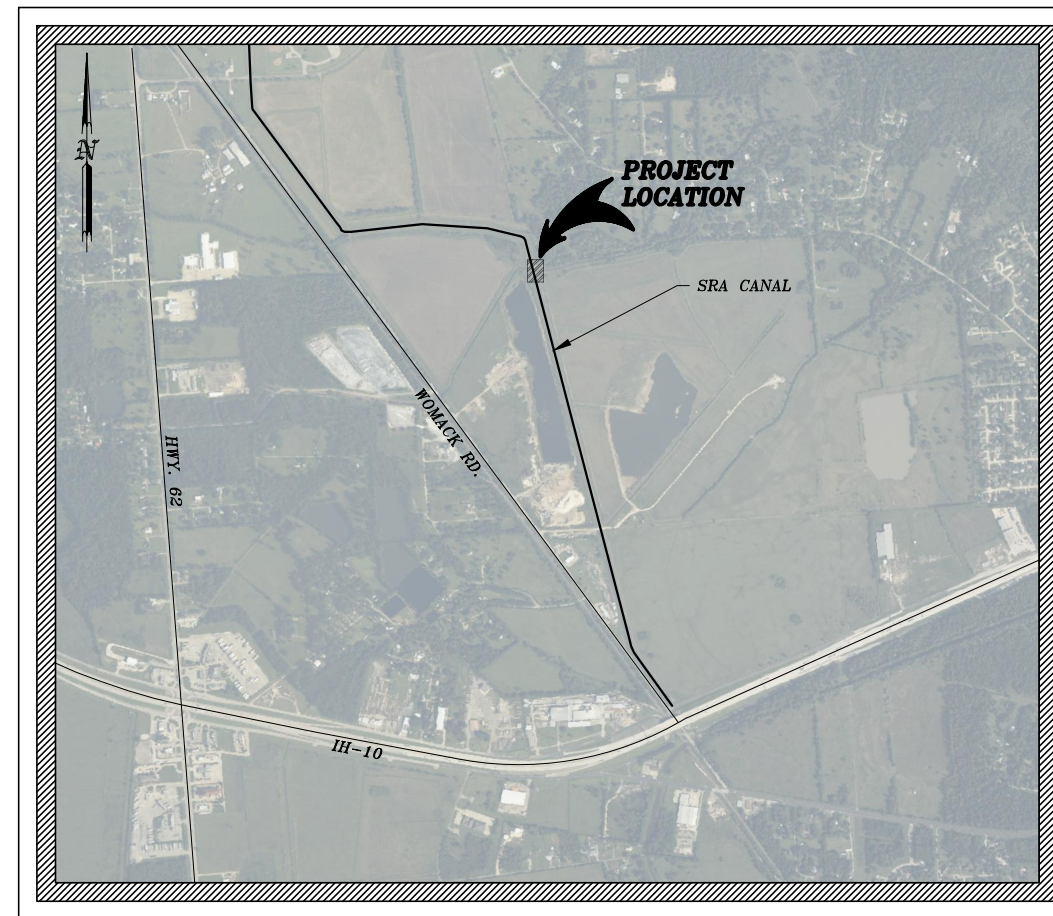


SABINE RIVER AUTHORITY



WOMACK SIPHON REPLACEMENT PROJECT



PROJECT LOCATION
NTS

PREPARED BY:
LJA ENGINEERING, INC.
CONSULTING ENGINEERS
2615 CALDER AVENUE, SUITE 500
BEAUMONT, TX 77702
Texas Registered Engineering Firm FRN-F-1386

AUGUST 2021

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APPROVED

LJA ENGINEERING, INC.

