (TXR 150000).
 - 5. Maintain copies of SWP3, inspection reports, and other documentation as required by TPDES Construction General Permit (TXR 150000).

3.2 SWP3 IMPLEMENTATION

- A. Implement SWP3 utilizing state of the art Best Management Practice controls as required by the Construction General Permit, the site specific SWP3, and local government.
- B. Inspect and maintain controls throughout the course of construction per the Construction General Permit requirements.
- C. Remove controls per the Construction General Permit requirements.
- D. On-Site Waste Material Storage:
 - 1. Self-contain on-site waste material storage and satisfy appropriate location, state, and federal rules and regulations.
 - 2. Prepare list of waste material to be stored on-site. Update list as necessary to include up-to-date information. Keep a copy of updated list with the SWP3.
 - 3. Prepare description of controls to reduce pollutants generated from on-site storage. Include storage practices necessary to minimize exposure of materials to storm water, and spill prevention and response measures consistent with best management practices. Keep a copy of the description with the SWP3.

END OF SECTION

SECTION 32 13 13 - MISCELLANEOUS CONCRETE

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Aggregate base course.
2. For:
 - a. Concrete curbs and gutters.
 - b. Concrete curb ramps.
 - c. Concrete sidewalks.
 - d. Concrete driveways.
 - e. Concrete fillets.
 - f. Concrete valleys.
 - g. Concrete flumes.
 - h. Concrete pilot channels.
 - i. Concrete inlets.
 - j. Concrete headwalls, culverts and safety end treatments.
 - k. Concrete manholes and manhole slabs
 - l. Concrete thrust blocking, pads, utility encasement, surface replacement, pipe bollards and manhole inverts
3. Joint Sealer, joint backer rod, and accessories.

1.2 UNIT PRICE MEASUREMENT AND PAYMENT

A. Concrete Curb and Gutter (Standard or Laydown):

1. Basis of Measurement: Payment by linear foot.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Concrete Curb and Gutter (Standard) – Per Linear Foot, Measured.
 - b. Concrete Curb and Gutter (Laydown) – Per Linear Foot, Measured.

B. Ribbon Curb:

1. Basis of Measurement: Payment by linear foot.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Ribbon Curb – Per Linear Foot, Measured.
 - b. Ribbon Curb – Per Linear Foot, Plan Quantity.

C. Mountable Curb:

1. Basis of Measurement: Payment by linear foot.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Mountable Curb – Per Linear Foot, Measured.
 - b. Mountable Curb – Per Linear Foot, Plan Quantity.

D. Curb Ramp:

1. Basis of Measurement: Payment by each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Ribbon Curb – Per Each, Measured.

E. Concrete End Block:

1. Basis of Measurement: Payment by linear foot or each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Concrete End Block is paid for as 5 linear foot of Concrete Curb and Gutter.
 - b. Concrete End Block – Per Each, Measured.

F. Concrete Curb Opening:

1. Basis of Measurement: Payment by linear foot or each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Concrete Curb Opening is paid for as 10 linear foot of Concrete Curb and Gutter.
 - b. Concrete Curb Opening – Per Each, Measured.

G. Concrete Sidewalk:

1. Basis of Measurement: Payment by square yard or linear foot (width shown on drawings)
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. ___ - Inch Concrete Sidewalk – Per Square Yard, Measured.
 - b. ___ - Inch Concrete Sidewalk – Per Linear Foot, Plan Quantity.

H. Concrete Driveways (Type 1, Type 2 or Type 3):

1. Basis of Measurement: Payment by square yard or each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Concrete Driveway (Type 1)(Method A) – Per Square Yard, Measured.
 - b. Concrete Driveway (Type 1)(Method B) – Per Square Yard, Plan Quantity.
 - c. Concrete Driveway (Type 1)(Method C) – Per Each, Plan Quantity.
 - d. Concrete Driveway (Type 2)(Method A) – Per Square Yard, Measured.
 - e. Concrete Driveway (Type 2)(Method B) – Per Square Yard, Plan Quantity.
 - f. Concrete Driveway (Type 2)(Method C) – Per Each, Plan Quantity.
 - g. Concrete Driveway (Type 3)(Method A) – Per Square Yard, Measured.
 - h. Concrete Driveway (Type 3)(Method B) – Per Square Yard, Plan Quantity.
 - i. Concrete Driveway (Type 3)(Method C) – Per Each, Plan Quantity.

I. Concrete Fillet:

1. Basis of Measurement: Payment by square yard or each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Concrete Fillet – Per Square Yard, Measured.
 - b. Concrete Fillet – Per Each Foot, Plan Quantity.

J. Concrete Valley:

1. Basis of Measurement: Payment by square yard or each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Concrete Valley – Per Square Yard, Measured.
 - b. Concrete Valley – Per Each, Plan Quantity.

K. Concrete Overflow Flume:

1. Basis of Measurement: Payment by square yard or linear foot (width shown on drawings.)
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Concrete Overflow Flume – Per Square Yard, Measured.
 - b. Concrete Overflow Flume – Per Linear Foot, Measured.

L. Concrete Pilot Channel:

1. Basis of Measurement: Payment by square yard or linear foot (width shown on drawings.)
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Concrete Pilot Channel – Per Square Yard, Measured.
 - b. Concrete Pilot Channel – Per Linear Foot, Measured.

M. Inlets (Cast In Place):

1. Basis of Measurement: Payment by each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Curb Inlet Type CO-Recessed – Per Each, Measured.
 - b. Curb Inlet Type CO – Per Each, Measured.
 - c. Drop Inlet – Per Each, Measured.
 - d. Concave Gutter Inlet – Per Each, Measured.

N. Culvert (Cast In Place):

1. Basis of Measurement: Payment by each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Culvert – Per Each, Measured.

O. Headwall and Energy Dissipaters:

1. Basis of Measurement: Payment by each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Headwall and Energy Dissipaters – Per Each, Measured.

P. Safety End Treatment (Cast In Place):

1. Basis of Measurement: Payment by each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Concrete Safety End Treatment – Per Each, Measured.

Q. Manholes (Cast In Place):

1. Basis of Measurement: Payment by each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Manhole – Per Each, Measured.

R. 10' x 10' Manhole Slabs:

1. Basis of Measurement: Payment by each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. 10' x 10' Manhole Slab – Per Each, Measured.

S. Pipe Bollards:

1. Basis of Measurement: Payment by each.
2. Basis of Payment: Includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Pipe Bollard – Per Each, Measured.

T. Concrete Riprap:

1. Basis of Measurement: Payment by square yard.
2. Basis of Payment: includes forms, reinforcing, concrete, joints, accessories, placing, finishing, curing, and testing.
 - a. Concrete Riprap – Per Square Yard, Measured.

U. Thrust Blocking, Pads, Utility Encasement, Surface Replacement, and Manhole Inverts:

1. Basis of Measurement and Payment: Shall be considered subsidiary to the construction for which it pertains.

1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301 - Specifications for Structural Concrete.
- B. Conform to ACI 305 – Hot Weather Concreting, when concreting during hot weather, except as amended herein.
- C. Conform to ACI 306.1 – Standard Specification for Cold Weather Concreting, when concreting during colder weather, except as amended herein.
- D. Obtain cement and aggregate from same source throughout.
- E. Batch Plant: Currently certified by the National Ready Mixed Concrete Association.

- F. Mix Designer: Licensed professional engineer registered in the State of Texas or TxDOT approved mix designer.

1.4 QUALIFICATIONS

- A. Installer: Company specializing in performing work of this section with minimum three years documented experience.

1.5 AMBIENT CONDITIONS

- A. Provide ambient conditions control facilities for product storage and installation.
- B. Do not place concrete when base surface temperature is less than 40 degrees F, or surface is wet or frozen.
- C. Maintain concrete temperature after installation at minimum 50 degrees F for minimum 7 days
- D. Joint Sealer: Maintain temperature and humidity recommended by sealant manufacturer during installation.

1.6 COORDINATION

- A. Coordinate placement of joint devices with erection of concrete formwork and placement of form accessories.

PART 2 PRODUCTS

2.1 MISCELLANEOUS CONCRETE

A. Form Materials:

1. Form Materials: shall be made of wood, metal, or other approved material and shall be like new to new condition.
2. Joint Sealer: Shall be in accordance with this Section.

B. Reinforcement:

1. Reinforcing Steel:
 - a. Dowel Bars: Dowel bars shall be plain steel bars conforming to ASTM A615 - Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement, or ASTM A966 and shall be free from burring or other deformation restricting slippage in the concrete. Before delivery to the construction site each dowel bar shall be painted with one coat of paint conforming to MIL-DTL-24441/20A.SSPC Paint 5 or SSPC Paint 25. Metal or plastic collars (when indicated on Drawings) shall be full circular device supporting the dowel until the epoxy hardens.

The sleeves for dowel bars used in expansion joints shall be translucent of an approved design to cover 2 inches (minimum) of the dowel, with a closed end and with a suitable stop to hold the end of the bar at least 1½

inches from the closed end of the sleeve. Sleeves shall be of such design that they will not collapse during construction.

C. Concrete Materials:

1. Cement: ASTM C150 – Standard Specification for Portland Cement, **Type I – Normal** or **Type II – Moderate**.
2. Exposed Aggregate: Gravel washed natural mineral aggregate; furnished from single source.
 - a. Minimum Size: 1/4 inch.
 - b. Maximum Size: 1/2 inch.
 - c. Color: As selected.
3. Normal Weight Aggregates: ASTM C33 furnished from a single source.
 - a. Meet ASTM C33.
 - b. Coarse Aggregate: Consisting of natural gravels, crushed gravels, crushed stone, or combination of these materials containing no more than 15% of flat, elongated particles (long dimension no more than 5 times short dimension). No more than 0.5% of coarse aggregate passing a 200 sieve.
 - c. Fine Aggregate: Clean, sharp natural sand with no more than 4% of fine aggregate passing a 200 sieve.
4. Water: potable, less than 250 ppm of chlorides.

2.2 ADMIXTURES

- A. General: Compatible with other admixtures and free from chlorides or other corrosive chemicals.
- B. Air Entrainment:
 1. ASTM C260, non-toxic after 30 days containing no chlorides.
 2. Concrete with air-entrainment admixture shall maintain air percentage, as batched, within plus or minus 2% for the time required for placement.
- C. High Range Water Reducing Admixture (Superplasticizer): ASTM C494/C494M.
 1. Hold slump of 5" or greater for time required for placement.
 2. Use Type F or Type G.
 3. Manufacturers
 - a. BASF Admixtures Inc.
 - b. Euclid Chemical Co.
 - c. WR Grace & Co.
- D. Water Reducing Admixture: ASTM C494/C494M, Type A or Type D.
 1. Manufacturers:
 - a. BASF Admixtures Inc.
 - b. Euclid Chemical Co.
 - c. WR Grace & Co.
- E. Silica Fume: Not Allowed.
- F. Fly Ash: Type C or Type F

2.3 FABRICATION

A. Form standard hooks for 180 degree bends and 90 degree bends as indicated on the Drawings.

2.4 MIXES

A. Concrete Mix:

1. Mix and deliver concrete in accordance with ASTM C94 - Standard Specification for Chemical Admixtures for Concrete, Option a.
2. Select proportions for normal weight concrete in accordance with ACI 301 - Specifications for Structural Concrete, Method 1.
3. Provide concrete to the following criteria:

Class of Concrete	Design Strength at 28 days (psi)	Max. w/cm Ratio	Placement Slump Range, in.	General Usage
A	3,000	0.60	As approved	Curb, gutter, curb & gutter, sidewalks, driveways, fillets, valleys, non-reinforced drilled shafts, pilot channels, flumes, safety end treatments, manhole slabs, surface replacement.
B	2,000	0.60	As approved	Riprap, small roadside signs, anchors, utility encasements.
C ¹	3,600	0.45	4 to 5-1/2	Culverts (except top slab of direct traffic culverts), headwalls, wing walls, retaining walls, inlets, manholes, manholes bases, energy dissipaters, reinforced drill shafts.

1. Structural Concrete Classes.

4. Submit Concrete Mix Design for each class of concrete (above table) from a batch plant that is currently certified by the National Ready Mixed Concrete Association. The Mix Designer shall be a licensed professional engineer registered in the State of Texas or a TxDOT approved Mix Designer. Concrete mix design date shall be no older than 12 months from current date (unless approval by Engineer) from the local TxDOT District and shall identify mix ingredients and proportions, including admixtures.
5. Use accelerating admixtures in cold weather only when approved by the Engineer in writing. Use of admixtures will not relax cold weather placement requirements.
6. Use calcium chloride only when approved by the Engineer in writing.

7. Use set retarding admixtures during hot weather only when approved by the Engineer in writing.

2.5 ACCESSORIES

A. Curing Compound: ASTM C309 – Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete, Type 2, Class B

B. Joint Sealers:

1. Manufacturers:
 - a. Sonneborne Building Products.
2. Products Description:
 - a. General Purpose Traffic Bearing Sealant (Sealant self-leveling); Polyurethane; ASTM C920 – Standard Specification for Elastomeric Joint Sealants, Grade P, Class 25, Use T,M; single component.
 - 1) Type: Sonolastic SLI manufactured by Sonneborne.
 - 2) Color: Colors as selected.
 - 3) Applications: Use for exterior, pedestrian, and vehicular traffic bearing joints.

C. Premolded Joint Filler: Premolded resilient joint filler for expansion joints shall conform to the requirements of ASTM D1751 – Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types), and shall be punched to admit the dowels where called for on the plans. The filler for each joint shall be furnished in a single piece for the full depth and width required for the joint, unless otherwise specified by the Engineer. When the use of more than one piece is required for a joint, the abutting ends shall be fastened securely and held accurately to shape by stapling or other positive fastening means satisfactory to Engineer. Joint filler shall be compatible with joint sealant.

D. Bond Breaker:

1. Manufacturers:
 - a. Burke Co.
 - b. Nox-Crete Products Group;
 - c. Williams Distributors, Inc.

E. Bonding Agent: Two component modified epoxy resin.

1. Manufacturers:
 - a. BASF Building Systems, Inc.
 - b. Euclid Chemical Co.
 - c. Sika Chemical Corp.

F. Vapor Retarder: ASTM E1745 Class A; 10 mil thick clear polyethylene film type recommended for below grade application. Furnish joint tape recommended by manufacturer.

G. Non-Shrink Grout: ASTM C1107/C1107M; premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; capable of developing minimum compressive strength of 4,000 psi in 24 hours and 7,000 psi in 7 days.

1. Manufacturers:

- a. Euclid Chemical Company,
- b. Master Builders
- c. U.S. Grout Corp.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify compacted base or subgrade is dry and ready to support paving and imposed loads.
 1. Proof roll subgrade with two perpendicular passes to identify soft spots.
 2. Remove soft subgrade or base and replace with Flexible Base.
- B. Verify gradients and elevations of underlying section are correct.
- C. Verify requirements for concrete cover over reinforcement.
- D. Verify anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with placing concrete.
- E.

3.2 PREPARATION

- A. Moisten substrate to minimize absorption of water from fresh concrete.
- B. Coat surfaces of manhole frames with oil to prevent bond with concrete paving.
- C. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent. Remove laitance, coatings, and unsound materials.
- D. In locations where new concrete is doweled to existing work, drill holes in existing concrete, insert steel dowels and pack solid with non-shrink grout.
- E. Remove debris and ice from formwork, reinforcement, and concrete substrates.
- F. Remove water from areas receiving concrete before concrete is placed.
- G. Joints:
 1. Locate expansion, control, contraction, and construction joints where shown.
 2. If not shown, provide construction joints at a maximum spacing of 40 feet.
 3. Vertical construction joints may not be greater than 20 feet from wall corners or intersections.
 4. Contraction joints shall be sawing immediately upon initial set of concrete and as practicable.

3.3 INSTALLATION

- A. Forms:

1. Place and secure forms and screeds to correct location, dimension, profile, and gradient.
2. Assemble formwork to permit easy stripping and dismantling without damaging concrete.

B. Reinforcement:

1. Place reinforcing as indicated on Drawings.
2. Interrupt reinforcing at expansion joints.
3. Provide doweled joints as indicated on Drawings. Dowel bars or other load-transfer units of an approved type shall be placed across joints in the manner as shown on Drawings. They shall be of the dimensions and spacings as shown and held rigidly in the middle of the slab depth in the proper horizontal and vertical alignment of by an approved assembly device to be left permanently in place. The dowel or load-transfer and joint devices shall be rigid enough to permit complete assembly as a unit ready to be lifted and placed into position. A dowel expansion cap or sleeve shall be furnished for each dowel bar used with expansion joints. These caps shall be substantial enough to prevent collapse and shall be placed on the ends of the dowels as shown on Drawings. The caps or sleeves shall fit the dowel bar tightly and the closed end shall be watertight. The portion of each dowel painted with rust preventative paint, as required under paragraph 2.1(B) and shown on Drawings to receive a debonding lubricant, shall be thoroughly coated with asphalt MC-70, or an approved lubricant, to prevent the concrete from bonding to that portion of the dowel. If free-sliding plastic-coated or epoxy-coated steel dowels are used, a lubrication bond breaker shall be used except when approved pullout tests indicate it is not necessary. Where butt-type joints with dowels are designated, the exposed end of the dowel shall be oiled.
4. Repair damaged galvanizing and/or epoxy coating to match shop finish.
5. Install tie bars consisting of deformed bars in joints as shown on Drawings. Tie bars shall be placed at right angles to the centerline of the concrete slab and shall be spaced at intervals shown on Drawings. They shall be held in position parallel to the pavement surface and in the middle of the slab depth. When tie bars extend into an unpaved lane, they may be bent against the form at longitudinal construction joints, unless threaded bolt or other assembled tie bars are specified. These bars shall not be painted, greased, or enclosed in sleeves. When slip-form operations call for tie bars, two-piece hook bolts can be installed in the female side of the keyed joint provided the installation is made without distorting the keyed dimensions or causing edge slump. If a bent tie bar installation is used, the tie bars shall be inserted through the keyway liner only on the female side of the joint. In no case shall a bent tie bar installation for male keyways be permitted.

C. Placing Concrete:

1. Ensure reinforcing, inserts, embedded parts, and formed joints are not disturbed during concrete placement.
2. Place concrete continuously over the full width of the panel and between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.
3. Place concrete in accordance with ACI 301 and ACI 304R, except as modified herein.
4. Notify testing laboratory and Engineer minimum 24 hours prior to commencement of operations.
5. Discharge time: Not to exceed 90 minutes (from time batched at plant), unless otherwise approved by Engineer.

6. Ensure reinforcement, inserts, embedded parts, formed expansion and contraction joints, and reinforcement supports are not disturbed during concrete placement.
7. Install vapor retarder under interior slabs on grade in accordance with ASTM E1643. Lap joints minimum 6 inches and seal watertight by adhesive applied between overlapping edges and ends.
8. Repair vapor retarder damaged during placement of concrete reinforcing. Repair with vapor retarder material; lap over damaged areas minimum 6 inches and seal watertight.
9. Separate slabs on grade from vertical surfaces with 2 inch thick joint filler.
10. Install construction joint devices in coordination with floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.
11. Install joint device anchors. Maintain correct position to allow joint cover to be flush with floor and wall finish.
12. Install joint covers in longest practical length, when adjacent construction activity is complete.
13. Apply sealants in joint devices.
14. Deposit concrete at final position. Prevent segregation of mix.
15. Place concrete in continuous operation for each panel or section determined by predetermined joints.
16. Consolidate concrete.
17. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
18. Place concrete continuously between predetermined expansion, control, and construction joints.
19. Do not interrupt successive placement; do not permit cold joints to occur.
20. Place floor slabs in checkerboard or saw cut pattern.
21. Saw cut joints within 12 hours after placing. Use 3/16 inch thick blade, cut into 1/4 depth of slab thickness.
22. Screed floors and slabs on grade level, maintaining surface flatness of a maximum of 1/8 inch in 10 feet.
23. Cold Weather:
 - a. Do not place when ambient temperature is below 40 degrees F.
 - b. Maintain surface temperature above 40 degrees F at all times.
 - c. Provide surface thermometers to monitor surface temperatures during curing.
 - d. Conform to ACI 306.1 and ACI 301 requirements.
24. Hot Weather:
 - a. Prepare, mix, place, cure, and protect per ACI 305R.
 - b. Maintain concrete temperature below 90 degrees F at all times.
 - c. Spray evaporation retardant on all exposed surfaces when temperature is greater than 90 degrees F.
 - d. Ensure that admixtures do not produce flash set plastic shrinkage or cracking from heat of hydration.

D. Joints: Joints shall be constructed as shown on Drawings and in accordance with these requirements. All joints shall be constructed with their faces perpendicular to the surface of the pavement and finished or edged as shown on Drawings. Joints shall not vary more than 1/2-inch from their designated position and shall be true to line with not more than 1/4-inch variation in 10 feet. The surface across the joint shall be tested with a 10-foot straightedge as the joints are finished and any irregularities in excess of 1/4-inch shall be

corrected before the concrete has hardened. All joints shall be so prepared, finished, or cut to provide a groove of uniform width and depth as shown on Drawings.

1. Place expansion joints as indicated on Drawings. Premolded joint filler of the thickness as shown on Drawings shall extend for the full depth and width of the slab at the joint, except for space for sealant at the top of the slab. The filler shall be securely staked or fastened into position perpendicular to the proposed finished surface. A cap shall be provided to protect the top edge of the filler and to permit the concrete to be placed and finished. After the concrete has been placed and struck off, the cap shall be carefully withdrawn leaving the space for the premolded filler. The edges of the joint shall be finished and tooled while the concrete is still plastic. Any concrete bridging the joint space shall be removed for the full width and depth of the joint. Align curb, gutter, pavement, and sidewalk joints.
2. Place isolation joints between paving components and building or other structures as indicated on Drawings. Construct isolation joints identically to expansion joints as specified in (1), above. Isolation joints shall not be dowelled.
3. Provide construction joints as indicated on Drawings. Longitudinal construction joints shall be slip-formed or formed against side forms with or without keyways, as shown on Drawings. Transverse construction joints shall be installed at the end of each day's placing operations and at any other points within a paving lane when concrete placement is interrupted for more than 30 minutes or it appears that the concrete will obtain its initial set before fresh concrete arrives. The installation of the joint shall be located at a planned contraction or expansion joint. If placing of the concrete is stopped, the Contractor shall remove the excess concrete back to the previous planned joint.
4. Install contraction joints at the locations and spacing as shown on Drawings. Contraction joints shall be installed to the dimensions required by forming a groove or cleft in the top of the slab while the concrete is still plastic or by sawing a groove into the concrete surface after the concrete has hardened. When the groove is formed in plastic concrete the sides of the grooves shall be finished even and smooth with an edging tool. If an insert material is used, the installation and edge finish shall be according to the manufacturer's instructions. The groove shall be finished or cut clean so that spalling will be avoided at intersections with other joints. Groove or saw cut contraction joints ¼-inch wide at an optimum time as soon as possible after finishing. Cut ¼ of depth of slab into the slab. If contraction joint spacing is not indicated on Drawings, maximum contraction joint spacing shall be thirty (30) times the depth of the concrete paving.
5. Provide keyways as indicated on Drawings. Form keyways (only female keys permitted) in the plastic concrete by means of side forms or the use of keyway liners that are inserted during the slip-form operations. The keyway shall be formed to a tolerance of ¼ inch in any dimension and shall be of sufficient stiffness to support the upper keyway flange without distortion or slumping of the top of the flange. The dimensions of the keyway forms shall not vary more than plus or minus ¼ inch from the mid-depth of the pavement. Liners that remain in place permanently and become part of the keyed joint shall be made of galvanized, copper clad, or of similar rust-resistant material compatible with plastic and hardened concrete and shall not interfere with joint reservoir sawing and sealing.

E. Joint Sealant:

1. Examination:
 - a. Verify substrate surfaces and joint openings are ready to receive work.
 - b. Verify joint backer rod and release tapes are compatible with sealant.

