

WILLIAMSON COUNTY, TEXAS

CHANGE ORDER NUMBER: 4

1. CONTRACTOR: Capital Excavation

2. Change Order Work Limits: Sta. 100+94 to Sta. 183+58

3. Type of Change(on federal-aid non-exempt projects): Minor (Major/Minor)

4. Reasons: 1B (3 Max. - In order of importance - Primary first)

Project: 22/FB39

Roadway: CR 111

CSJ
Number: _____

5. Describe the work being revised:

1. Design Error or omission. 1B. Other: This Change Order updates the bid item quantities that were revised in the plan set summary sheet, but not reflected in the Bid Form. The Change Order also includes pay items for 2 new items that were identified in the plans, but inadvertently left off the Bid Form.

6. Work to be performed in accordance with Items: See attached.

7. New or revised plan sheet(s) are attached and numbered: Jonah: Title, G1-G2, K1, 1-27

8. New Special Provisions/Specifications to the contract are attached: ☐ Yes ☒ No

9. New Special Provisions to Item N/A No. N/A, Special Specification Item N/A are attached.

Each signatory hereby warrants that each has the authority to execute this Change Order (CO).

<p><i>The contractor must sign the Change Order and, by doing so, agrees to waive any and all claims for additional compensation due to any and all other expenses; additional changes for time, overhead and profit; or loss of compensation as a result of this change.</i></p> <p>THE CONTRACTOR Date <u>6/30/22</u></p> <p>By <u>[Signature]</u></p> <p>Typed/Printed Name <u>JOE CHESNEY</u></p> <p>Typed/Printed Title <u>V.P.</u></p>	<p>The following information must be provided</p> <p>Time Ext. #: <u>N/A</u> Days added on this CO: <u>0</u></p> <p>Amount added by this change order: <u>\$454,267.40</u></p>
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RECOMMENDED FOR EXECUTION:

[Signature] 6/30/2022
Project Manager Date

N/A
Design Engineer Date

[Signature] 6/30/2022
Program Manager Date

Design Engineer's Seal:

County Commissioner Precinct 1 Date
☐ APPROVED ☐ REQUEST APPROVAL

County Commissioner Precinct 2 Date
☐ APPROVED ☐ REQUEST APPROVAL

County Commissioner Precinct 3 Date
☐ APPROVED ☐ REQUEST APPROVAL

County Commissioner Precinct 4 Date
☐ APPROVED ☐ REQUEST APPROVAL

County Judge Date
☐ APPROVED

WILLIAMSON COUNTY, TEXAS

CHANGE ORDER NUMBER: 4

Project # 22IFB39

TABLE A: Force Account Work and Materials Placed into Stock

LABOR	HOURLY RATE		HOURLY RATE

TABLE B: Contract Items:

				ORIGINAL + PREVIOUSLY REVISED		ADD or (DEDUCT)	NEW		
ITEM	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	ITEM COST	QUANTITY	QUANTITY	ITEM COST	OVERRUN/ UNDERRUN
462-6010	CONC BOX CULV (6 FT X 3 FT)	LF	\$465.00	2,371.00	\$1,102,515.00	2.00	2,373.00	\$1,103,445.00	\$930.00
464-6003	RC PIPE (CL III) (18 IN)	LF	\$80.00	4,409.00	\$352,720.00	44.00	4,453.00	\$356,240.00	\$3,520.00
464-6005	RC PIPE (CL III) (24 IN)	LF	\$100.00	2,125.00	\$212,500.00	207.00	2,332.00	\$233,200.00	\$20,700.00
464-6007	RC PIPE (CL III)(30 IN)	LF	\$135.00	3,095.00	\$417,825.00	(62.00)	3,033.00	\$409,455.00	(\$8,370.00)
465-6015	INLET (COMPL)(PCO)(3FT)(RIGHT)	EA	\$6,500.00	5.00	\$32,500.00	(1.00)	4.00	\$26,000.00	(\$6,500.00)
465-6016	INLET (COMPL)(PCO)(3FT)(BOTH)	EA	\$7,000.00	19.00	\$133,000.00	1.00	20.00	\$140,000.00	\$7,000.00
467-6356	SET (TY II) (18 IN) (RCP) (3: 1) (C)	EA	\$1,750.00	2.00	\$3,500.00	(1.00)	1.00	\$1,750.00	(\$1,750.00)
467-6357	SET (TY II) (18 IN) (RCP) (3: 1) (P)	EA	\$2,170.00	1.00	\$2,170.00	(1.00)	0.00	\$0.00	(\$2,170.00)
467-6362	SET (TY II) (18 IN) (RCP) (6: 1) (C)	EA	\$2,200.00	0.00	\$0.00	1.00	1.00	\$2,200.00	\$2,200.00
467-6363	SET (TY II) (18 IN) (RCP) (6:1) (P)	EA	\$1,980.00	60.00	\$118,800.00	(19.00)	41.00	\$81,180.00	(\$37,620.00)
467-6395	SET (TY II) (24 IN) (RCP) (6:1) (P)	EA	\$2,170.00	36.00	\$78,120.00	5.00	41.00	\$88,970.00	\$10,850.00
467-6423	SET (TY II) (30 IN) (RCP) (6: 1) (P)	EA	\$4,240.00	13.00	\$55,120.00	4.00	17.00	\$72,080.00	\$16,960.00
467-6454	SET (TY II) (36 IN) (RCP) (6: 1) (P)	EA	\$5,600.00	10.00	\$56,000.00	(6.00)	4.00	\$22,400.00	(\$33,600.00)
J105-01	24" C-151, PC200 D.I. Pipe, Polyethylene Tube Protection, and Fittings; w/ Tracer Wire; Installed	LF	\$335.00	559.00	\$187,265.00	2,049.00	2,608.00	\$873,680.00	\$686,415.00
J105-02	24" C-151, PC200 D.I. Restrained Joint Pipe, Polyethylene Tube Protection, and Fittings; w/ Tracer Wire; Installed	LF	\$270.00	510.00	\$137,700.00	113.00	623.00	\$168,210.00	\$30,510.00
J105-03	16" C-905, DR-18 PVC PIPE AND FITTINGS; W / TRACER WIRE; INSTALLED	LF	\$185.00	3,008.00	\$556,480.00	(1,611.00)	1,397.00	\$258,445.00	(\$298,035.00)
J105-04	16" C-905, DR-18 PVC RESTRAINED JOINT PIPE AND FITTINGS; W / TRACER WIRE; INSTALLED	LF	\$201.00	480.00	\$96,480.00	(123.00)	357.00	\$71,757.00	(\$24,723.00)
J105-05	12" C-900, DR-18 PVC RESTRAINED JOINT PIPE AND FITTINGS; W/ TRACER WIRE; INSTALLED	LF	\$195.00	114.00	\$22,230.00	2.00	116.00	\$22,620.00	\$390.00
J105-WC01	6" C-900, DR-18 PVC RESTRAINED JOINT PIPE AND FITTINGS; W / TRACER WIRE; INSTALLED	LF	\$111.00	0.00	\$0.00	88.00	88.00	\$9,768.00	\$9,768.00
J105-08	4" C-900, DR-18 PVC PIPE AND FITTINGS; W / TRACER WIRE; INSTALLED	LF	\$38.60	1,481.00	\$57,166.60	(96.00)	1,385.00	\$53,461.00	(\$3,705.60)
J105-09	4" C-900, DR-18 PVC RESTRAINED JOINT PIPE AND FITTINGS; W / TRACER WIRE; INSTALLED	LF	\$140.00	25.00	\$3,500.00	143.00	168.00	\$23,520.00	\$20,020.00
J105-10	2" HDPE SDR 9 AND FITTINGS; W / TRACER WIRE; INSTALLED	LF	\$54.90	28.00	\$1,537.20	1.00	29.00	\$1,592.10	\$54.90
J105-11	1" HDPE SDR 9 AND FITTINGS; W / TRACER WIRE; INSTALLED	LF	\$53.40	35.00	\$1,869.00	2.00	37.00	\$1,975.80	\$106.80
TOTALS					\$3,628,997.80			\$4,021,948.90	\$392,951.10

WILLIAMSON COUNTY, TEXAS

CHANGE ORDER NUMBER: 4

Project # 22IFB39

TABLE B: Contract Items (Continued)

				ORIGINAL + PREVIOUSLY REVISED		ADD or (DEDUCT)	NEW		
ITEM	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	ITEM COST	QUANTITY	QUANTITY	ITEM COST	OVERRUN/ UNDERRUN
J105-12	36" STEEL ENC. PIPE, BORED; W / 24" RESTRAINED JOINT C-151 PC200 D.I. PIPE; INSTALLED	LF	\$1,170.00	128.00	\$149,760.00	(18.00)	110.00	\$128,700.00	(\$21,060.00)
J105-13	36" STEEL ENC. PIPE, OPEN CUT; W/24" RESTRAINED JOINT C-151 PC200 D.I. PIPE; INSTALLED	LF	\$575.00	282.00	\$162,150.00	149.00	431.00	\$247,825.00	\$85,675.00
J105-15	24" STEEL ENC. PIPE, OPEN CUT; W/16" RESTRAINED JOINT C900 DR18 PVC PIPE; INSTALLED	LF	\$370.00	495.00	\$183,150.00	(130.00)	365.00	\$135,050.00	(\$48,100.00)
J105-22	4" STEEL ENC. PIPE, BORED W / 1" HDPE SERVICE LINE; INSTALLED	EA	\$320.00	308.00	\$98,560.00	(70.00)	238.00	\$76,160.00	(\$22,400.00)
J105-23	4" STEEL ENC. PIPE, OPEN CUT W / 1" HDPE SERVICE LINE;	EA	\$80.70	386.00	\$31,150.20	(1.00)	385.00	\$31,069.50	(\$80.70)
J105-24	4" STEEL ENC. PIPE, BORED W / 2" HDPE SERVICE LINE; INSTALLED	EA	\$380.00	77.00	\$29,260.00	70.00	147.00	\$55,860.00	\$26,600.00
J105-25	4" STEEL ENC. PIPE, OPEN CUT W / 2" HDPE SERVICE LINE;	EA	\$94.80	63.00	\$5,972.40	65.00	128.00	\$12,134.40	\$6,162.00
J105-26	24" GATE VALVE, BOX, AND MARKER; INSTALLED	EA	\$25,700.00	4.00	\$102,800.00	1.00	5.00	\$128,500.00	\$25,700.00
J105-27	24" BUTTERFLY VALVE, BOX, AND MARKER; INSTALLED	EA	\$12,800.00	8.00	\$102,400.00	(1.00)	7.00	\$89,600.00	(\$12,800.00)
J105-35	CONNECT NEW 16" TO EXISTING 16"; INSTALLED	EA	\$8,400.00	10.00	\$84,000.00	2.00	12.00	\$100,800.00	\$16,800.00
J105-41	CONNECT NEW 16" TO EXISTING 16"; INSTALLED	EA	\$2,000.00	1.00	\$2,000.00	1.00	2.00	\$4,000.00	\$2,000.00
J105-46	RELOCATE AND RECONNECT WATER SERVICE; COMPLETE AND INSTALLED	EA	\$2,820.00	16.00	\$45,120.00	1.00	17.00	\$47,940.00	\$2,820.00
The "Totals" from Table B of the previous work sheet:					\$3,628,997.80			\$4,021,948.90	\$392,951.10
TOTALS					\$4,625,320.40			\$5,079,587.80	\$454,267.40

CHANGE ORDER REASON(S) CODE CHART

1. Design Error or Omission	1A. Incorrect PS&E 1B. Other
2. Differing Site Conditions (unforeseeable)	2A. Dispute resolution (expense caused by conditions and/or resulting delay) 2B. Unavailable material 2C. New development (conditions changing after PS&E completed) 2D. Environmental remediation 2E. Miscellaneous difference in site conditions (unforeseeable)(Item 9) 2F. Site conditions altered by an act of nature 2G. Unadjusted utility (unforeseeable) 2H. Unacquired Right-of-Way (unforeseeable) 2I. Additional safety needs (unforeseeable) 2J. Other
3. County Convenience	3A. Dispute resolution (not resulting from error in plans or differing site conditions) 3B. Public relations improvement 3C. Implementation of a Value Engineering finding 3D. Achievement of an early project completion 3E. Reduction of future maintenance 3F. Additional work desired by the County 3G. Compliance requirements of new laws and/or policies 3H. Cost savings opportunity discovered during construction 3I. Implementation of improved technology or better process 3J. Price adjustment on finished work (price reduced in exchange for acceptance) 3K. Addition of stock account or material supplied by state provision 3L. Revising safety work/measures desired by the County 3M. Other
4. Third Party Accommodation	4A. Failure of a third party to meet commitment 4B. Third party requested work 4C. Compliance requirements of new laws and/or policies (impacting third party) 4D. Other
5. Contractor Convenience	5A. Contractor exercises option to change the traffic control plan 5B. Contractor requested change in the sequence and/or method of work 5C. Payment for Partnering workshop 5D. Additional safety work/measures desired by the contractor 5E. Other
6. Untimely ROW/Utilities	6A. Right-of-Way not clear (third party responsibility for ROW) 6B. Right-of-Way not clear (County responsibility for ROW) 6C. Utilities not clear 6D. Other

Williamson County Road Bond Program

CR111 Westinghouse Rd Williamson County Project No. 22IFB39

Change Order No. 4 Reason for Change

This Change Order updates the bid item quantities that were revised in the plan set summary sheet, but not reflected in the Bid Form. The Change Order also includes pay items for 2 new items that were identified in the plans, but inadvertently left off the Bid Form. The scope of work depicted in the plan sheets is necessary and the quantity adjustments are needed to complete the project. The submitted prices for the 2 new items are comparable to current prices on similar projects currently under construction.

The following new items will be added by this Change Order.

ITEM	DESCRIPTION	QTY	UNIT
467-6362	SET (TY II) (18 IN) (RCP) (6: 1) (C)	1	EA
J105-WC01	6" C-900, DR-18 PVC RESTRAINED JOINT PIPE AND FITTINGS; W / TRACER WIRE; INSTALLED	88	LF

Per the Jonah Water line agreement, Jonah will reimburse Williamson County 17.2% for the water line relocation work. The original cost of Jonah's participating items is \$2,903,610.65 and the original reimbursable amount is \$499,421.03. This Change Order adds \$482,117.40 to their participating amount, as a result of the quantity revisions and work items related to the water line relocations. The revised cost of Jonah's participating items is \$3,385,728.05 and their revised reimbursable amount is \$582,345.22. Jonah Water has reviewed and agreed to the increased amount for reimbursement, as indicated in the executed ILA with the County.

This Change Order results in a net increase of \$454,267.40 to the Contract amount, for an adjusted Contract total of \$21,739,825.32. The original Contract amount was \$21,024,332.88. As a result of this and all Change Orders to-date, \$715,492.44 has been added to the Contract, resulting in a 3.40% net increase in the overall Contract cost. As a result of this Change Order, (0) days will be added to the contract.

HNTB Corporation

Oscar Salazar-Bueno, P.E.



PO Box 1301
Austin, TX 78767
Email: Estimating@CapitalExcavation.com

Change Request # 1

Date: 1/18/2022

QuoteTo:

Project: CR 111 / 110 (1024)

Capital Project #: 1024

Description: Storm Revisions

Item	Description	Quantity	Unit	Unit Price	Amount
462-6010	CONC BOX CULV (6 FT X 3 FT)	2.00	LF	465.00	930.00
464-6003	RC PIPE (CL III)(18 IN)	44.00	LF	80.00	3,520.00
464-6005	RC PIPE (CL III)(24 IN)	207.00	LF	100.00	20,700.00
464-6007	RC PIPE (CL III)(30 IN)	-62.00	LF	135.00	-8,370.00
465-6015	INLET (COMPL)(PCO)(3FT)(RIGHT)	-1.00	EA	6,500.00	-6,500.00
465-6016	INLET (COMPL)(PCO)(3FT)(BOTH)	1.00	EA	7,000.00	7,000.00
467-6356	SET (TY II)(18 IN)(RCP)(3:1)(C)	-1.00	EA	1,750.00	-1,750.00
467-6357	SET (TY II)(18 IN)(RCP)(3:1)(P)	-1.00	EA	2,170.00	-2,170.00
465-6362	SET (TY II)(18 IN)(RCP)(6:1)(C)	1.00	EA	2,200.00	2,200.00
467-6363	SET (TY II)(18 IN)(RCP)(6:1)(P)	-19.00	EA	1,980.00	-37,620.00
467-6395	SET (TY II)(24 IN)(RCP)(6:1)(P)	5.00	EA	2,170.00	10,850.00
467-6423	SET (TY II)(30 IN)(RCP)(6:1)(P)	4.00	EA	4,240.00	16,960.00
467-6454	SET (TY II)(36 IN)(RCP)(6:1)(P)	-6.00	EA	5,600.00	-33,600.00

GRAND TOTAL -27,850.00

Scope: Quantity adjustments for discrepancies in the plans and bid form at contract unit prices. New pricing for item 67-6362 that was not included in the bid form.