BY: 
DAWN PILCHER, P.E. NO. 87863

31 Aug 2021
DATE



ORIGINAL PLAN SET NOTES

1. ALL ELEVATIONS SHOWN ARE NAVD 88 DATUM.
2. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING FACILITIES PRIOR TO CONSTRUCTION OF PROPOSED FACILITIES.
3. PLAN AND PROFILE STATIONING IS BASED ON CENTERLINE STATIONING UNLESS OTHERWISE SHOWN.
4. SPOIL FORM CONSTRUCTION SHALL BE REDISTRIBUTED AT CONSTRUCTION SITE PER SRA DIRECTION.
5. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE RESTORED TO AN EQUAL OR BETTER CONDITION AT THE EXPENSE OF THE CONTRACTOR.
6. UTILITY LOCATIONS AND OTHER OBSTRUCTIONS SHOWN ON THE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT EXACT. THE ENGINEER AND THE OWNER ASSUME NO RESPONSIBILITY FOR VARIATION IN LOCATION AND GRADES. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING FACILITIES PRIOR TO CONSTRUCTION OF PROPOSED FACILITIES. DISCREPANCIES BETWEEN THE TWO SHALL BE IMMEDIATELY REPORTED TO THE OWNER OR ENGINEER.
7. CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES WITH EXISTING FACILITIES IN THE AREAS OF CONSTRUCTION 48 HOURS PRIOR TO CONSTRUCTION IN AREAS OF POSSIBLE UNDERGROUND UTILITIES WHICH MAY OR MAY NOT BE SHOWN ON DRAWING. CONTRACTOR IS RESPONSIBLE FOR MAKING THE TEXAS ONE CALL AND FOLLOWING ALL REQUIREMENTS SET FORTH THROUGH THAT AGENCY.
8. ANY EXCESS SOIL THAT IS NOT HAULED OFF MAY BE USED AS FULL FOR RUTS AND BACKFILL TO RESHAPE DRAINAGE DITCH. ANY FILL SHALL BE PLACED AND GRADED TO FACILITATE DRAINAGE. EXISTING SURFACE DRAINAGE SHALL NOT BE IMPAIRED.
9. ALL DISTURBED AREAS SHALL BE SEEDED TO PREVENT EROSION.
10. ALL PROPOSED CONSTRUCTION SHALL BE PERFORMED WITHIN THE BOUNDARY OF THE SRA PROPERTY AND/OR EASEMENTS UNLESS OTHERWISE APPROVED.
11. ALL MATERIAL SUCH AS TREES, DIRT, SHRUBS, ROOTS, BROKEN CONCRETE, ASPHALT, AND OTHER DEBRIS ENCOUNTERED AND REMOVED DURING CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY CONTRACTOR AT CONTRACTOR'S EXPENSE.
12. ALL SIPHON PIPE AND OTHER DRAINAGE FACILITIES SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION OPERATIONS. CULVERTS, ECT. DAMAGED AS A RESULT OF CONTRACTOR'S NEGLIGENCE SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