2. Preparation:
 - a. Saw joints in accordance with Drawings.
 - b. Immediately after sawing the joint, remove slurry and foreign matter from the joint and adjacent area by flushing with high-pressure water jet, and by use of other tools as necessary.
 - c. Immediately before sealing, clean and prime joints. Upon completion of cleaning, the joints shall be blown out with compressed air, free of oil and water. The joint faces shall be surface dry when the sealant is applied.
 - d. Perform preparation in accordance with ASTM C1193 - Standard Guide for Use of Joint Sealants.
 - e. Protect elements surrounding Work of this section from damage or disfiguration.
3. Installation:
 - a. Perform installation in accordance with ASTM C1193 - Standard Guide for Use of Joint Sealants.
 - b. Apply joint sealant by means of pressure equipment that will force the sealing material to the bottom of the joint and completely fill the joint without spilling the material on the surface of the pavement. A backing material shall be placed as shown on Drawings and shall be nonreactive and nonadhesive to the concrete or the sealant material. Sealant that does not bond to the concrete surface of the joint walls, contains voids, or fails to set to a tack-free condition will be rejected and replaced by the Contractor at no additional cost. Before sealing the joints, the Contractor shall demonstrate that the equipment and procedures for preparing, mixing, and placing the sealant will produce a satisfactory joint seal. Any sealant spilled on the surface of the pavement, structures and/or adjacent areas shall be removed immediately.
 - c. Surface bond area on each side not less than 75 percent of joint width.
 - d. Install bond breaker where joint backing is not used.
 - e. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
 - f. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
 - g. Tool joints as detailed on Drawings.
 - h. Protect sealant until cured.

F. Finishing Schedule:

1. Light broom.

G. Curing and Protection

1. Immediately after placement, protect concrete (by applying curing compound or use of curing blankets) from premature drying, excessively hot or cold temperatures, and mechanical injury.
2. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

3.4 TOLERANCES

- A. Maximum Variation of Surface Flatness: 1/4 inch in 10 ft.
- B. Maximum Variation from True Position: 1/4 inch.
- C. Maximum Variation in Thickness: 1/4 inch.

3.5 FIELD QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements.
- B. Inspect reinforcing placement for size, spacing, location, support.
- C. Testing firm will take cylinders and perform slump and air entrainment tests.
- D. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.
- E. Submit delivery tickets indicating actual materials delivered to Project site. Delivery tickets shall contain project description, date, time, class and quantity of mix, actual batch proportions, free moisture content of aggregate and quantity of water withheld.

3.6 PATCHING

- A. Allow Engineer to inspect concrete surfaces immediately upon removal of forms.
- B. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify Engineer upon discovery.
- C. Inject leaking cracks with injection epoxy equal to Sikadur 55 SLV.
- D. Patch imperfections as directed by Engineer.
- E. Provide a structurally sound surface finish, uniform in appearance acceptable to the Engineer.
- F. Tie Holes:
 - 1. Fill with non-shrink grout.
 - 2. Match color of concrete.
 - 3. Compact using steel hammer or steel tool to high density.
 - 4. Cure with water.

3.7 PROTECTION

- A. Immediately after placement, protect paving from premature drying, excessive hot or cold temperatures, and mechanical injury.
- B. Do not permit vehicular traffic over paving for 14 days (minimum) after finishing.

3.8 DEFECTIVE CONCRETE

- A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.
- B. Repair or replacement of defective concrete will be determined by Engineer.

- C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Engineer for each individual area.
- D. Repair all concrete damaged by construction

END OF SECTION

SECTION 32 92 19 - SEEDING

PART 1 GENERAL

1.1 SUMMARY

- A. Description: This item shall consist of preparing a seed bed to the lines and grades indicated, sowing of seed, fertilizing, mulching with straw, asphalt, cellulose fiber and other management practices along and across such areas as are indicated or as directed by the Engineer.
- B. Section Includes:
 - 1. Fertilizing.
 - 2. Seeding.
 - 3. Hydroseeding.
 - 4. Mulching.
 - 5. Maintenance.

1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Seeding:
 - 1. Measurement: Work and acceptable material for "Broadcast Seeding" or "Hydraulic Seeding" will be measured by the square yard (Method A), by the acre (Method B), or by the linear foot (Method C), complete in place, with a minimum of 80 percent coverage with no bare areas exceeding 16 square feet and a 1 1/2 inch stand of grass. Bare areas shall be reprepared and reseeded as required.
 - 2. Payment: The work performed and materials furnished and measured will be paid for at the unit price bid for "Broadcast Seeding" or "Hydraulic Seeding" of the method specified, which price shall be full compensation for furnishing all materials, including all topsoil (if not included as a separate pay item), water, seed, fertilizer, maintenance, mulch and for performing all operations necessary to complete the work. When paid by the linear foot, seeding will be for the width of ROW and/or width of easement (temporary construction and permanent). Payment will be made under one of the following:
 - a. Broadcast Seeding (Method A) – Per Square Yard, Measured.
 - b. Broadcast Seeding (Method B) – Per Acre, Plan Quantity.
 - c. Broadcast Seeding (Method C) – Per Linear Foot, Plan Quantity.
 - d. Broadcast Seeding (Method A)(including ___- inch topsoil) – Per Square Yard, Measured.
 - e. Broadcast Seeding (Method B)(including ___- inch topsoil) – Per Acre, Plan Quantity.
 - f. Broadcast Seeding (Method C)(including ___- inch topsoil) – Per Linear Foot, Plan Quantity.
 - g. Hydraulic Seeding (Method A) – per Square Yard, Measured.
 - h. Hydraulic Seeding(Method B) – Per Acre, Plan Quantity.
 - i. Hydraulic Seeding (Method C) – Per Linear Foot, Plan Quantity.
 - j. Hydraulic Seeding (Method A)(including ___- inch topsoil) – Per Square Yard, Measured.

- k. Hydraulic Seeding (Method B)(including ___ - inch topsoil) – Per Acre, Plan Quantity.
- l. Hydraulic Seeding (Method C)(including ___ - inch topsoil) – Per Linear Foot, Plan Quantity.

1.3 DEFINITIONS

- A. Weeds: Include Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwort, Bermuda Grass, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Perennial Sorrel, Brome Grass, or vegetative species other than specified species to be established in given area.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Include maintenance instructions, cutting method and maximum grass height; and types, application frequency, and recommended coverage of fertilizer.

1.5 QUALITY ASSURANCE

- A. Provide seed mixture in containers showing percentage of seed mix, germination percentage, inert matter percentage, weed percentage, year of production, net weight, date of packaging, and location of packaging.

1.6 QUALIFICATIONS

- A. Seed Supplier: Company specializing in manufacturing Products specified in this section.
- B. Installer: Company specializing in performing work of this section.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.
- B. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.8 MAINTENANCE SERVICE

- A. Maintain seeded areas immediately after placement until grass is well established and exhibits vigorous growing condition.

PART 2 PRODUCTS

2.1 SEED

- A. All seed must meet the requirements of the Texas Seed Law including the labeling requirements for showing pure live seed (PLS), name and type of seed. Seed furnished shall be

of the previous season's crop and the date of analysis shown on each bag shall be within nine months of the time of delivery to the project. Each variety of seed shall be furnished and delivered in separate bags or containers. A sample of each variety of seed shall be furnished for analysis and testing when directed by the Engineer. The amount of seed planted per acre shall be of the type specified below.

2.2 ACCESSORIES

- A. **Mulching Material:** Oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Hay or chopped cornstalks are not acceptable. Straw mulch shall be spread uniformly over the area indicated or as designated by the Engineer at the rate of 2 to 2 1/2 tons of straw per acre. The actual rate of application will be designated by the Engineer. Straw may be hand or machine placed and adequately secured.
- B. **Cellulose Fiber Mulch:** Cellulose fiber mulch shall be spread uniformly over the area indicated or as designated by the Engineer at the rate of 45 to 80 lbs per 1000 square feet.
- C. **Fertilizer:** All fertilizer shall be delivered in bags or containers clearly labeled showing the analysis. The fertilizer is subject to testing by the State Chemist in accordance with the Texas Fertilizer Law. A pelleted or granulated fertilizer shall be used with an analysis indicated below. The figures in the analysis represent the percent of nitrogen, phosphoric acid and potash nutrients, respectively, as determined by the methods of the Association of Official Agricultural Chemists. Fifty percent or greater of the Nitrogen required shall be in the form of Nitrate Nitrogen (NO_3). The remaining Nitrogen required may be in the form of Urea Nitrogen ($\text{CO}(\text{NH}_2)_2$).

In the event it is necessary to substitute a fertilizer of a different analysis, it shall be a pelleted or granulated fertilizer with a lower concentration. The total amount of nutrients furnished and applied per acre shall equal or exceed that specified for each nutrient.

Fertilizer shall be commercial grade; recommended for grass; of proportion necessary to eliminate deficiencies of topsoil to the following proportions: Nitrogen 15 percent, phosphoric acid 15 percent, soluble potash 15 percent.

- D. **Lime:** ASTM C602 – Standard Specification for Agricultural Liming Material, Class T agricultural limestone containing a minimum 80 percent calcium carbonate equivalent.
- E. **Water:** Clean, fresh and free of industrial wastes and other substances or matter capable of inhibiting vigorous growth of grass.
- F. **Herbicide:** As specified in Section 31 10 10.
- G. **Stakes:** Softwood lumber, chisel pointed.
- H. **String:** Inorganic fiber.

2.3 SOURCE QUALITY CONTROL

- A. Analyze to ascertain percentage of nitrogen, phosphorus, potash, soluble salt content, organic matter content, and pH value.

- B. Provide recommendation for fertilizer and lime application rates for specified seed mix as result of testing.
- C. Testing is not required when recent tests and certificates are available for imported topsoil. Submit these test results to testing laboratory. Indicate, by test results, information necessary to determine suitability.
- D. Submit tickets indicating actual materials delivered to Project site.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify prepared soil base is ready to receive the Work of this section.

3.2 PREPARING SEED BED

- A. After the designated areas have been rough graded to the lines, grades and typical sections indicated or as provided for in other items of this contract and any other soil area disturbed by the construction, a suitable seed bed shall be prepared. The seed bed shall consist of either 4 inches of approved topsoil or 4 inches of approved salvaged topsoil cultivated and rolled sufficiently to a state of good tilth which could prevent the seed from being covered too deep for optimum germination. The optimum depth for seeding shall be 1/4 inch. Water shall be applied as required to prepare the seed bed. Seeding shall be performed in accordance with the requirements hereinafter described.

3.3 FERTILIZING

- A. Apply lime at application rate recommended by soil analysis. Work lime into top 6 inches of soil.
- B. Apply fertilizer at application rate as indicated below:

Use	Type	Application Rate Pound Per Acre
Broadcast Seeding	Any	400
Hydraulic Seeding	Water Soluble	653
Sodding	Any	300

- C. Apply after smooth raking of topsoil and prior to roller compaction.
- D. Do not apply fertilizer at same time or with same machine used to apply seed.
- E. Mix fertilizer thoroughly into upper 2 inches of topsoil.
- F. Lightly water soil to aid dissipation of fertilizer. Irrigate top level of soil uniformly.

3.4 BROADCAST SEEDING

- A. The seed or seed mixture in the quantity specified shall be uniformly distributed over the prepared seed bed areas indicated or where directed. If the sowing of seed is by hand, rather than by mechanical methods, the seed shall be sown in two directions at right angles to each other. If mechanical equipment is used, all varieties of seed, as well as fertilizer, may be distributed at the same time, provided that each component is uniformly applied at the specified rate. After planting, the planted area shall be rolled with a corrugated roller of the “Culitpacker” type. All rolling of the slope areas shall be on the contour.
- B. Seed Mixture and Rate of Application for Broadcast Seeding: From September 15 to March 1, seeding shall be with a combination of unhulled Bermuda Grass at a rate of 2 pounds per 1000 square feet and winter rye at a rate of 7 pounds per 1000 square feet that has a PLS = 0.83. From March 1 to September 15, seeding shall be with hulled Bermuda Grass at a rate of 2 pounds per 1000 square feet with a PLS = 0.83. Fertilizer shall be applied as specified herein.
- C. Do not seed areas in excess of that which can be mulched on same day.
- D. Do not sow immediately following rain, when ground is too dry, or when winds are over 12 mph.
- E. Lightly roll seeded area with roller not exceeding 112 lbs/linear foot.
- F. Immediately following seeding and rolling, apply mulch to thickness of 1/8 inch. Maintain clear of shrubs and trees.
- G. The broadcast seeded areas shall immediately be watered with a minimum of 5 gallons of water per square yard or as needed and in the manner and quantity as directed by the Engineer. Water shall be applied at a minimum rate of 10 gallons per square yard weekly except when rainfall of 1/2 inch or greater occurs on the site, the water can be postponed for one week or as directed, until the grass is uniformly 1 1/2 inches in height.

3.5 HYDRAULIC SEEDING

- A. The seed bed shall be prepared as specified above and hydraulic seeding equipment, which is capable of placing all materials in a single operation, shall be used.

March 1 to September 15: Hydraulic seeding mixture and minimum rate of application per 1000 square feet:

Hulled Bermuda Seed (PLS = 0.83)	Water Soluble Fertilizer	Cellulose Fiber Mulch	Soil Tackifier
1 lb.	15 lbs.	45.9 lbs.	1.4 lbs.

September 15 to March 1: Add 7 pounds per 1000 square feet of winter rye with a PLS = 0.83 to above mixture. Fertilizer shall be applied as specified herein.

- B. Watering: Hydraulically planted seeded area shall be watered weekly, except when rainfall of 1/2 inch or greater occurs on the site, the watering can be postponed for one week, commencing after the tackifier has dried or until the grass is uniformly 1 1/2 inches in height.

The native grass seeded area shall be watered at a minimum rate of 5 gallons per square yard weekly commencing after the tackifier has dried or until the grass is uniformly 1 1/2 inches in height. The watering can be postponed for one week or as directed, when rainfall of 1 1/2 inches or greater occurs on the site.

3.6 SEED PROTECTION

- A. Cover seeded slopes where grade is 3:1 (Horizontal:Vertical) or greater with soil retention blanket. Roll fabric onto slopes without stretching or pulling.
- B. Lay fabric smoothly on surface, bury top end of each section in 6 inch deep excavated topsoil trench. Overlap edges and ends of adjacent rolls minimum 12 inches. Backfill trench and rake smooth, level with adjacent soil.
- C. Secure outside edges and overlaps at 36 inch intervals with stakes.
- D. Lightly dress slopes with topsoil to ensure close contact between fabric and soil.
- E. At sides of ditches, lay fabric laps in direction of water flow. Lap ends and edges minimum 6 inches.

3.7 MAINTENANCE

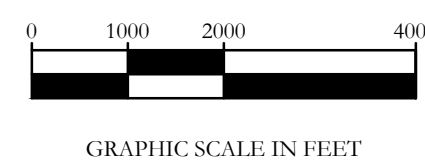
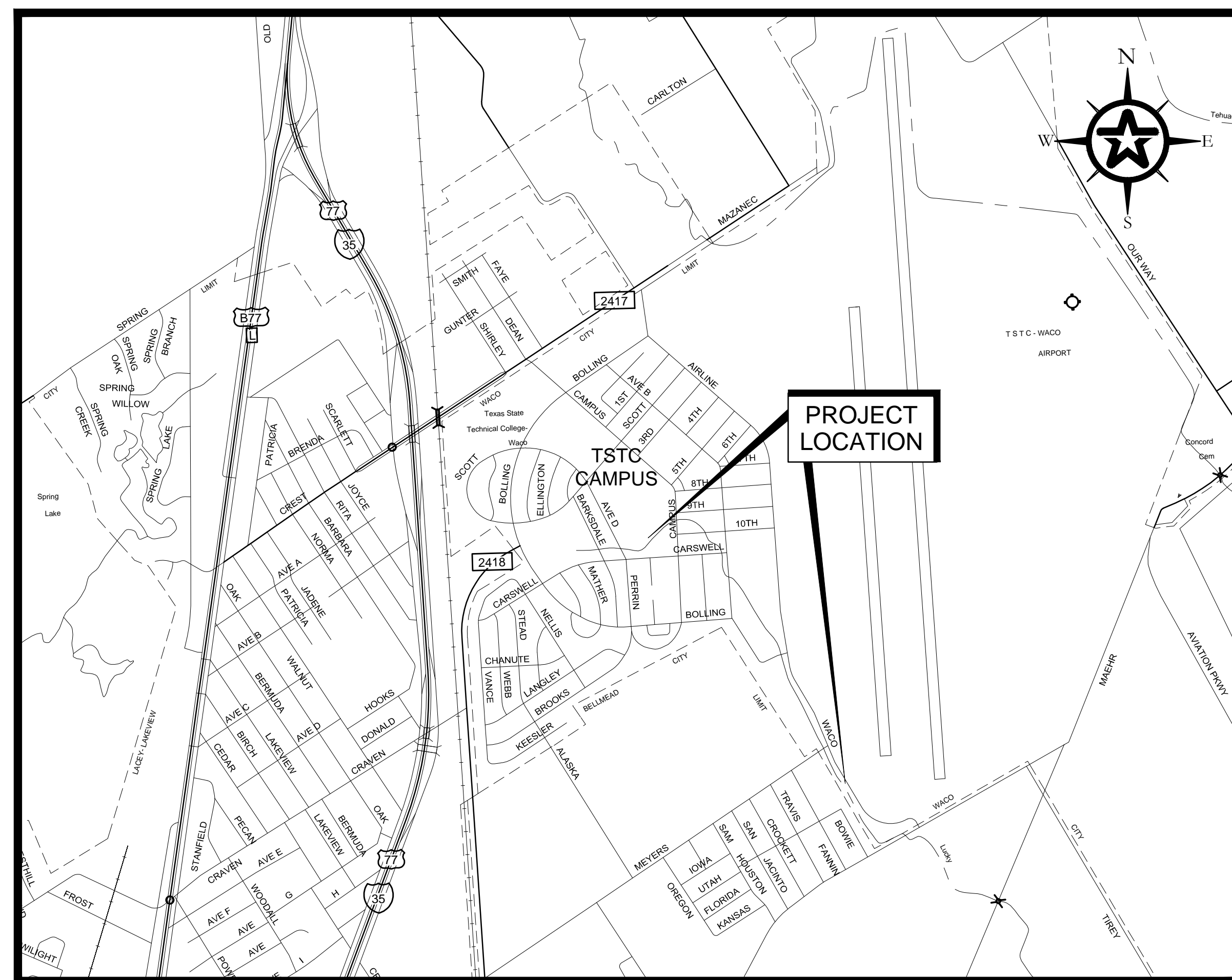
- A. Mow grass at regular intervals to maintain at maximum height of 2-1/2 inches. Do not cut more than 1/3 of grass blade at each mowing. Perform first mowing when seedlings are 40 percent higher than desired height.
- B. Neatly trim edges and hand clip where necessary.
- C. Immediately remove clippings after mowing and trimming. Do not let clippings lay in clumps.
- D. Water to prevent grass and soil from drying out.
- E. Lightly roll surface to remove minor depressions or irregularities.
- F. Control growth of weeds. Apply herbicides. Remedy damage resulting from improper use of herbicides.
- G. Immediately reseed areas showing bare spots.
- H. Repair washouts or gullies.
- I. Protect seeded areas with warning signs during maintenance period.

END OF SECTION

DRAWINGS for TEXAS STATE TECHNICAL COLLEGE TSTC DRAINAGE IMPROVEMENTS WACO, TEXAS



OWNER: 3801 CAMPUS DR,
WACO, TX 76705



INDEX OF DRAWINGS

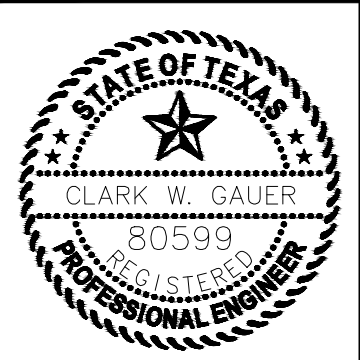
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AREA 1	
C100	AREA 1 - CARSWELL DRAINAGE CHANNEL PLAN & PROFILE
C101	AREA 1 - CARSWELL DRAINAGE CHANNEL CROSS SECTIONS
C102	AREA 1 - CARSWELL DRAINAGE CHANNEL DETAILS
AREA 3	
C300	AREA 3 - AIRLINE DRAINAGE CHANNEL PLAN & PROFILE
C301	AREA 3 - AIRLINE DRAINAGE CHANNEL DETAILS
AREA 4	
C400	AREA 4 - AIRLINE DRAINAGE CHANNEL PLAN & PROFILE
C401	AREA 4 - AIRLINE DRAINAGE CHANNEL PLAN & PROFILE
C402	AREA 4 - AIRLINE DRAINAGE CHANNEL CROSS SECTIONS
C403	AREA 4 - AIRLINE DRAINAGE CHANNEL DETAILS
AREA 5	
C500	AREA 5 - CAMPUS DRAINAGE CHANNEL PLAN & PROFILE
C501	AREA 5 - CAMPUS DRAINAGE CHANNEL DETAILS
C502	AREA 5 - CAMPUS DRAINAGE CHANNEL CROSS SECTIONS

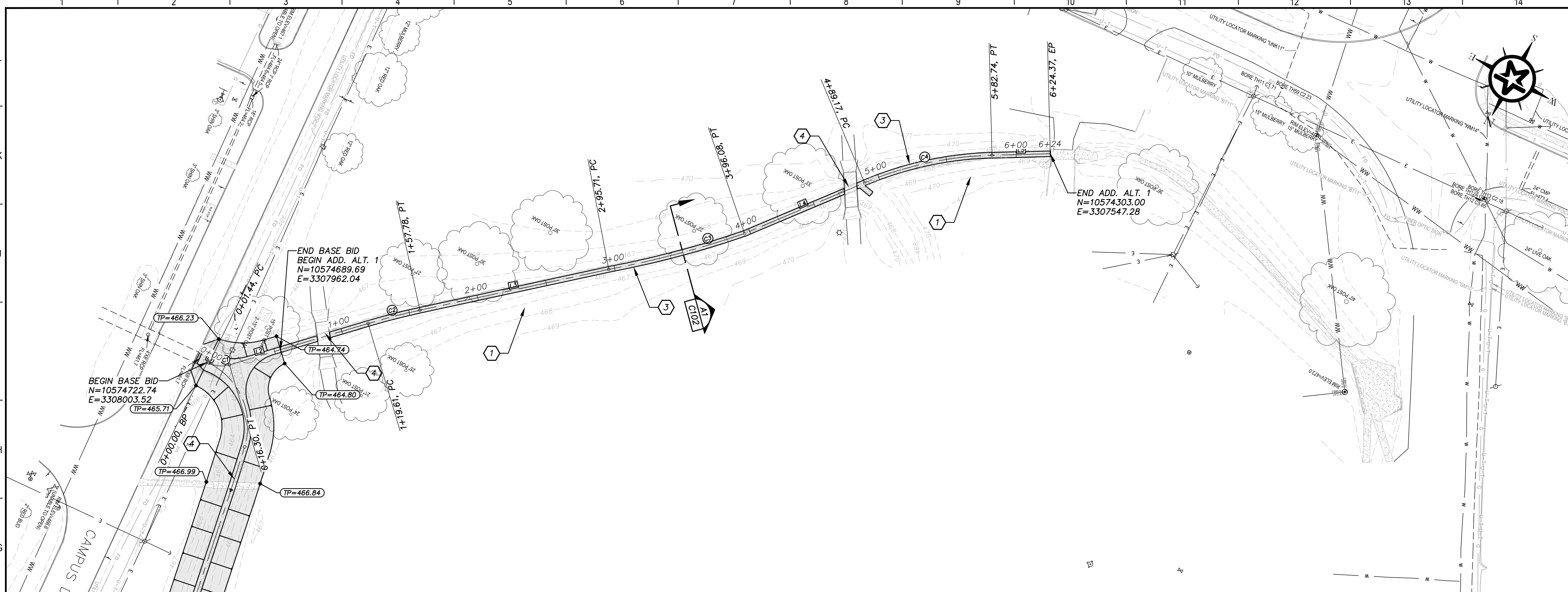


T.B.P.E. Registration No. 8053

01-18-2018 DATE *Clark W. Gauier, P.E.*
CLARK W. GAUER

T.B.P.E. REGISTRATION NO. 8053





- ### KEY NOTES
- 1 BERMUDA SEEDING
 - 3 REMOVE EX. CONCRETE PILOT CHANNEL AND DISPOSE OF OFF-SITE OR AT APPROVED LOCATION BY OWNER.
 - 4 DOWEL INTO EXISTING CONCRETE (6" MIN.)