Capital Excavation Requests an additional : TIA day(s)

Client #	Description	Unit	Bid Quantity	Revised Qty	Delta	Bid Price	Bid Total
462-6010	CONC BOX CULV (6 FT X 3 FT)	LF	2,371.000	2,373.000	2.000	\$ 465.00	\$ 930.00
464-6003	RC PIPE (CL III) (18 IN)	LF	4,409.000	4,453.000	44.000	\$ 80.00	\$ 3,520.00
464-6005	RC PIPE (CL III) (24 IN)	LF	2,125.000	2,332.000	207.000	\$ 100.00	\$ 20,700.00
464-6007	RC PIPE (CL III)(30 IN)	LF	3,095.000	3,033.000	-62.000	\$ 135.00	\$ (8,370.00)
465-6015	INLET (COMPL)(PCO)(3FT)(RIGHT)	EA	5.000	4.000	-1.000	\$ 6,500.00	\$ (6,500.00)
465-6016	INLET (COMPL)(PCO)(3FT)(BOTH)	EA	25.000	26.000	1.000	\$ 7,000.00	\$ 7,000.00
467-6356	SET (TY II) (18 IN) (RCP) (3: 1) (C)	EA	2.000	1.000	-1.000	\$ 1,750.00	\$ (1,750.00)
467-6357	SET (TY II) (18 IN) (RCP) (3: 1) (P)	EA	1.000	0.000	-1.000	\$ 2,170.00	\$ (2,170.00)
467-6362	SET (TY II) (18 IN) (RCP) (6:1) (C)	EA		1.000	1.000	\$ 2,200.00	\$ 2,200.00
467-6363	SET (TY II) (18 IN) (RCP) (6:1) (P)	EA	60.000	41.000	-19.000	\$ 1,980.00	\$ (37,620.00)
467-6395	SET (TY II) (24 IN) (RCP) (6:1) (P)	EA	36.000	41.000	5.000	\$ 2,170.00	\$ 10,850.00
467-6423	SET (TY II) (30 IN) (RCP) (6: 1) (P)	EA	13.000	17.000	4.000	\$ 4,240.00	\$ 16,960.00
467-6454	SET (TY II) (36 IN) (RCP) (6: 1) (P)	EA	10.000	4.000	-6.000	\$ 5,600.00	\$ (33,600.00)



PO Box 1301
Austin, TX 78767
Email: Estimating@CapitalExcavation.com

Change Request # 2

Date: 1/18/2022

QuoteTo:

Project: CR 111 / 110 (1024)

Capital Project #: 1024

Description: Water Revisions

Item	Description	Quantity	Unit	Unit Price	Amount
J105-01	24" C-151, PC200 D.I. PIPE, POLYETHYLENE TUBE PROT	2,049.00	LF	335.00	686,415.00
J105-02	24" C-151, PC200 D.I. RESTRAINED JOINT PIPE, POLYE	113.00	LF	270.00	30,510.00
J105-03	16" C-905, DR-18 PVC PIPE AND FITTINGS; W / TRA	-1,611.00	LF	185.00	-298,035.00
J105-04	16" C-905, DR-18 PVC RESTRAINED JOINT PIPE AND FIT	-123.00	LF	201.00	-24,723.00
J105-05	12" C-900, DR-18 PVC RESTRAINED JOINT PIPE AND FIT	2.00	LF	195.00	390.00
J105-WC01	6" C-900, DR-18 PVC RESTRAINED JOINT PIPE AND FITTINGS	88.00	LF	111.00	9,768.00
J105-08	4" C-900, DR-18 PVC PIPE AND FITTINGS; W / TRA	-96.00	LF	38.60	-3,705.60
J105-09	4" C-900, DR-18 PVC RESTRAINED JOINT PIPE AND	143.00	LF	140.00	20,020.00
J105-10	2" HDPE SDR 9 AND FITTINGS; W / TRACER WIRE; I	1.00	LF	54.90	54.90
J105-11	1" HDPE SDR 9 AND FITTINGS; W / TRACER WIRE; I	2.00	LF	53.40	106.80
J105-12	36" STEEL ENC. PIPE, BORED; W / 24" RESTRAINED	-18.00	LF	1,170.00	-21,060.00
J105-13	36" STEEL ENC. PIPE, OPEN CUT; W/24" RESTRAINE	149.00	LF	575.00	85,675.00
J105-15	24" STEEL ENC. PIPE, OPEN CUT; W/16" RESTRAINE	-130.00	LF	370.00	-48,100.00
J105-22	4" STEEL ENC. PIPE, BORED W / 1" HDPE SERVICE	-70.00	LF	320.00	-22,400.00
J105-23	4" STEEL ENC. PIPE, OPEN CUT W / 1" HDPE SERVI	-1.00	LF	80.70	-80.70
J105-24	4" STEEL ENC. PIPE, BORED W / 2" HDPE SERVICE	70.00	LF	380.00	26,600.00
J105-25	4" STEEL ENC. PIPE, OPEN CUT W / 2" HDPE SERVI	65.00	LF	94.80	6,162.00
J105-26	24" GATE VALVE, BOX, AND MARKER; INSTALLED	1.00	EA	25,700.00	25,700.00
J105-27	24" BUTTERFLY VALVE, BOX, AND MARKER; INSTALLE	-1.00	EA	12,800.00	-12,800.00
J105-35	CONNECT NEW 16" TO EXISTING 16"; INSTALLED	2.00	EA	8,400.00	16,800.00
J105-41	CONNECT NEW 4" TO EXISTING 2"; INSTALLED	1.00	EA	2,000.00	2,000.00
J105-46	RELOCATE AND RECONNECT WATER SERVICE; COMPLETE AND	1.00	EA	2,820.00	2,820.00

GRAND TOTAL 482,117.40

Scope: Quantity adjustments for discrepancies in the plans and bid form at contract unit prices. New pricing for item J105-WC01 that was not included in the bid form.

Capital Excavation Requests an additional : TIA day(s)

Client #	Description	Unit	Bid Quantity	Revised Quantity	Delta	Bid Price	Bid Total
J105-01	24" C-151, PC200 D.I. PIPE, POLYETHYLENE TUBE PROT	LF	559.000	2,608.000	2,049.000	\$ 335.00	\$ 686,415.00
J105-02	24" C-151, PC200 D.I. RESTRAINED JOINT PIPE, POLYE	LF	510.000	623.000	113.000	\$ 270.00	\$ 30,510.00
J105-03	16" C-905, DR-18 PVC PIPE AND FITTINGS; W / TRA	LF	3,008.000	1,397.000	-1,611.000	\$ 185.00	\$ (298,035.00)
J105-04	16" C-905, DR-18 PVC RESTRAINED JOINT PIPE AND FIT	LF	480.000	357.000	-123.000	\$ 201.00	\$ (24,723.00)
J105-05	12" C-900, DR-18 PVC RESTRAINED JOINT PIPE AND FIT	LF	114.000	116.000	2.000	\$ 195.00	\$ 390.00
J105-WC01	6" C-900, DR-18 PVC RESTRAINED JOINT PIPE AND FITT	LF	0.000	88.000	88.000	\$ 111.00	\$ 9,768.00
J105-08	4" C-900, DR-18 PVC PIPE AND FITTINGS; W / TRA	LF	1,481.000	1,385.000	-96.000	\$ 38.60	\$ (3,705.60)
J105-09	4" C-900, DR-18 PVC RESTRAINED JOINT PIPE AND	LF	25.000	168.000	143.000	\$ 140.00	\$ 20,020.00
J105-10	2" HDPE SDR 9 AND FITTINGS; W / TRACER WIRE; I	LF	28.000	29.000	1.000	\$ 54.90	\$ 54.90
J105-11	1" HDPE SDR 9 AND FITTINGS; W / TRACER WIRE; I	LF	35.000	37.000	2.000	\$ 53.40	\$ 106.80
J105-12	36" STEEL ENC. PIPE, BORED; W / 24" RESTRAINED	LF	128.000	110.000	-18.000	\$ 1,170.00	\$ (21,060.00)
J105-13	36" STEEL ENC. PIPE, OPEN CUT; W/24" RESTRAINE	LF	282.000	431.000	149.000	\$ 575.00	\$ 85,675.00
J105-15	24" STEEL ENC. PIPE, OPEN CUT; W/16" RESTRAINE	LF	495.000	365.000	-130.000	\$ 370.00	\$ (48,100.00)
J105-22	4" STEEL ENC. PIPE, BORED W / 1" HDPE SERVICE	EA	308.000	238.000	-70.000	\$ 320.00	\$ (22,400.00)
J105-23	4" STEEL ENC. PIPE, OPEN CUT W / 1" HDPE SERVI	EA	386.000	385.000	-1.000	\$ 80.70	\$ (80.70)
J105-24	4" STEEL ENC. PIPE, BORED W / 2" HDPE SERVICE	EA	77.000	147.000	70.000	\$ 380.00	\$ 26,600.00
J105-25	4" STEEL ENC. PIPE, OPEN CUT W / 2" HDPE SERVI	EA	63.000	128.000	65.000	\$ 94.80	\$ 6,162.00
J105-26	24" GATE VALVE, BOX, AND MARKER; INSTALLED	EA	4.000	5.000	1.000	\$ 25,700.00	\$ 25,700.00
J105-27	24" BUTTERFLY VALVE, BOX, AND MARKER; INSTALLE	EA	8.000	7.000	-1.000	\$ 12,800.00	\$ (12,800.00)
J105-35	CONNECT NEW 16" TO EXISTING 16"; INSTALLED	EA	10.000	12.000	2.000	\$ 8,400.00	\$ 16,800.00
J105-41	CONNECT NEW 4" TO EXISTING 2"; INSTALLED	EA	1.000	2.000	1.000	\$ 2,000.00	\$ 2,000.00
J105-46	RELOCATE AND RECONNECT WATER SERVICE; COMPLETE AND	EA	16.000	17.000	1.000	\$ 2,820.00	\$ 2,820.00

\$ 482,117.40

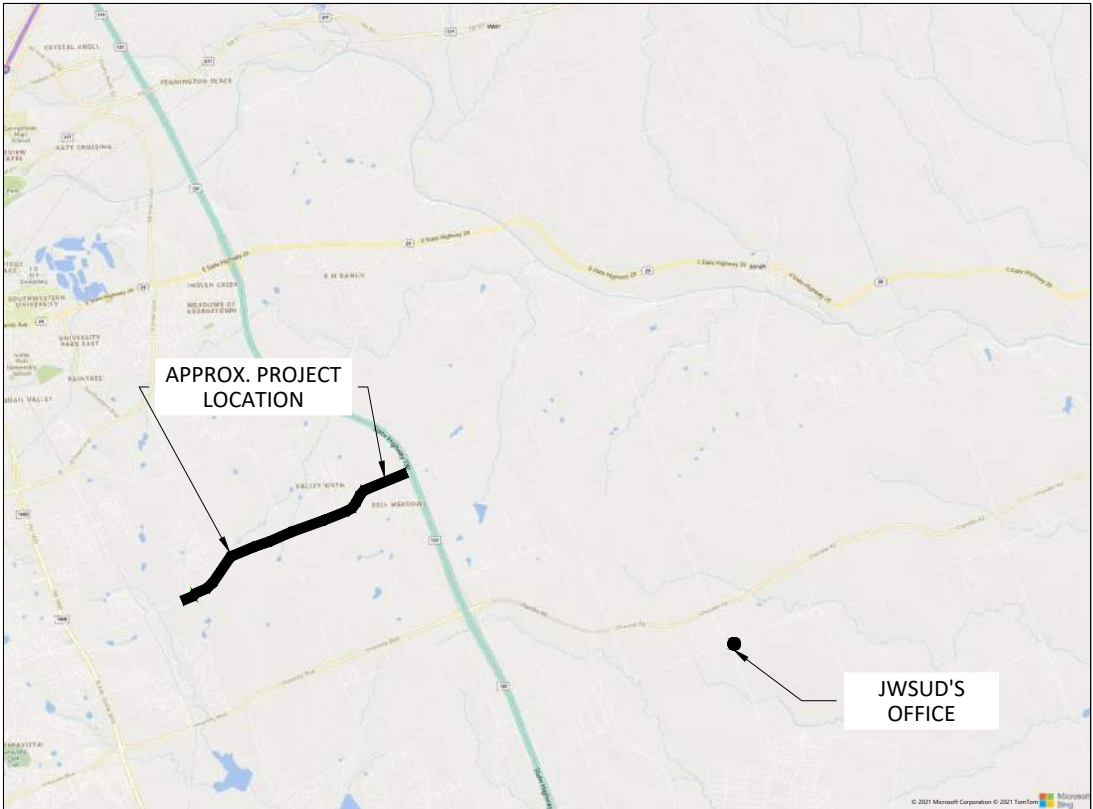


4050 FM 1660
HUTTO , TEXAS 78634
1-512-759-1286
PWS ID 246002
GCN ID 10970

2021 - CR 111, 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 COMPANIES48 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)-12 THROUGH TCP(1-6)-12; SEE [HTTPS://WWW.DOT.STATE.TX.US/INSDOTDOT/ORGCHART/CMD/CSE/VE/STANDARD/TOC.HTM](https://www.dot.state.tx.us/insdotdot/ORGCHART/CMD/CSE/VE/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. METER RECONNECTIONS SHALL INCLUDE; NEW METER BOX, SERVICE LINE, SERVICE TAP, CURB STOP, ANGLE STOP, AND METER COUPLING. EXISTING METER IS TO REMAIN.

SHEET INDEX:

G1	GENERAL NOTES	13	WATERLINE ALIGN. "J"; STA. J-0+00 TO J-1+59; CAPPING EX. LINE
G2	TAKE OFF	14	WATERLINE ALIGN. "K"; STA. K-0+00 TO K-1+00
K1	KEY MAP	15	WATERLINE ALIGN. "L"; STA. L-0+00 TO L-3+50
1	WATERLINE ALIGN. "A"; STA. A-0+00 TO A-6+38	16	WATERLINE ALIGN. "M"; STA. M-0+00 TO M-2+00
2	WATERLINE ALIGN. "B"; STA. B-0+00 TO B-3+25	17	WATERLINE ALIGN. "N"; STA. N-0+00 TO N-5+50
3	WATERLINE ALIGN. "C"; STA. C-0+00 TO C-3+60	18	WATERLINE ALIGN. "N"; STA. N-5+50 TO N-12+67
4	WATERLINE ALIGN. "D"; STA. D-0+00 TO D-1+00	19	WATERLINE ALIGN. "O"; STA. O-0+00 TO O-1+71
5	WATERLINE ALIGN. "E"; STA. E-0+00 TO E-5+88	20	WATERLINE ALIGN. "O"; CONTINUATION
6	WATERLINE ALIGN. "F"; STA. F-0+00 TO F-1+83	21	WATERLINE ALIGN. "P"; STA. P-0+00 TO P-1+60
7	WATERLINE ALIGN. "G"; STA. G-0+00 TO G-7+50	22	WATERLINE ALIGN. "Q"; STA. Q-0+00 TO Q-1+64
8	WATERLINE ALIGN. "G"; STA. G-7+50 TO G-15+50	23	STANDARD DETAILS
9	WATERLINE ALIGN. "G"; STA. G-15+50 TO G-23+50	24	STANDARD DETAILS
10	WATERLINE ALIGN. "G"; STA. G-23+50 TO G-32+66	25	STANDARD DETAILS
11	WATERLINE ALIGN. "H"; STA. H-0+00 TO H-7+10	26	TCP/EROSION CONTROL DETAIL
12	WATERLINE ALIGN. "I"; STA. I-0+00 TO I-2+18		



