

INTERLOCAL AGREEMENT REGARDING

**RELOCATION OF WATER SYSTEM IMPROVEMENTS
FM 3349 (Southeast Loop Segment 3)**

THE STATE OF TEXAS	§	
	§	KNOW ALL BY THESE PRESENTS:
COUNTY OF WILLIAMSON	§	

THIS INTERLOCAL AGREEMENT REGARDING RELOCATION OF WATER SYSTEM IMPROVEMENTS (“Agreement”) is entered into between Jonah Special Utility District (the “**District**”) and Williamson County, a political subdivision of the State of Texas (the “**County**”). In this Agreement, the District and the County are sometimes individually referred to as “**a Party**” and collectively referred to as “**the Parties**”.

WHEREAS, the County is and has been in the process of designing and acquiring property for the proposed construction of improvements to FM 3349, the location of which is shown on Exhibit “A”, attached hereto (the “County Project”); and

WHEREAS, some of the proposed County Project includes the widening of the right-of-way into easements in which the District’s water system improvements are or will be located; and

WHEREAS, the Parties have determined that, because of the County Project, the relocation of District water lines is necessary (the “Relocation Project”); and

WHEREAS, plans and specifications for the relocation of the District water lines affected by the County Project are attached hereto as Exhibit “B” (the “Plans”); and

WHEREAS, this Agreement sets forth the terms and conditions pursuant to which the County will relocate the District’s waterlines in certain segments of the County Project.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual promises and agreements of the Parties contained in this Agreement, the Parties agree as follows:

**I.
GENERAL STATEMENT**

1.01 General. The purpose of this Agreement is to provide for the County’s relocation and construction of the Relocation Project caused by the County’s construction of the County Project.

1.02 County Relocation of Waterlines. The County must, at its own expense, pay all costs related to the Relocation Project in accordance with the Plans, subject only to certain

betterment Easement Costs reimbursement as detailed below. As stated below, the County must reimburse the District for all costs related to the design of the Plans.

1.03 County to Obtain Easements. The County must acquire at its own expense all necessary easements required by the District for the County Project and the Relocation Project as shown in the Plans. This agreement specifically allows the County's right-of-way attorneys to acquire easements by eminent domain, if necessary, on behalf of the District. The form of the easement is attached hereto as Exhibit "C". The District is not responsible for costs associated with easement acquisition for the County Project or Relocation Project, other than for newly established easement area shares as identified below. The easements' locations and widths shall be agreed upon by the District and the County, and any easements which are not acquired directly in the name of the District as Grantee shall be assigned by the County to the District upon completion of construction of the Relocation Project.

The parties acknowledge that County has been requested to acquire certain newly established easement areas in addition to replacement widths for what County Project conflicted locations are currently existing, which results in a betterment to District. County shall be responsible for 87% of the total documented easement acquisition purchase prices or condemnation acquisition values, and District shall be responsible for 13% of the documented easement acquisition purchase prices or condemnation acquisition values. The District's 13% share of the Easement Costs will be due and owing thirty (30) days after the District has completed and accepted the completed Relocation Project, or upon final completion of acquisition of the easements, whichever occurs sooner.

1.04 District Obligations. The District is responsible for the design of the Plans, including specifications. The District will submit invoices for design costs to the County, and the County must reimburse 51.60% of District's costs pursuant to the Prompt Payment Act, Chapter 2251 of the Texas Government Code.

1.05 Continuation of Service. The County agrees that both the County Project and the Relocation Project must be undertaken so as to minimize any disruption of water service to existing customers of the District and will not result in the prolonged loss of water service to any such customers.

II. CONSTRUCTION OF PROJECT

2.01 General. The Parties mutually acknowledge and agree that the County will, at its own expense, construct all physical improvements that constitute the County Project and the Relocation Project. The County and the District agree that the County is responsible for 51.60% of the construction costs of the Relocation Project (estimated at \$3,660,705.28) and the District is responsible for 48.40% of the construction costs of the Relocation Project (estimated at \$3,433,877.26). Collectively, these shares are referred to as the Construction Costs. All design costs are included within the Construction Costs.

2.02 Payment and Maintenance. The District's 48.40% share of the Construction Costs will be due and payable to the County 30 days after the District provides written acceptance of the completed Relocation Project. After acceptance, the District will own and maintain the facilities included within the Relocation Project.

2.03 Construction Plans. The District must submit the Plans related to the Relocation Project, and any changes or modifications thereto, to the County for review and approval prior to the County commencing construction. The Relocation Project will be jointly bid and constructed as part of the County Project, in accordance with the Plans.

2.04 Inspection. The District may inspect the relocation of the waterlines during construction. If the District's inspectors determine that the construction by the County is not in accordance with the approved Plans and upon receipt of such notification from the District, the County must cease construction until the deficiency can be identified and a corrective plan of construction implemented with the written agreement of the District.

2.05 Insurance, Bonds, Warranties and Construction Permits. The County must require the contractor for the County Project to name the District as an additional insured on any policies related to the County Project or Relocation Project. The County must require the contractor to provide performance bonds, payment bonds and maintenance bonds in favor of the District for the County Project and Relocation Project in amounts satisfactory to the District. The County must transfer any warranties for the Relocation Project to the District upon final completion and the District's written acceptance of the Relocation Project. The County and/or its contractor or agents shall be solely responsible for obtaining all regulatory permits or other approvals, including required specifically from Union Pacific Railroad, which are required to carry out construction of the County Project and Relocation Project in accordance with the Plans, however, the District shall promptly provide any reasonable assistance or information, at no cost to District, requested to assist with any permit submission process.

2.06 Other Costs. The County must reimburse the District for 51.60% of all invoice documented and submitted costs incurred by the District for inspections, permitting, engineering and legal services related to the Relocation Project, in accordance with the Texas Prompt Payment Act.

2.07 As-Built Drawings. Upon completion of construction of the Relocation Project, County will provide District with the as-built drawings of the Relocation Project.

III. DISPUTES

3.01 Material Breach; Notice and Opportunity to Cure.

(a) In the event that one Party believes that another Party has materially breached one of the provisions of this Agreement, the non-defaulting Party must make written demand to cure and give the defaulting Party up to 30 days to cure such material breach or, if the curative action cannot reasonably be completed within 30 days, the defaulting Party must commence the curative action within 30 days and thereafter diligently pursue the curative action to completion. Notwithstanding the foregoing, any matters specified in the default notice that may be cured solely

by the payment of money must be cured within 10 days after receipt of the notice. This applicable time period must pass before the non-defaulting Party may initiate any remedies available to the non-defaulting party due to such breach.

(b) Any non-defaulting Party must mitigate direct or consequential damage arising from any breach or default to the extent reasonably possible under the circumstances.

(c) The Parties agree that they will negotiate in good faith to resolve any disputes and may engage in non-binding mediation, arbitration or other alternative dispute resolution methods as recommended by the laws of the State of Texas.

3.02 Equitable Relief. In recognition that failure in the performance of the Parties' respective obligations could not be adequately compensated in money damages alone, the Parties agree that after providing notice and an opportunity to cure in accordance with Section 3.01 above, the non-defaulting Party may request any court, agency or other governmental authority of appropriate jurisdiction to grant any and all remedies which are appropriate to assure conformance to the provisions of this Agreement. The defaulting Party will be liable to the other for all costs actually incurred in pursuing such remedies and for any penalties or fines as a result of the failure to comply with the terms including, without limitation, the right to obtain a writ of mandamus or an injunction requiring the governing body of the defaulting Party to levy and collect rates and charges or other revenues sufficient to pay the amounts owed under this Agreement.

3.03 Agreement's Remedies Not Exclusive. The provisions of this Agreement providing remedies in the event of a Party's breach are not intended to be exclusive remedies. The Parties retain, except to the extent released or waived by the express terms of this Agreement, all rights at law and in equity to enforce the terms of this Agreement.

IV. GENERAL PROVISIONS

4.01 Authority. This Agreement is made in part under the authority conferred in Chapter 791, *Texas Government Code*.

4.02 Severability. The provisions of this Agreement are severable and, if any provision of this Agreement is held to be invalid for any reason by a court or agency of competent jurisdiction, the remainder of this Agreement will not be affected and this Agreement will be construed as if the invalid portion had never been contained herein.

4.03 Payments from Current Revenues. Any payments required to be made by a Party under this Agreement must be paid from current revenues available to the Party for such purpose.

4.04 Cooperation. The Parties agree to cooperate at all times in good faith to effectuate the purposes and intent of this Agreement.

4.05 Effective Date. This Agreement is effective from the date of execution by the authorized representative of each Party.

4.06 Entire Agreement. This Agreement contains the entire agreement of the Parties regarding the subject matter hereof and supersedes all prior or contemporaneous understandings or representations, whether oral or written, regarding the subject matter and only relates to those portions of the County Project or Relocation Project shown in the Plans.

4.07 Amendments. Any amendment of this Agreement must be in writing and will be effective if signed by the authorized representatives of the Parties.

4.08 Applicable Law; Venue. This Agreement will be construed in accordance with Texas law. Venue for any action arising hereunder will be in Williamson County, Texas.

4.09 Notices. Any notices given under this Agreement will be effective if (i) forwarded to a Party by hand-delivery; (ii) transmitted to a Party by confirmed fax machine; or (iii) deposited with the U.S. Postal Service, postage prepaid, certified, to the address of the Party indicated below:

DISTRICT:

Jonah Water Special Utility District
4050 FM 1660
Hutto, Texas 78634
Attn: General Manager
Telephone: (512) 759-2983

With a copy to:

John Carlton
The Carlton Law Firm, P.L.L.C.
4301 Westbank Drive, Suite B-130
Austin, Texas 78746
Facsimile: (512) 900-2855
john@carltonlawaustin.com

COUNTY:

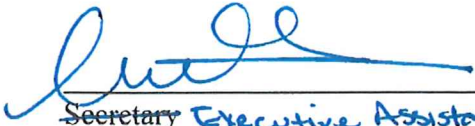
Williamson County
710 Main Street, Suite 101
Georgetown, Texas 78626
Attn: County Auditor
Telephone: (512) 943-1577

4.10 Counterparts; Effect of Partial Execution. This Agreement may be executed simultaneously in multiple counterparts, each of which will be deemed an original, but all of which will constitute the same instrument.

4.11 Authority. Each Party represents and warrants that it has the full right, power and authority to execute this Agreement.

(SIGNATURES ON THE FOLLOWING PAGE)

ATTEST:


Secretary Executive Assistant

JONAH WATER SPECIAL UTILITY
DISTRICT:

By: 

Printed Name: Bill Brown

Title: General Manager

Date: June 13, 2023

ATTEST:

Nancy Rister, County Clerk

WILLIAMSON COUNTY:

By: _____
Bill Gravell, Jr., County Judge

Date: _____

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS

REGISTERED ACCESSIBILITY SPECIALIST
(RAS) INSPECTION IS REQUIRED

WILLIAMSON COUNTY

PRECINCT NUMBER 4

FM 3349 AT US 79

NET LENGTH OF NEW ROADWAY = 34,976.06 FT (6.624 MILES)
NET LENGTH OF NEW BRIDGE = 3,923.00 FT (0.743 MILES)
NET LENGTH OF PROJECT = 38,899.06 FT (7.367 MILES)

LIMITS: FM 3349 FROM NORTH OF CR 404 TO CR 395

CSJ: 3486-01-008, ETC

FOR THE CONSTRUCTION OF A TWO LANE DIVIDED ROADWAY CONSISTING OF GRADING, FLEX BASE, ASPHALT PAVEMENT, RETAINING WALLS, BRIDGE STRUCTURES, STORM SEWERS, CULVERTS, EROSION CONTROL, SIGNING AND PAVEMENT MARKINGS.

END CSJ 3486-01-008
C FM3349
STA 361+97.69
END PROJECT
B NBFR
STA 1567+02.58

END CONSTRUCTION
B CR101
STA 35+50.00

END CONSTRUCTION
B SBFR
STA 2543+30.01
BEGIN CONSTRUCTION
C CR101
STA 34+42.85

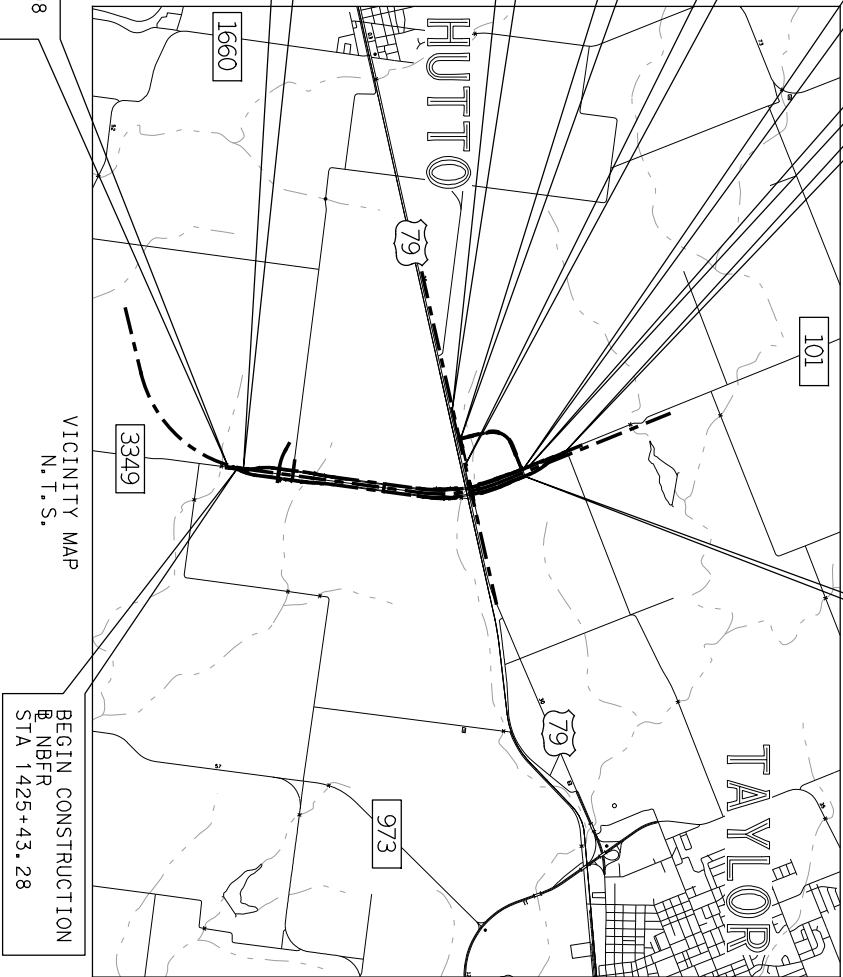
END CSJ 0204-02-034
END CONSTRUCTION
C US79
STA 702+40.00

BEGIN CSJ 0914-05-211
BEGIN CONSTRUCTION
B JUG
STA 100+63.00

BEGIN CSJ 0204-02-034
BEGIN CONSTRUCTION
C US79
STA 678+10.00

END CONSTRUCTION
B TRANSITION
STA 14+30.93
BEGIN CONSTRUCTION
C SBFR
STA 2424+35.31

BEGIN CSJ 3486-01-008
C FM3349
STA 418+23.11
BEGIN PROJECT
B TRANSITION
STA 10+75.00



EXCEPTIONS: NONE
EQUATIONS: B TRANSITION STA 17+00.00, 18' LT=B SBFR STA 2423+37.73
B SBFR 2543+18.00, 12.60' RT = C CR101 STA 34+30.84
B TRANSITION STA 14+28.60, 39.58' RT = B NBFR STA 1425+43.28
RAILROAD CROSSING: UPRR
WATERSHED: BRUSHY CREEK
AREA OF CONSTRUCTION DISTURBANCE: 136 ACRES

PREPARED BY:
HDR ENGINEERING, INC.
TBPE FIRM NO. F-754

HDR Engineering, Inc.
710 Hesters Crossing, Suite 150
Round Rock, Texas 78661
Texas Registered Engineering Firm F-754

PHILIP A. FULTON
PROJECT MANAGER

DATE

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	HIGHWAY NO.
6		FM 3349
STATE	DISTRICT	COUNTY
TEXAS	AUS	WILLIAMSON
CONTROL	SECTION	JOB
3486	01	008, ETC
		1

ROADWAY	CLASSIFICATION	DESIGN SPEED
FM 3349	COLLECTOR	60 MPH
JUG HANDLE	COLLECTOR	45 MPH *
US 79	PRINCIPAL ARTERIAL	65 MPH
UTURN		20 MPH

* LOW SPEED URBAN CRITERIA

ROADWAY	ADT (2024)	ADT (2044)
FM 3349 SBFR	2,130	4,550
FM 3349 NBFR	2,130	4,450
JUGHANDLE ROAD	2,920	4,100



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APPROVED BY:
WILLIAMSON COUNTY

BILL GRAVELL JR
WILLIAMSON COUNTY JUDGE

RUSS BOLES
WILLIAMSON COUNTY COMMISSIONER
PRECINCT 4

APPROVED BY:
HNTB CORPORATION

NAME, PE
ROAD BOND MANAGEMENT TEAM

DATE

PRELIMINARY--FOR INFORMATION ONLY

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF INTERIM REVIEW AND IS
NOT TO BE USED FOR CONSTRUCTION,
BIDDING, OR PERMITTING PURPOSES.

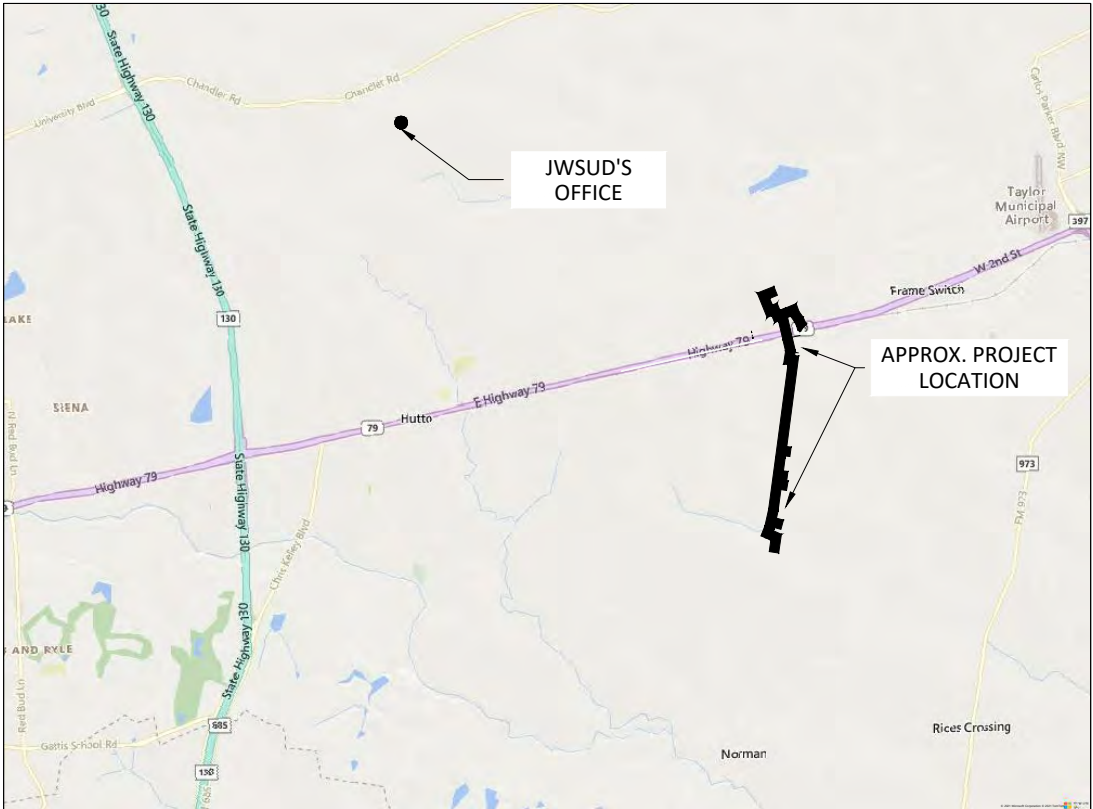
Supervised By: PHILIP A. FULTON
P.E. Serial No. 73469
Date: 9/3/2021



2021 - FM 3349, UTILITY ADJUSTMENTS

GENERAL CONSTRUCTION NOTES

1. THESE PLANS DO NOT INDICATE DETAILED TOPOGRAPHY, AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE PROJECT BEFORE SUBMITTING BIDS TO DETERMINE LOCATIONS OF VARIOUS TOPOGRAPHIC FEATURES THAT COULD EFFECT CONSTRUCTION METHODS
2. THE CONTRACTOR SHALL NOTIFY
2.1. THE TxDOT HIGHWAY MAINTENANCE FOREMAN
2.2. RAILWAY SUPERINTENDENT
2.3. COUNTY COMMISSIONER
2.4. APPLICABLE CITY
2.5. APPLICABLE UTILITY COMPANIES
48 HOURS PRIOR TO STARTING CONSTRUCTION ON ANY HIGHWAY OR RAILROAD AND IN THE VICINITY OF ANY EXISTING UTILITIES, AND SHALL BE SUBJECT TO INSPECTION AND COMPLIANCE WITH THE ABOVE AUTHORITIES.
3. THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D.
4. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE/NATIONAL SANITATION FOUNDATION (ANSI/NSF) STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.
5. NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF POTABLE WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY.
6. WATER TRANSMISSION AND DISTRIBUTION LINES MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
7. THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION.
8. COORDINATE ANY PLANNED INTERRUPTIONS TO SERVICE WITH THE APPLICABLE UTILITY PURVEYOR A MINIMUM 48 HOURS IN ADVANCE
9. ANY AND ALL OBJECTS THAT BECOME DAMAGED AND/OR DESTROYED BY THE CONSTRUCTION PROCESS SHALL BE REPLACED OR RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED JUST PRIOR TO THE INCIDENT OR INCIDENTS.
10. PROPERTY OWNERS SHALL HAVE ACCESS TO THEIR RESPECTED PROPERTY DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL NOTIFY THE APPLICABLE PROPERTY OWNER IF PROPERTY ACCESS IS TO BE DENIED FOR ANY PERIOD OF TIME. THE CONTRACTOR SHALL TAKE STEPS TO ASSURE THAT ACCESS IS ACHIEVED IN THE PERIODS OF THE CONTRACTOR'S ABSENCE.
11. TRAFFIC CONTROL PLANS SHALL BE IN ACCORDANCE WITH TCP(1-1)-1.2 THROUGH TCP(1-6)-1.2; SEE [HTTPS://WWW.DOT.STATE.TX.US/INSDOTDOT/ORGCHART/CMD/CSEVE/STANDARD/TOC.HTM](https://www.dot.state.tx.us/insdotdot/ORGCHART/CMD/CSEVE/STANDARD/TOC.HTM) FOR SHEETS.



PROJECT SPECIFIC NOTES:

1. SCHEDULE ALL PLANNED INTERRUPTIONS TO WATER SERVICE WITH JONAH WATER S.U.D. AT LEAST 48 HOURS IN ADVANCE.
2. FIELD VERIFY DEPTH AND LOCATIONS OF ALL EXISTING APPLICABLE UTILITIES.
3. COORDINATE AND GIVE PROPER NOTICE TO OWNER OF POSSIBLE INTERRUPTIONS TO SERVICE.
4. ALL COMPONENTS OF THIS PROJECT SHALL BE INSTALLED PER THE MANUFACTURE'S RECOMMENDATIONS.
5. ALL MATERIAL TO BE USED SHALL COMPLY WITH THE BUY AMERICA PROVISIONS OF 23 U.S.C. § 313, 23 CFR 635.410, AS AMENDED, AND THE STEEL AND IRON PREFERENCE PROVISIONS OF TEXAS TRANSPORTATION CODE § 223.045 AND, WHEN PRODUCTS THAT ARE COMPOSED PREDOMINATELY OF STEEL AND/OR IRON ARE INCORPORATED INTO THE PERMANENT INSTALLATION OF THE UTILITY FACILITY, USE DOMESTICALLY MANUFACTURED PRODUCTS. TxDOT FORM 1818 (MATERIAL STATEMENT), ALONG WITH ALL REQUIRED ATTACHMENTS, MUST BE SUBMITTED, PRIOR TO THE COMMENCEMENT OF THE ADJUSTMENT, REMOVAL, AND RELOCATION OF THE FACILITY, AS EVIDENCE OF COMPLIANCE WITH THE AFOREMENTIONED PROVISIONS.

SHEET INDEX:

G1	GENERAL NOTES	17	WATERLINE ALIGN. "A"; STA. A-126+50 TO A-134+50
G2	TAKE OFF	18	WATERLINE ALIGN. "A"; STA. A-134+50 TO A-142+50
K1	KEY MAP	19	WATERLINE ALIGN. "A"; STA. A-142+50 TO A-146+00
1	WATERLINE ALIGN. "A"; STA. A-0+00 TO A-7+50	20	WATERLINE ALIGN. "B"; STA. B-0+00 TO B-6+50
2	WATERLINE ALIGN. "A"; STA. A-7+50 TO A-15+50	21	WATERLINE ALIGN. "B"; STA. B-6+50 TO B-13+00
3	WATERLINE ALIGN. "A"; STA. A-15+00 TO A-23+50	22	WATERLINE ALIGN. "C"; STA. C-0+00 TO C-6+00
4	WATERLINE ALIGN. "A"; STA. A-23+50 TO A-31+50	23	WATERLINE ALIGN. "D"; STA. D-0+00 TO D-5+50
5	WATERLINE ALIGN. "A"; STA. A-31+50 TO A-39+50	24	WATERLINE ALIGN. "E"; STA. E-0+00 TO E-4+84
6	WATERLINE ALIGN. "A"; STA. A-39+50 TO A-47+50	25	WATERLINE ALIGN. "G"; STA. G-0+00 TO G-4+27
7	WATERLINE ALIGN. "A"; STA. A-47+50 TO A-55+50	26	WATERLINE ALIGN. "H"; STA. H-0+00 TO H-6+50
8	WATERLINE ALIGN. "A"; STA. A-55+50 TO A-63+50	27	WATERLINE ALIGN. "H"; STA. H-6+50 TO C-1+4+50
9	WATERLINE ALIGN. "A"; STA. A-63+50 TO A-71+50	28	WATERLINE ALIGN. "H"; STA. H-14+50 TO C-1+7+50
10	WATERLINE ALIGN. "A"; STA. A-71+50 TO A-79+50	28.1	WATERLINE ALIGN. "I"; STA. I-00+00 TO I-02+50
11	WATERLINE ALIGN. "A"; STA. A-79+50 TO A-87+50	29	HWY 79 / FM 3349 INTERSECTION; PIPELINE ABANDONMENT
12	WATERLINE ALIGN. "A"; STA. A-87+50 TO A-94+50	30	STANDARD DETAILS
13	WATERLINE ALIGN. "A"; STA. A-94+50 TO A-103+50	31	STANDARD DETAILS
14	WATERLINE ALIGN. "A"; STA. A-103+50 TO A-111+50	32	STANDARD DETAILS
15	WATERLINE ALIGN. "A"; STA. A-111+50 TO A-118+50	33	STANDARD DETAILS
16	WATERLINE ALIGN. "A"; STA. A-118+50 TO A-126+50	34	TCP / EROSION CONTROL DETAIL



APPROVED

CIVIL ENGINEER

12/16/2021

DATE APPROVED



T.B.P.E. F-16387
P.O. Box 24189
Waco, TX 76702 PH. 254-744-3439
MILES@CAYOTECON.COM



OWNER

11/16/2021

DATE APPROVED

JONAH WATER S.U.D.
2021 - FM 3349, UTILITY ADJUSTMENTS

General notes:

1) The proposed roadway, drainage, existing utilities shown on these plans were received by Jonah Water S.U.D. from thier represintitives.
It shall be the Contractor's responsibility to familiarize themselves with the County's project documents, so that any discrepancies can be avoided.