PROFILE LEGEND

N.G. ~ CENTERLINE
 F.G. ~ CENTERLINE

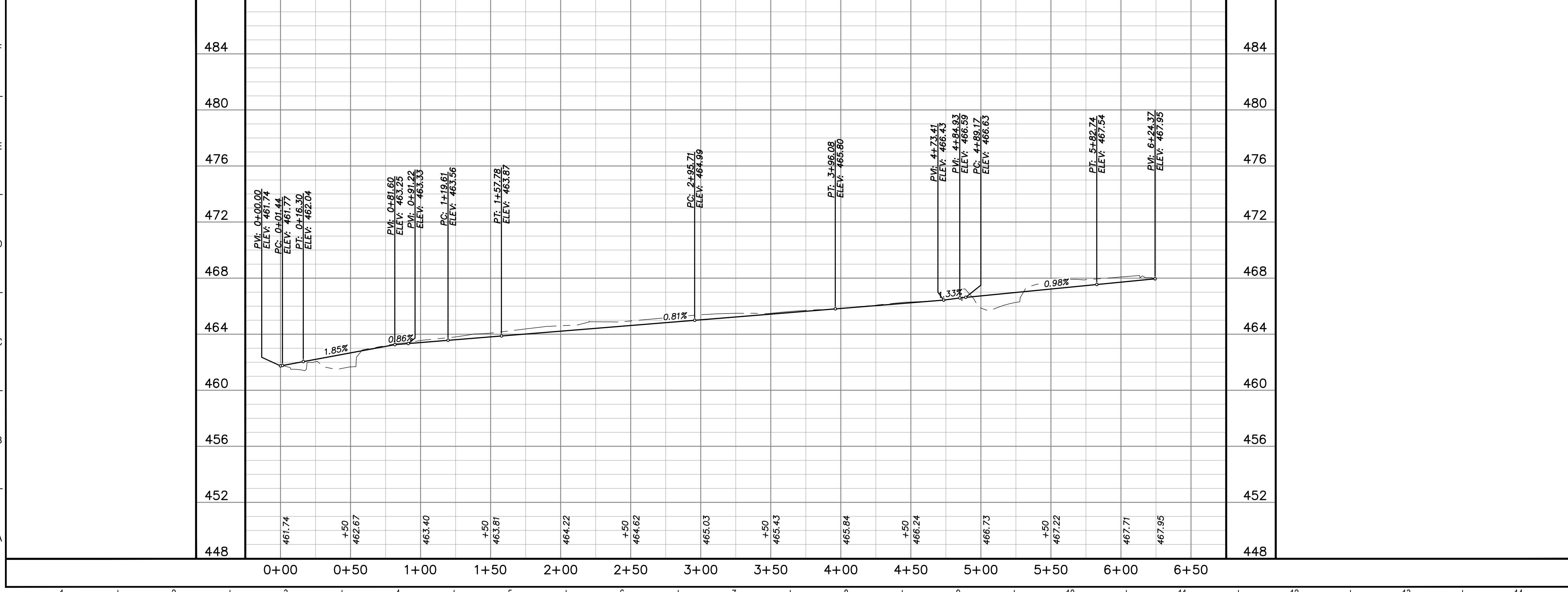
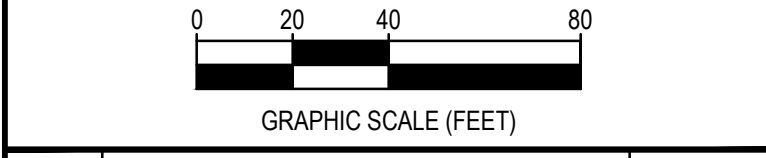
LINE TABLE

LINE #	BEARING	DISTANCE
L1	S87° 14' 54"W	1.44
L2	S44° 41' 45"W	103.31
L3	S48° 04' 12"W	137.93
L4	S38° 22' 10"W	93.09
L5	S59° 48' 52"W	41.63

CURVE TABLE

CURVE #	LENGTH	RADIUS	DELTA	CHORD
C1	14.85	20.00	42° 33' 09"	S65° 08' 20"W - 14.51
C2	38.17	500.00	4° 22' 27"	S46° 52' 59"W - 38.16
C3	100.36	702.15	8° 11' 23"	S46° 29' 27"W - 100.28
C4	93.57	250.00	21° 26' 43"	S49° 05' 31"W - 93.03

- ### GENERAL NOTES
- ALL DISTURBED AREAS SHALL BE RE-VEGETATED USING HULLED BERMUDA SEED.
 - CONTRACTOR SHALL PROTECT EXISTING TREES DURING CONSTRUCTION ACTIVITIES. BRANCHES OR ROOTS SHALL NOT BE TRIMMED WITHOUT PRIOR APPROVAL OF OWNER.



REV.	DESCRIPTION	DATE



TSTC

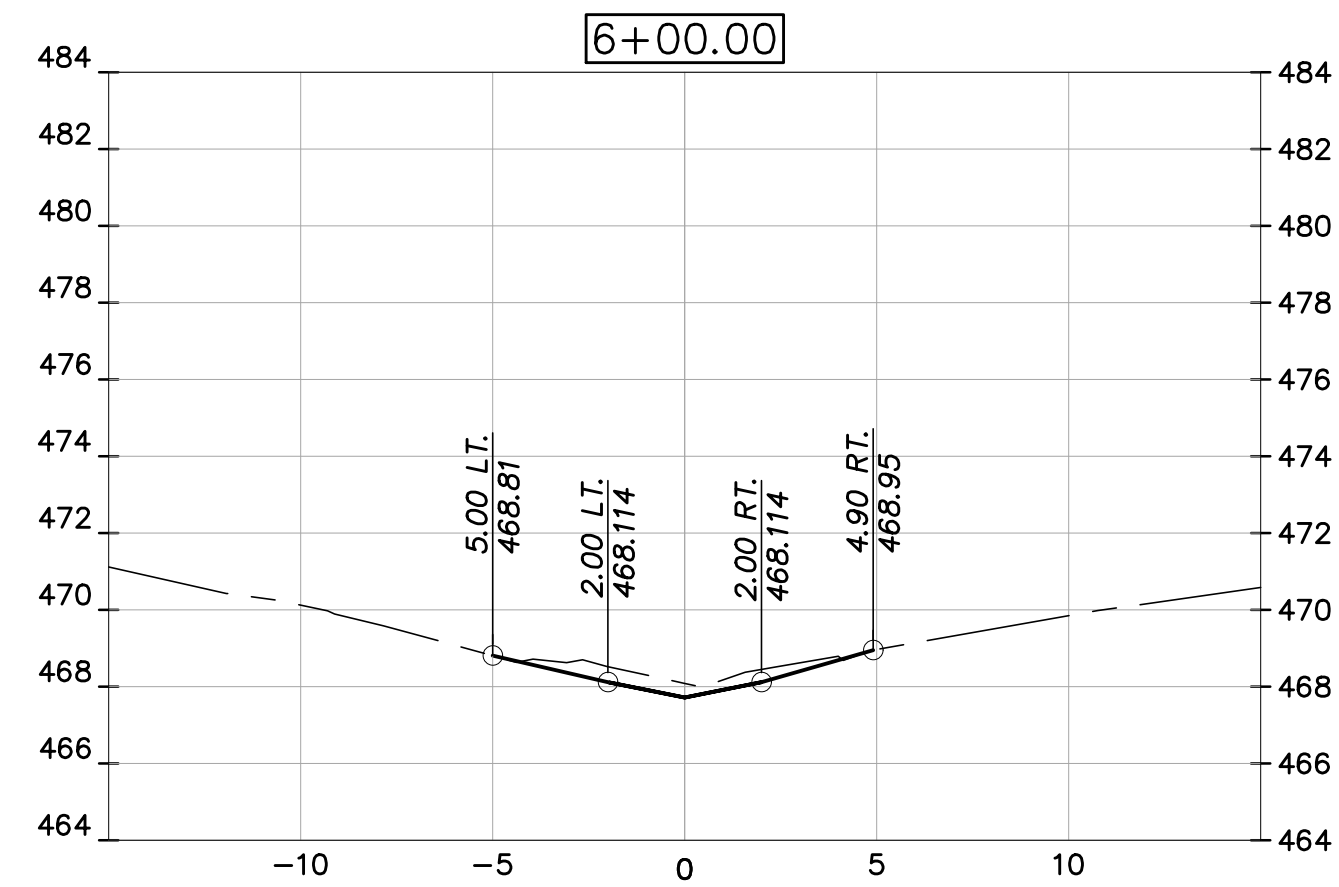
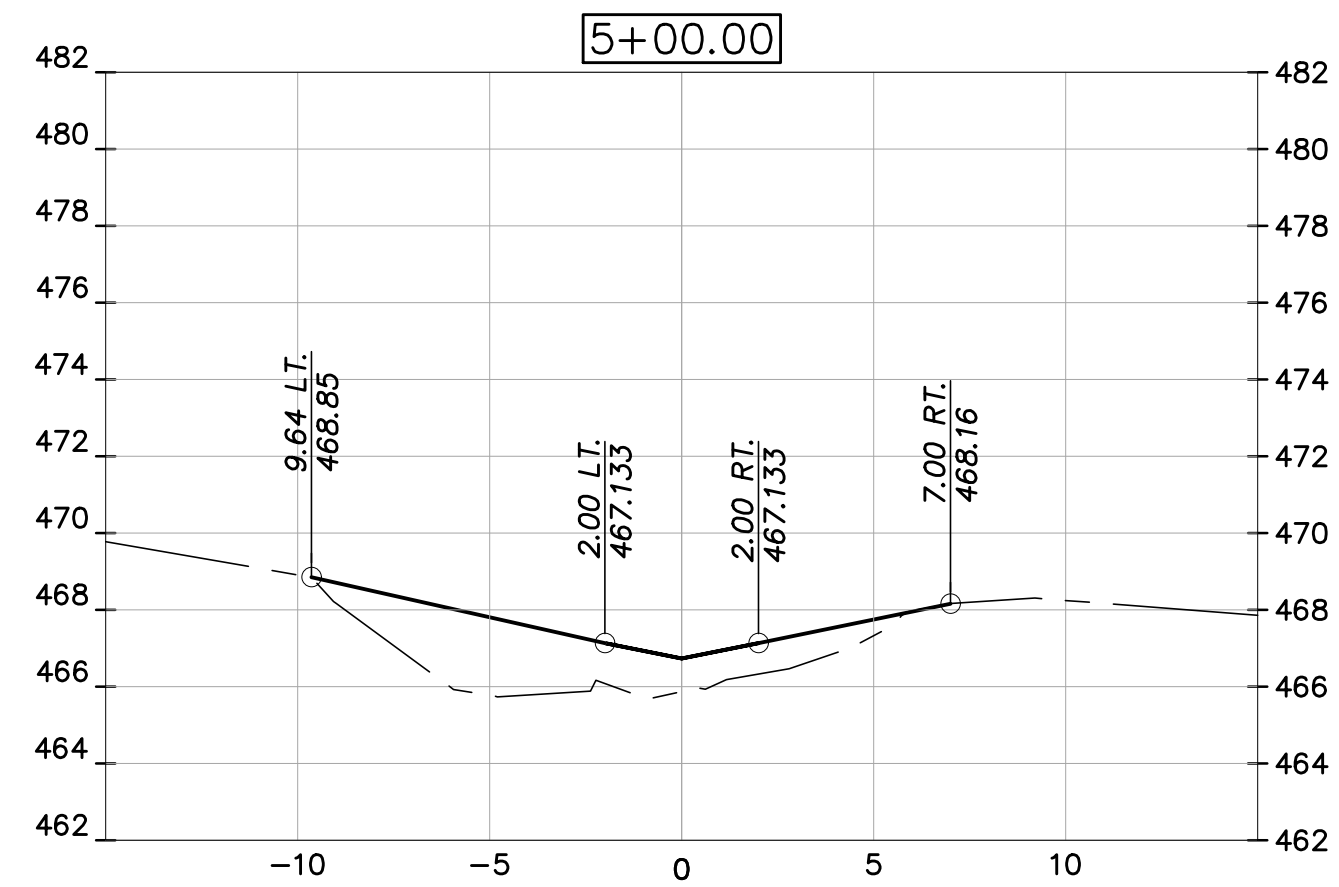
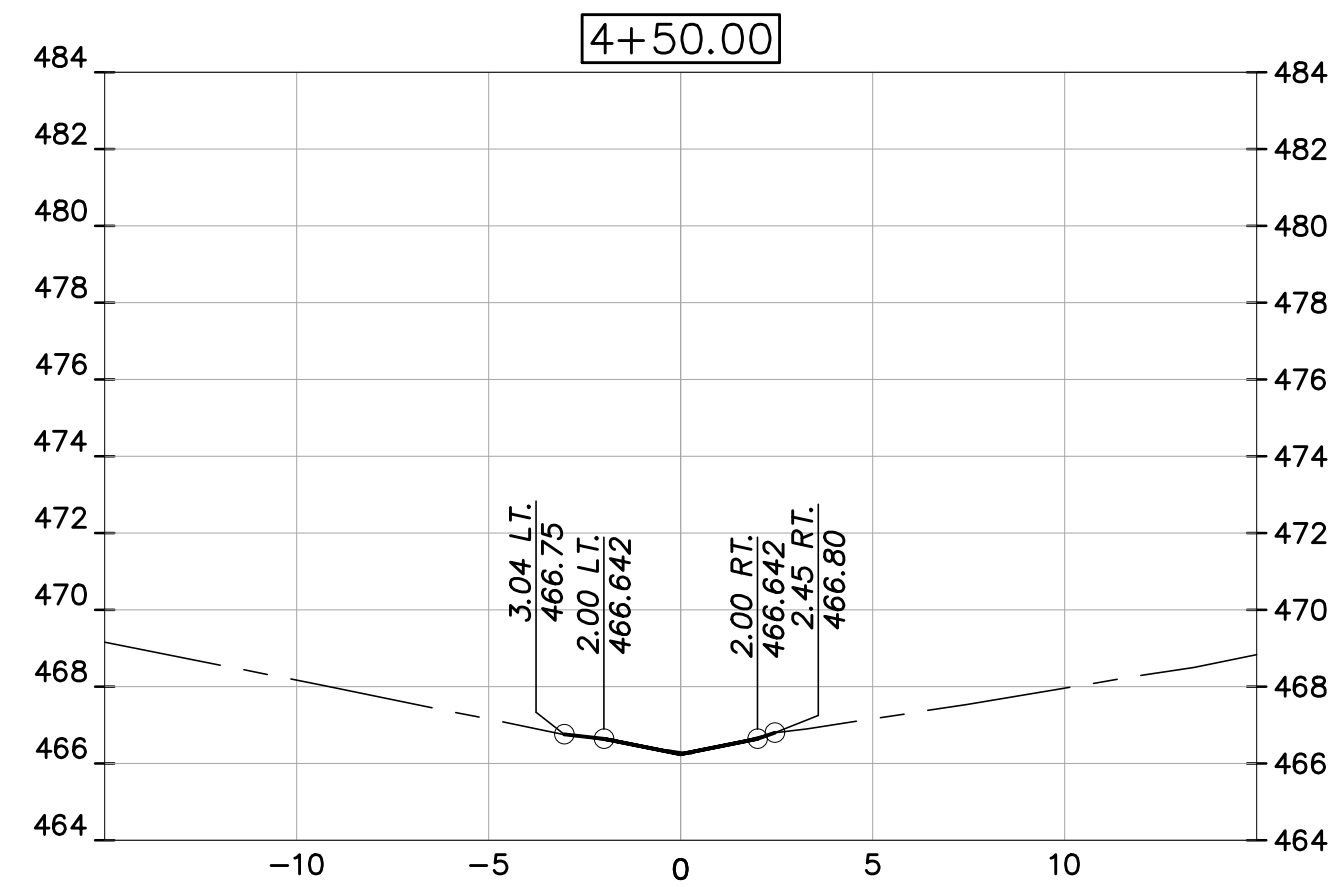
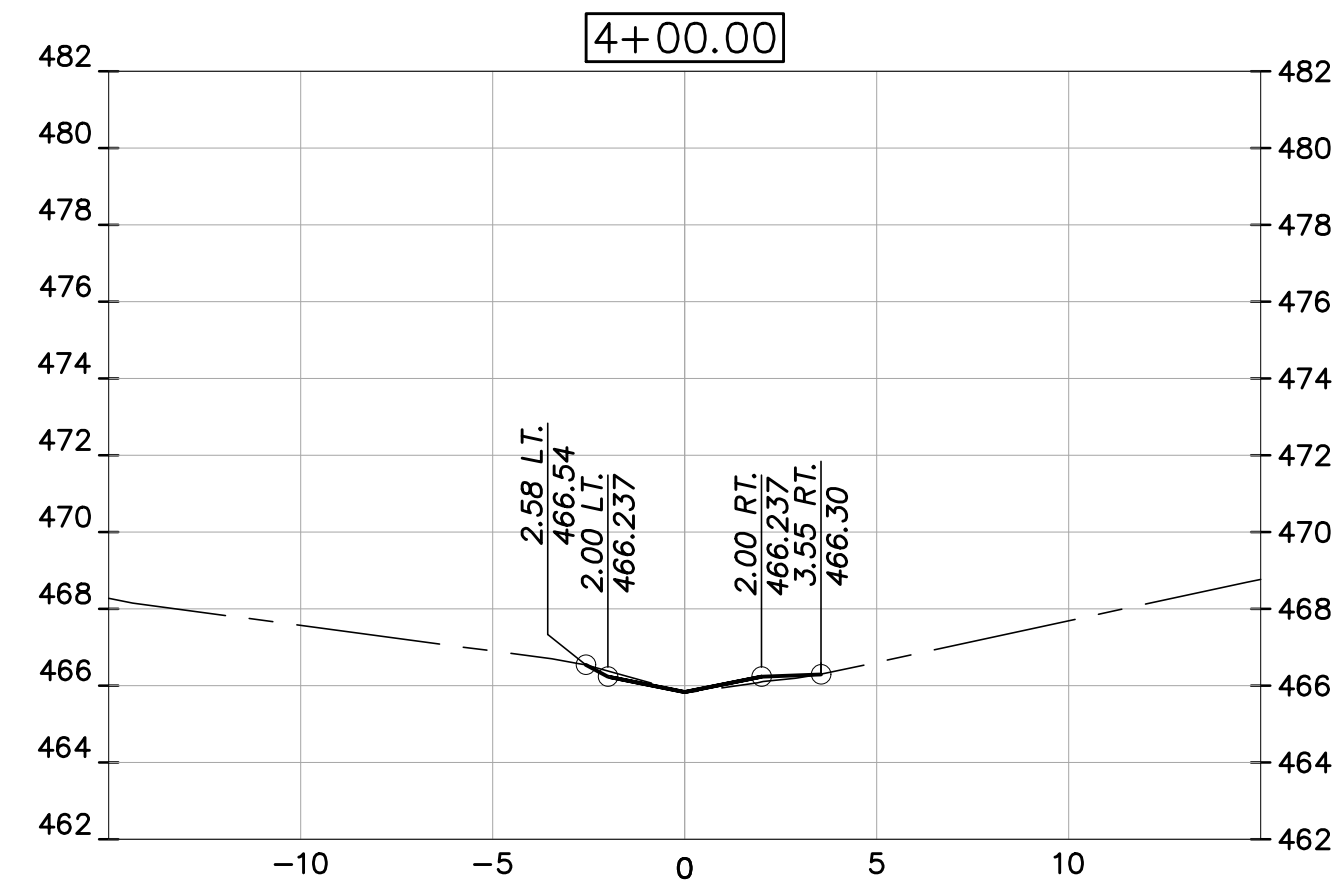
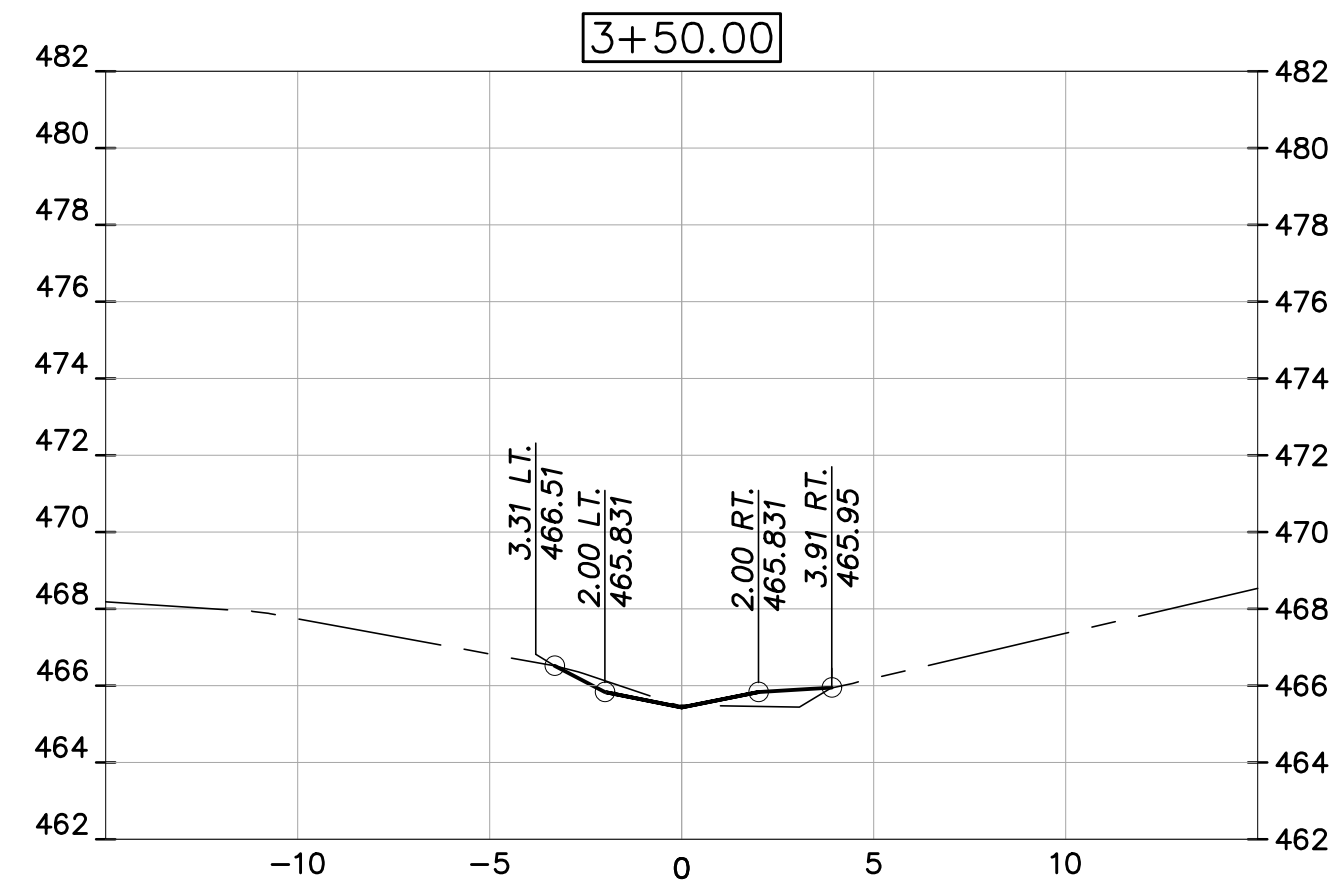
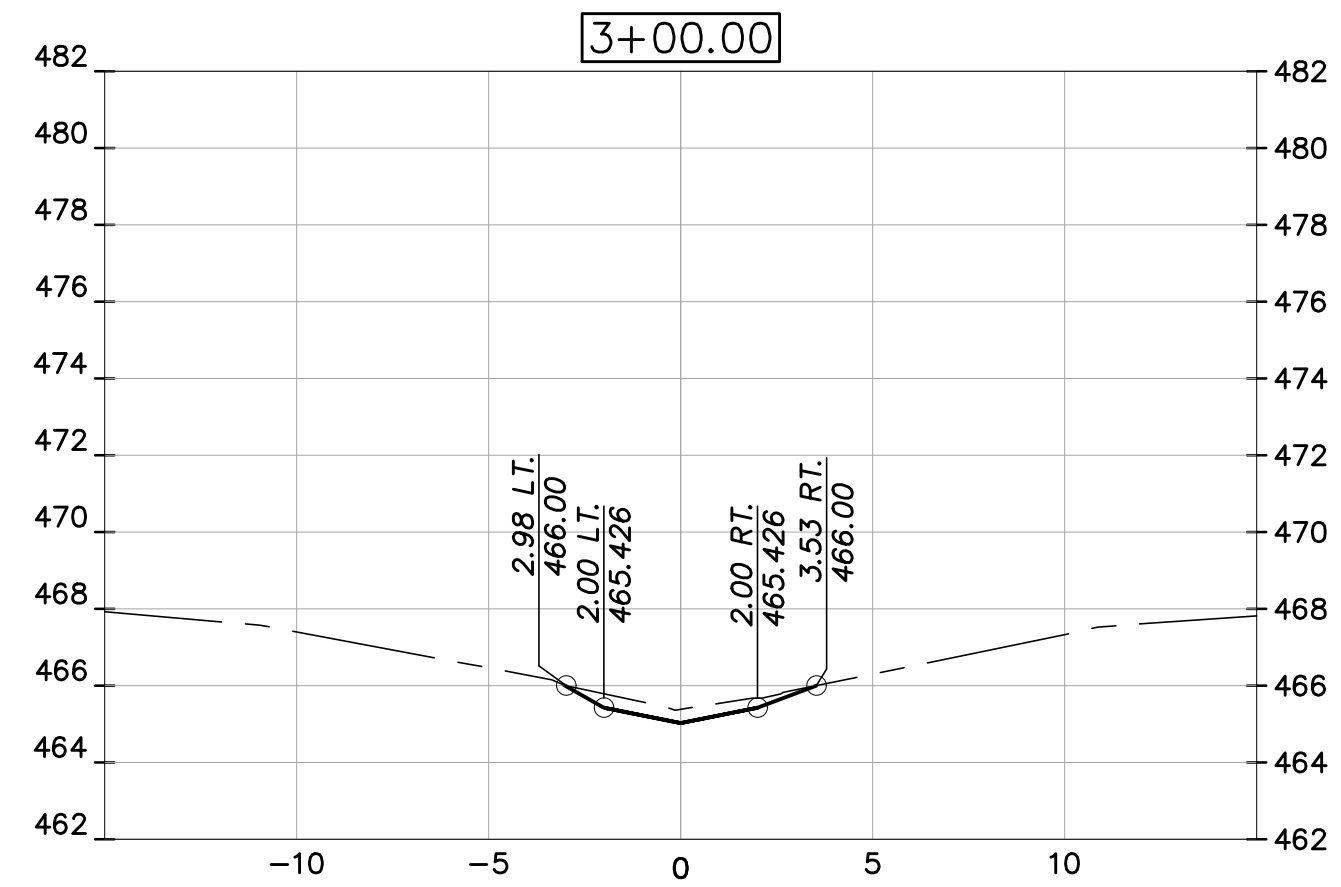
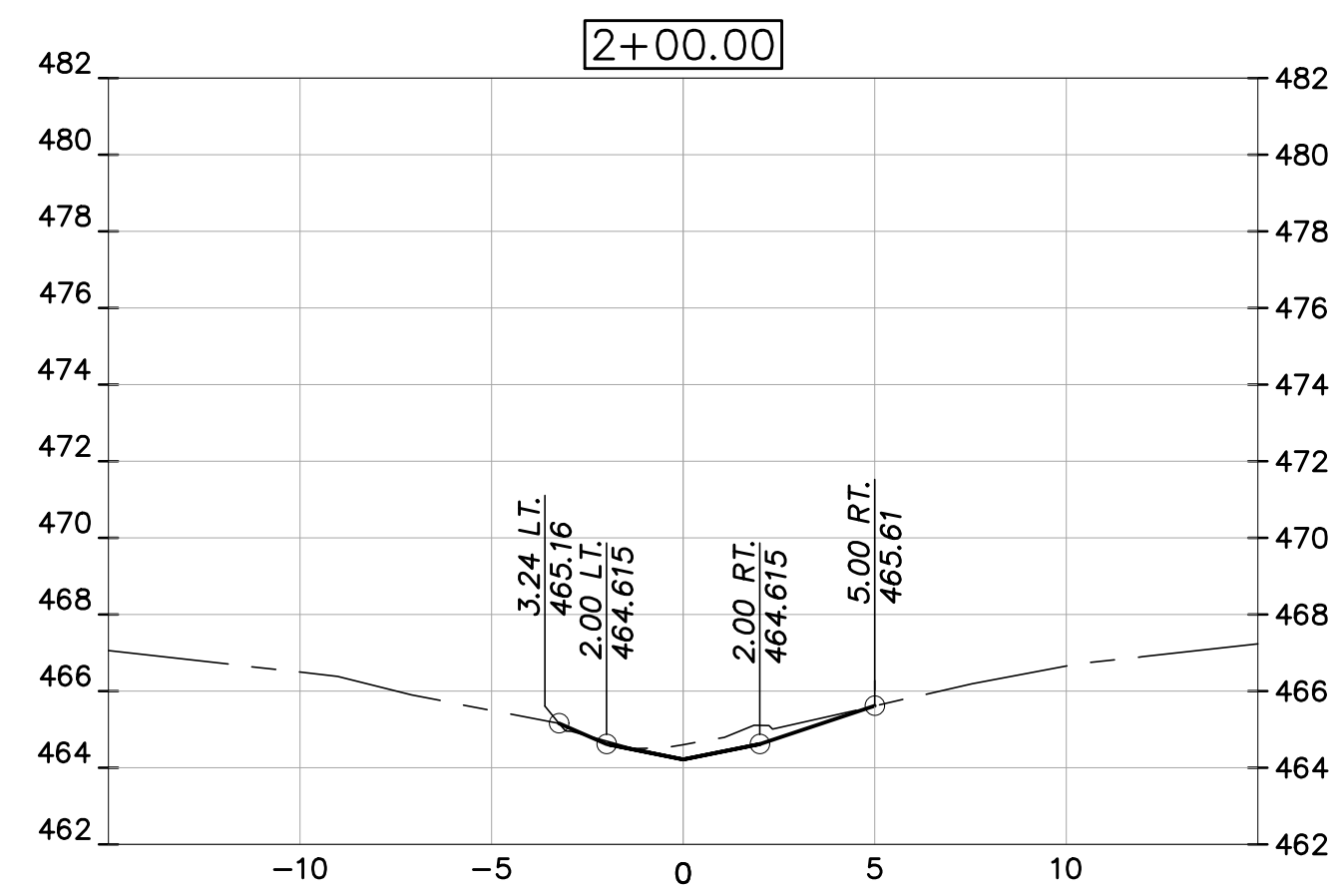
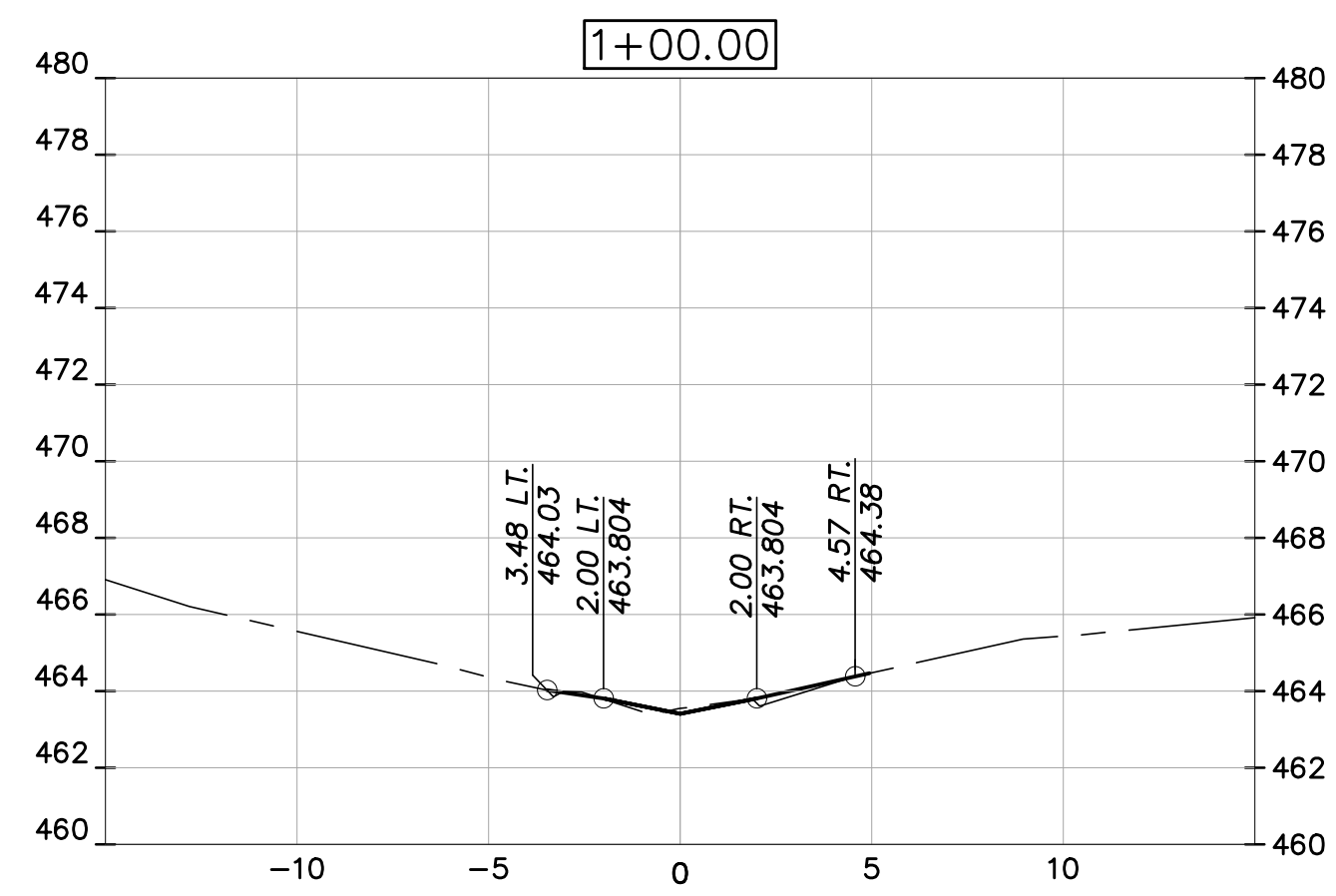
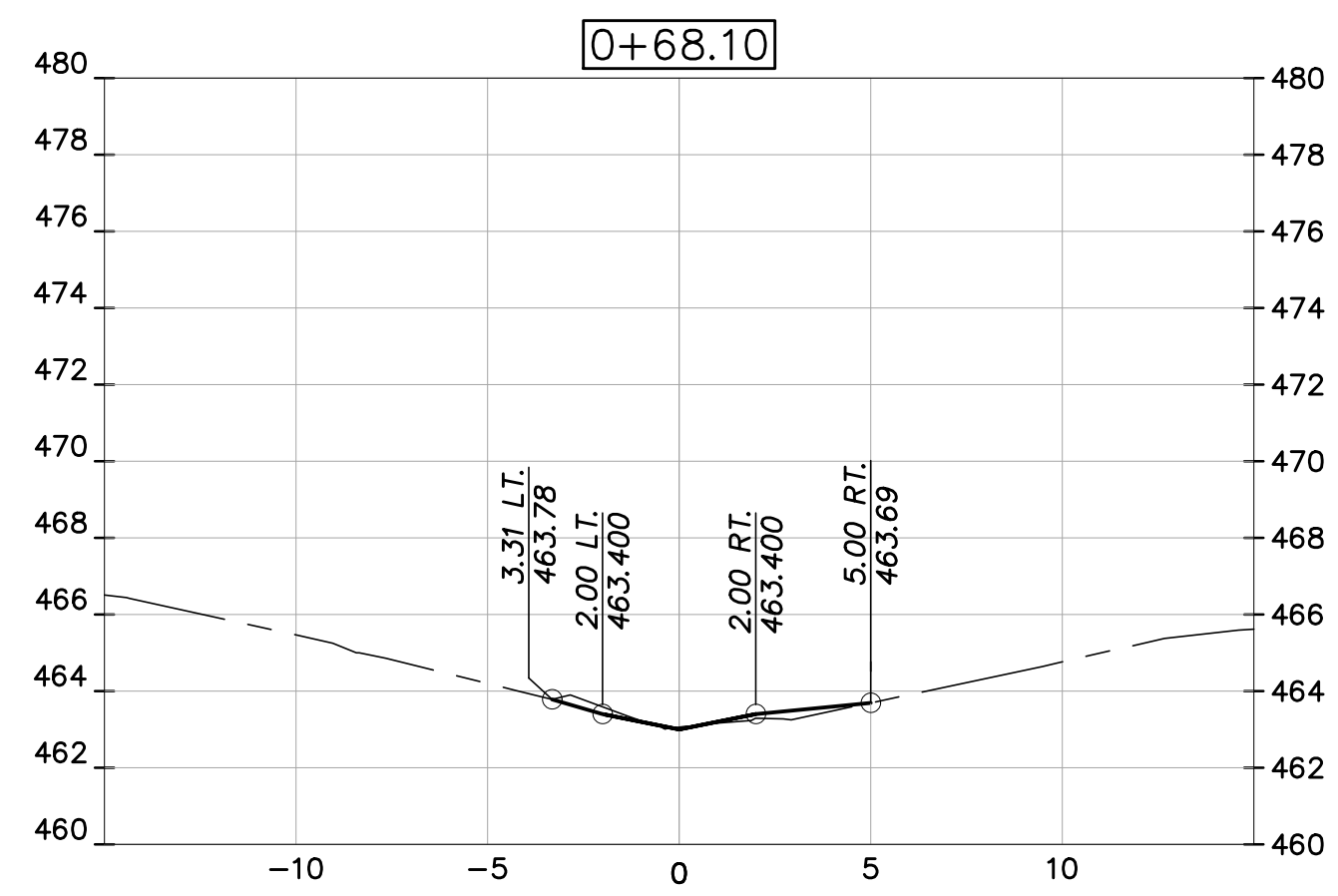
DRAINAGE IMPROVEMENTS