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MILES@CAYOTECON.COM



CIVIL ENGINEER

APPROVED

12/3/21

DATE APPROVED

OWNER

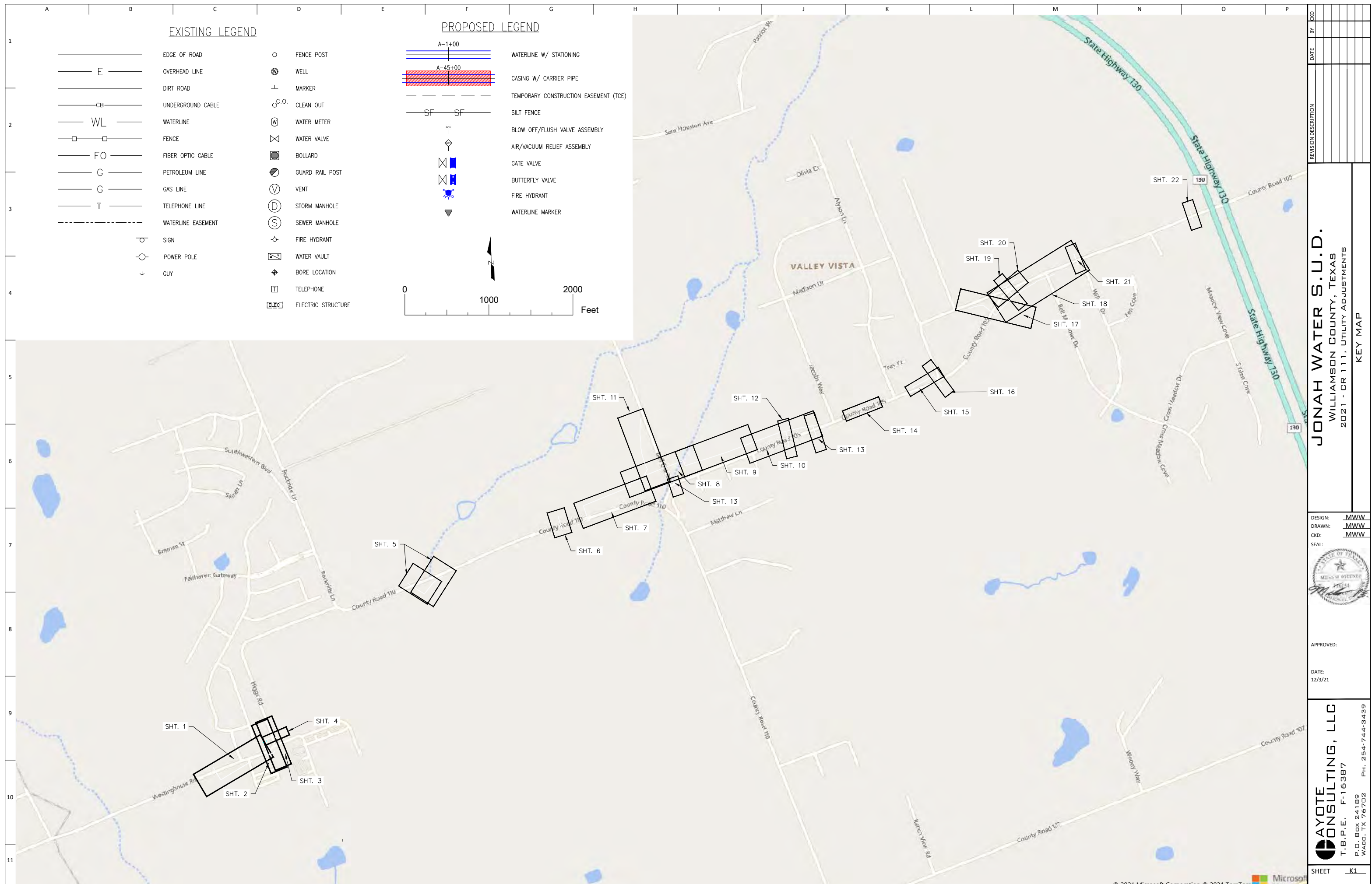
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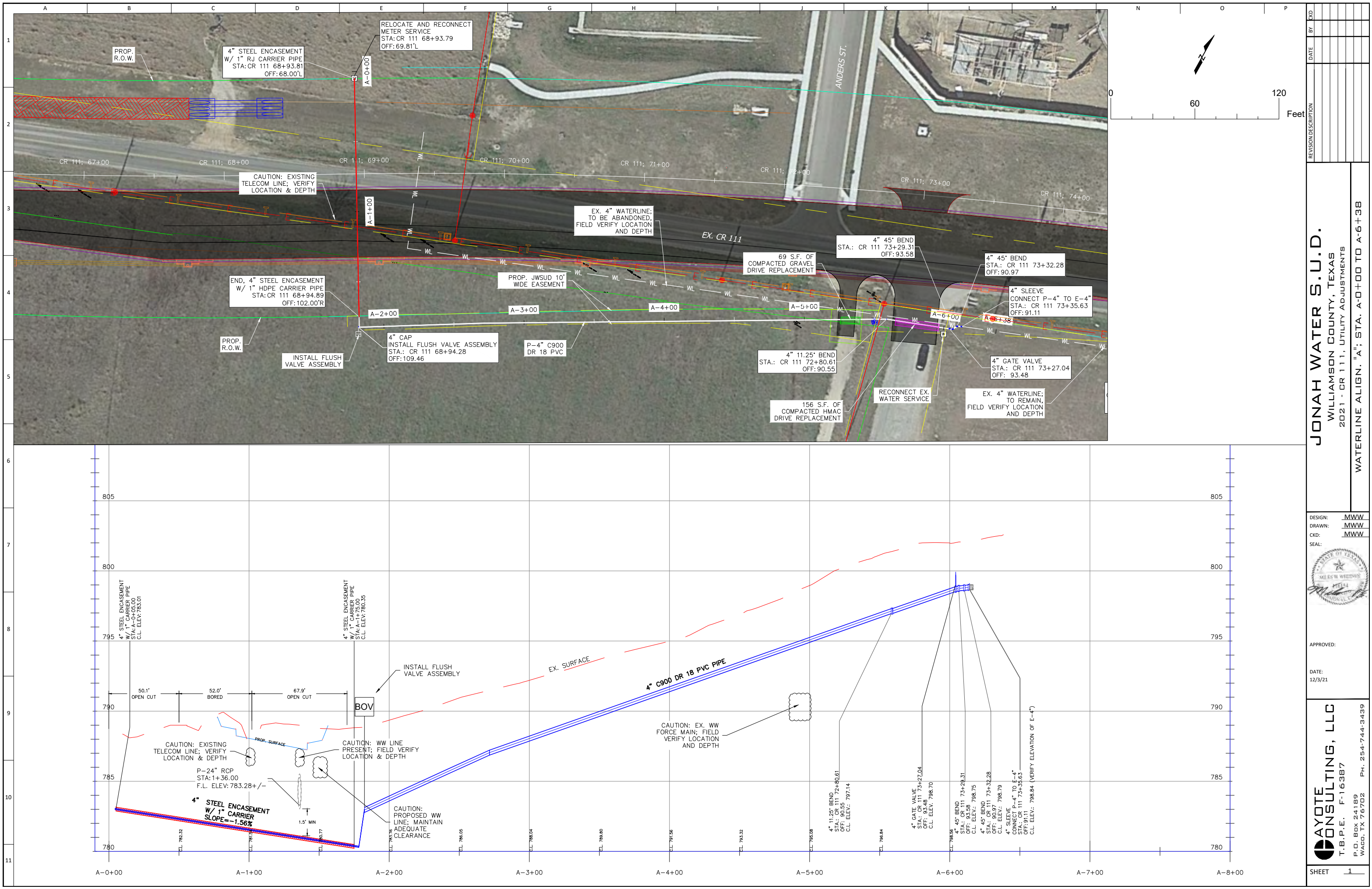
DATE APPROVED

JONAH WATER S.U.D.
2021 - CR 111, UTILITY ADJUSTMENTS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
General notes:																
1	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	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.															
3	a) Refer to project Property Owner line list for tract information and easement status, if available.															
4	b) Easements shown within these plans are for representation purposes only. Contractor shall refer to filed easement documents for legal descriptions.															
5	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.															
6	a. Gas, telephone, electric, fiber optic, oil: call Texas 811 at 800-344-8377															
7	b. Water: call the Jonah Water or City of Georgetown															
8	4) The Contractor shall protect 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.															
9	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.															
10	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.															
11	5) When unlabeled 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.															
12	6) Contractor shall take all due precautions to protect existing facilities and features from damage during construction, including all features on 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.															
13	7) Any work completed without prior written authorization which is not included in these plans and specifications will not be compensated by the Owner.															
14	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.															
15	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).															
16	10) The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit.															
17	11) The contractor shall protect all survey control during construction and be responsible for damaged control.															
18	12) The contractor is responsible for performing all construction staking.															
19	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.															
20	14) Contractor shall always maintain a clean construction site free from trash, litter, blowing debris, and silt runoff.															
21	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.															
22	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.															
23	17) Contractor to trench in such a manner as to separate topsoil, stockpile, and place on top layer of trench.															
24	18) When work requires a permit, the contractor shall follow the provisions of the permit.															
25	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.															
26	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.															
27	21) Holiday Work: Contractors will not be allowed to perform work on Owner recognized holidays.															
28	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.															
29	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.															
30	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.															
31	23) All contract work in these drawings shall be carried out in accordance with the latest editions of the following national codes and standards:															
32	a) International Building Codes, 2012 (IBS2012).															
33	b) American Society of Civil Engineers (ASCE) 7- 02.															
34	c) Occupational Safety and Health Administration (OSHA).															
35	d) National Fire Protection Association (NFPA).															
36	e) National Fire Code (NFC).															
37	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.															
38	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.															
39	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.															
40	27) Excavations shall not be made during inclement weather. Water accumulation in excavations exceeding 1 inch shall be pumped out before concrete is placed.															
41	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.															
42	29) Contractor shall stay within the boundaries of easements at all times.															
43	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.															
44	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 construction ion. All entrances shall be restored immediately. Ingress and egress to the property adjacent to construct ion shall be maintained by the Contractor.															
45	3) Contractor shall saw-cut neat line where new pavement adjoins existing pavement to remain. Reference saw-cut notes below:															
46	a) HMAAC paving: saw-cut neat line and place proposed HMAAC flush with existing surface at limits.															
47	b) Curb & gutter: saw-cut neat line and dowel into existing curb & gutter at limits. Contractor to match flowlines.															
48	c) Driveway and sidewalks: saw-cut neat line and place expansion joint at limits.															
49	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.															
50	Trench Protection Requirements:															
51	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.															
52	2) During construction, the contractor shall:															
53	a) Prohibit employees and equipment from accessing areas within tree protection limits.															
54	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.															
55	c) Prohibit attachments or wires of any kind, other than those of a protective nature, to any protected tree.															
56	d) Prohibit the disturbance of existing ground grades within tree protection limits.															
57	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).															
58	4) All trees to be removed shall be marked in the field and reviewed with the engineer and owner prior to removal.															
59	5) Contractor may be financially responsible for trees damaged due to contractor's neglect.															
60	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:															
61	i) Cut 1/3 through bottom of limb 8" to 12" away from main stem or trunk															
62	ii) Remove limb 4" to 6" beyond the first cut															
63	iii) Remove stump with a smooth cut so that trace collar of the removed limb protrudes approximately 1/2" from main stem or trunk.															
64	Paving Construction Notes:															
65	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.															
66	2) Contractor shall match existing driveway/sidewalk with exposed aggregate finish, if applicable.															
67	3) Contractor shall protect all adjoining pavement during construction. Damages shall be prepared at contractor															

		A		B		C		D		E		F		G		H		I		J		K		L		M		N		O		P		Q		R		S		T		U		V		W		X		Y		Z		AA		AB		AC		AD		AE		AF		AG		AH		AI		AJ		AK		AL		AM		AN		AO		AP		AQ		AR		AS		AT		AU		AV		AW		AX		AY		AZ		BA		BB		BC		BD		BE		BF		BG		BH		BI		BJ		BK		BL		BM		BN		BO		BP		BQ		BR		BS		BT		BU		BV		BW		BX		BY		BZ		CA		CB		CC		CD		CE		CF		CG		CH		CI		CJ		CK		CL		CM		CN		CO		CP		CQ		CR		CS		CT		CU		CV		CW		CX		CY		CZ		DA		DB		DC		DD		DE		DF		DG		DH		DI		DJ		DK		DL		DM		DN		DO		DP		DQ		DR		DS		DT		DU		DV		DW		DX		DY		DZ		EA		EB		EC		ED		EE		EF		EG		EH		EI		EJ		EK		EL		EM		EN		EO		EP		EQ		ER		ES		ET		EU		EV		EW		EX		EY		EZ		FA		FB		FC		FD		FE		FF		FG		FH		FI		FJ		FK		FL		FM		FN		FO		FP		FQ		FR		FS		FT		FU		FV		FW		FX		FY		FZ		GA		GB		GC		GD		GE		GF		GG		GH		GI		GJ		GK		GL		GM		GN		GO		GP		GQ		GR		GS		GT		GU		GV		GW		GX		GY		GZ		HA		HB		HC		HD		HE		HF		HG		HH		HI		HJ		HK		HL		HM		HN		HO		HP		HQ		HR		HS		HT		HU		HV		HW		HX		HY		HZ		IA		IB		IC		ID		IE		IF		IG		IH		II		IJ		IK		IL		IM		IN		IO		IP		IQ		IR		IS		IT		IU		IV		IW		IX		IY		IZ		JA		JB		JC		JD		JE		JF		JG		JH		JI		JJ		JK		JL		JM		JN		JO		JP		JQ		JR		JS		JT		JU		JV		JW		JX		JY		JZ		KA		KB		KC		KD		KE		KF		KG		KH		KI		KJ		KK		KL		KM		KN		KO		KP		KQ		KR		KS		KT		KU		KV		KW		KX		KY		KZ		LA		LB		LC		LD		LE		LF		LG		LH		LI		LJ		LK		LM		LN		LO		LP		LQ		LR		LS		LT		LU		LV		LW		LX		LY		LZ		MA		MB		MC		MD		ME		MF		MG		MH		MI		MJ		MK		ML		MN		MO		MP		MQ		MR		MS		MT		MU		MV		MW		MX		MY		MZ		NA		NB		NC		ND		NE		NF		NG		NH		NI		NJ		NK		NL		NM		NO		NP		NQ		NR		NS		NT		NU		NV		NW		NX		NY		NZ		OA		OB		OC		OD		OE		OF		OG		OH		OI		OJ		OK		OL		OM		ON		OO		OP		OQ		OR		OS		OT		OU		OV		OW		OX		OY		OZ		PA		PB		PC		PD		PE		PF		PG		PH		PI		PJ		PK		PL		PM		PN		PO		PP		PQ		PR		PS		PT		PU		PV		PW		PX		PY		PZ		QA		QB		QC		QD		QE		QF		QG		QH		QI		QJ		QK		QL		QM		QN		QO		QP		QQ		QR		QS		QT		QU		QV		QW		QX		QY		QZ		RA		RB		RC		RD		RE		RF		RG		RH		RI		RJ		RK		RL		RM		RN		RO		RP		RQ		RR		RS		RT		RU		RV		RW		RX		RY		RZ		SA		SB		SC		SD		SE		SF		SG		SH		SI		SJ		SK		SL		SM		SN		SO		SP		SQ		SR		SS		ST		SU		SV		SW		SX		SY		SZ		TA		TB		TC		TD		TE		TF		TG		TH		TI		TJ		TK		TL		TM		TN		TO		TP		TQ		TR		TS		TT		TU		TV		TW		TX		TY		TZ		UA		UB		UC		UD		UE		UF		UG		UH		UI		UJ		UK		UL		UM		UN		UO		UP		UQ		UR		US		UT		UU		UV		UW		UX		UY		UZ		VA		VB		VC		VD		VE		VF		VG		VH		VI		VJ		VK		VL		VM		VN		VO		VP		VQ		VR		VS		VT		VU		VV		VW		VX		VY		VZ		WA		WB		WC		WD		WE		WF		WG		WH		WI		WJ		WK		WL		WM		WN		WO		WP		WQ		WR		WS		WT		WU		WV		WW		WX		WY		WZ		XA		XB		XC		XD		XE		XF		XG		XH		XI		XJ		XK		XL		XM		XN		XO		XP		XQ		XR		XS		XT		XU		XV		XW		XX		XY		XZ		YA		YB		YC		YD		YE		YF		YG		YH		YI		YJ		YK		YL		YM		YN		YO		YP		YQ		YR		YS		YT		YU		YV		YW		YX		YY		YZ		ZA		ZB		ZC		ZD		ZE		ZF		ZG		ZH		ZI		ZJ		ZK		ZL		ZM		ZN		ZO		ZP		ZQ		ZR		ZS		ZT		ZU		ZV		ZW		ZX		ZY		ZZ	
Item No.	Item Description	A+0+00 to A+6+50	B+0+00 to B+3+25	C+0+00 to C+3+25	D+0+00 to D+1+00	E+0+00 to E+5+88	F+0+00 to F+1+83	G+0+00 to G+7+50	G+7+50 to G+15+50	G+15+50 to G+23+50	G+23+50 to G+32+66	H+0+00 to H+7+10	I+0+00 to I+2+18	J+0+00 to J+1+59	K+0+00 to K+1+00	L+0+00 to L+3+50	M+0+00 to M+2+00	N+0+00 to N+5+50	N+5+50 to N+12+67	O+0+00 to O+1+71	"O" Cont.	P+0+00 to P+1+80	Q+0+00 to Q+1+84	Project Totals																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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25	4" Steel Enc. Pipe, Open Cut w/ 2" HDPE Service Line; Installed																63				65		128																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
26	24" Gate Valve, Box, and Marker; Installed							1	3		1												5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
27	24" Butterfly Valve, Box, and Marker; Installed							5	2														7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
28	16" Gate Valve, Box, and Marker; Installed					7						1						4	2				14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
29	12" Gate Valve, Box, and Marker; Installed				3								1										4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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33	Air/Vacuum Relief Valve Assembly and Marker; Installed							1		1													2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
34	Blow Off Valve Assembly and Marker; Installed	1										1											2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
35	Connect New 16" to Existing 16"; Installed					3		2	1		1				2	2			1				12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
36	Connect New 12" to Existing 12"; Installed				2																		2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
37	Connect New 8" to Existing 8"; Installed				1														1				2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
38	Connect New 6" to Existing 6"; Installed			2																			2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
39	Install 12" x 4" Tapping Sleeve; Installed		1																				1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
40	Connect New 4" to Existing 4"; Installed	1	2		1									1									5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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REVISION DESCRIPTION

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - CR 111, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "A"; STA: A-0+00 TO A-6+38