2)Various portions of the work shall be performed on private property as shown in the drawings. The owner has or is obtaining right of entry permission, permanent easement, or permanent right of way for all portions of private property requiring work (in addition to areas where there are pre-existing permanent easements), unless noted otherwise in project special provisions. The contractor shall not access or disturb private property without giving notice to each private property owner at least one week prior to construction activities on their property, including an estimated duration that their property will be affected. Every effort shall be made by the contractor to schedule work to minimize disruption to property owners. Upon completion of work (or phases of work), private properties shall be restored to existing or better conditions, than that of those that existed just prior to the beginning of construction.
a)Refer to project Property Owner line list for tract information and easement statues.

3)The locations of underground utilities as shown hereon are based on above ground structures, record drawings, or information from other entities provided to the engineer. Locations of underground utilities structures may vary from locations shown hereon. Additional buried utilities structures may be encountered. Before excavations are begun, the following entities shall be contacted for verification of utility type and field locations.
a. Gas, telephone, electric, fiber optic, oil, water, sanitary sewer: call Texas 811 at 800-344-8377
b. Water: call the Jonah Water

4)The Contractor shall pthohle the existing utilities lines ahead of the pipeline installation to verify adequate room is available for the trenching of the proposed lines. If the proposed trench for the water lines and the existing location of the utility lines are to become in conflict, the Contractor shall at his cost provide excavation and possible shoring up of the conflicting utilities, to allow for the trenching of the proposed water lines. The Contractor protect the existing utility lines at their expense and shall place the line back into its original alignment once the trench is being backfilled. It will be imperative that the contractor shall compact the trench so to not allow excessive settlement that could damage the exiting utility line.
a)If shoring of lines is required, the Contractor shall notify the utility's owner of the process that is to take place at least 72 hours in advance to schedule inspections and assistance from the utility's owner. No separate payment, for the costs associated with this process, shall be made and shall be subsidiary to the other applicable costs.

4)Prior to beginning any construction, the contractor shall verify horizontal and vertical locations of all known existing utilities which will either be connected to, adjacent, or crossed, if there are any conflicts between proposed and existing utilities, or if the existing utilities are in any way different from what is shown on the drawings. It shall be the contractor's responsibility to notify the engineer before proceeding with any construction. The contractor shall work with the engineer in resolving such conflicts before proceeding with work.

5)When unlocated or incorrectly located underground piping, or a break located in the line, or other utilities and services are encountered during work operations, notify the applicable utility company immediately to obtain procedure directions. Cooperate with the applicable utility company in maintaining active services in operation.

6)Contractor shall take all due precautions to protect existing facilities and features from damage during construction, including all features of private property (trees, landscaping irrigation, fences, etc.) and franchise utilities. Any damage to existing features that are not called to be removed shall be repaired or restored to conditions equal to or greater than those just prior to the beginning of construction, by the Contractor, at no additional cost to the owner.

7)Any work completed without prior written authorization which is not included in these plans and specifications will not be compensated by the Owner.

8)Protect mailboxes and other features located within the R.O.W. If features conflict with proposed construction, contractor shall remove, protect, and reinstall features accordingly (temporary mailboxes may be required). Protecting installed features is subsidiary to other bid items.

9)Contractor shall not store materials, equipment or other construction items on adjacent properties or ROW without the prior written consent of the property owner, the City, County and/or State (for within ROW).

10)The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit.

11)The contractor shall protect all survey control during construction and be responsible for damaged control.

12)The contractor is responsible for performing all construction staking.

13)Contractor shall be responsible for protecting all property pins for the duration of construction. Any pins disturbed during construction shall be replaced by the contractor at no additional cost to the owner.

14)Contractor shall always maintain a clean construction site free from trash, litter, blowing debris, and silt runoff.

15)The contractor shall keep accurate records of all construction that deviates from the plans. The contractor shall furnish the Owner accurate "Record Drawings" following completion of all construction.

16)When construction is being carried out within easements, the contractor shall confine their work within the permanent and any temporary easements. Prior to final acceptance, the contractor shall be responsible for removing all trash and debris within the permanent and temporary easements. Clean-up shall be to the satisfaction of the property owner and or Owner.

17)Contractor to trench in such a manner as to separate topsoil, stockpile, and place on top layer of trench.

18)When work requires a permit, the contractor shall follow the provisions of the permit.

19)Pre-Construction Site Video: Before the start of any construction. The Project shall be video recorded by the Contractor with one copy submitted to the Owner's Inspector. A pre-site video is to provide accurate documentation of the existing conditions.

20)Power Pole Bracing: Contractors should be advised that there are existing overhead utility poles along the project. Contractors should further be advised that if the distance from the outside face of a utility trench to the face of a utility pole is less than 5 feet, said utility pole is subject to bracing, based on a determination made by utility pole owner. Costs incurred by Contractor for bracing of these utility poles is made through a separate bid item, no additional payment shall be made. It is advisable for the Contractor to review the construction documents and visit the construction site to determine potential impacts.

21)Holiday Work: Contractors will not be allowed to perform work on Owner recognized holidays.
a)Weekend Work: Contractors are required to notify the Owner/Project's Inspector 48 hours in advance to request weekend work. Submitted requests do not grant automatic acceptance of request.

b)All work installed without holiday/weekend approval will be subject to be uncovered for proper inspection, at no additional cost to the Owner/Project.

22)The contractor shall be responsible for training his employees and subcontractors in the recognition and avoidance of unsafe conditions, and in the regulations and hazards which apply to the area in which the work will take place.

23)All contract work in these drawings shall be carried out in accordance with the latest editions of the following national codes and standards:
a)International Building Codes, 2012 (IBS2012).
b)American Society of Civil Engineers (ASCE) 7- 02.
c)Occupational Safety and Health Administration (OSHA).
d)National Fire Protection Association (NFPA).
e)National Fire Code (NFC).

24)The Contractor shall dispose of all materials removed which are not to be reinstalled or salvaged on the project. Disposal of materials shall be the responsibility of the contractor.

25)Unless prior permission is obtained from the owner's representative, the contractor shall confine all construction activity, staging areas, etc., within the limits of construction.

26)Adequate barricades, warnings and lighting will be employed for safety and traffic flow. All work shall be done in accordance with the Texas Manual of Uniform Control Devices for Streets and Highways.

27)Excavations shall not be made during inclement weather. Water accumulation in excavations exceeding 1 inch shall be pumped out before concrete is placed.

28)The contractor shall be solely responsible for the design and implementation of a trench safety program. The contractor shall appoint a trench safety foreman who will always be on site while trenching or excavation is being performed. All excavations and backfill operations shall be in accordance with the latest OSHA excavation safety standards, OSHA 2226 and 29 CFR part 1926 subpart P. The contractor shall provide an excavation plan prepared by an engineer registered in the State of Texas. The excavation plan shall indicate the procedures to be used by the contractor to comply with the OSHA requirements. The excavation plan shall identify the "competent person" as required by paragraph 1926.651 (k)(i), within United States Department of Labor, that will work with each crew.

29)Contractor shall stay within the boundaries of easements at all times.

30)The contractor shall protect property from damage due to the progress of the work. Any damage to private property shall be repaired or replaced by the Contractor at his own expense.

31)The Contractor shall remove, replace, and restore to original condition, elevation, and location, all existing culverts, mailboxes, fences, and other existing improvements, including driveways and roads encountered during construct ion. All entrances shall be restored immediately. Ingress and egress to the property adjacent to construct ion shall be maintained by the Contractor.

Traffic Control Plan (TCP)
1)The Contractor shall be responsible to submit a traffic control plan for review. The plan shall be based upon applicable state requirements and established standards.
2)The Contractor will be required to keep traffic open during the utility crossings.
3)The Contractor is responsible to monitor the plan as the work progresses and submit modifications for review as needed.
4)The Contractor shall be responsible to ensure the Project's Engineer and Inspector a copy of the signed plan prior to beginning work.

Demolition Notes:
1)Existing pavement to be removed (HMAC and concrete pavement, curb, sidewalk, driveway aprons, etc.) Shall become property of the contractor and disposed of legally (base bid and alternate bid).
2)Contractor shall keep existing water and wastewater systems in service for the duration of the project while constructing proposed improvements.
3)Contractor shall saw-cut neat line where new pavement adjoins existing pavement to remain. Reference saw-cut notes below:
a)HMAC paving: saw-cut neat line and place proposed HMAC flush with existing surface at limits.

c)Curb & gutter: saw-cut neat line and dowel into existing curb & gutter at limits. Contractor to match flowlines.
c)Driveway and sidewalks: saw-cut neat line and place expansion joint at limits.

4)All existing fences are to remain unless otherwise noted on the drawings. Any damage to fences shall be repaired to equal or better conditions, than that of those that existed just prior to the beginning of construction, at no additional cost to the owner.

Tree Protection Requirements:
1)Prior to construction, the contractor shall mark all trees that are to be protected (as indicated on plans or as directed by Owner) with clearly marked 4" tall orange barricade fence and signage to protect the area under the canopy drip line of any protected tree or group of protected trees. The drip line is the outer extent of any branching and/or leaves. At select trees, as shown on the plans or directed by the Owner, the tree protection limits may encroach within the dripline to accommodate construction. Do not exceed 24" ground penetration with support stakes at any location.
2)During construction, the contractor shall:
a)Prohibit employees and equipment from accessing areas within tree protection limits.
b)Prohibit cleaning of equipment or storage of materials and disposal of any waste material, including, but not limited to, paint, oil, solvents, asphalt, concrete, mortar, etc., within tree protection limits.
c)Prohibit attachments or wires of any kind, other than those of a protective nature, to any protected tree.
d)Prohibit the disturbance of existing ground grades within tree protection limits.
3)If roots are exposed when performing excavations near protected trees, roots shall be cut cleanly at 90-degree angles (no ripping, tearing, or pulling).
4)All trees to be removed shall be marked in the field and reviewed with the engineer and owner prior to removal.
5)Contractor may be financially responsible for trees damaged due to contractor's neglect.
6)When directed by owner, contractor shall trim trees. This work is subsidiary to the applicable items. Remove all limbs to a point 10 feet above natural ground (or 18' above pavement) utilizing the following steps:
i) Cut 1/3 through bottom of limb 8" to 12" away from main stem or trunk
ii) Remove limb 4" to 6" beyond the first cut
iii) Remove stump with a smooth cut so that trace collar of the removed limb protrudes approximately 1/2" from main stem or trunk.

Paving Construction Notes:
1)Contractor shall protect all existing and/or proposed water, wastewater, and storm drain facilities throughout paving operations. Contractor shall replace any facilities damaged during paving operations at no additional cost to the Owner. All manholes and valves falling within pavement area shall be adjusted to finished grade and shall be subsidiary to other bid items.
2)Contractor shall match existing driveway/sidewalk with exposed aggregate finish, if applicable.
3)Contractor shall protect all adjoining pavement during construction. Damages shall be prepared at contractor's expense.
4)Asphalt pavement and/or concrete items shall be saw- cut where existing asphalt pavement or a concrete item is being partially removed. These cuts shall be vertical and made with a saw (1- 1/2" deep).
5)At a minimum, pavement repair shall consist of 2" of HMAC and 12" of concrete subgrade If the existing pavement section is found to be thicker, the pavement the repair section shall be increased to match the existing section.
6)Unless noted otherwise, concrete for rip- rap, sidewalks and other miscellaneous site structures and/or site flatwork shall be normal weight and shall attain a minimum 28- day compressive strength of 3,000 psi. Use gray Portland cement conforming to ASTM c 150 Type 1. Minimum cement content shall be 4 sacks per cubic yard. Maximum water cement ratio shall be 0.50. Maximum slump shall be 5 inches. Maximum aggregate size shall be 1 1/2 ". Provide 4 to 6 percent air- entrainment, conforming to ASTM C260. Chemical admixtures shall conform to ASTM C494, type a, d, or e. If flyash is to be used in the concrete mix, it shall be included in the m i x design submitted. The amount of fly ash used shall be no greater than 15 to 20 percent by weight of the specified cement. In no case shall the Portland cement content of the mix be less than 4 sacks per yard. Concrete shall not be placed prior to approval of the concrete mix design by the engineer.
7)Reinforcing steel shall be new domestic deformed billet steel, conforming to ASTM A615, grade 60. Welded wire fabric shall conform to ASTM a185, grade 60 and shall be supplied in flat sheets only, and only used if approved by the applicable governmental entity.
8)The point for pavement markings shall meet the requirements of FED spec TT-P- 85. The point may be used with or without reflective media. The painting shall be performed only when all the following conditions are satisfied:
a)The existing surface is dry and clean
b)When the atmospheric temperature is 40° F and rising
c)When the weather is not excessively windy, dusty, or foggy
9)A minimum of 28- days shall elapse between the placement of the asphalt or concrete surface and the application of the pavement point/ markings. The point shall not bleed excessively, curl or discolor when applied to asphalt surfaces.

Water Construction Notes:
1)Contractor shall keep existing water main and private service lines in service while constructing proposed water system. Contractor shall construct as much proposed waterline as possible prior to tying into existing main and reconnecting services.
a)Temporary water services to meters may be required in some locations, and the cost of such shall be subsidiary to the cost of the applicable line work.
2)The Contractor is hereby notified that connecting to, shutting down, or termination existing utility lines, may have to occur at off-peak hours. Such hours are usually outside normal working hours and possibly between 12 a.m. and 6 a.m.
3)Pipe material for water mains shall be as required for the project. PVC (AWWA C-900/905, min. class 200), Ductile Iron (AWWA C-150/151, min. Class 200), or Spiral Welded Steel Pipe (AWWA C200, min. Class 200). Water services (2" or less) shall be polyethylene tubing (200 psi, DR 9).
4)The Contractor shall not operate any existing valves without the approval of the utility's Owner.
5)Contractor shall locate, verify, and protect the working conditions of all existing water mains.
5)1) The Contractor shall pthohle proposed connection locations ahead of the construction process to verify connections can be performed without adjustments to planned alignments/elevations of the proposed pipelines. It shall be the Contractors responsibility to notify the Engineer, in writing, of potential complications, at least 72 hours ahead of proposed connection work.
6)Contractor shall locate, verify, and protect the working conditions of all existing private service lines, including meters, lines, etc... Contractor shall employ a licensed plumber to perform all reconstruction of the private side of the meter and verify the system is operational. The contractor shall remove, adjust, reinstall, and/or replace service lines, if in direct conflict with proposed construction with the same or better-quality material and appurtenances. Damage to existing service lines shall be restored to equal or better condition which it was found prior to construction. All work shall be subsidiary to other bid items.
7)Line flushing or any activity using a large quantity of water must be scheduled with the Owner.
8)The Contractor, at his expense, shall perform disinfection of all potable water lines constructed and shall provide all equipment (including test gauges), supplies (including concentrated chlorine disinfecting material), and necessary labor required for the disinfection procedure. The disinfection procedure shall be monitored by the Projects Inspector. Water samples will be collected by the Owner/Inspector to verify each treated line has attained an initial chlorine concentration of 50 ppm.
9)At the Contractor's request, and in his presence, samples for bacteriological testing will be collected by the Owner/Inspector no less than 24 hours after the treated line has been flushed of the concentrated chlorine solution and charged with water approved by the Owner. The Contractor shall pay invoices, to cover the fee charged for testing each water sample.
10)Where means of flushing is necessary, the Contractor, at his expense, shall provide flushing devices and remove said devices prior to final acceptance by the Owner.
11)All excess excavated material, not suitable for backfill is to be removed and disposed of by the contractor.
12)All salvaged equipment, if owner desires, shall be remain the property of the owner and shall be delivered to a location of their choosing. Otherwise, it and all pipe, fittings, poles, fencing, electrical boxes, wires, etc... Shall become the property of the contractor, shall be removed from the project, and shall be considered in the bid price, unless otherwise noted. Disposal of equipment shall not be in violation of city, state, or federal laws.
13)Water valve covers, fire hydrants, etc., shall be raised to finished pavement grade at the Contractor's expense. All utility adjustments shall be completed once finish grade has been achieved.
14)All bends and changes in direction on water mains shall be restrained and thrust blocked
15)Fire hydrant leads shall be restrained ductile iron pipe (AWWA C-100, min. class 200).
16)All ductile iron pipe and fittings shall be wrapped with minimum 8-mil polyethylene and sealed with tape accepted by the pipe/fitting manufacturer.
17)All water lines shall be completed and in place including all bends, blocks, fittings, services, and appurtenances before pressure testing.
18)Existing gate valves, that are to be removed and/or abandoned, shall be completely removed if the operation nut is within 18" to top of the ground, topsoil shall be placed to fill void. If the operation nut is deeper than 19" then the contractor shall remove the valve stack and place topsoil to fill void created.
19)Prior to tie-ins, any shutdowns of existing mains of any size must be coordinated with the Owner and Project's Inspector at least one week or more in advance of the shutdown. The Contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to the project and it is the responsibility of the Contractor to sequence the work accordingly.
20)Contractor shall obtain the necessary fittings required to connect existing and proposed pipelines in a manner that is approved by the fitting/pipeline manufacturers, and at no additional cost to the Owner.
21)In locations where a vertical change in elevation occurs with the utilization of bends, that contractor shall restrain joints for a distance as required by the soil conditions prior to initial fitting, and past last fitting used for the vertical change. The use of restrained joints does not eliminate the need for thrust blocking.
22)If during the construction process additional water services are discovered that are connected to a line that is to be abandoned, the contractor shall notify the Project's Inspector and the Project Engineer for direction on how to proceed with the reconnection of the service.
23)All material to be used shall comply with the Buy America provisions of 23 U.S.C. § 313, 23 CFR 635.410, as amended, and the steel and iron preference provisions of Texas Transportation Code § 223.045 and, when products that are composed predominately of steel and/or iron are incorporated into the permanent installation of the utility facility, use domestically manufactured products. TxDOT

form 1818 (material statement), along with all required attachments, must be submitted, prior to the commencement of the adjustment, removal, and relocation of the facility, as evidence of compliance with the aforementioned provisions.

Drainage Construction Notes:
1)Prior to final acceptance, all new or existing drainage structures and extensions shall be cleaned by the contractor (subsidiary).
2)Contractor may provide pre-cast or cast-in-place box culverts.
3)Joints between pre-cast concrete box culverts shall be pre-formed flexible joint sealants as described in TxDOT specifications.
4)Place non-erodible material (pneumatically placed concrete, cement stabilized sand, etc.) On channel bottom and side slopes at temporary culvert/storm drain ends to minimize erosion, as directed by owner (subsidiary).
5)Welds are not allowed to splice safety pipe runners; must be one continuous pipe.

Trench Safety Notes:
1)In accordance with the laws of the state of Texas and the U.S. Occupational Safety and Health Administrations Regulations, all trenches over 5 feet in depth in either hard and stable or soft and unstable soil shall be sloped, shored, sheeted, braced or otherwise supported. Furthermore, all trenches less than 5 feet in depth shall also be effectively protected when hazardous ground movement may be expected. Trench safety systems to be utilized for this project shall be provided by the contractor.
2)In accordance with the U.S Occupational Safety and Health Administration regulations, when employees are required to be in trenches 4 feet deep or more, adequate means of exit such as ladder or steps, must be provided and locates so as to require no more than 25 feet of lateral travel.

Storm Water Pollution Prevention Plan (SWPPP)
1)The Contractor shall submit a SWPPP for review. The Plans shall be based upon applicable City, State, and Federal requirements and established standards.
2)The Contractor is responsible to monito the plan as the work progresses and submit modifications for review as needed.
3)The Contractor is responsible to ensure the Project's Engineer and Inspector has been provided a copy of the signed plans prior to beginning work.
4)The SWPPP Best Management Practices (BMPs) approved must be installed prior to and excavation activities.

Irrigation Revegetation and Slope Stabilization Notes:
1)Contractor shall locate, verify, and protect the working conditions of all existing irrigation systems, including meters, lines, and heads. Contractor shall employ a licensed irrigation installer or plumber to perform all reconstruction of irrigation systems and verify the system is operational. The contractor shall remove, adjust, and reinstall irrigation systems back to good condition; replace irrigation systems, if in direct conflict with proposed construction with the same or better-quality material and appurtenances. Damage to existing irrigation systems shall be restored to equal or better condition which it was found prior to construction. All work shall be subsidiary to other bid items.
2)Provide temporary vegetation and watering as part of contractor's stormwater pollution prevention plan implementation.
3)All disturbed areas shall be permanently revegetated unless the location is utilized as a cultivated field. Payment includes watering necessary to fully establish vegetation. Contractor shall check regularly to verify that coverage is properly established and maintained.
4)Contractor shall be responsible for mowing within project limits throughout construction, as directed by owner (subsidiary).
5)The following guidance shall be used for permanent vegetation and soil stabilization:
a)At established lawns, place solid block sod matching existing grass type (Bernuda or St. Augustine).
b)Between back of curb and edge of sidewalk, place solid block sod (Bernuda).
c)Roadway side slopes (non-ditch areas):
i)If steeper than 6: 1, place soil retention blanket (spray-on application allowed) and Bernuda seed.
ii)If 6: 1 or flatter, place Bernuda seed.
d)Ditch channel side slopes:
i)Place Bernuda seed in all disturbed areas.
ii)If shown on plans, place flexible channel liner.
iii)For all other locations:
(1) If steeper than 6: 1, place soil retention blanket (non-spray application) and Bernuda seed.
(2) If 6: 1 or flatter, place Bernuda seed.
e)All soil retention blanket shall be class 1 type a per TxDOT item 169.
f)All flexible channel liner shall be class 2 type g per TxDOT item 169.
6)For broadcast seed rate, refer to specifications
7)Broadcast seed shall immediately be watered with a minimum of 5 gallons of water per square yard, then weekly at a minimum rate of 10 gallons per square yard. Until the grass in uniformly 1 inch in height. Sod shall immediately be watered with a minimum of 5 gallons of water per square yard, then weekly at a minimum rate of 6 gallons per square yard weekly until the grass in uniformly 2 inches in height. When allowed by engineer, watering may be postponed for one week when rainfall of 1 inch or greater occurs on the site. Do not cause damage by over watering.
8)Prior to placing block sod, contractor shall blade and rake smooth topsoil. Sod shall not be placed such that it impedes drainage runoff.

Special Notes:
1)Owner shall be responsible for materials testing in accordance with applicable specifications. Contractor shall coordinate testing with owner and testing agency. Contractor shall bear the cost for re-tests due to failing tests.
2)Stockpile all topsoil removed from project separate from other cut/fill materials. Utilize stockpiled topsoil to finalize grades in disturbed areas.
3)Contractor shall keep drainage structures and ditches free from obstructions during times when weather conditions require its use to convey runoff.
a)Contractor shall verify that temporary of final grading shall not adversely affect surrounding/adjoining properties.
4)Excavation in existing driveways shall be backfilled and repaired to existing condition.
5)Contractor shall shape embedment material to accommodate the belled joints of pipes to insure support throughout their lengths. Belled joints shall have a minimum of 2" of fill beneath them.
6)If excavated material is not acceptable to the engineer for backfill, the contractor shall provide select import material as required. All backfill material is subsidiary to the price of pipe in place.
7)Max joint deflection shall be half the manufacturer recommended maximum.
8)Contractor shall adjust, repair, or reconstruct residential services (not already specifically called on the plans) as necessary. Payment shall be subsidiary to installation of pipeline & not an additional pay item.
9)Contractor shall be required to adhere to the requirements of the "Agreement" and the "Supplemental Agreement" between Union Pacific and Jonah Water Special Utility District, to include but not limited to:
9)1) Contacting Mr. Ben R. Woolf, 575-740-2472, brwoolf@up.com; prior to entering UP's R.O.W.
9)2) Coordinate work with Railpros Field Services, RP.Utility@railpros.com; 682-223-5271. Railpros is to monitor both the tracks and the construction progress, during work performed at UP's ROW.
10)It is the intent of this project to perform the HWY 79 / RR crossing in the initial stages of construction, so that the roadway contractors may abandon conflicting lines in the area of roadway work at the intersection of Hwy 79/FM 3349.
10)1) Contractor shall construct the waterlines improvements shown in the below limits initially coordinate schedule with roadway construction:
10)1)1) Stations A-100+38.56 thru A-145+44.75; Sheets 13 - 19, to include temporary connection to E-20" stub out.
10)1)2) Stations G-0+00 thru G-3+99.26; Sheet 25
10)1)3) Stations H-0+00 thru H-17+16.45; Sheets 26-28

Construction Sequencing:
1)Mobilization.
2)Temporary traffic control.
3)Storm water pollution prevention plan and implementation.
4)Clearing and stripping of the work corridor to limits indicated on the plans.
5)Exploratory excavation of existing pipe.
6)Installation of pipe along the Projects pathway, utilizing both the private easement and County/State ROW. Along with the installation of water transmission line appurtenances including valves, fittings, restrained joints, thrust and anchor blocks, polyvinyl wrapping, air/vacuum release valves and vaults, blow- off/ flush valve assemblies and vaults, flush hydrants, pipe markers, tracing wire, detection tape, and driveway and county road repairs.
7)Trench safety, excavation, bedding and backfill.
8)Temporary connection of the new water line pipe to the existing water lines for flushing and disinfection.
9)Perform final connections and switch over water services.
8)Abandon existing waterlines, that are labeled to be abandoned.
9)Fence repair and access gate installation.
10)Seeding of disturbed acreage.

DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL:

APPROVED:

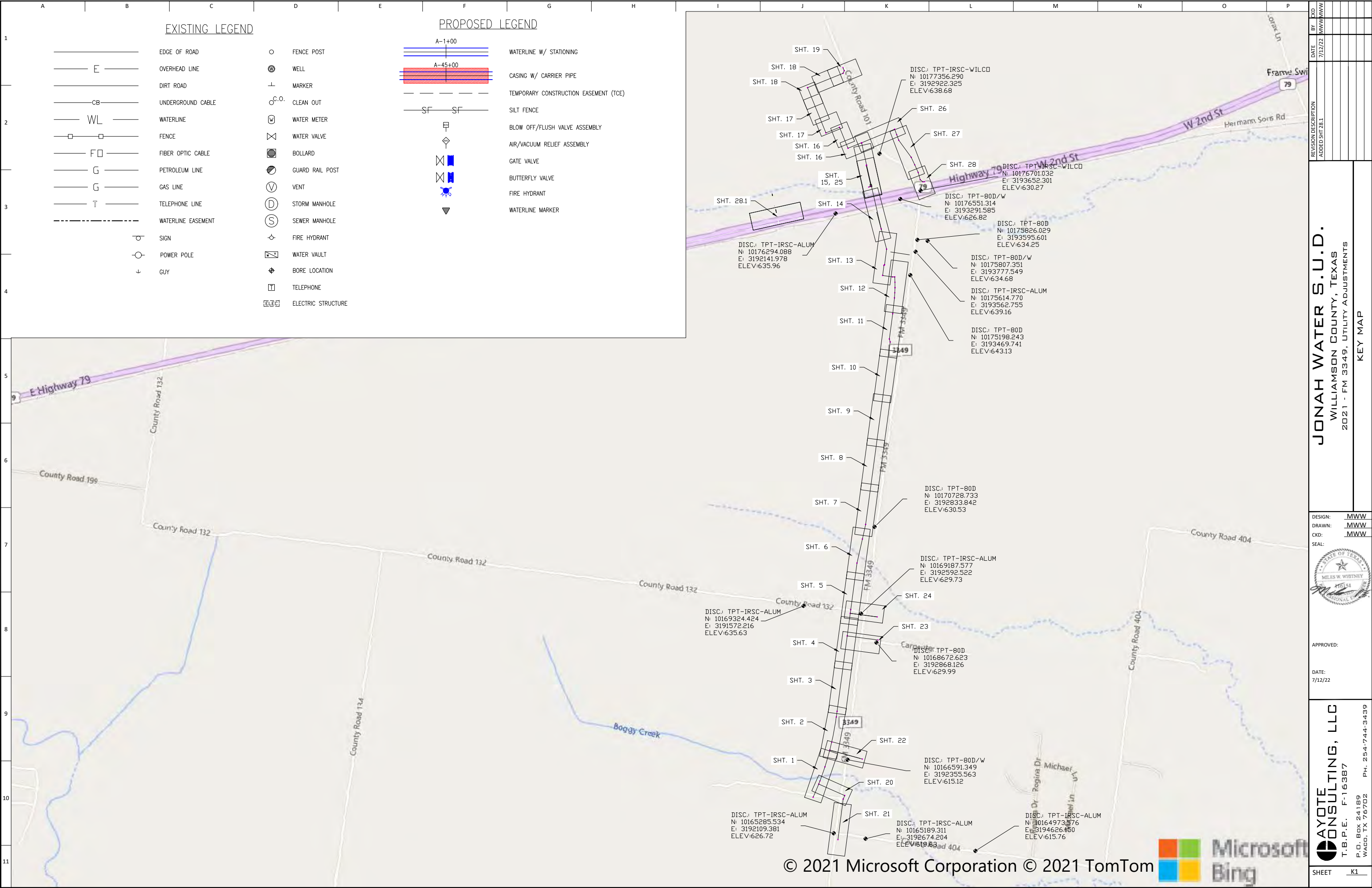
DATE:
12/16/21

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Waco, TX 76702
PH. 254-744-9439

SHEET G1

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
GENERAL NOTES

		A		B		C		D		E		F		G		H		I		J		K		L		M		N		O		P	
		Betterment Take Off - Revised 08-16-22																															
		Station Limits																															



EXISTING LEGEND

	EDGE OF ROAD		FENCE POST
	OVERHEAD LINE		WELL
	DIRT ROAD		MARKER
	UNDERGROUND CABLE		CLEAN OUT
	WATERLINE		WATER METER
	FENCE		WATER VALVE
	FIBER OPTIC CABLE		BOLLARD
	PETROLEUM LINE		GUARD RAIL POST
	GAS LINE		VENT
	TELEPHONE LINE		STORM MANHOLE
	WATERLINE EASEMENT		SEWER MANHOLE
	SIGN		FIRE HYDRANT
	POWER POLE		WATER VAULT
	GUY		BORE LOCATION
			TELEPHONE
			ELECTRIC STRUCTURE

PROPOSED LEGEND

	WATERLINE W/ STATIONING
	CASING W/ CARRIER PIPE
	TEMPORARY CONSTRUCTION EASEMENT (TCE)
	SILT FENCE
	BLOW OFF/FLUSH VALVE ASSEMBLY
	AIR/VACUUM RELIEF ASSEMBLY
	GATE VALVE
	BUTTERFLY VALVE
	FIRE HYDRANT
	WATERLINE MARKER

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
KEY MAP

DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL:

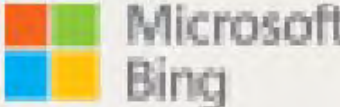


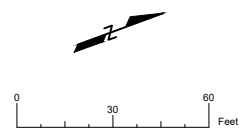
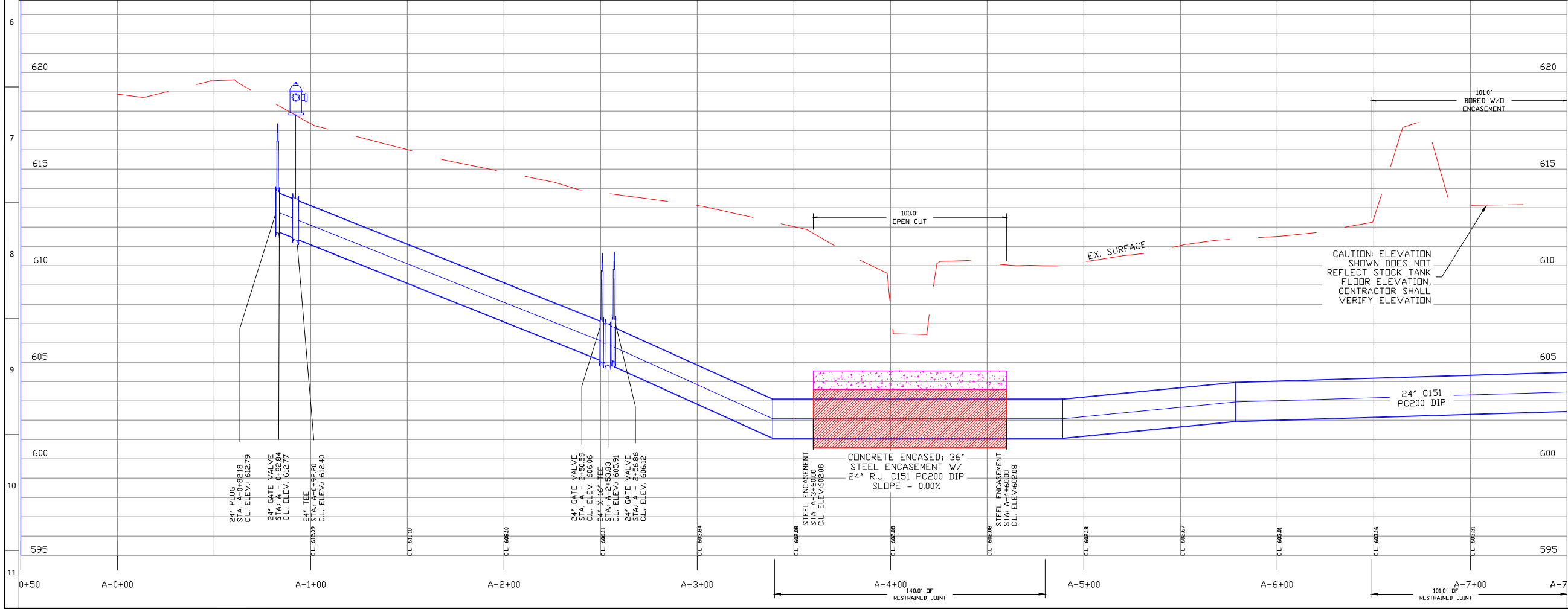
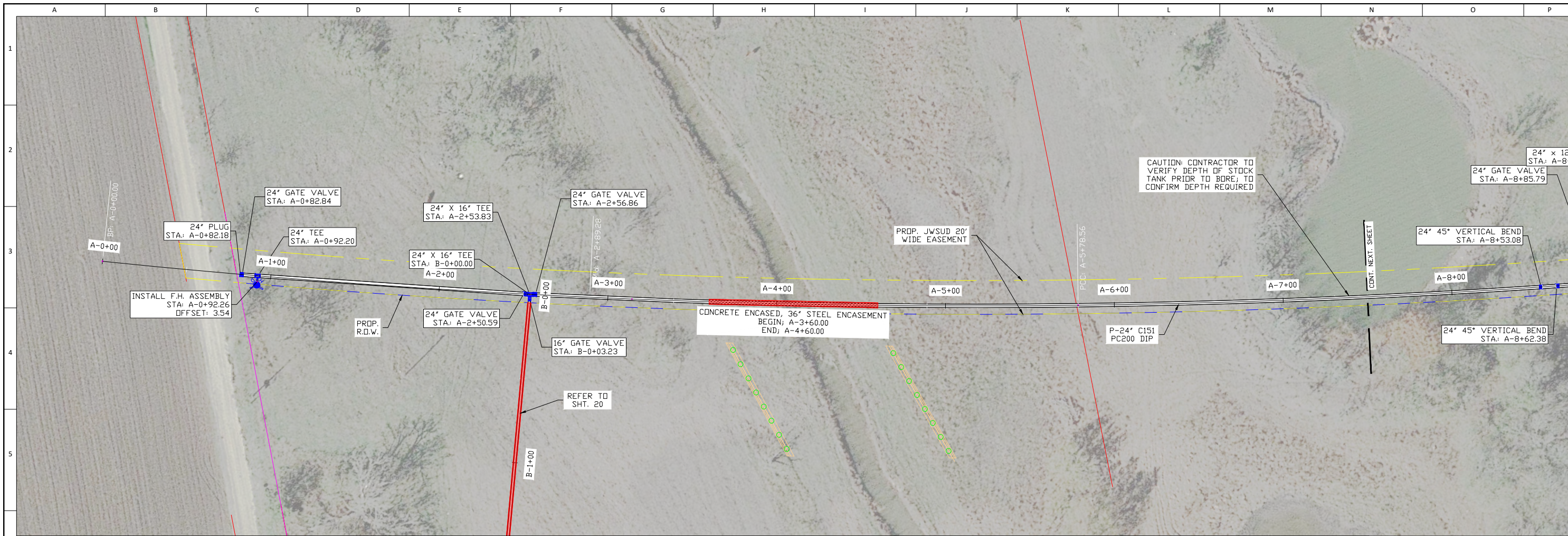
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DATE: 7/12/22

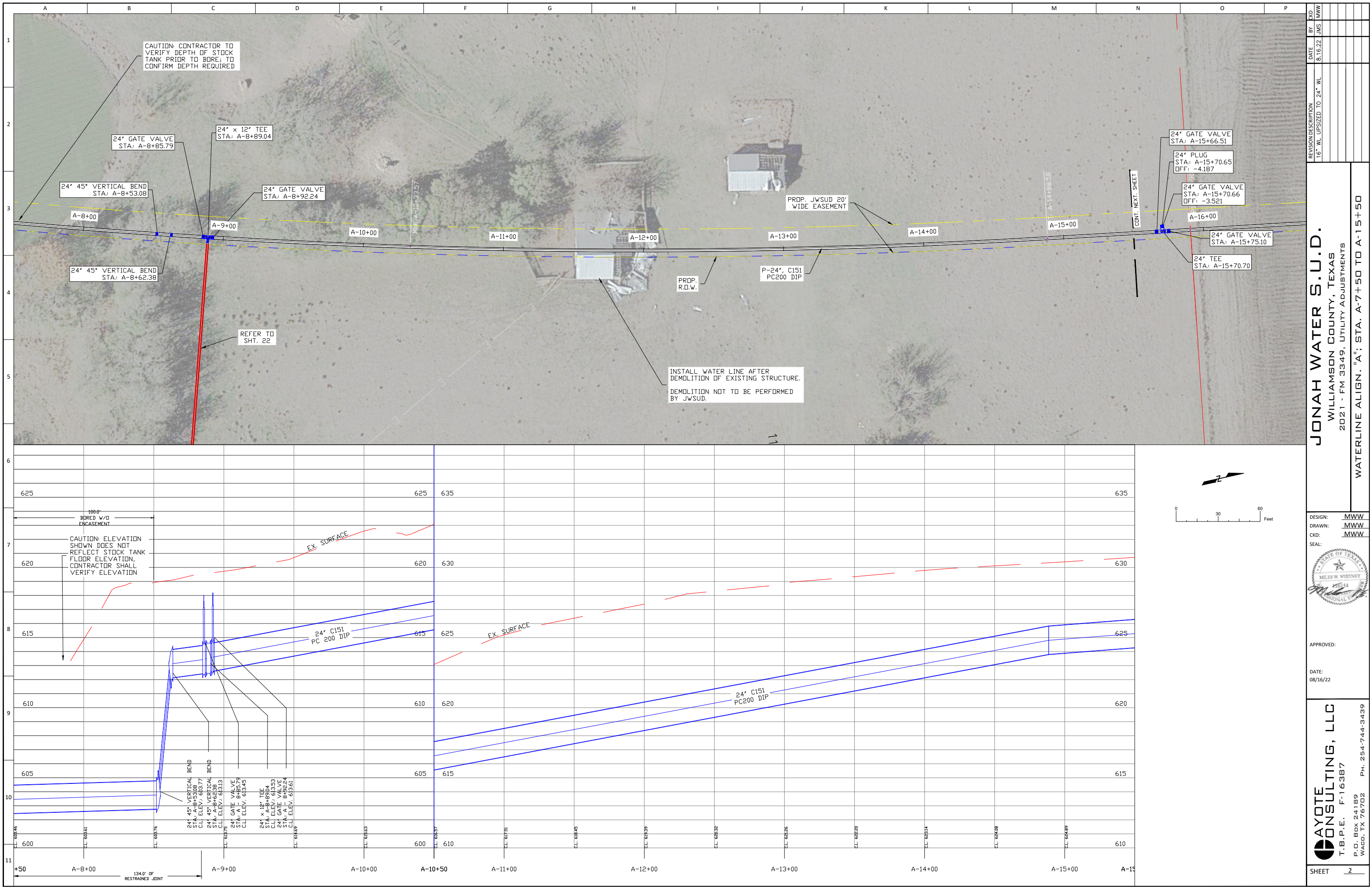
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PH. 254-744-3439

SHEET K1





REVISION DESCRIPTION	DATE	BY	CHK
	8/16/22	JMS	MWW
16" WL UPSIZED TO 24" WL			
RELOCATION OF FH			
JONAH WATER S.U.D. WILLIAMSON COUNTY, TEXAS 2021 - FM 3349, UTILITY ADJUSTMENTS WATERLINE ALIGN. "A"; STA. A-0+00 TO A-7+50			
DESIGN:	MWW		
DRAWN:	MWW		
CKD:	MWW		
SEAL:			
APPROVED:			
DATE:	08/16/22		
AYOTE CONSULTING, LLC T.B.P.E. F-16387 P.O. BOX 24189 WACO, TX 76702 PH. 254-744-3439			
SHEET	1		



NO.	DATE	BY	CD
1	8/16/22	JMS	MWW

REVISION DESCRIPTION
16" WL UPSIZED TO 24" WL

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "A"; STA. A-7+50 TO A-15+50

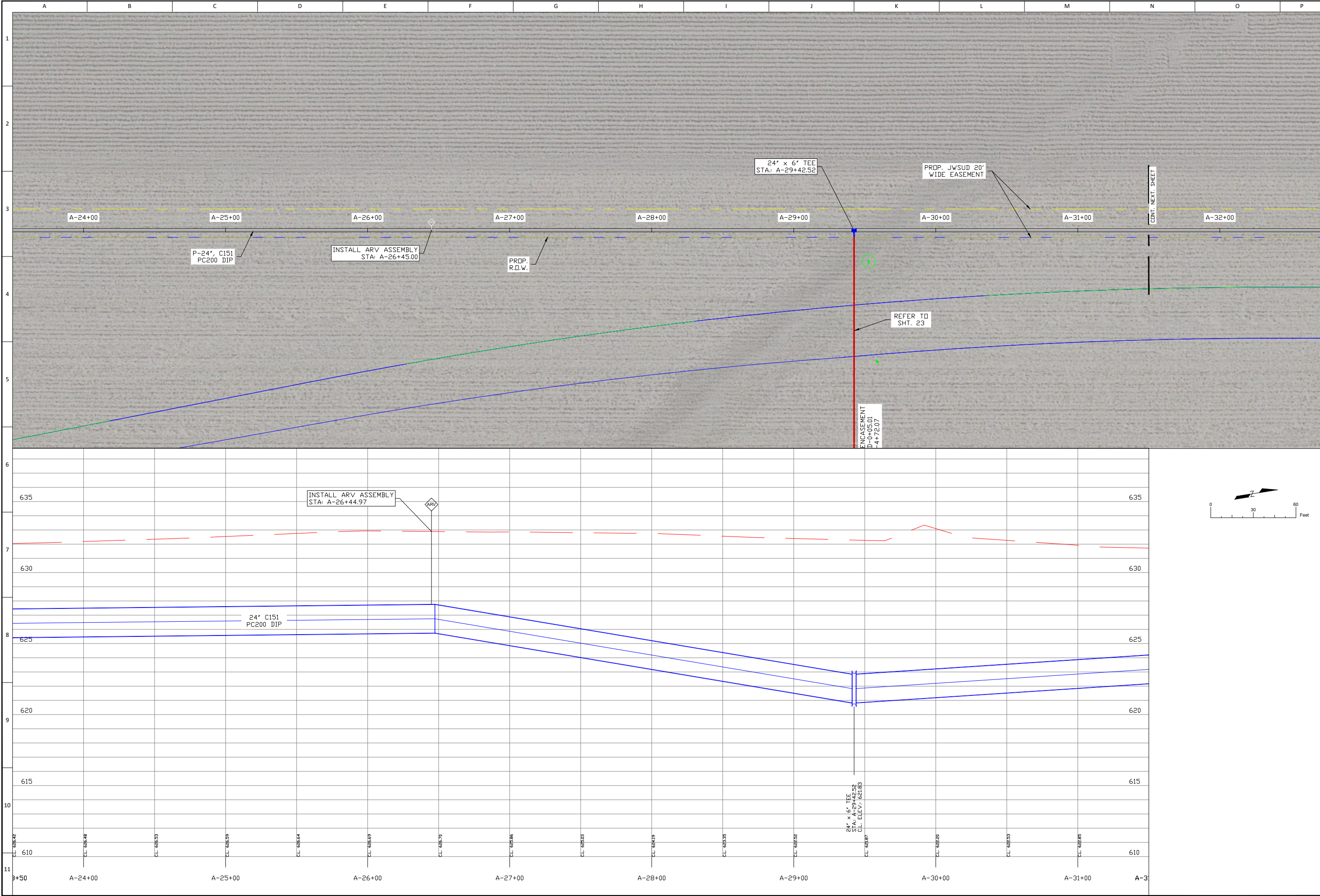
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CKD: MWW
SEAL:

APPROVED:

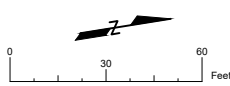
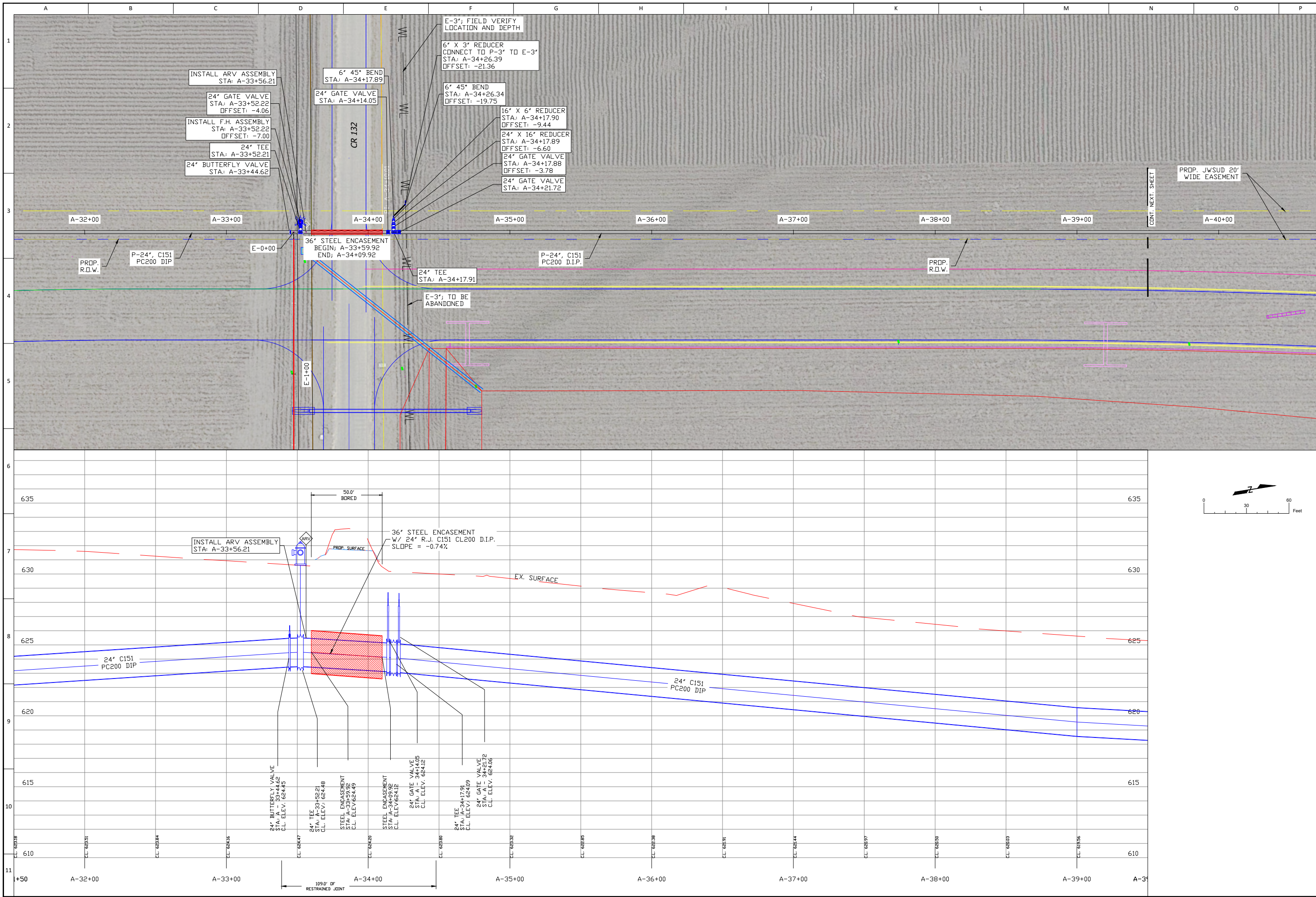
DATE: 08/16/22

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PH. 254-744-3439

SHEET 2



REVISION DESCRIPTION 16" WL UPSIZED TO 24" WL	NO	BY	DATE
		MWW	8/16/22
JONAH WATER S.U.D. WILLIAMSON COUNTY, TEXAS 2021 - FM 3349, UTILITY ADJUSTMENTS WATERLINE ALIGN. "A"; STA. A-23+50 TO A-31+50			
DESIGN: MWW			
DRAWN: MWW			
CKD: MWW			
SEAL:			
APPROVED:			
DATE: 08/16/22			
AYOTE CONSULTING, LLC T.B.P.E. F-16387 P.O. BOX 24189 WACO, TX 76702 PH. 254-744-3439			
SHEET 4			



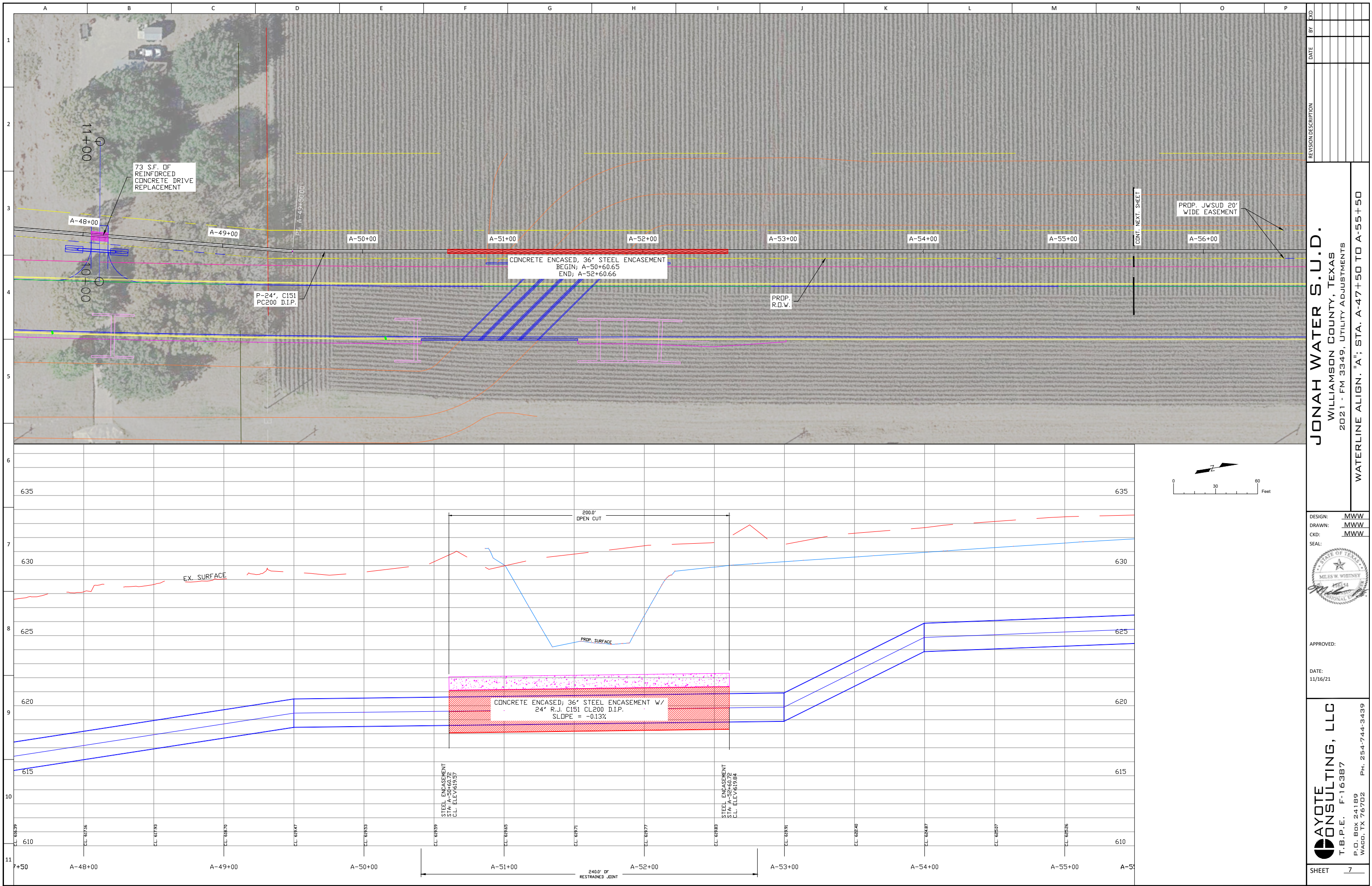
REVISION	NO	BY	DATE	DESCRIPTION
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JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "A"; STA. A-31+50 TO A-39+50

DESIGN:	MWW
DRAWN:	MWW
CKD:	MWW
SEAL:	
APPROVED:	
DATE:	08/16/22

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SHEET	5
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REVISION DESCRIPTION	DATE	BY	CHK