AREA 1 - CARSWELL DRAINAGE CHANNEL PLAN & PROFILE

01-18-2018 *Clark W. Gauher, P.E.*
 DATE CLARK W. GAUHER

	DESIGNED	CWG
	DRAFTED	JRH
	CHECKED	CWG
	PROJECT NO.	1-03084
	DRAWING NO.	C100

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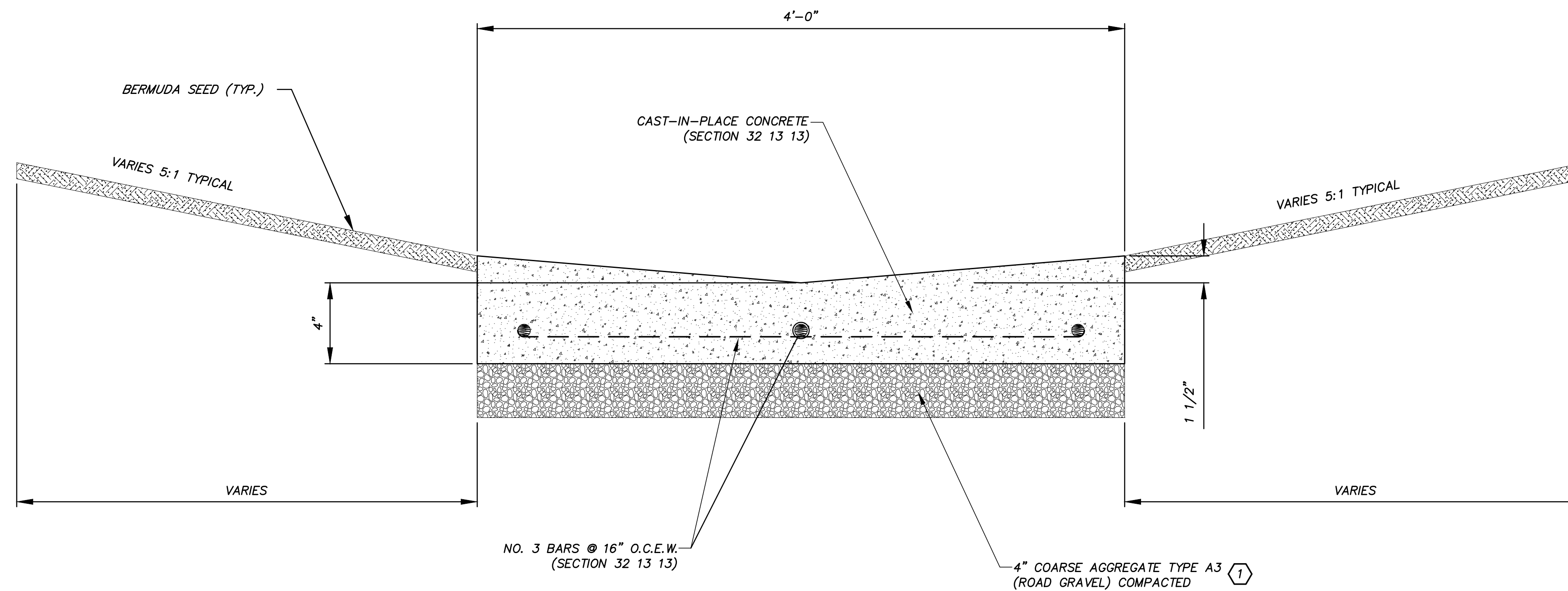


TSTC
DRAINAGE IMPROVEMENTS

AREA 1 - CARSWELL DRAINAGE CHANNEL CROSS SECTIONS

01-18-2018 *Clark W. Gauzer, P.E.*
DATE: CLARK W. GAUZER

	DESIGNED	CWG
	DRAFTED	JRH
	CHECKED	CWG
	PROJECT NO.	1-03084
	DRAWING NO.	C101



KEY NOTES

① COURSE AGGREGATE TYPE A3: DURABLE PARTICLES OF GRAVEL MIXED WITH APPROVED BINDING MATERIAL; SHALL BE FREE FROM THIN OR ELONGATED PIECES, CLAY LUMPS, SOIL LOAM, OR VEGETABLE MATTER.

- LL - 35 MAX (ASTM D4318-17)
- PL - TEST USING ASTM D4318-17
- PI - 12 MAX, 4 MIN (ASTM 4318-17)

GRADATION:

PASSING 1 3/4 IN. SIEVE (45.00 MM)	100%
PASSING 3/4 IN. SIEVE (9.5 MM)	40 TO 80%
PASSING NO. 4 SIEVE (4.75 MM)	25 TO 60%
PASSING NO. 40 SIEVE (425 μm)	15 TO 35%

G1 TYPICAL CHANNEL SECTION - CARSWELL STREET

N.T.S.

REV.	DESCRIPTION	DATE



TSTC

DRAINAGE IMPROVEMENTS

AREA 1 - CARSWELL DRAINAGE CHANNEL DETAILS

DATE 01-18-2018 *Clark W. Gauier, P.E.*

DESIGNED	CWG
DRAFTED	JRH
CHECKED	CWG
PROJECT NO.	1-03084



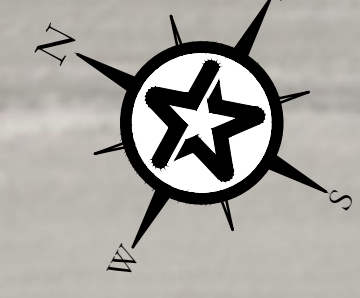
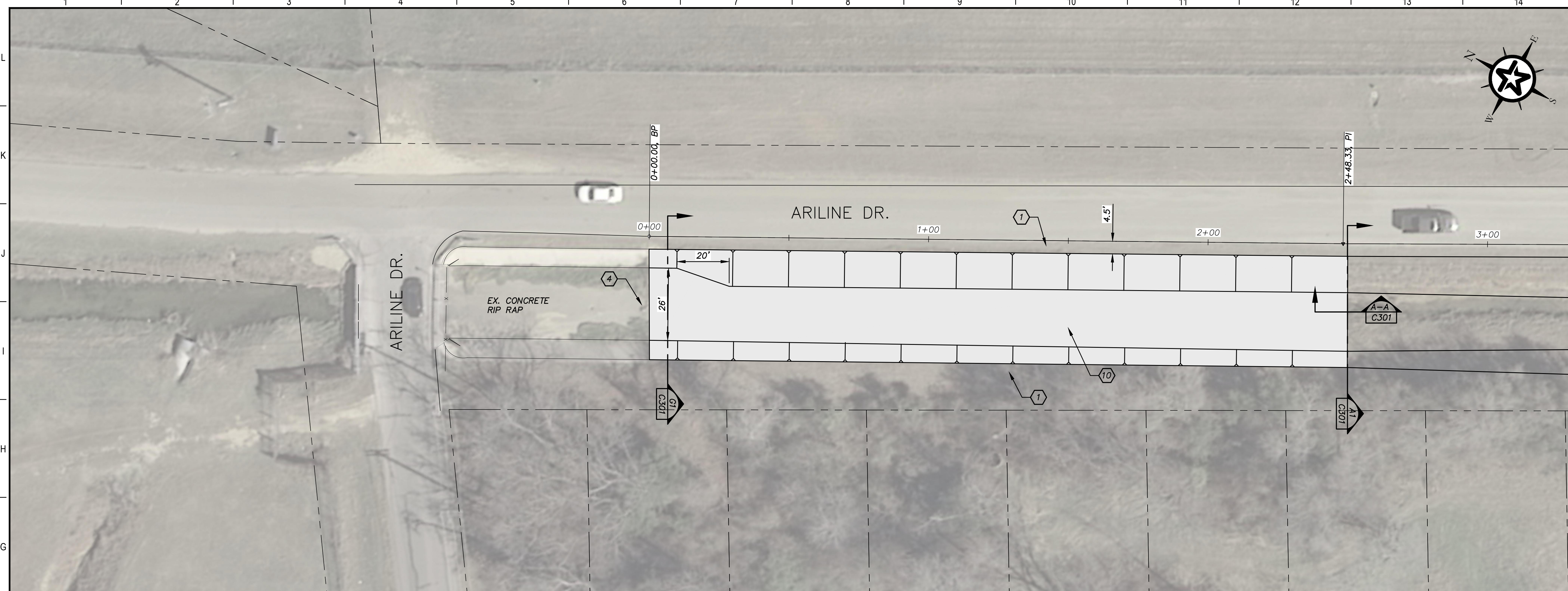
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N.T.S.