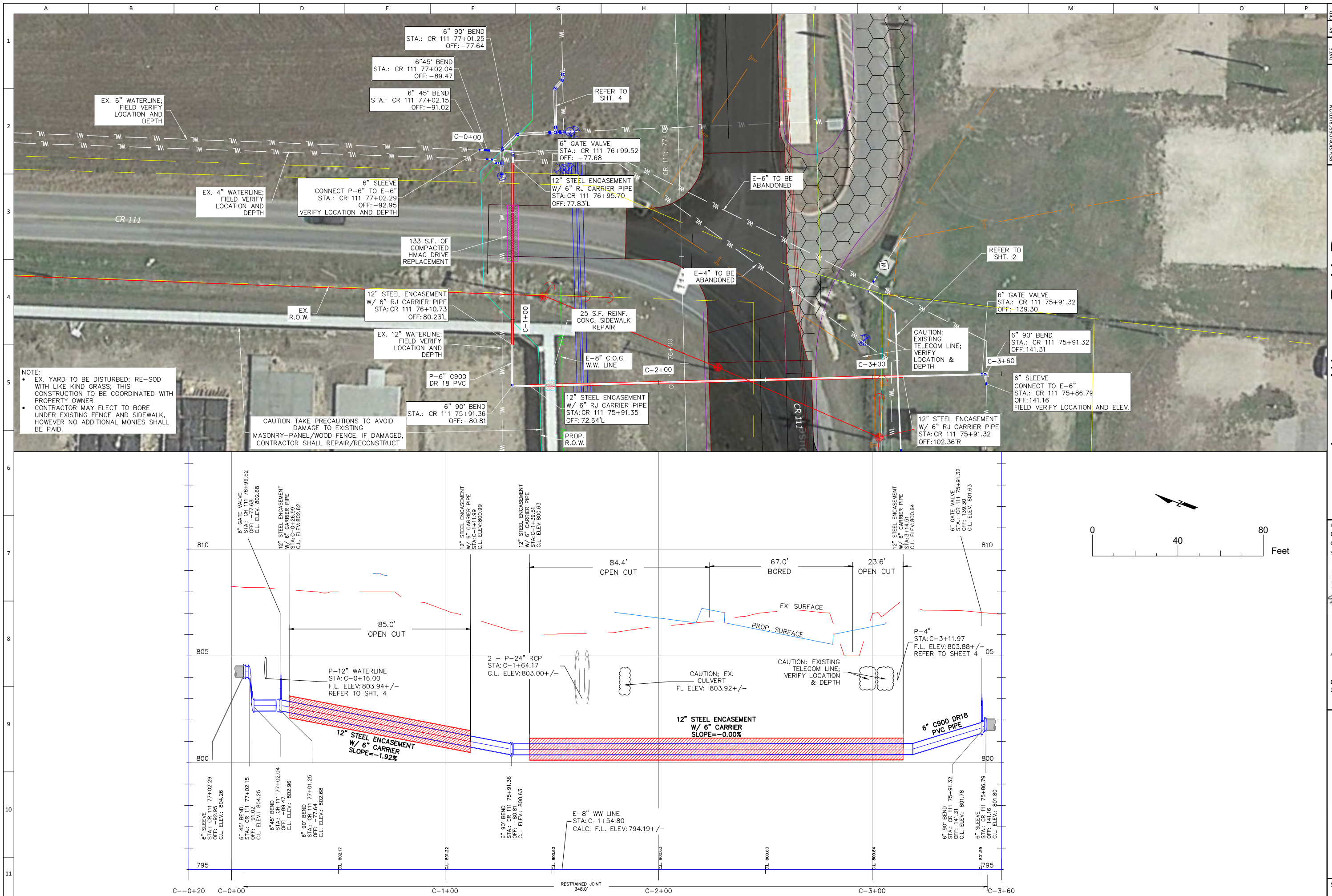
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DRAWN: MWW
CKD: MWW
SEAL:

APPROVED:


DATE: 12/3/21

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

SHEET 1

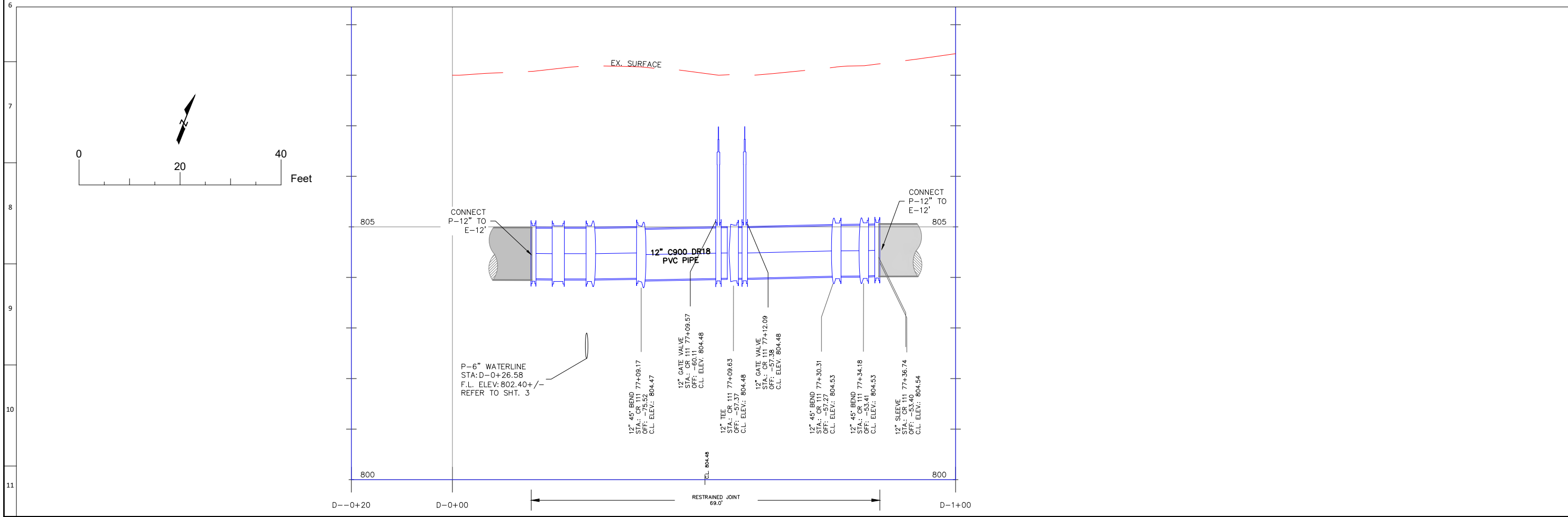
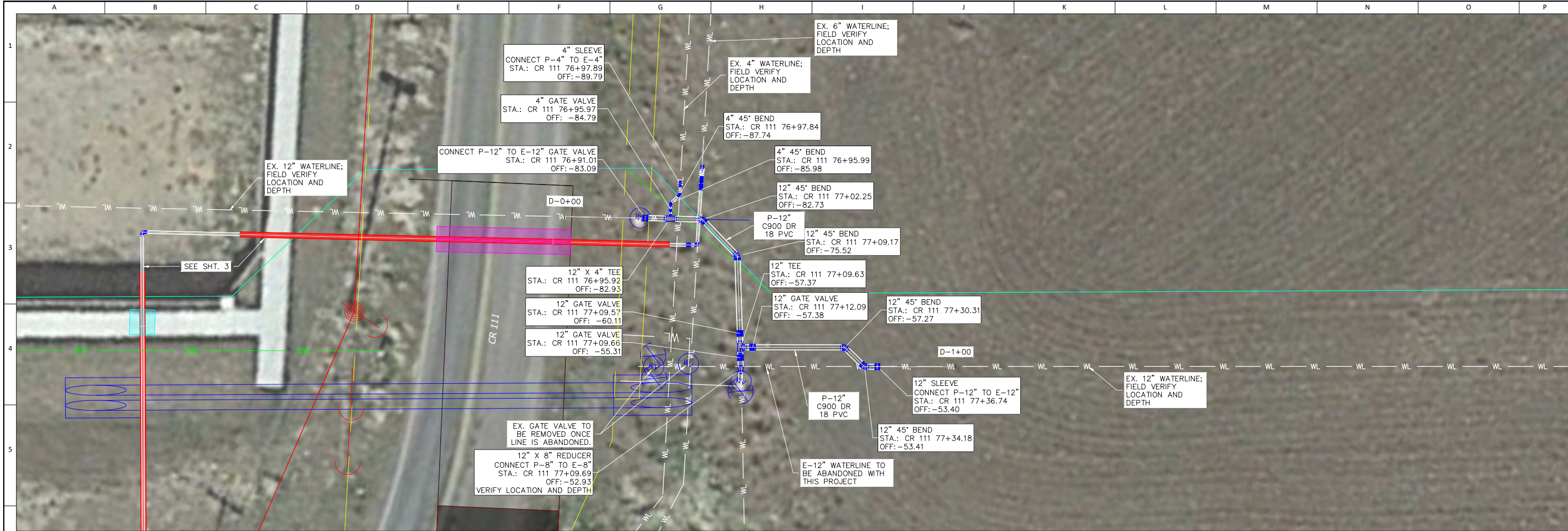
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DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL:



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AYOTE CONSULTING, LLC
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 - CR 111, UTILITY ADJUSTMENTS

WATERLINE ALIGN. "D"; STA. D-0+00 TO D-1+00

DESIGN: MWW

DRAWN: MWW

CKD: MWW

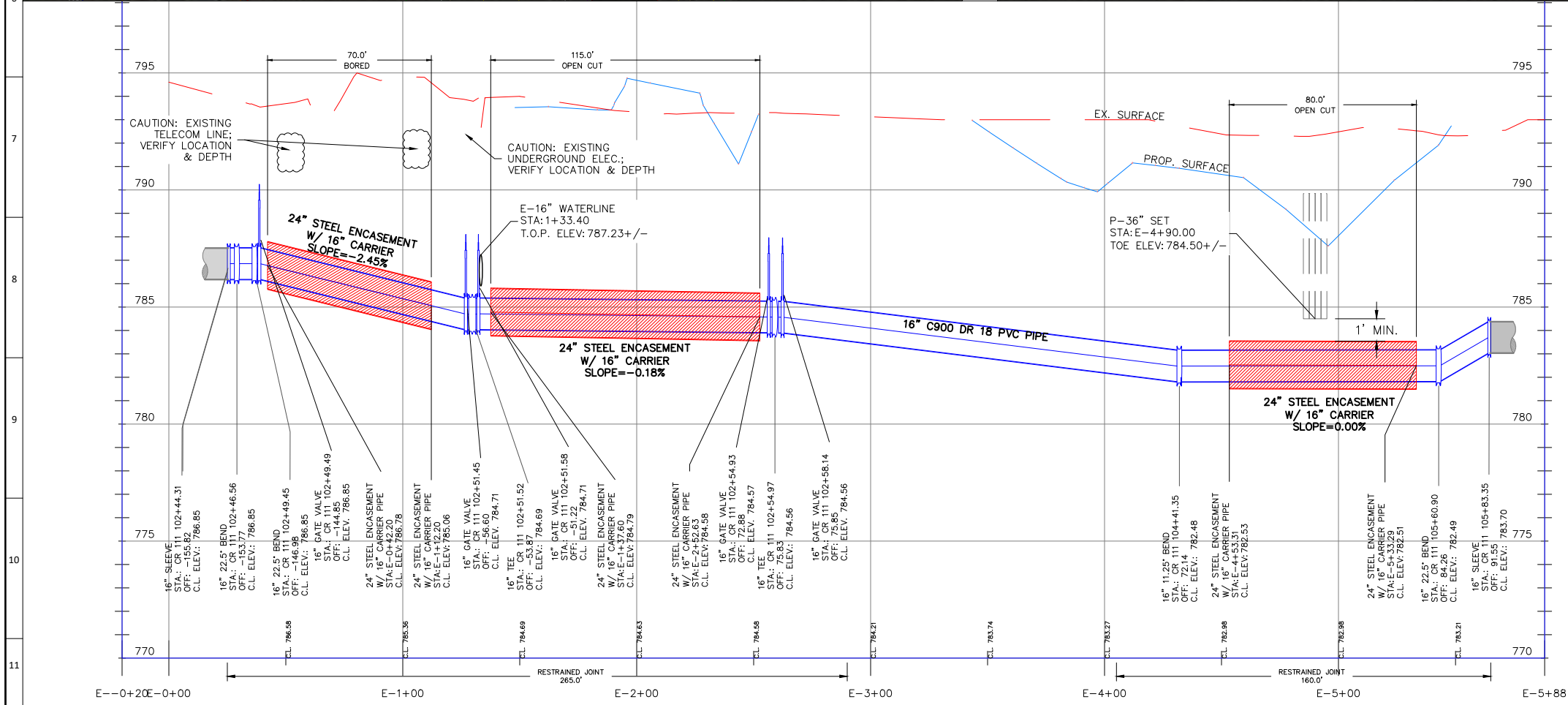
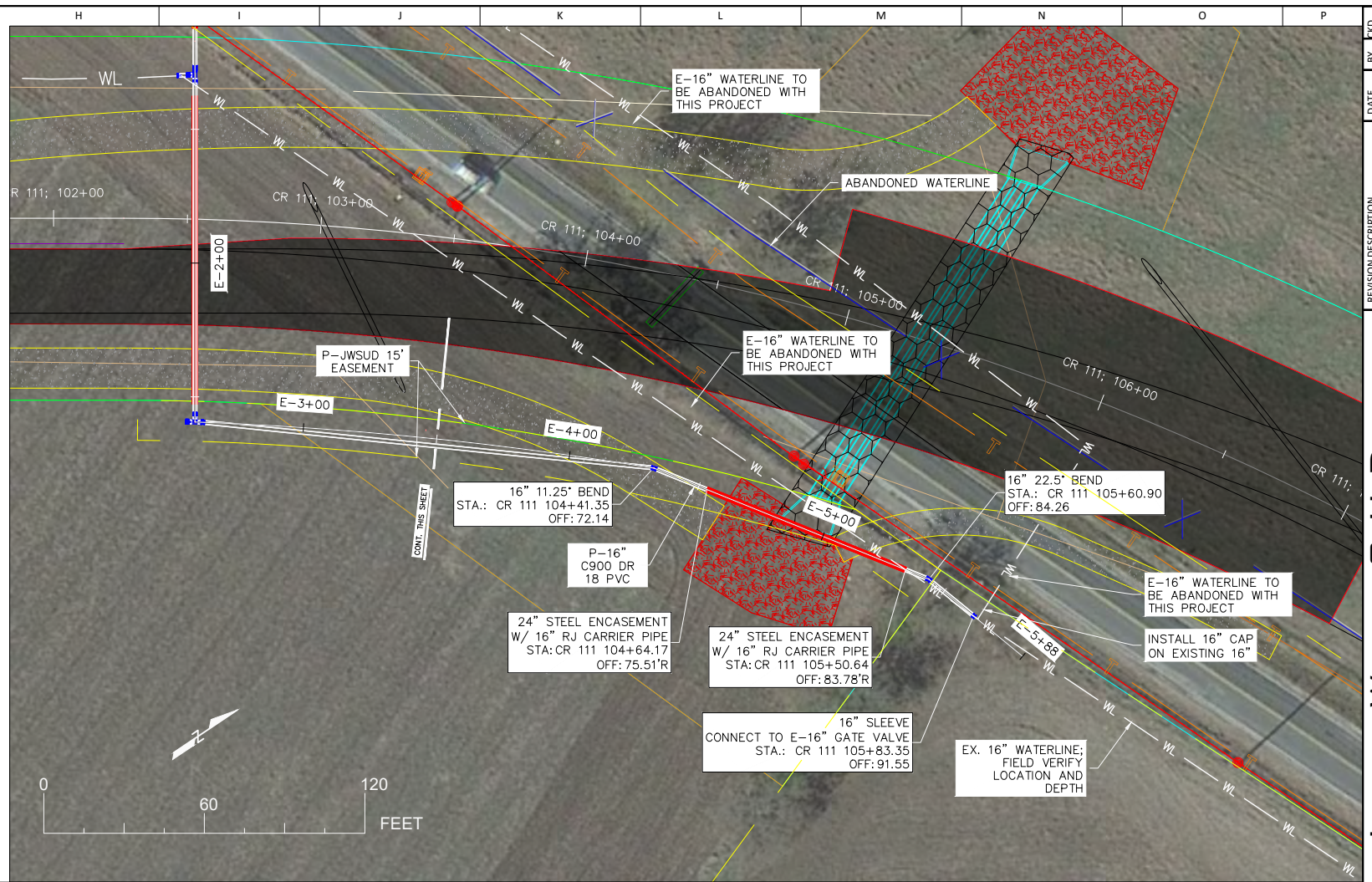
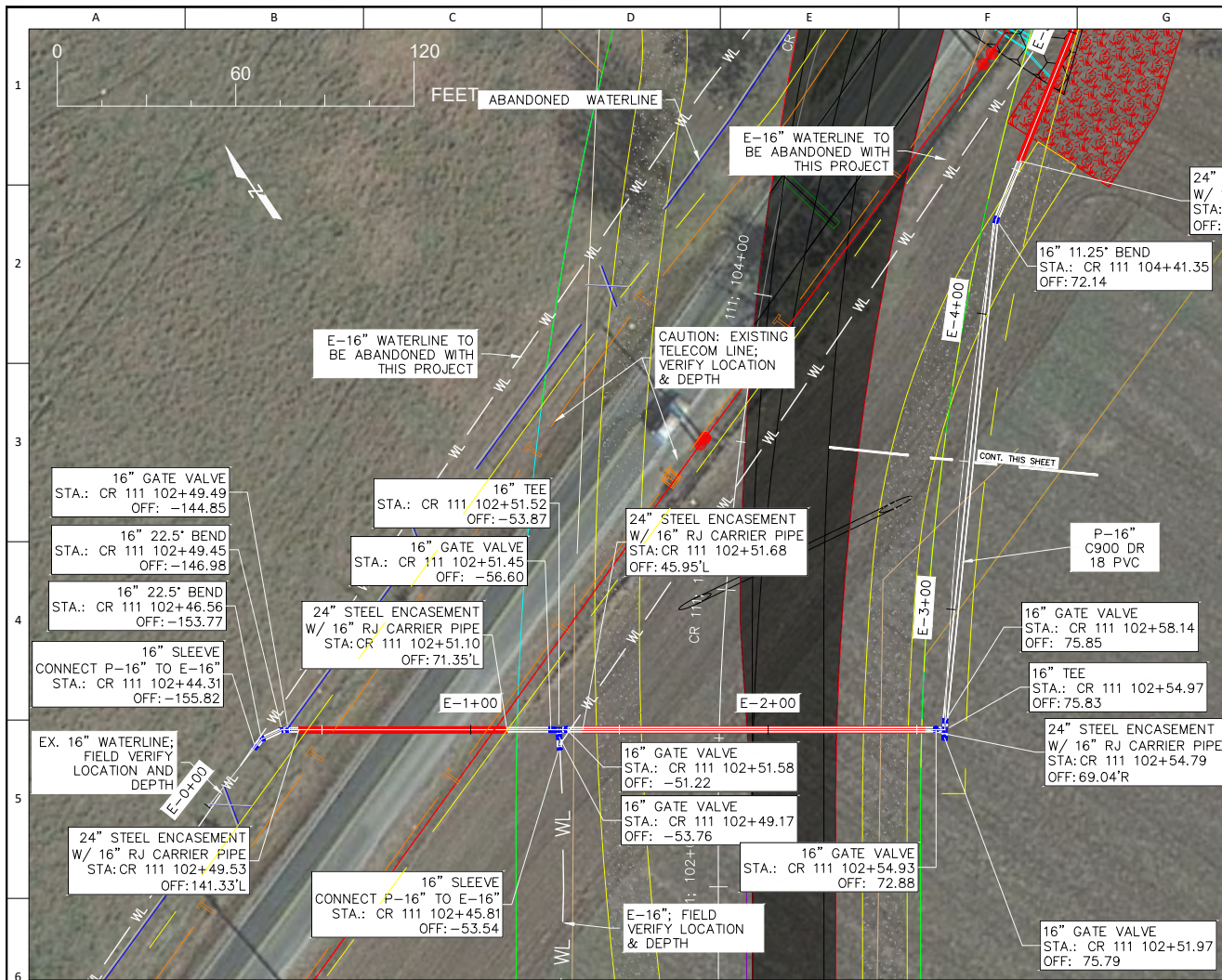
SEAL: 