13. THE CONTRACTOR SHALL INFORM UTILITY OWNERS SUFFICIENTLY IN ADVANCE OF THE CONTRACTOR'S OPERATIONS TO ENABLE SUCH UTILITY OWNERS TO REROUTE, PROVIDE TEMPORARY DETOURS, OR TO MAKE OTHER ADJUSTMENTS TO UTILITY LINES IN ORDER THAT THE CONTRACTOR MAY PROCEED WITH HIS WORK WITH A MINIMUM AMOUNT OF DELAY AND EXPENSE. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS CONCERNED IN EFFECTING ANY UTILITY ADJUSTMENTS NECESSARY AND SHALL NOT HOLD THE OWNER LIABLE FOR ANY EXPENSES DUE TO DELAY OR ADDITIONAL WORK BECAUSE OF CONFLICTS.
14. CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN ALL BARRICADES, WARNING SIGNS, AND MARKINGS FOR HAZARDS NECESSARY TO PROTECT THE PUBLIC AND THE WORK SITE. WHEN USED DURING PERIODS OF DARKNESS, SUCH BARRICADES, WARNING SIGNS AND HAZARD MARKINGS SHALL BE SUITABLY ILLUMINATED. ALL TRAFFIC CONTROL DEVICES AND THEIR PLACEMENT SHALL BE IN ACCORDANCE WITH THE LATEST TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
15. THE CONTRACTOR SHALL PROVIDE A TELEPHONE NUMBER AND OTHER CONTACT INFORMATION TO SRA DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ON-CALL DURING CONSTRUCTION 24-HOURS EACH DAY, SEVEN DAYS PER WEEK.
16. CONTRACTOR SHALL KEEP A MINIMUM OF ONE COMPLETE SET OF CONSTRUCTION DRAWINGS AND SPECIFICATIONS ON-SITE AT ALL TIMES.
17. ANY WORK THAT IS CALLED FOR IN THE PLANS THAT IS NOT INCLUDED IN A SPECIFIC BID ITEM SHALL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE BID ITEMS, WITH NO ADDITIONAL COST TO THE OWNER.
18. THE ENGINEER SHALL VIDEO ALL ROADWAYS, RIGHTS-OF-WAY, ACCESS POINTS, AND EASEMENTS IN WHICH WORK SHALL BE PERFORMED OR USED TO ACCESS THE PROJECT SITE. THE CONTRACTOR SHALL BE REQUIRED TO REPAIR ANY DAMAGES CAUSED BY HIS OPERATIONS, EMPLOYEES, SUB CONSULTANTS, OR SUPPLIERS TO THESE AREAS (INCLUDING ROADS). THE CONTRACTOR SHALL RETURN THOSE AREAS TO PRE-CONSTRUCTION CONDITIONS (AS SHOWN ON THE VIDEO) OR BETTER. PAYMENT FOR THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO "MOBILIZATION".
19. INGRESS AND EGRESS ADJACENT TO THE PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES. THE CONTRACTOR WILL BE RESPONSIBLE FOR KEEPING MUD AND DEBRIS OFF EXISTING PUBLIC STREETS ADJACENT TO THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLOSING AND SECURING ALL ACCESS GATES WHEN ENTERING AND LEAVING THE SITE.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL MATERIAL TESTING REQUIRED IN THE PROJECT THROUGH AN OWNER APPROVED TESTING LABORATORY. THE OWNER SHALL PAY FOR ALL MATERIAL TESTING.