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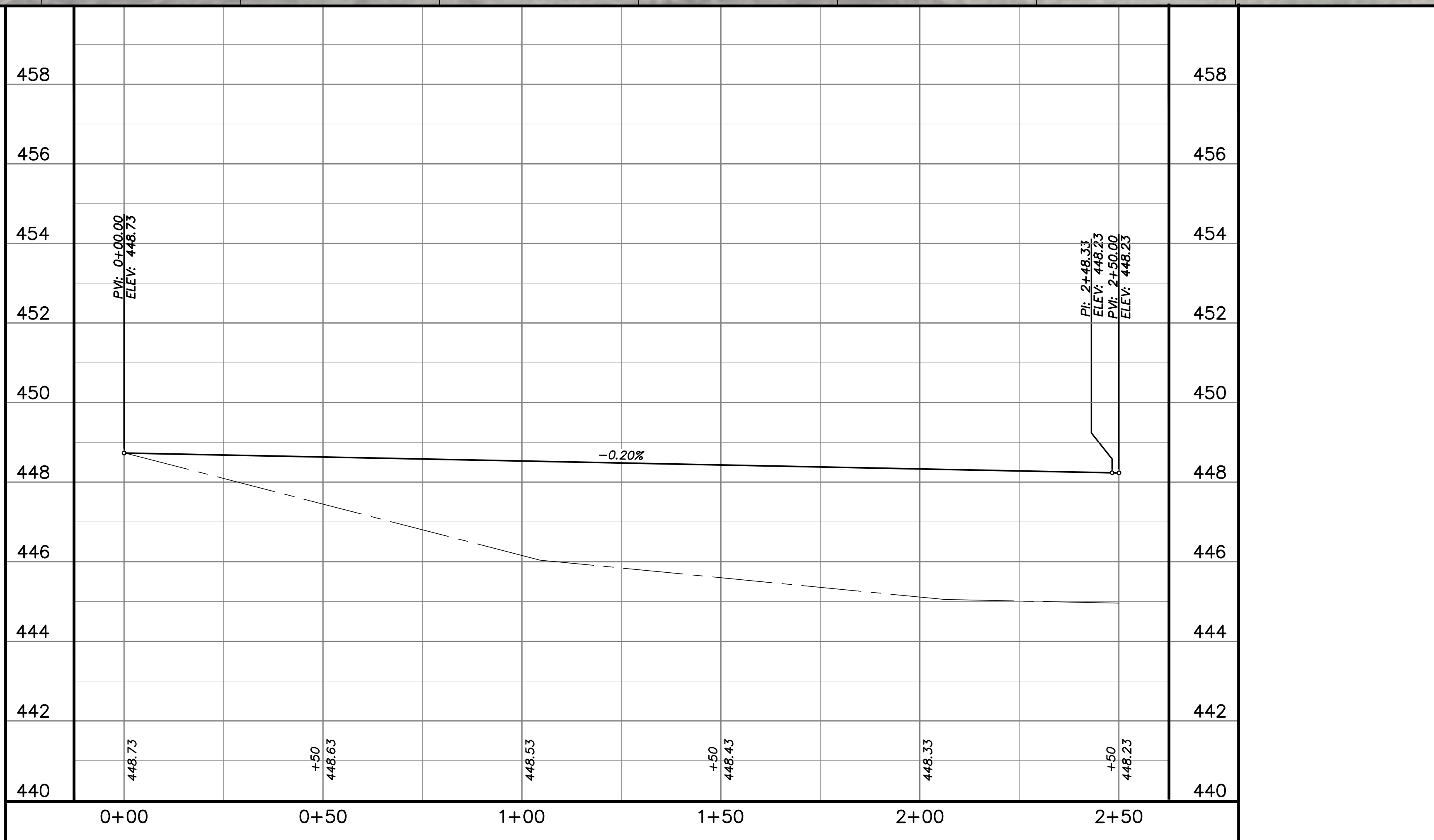
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- ### KEY NOTES
- ① BERMUDA SEEDING
 - ④ DOWEL INTO EXISTING CONCRETE (6" MIN.)
 - ⑩ CLEAR DRAINAGE CHANNEL OF ALL TREES, BRUSH, LOGS, RUBBISH AND ALL OTHER OBJECTIONABLE MATTER. DISPOSE OF WASTE OFF SITE. TREES/BRUSH SHALL NOT BE ALLOWED TO BE CHIPPED AND SPREAD ON SITE.

- ### PROFILE LEGEND
- N.G. ~ CENTERLINE OF CHANNEL
 - F.G. ~ CENTERLINE OF CHANNEL

- ### GENERAL NOTES
1. ALL DISTURBED AREAS SHALL BE RE-VEGATED USING HULLED BERMUDA SEED
-
- GRAPHIC SCALE (FEET)



REV.	DESCRIPTION	DATE

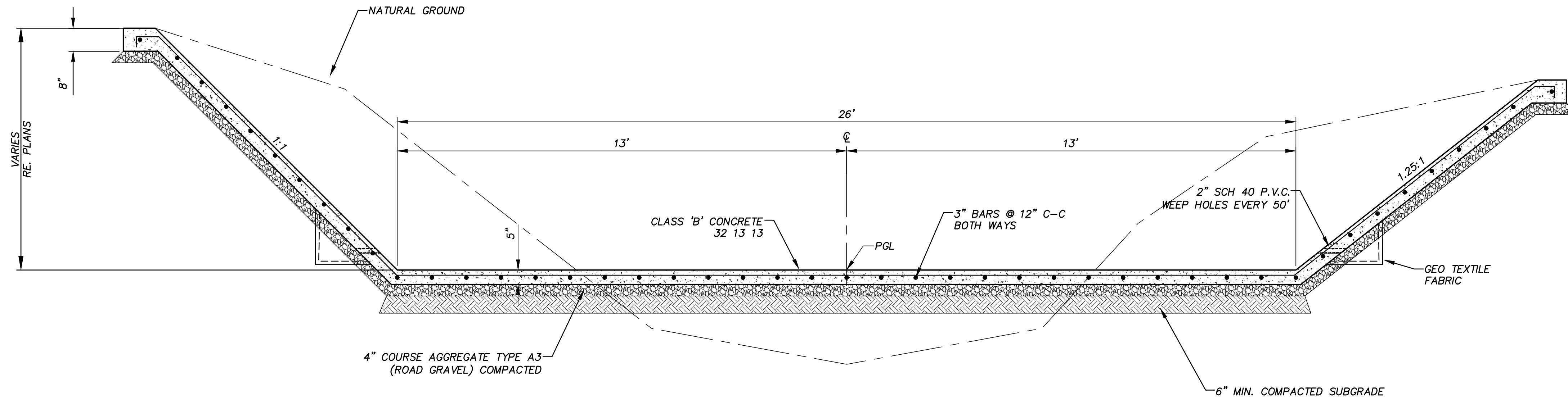


TSTC

DRAINAGE IMPROVEMENTS
AREA 3 - AIRLINE DRAINAGE CHANNEL PLAN & PROFILE

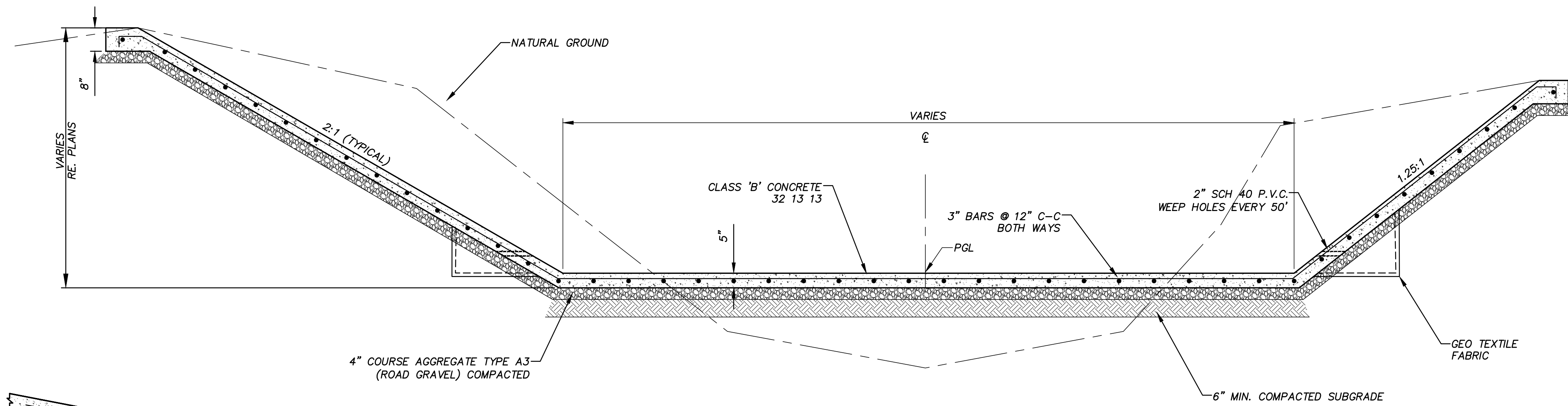
DATE: 01-18-2018
 DESIGNED BY: Clark W. Gauier, P.E.

	DESIGNED	CWG
	DRAFTED	JRH
	CHECKED	CWG
	PROJECT NO.	1-03084
DRAWING NO.		C300



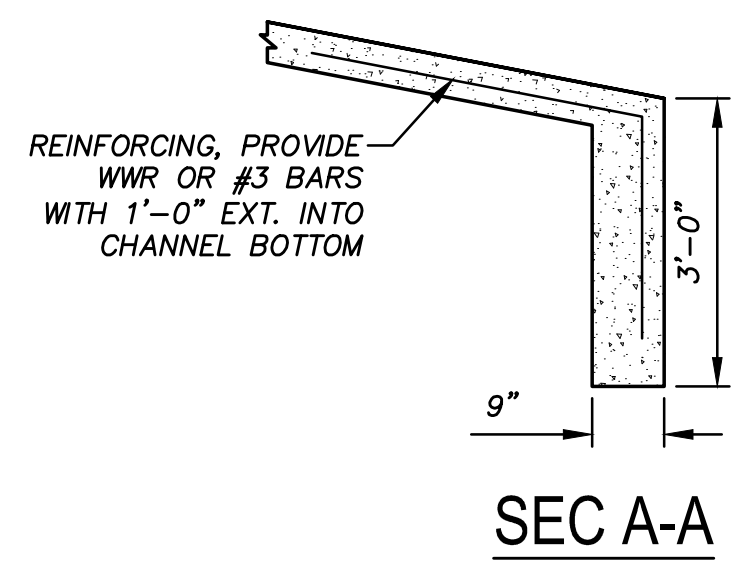
G1 TYPICAL CONCRETE CHANNEL SECTION - AIRLINE DRIVE (STA. 0+00 - 0+10)

N.T.S.



G1 TYPICAL CONCRETE CHANNEL SECTION - AIRLINE DRIVE (STA. 0+10 - 2+50)

N.T.S.



KEY NOTES

1 COURSE AGGREGATE TYPE A3: DURABLE PARTICLES OF GRAVEL MIXED WITH APPROVED BINDING MATERIAL; SHALL BE FREE FROM THIN OR ELONGATED PIECES, CLAY LUMPS, SOIL LOAM, OR VEGETABLE MATTER.

- LL - 35 MAX (ASTM D4318-17)
- PL - TEST USING ASTM D4318-17
- PI - 12 MAX, 4 MIN (ASTM 4318-17)

GRADATION:

PASSING 1 3/4 IN. SIEVE (45.00 MM)	100%
PASSING 3/4 IN. SIEVE (9.5 MM)	40 TO 80%
PASSING NO. 4 SIEVE (4.75 MM)	25 TO 60%
PASSING NO. 40 SIEVE (425 μm)	15 TO 35%

REV.	DESCRIPTION	DATE

Walker Partners
engineers • surveyors
T.B.P.E. Registration No. 8553

TSTC

DRAINAGE IMPROVEMENTS

AREA 3 - AIRLINE DRAINAGE CHANNEL DETAILS

01-18-2018 *Clark W. Gauzer, P.E.*
DATE CLARK W. GAUZER

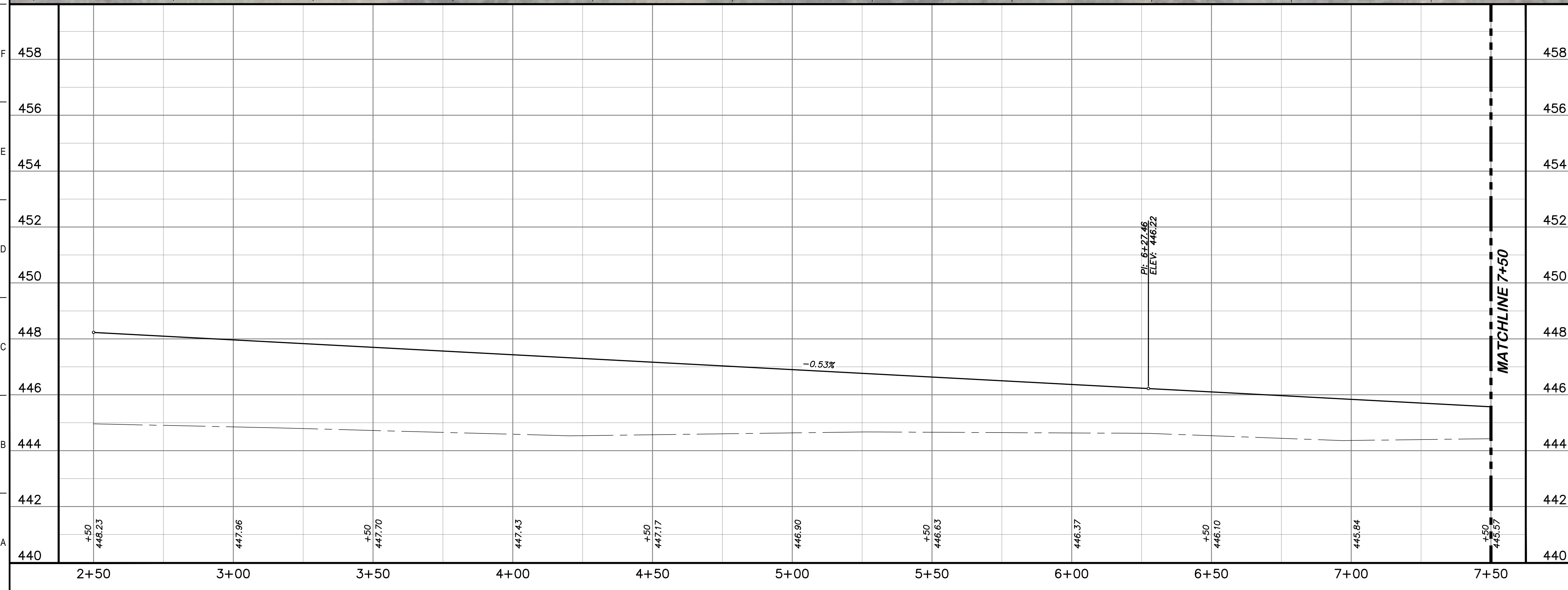
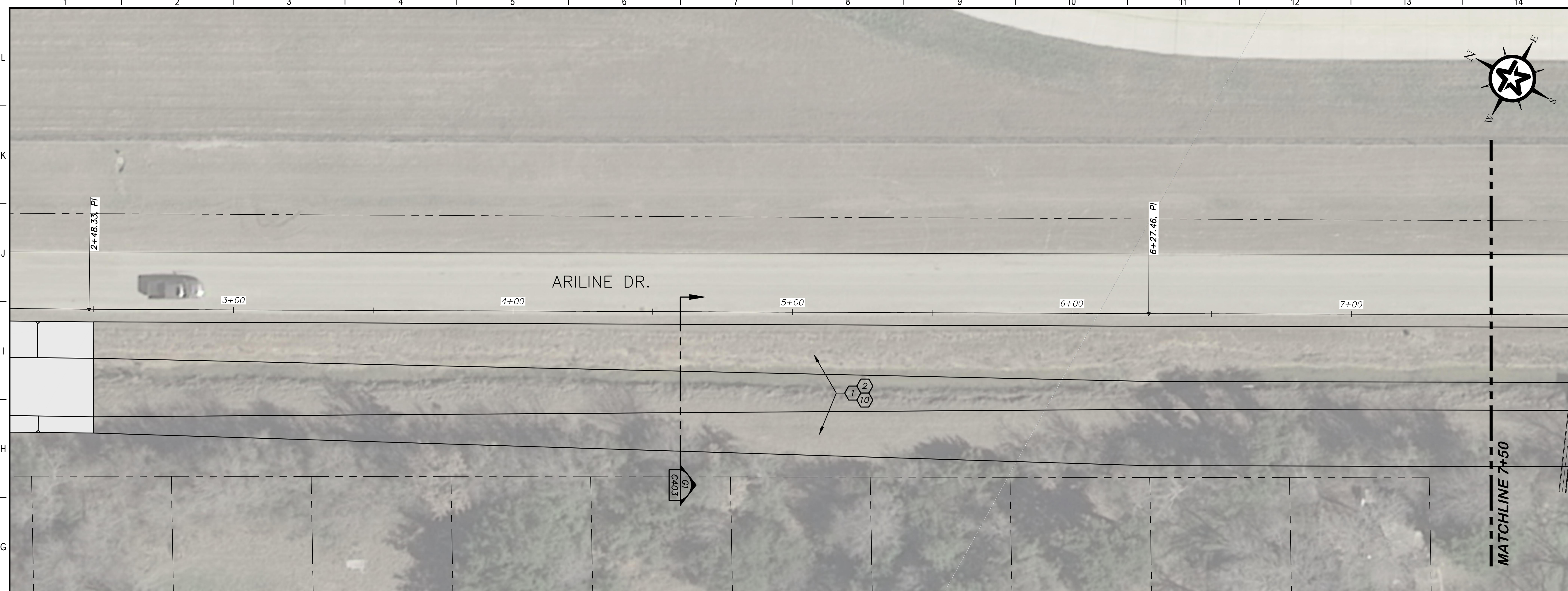
DESIGNED	CWG
DRAFTED	JRH
CHECKED	CWG
PROJECT NO.	1-03084



DRAWING NO.
C301

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KEY NOTES

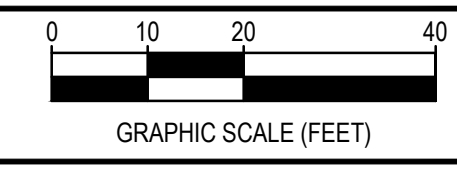
- ① BERMUDA SEEDING
- ② SOIL RETENTION BLANKET (RE. DETAIL A1/C403)
- ⑩ CLEAR DRAINAGE CHANNEL OF ALL TREES, BRUSH, LOGS, RUBBISH AND ALL OTHER OBJECTIONABLE MATTER. DISPOSE OF WASTE OFF SITE. TREES/BRUSH SHALL NOT BE ALLOWED TO BE CHIPPED AND SPREAD ON SITE.

PROFILE LEGEND

N.G. ~ CENTERLINE OF CHANNEL
 F.G. ~ CENTERLINE OF CHANNEL

GENERAL NOTES

- 1. ALL DISTURBED AREAS SHALL BE RE-VEGATED USING HULLED BERMUDA SEED



REV.	DESCRIPTION	DATE



TSTC

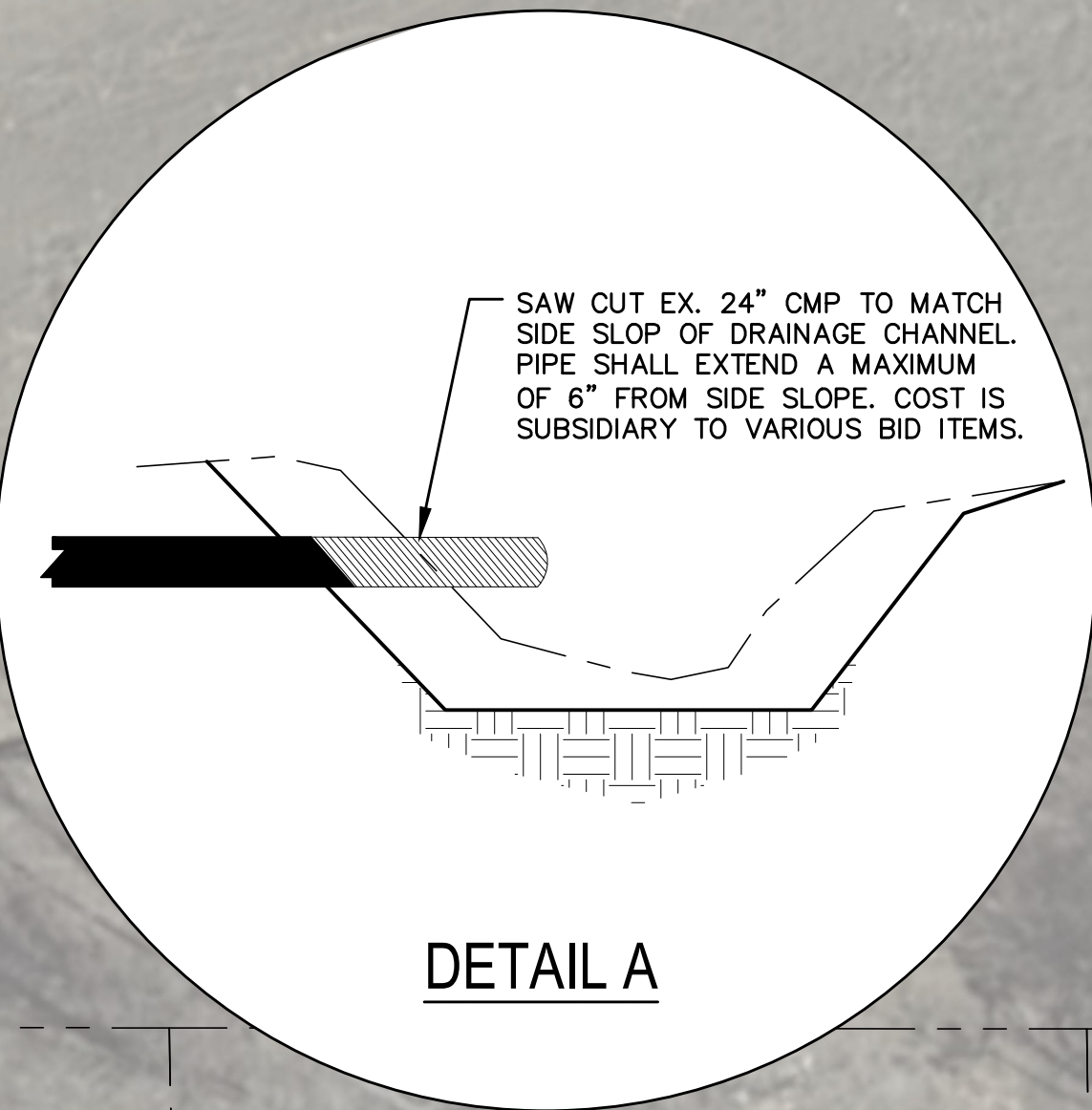
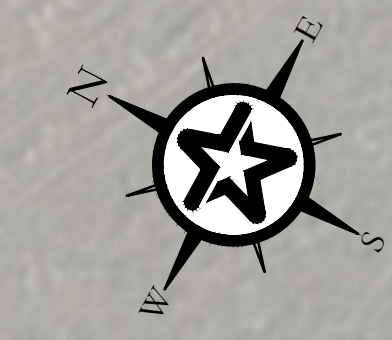
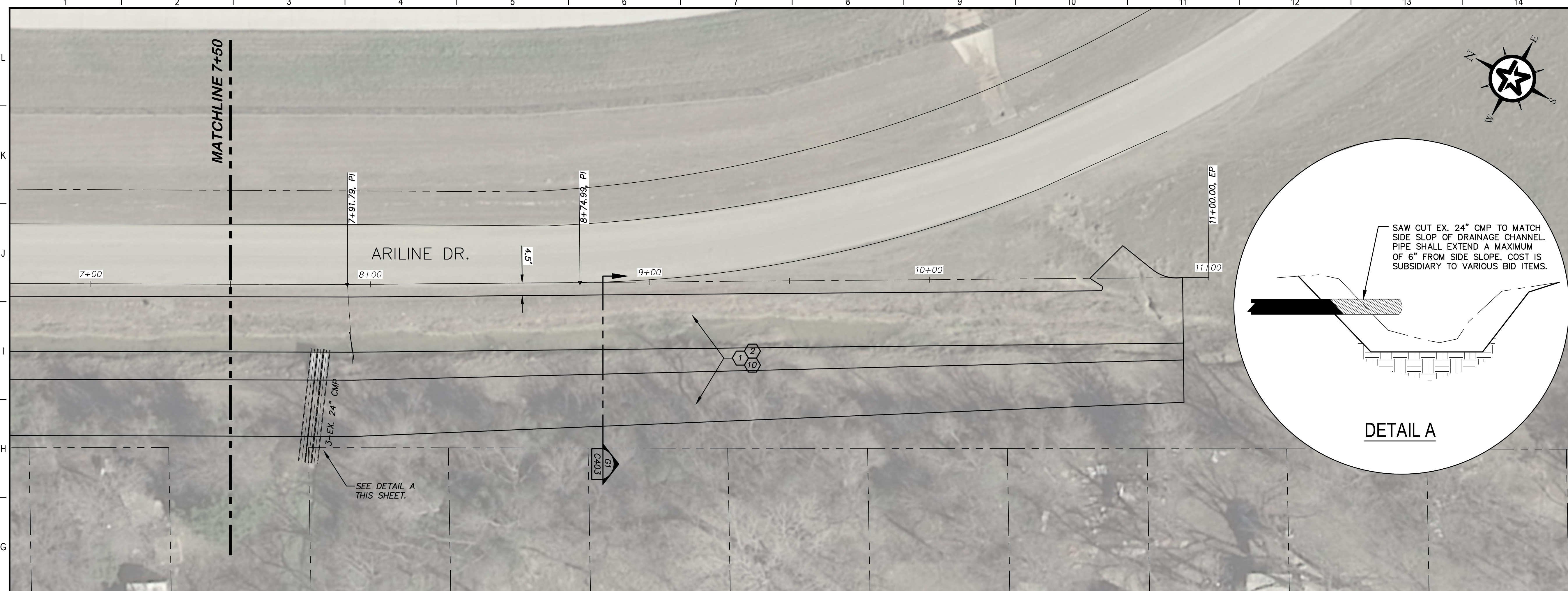
DRAINAGE IMPROVEMENTS