APPROVED:

DATE: 12/3/21

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

SHEET 4



NO.	BY	DATE	REVISION DESCRIPTION
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DESIGN: MWW
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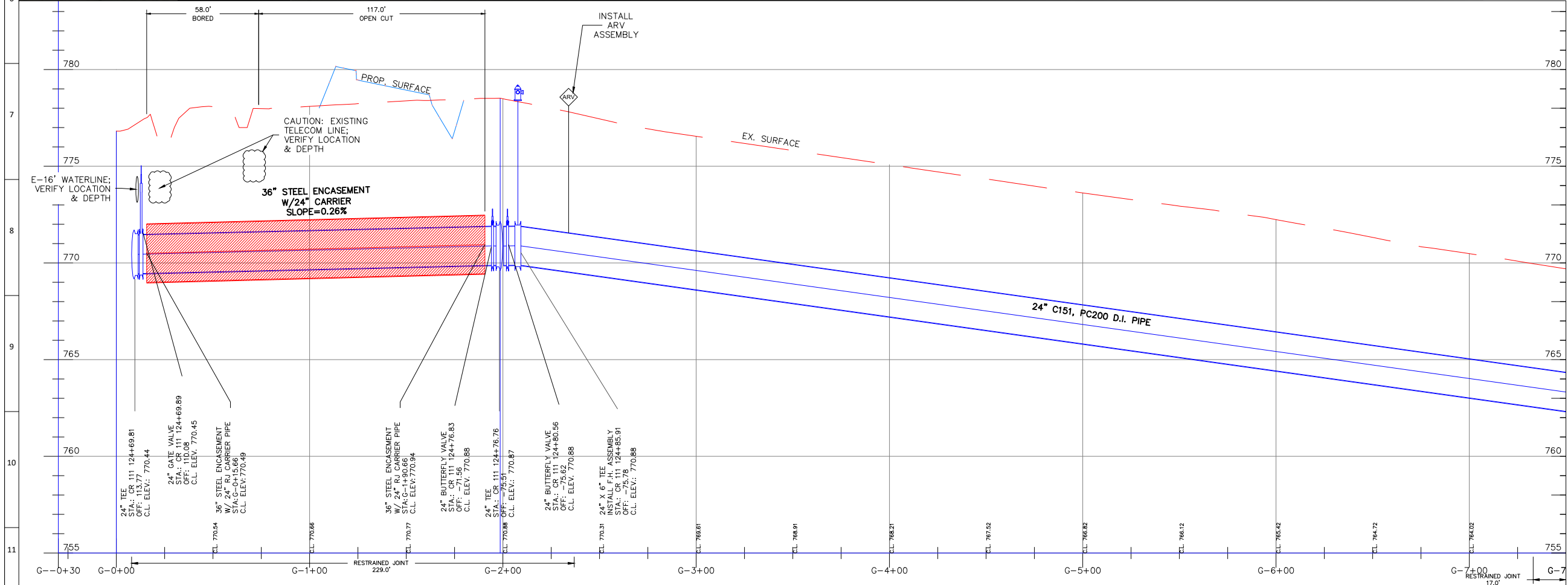
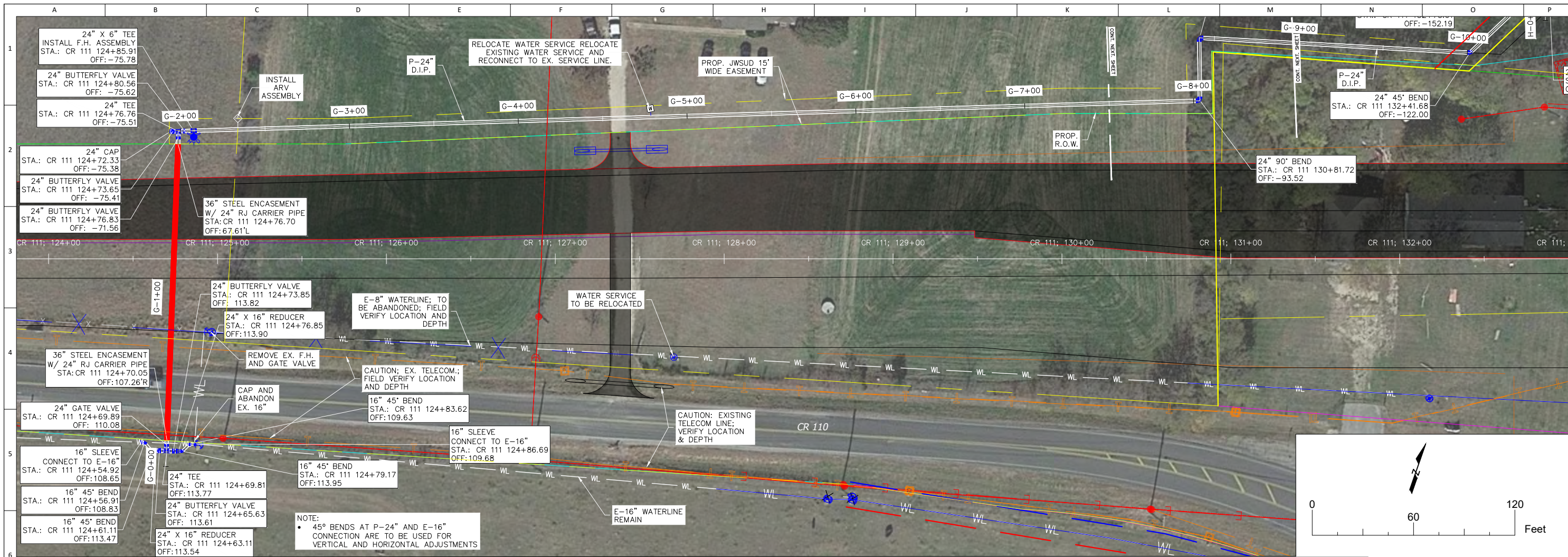
APPROVED:

DATE: 12/3/21

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - CR 111, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "E"; STA. E-0+00 TO E-5+88

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

SHEET 5



REVISION DESCRIPTION	
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JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - CR 111, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "G"; STA. G-0+00 TO G-7+50

DESIGN: **MWW**

DRAWN: **MWW**

CKD: **MWW**

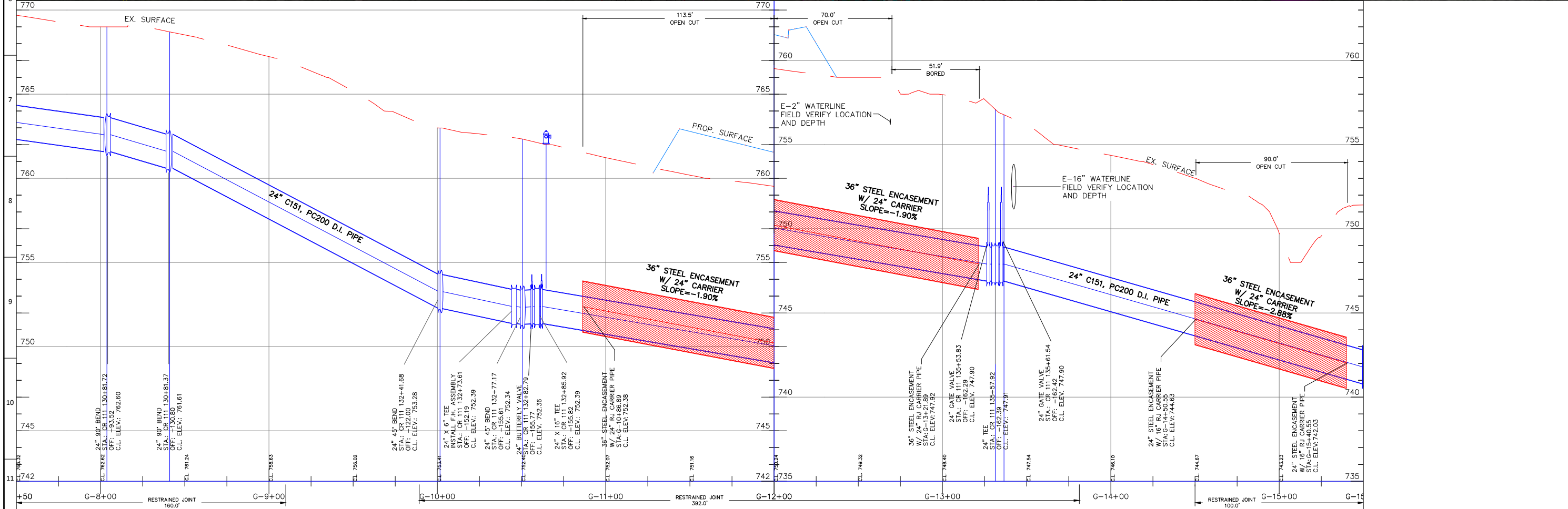
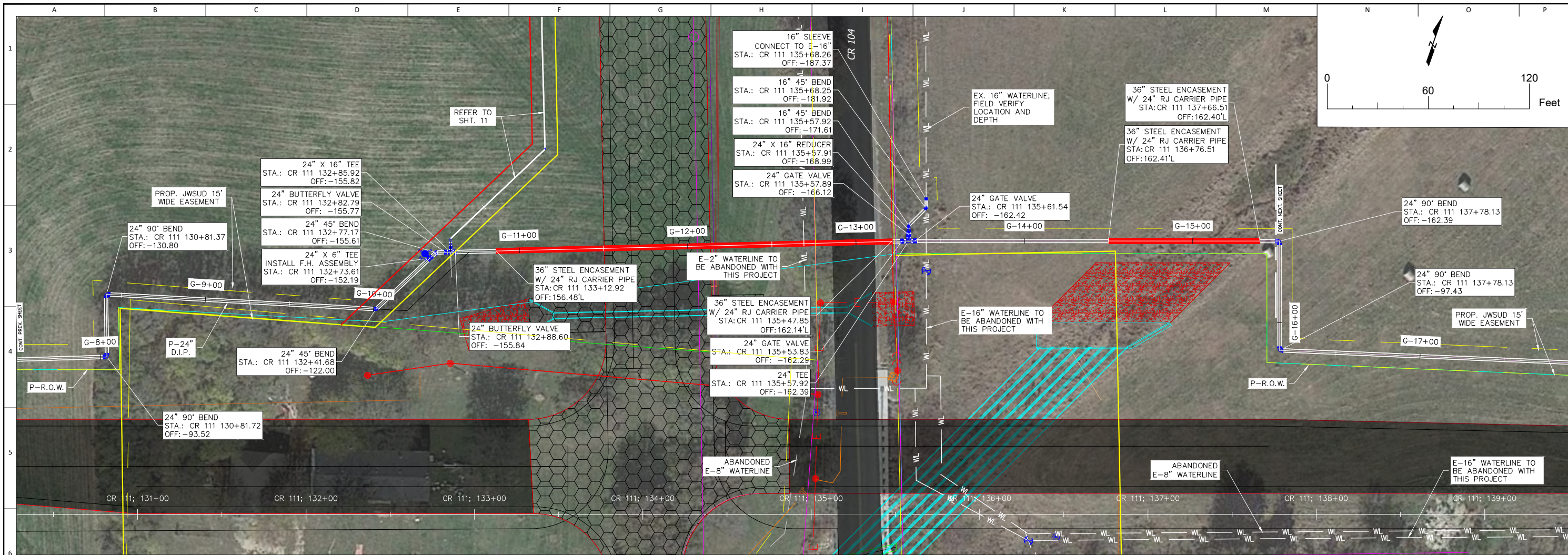
SEAL:

APPROVED:

DATE: 12/3/21

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

SHEET **7**



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REVISION DESCRIPTION

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - CR 111, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "G"; STA. G-7+50 TO G-15+50

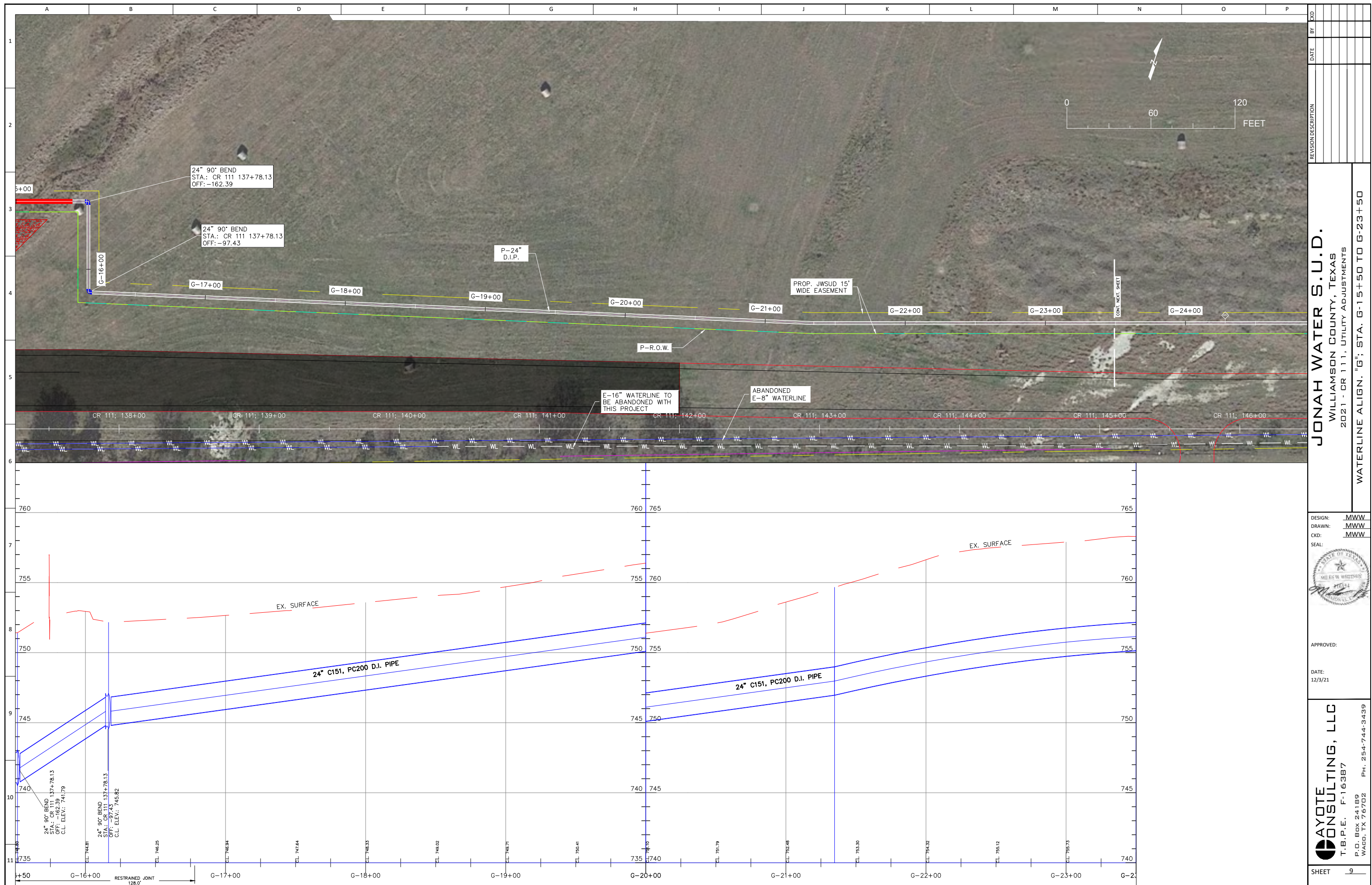
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SEAL:

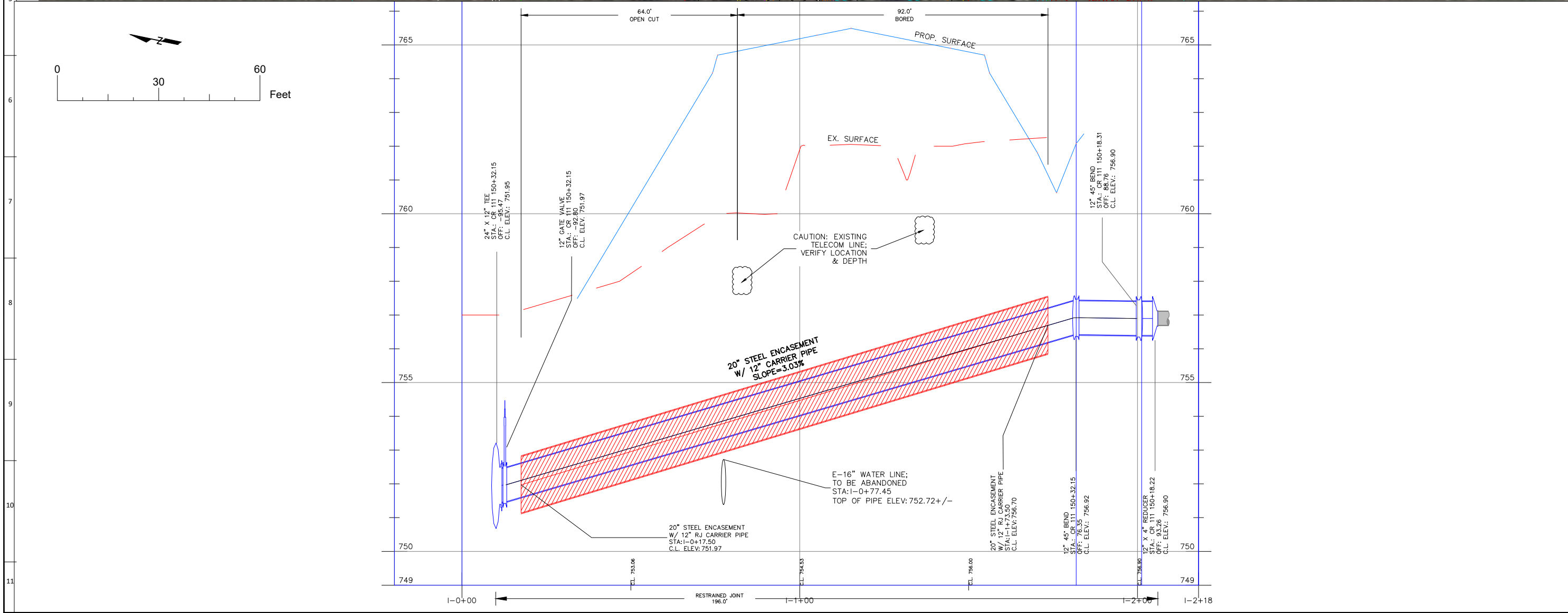
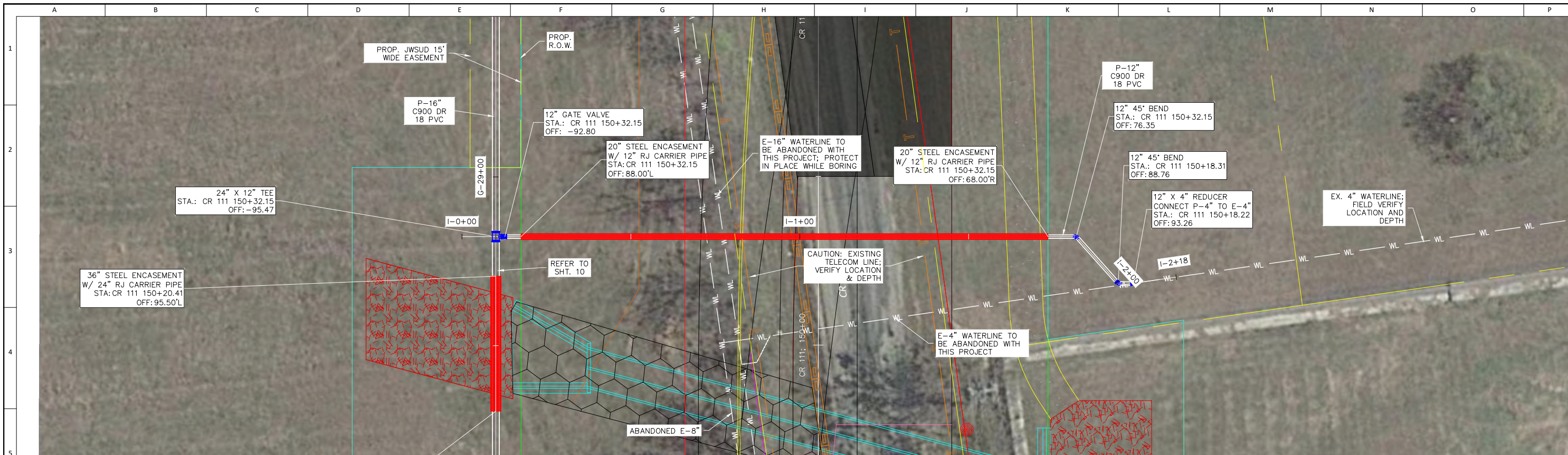
APPROVED:

DATE: 12/3/21

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

SHEET 8





NO.	DATE	BY	REVISION DESCRIPTION

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - CR 111, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "I"; STA. I-0+00 TO I-2+18

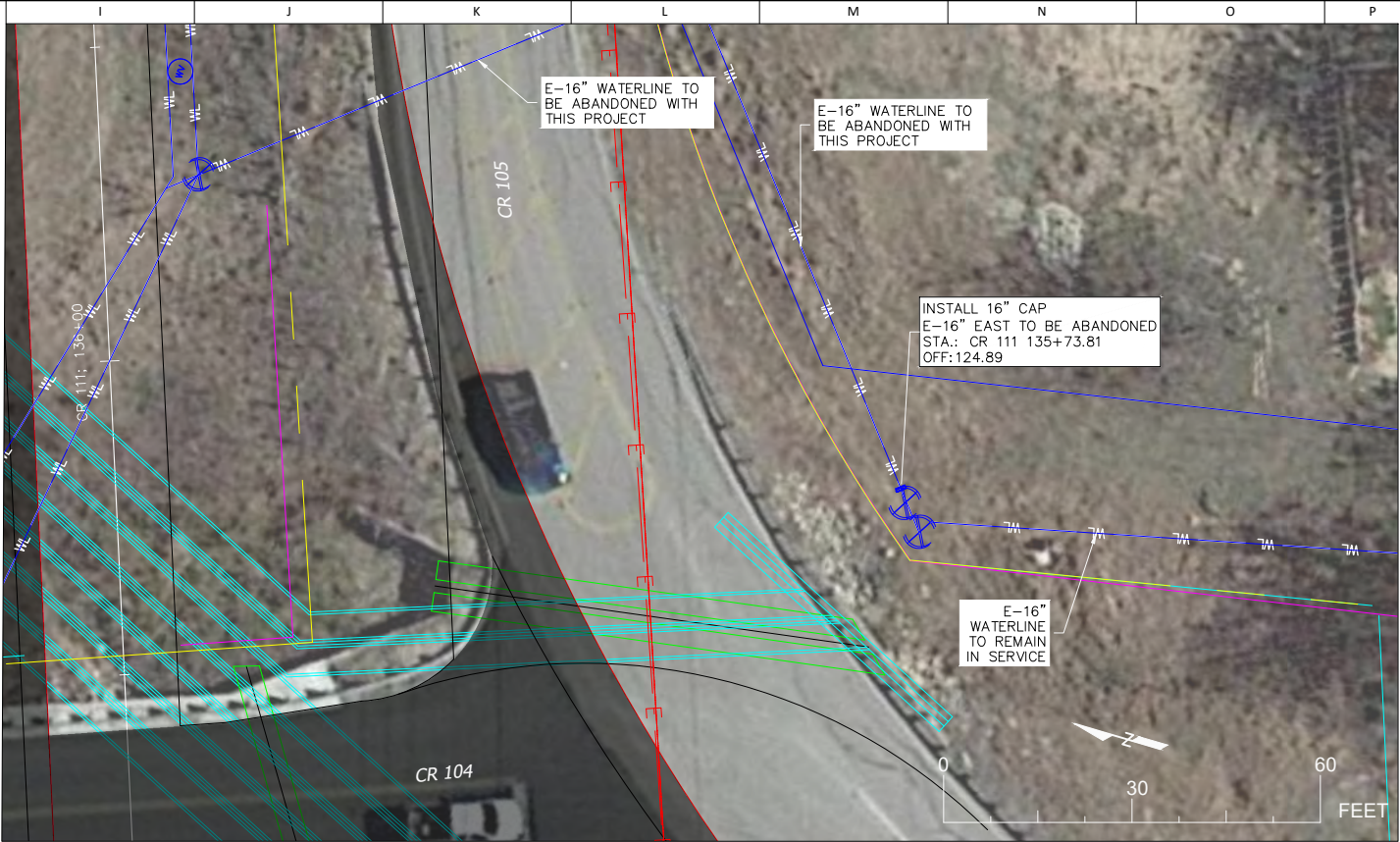
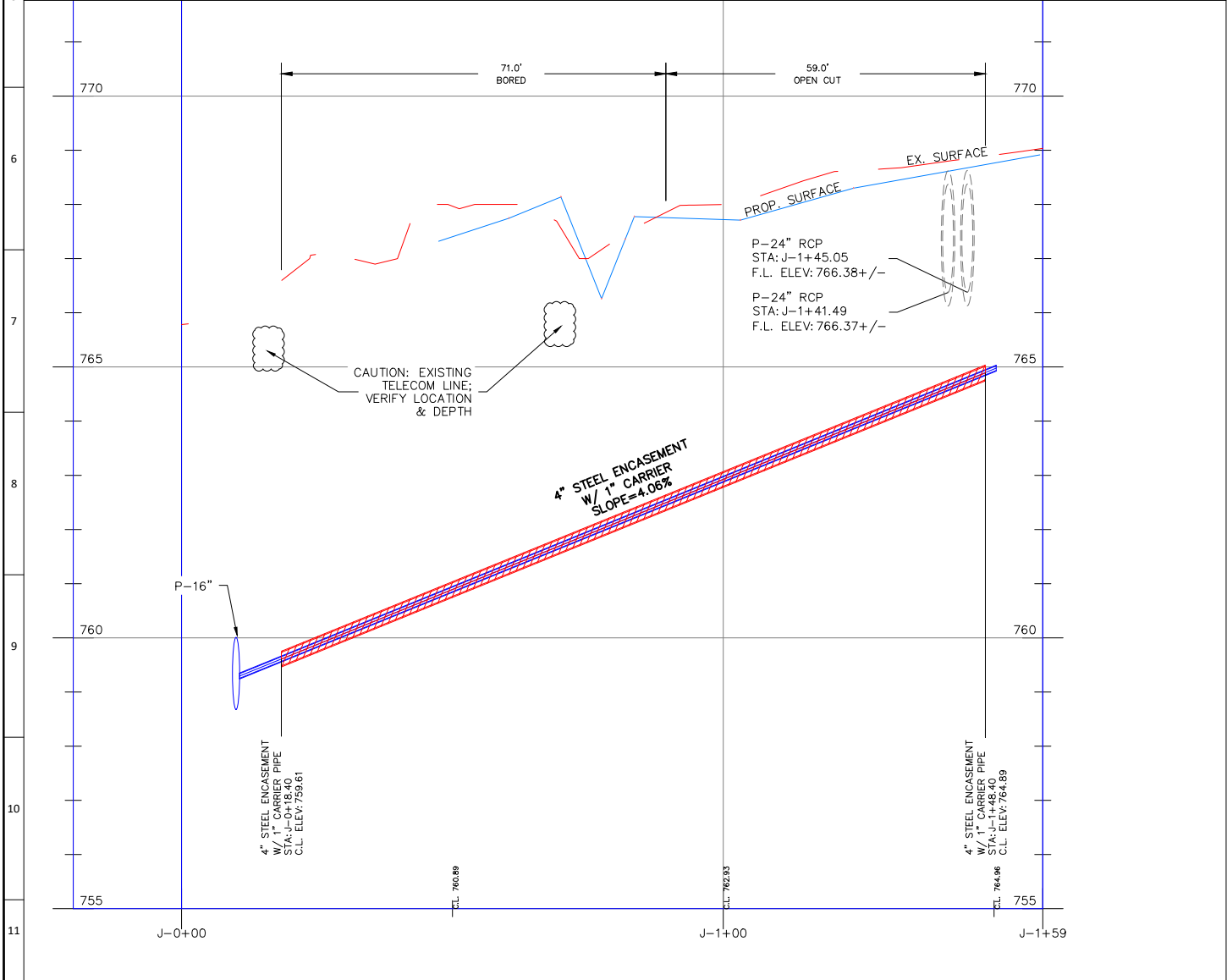
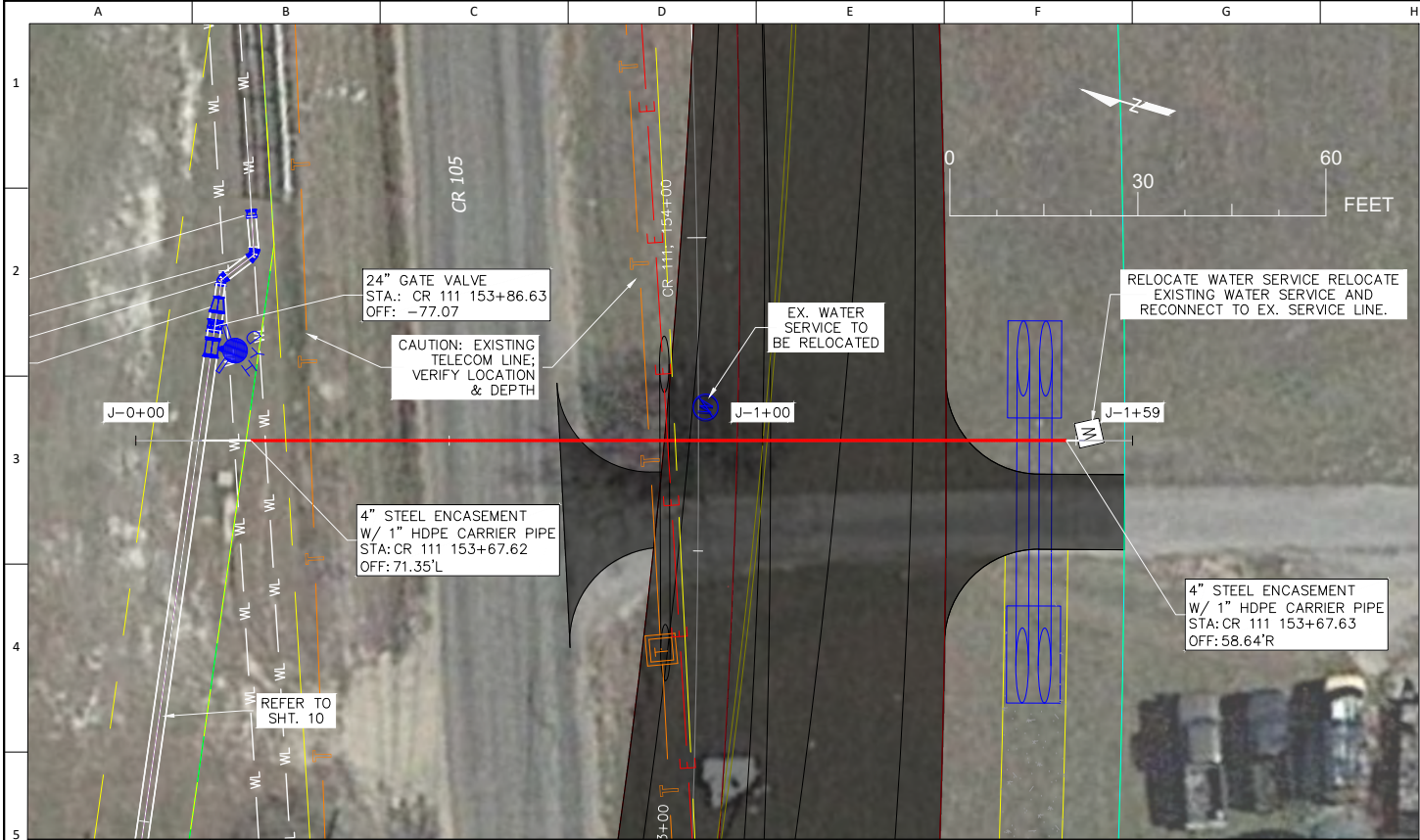
DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL:

APPROVED:

DATE: 12/3/21

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

SHEET 12



REVISION	DESCRIPTION	DATE	BY	CHK

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - CR 111, UTILITY ADJUSTMENTS