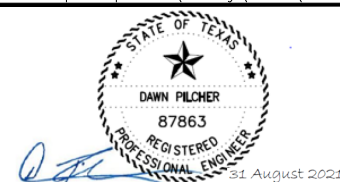
CONTACT INFORMATION FOR SRA NOTIFICATION AND ACCESS

COMPANY	CONTACT	PHONE NUMBER
SRA NOTIFICATION	DAVID WILLIAMS	409-746-2192

NOTE: ADJACENT LAND OWNER INFORMATION TO BE FURNISHED BY SRA.

O:\Projects LJA B000 - BXXX\B883-SRA\B883-1023 Siphon Replacement\CAD dwgs\Womack\SHEETS\01 Construction Notes.dwg

Date : 8/21
 File Name : B883-1023
 File Drawer No. : B883-1023/CAD



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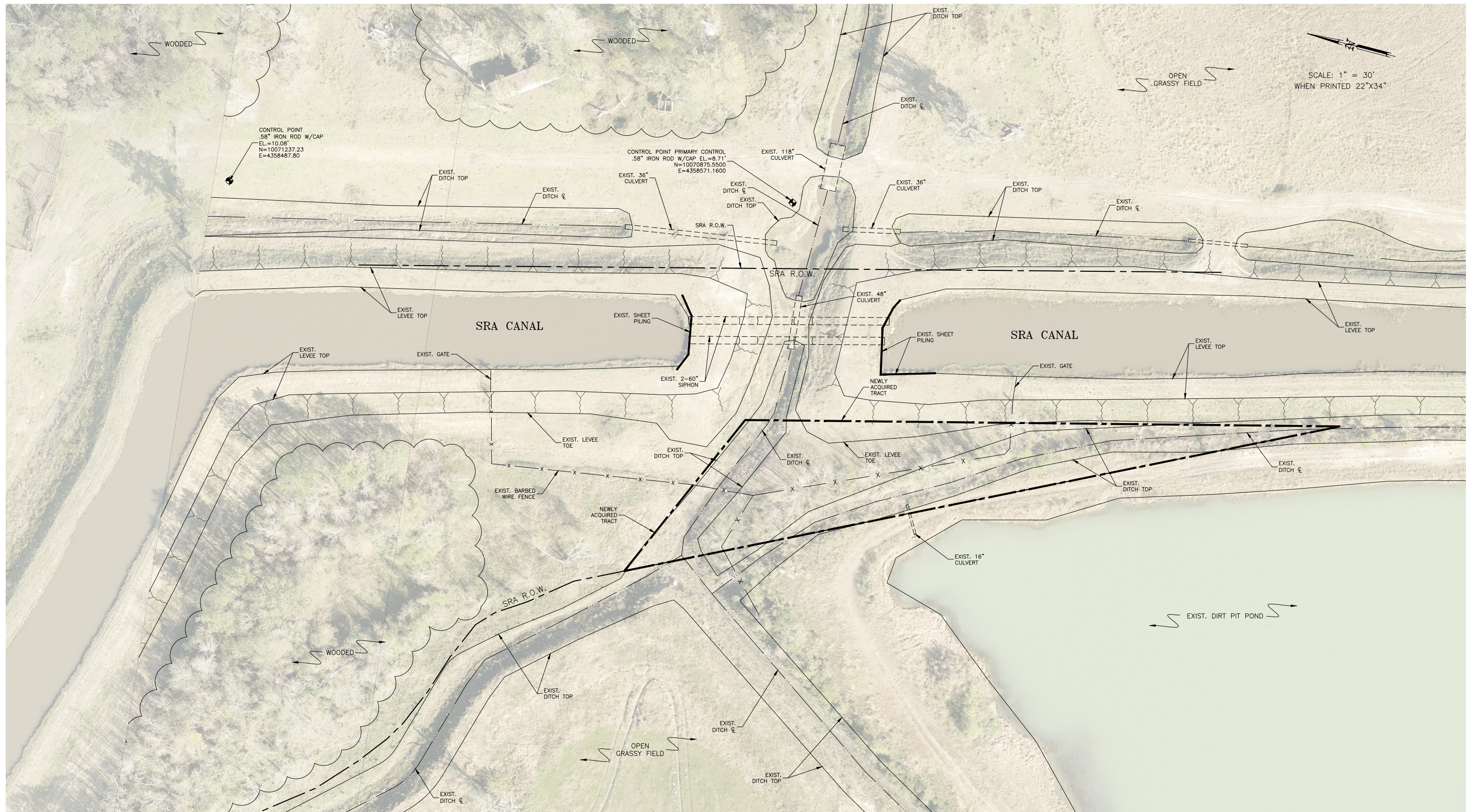
Phone 409.833.3363
 Fax 409.833.0317
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SABINE RIVER AUTHORITY
 WOMACK SIPHON REPLACEMENT

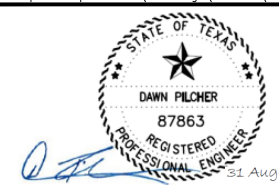
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Drawn	BA	8/21
Checked	BA	8/21
Approved	DP	8/21
Scale		
Sheet	1	of 11