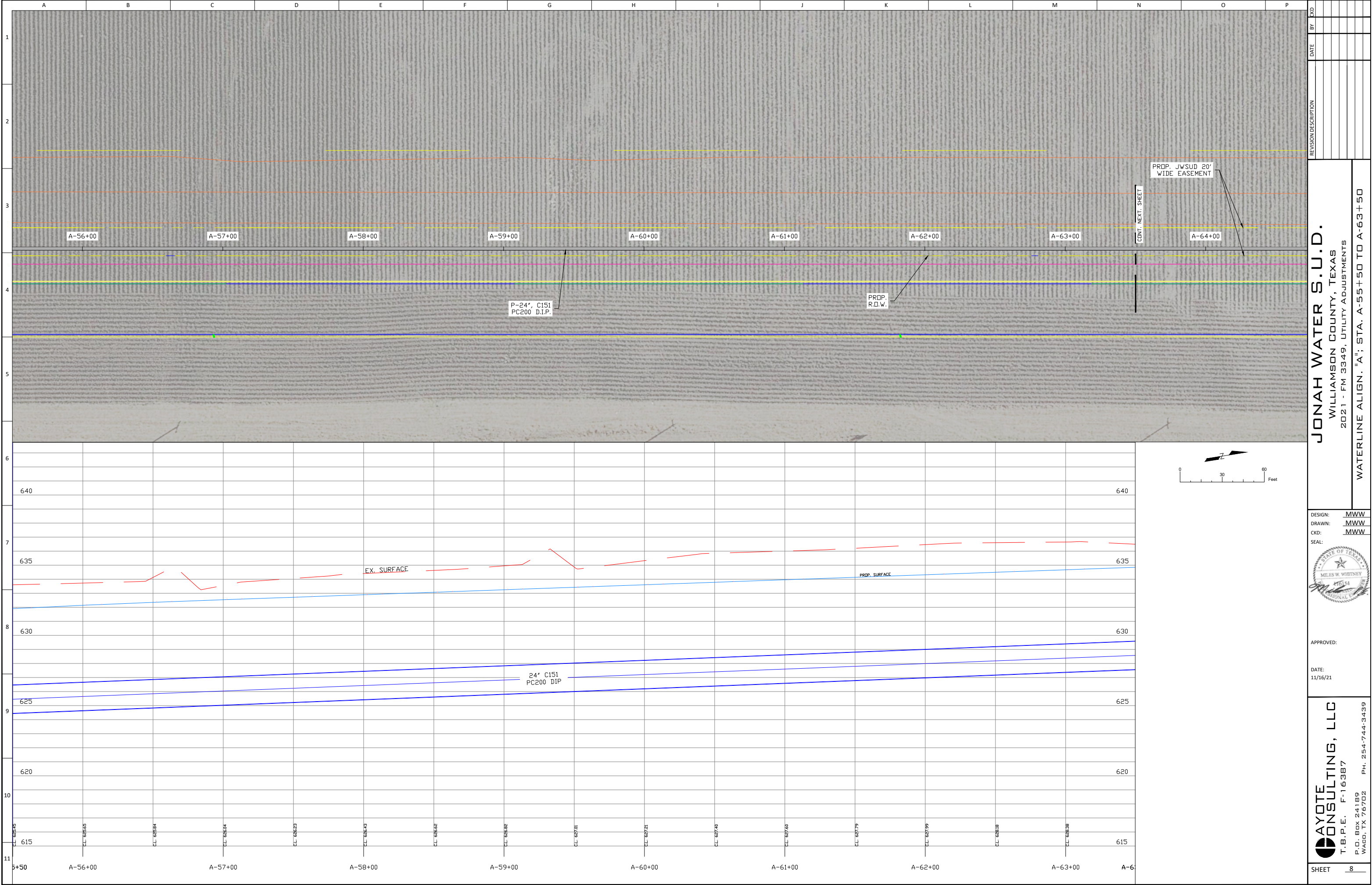
JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "A"; STA. A-47+50 TO A-55+50

DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL:

APPROVED:
DATE: 11/16/21

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SHEET 7



REVISION DESCRIPTION		DATE	BY	CHK

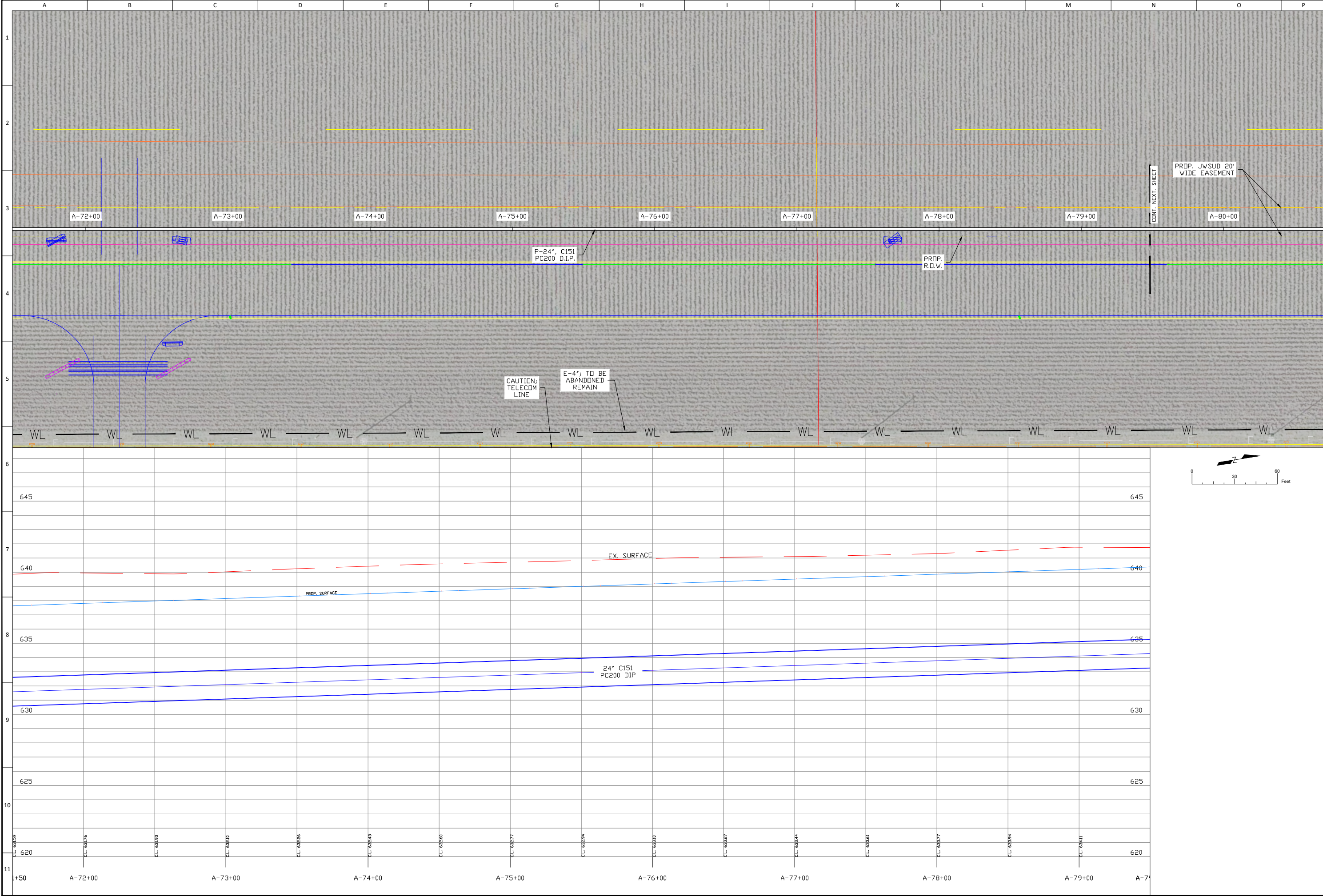
JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS

WATERLINE ALIGN. "A"; STA. A-55+50 TO A-63+50

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DRAWN:	MWW
CKD:	MWW
SEAL:	
APPROVED:	
DATE:	11/16/21

AYOTE CONSULTING, LLC
T.B.P.E. F-16387
P.O. BOX 24189
WACO, TX 76702
PH. 254-744-3439

SHEET 8



REVISION DESCRIPTION		DATE	BY	CHK

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "A"; STA. A-71+50 TO A-79+50

DESIGN: **MWW**

DRAWN: **MWW**

CKD: **MWW**

SEAL:

APPROVED:

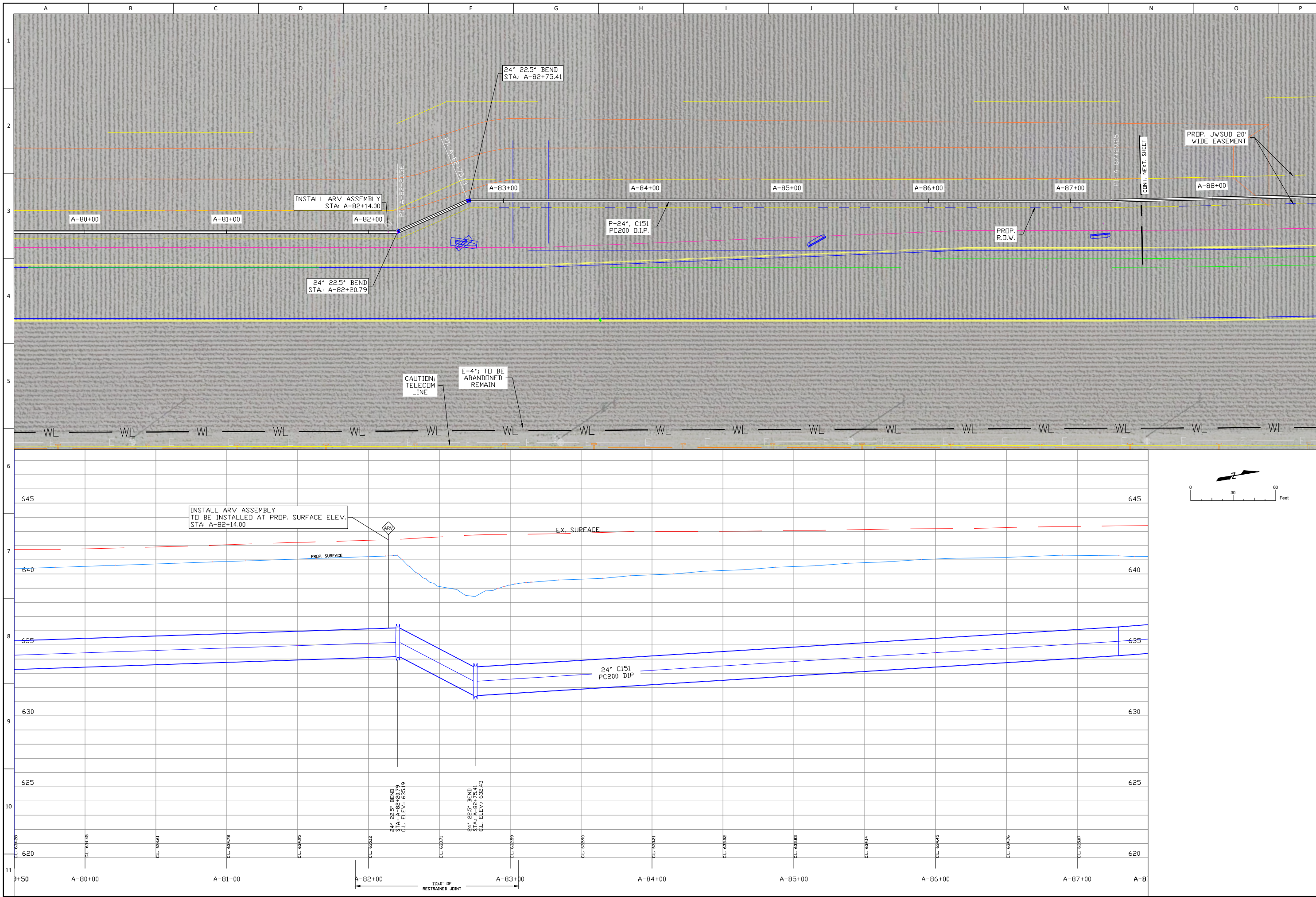
DATE: 11/16/21

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WACO, TX 76702

PH. 254-744-3439

SHEET

10



REVISION DESCRIPTION		DATE	BY	CHK

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "A"; STA. A-79+50 TO A-87+50

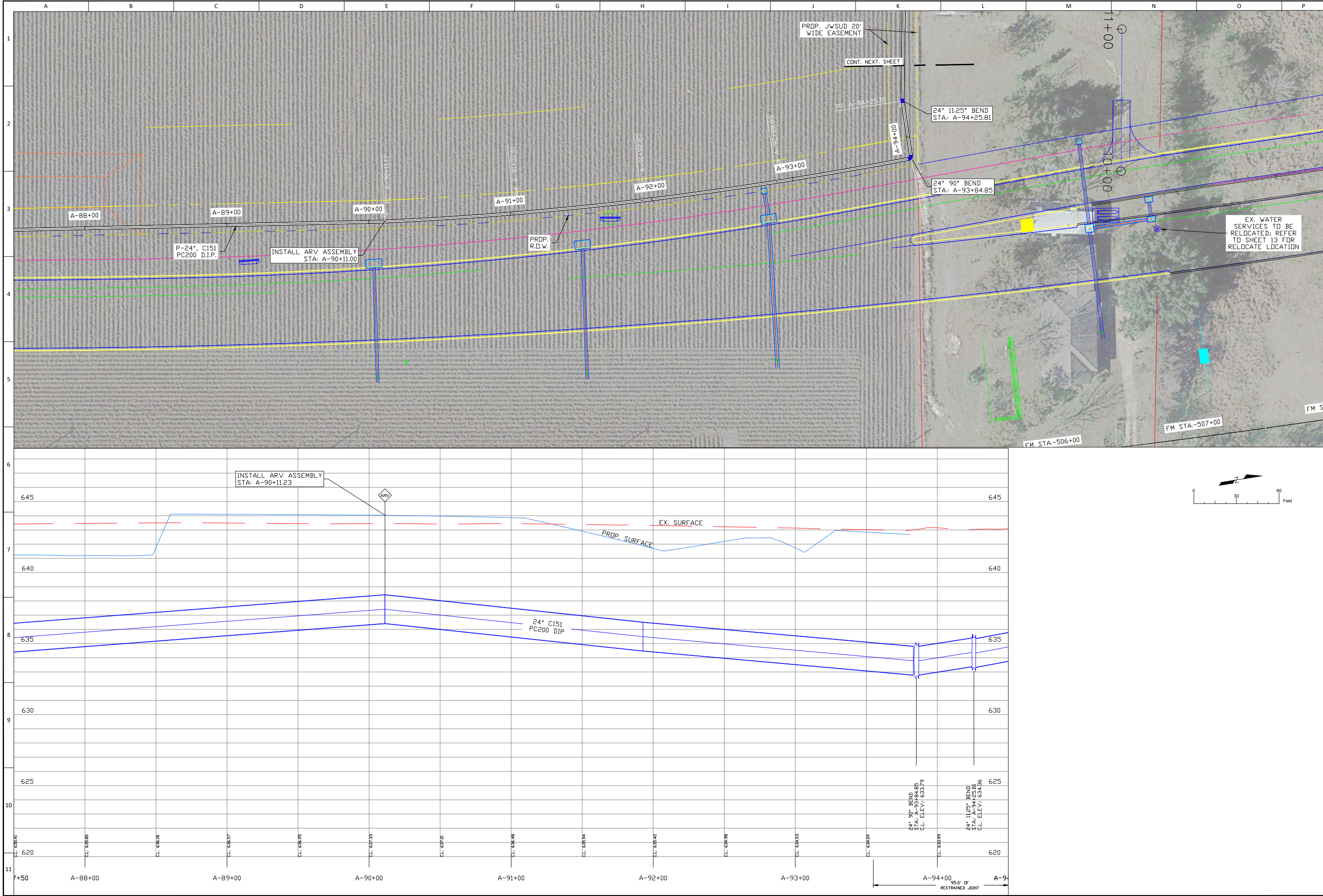
DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL:

APPROVED:

DATE: 11/16/21

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WACO, TX 76702
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SHEET 11



REVISION		DATE	BY	CHK

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "A"; STA. A-87+50 TO A-94+50

DESIGN: **MWW**

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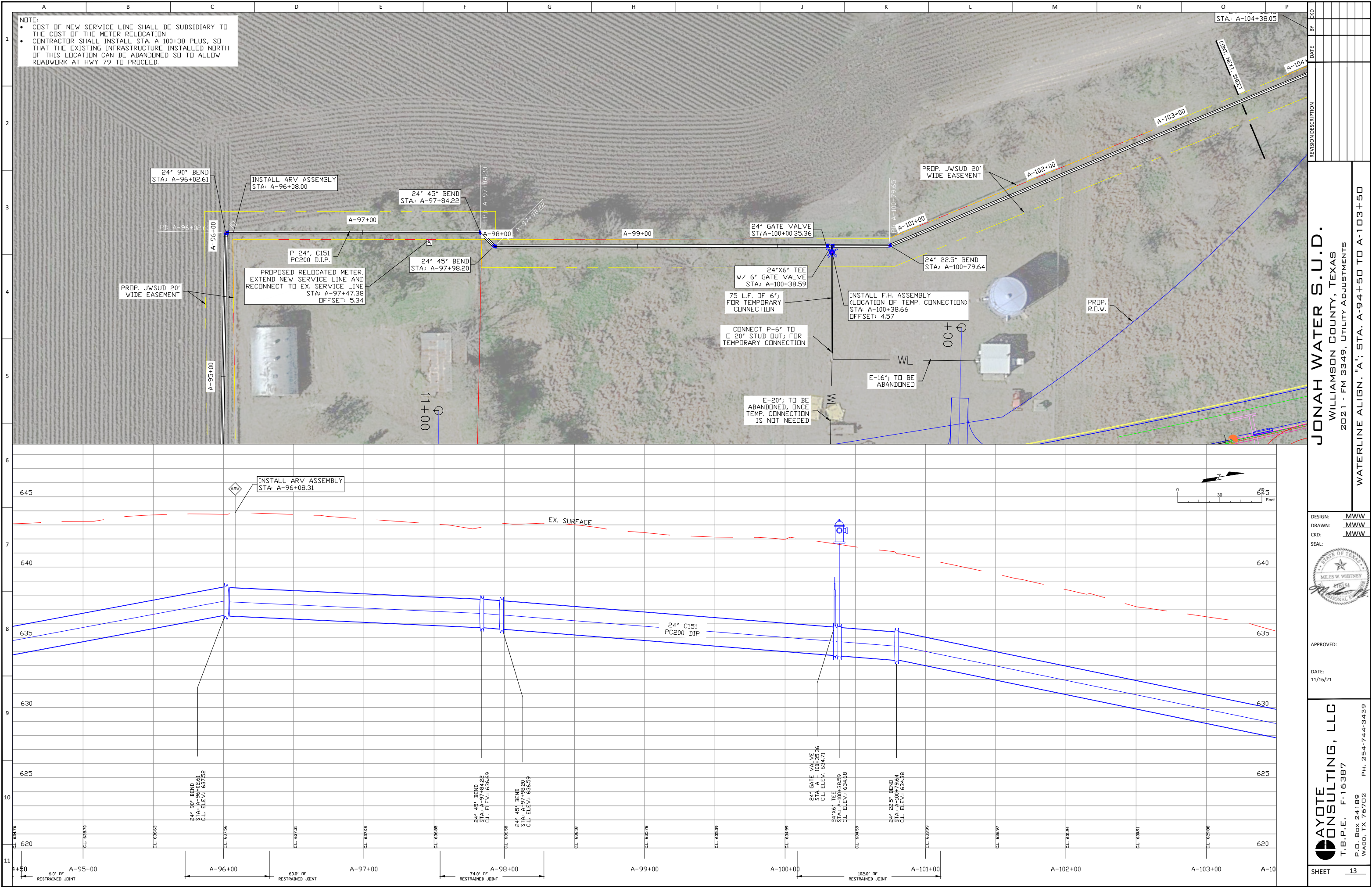
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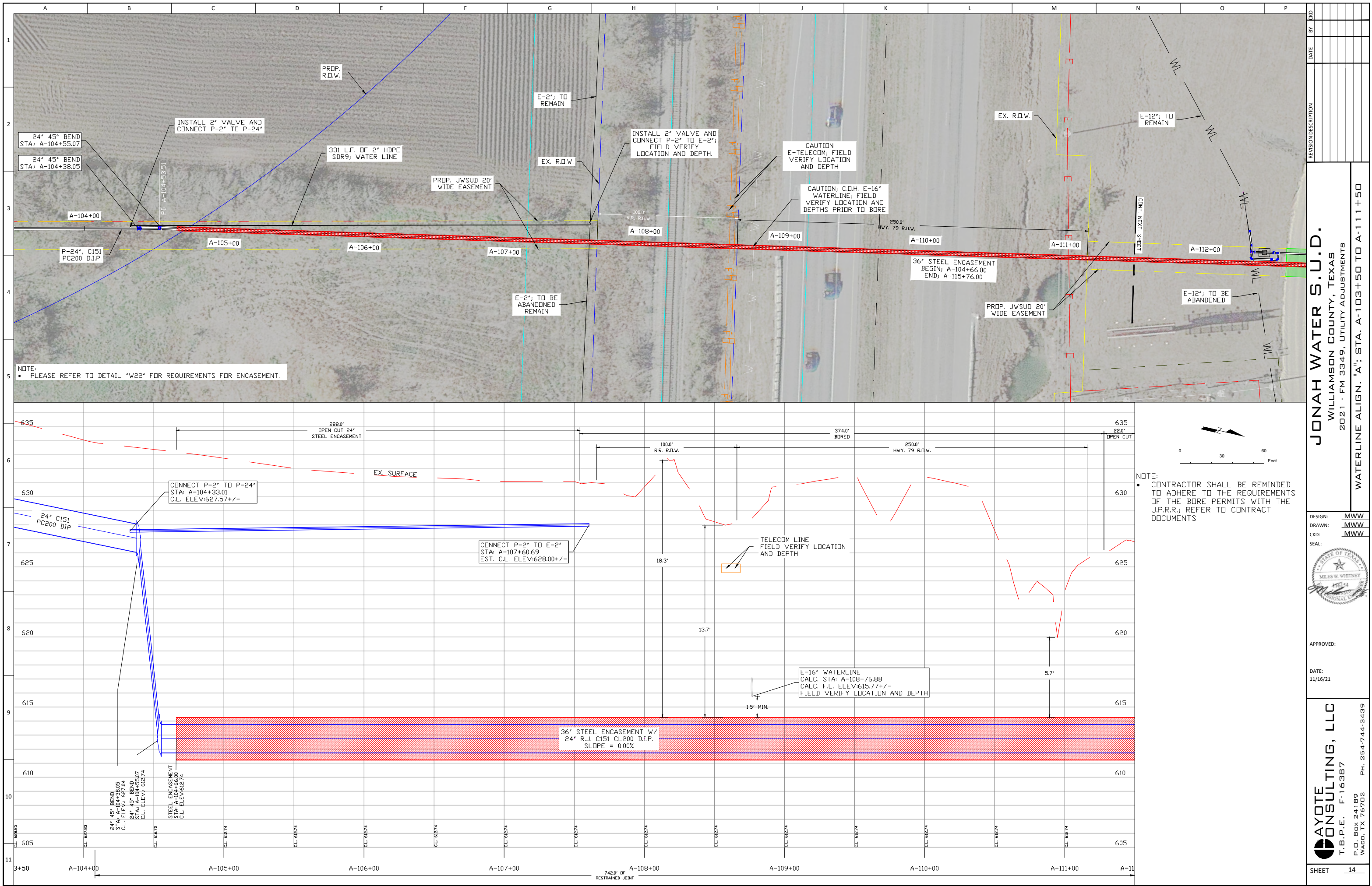
APPROVED:

DATE: 11/16/21

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WACO, TX 76702
PH. 254-744-3439

SHEET **12**





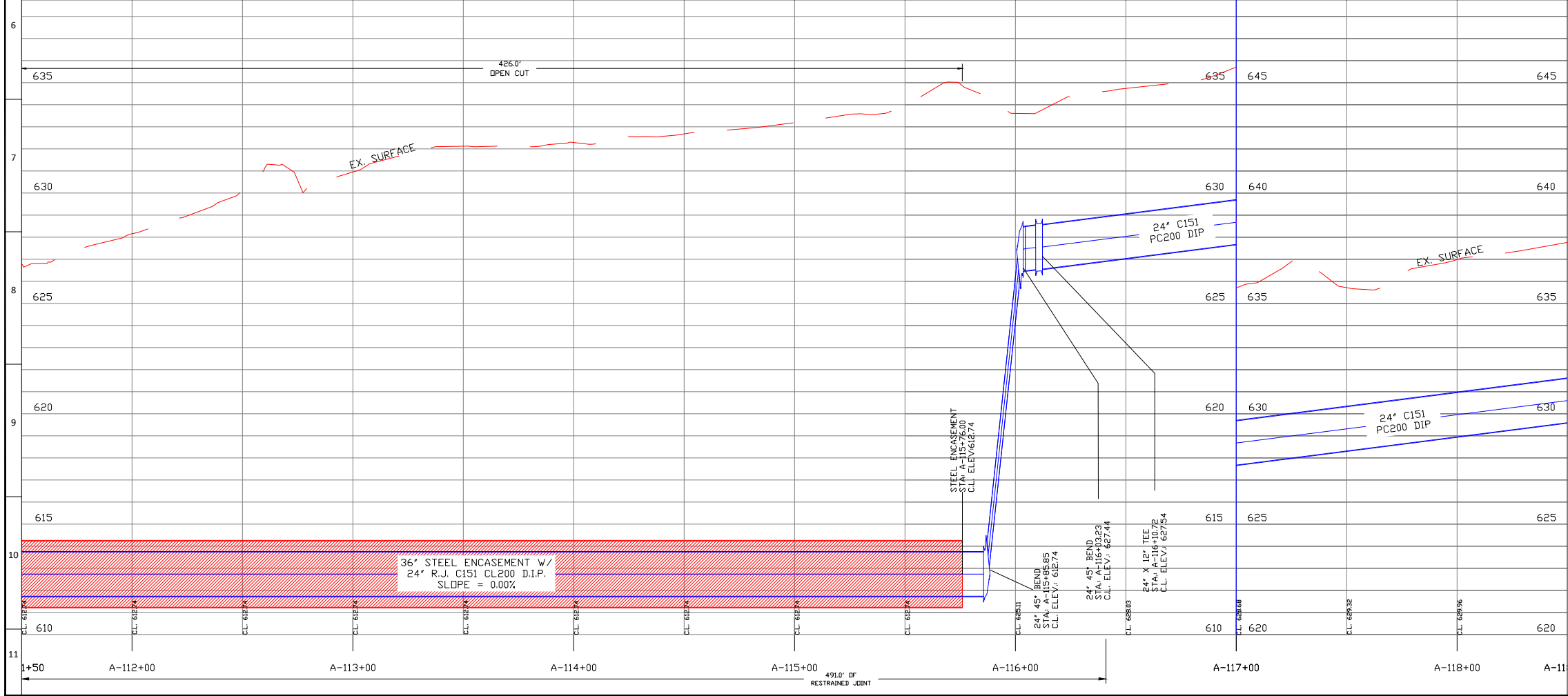
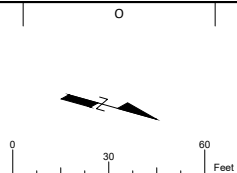
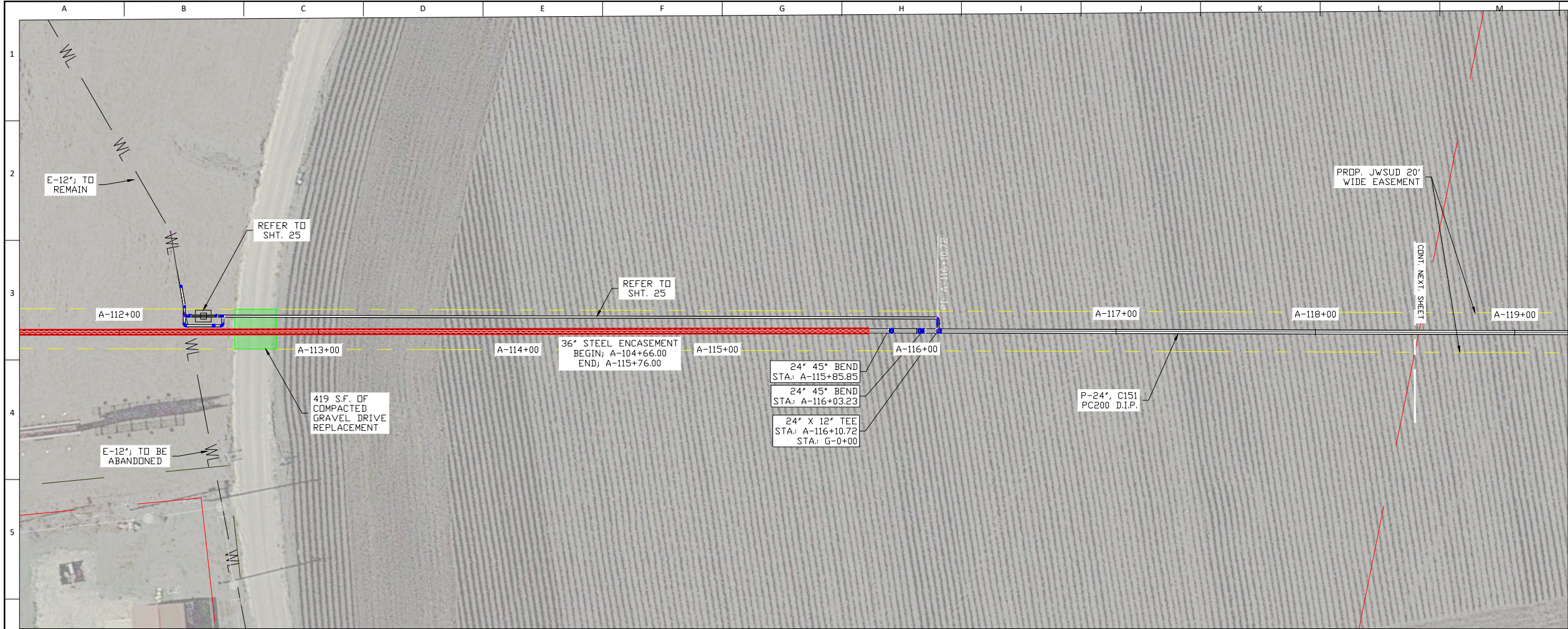
REVISION	DESCRIPTION	DATE	BY	CHK