WATERLINE ALIGN. "J"; STA: J-0+00 TO J-1+59; CAPPING EX. LINE

DESIGN: **MWW**

DRAWN: **MWW**

CKD: **MWW**

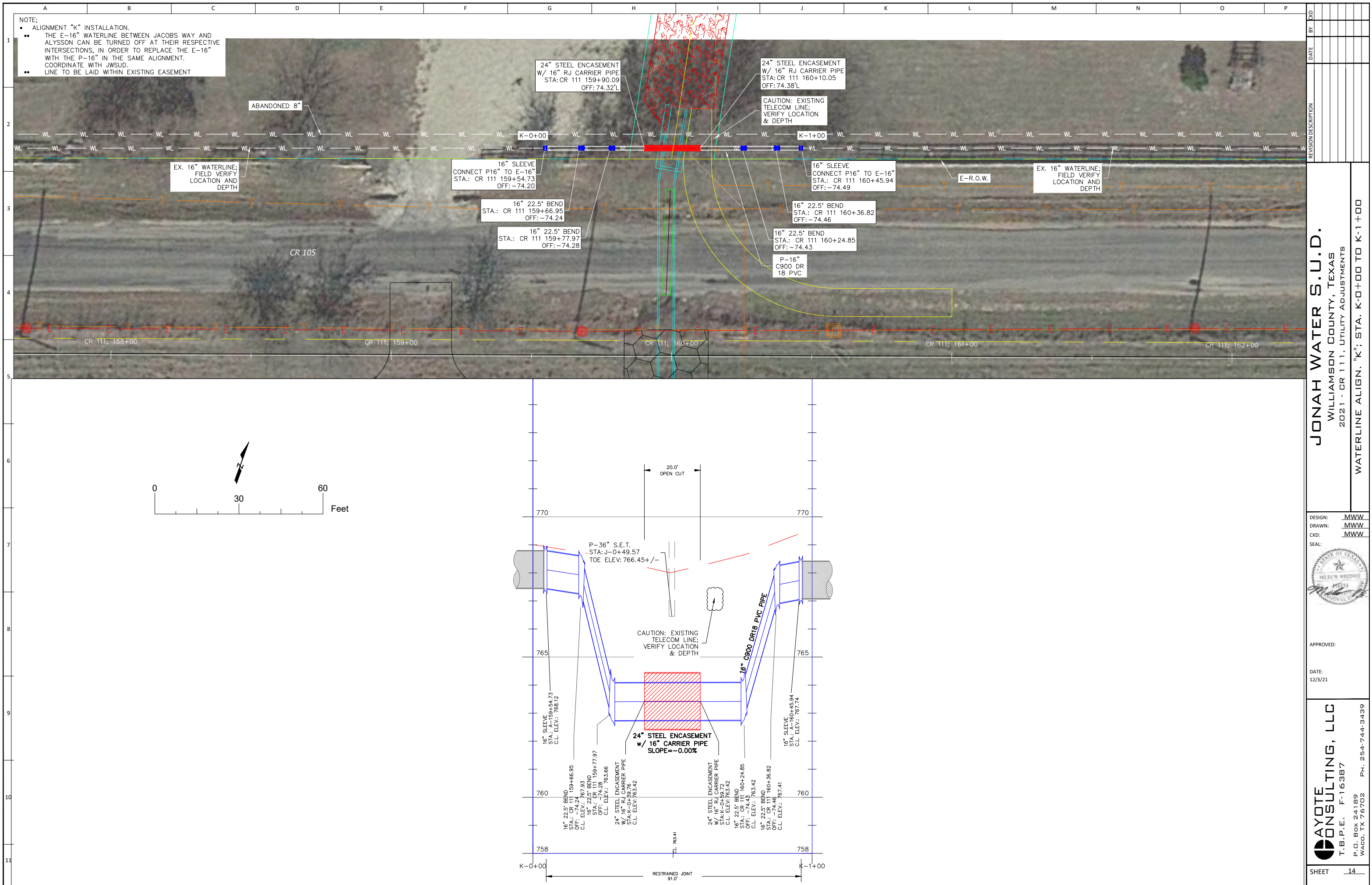
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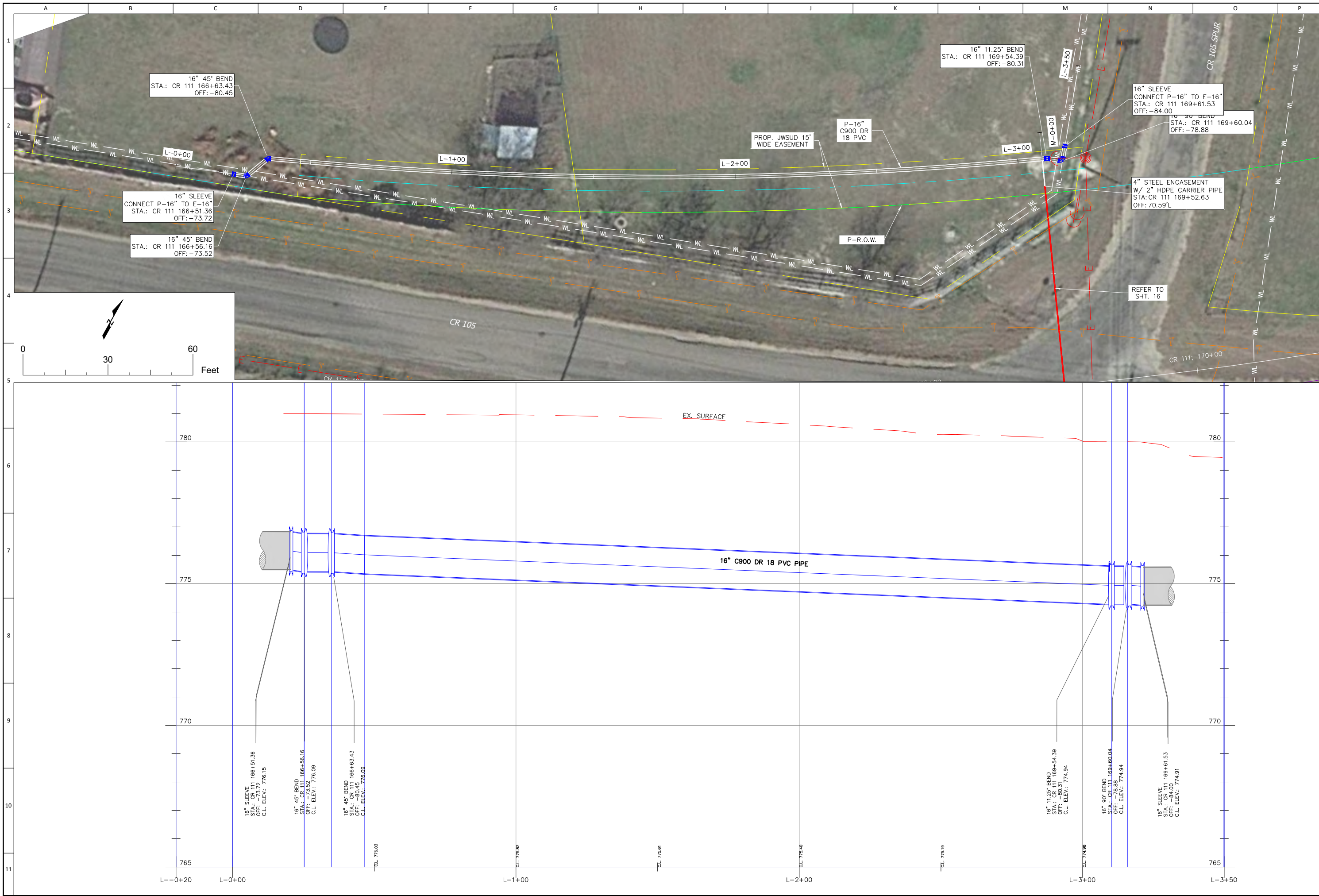
APPROVED:

DATE: 12/3/21

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

SHEET 13





REVISION DESCRIPTION		DATE	BY	CHK

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - CR 111, UTILITY ADJUSTMENTS

WATERLINE ALIGN. "L"; STA: L-0+00 TO L-3+50

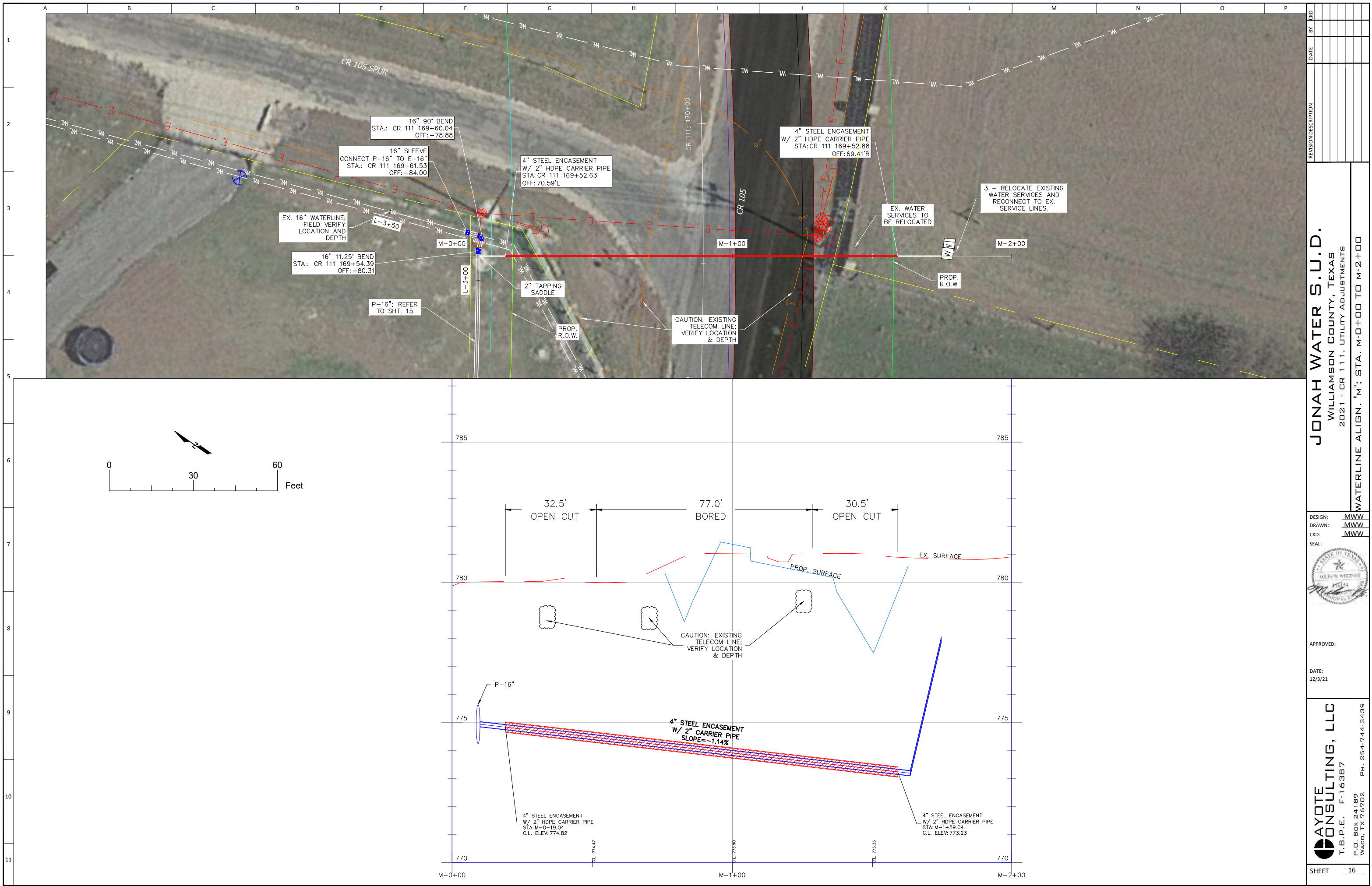
DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL:

APPROVED:

DATE: 12/3/21

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

SHEET 15



REVISION	DESCRIPTION	DATE	BY	CHK

JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - CR 111, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "M"; STA. M-0+00 TO M-2+00

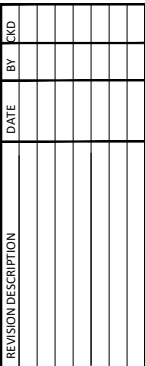
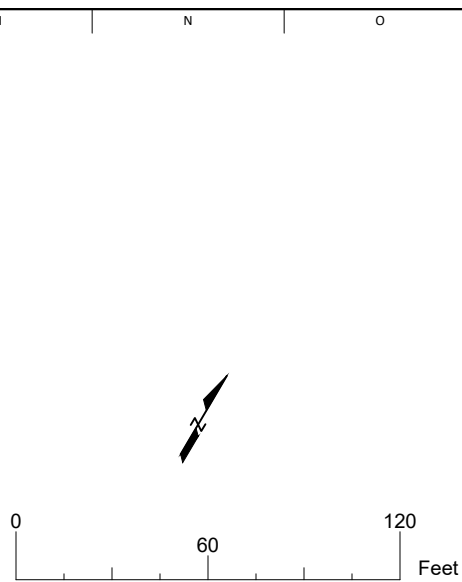
DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL:

APPROVED:

DATE: 12/3/21

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

SHEET 16



JONAH WATER S.U.D.
WILLIAMSON COUNTY, TEXAS
2021 - CR 111, UTILITY ADJUSTMENTS
WATERLINE ALIGN. "N"; STA. N-5+50 TO N-12+67

DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL: _____

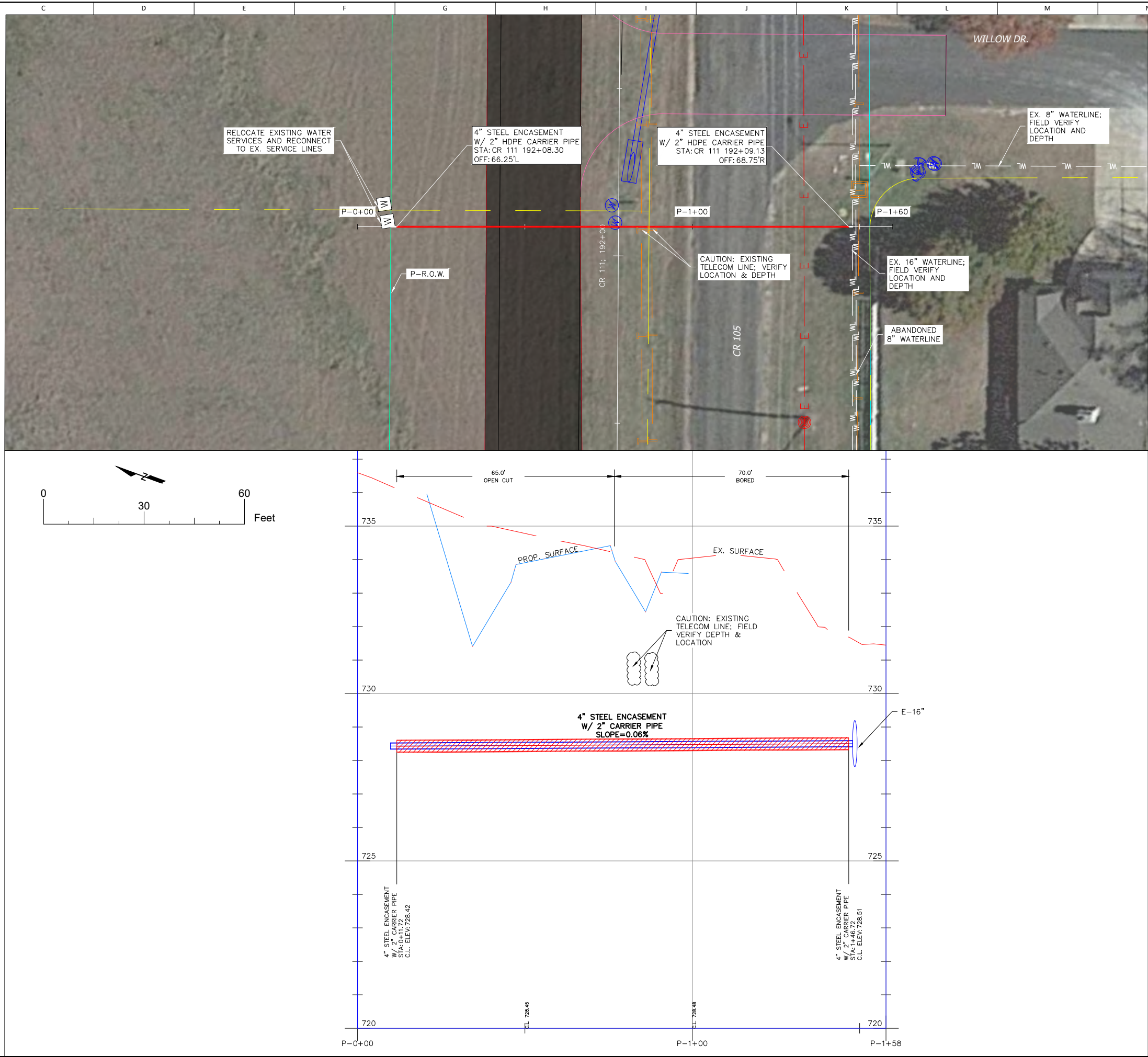



APPROVED:

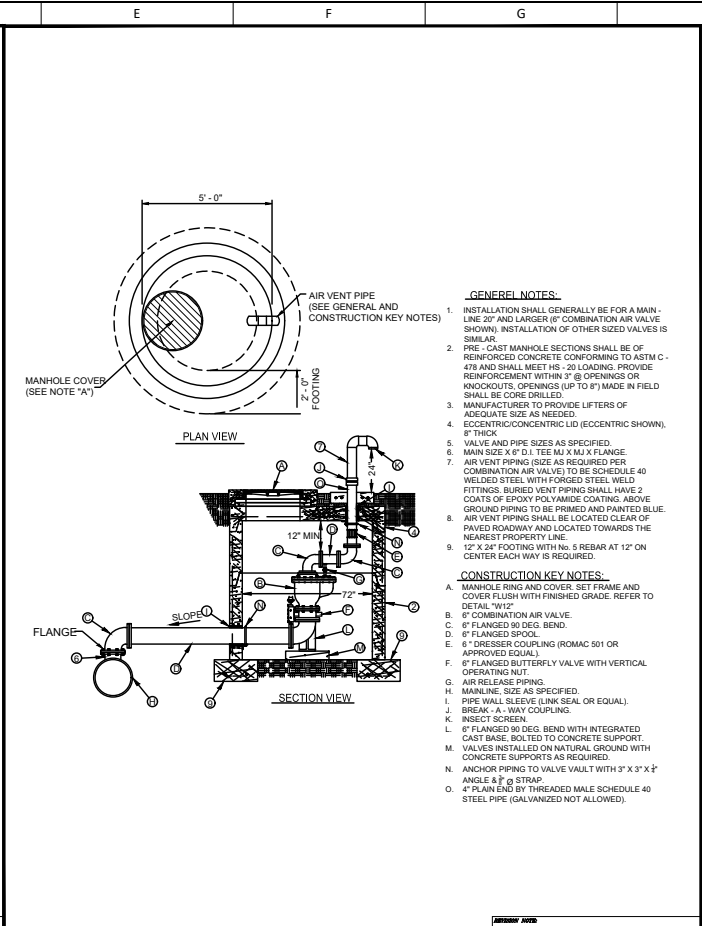
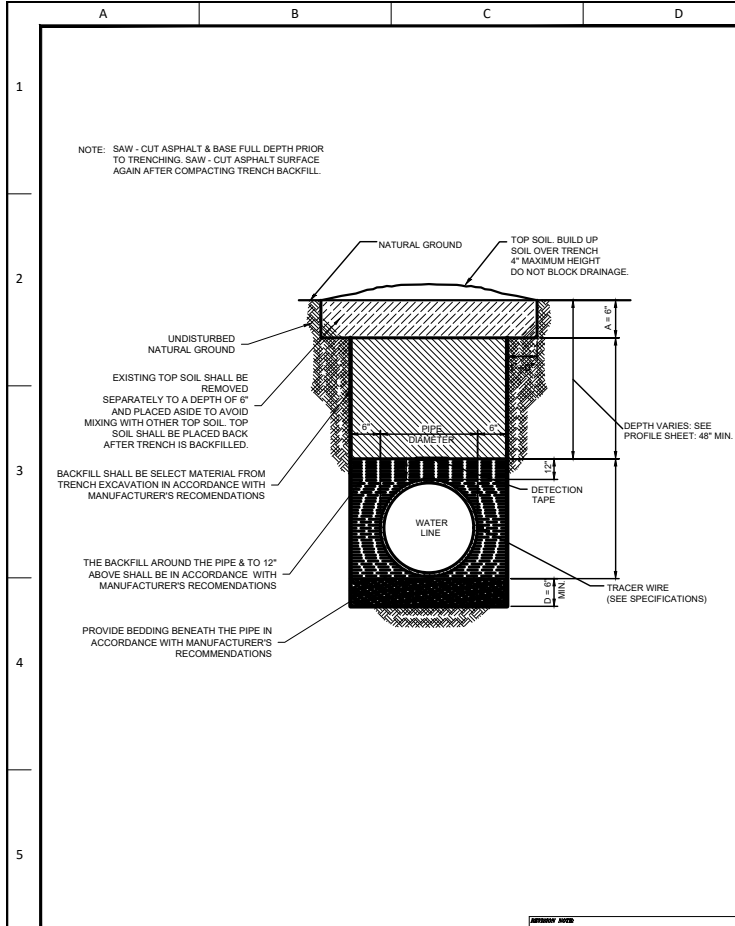
DATE:
12/3/21

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

	A	B
1	NOTE; • ALIGNMENT "P" INSTALLATION. • IT IS REQUIRED THAT EACH INDIVIDUAL METER BE INSTALLED ON THEIR RESPECTIVE PROPERTY.	
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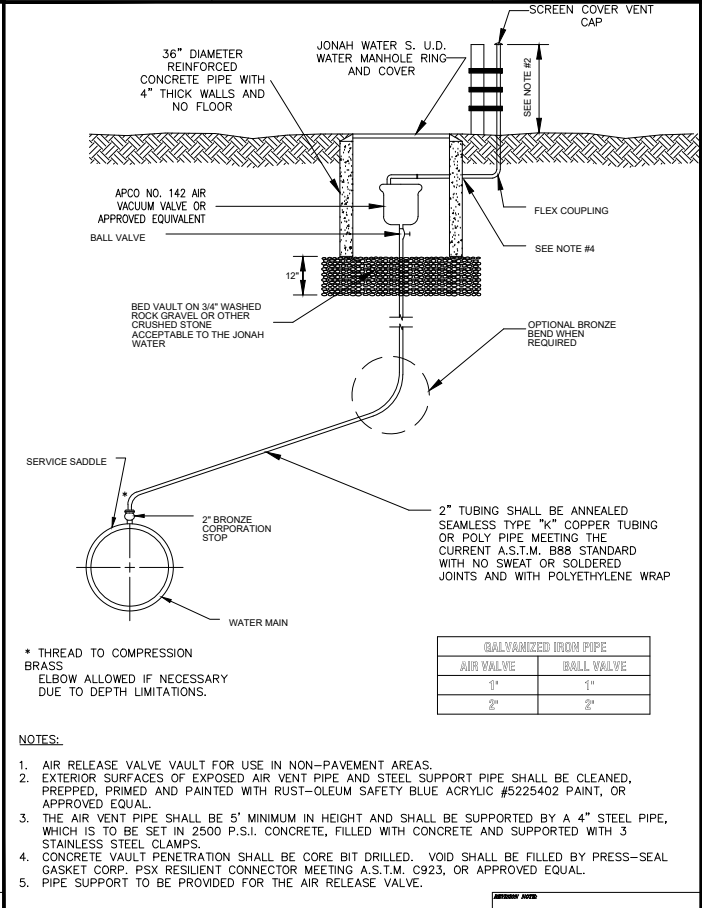
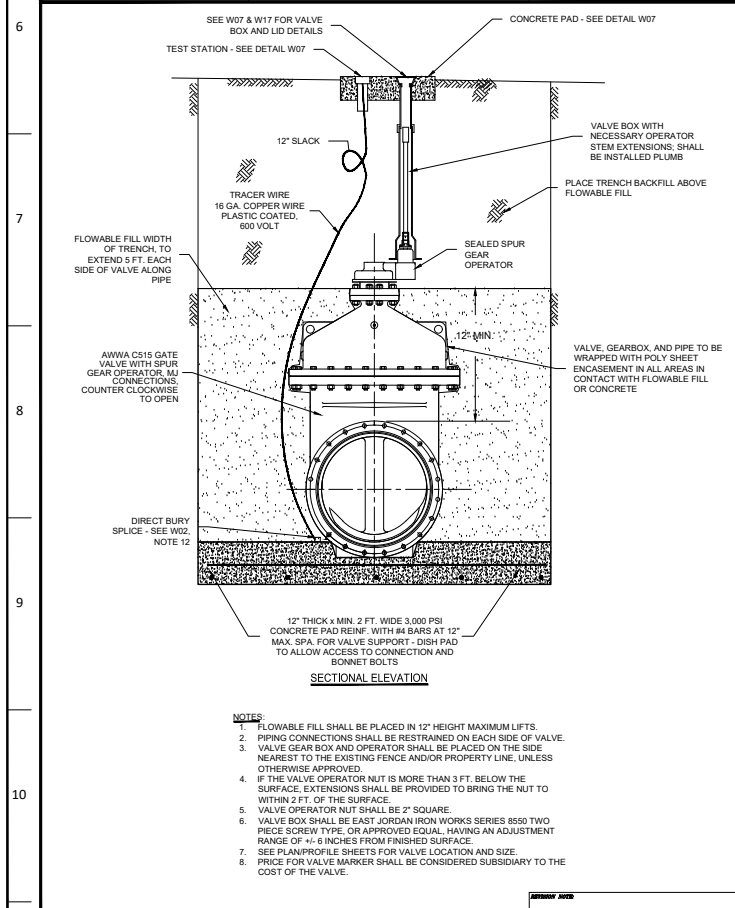


SHEET	AYOTE CONSULTING, LLC T.B.P.E. F-16387 P.O. BOX 24189 WACO, TX 76702 PH. 254-744-3439	DATE:	12/3/21	APPROVED:		SEAL:		CKD:		REVISION DESCRIPTION	DATE	BY	CKD
		DESIGN:		DRAWN:									
JONAH WATER S.U.D. WILLIAMSON COUNTY, TEXAS 2021 - CR 111, UTILITY ADJUSTMENTS WATERLINE ALIGN. "P"; STA. P-0+00 TO P-1+60													



JONAH WATER SUD		W27	
WATER CONSTRUCTION STANDARD DETAILS			
24\"/>		DATE	APPROVED BY
N.T.S.	10/17/20		
SCALE	AS SHOWN		

JONAH WATER SUD		W28	
WATER CONSTRUCTION STANDARD DETAILS			
24\"/>		DATE	APPROVED BY
N.T.S.	10/17/20		
SCALE	AS SHOWN		



JONAH WATER SUD		W32	
WATER CONSTRUCTION STANDARD DETAILS			
TYPICAL VERTICAL GATE VALVE INSTALLATION DETAILS (24\"/>		DATE	APPROVED BY
N.T.S.	1-6-21		
SCALE	AS SHOWN		

JONAH WATER SUD		W08.1	
WATER CONSTRUCTION STANDARD DETAILS			
"MODIFIED" AIR RELEASE VALVE FOR WATER MAIN DETAIL		DATE	APPROVED BY
N.T.S.	10/21		
SCALE	AS SHOWN		

NO

BY

DATE

REVISION DESCRIPTION

JONAH WATER S.U.D.

WILLIAMSON COUNTY, TEXAS

2021 - CR 111, UTILITY ADJUSTMENTS

DETAIL

DESIGN: MWW

DRAWN: MWW

CKD: MWW

SEAL:

APPROVED:

DATE: 12/3/21

AYOTE CONSULTING, LLC

T.B.P.E. F-16387

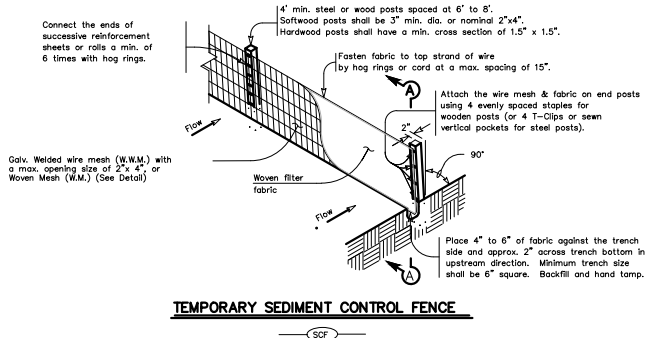
P.O. BOX 24189

WACO, TX 76702

PH: 254-744-3439

SHEET 25

- ¹¹ File: Z:\John Comp\TxDOT Details\TCP1-18.pdf
Sheet: 1



Sediment control fence should be sized to filter a max. flow through rate of 100 GPM/FT. Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.



A Baled Hay installation may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A two year storm frequency may be used to calculate the flow rate to be filtered. The installation should be sized to filter a maximum flow thru rate of 5 GPM/FT² of cross sectional area. Baled hay may be used at the following locations:

1. Where the runoff approaching the baled hay flows over disturbed soil for less than 100', if the slope of the disturbed soil exceeds 10%, the length of slope upstream the baled hay should be less than 50'.
2. Where the installation will be required for less than 3 months.
3. Where the contributing drainage area is less than 1/2 acre.

For Baled Hay installations in small ditches, the additional following considerations apply:

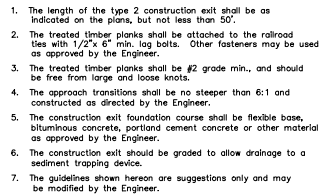
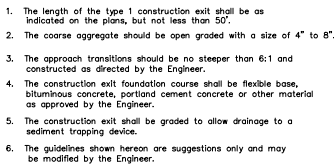
1. The ditch sideslopes should be graded as flat as possible to maximize the drainage flowrate thru the hay.
2. The ditch should be graded large enough to contain the overtopping drainage when sediment has filled to the top of the baled hay.

Bales should be replaced usually every 2 months or more often during wet weather when loss of structural integrity is accelerated.



1. Hay bales shall be a minimum of 30" in length and weigh a minimum of 50 Lbs.
2. Hay bales shall be bound by either wire or nylon or polypropylene string. The bales should be composed entirely of vegetative matter.
3. Hay bales shall be **embedded** in the soil a minimum of 4" and shall protrude 1/2" above the height of the bale.
4. Hay bales shall be placed in a row with ends tightly abutting the adjacent bales. The bales shall be placed with bindings parallel to the ground.
5. Hay bales shall be securely anchored in place with 3/8" Dia. rebar or 2" x 2" wood stakes, driven through the bales. The first stake shall be inserted towards the previously laid bale to force the bales together.
6. The guidelines shown herein are suggestions only and may be modified by the Engineer.

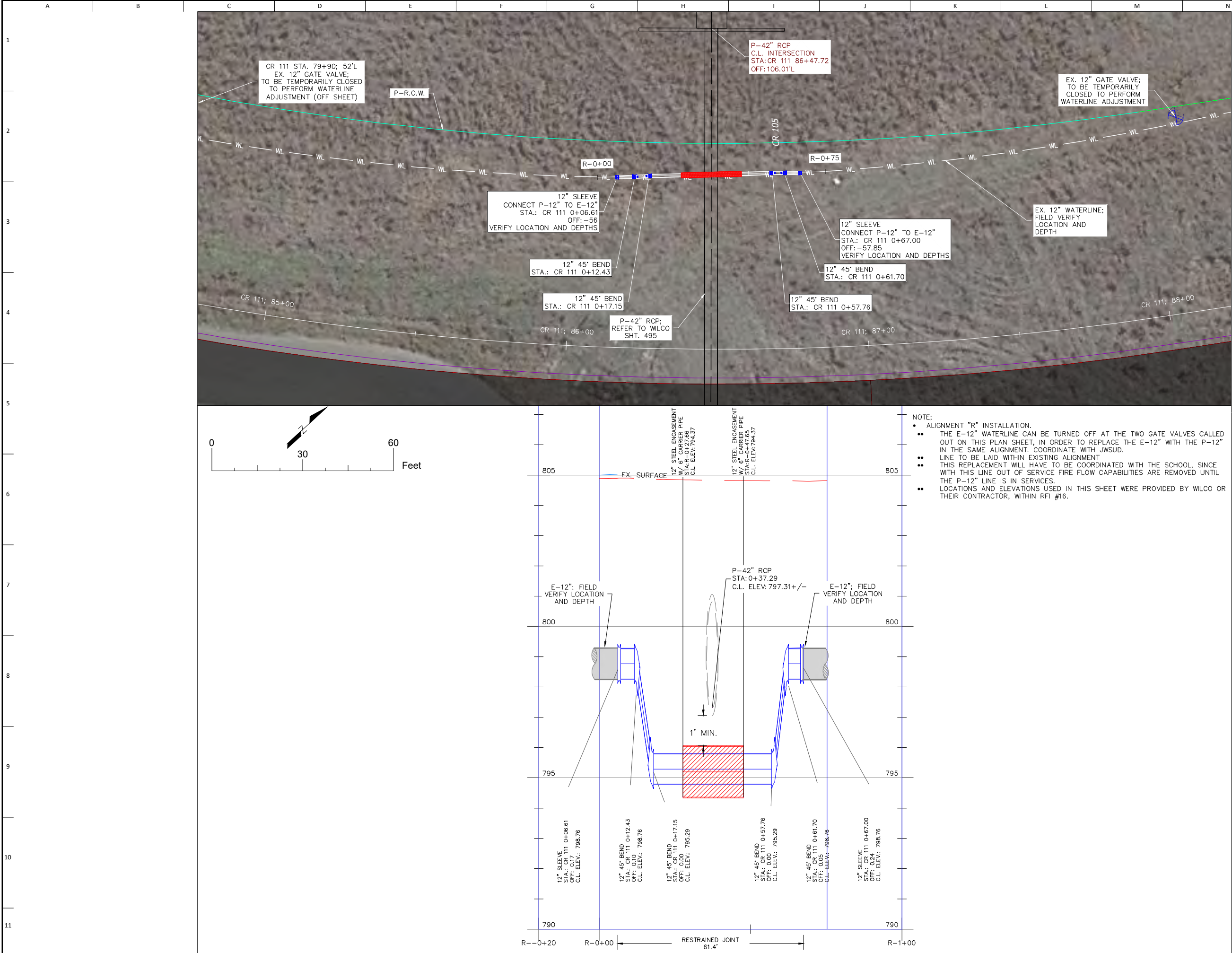
FILE: ec108.dgn	DR: TxDOT	CR: AM	DR: TV	CR: ED
© TxDOT June 1993	CONT	SECT	JOB	HIGHWAY
REVISIONS				
	DIST	COUNTY	SHEET NO.	



1. The length of the type 3 construction exit shall be as shown on the plans, or as directed by the Engineer.
2. The type 3 construction exit may be constructed from open graded crushed stone with a size of two to four inches spread a min. of 4" thick to the limits shown on the plans.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

FILED	ec193.dgn	DATE	TxDOT	CHK	HEJ	DATE	BD	CHK
TxDOT		June 1993		CONT	SECT	JOB		HIGHWAY
REVISIONS								
		DIST		COUNTY		SHEET NO.		

[illegible]



NO.	BY	DATE	REVISION DESCRIPTION

Jonah Water S.U.D.
Williamson County, Texas
2021 - CR 111, Utility Adjustments
WATERLINE ALIGN. "R"; STA. R-0+00 TO R-0+75

DESIGN: MWW
DRAWN: MWW
CKD: MWW
SEAL:

APPROVED:

DATE: 4/27/22

AYOTE CONSULTING, LLC
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SHEET 27