AREA 4 - AIRLINE DRAINAGE CHANNEL PLAN & PROFILE

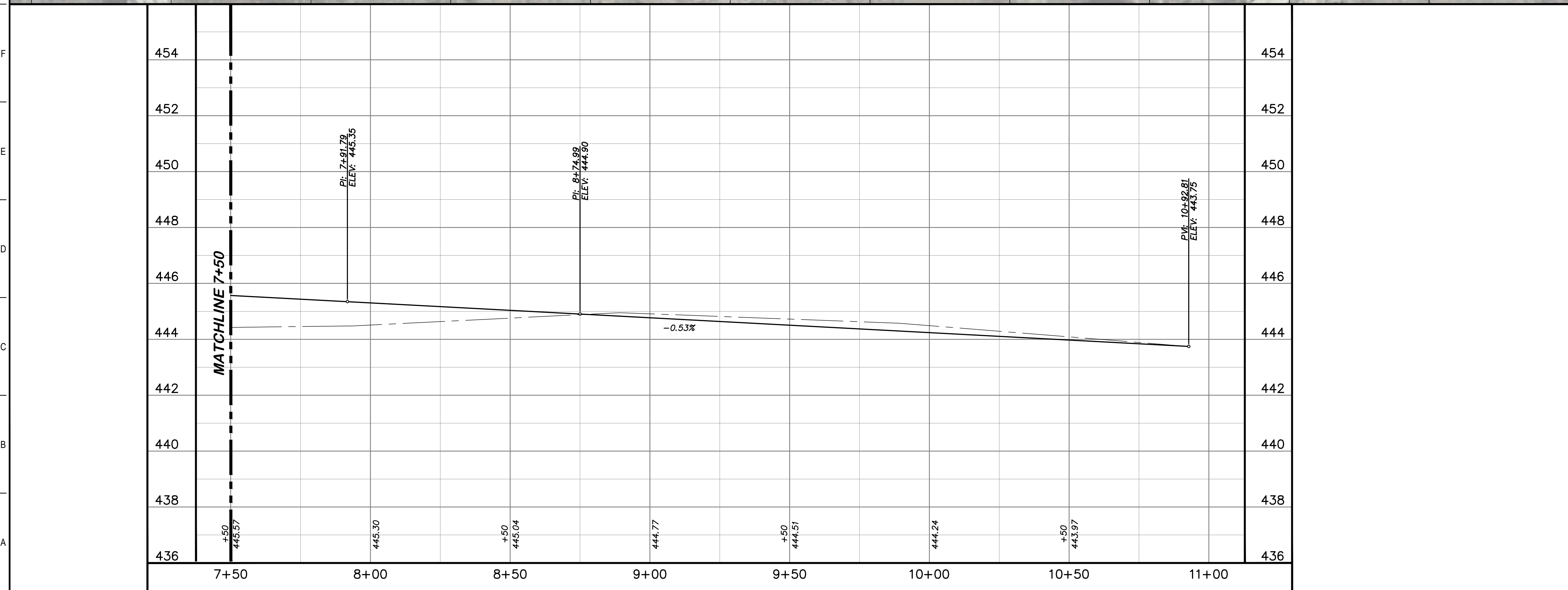
DATE: 01-18-2018
 DESIGNED BY: Clark W. Gauier, P.E.

	PM	CWG
	DESIGNED	CWG
	DRAFTED	JRH
	CHECKED	CWG
PROJECT NO.	1-03084	
DRAWING NO.	C400	

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- ### KEY NOTES
- ① BERMUDA SEEDING
 - ② SOIL RETENTION BLANKET (RE. DETAIL A1/C403)
 - ⑩ CLEAR DRAINAGE CHANNEL OF ALL TREES, BRUSH, LOGS, RUBBISH AND ALL OTHER OBJECTIONABLE MATTER. DISPOSE OF WASTE OFF SITE. TREES/BRUSH SHALL NOT BE ALLOWED TO BE CHIPPED AND SPREAD ON SITE.



- ### PROFILE LEGEND
- N.G. ~ CENTERLINE OF CHANNEL
 - F.G. ~ CENTERLINE OF CHANNEL

- ### GENERAL NOTES
1. ALL DISTURBED AREAS SHALL BE RE-VEGATED USING HULLED BERMUDA SEED
-

REV.	DESCRIPTION	DATE



TSTC

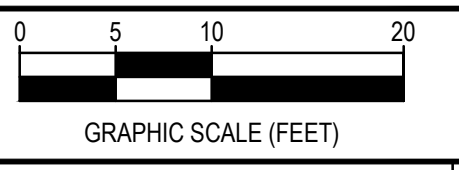
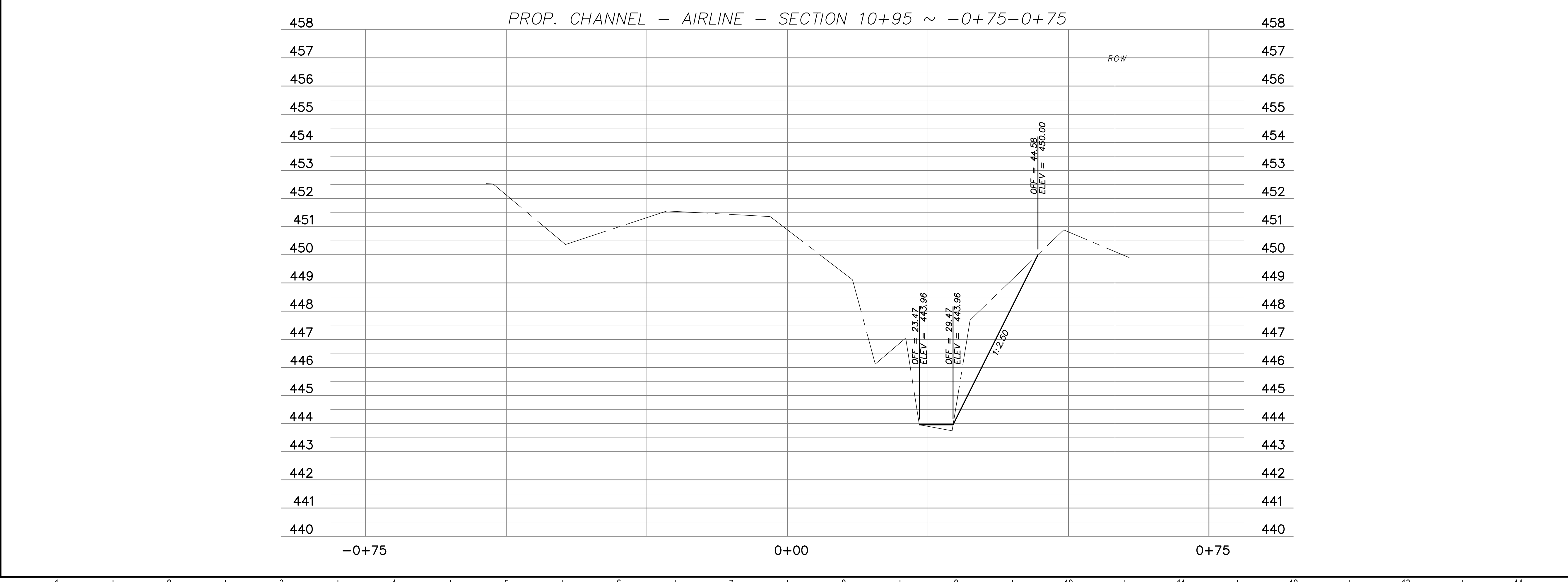
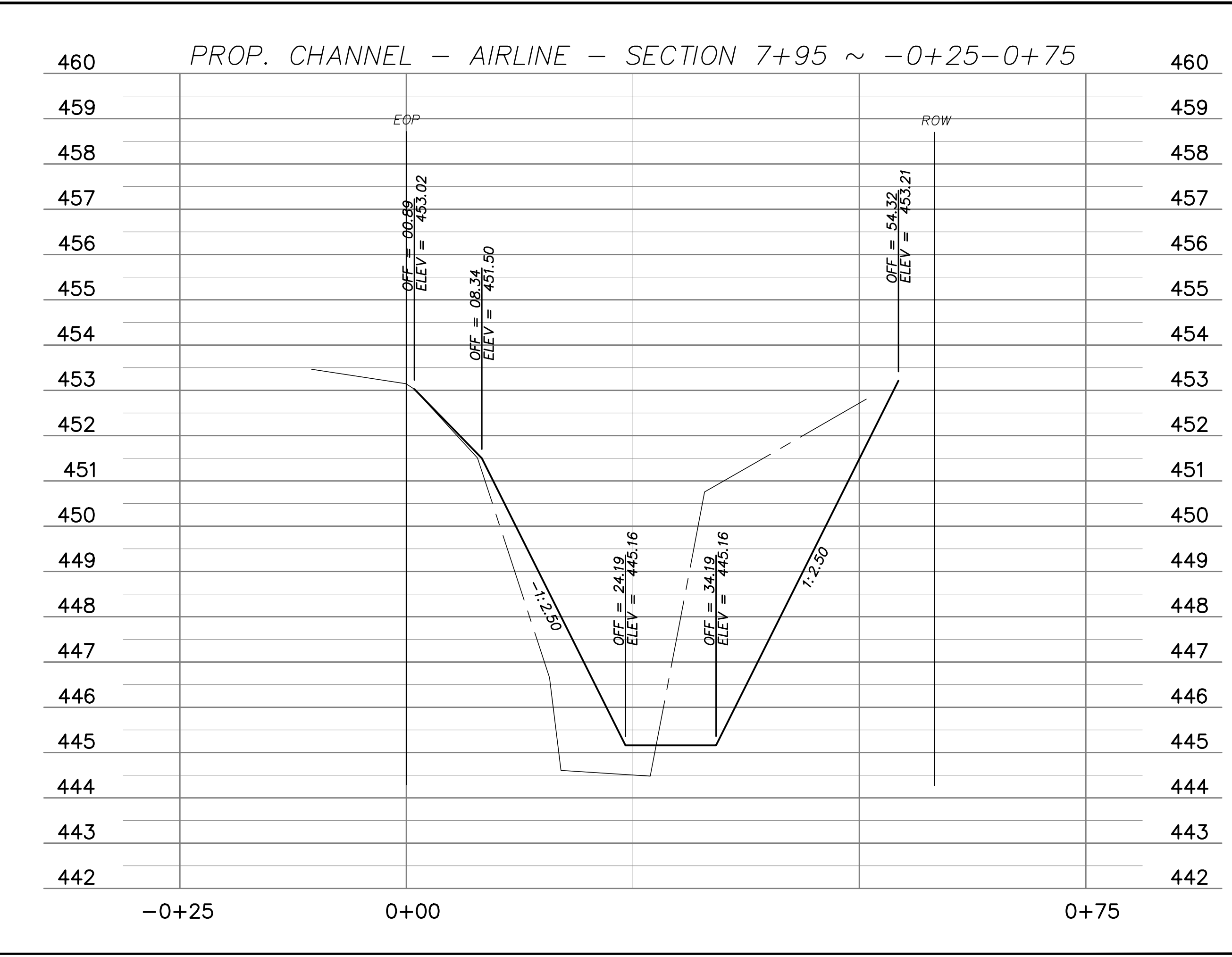
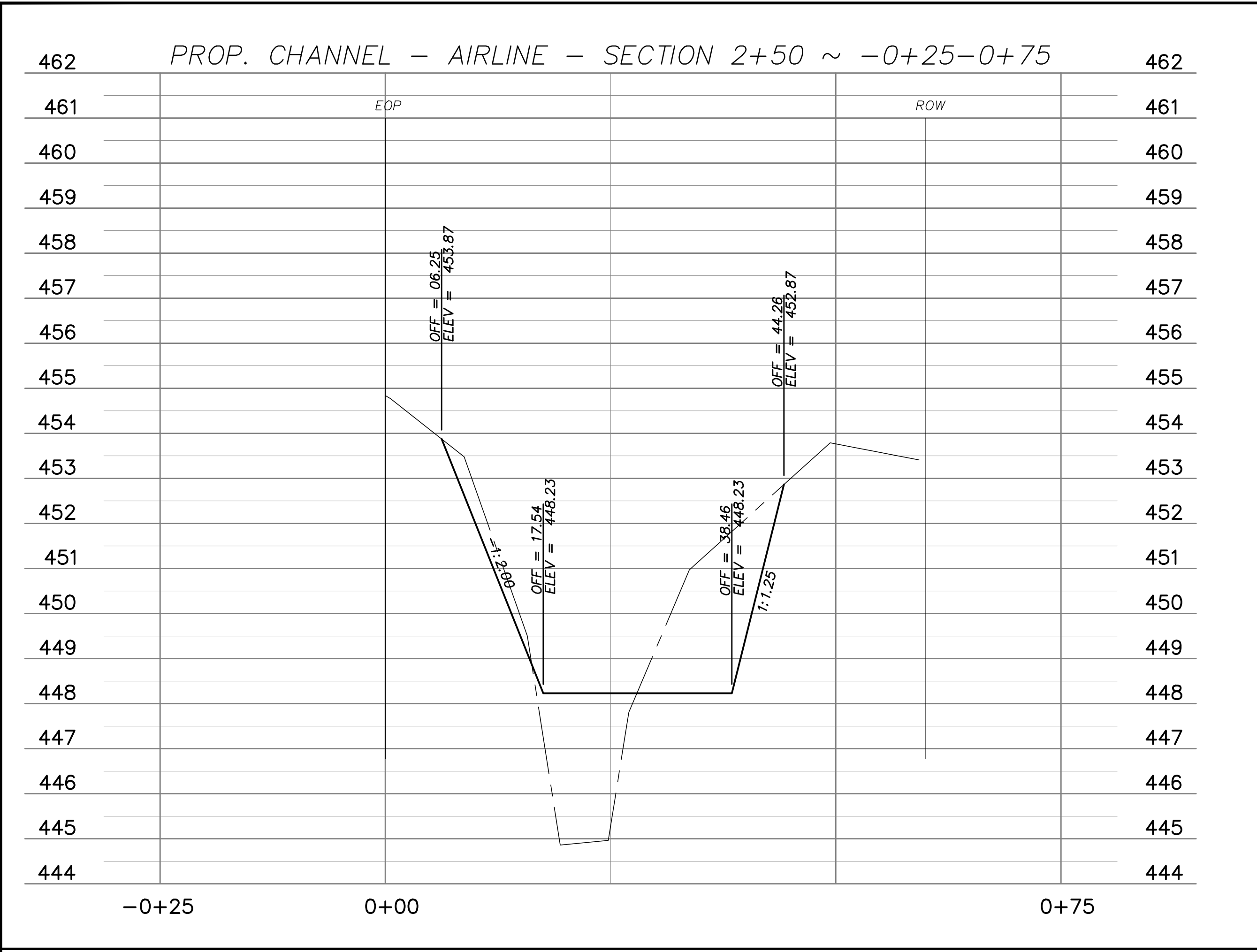
DRAINAGE IMPROVEMENTS

AREA 4 - AIRLINE DRAINAGE CHANNEL PLAN & PROFILE

DATE: 01-18-2018 *Clark W. Gauher, P.E.*

	DESIGNED	CWG
	DRAFTED	JRH
	CHECKED	CWG
	PROJECT NO.	1-03084
DRAWING NO.		C401

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REV.	DESCRIPTION	DATE

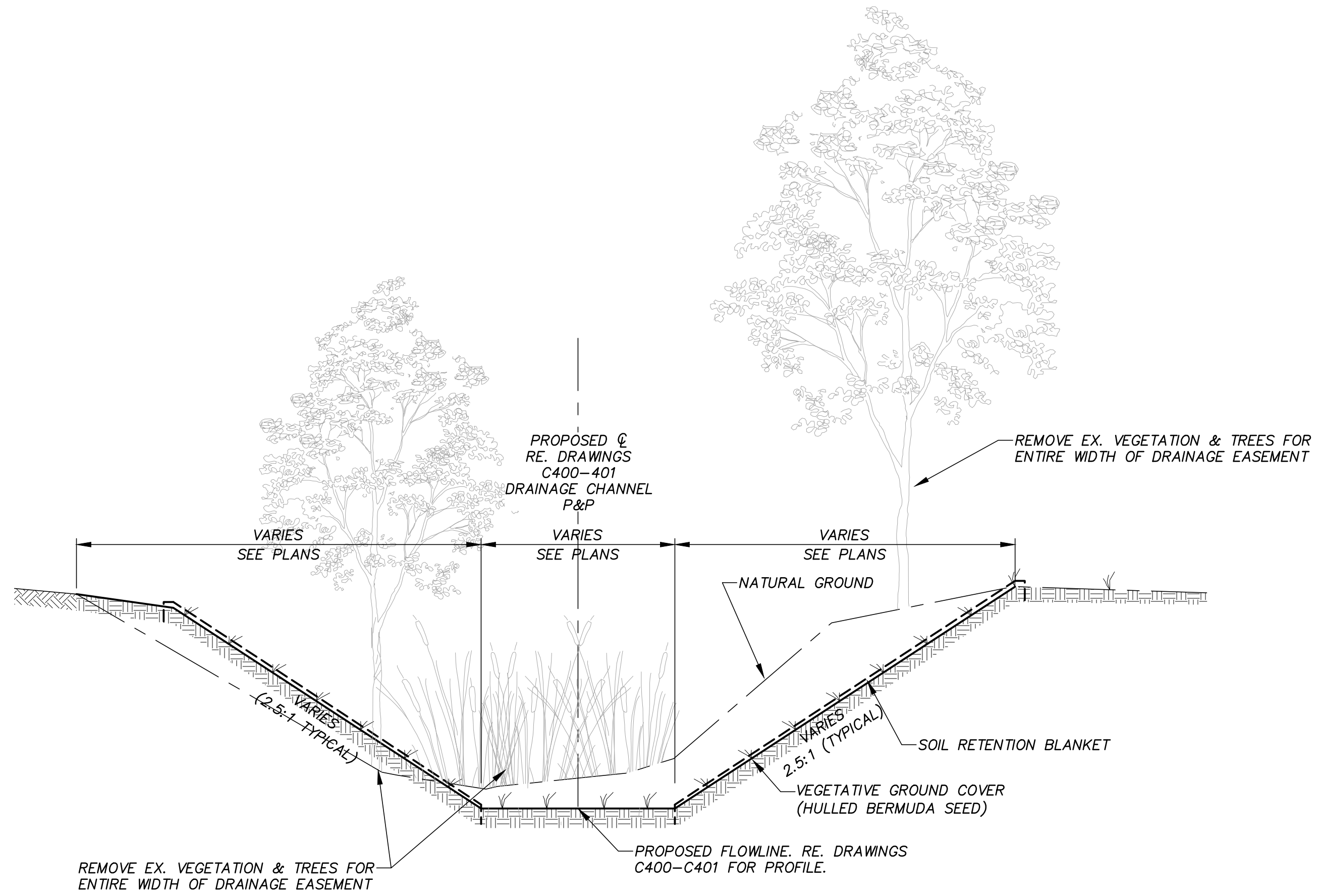


TSTC
DRAINAGE IMPROVEMENTS

AREA 4 - AIRLINE DRAINAGE CHANNEL CROSS SECTIONS

01-18-2018 *Clark W. Gauzer, P.E.*
DATE CLARK W. GAUZER

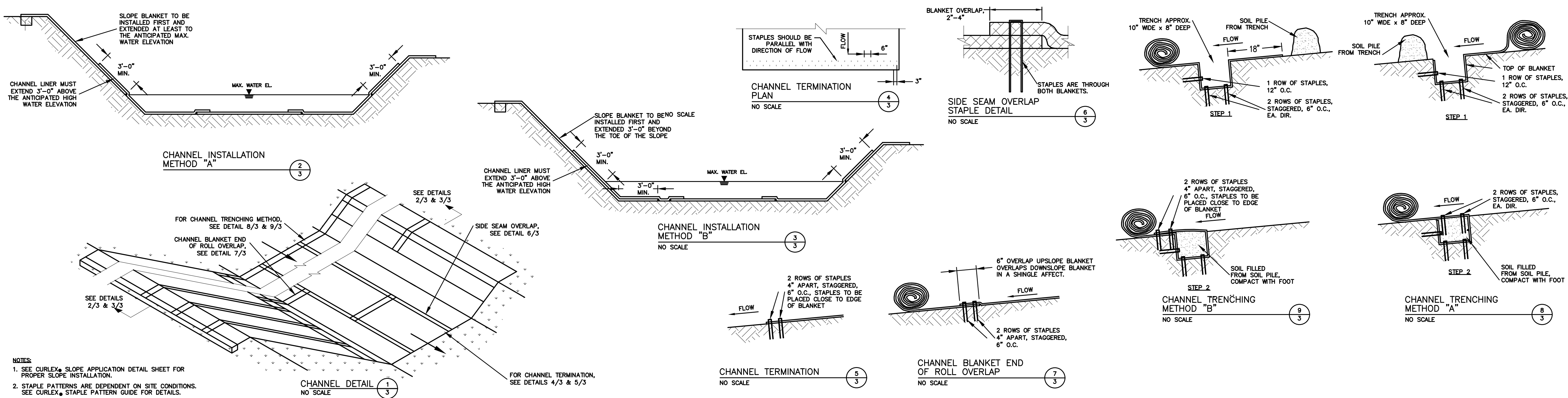
	DESIGNED	CWG
	DRAFTED	JRH
	CHECKED	CWG
	PROJECT NO.	1-03084
DRAWING NO.		C402



- SOIL RETENTION BLANKET SHALL BE ONE OF THE FOLLOWING:
- AEC Premier Straw/Coconut
 - AEC Premier Straw Double Net
 - BIOMAC C
 - BIOMAC CC 025.3
 - BIOMAC N20
 - Channel Soxx
 - Contech C-35
 - Contech C50
 - Contech Coconut / Poly Fiber Mat
 - Contech Coconut Mat w/ Kraft Net
 - Contech TRM C-45
 - Curlex®II Stitched
 - Curlex®II (.98)
 - Curlex®II CL
 - Curlex®III Stitched
 - Curlex®Enforcer®
 - Curlex®Enforcer®I
 - Earth-Lock
 - Earth-Lock II
 - ECB EX 32
 - ECB P 42 TRM
 - ECB SC 32 Double Net Extended Term
 - ECB S 32 Double Net Straw
 - ECC-3 Coconut Turf Reinforcement Mat
 - ECP-2 10oz Polypropylene Turf Rein. Mat
 - ECP-3
 - ECSC-3 Straw/Coconut Turf Rein. Mat
 - Enkamat 7018
 - Enkamat 7020
 - ETPP-10
 - ETRS-2
 - Excel CC-4
 - Excel CS-3
 - Excel CS-3 All Natural
 - Excel PP5-8
 - Excel PP5-10
 - Excel PP5-12
 - Excel R-1
 - Excel S-2
 - Excel SD-3
 - Excel SS-2
 - GreenArmor 7020
 - Greenfix CFG
 - Greenstreak Pec-Mat
 - Haymark HMI-350PP
 - Koirmat™ 700
 - Landlok® C2
 - Landlok® CS2
 - Landlok® S-2
 - Landlok® TRM 435
 - Landlok® TRM 450
 - Landlok® TRM 1051
 - Landlok® TRM 1060
 - Multimat 100
 - North American Green C125 BN
 - North American Green C350
 - North American Green P350
 - North American Green P550
 - North American Green S150
 - North American Green S350
 - North American Green SC150 BN
 - North American Green SC 250
 - Pyramat®
 - Recyclex TRM
 - Recyclex TRM-V
 - Rhino Erosion King Double-Net
 - SEC P2
 - SEC XL2
 - SS-2 Superior Straw
 - StayTurf
 - T-RECS
 - Webtec Terraguard 44P
 - Webtec Terraguard 45P
 - Winters Turf

F1 TYPICAL EARTHEN CHANNEL SECTION - AIRLINE DRIVE (STA. 2+50 - END)

N.T.S.