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "A"; STA. A-103+50 TO A-111+50

DESIGN:	MWW
DRAWN:	MWW
CKD:	MWW
SEAL:	
APPROVED:	
DATE:	11/16/21

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PH. 254-744-3439

SHEET	14
-------	----



NO.	BY	DATE	REVISION DESCRIPTION

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS

WATERLINE ALIGN. "A"; STA. A-111+50 TO A-118+50

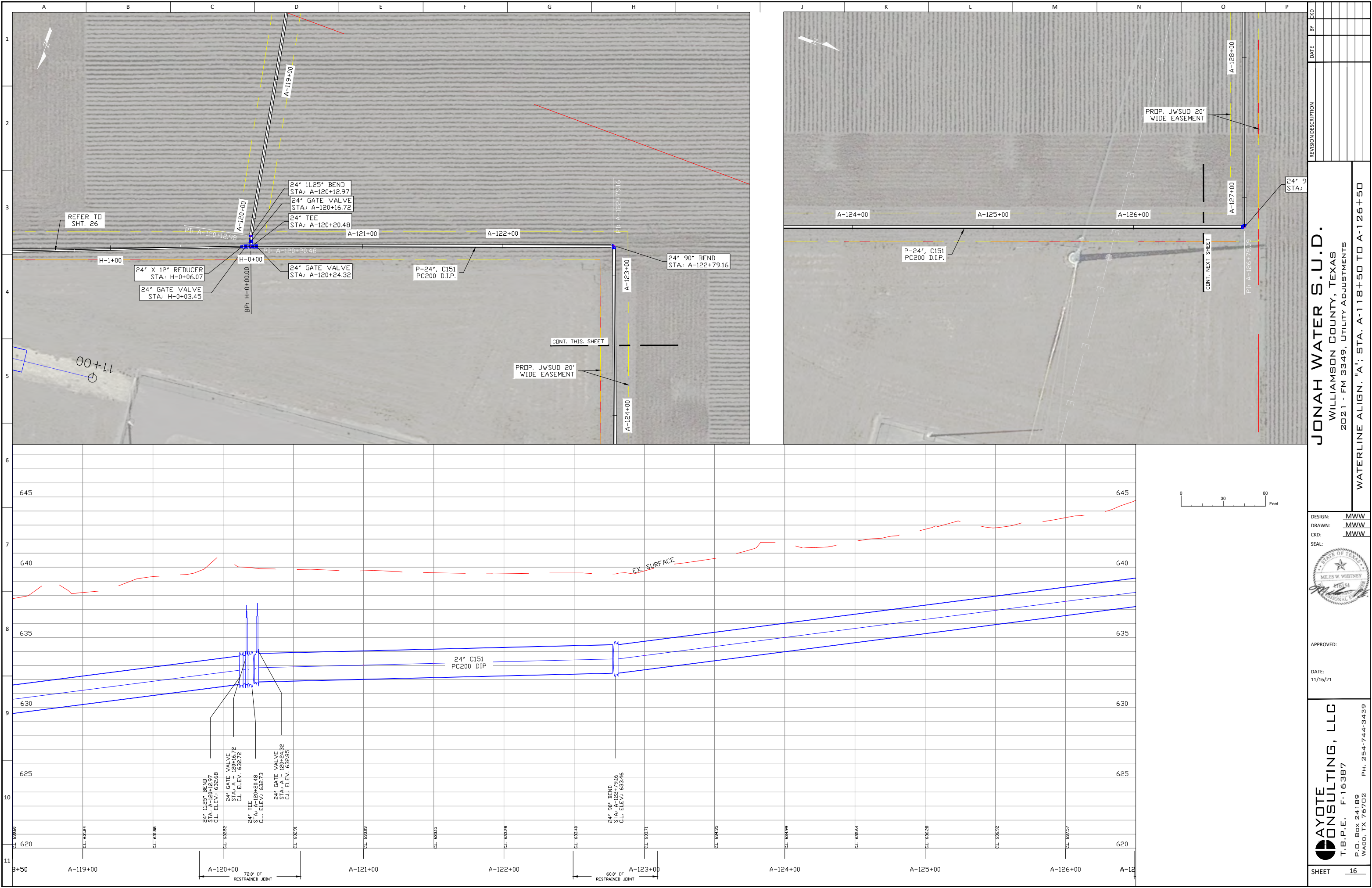
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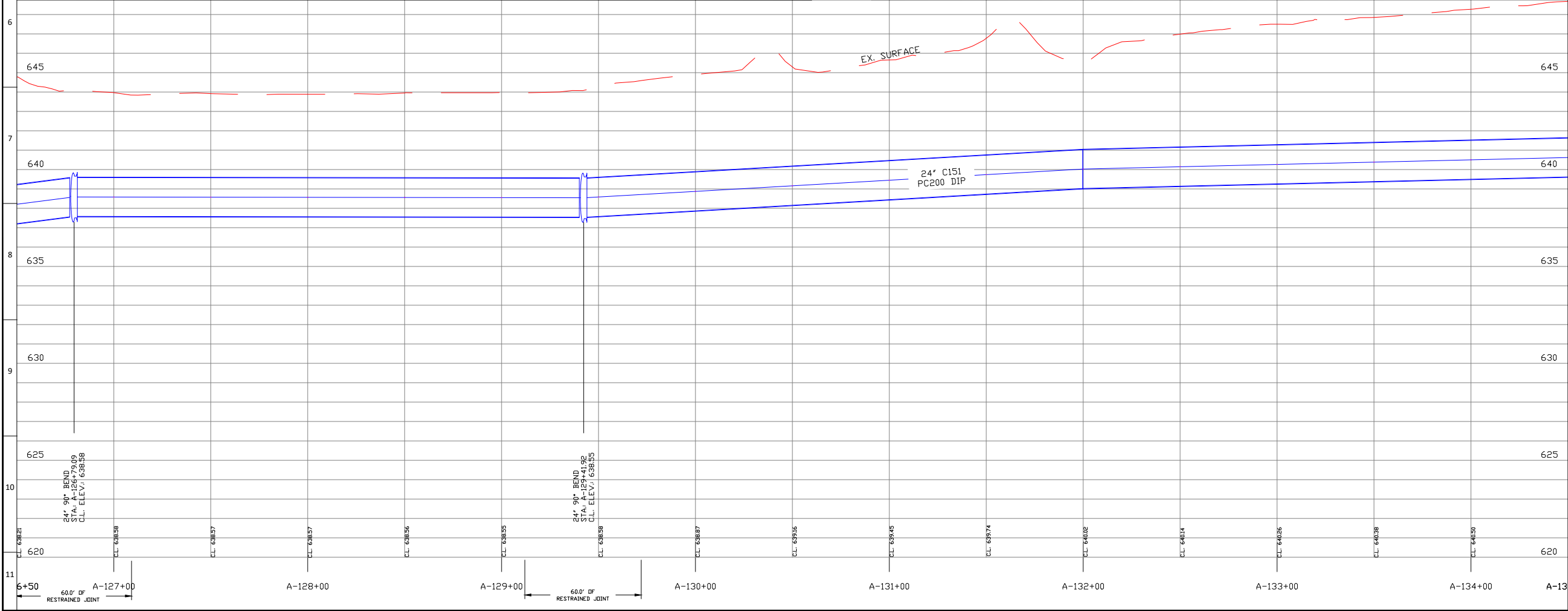
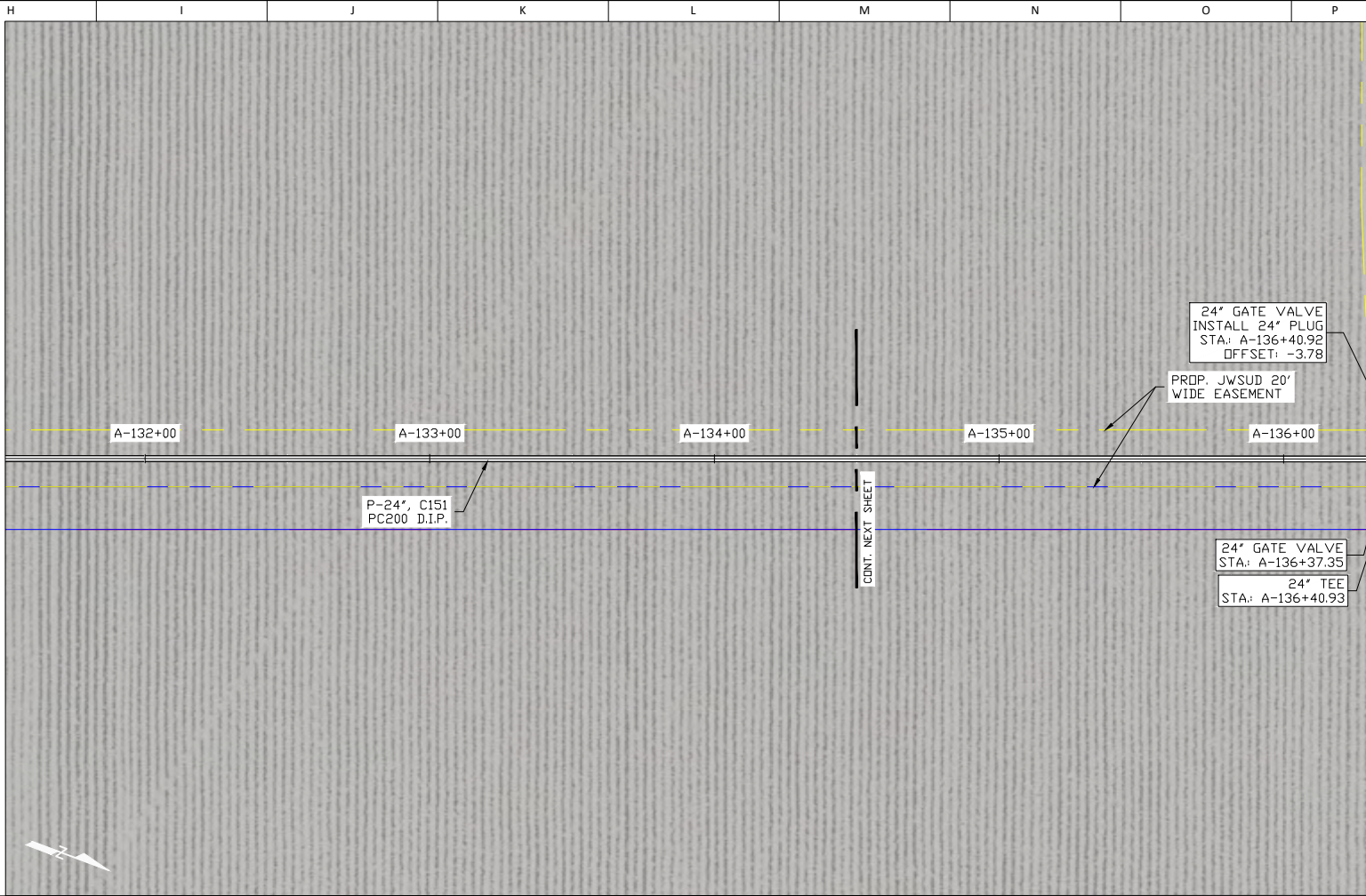
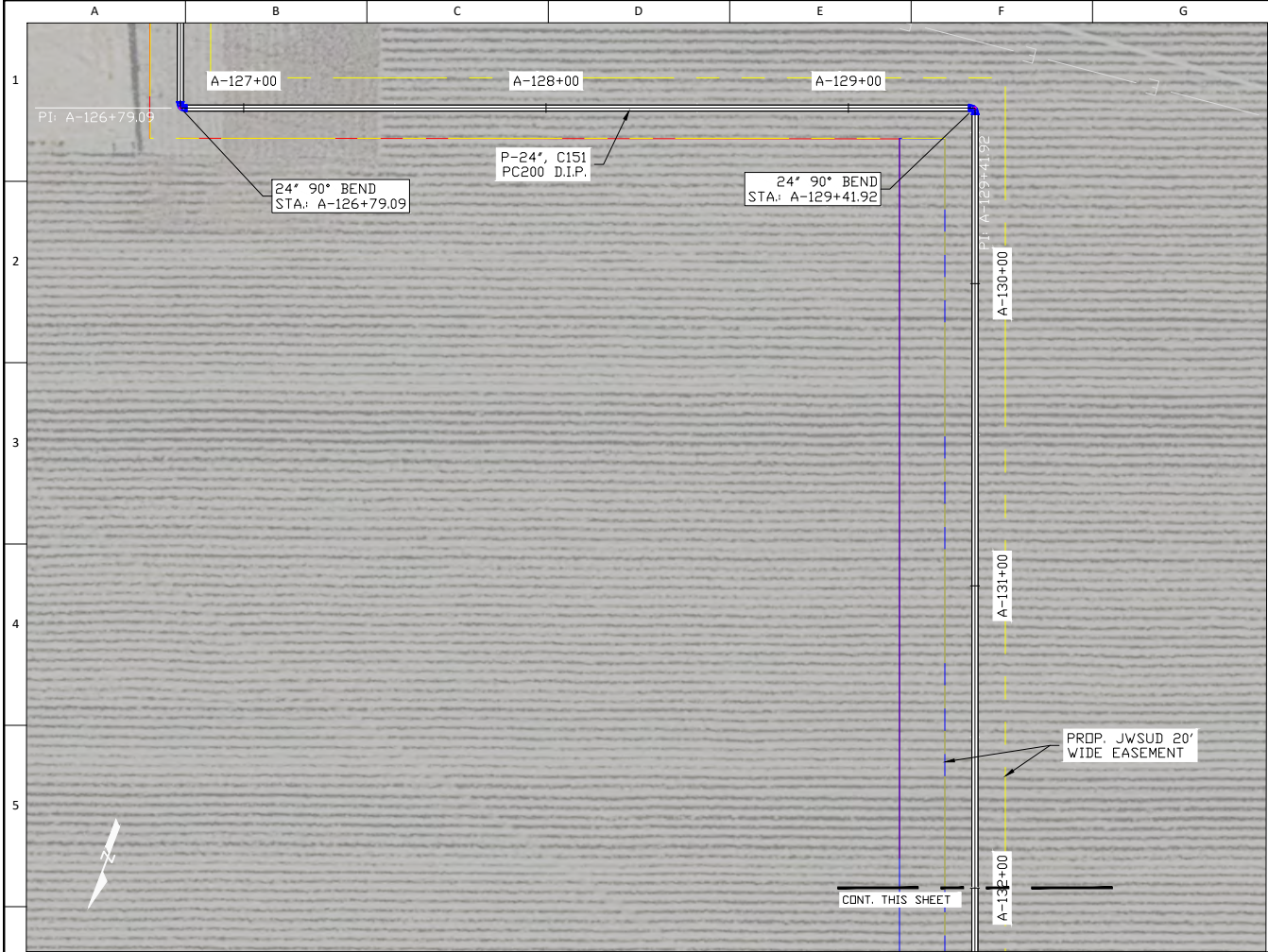


APPROVED:

DATE:
11/16/21

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REVISION	DESCRIPTION	DATE	BY	CHK

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "A"; STA. A-126+50 TO A-134+50

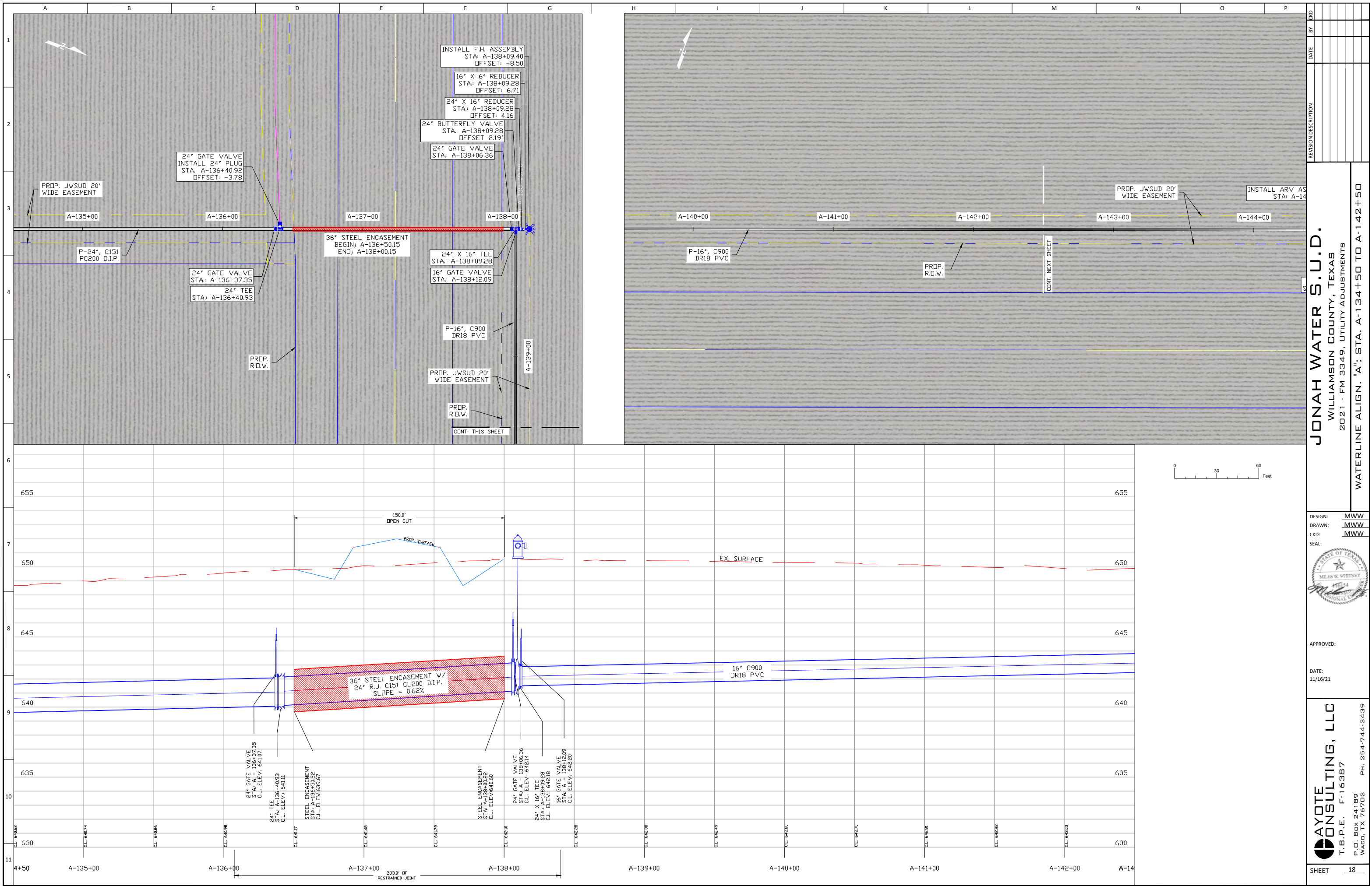
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CKD: MWW
SEAL:



APPROVED:

DATE:
11/16/21

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T.B.P.E. F-16387
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PH: 254-744-3439



NO.	DATE	BY	REVISION DESCRIPTION

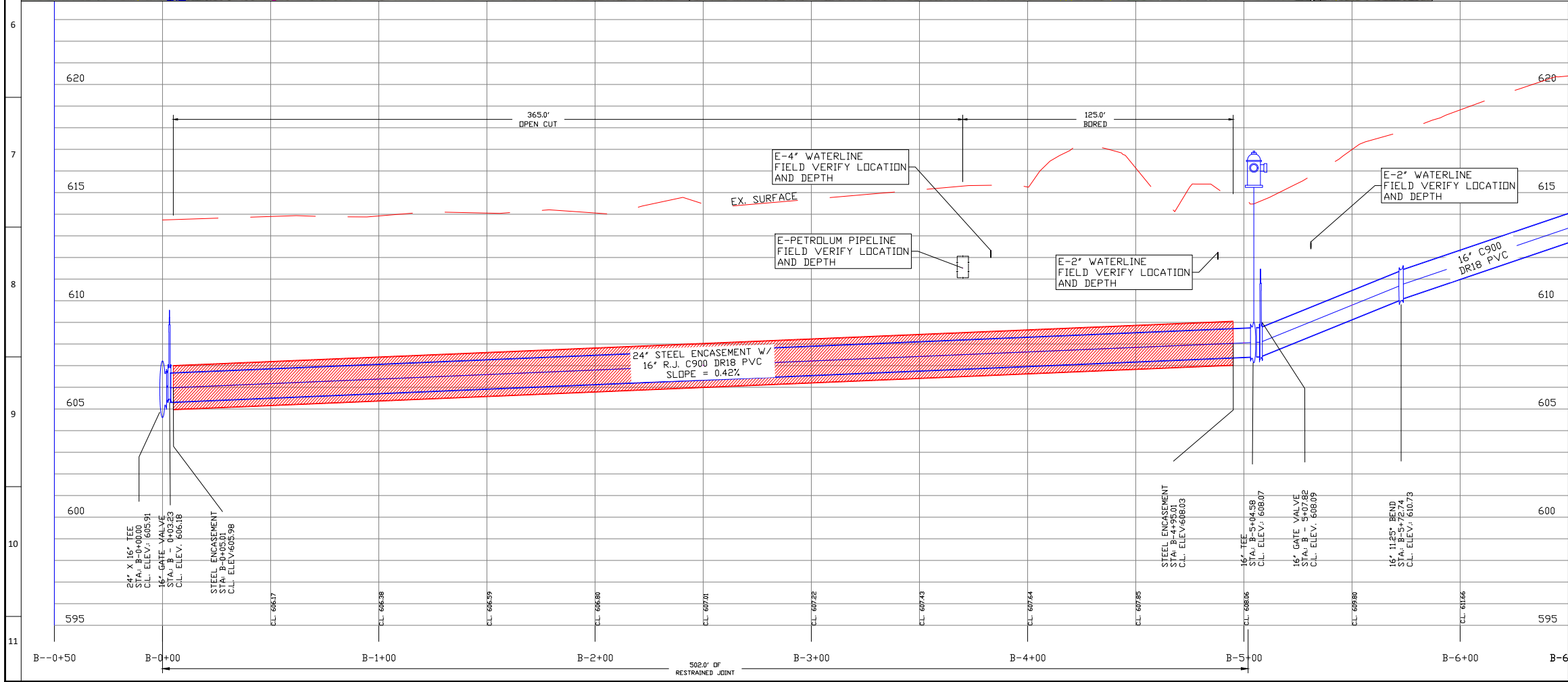
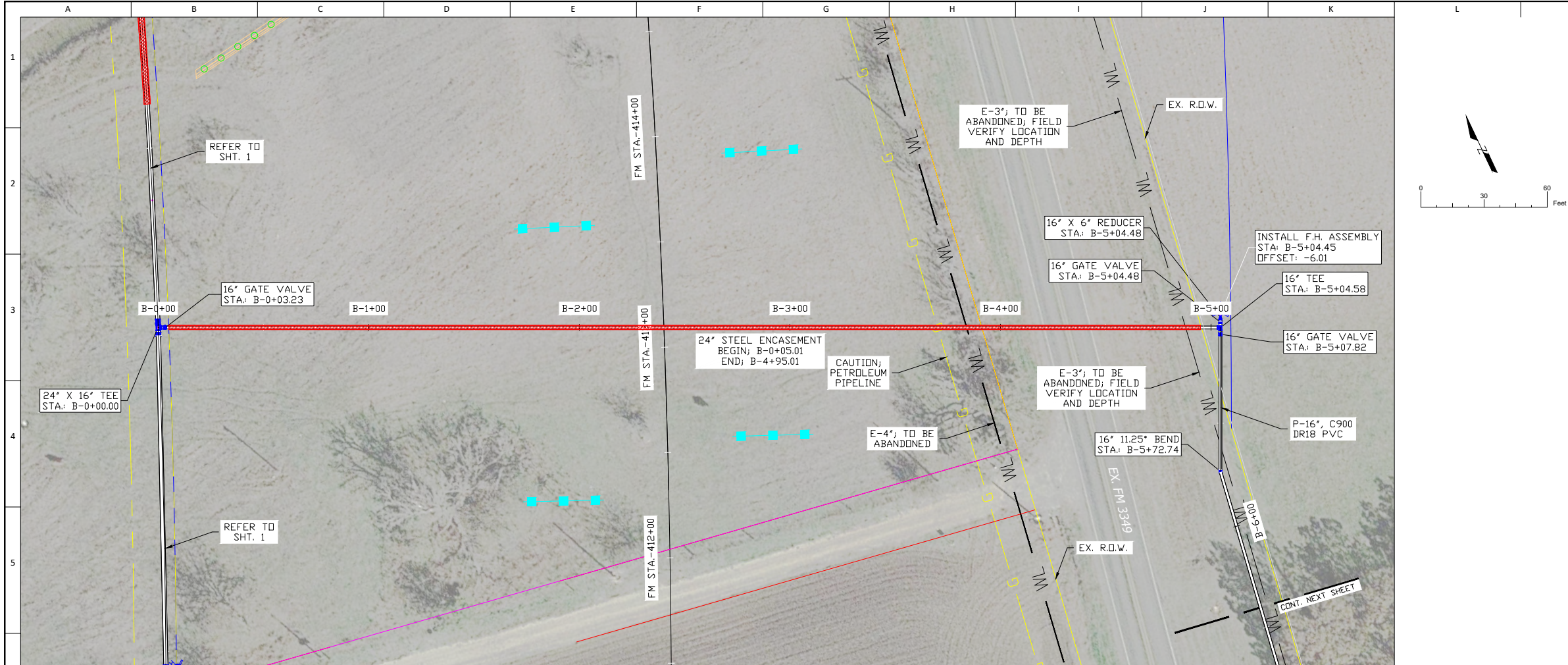
JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "A"; STA. A-134+50 TO A-142+50

DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL:

APPROVED:
DATE: 11/16/21

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WACO, TX 76702
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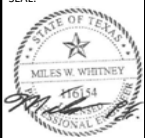
SHEET 18



REVISION	DESCRIPTION	DATE	BY	CHKD
1	16" X 16" TEE TO 24" X 16" TEE	8/16/22	JMS	JMS
2	C.L. ELEVATION ADJUSTMENTS	8/16/22	JMS	JMS

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "B"; STA. B-0+00 TO B-6+50

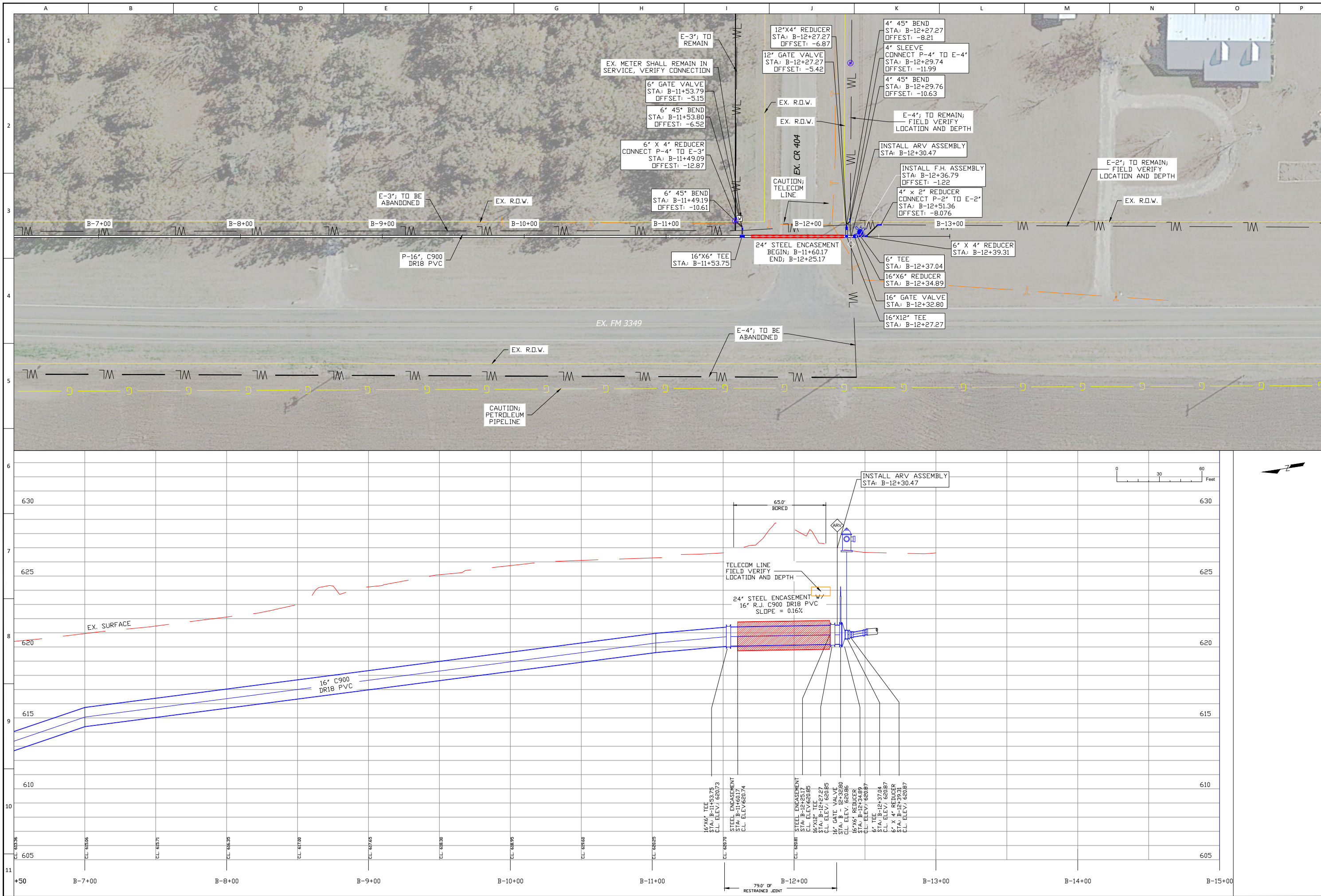
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CKD: MWW
SEAL:



APPROVED:

DATE:
08/16/22

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REVISION DESCRIPTION	
NO.	DATE

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS

WATERLINE ALIGN. "B"; STA. B-6+50 TO B-13+00

DESIGN: MWW

DRAWN: MWW

CKD: MWW

SEAL:

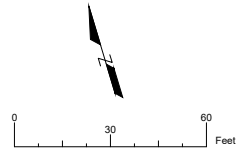
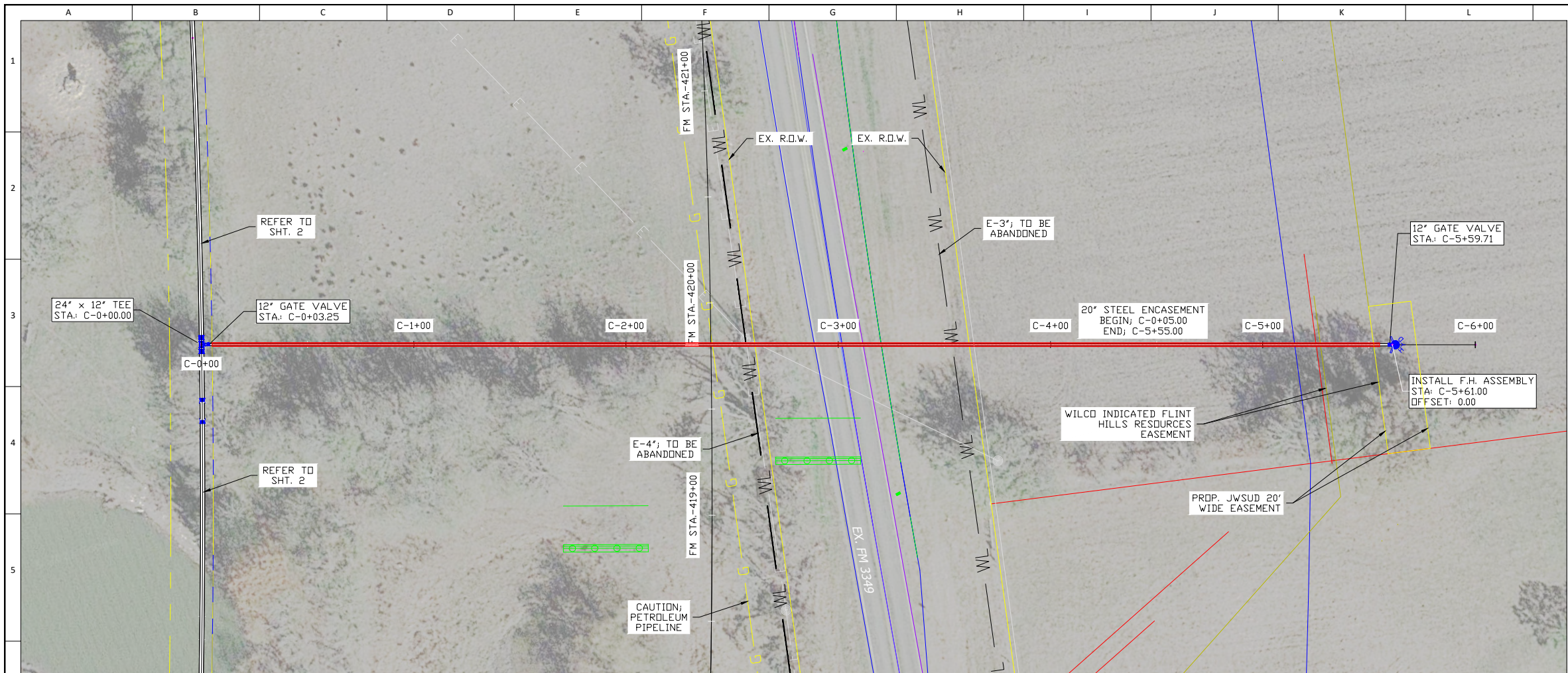
APPROVED:

DATE: 11/16/21

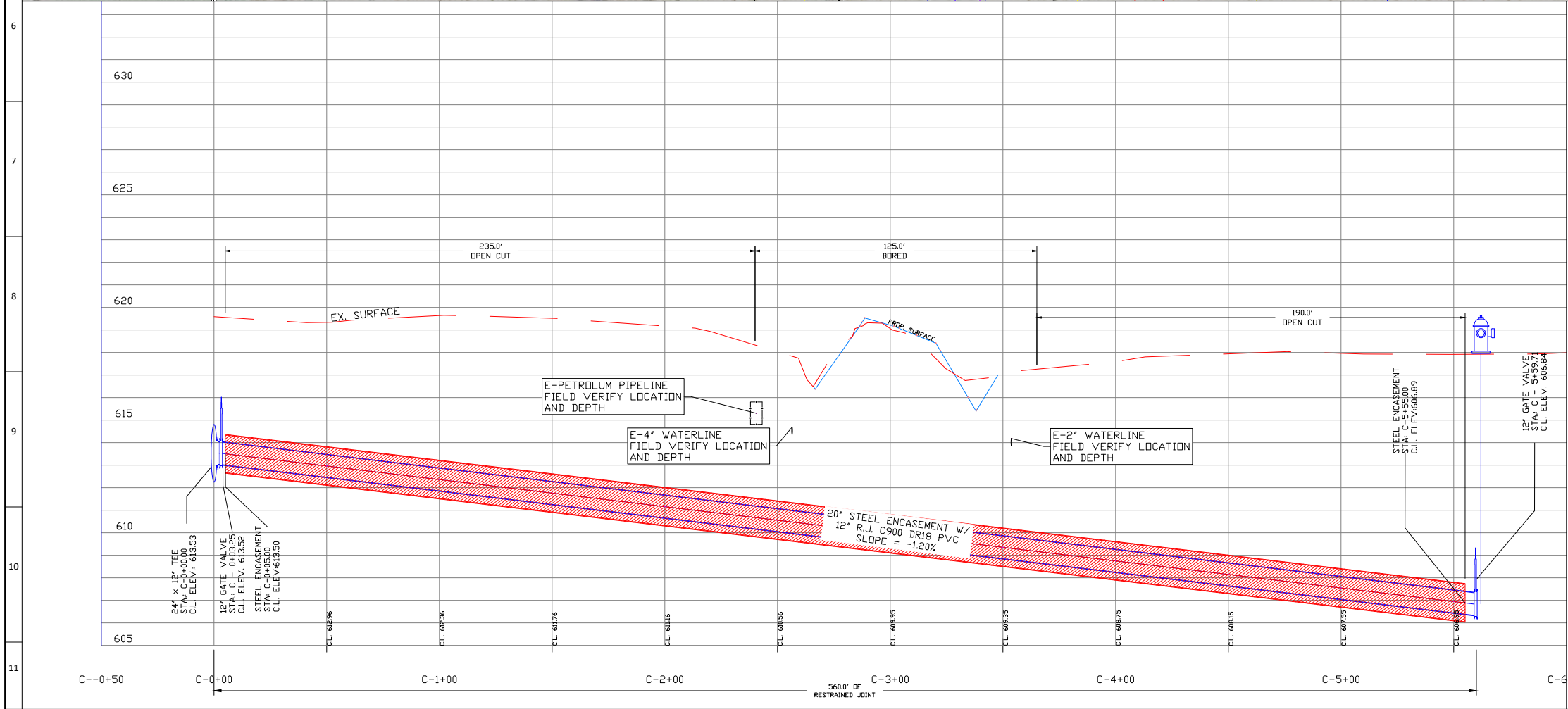
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WACO, TX 76702

PH. 254-744-3439

SHEET 21

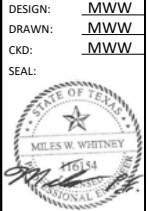


NOTE:
• CONTRACTOR SHALL BE AWARE THAT THE EASEMENT FOR THE F.H. ASSEMBLY TO BE PLACED AT STA. C-5+61 IS BEING FINALIZED AND NOT YET IN PLACE.



REVISION	DESCRIPTION	DATE	BY	CHKD
16"x12"	TEE TO 24"x12"	8.16.22	JMS	MWW
C.L.	ELEVATION ADJUSTMENTS	8.16.22	JMS	MWW

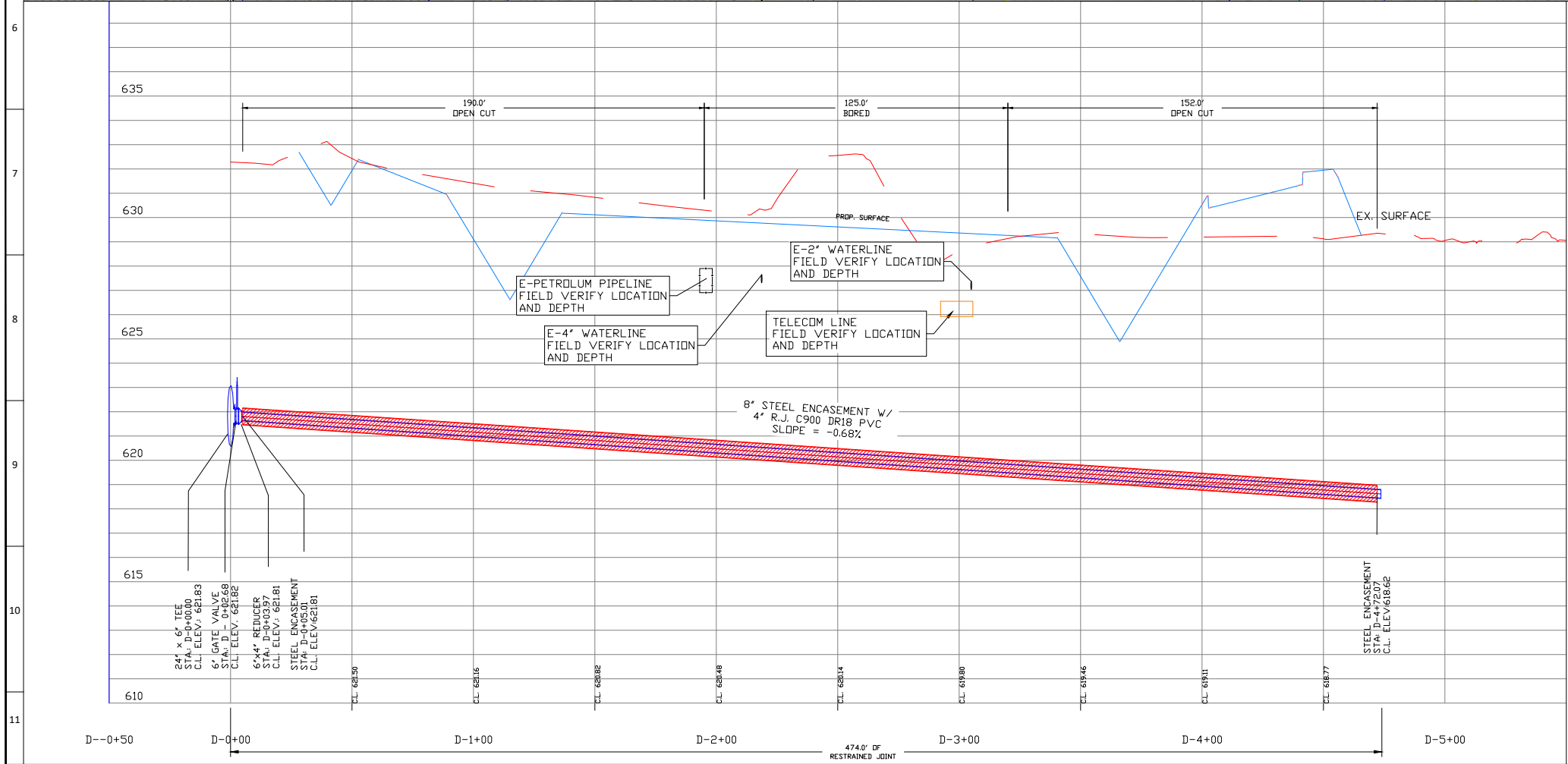
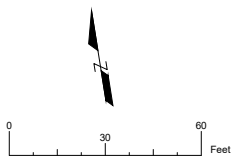
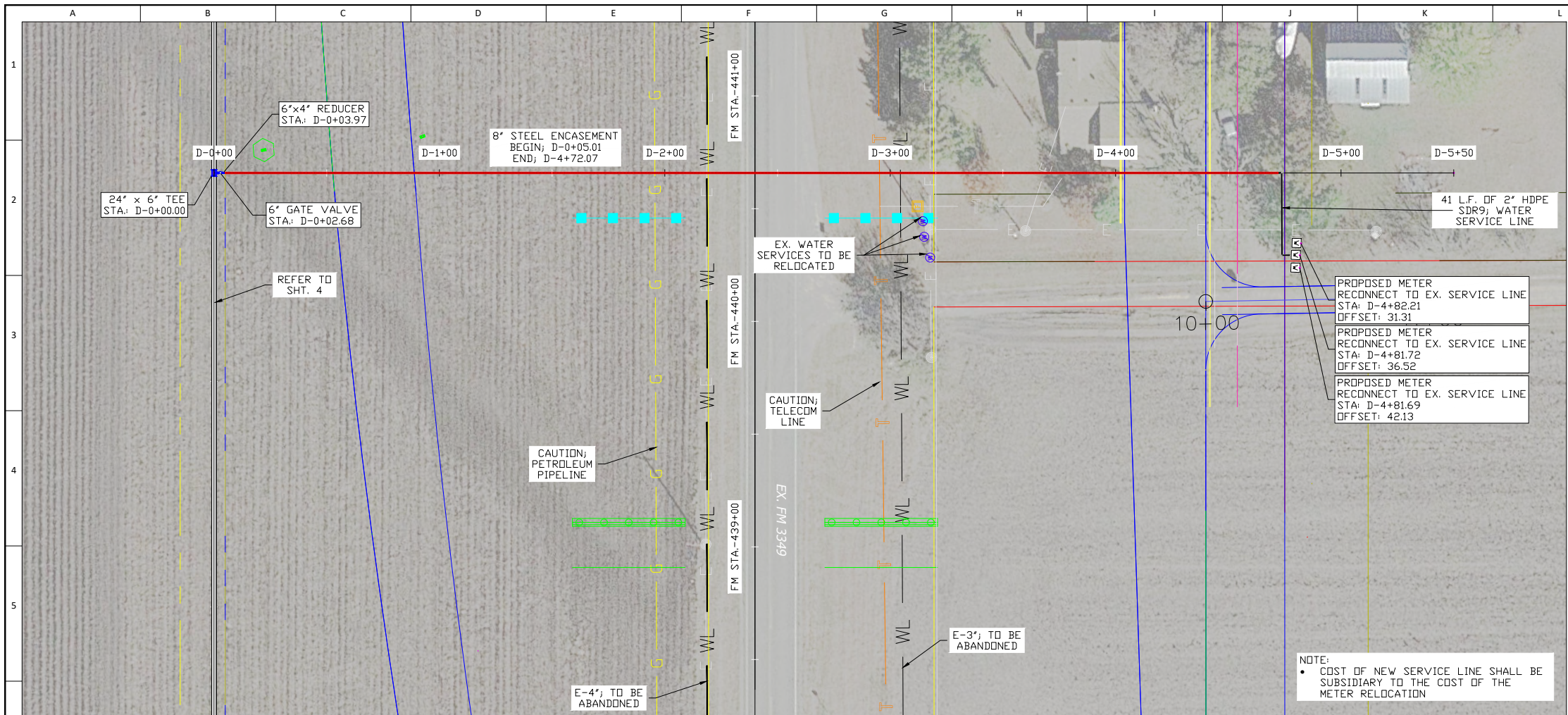
JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "C"; STA. C-0+00 TO C-6+00



APPROVED:

DATE:
08/16/22

AYOTE CONSULTING, LLC
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P.O. BOX 24189
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REVISION DESCRIPTION	DATE	BY	CHK
C.L. ELEVATION ADJUSTMENTS	8/16/22	JMS	MWW

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS

WATERLINE ALIGN. "D"; STA. D-0+00 TO D-5+50

DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL:

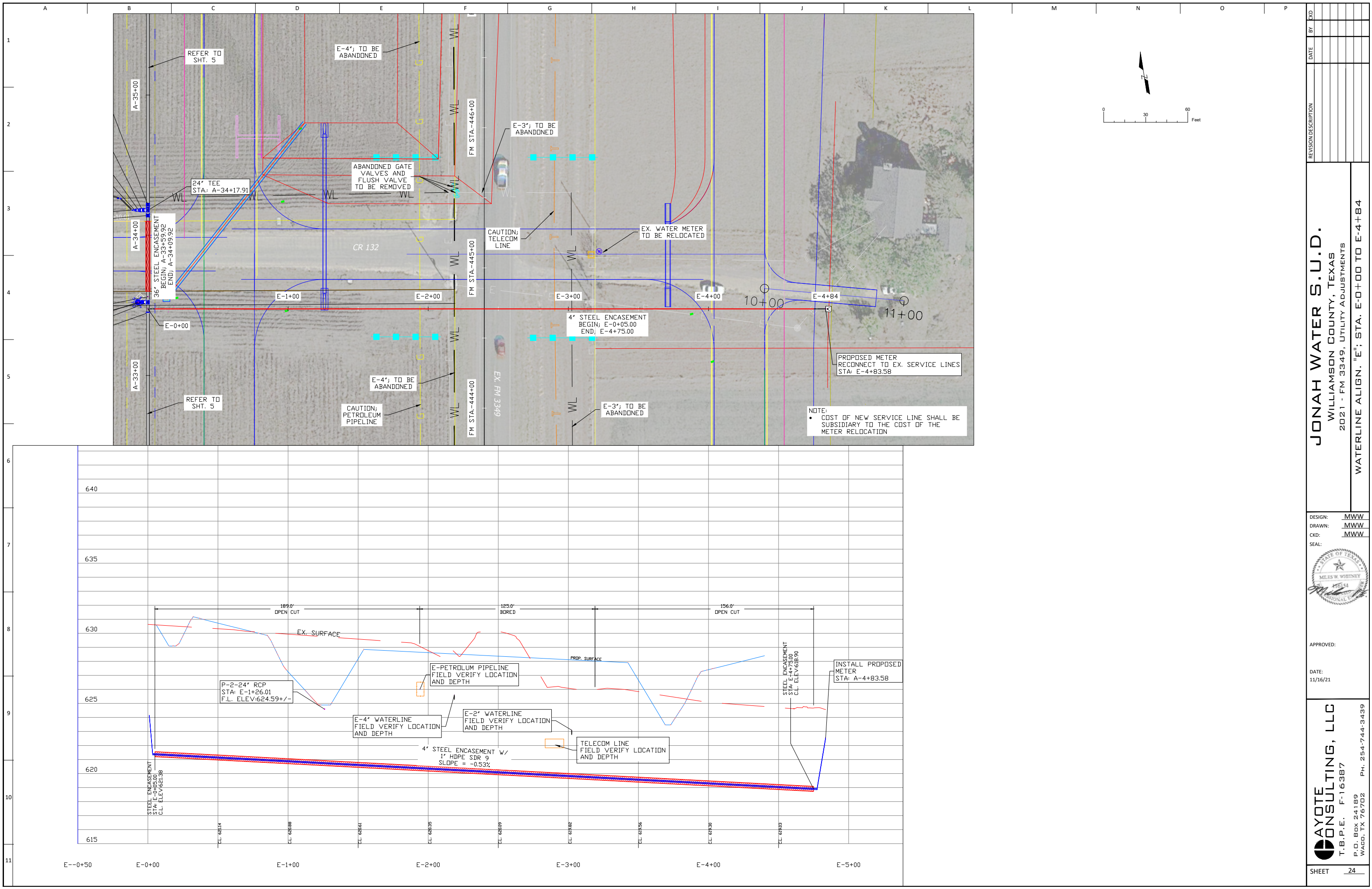


APPROVED:

DATE:
08/16/22

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T.B.P.E. F-16387
P.O. BOX 24189
WACO, TX 76702

PH: 254-744-3439



REVISION DESCRIPTION		DATE	BY	CHK

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "E"; STA. E-0+00 TO E-4+84

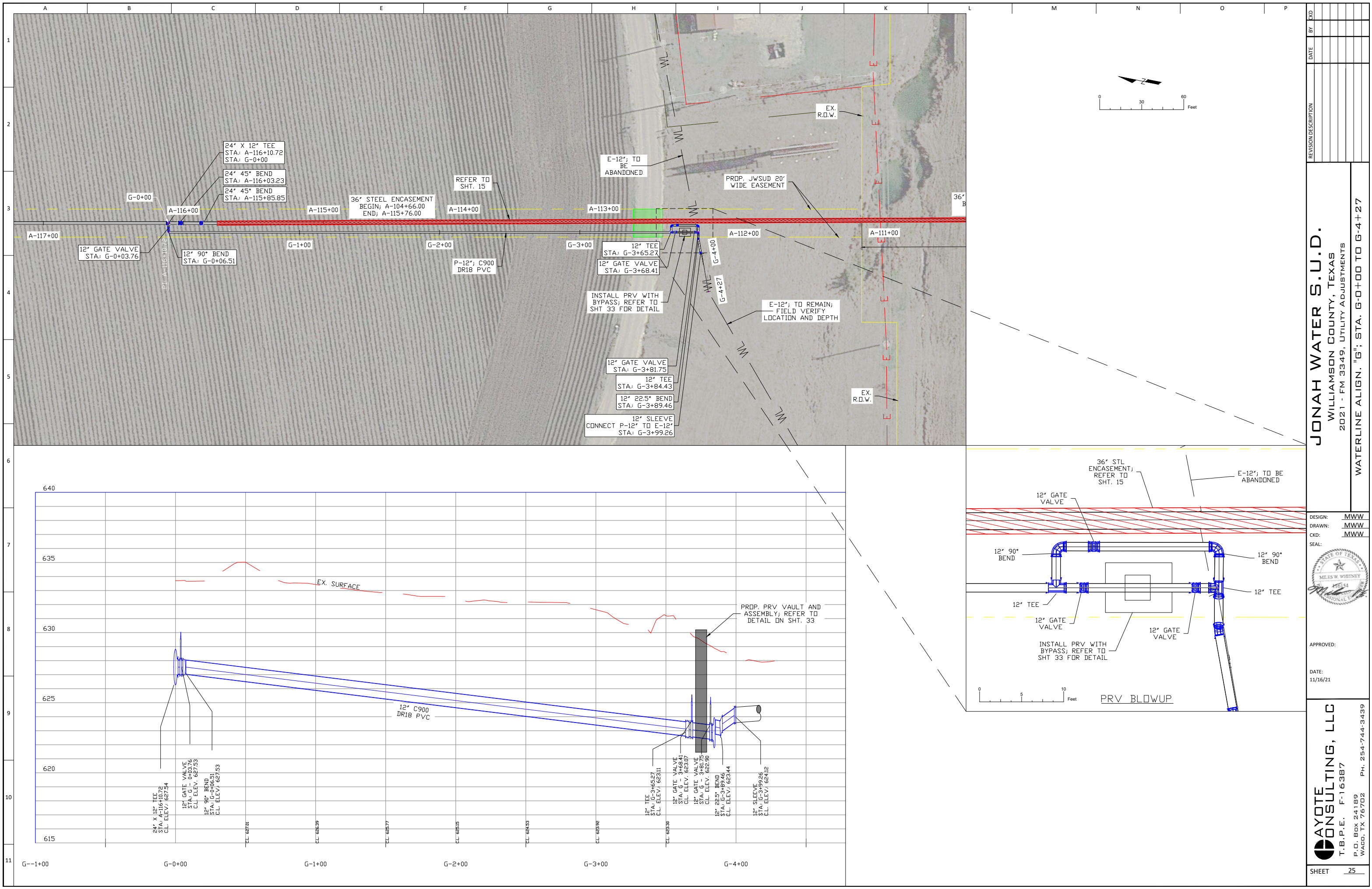
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CKD: MWW
SEAL:

APPROVED:

DATE: 11/16/21

**AYOTE CONSULTING, LLC**
T.B.P.E. F-16387
P.O. BOX 24189
WACO, TX 76702
PH. 254-744-3439

SHEET 24



NO.	DATE	BY	REVISION DESCRIPTION

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS

WATERLINE ALIGN. "G"; STA. G-0+00 TO G-4+27

DESIGN: MWW
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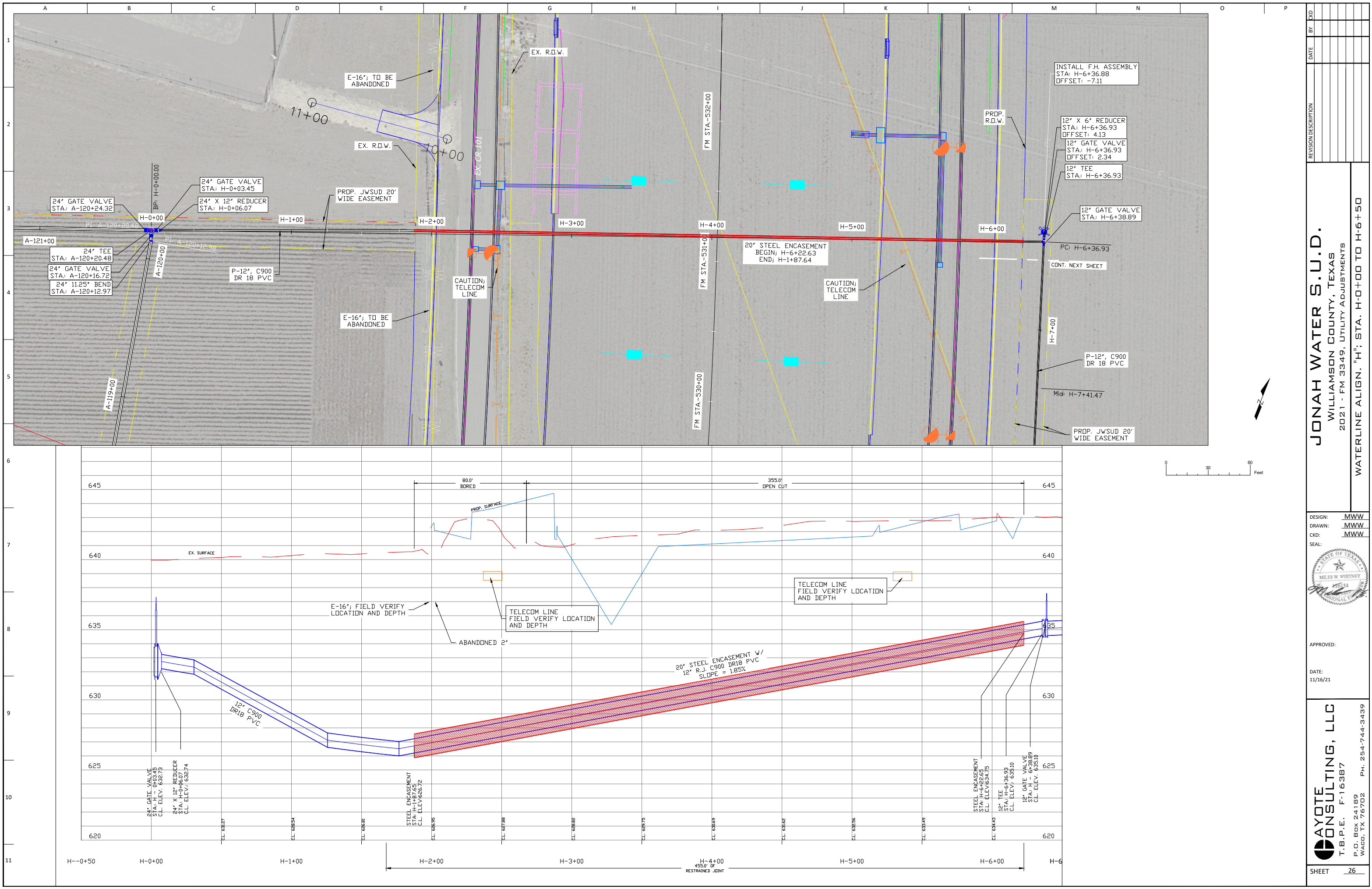
SEAL:

APPROVED:

DATE: 11/16/21

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T.B.P.E. F-16387
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WACO, TX 76702
PH. 254-744-3439

SHEET 25



NO.	BY	DATE	REVISION DESCRIPTION

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS

WATERLINE ALIGN. "H"; STA. H-0+00 TO H-6+50

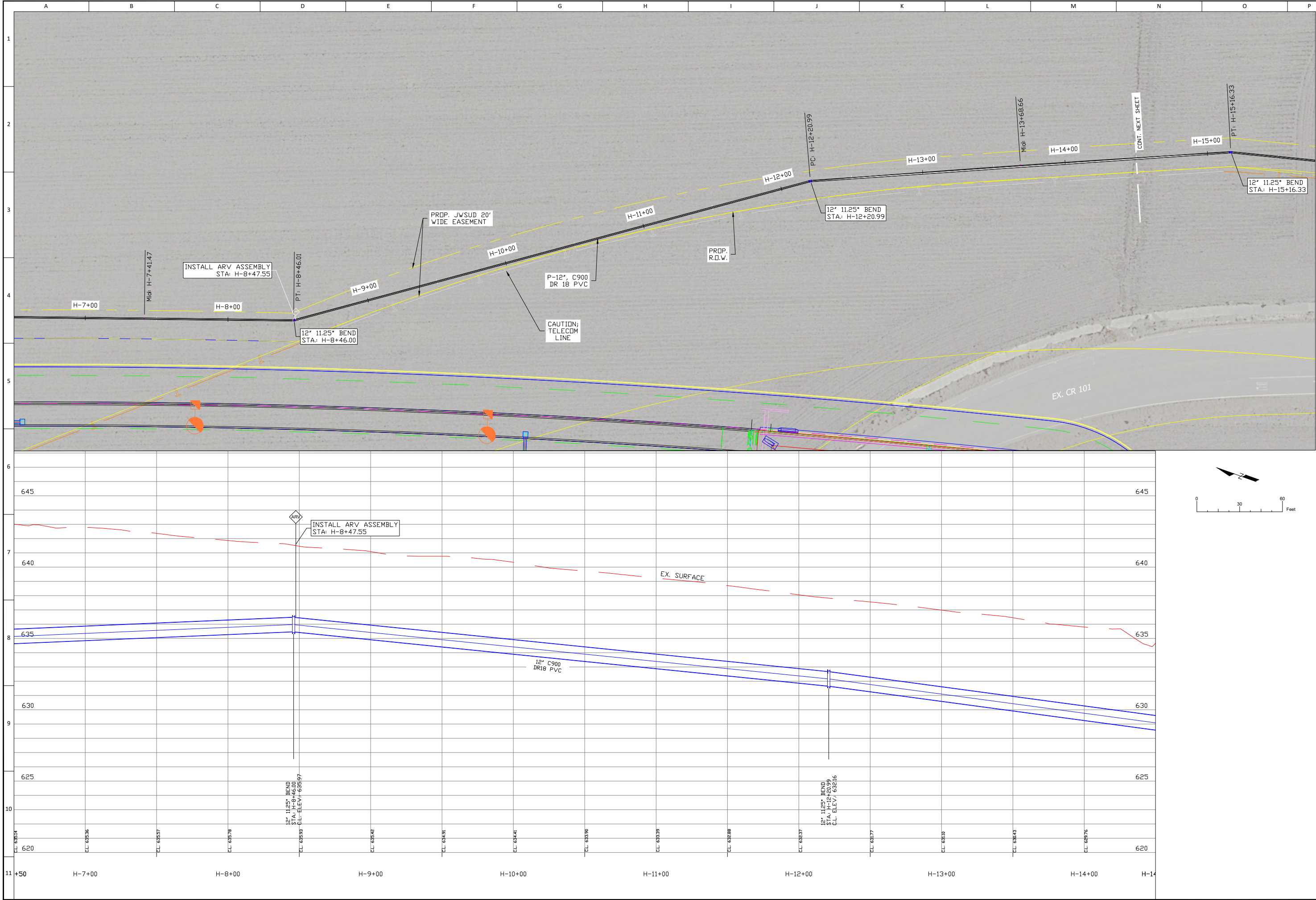
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SEAL:

APPROVED:

DATE: 11/16/21

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P.O. BOX 24189
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PH. 254-744-3439

SHEET 26



REVISION DESCRIPTION	DATE	BY	CHK

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS

WATERLINE ALIGN. "H"; STA. H-6+50 TO H-14+50

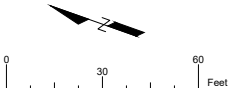
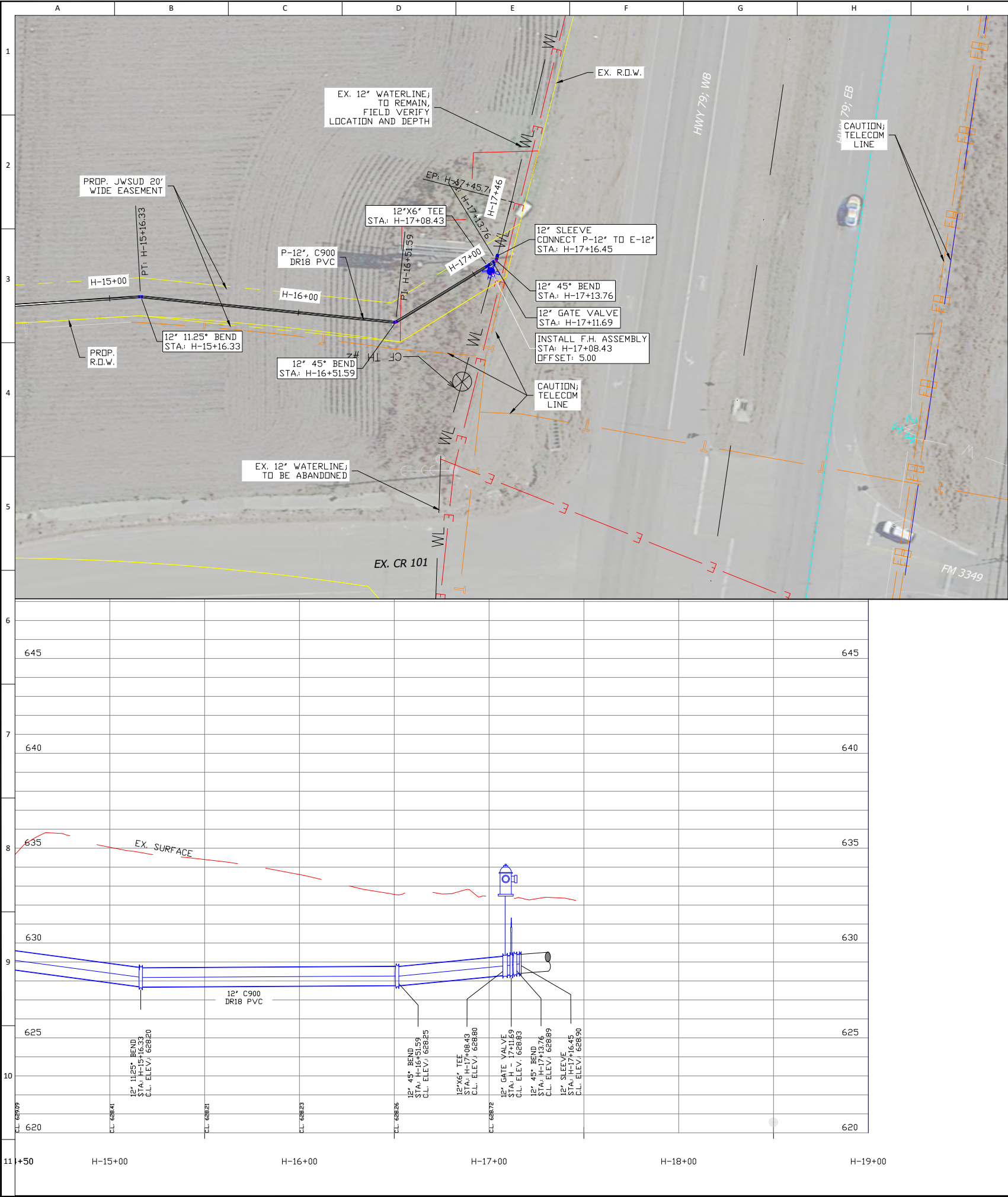
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SEAL:

APPROVED:

DATE:
11/16/21

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SHEET **27**



NO.	DATE	BY	CHKD

REVISION DESCRIPTION

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "H"; STA. H-14+50 TO H-17+50

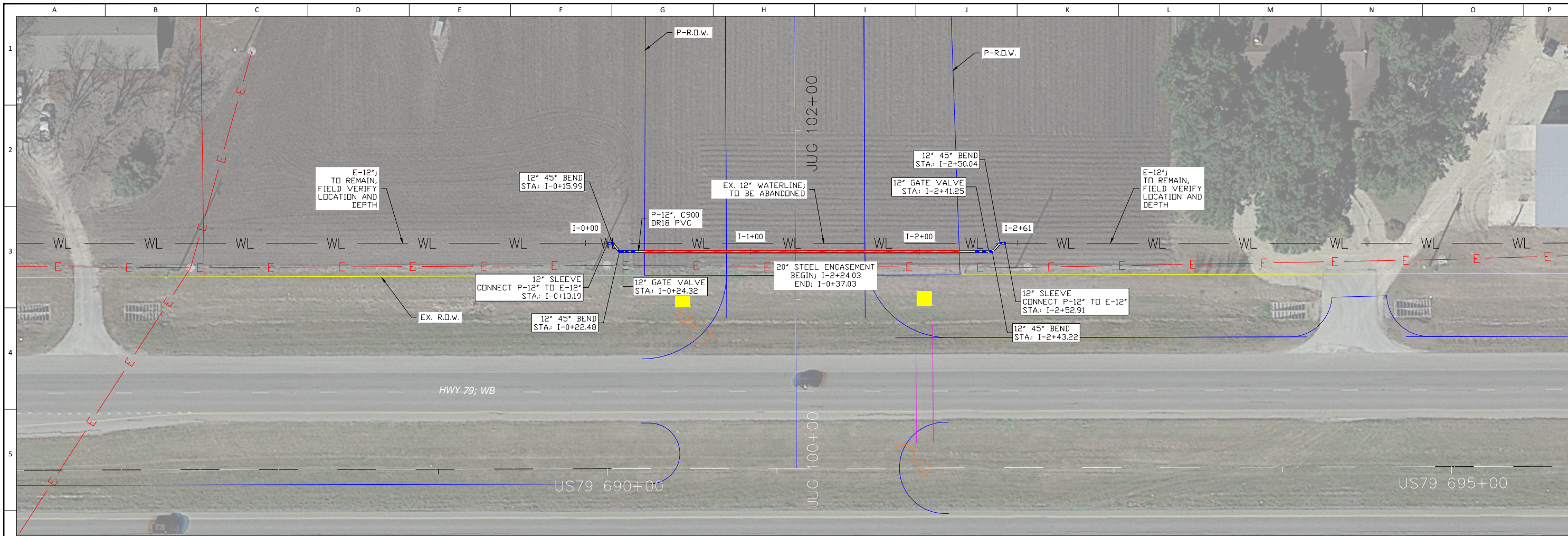
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APPROVED:

DATE: 11/16/21

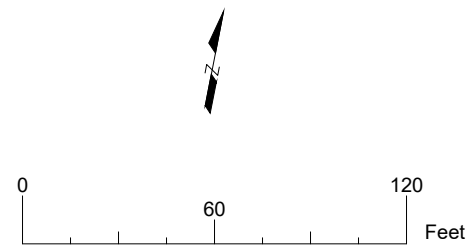
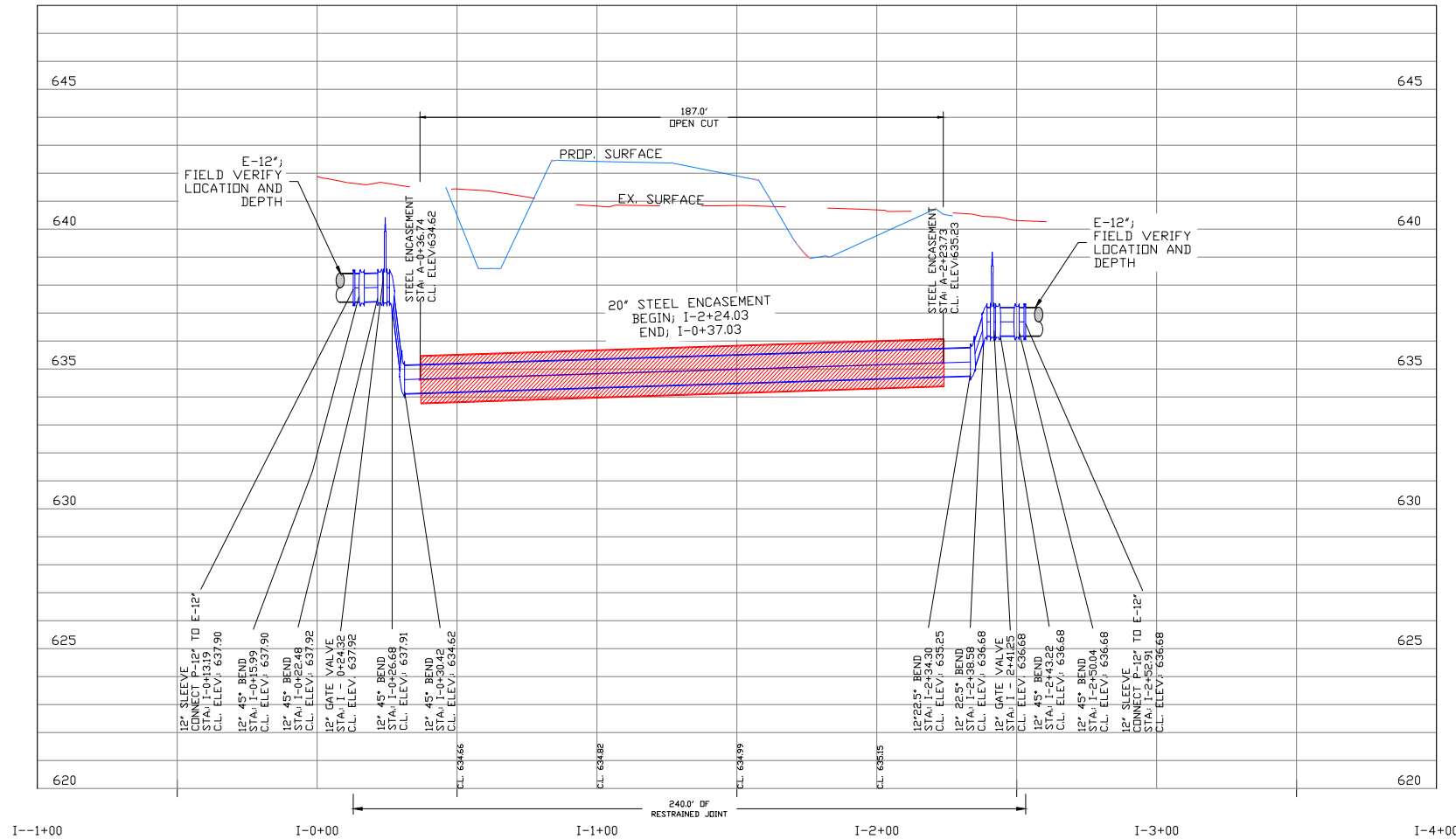
AYOTE CONSULTING, LLC
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SHEET 28



NOTE:

- IT IS THE INTENT TO UTILIZE JWSUD'S EXISTING EASEMENT FOR THIS ADJUSTMENT



REVISION DESCRIPTION		DATE	BY	CHK

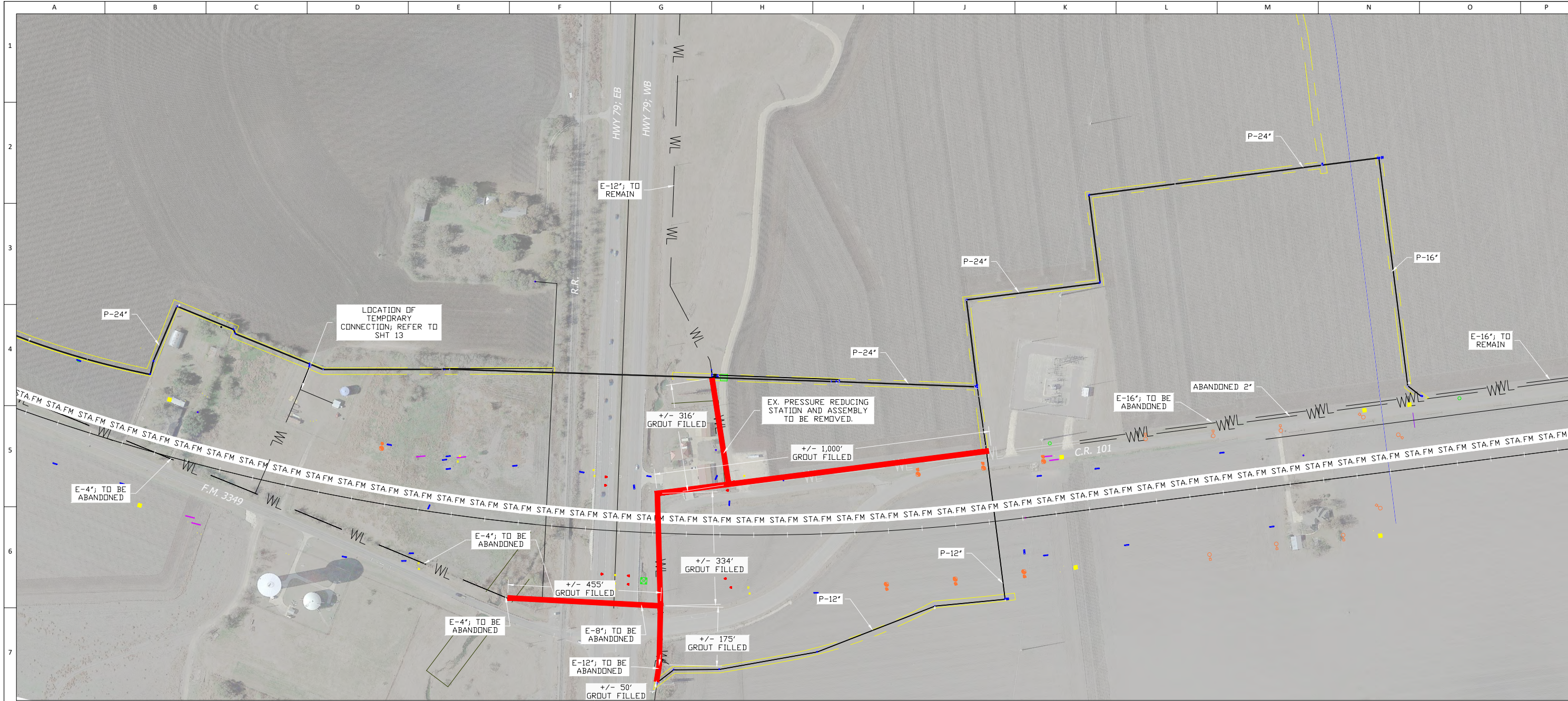
JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS

WATERLINE ALIGN. 1"; STA. I-00+00 TO I-02+50

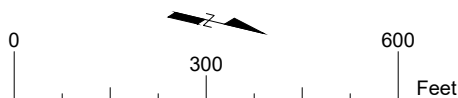
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APPROVED:	
DATE:	7/12/22

AYOTE CONSULTING, LLC
T.B.P.E. F-16387
P.O. BOX 24189
WACO, TX 76702
PH. 254-744-3439

SHEET **28.1**



- NOTES:
- ALL JWSUD WATERLINES TO BE ABANDONED WITHIN EXISTING AND PROPOSED TxDOT R.O.W. AND THE EXISTING UNION PACIFIC R.O.W. SHALL BE FILLED WITH GROUT, ONCE PROPOSED LINES ARE INSTALLED AND ARE IN SERVICE. FIELD VERIFY LOCATIONS, SIZES, AND DEPTHS.
 - APPROXIMATE LENGTHS OF EXPECTED LINES TO BE ABANDONED / SIZE.
 - 16" 780 L.F.
 - 12" 1,095 L.F.
 - 8" 455 L.F.
 - CONTRACTOR SHALL REFER TO SHEET 13, TO REFERENCE AREA THAT IS TO BE CONSTRUCTED INITIALLY TO ALLOW ROADWAY TO COMMENCE AT THE INTERSECTION OF HWY 79/R.R. AND FM 3349.
 - EXISTING PRESSURE REDUCING VALVE (PRV) STATION TO BE REMOVED ONCE E-12" LINE IS ABANDONED. COORDINATE WITH JWSUD FOR ABANDONMENT. PRV VALVE TO BE RETURNED TO JWSUD.