- NOTES:
- SEE CURLEX® SLOPE APPLICATION DETAIL SHEET FOR PROPER SLOPE INSTALLATION.
 - STAPLE PATTERNS ARE DEPENDENT ON SITE CONDITIONS. SEE CURLEX® STAPLE PATTERN GUIDE FOR DETAILS.

REV.	DESCRIPTION	DATE

Walker Partners
engineers • surveyors
T.B.P.E. Registration No. 8953

TSTC

DRAINAGE IMPROVEMENTS

AREA 4 - AIRLINE DRIVE DRAINAGE CHANNEL DETAILS

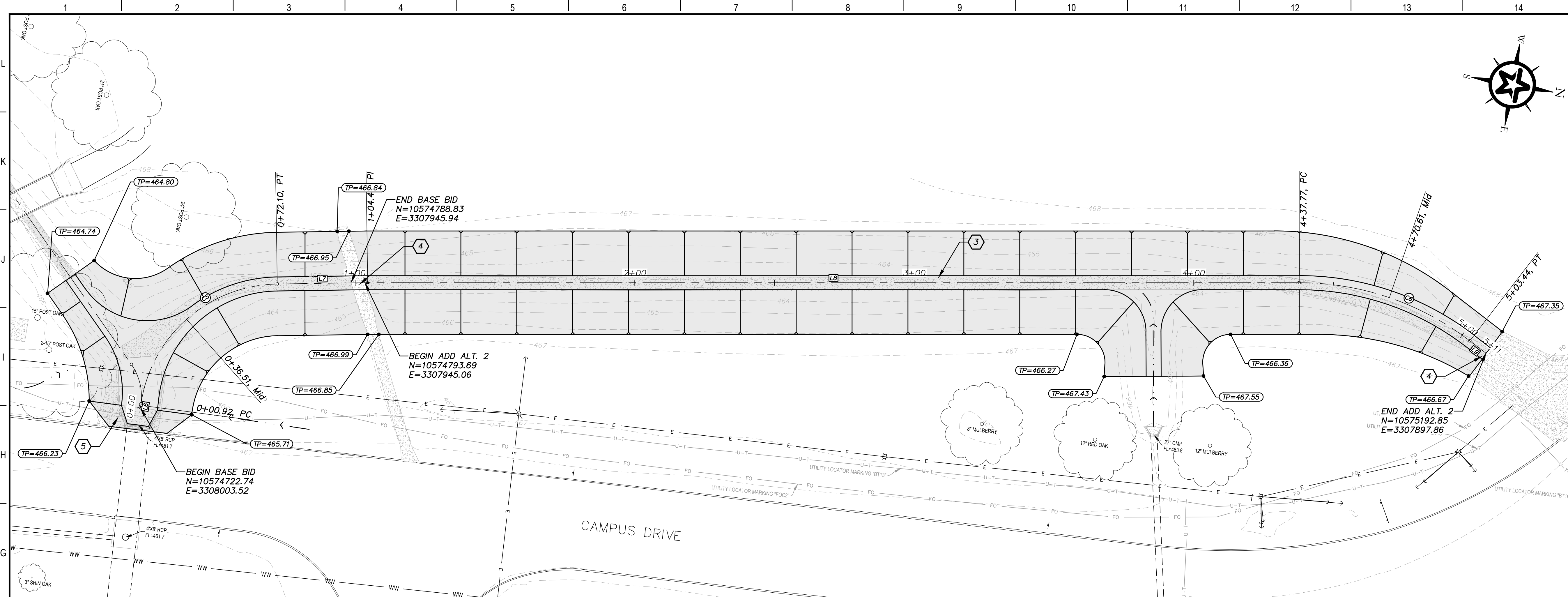
11-18-2018 *Clark W. Gaujer, P.E.*

DATE CLARK W. GAUJER

STATE OF TEXAS REGISTERED PROFESSIONAL ENGINEER 80599

DESIGNED	CWG
DRAFTED	JRH
CHECKED	CWG
PROJECT NO.	1-03084
DRAWING NO.	C403

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- ### KEY NOTES
- 3 REMOVE EX. CONCRETE PILOT CHANNEL AND DISPOSE OF OFF-SITE OR AT APPROVED LOCATION BY OWNER
 - 4 DOWEL INTO EX. CONCRETE (6" MIN.)
 - 5 REMOVE EX. CONCRETE WALLS AND MISCELLANEOUS CONCRETE AROUND HEADWALL AND WING WALLS. CONTRACTOR SHALL PROTECT EX. HEADWALL AND WING WALLS FROM DAMAGE.

PROFILE LEGEND

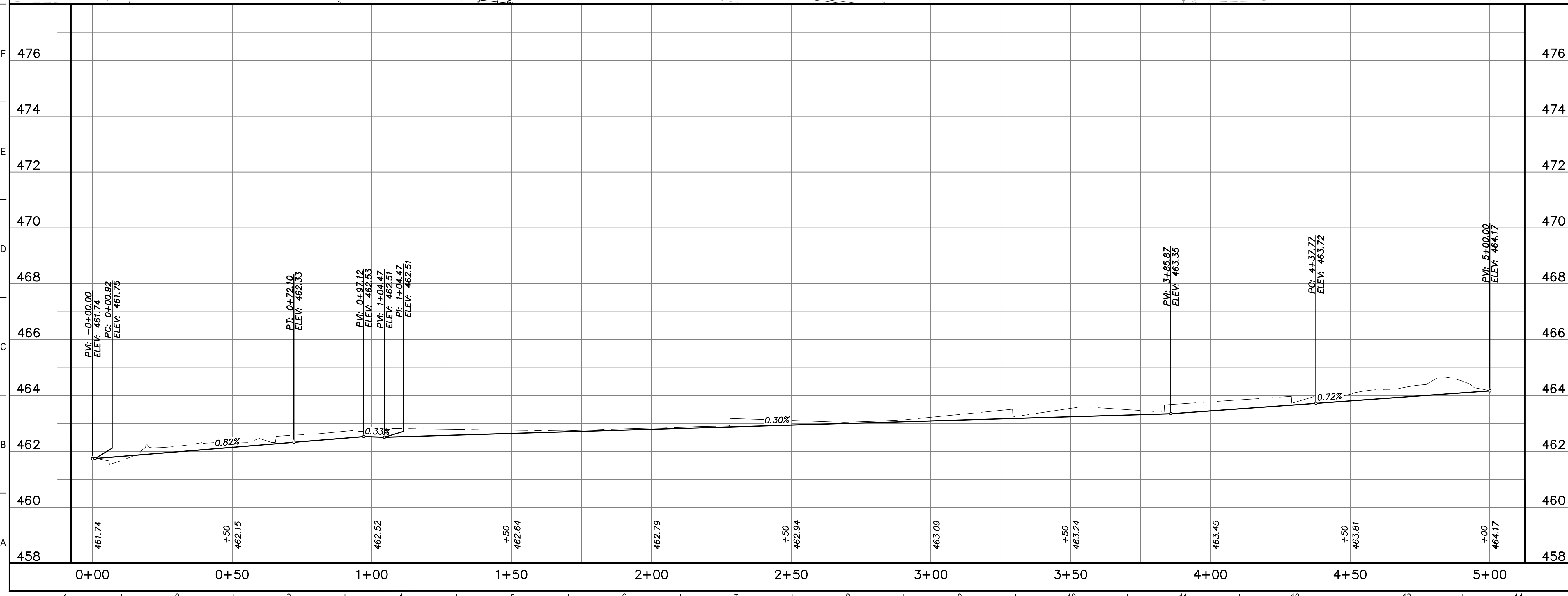
N.G. ~ CENTERLINE
 F.G. ~ CENTERLINE

LINE TABLE

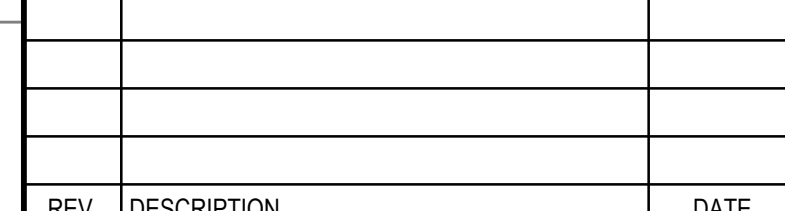
LINE #	BEARING	DISTANCE
L6	S87° 14' 54"W	0.92
L7	N11° 11' 34"W	32.57
L8	N10° 20' 38"W	333.30
L9	N27° 16' 46"E	7.29

CURVE TABLE

CURVE #	LENGTH	RADIUS	DELTA	CHORD
C5	71.17	50.00	81° 33' 31"	N51° 58' 20"W - 65.31
C6	65.67	100.00	37° 37' 24"	N8° 28' 04"E - 64.49