DENOTES PIPELINE LIMITS TO BE FILLED WITH GROUT PER SPECIFICATIONS

REVISION DESCRIPTION		DATE	BY	CHK

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - FM 3349, UTILITY ADJUSTMENTS
HWY 79 / FM 3349 INTERSECTION; PIPELINE ABANDONMENT

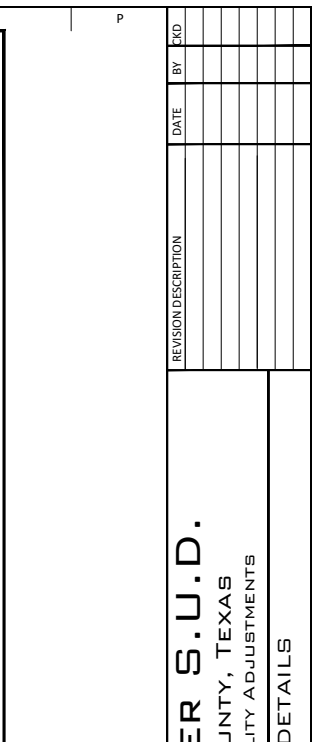
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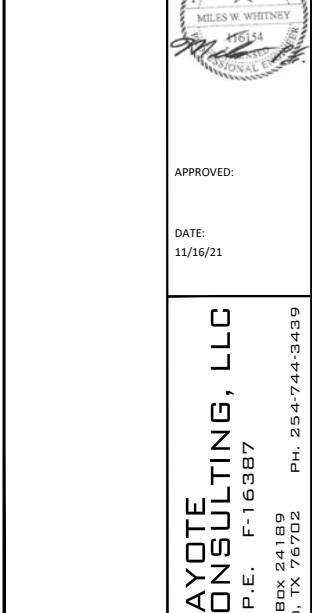
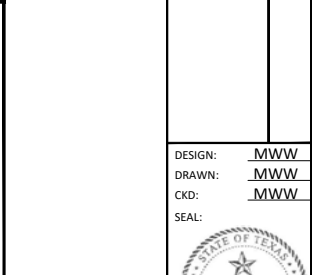
DATE: 11/16/21

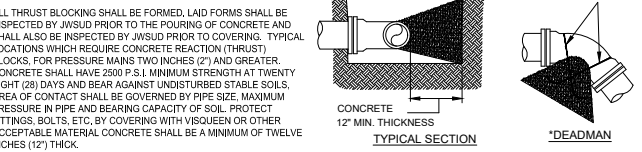
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P.O. BOX 24189
WACO, TX 76702
PH. 254-744-3439

SHEET 29



WILLIAMSON COUNTY
- FM 3349, UTILITY
STANDARD

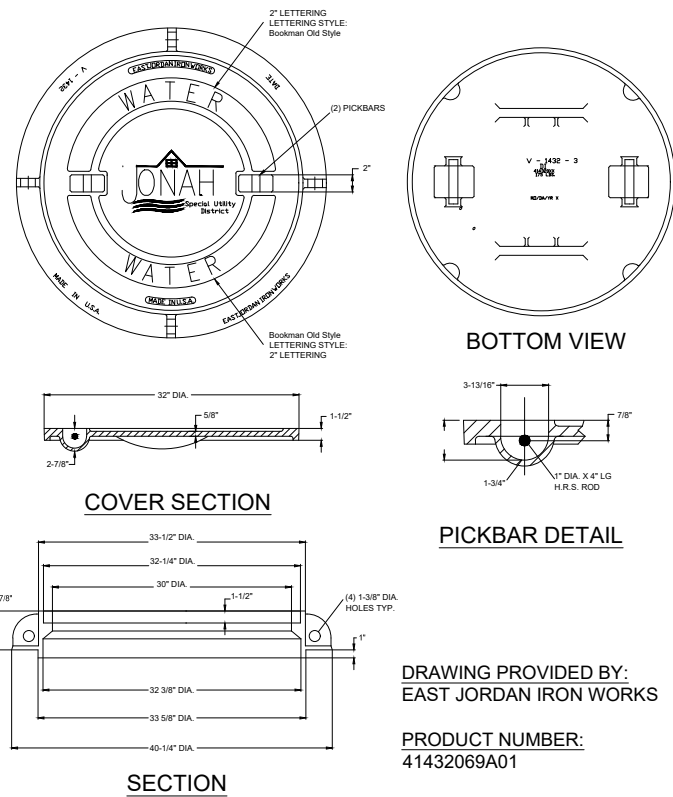
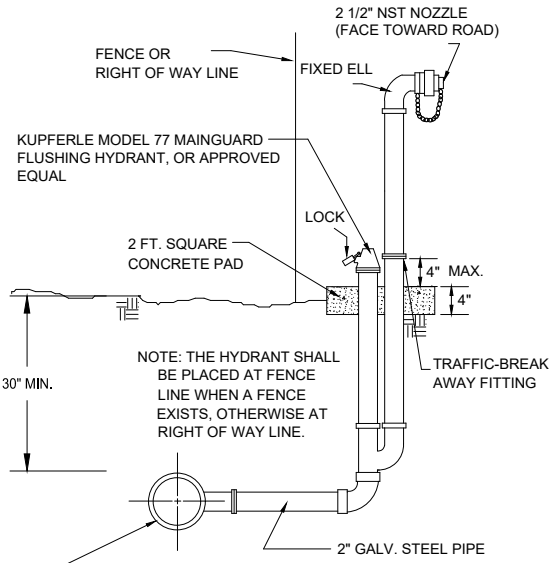
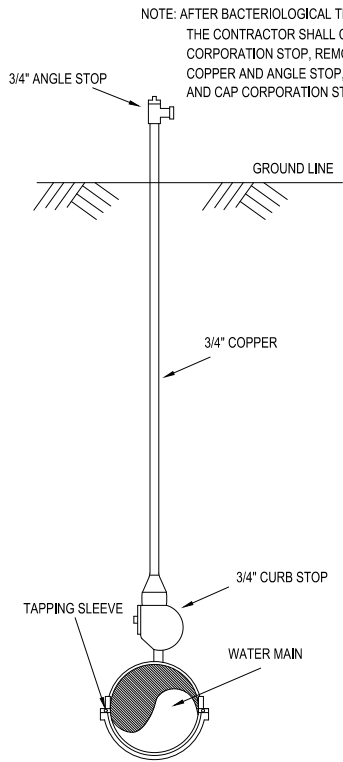




PIPE SIZE	THRUST BLOCK AREA REQUIRED	PIPE SIZE	THRUST BLOCK AREA REQUIRED	REMARKS
4"	2.0 SQ. FT.	18"	30.0 SQ. FT.	VALUES ARE FOR 90° BENDS, BASED ON 2000 P.S.F. SAE BEARING LOAD AND PIPE * PRESSURE OF 150 P.S.I. PLUS 33% SAFETY FACTOR FOR OTHER SOILS AND PRESSURES, THE AREA REQUIRED IS IN DIRECT PROPORTION.
6"	4.0 SQ. FT.	20"	37.0 SQ. FT.	
8"	6.6 SQ. FT.	24"	53.0 SQ. FT.	
10"	10.0 SQ. FT.	27"	80.0 SQ. FT.	
12"	14.0 SQ. FT.	30"	98.0 SQ. FT.	
14"	18.0 SQ. FT.			
16"	24.0 SQ. FT.			

*THE ENGINEER OF RECORD SHALL CALCULATE THE SIZE OF THE DEADMAN REQUIRED AS WELL AS ANY INSTALLATION WHICH IS NOT COVERED BY THE ABOVE.

- NOTE:
- * ALL 3" & LARGER ELBS, TEES AND BENDS SHALL BE MILD DUCTILE IRON FITTINGS WITH "MEGALUG" OR APPROVED EQUAL JOINT RESTRAINTS - CONCRETE THRUST BLOCKING AS SHOWN IN THE ABOVE TABLE SHALL BE INSTALLED. JOINT RESTRAINTS SHALL ALSO BE USED FOR ANY PIPE LENGTH LESS THAN ONE FULL PIPE JOINT AWAY FROM EACH M.J. FITTING.
 - * ALL 2-1/2" AND SMALLER CAPS, ELBS, TEES AND 45° BENDS SHALL BE HARCO PUSH-ON DUCTILE IRON FITTINGS WITH KNUKLE JOINT RESTRAINT OR APPROVED EQUAL - CONCRETE THRUST BLOCKING AS SHOWN IN THE ABOVE TABLE SHALL BE INSTALLED.
 - * OTHER THRUST BLOCKING DIMENSIONS ACCEPTED IF DESIGNED BY LICENSED ENGINEER.



JONAH WATER SUD
WATER CONSTRUCTION STANDARD DETAILS

TYPICAL THRUST BLOCKS FOR WATER AND FORCE MAINS DETAIL



JONAH WATER SUD
WATER CONSTRUCTION STANDARD DETAILS

TEMPORARY SAMPLING TEST STATION



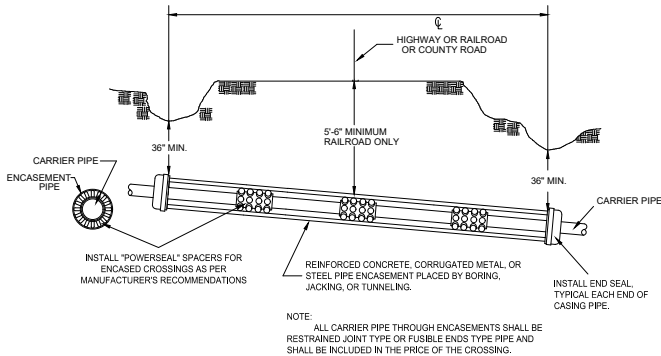
JONAH WATER SUD
WATER CONSTRUCTION STANDARD DETAILS

FIRE TYPE BLOW OFF HYDRANT



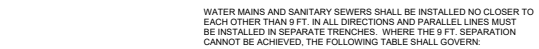
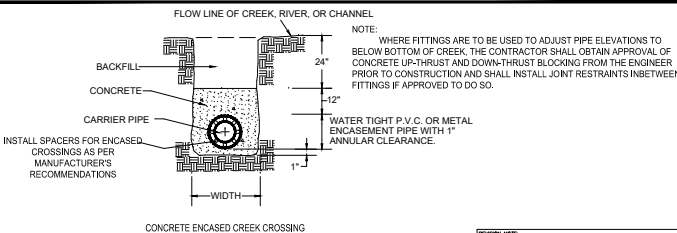
JONAH WATER SUD
WATER CONSTRUCTION STANDARD DETAILS

WATER MANHOLE LID

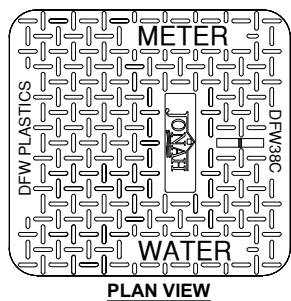


COUNTY ROAD, HIGHWAY AND RAILROAD CROSSINGS

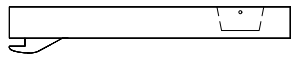
STEEL ENCASEMENT WALL THICKNESS CHART FOR SMOOTH STEEL CASING PIPE WITH A MINIMUM YIELD STRENGTH OF 35,000 PSI.		
MINIMUM THICKNESS		DIAMETER OF CASING PIPE.
0-0.2500"	0-0 1/4"	12" OR LESS
0-0.3125"	0-0 5/16"	OVER 12" TO 18"
0-0.3750"	0-0 3/8"	OVER 18" TO 22"
0-0.4375"	0-0 7/16"	OVER 22" TO 28"
0-0.5000"	0-0 1/2"	OVER 28" TO 34"
0-0.5625"	0-0 9/16"	OVER 34" TO 42"
0-0.6250"	0-0 5/8"	OVER 42" TO 48"



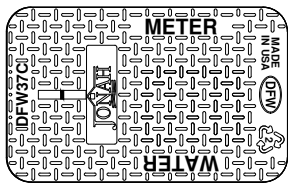
CONDITION	LOCATION		MATERIAL		MINIMUM SEPARATION		COMMENTS
			WATER	SEWER	VERT.	HORIZ.	
<u>NEW WATER AND NEW SEWER</u>							
SEWER FORCE MAIN AND GRAVITY SANITARY SEWER PARALLEL TO WATER MAIN	WATER ABOVE SEWER	STD.	C.I. D.I. P.V.C., 150 P.S.I.		2'	4'	SEPARATE TRENCHES
GRAVITY SANITARY SEWER CROSSING WATER MAIN	WATER ABOVE SEWER OR SEWER ABOVE WATER	STD.	C.I. D.I. P.V.C., 150 P.S.I.		6"	NA	CENTER ONE JOINT OF SEWER ON WATER MAIN
GRAVITY SANITARY SEWER CROSSING WATER MAIN	WATER ABOVE SEWER	STD.	ABS. CLAY CONCRETE COMPOSITE		2'	NA	CEMENT STABILIZE SAND INITIAL BACKFILL ZONE OF SEWER POR 9 FT. EACH SIDE OF CENTER ONE JOINT OF SEWER ON WATER MAIN.
<u>NEW WATER AND EXISTING SANITARY SEWER</u>							
NEW WATER PARALLEL TO EXISTING SEWER	WATER ABOVE SEWER	STD.	CLAY, CONC., ABS., C.I. D.I. P.V.C.		2'	4'	IF SEWER SHOWS NO SIGN OF LEAKAGE, THEN LEAVE AS IS ALONE. IF SEWER SHOWS SIGN OF LEAKAGE, THEN REPLACE.
NEW WATER CROSSING EXISTING SEWER	WATER ABOVE SEWER	STD.	ABS. CLAY, CONCRETE COMPOSITE		2'	NA	IF SEWER SHOWS NO SIGN OF LEAKAGE, THEN LEAVE AS IS ALONE. IF SEWER SHOWS SIGN OF LEAKAGE, THEN REPLACE.
NEW WATER CROSSING EXISTING SEWER	SEWER ABOVE WATER	STD.	ABS. CLAY, CONCRETE COMPOSITE		2'	NA	REPLACE EXISTING SEWER ONE JOINT C.I. D.I. P.V.C. P.S.I., CENTERING OVER LINE.
NEW WATER PARALLEL TO EXISTING SEWER	SEWER ABOVE WATER	STD.	ABS. CLAY, CONCRETE COMPOSITE		2'	4'	REPLACE EXISTING SEWER D.I. P.V.C.-150 P.S.I. OR CEMENT STABILIZED SAND BACKFILL INITIAL BACKFILL ZONE WHERE PARALLEL CROSSING. OR ENCASE THE WATER PIPE TWO NOMINAL SIZES.
<u>EXISTING WATER AND NEW SANITARY SEWER</u>							
NEW SEWER PARALLEL TO EXISTING WATER	WATER ABOVE SEWER OR SEWER ABOVE WATER	STD.	C.I. D.I. P.V.C., 150 P.S.I.		2'	4'	SEPARATE TRENCHES
NEW SEWER CROSSING EXISTING WATER	WATER ABOVE SEWER OR SEWER ABOVE WATER	STD.	C.I. D.I. P.V.C., 150 P.S.I.		6"	NA	CENTER ONE JOINT OF SEWER ON WATER MAIN
NEW SEWER CROSSING EXISTING WATER	WATER ABOVE SEWER	STD.	ABS. CLAY, CONCRETE COMPOSITE		2'	NA	CEMENT STABILIZE SAND INITIAL ZONE OF SEWER EACH SIDE OF CROSSING. ONE JOINT OF SEWER ON WATER MAIN.
FIRE HYDRANTS SHALL NOT BE LOCATED WITHIN 9 FT. VERTICALLY OR HORIZONTALLY OF ANY SANITARY SEWER, REGARDLESS OF CONSTRUCTION. WATER MAINS SHALL NOT BE INSTALLED CLOSER THAN 10 FT. TO SEPTIC TANK DRAINFIELDS.							



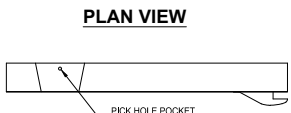
**METER LID DETAIL
FOR DUAL $\frac{5}{8}$ ", $\frac{3}{4}$ ",
OR 1" METERS**



COVER SECTION



METER LID DETAIL
FOR ONE $\frac{5}{8}$ " $\frac{3}{4}$ "
OR 1" METER



COVER SECTION



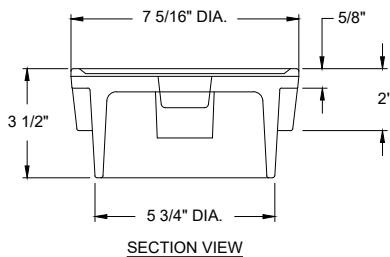
DESIGN: MWW
DRAWN: MWW
CKD: MWW



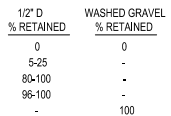
APPROVED

DATE:
11/16/21

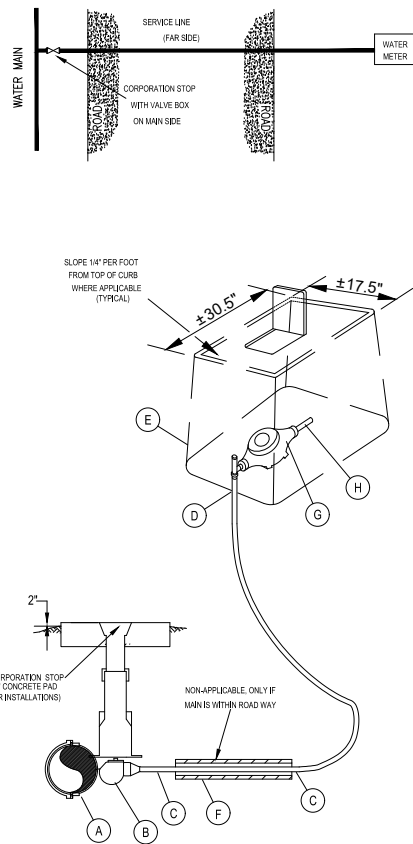
AYOTE CONSULTING, LLC
T.B.P.E. F-16387
P.O. Box 24189
Waco, TX 76702
817-254-7444-3439



New mains shall be thoroughly disinfected in accordance with AWWA Standard C651 and then flushed and sampled before being placed in service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure. Sampling shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed waterline will be required or at the next available sampling point beyond 1,000 feet as designated by the design engineer.

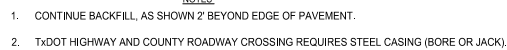
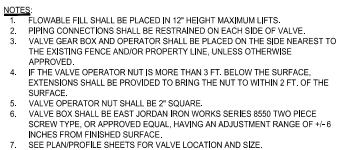


NOTE:
BURIED PIPING SHALL HAVE THE FOLLOWING
LISTED MINIMUM COVER:
12" AND SMALLER - 30" MINIMUM COVER
14" THRU 24" - 54" MINIMUM COVER



1. SERVICE PIPE SHALL BE COPPER TUBE SIZE. IT MAY BE 150 PSI ANNEALED SEAMLESS TYPE "K" COPPER TUBING OR 200 PSI POLYETHYLENE HAVING A DIMENSION RATIO OF 9 (DR) STAINLESS STEEL INSERTS SHALL BE USED WITH POLYETHYLENE TUBING.
2. SERVICE SADDLES SHALL BE WRAPPED COMPLETELY WITH 8 MILL. POLYETHYLENE FILM.
3. TOP OF BOXES SHALL BE 2" ABOVE FINISHED GRADE.
4. PIPING AND TUBING SHALL BE INSTALLED WITH A 6" SAND BEDDING ENVELOPE.
5. BRASS SHALL ONLY BE FORD.
6. FLARED FITTINGS WILL NOT BE ALLOWED ON COPPER SERVICES.
7. REFERENCE DETAIL W17 FOR VALVE BOX LID

STEEL ENCASEMENT WALL THICKNESS CHART FOR SMOOTH STEEL CASING PIPE WITH A MINIMUM YIELD STRENGTH OF 35,000 PSI		
MINIMUM THICKNESS	DIAMETER OF CASING PIPE.	
0'-0.2500"	0'-0.14"	12" OR LESS
0'-0.3125"	0'-0.916"	OVER 12" TO 18"
0'-0.3750"	0'-0.38"	OVER 18" TO 22"
0'-0.4375"	0'-0.716"	OVER 22" TO 28"
0'-0.5000"	0'-0.12"	OVER 28" TO 34"
0'-0.5625"	0'-0.916"	OVER 34" TO 42"
0'-0.6250"	0'-0.58"	OVER 42" TO 48"



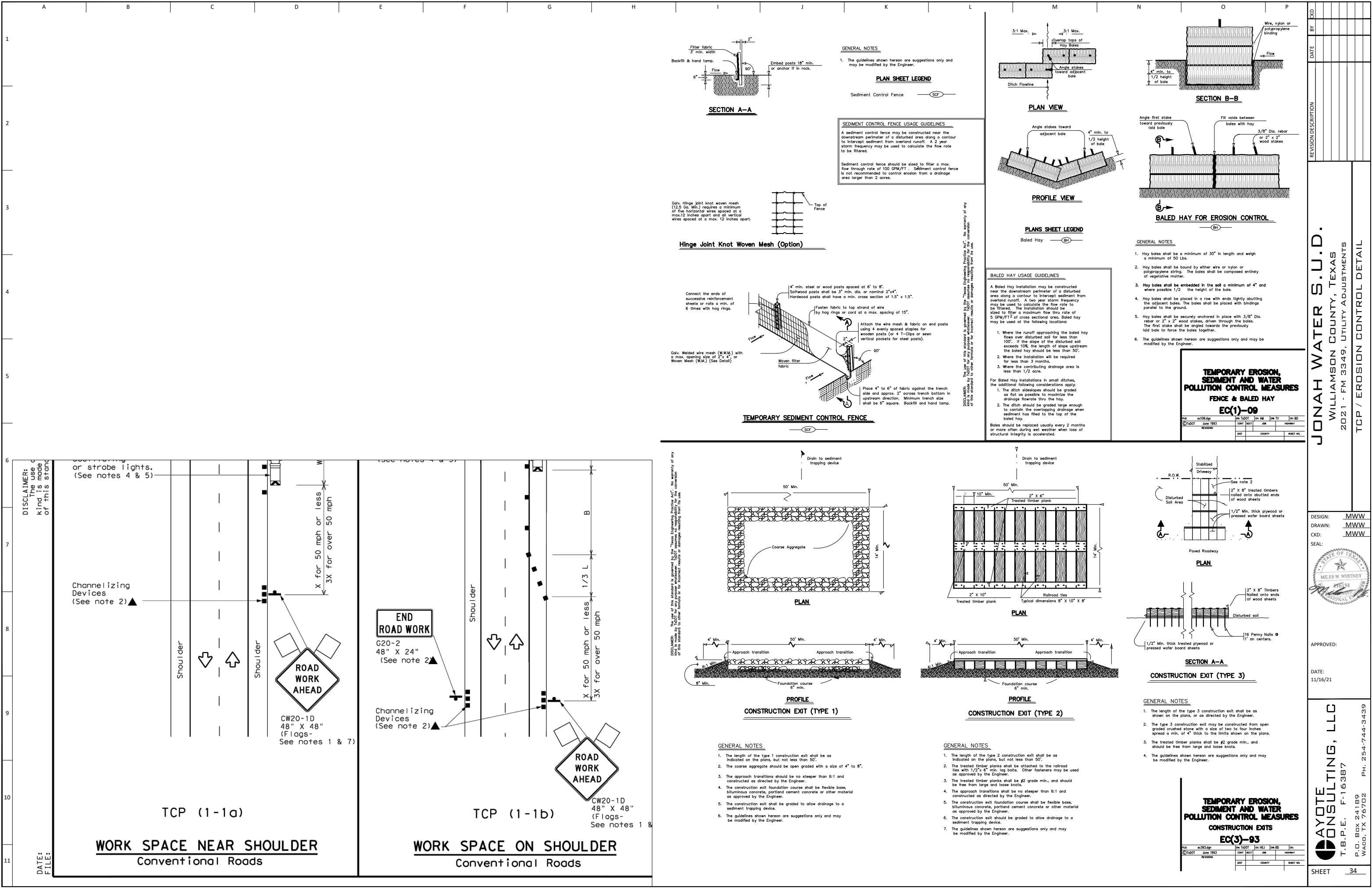


EXHIBIT "C"

WATERLINE EASEMENT

THE STATE OF TEXAS

COUNTY OF WILLIAMSON

GRANT OF EASEMENT:

_____ (“Grantor”, whether one or more), for the sum of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and confessed, does hereby grant, sell and convey unto JONAH WATER SPECIAL UTILITY DISTRICT, whose address is 4050 FM 1660, Hutto, Texas 78634, (“Grantee”), an easement and right-of-way (“Easement”) upon and across that certain _____ acre (_____ SF) parcel of land, being the property of Grantor which is more particularly described by metes and bounds and sketch in Exhibit “A” attached hereto, located in Williamson County, Texas; and incorporated herein by reference. (collectively the “Easement Tract”).

TO HAVE AND TO HOLD the same perpetually to Grantee and its successors and assigns, together with the rights and privileges and on the terms and conditions set forth below.

Grantor does hereby covenant and agree to WARRANT AND FOREVER DEFEND title to the Easement herein granted, unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

CHARACTER OF EASEMENT:

The Easement is an easement in gross.

PURPOSE OF EASEMENT:

The Easement shall be used for water line purposes, including placement, construction, installation, replacement, repair, inspection, maintenance, relocation, removal, and operation of water distribution and transmission lines and related facilities and appurtenances, or making connections thereto.

The Easement shall also be used for the purpose of providing access for the operation, repair, maintenance, inspection, replacement and expansion of the water distribution and transmission lines and related facilities and appurtenances.

Additionally, Grantor hereby grants and conveys to Grantee a non-exclusive right of ingress and egress over Grantor’s adjacent lands for the purpose of which this Easement is granted. However, such right shall only be exercised and allowed if access to the Easement Tract is not otherwise reasonably available from an adjacent public right of way.

DURATION OF EASEMENT:

The Easement shall be perpetual.

EXCLUSIVENESS OF EASEMENT:

The Easement shall be exclusive, and Grantor covenants that Grantor will not convey any other easement or conflicting rights within the Easement Tract. Grantor may alter or otherwise use the surface of the Easement Tract for such purposes that do not interfere with the exercise by Grantee of the rights herein granted provided that the plans for all improvements to be placed in the Easement Tract by Grantor must be approved by Grantee before the improvements are constructed, with such approval not to be unreasonably withheld. Grantee has the right to trim and cut down trees and shrubbery and to remove other improvements and structures to the extent reasonably necessary to prevent interference with the operation or repairs to Grantee's facilities in the Easement Tract, and Grantee will be held harmless by Grantor from any and all claims of Grantor if Grantee exercises such right.

DAMAGES:

The consideration given for this Easement constitutes payment in full for all damage sustained by Grantor by reason of the installation of the improvements referred to herein.

ENCUMBRANCES AND LIENS:

Grantor warrants that no person or business entity owns a present possessory interest in the fee title in the Easement Tract other than Grantor, and that there are no parties in possession of any portion of the Easement Tract as lessees. Furthermore, Grantor warrants that the Easement Tract is free and clear of all encumbrances and liens except the following: _____

WATER SERVICE:

Grantee and Grantor hereby acknowledge and agree that, effective immediately upon execution of this Easement, Grantee will be deemed to be providing and will be obligated to provide Grantor water service to Grantor's property across which the Easement is located. Grantor acknowledges and agrees that Grantor's ability to receive water from Grantee is subject to payment of all fees and charges due to Grantee under its tariff for such service.

ENTIRE AGREEMENT:

This instrument contains the entire agreement between the parties relating to the rights herein granted and the obligations herein assumed. Any oral representation or modification concerning this instrument shall be of no force and effect except for any subsequent modification in writing, signed by the party to be charged.

BINDING EFFECT:

This Agreement shall bind and inure to the benefit of the respective parties hereto, their heirs, legal representatives, successors and assigns.

ASSIGNABILITY:

This Easement and the rights of Grantee hereunder may be assigned in whole or in part by Grantee.

In witness whereof, this instrument is executed this ____ day of _____, 2021.

[signature pages follow]

GRANTOR:

By: _____

Printed Name: _____

Title: _____

Acknowledgment

STATE OF TEXAS

COUNTY OF _____

This instrument is acknowledged before me on the ____ day of _____, 2021,
by _____, in the capacity and for the purposes and consideration recited
herein.

Notary Public, State of Texas

Printed Name: _____

My Commission Expires: _____

GRANTOR:

Acknowledgment

STATE OF TEXAS

COUNTY OF _____

This instrument is acknowledged before me on the ____ day of _____ 2021, by _____, in the capacity and for the purposes and consideration recited herein.

Notary Public, State of Texas

Printed Name: _____

My Commission Expires: _____