- ### GENERAL NOTES
- ALL DISTURBED AREAS SHALL BE RE-VEGETATED USING HULLED BERMUDA SEED



REV.	DESCRIPTION	DATE

Walker Partners
 engineers • surveyors
T.B.P.E. Registration No. 8953

TSTC

DRAINAGE IMPROVEMENTS

AREA 5 - CAMPUS DRAINAGE CHANNEL PLAN & PROFILE

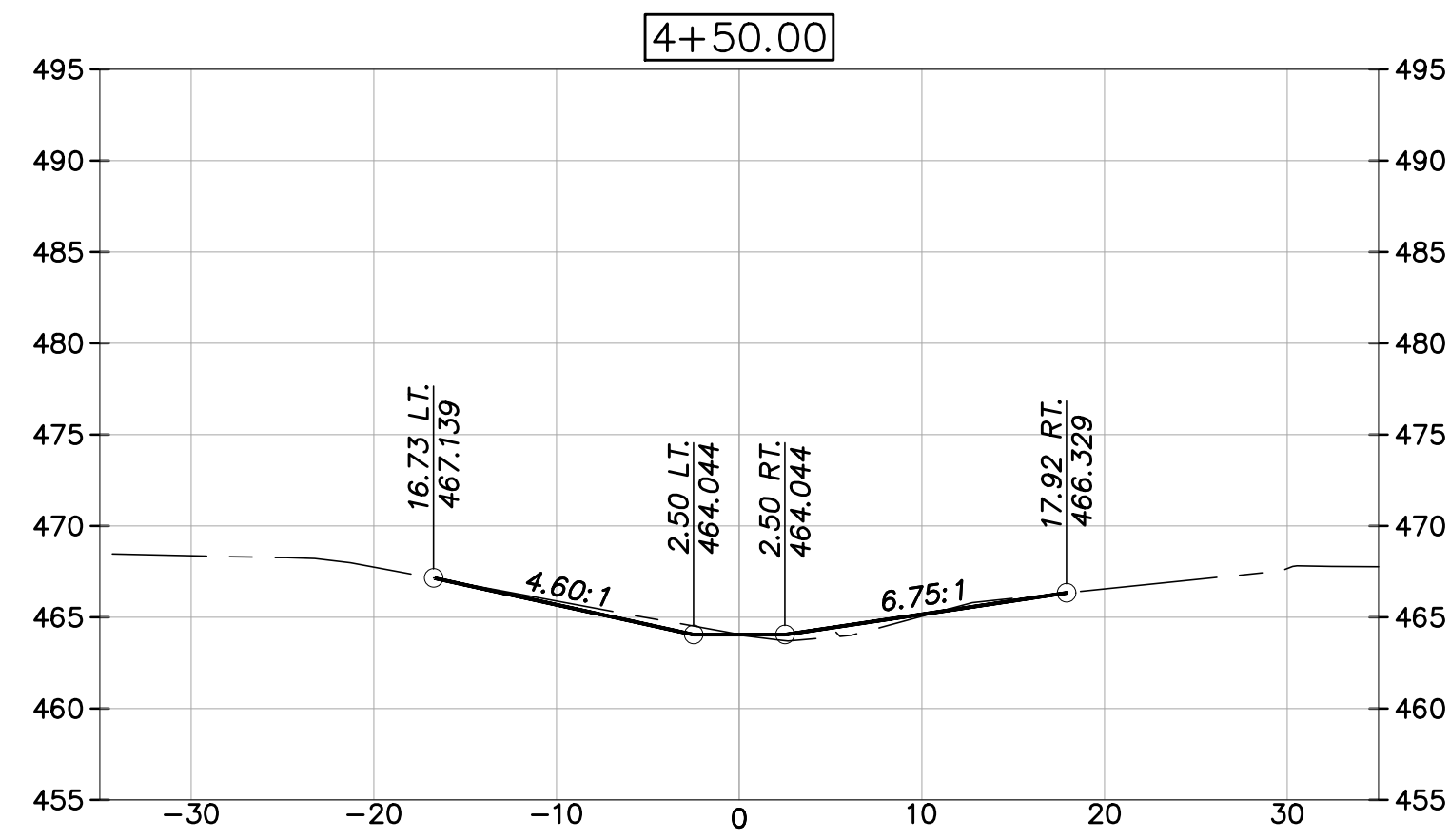
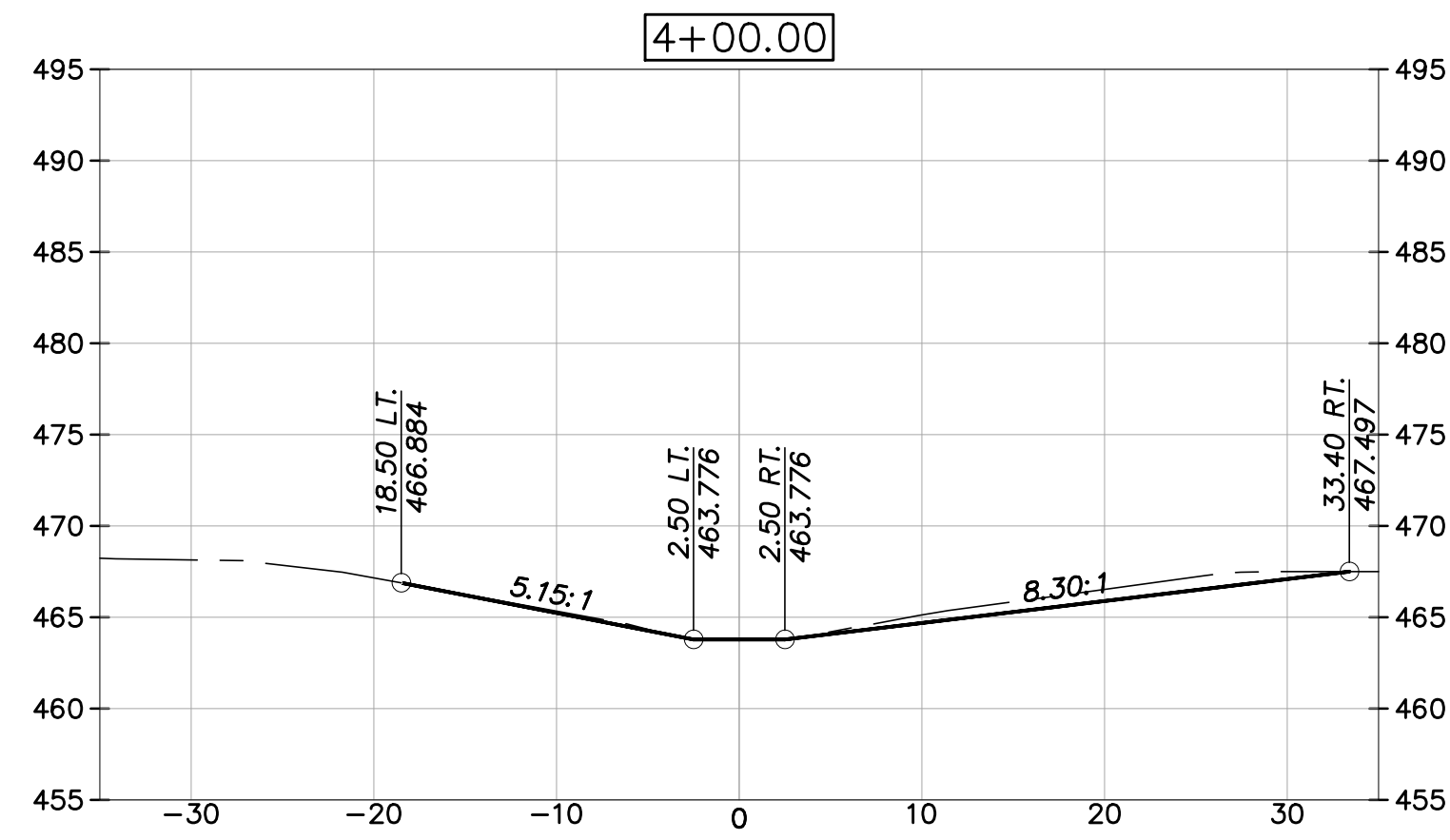
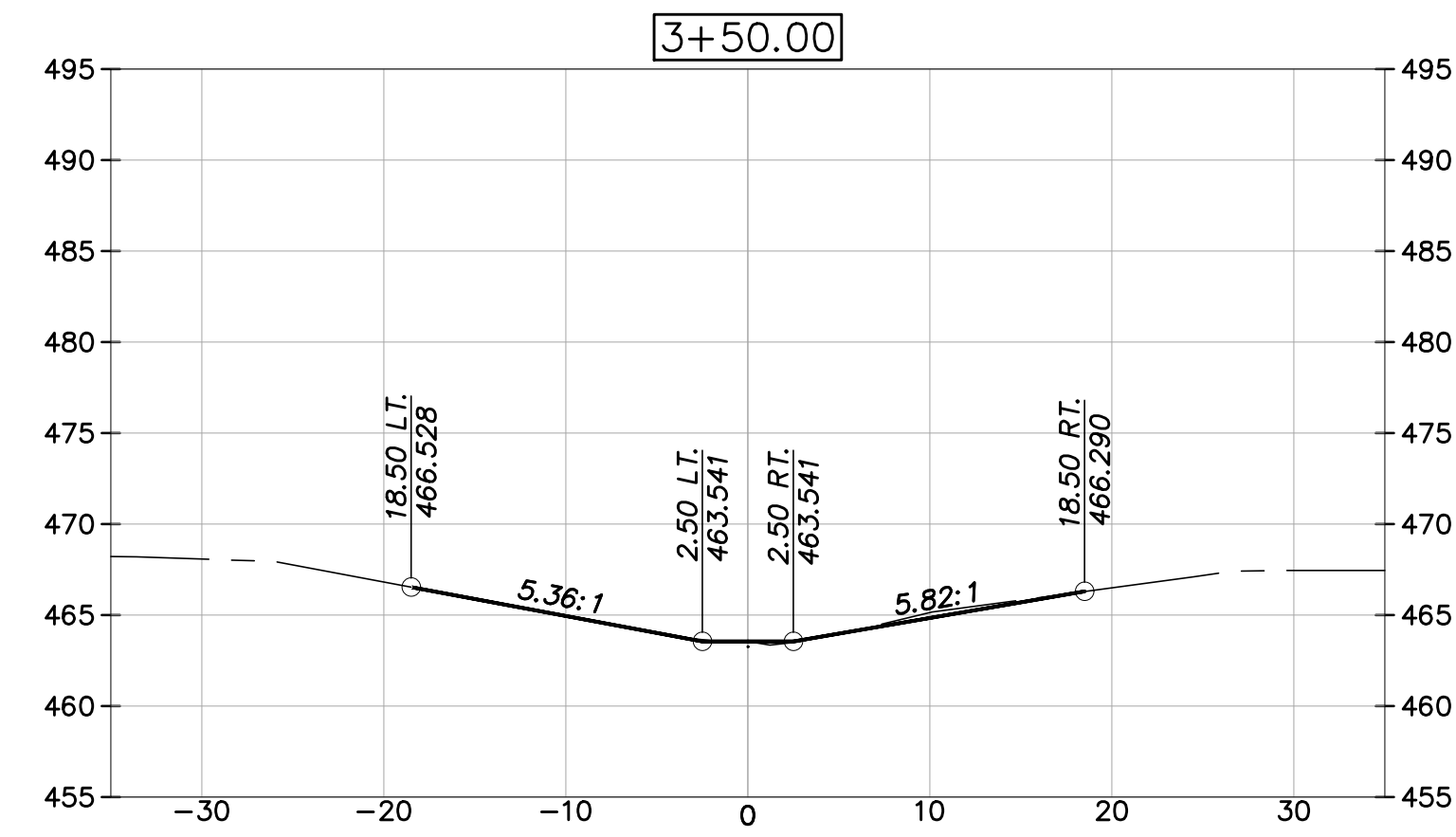
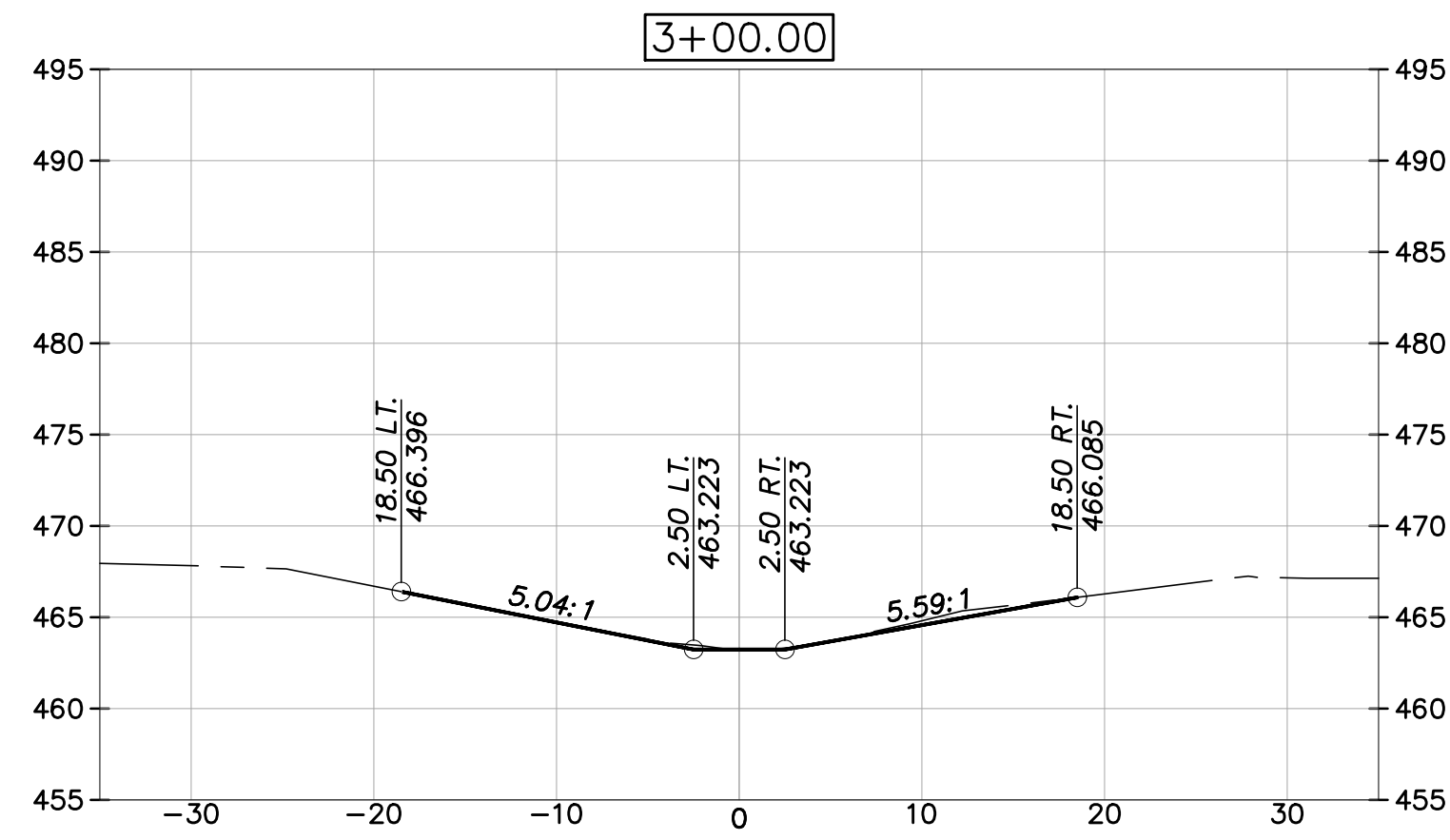
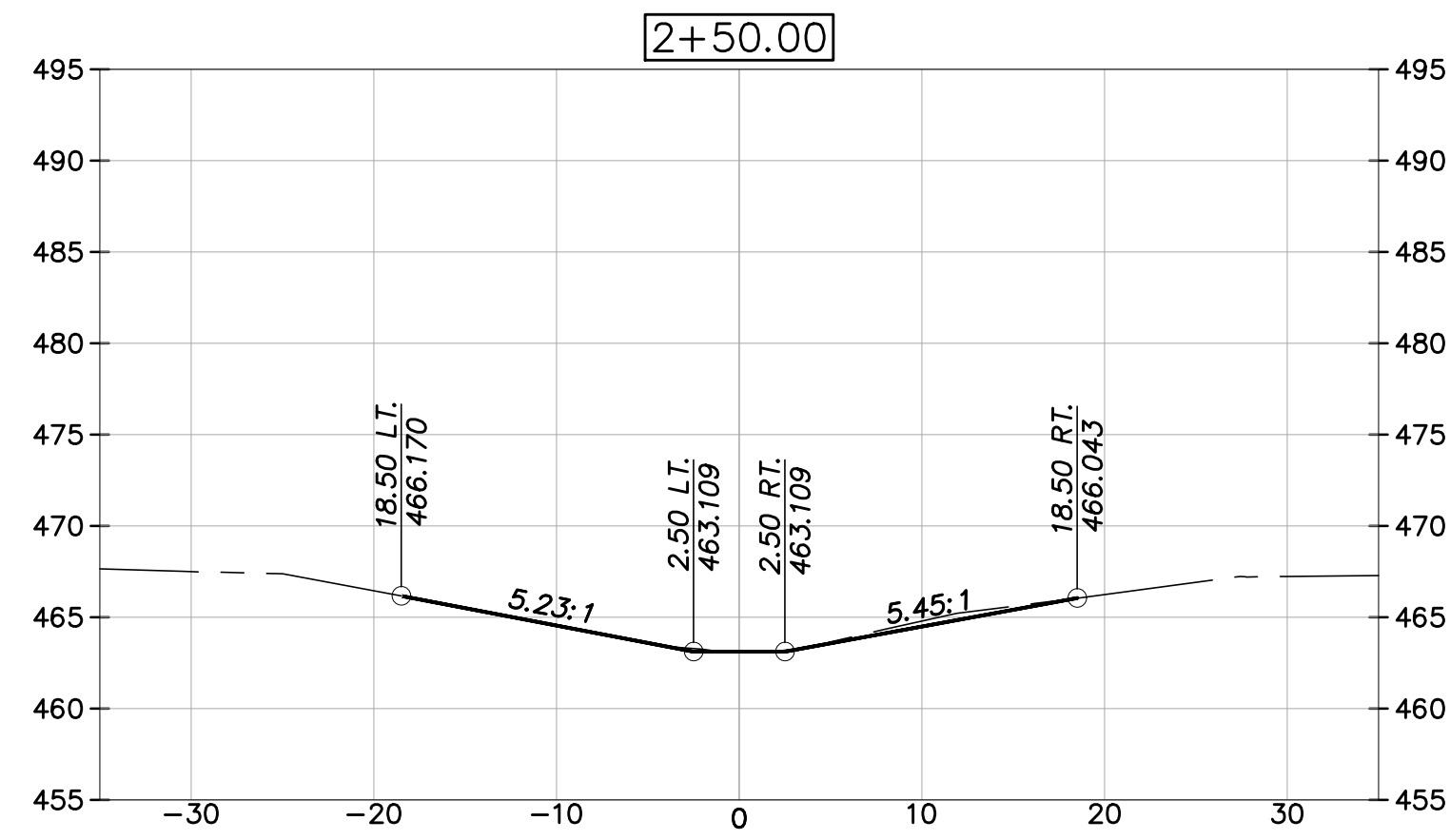
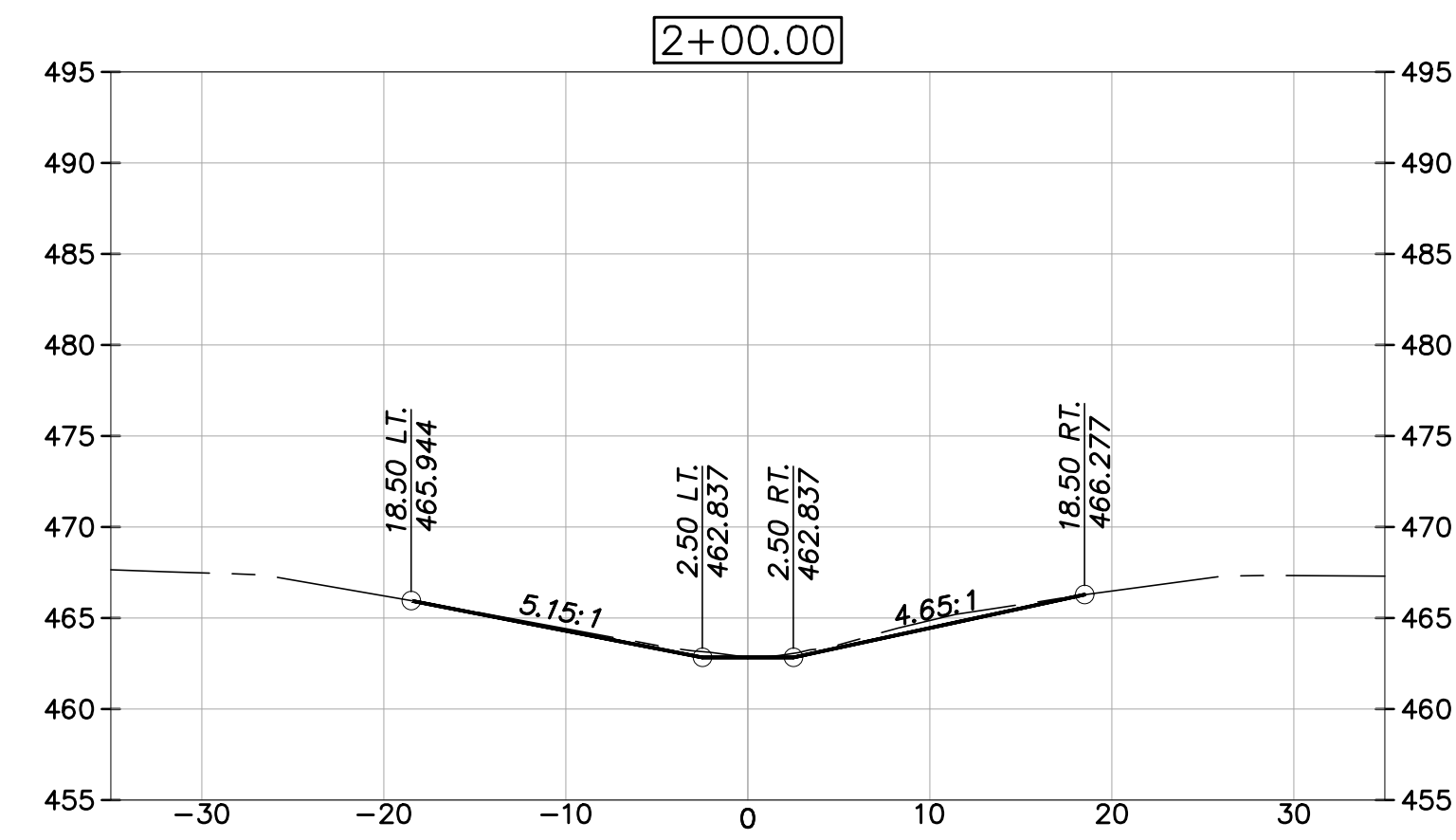
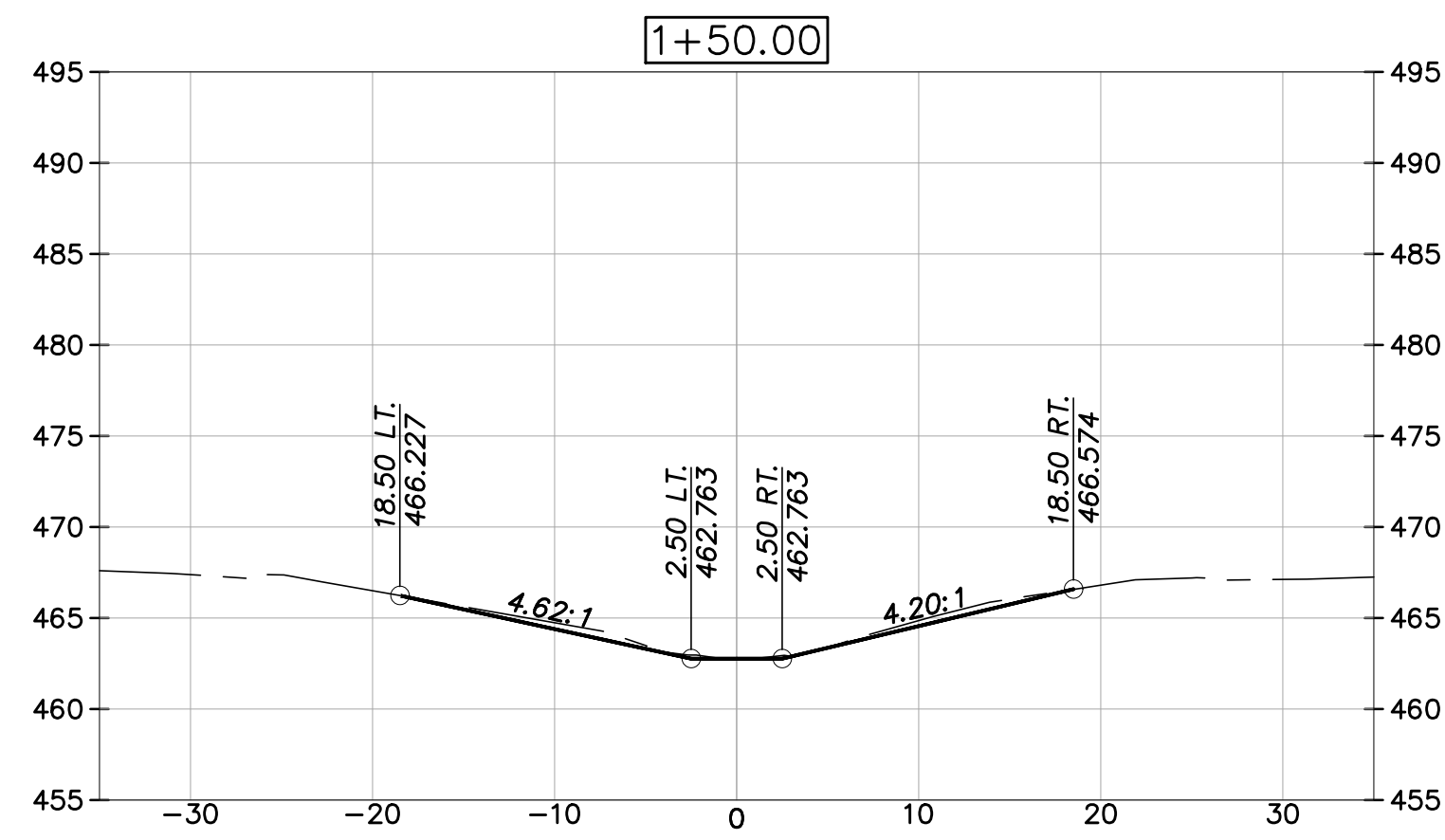
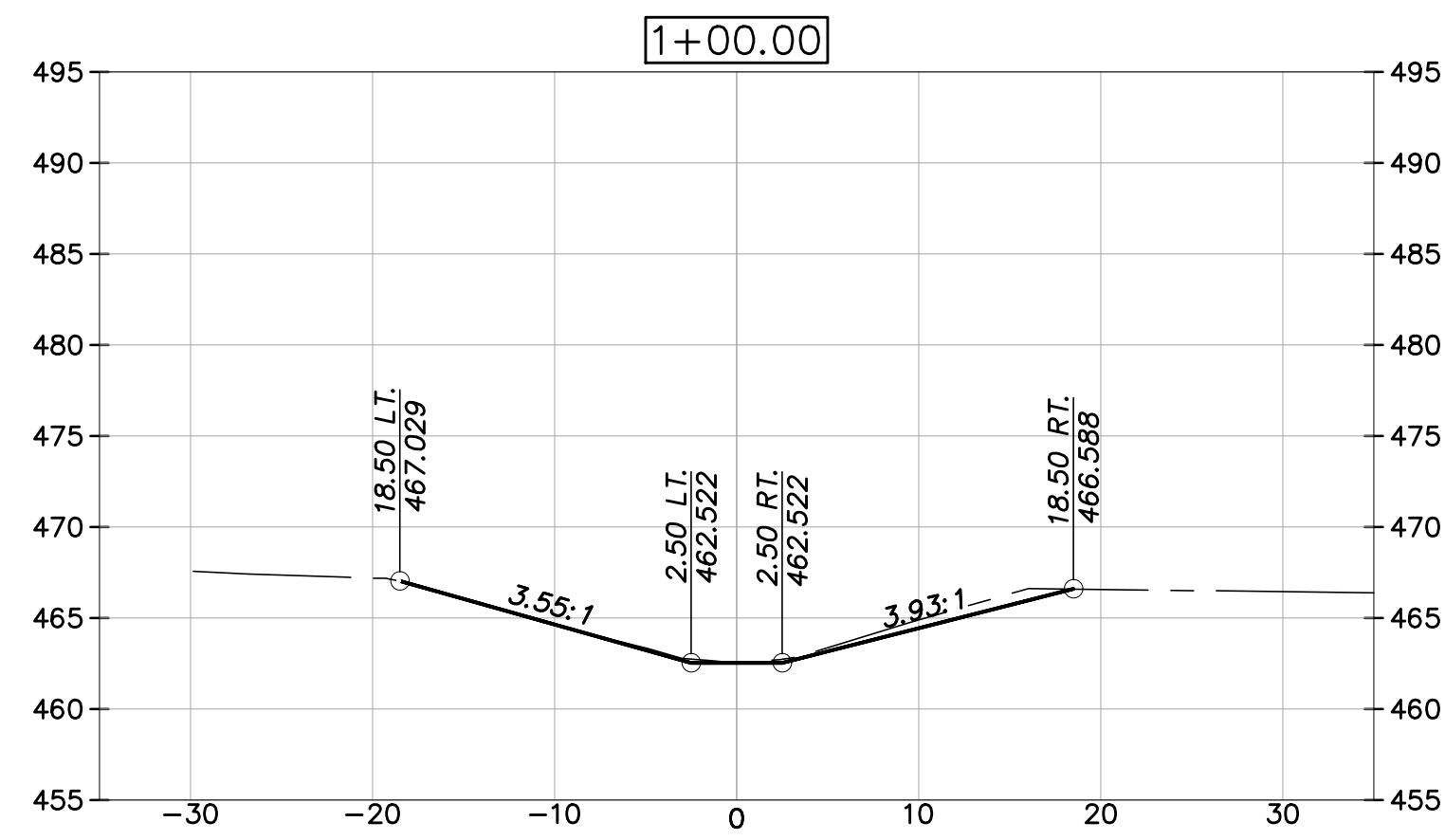
01-18-2018 *Clark W. Gauier, P.E.*

DATE: 01-18-2018 CLARK W. GAUER

DESIGNED	CWG
DRAFTED	JRH
CHECKED	CWG
PROJECT NO.	1-03084
DRAWING NO.	C500

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REV.	DESCRIPTION	DATE



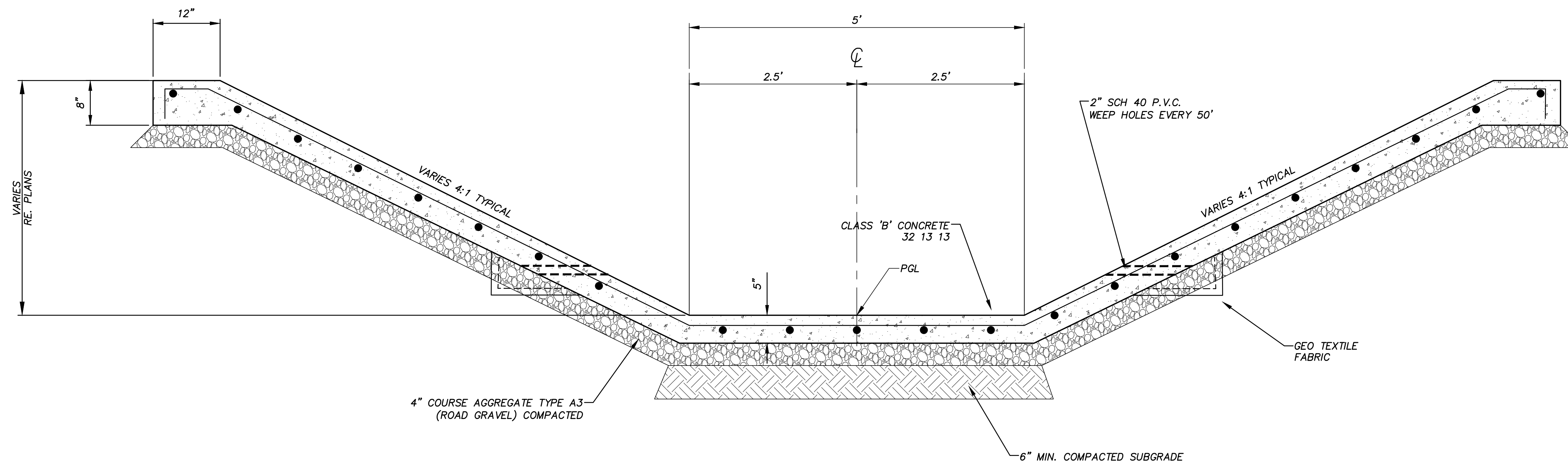
TSTC

DRAINAGE IMPROVEMENTS

AREA 5 - CAMPUS DRAINAGE CHANNEL CROSS SECTIONS

01-18-2018 *Clark W. Gauzer, P.E.*

	DESIGNED	CWG
	DRAFTED	JRH
	CHECKED	CWG
	PROJECT NO.	1-03084
	DRAWING NO.	C501



KEY NOTES

- ① COURSE AGGREGATE TYPE A3: DURABLE PARTICLES OF GRAVEL MIXED WITH APPROVED BINDING MATERIAL; SHALL BE FREE FROM THIN OR ELONGATED PIECES, CLAY LUMPS, SOIL LOAM, OR VEGETABLE MATTER.
- LL - 35 MAX (ASTM D4318-17)
 - PL - TEST USING ASTM D4318-17
 - PI - 12 MAX, 4 MIN (ASTM 4318-17)

GRADATION:

PASSING 1 3/4 IN. SIEVE (45.00 MM)	100%
PASSING 3/4 IN. SIEVE (9.5 MM)	40 TO 80%
PASSING NO. 4 SIEVE (4.75 MM)	25 TO 60%
PASSING NO. 40 SIEVE (425 μm)	15 TO 35%

G1 TYPICAL CHANNEL SECTION - CAMPUS DRIVE

N.T.S.

REV.	DESCRIPTION	DATE

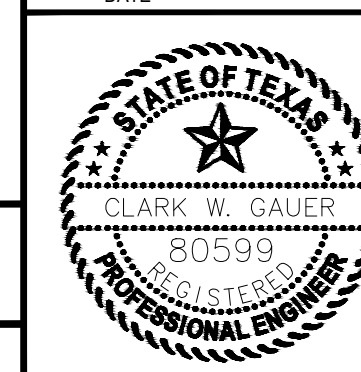


TSTC

DRAINAGE IMPROVEMENTS

AREA 5 - CAMPUS DRAINAGE CHANNEL DETAILS

DATE: 01-18-2018 *Clark W. Gauier, P.E.*
 CLARK W. GAUER



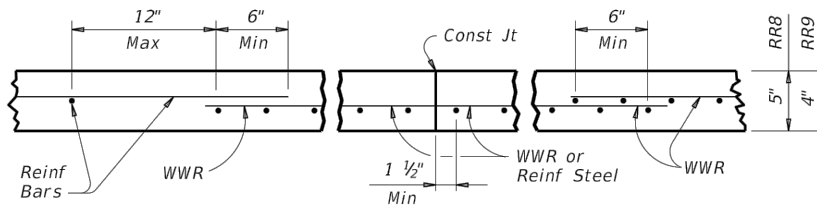
DESIGNED	CWG
DRAFTED	JRH
CHECKED	CWG
PROJECT NO.	1-03084

DRAWING NO.
C502

A1 INTENTIONALLY LEFT BLANK

N.T.S.

EXHIBIT 2



REINFORCEMENT DETAILS

See General Notes for optional sythetic fiber reinforcement.

NOTES:

1. INSTALL CONSTRUCTION JOINTS EXTENDING THE FULL SLANT SLOPE HEIGHT AT INTERVALS OF APPROXIMATELY 20 FEET UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MARKED JOINTS SHALL BE MADE 3/8 INCH DEEP AT 10 FOOT INTERVALS. ALL JOINTS SHALL BE PERPENDICULAR AND AT RIGHT ANGLES TO THE FORMS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

2. PROVIDE #3 REINFORCING BARS AT 18" SPACING C-C. PROVIDE WELDED WIRE REINFORCEMENT (WWR) AS 6x6-D3xD3. COMBINATIONS OF WWR AND REINFORCING BARS MAY BE USED IF BOTH ARE PERMITTED. USE LAP SPLICES OF A MINIMUM 6 INCHES, MEASURE FROM THE TRANSVERSE WIRE OF WWR, AND THE ENDS OF REINFORCING BARS.

CONCRETE REINFORCING AND JOINT DETAIL

SCALE: N.T.S.



T.B.P.E. Registration No. 8053

CLIENT NAME: TSTC

PROJECT NAME: TSTC DRAINAGE IMP.

PROJECT NUMBER: 1-03084

DATE: 03/05/2018

REVISION: ADD. 1

A1