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Date : 8/21
 File Name : B883-1023
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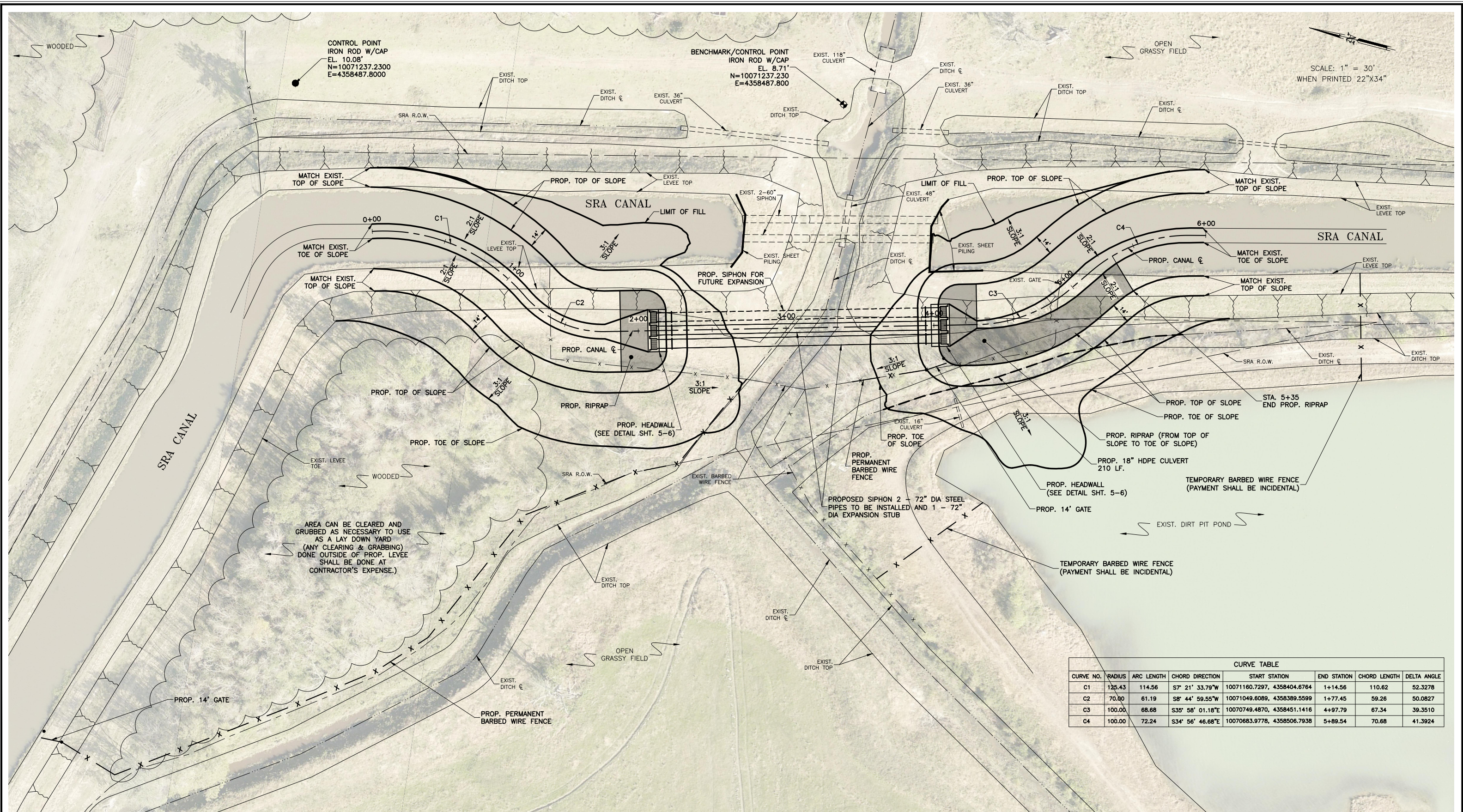
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EXISTING SITE PLAN

Action	Name	Date
Design	BA	8/21
Drawn	JS	8/21
Checked	BA	8/21
Approved	DP	8/21
Scale	SHOWN	
Sheet	2	Of 11



CURVE TABLE							
CURVE NO.	RADIUS	ARC LENGTH	CHORD DIRECTION	START STATION	END STATION	CHORD LENGTH	DELTA ANGLE
C1	125.43	114.56	S7° 21' 33.79"W	10071160.7297, 4358404.6764	1+14.56	110.62	52.3278
C2	70.80	61.19	S8° 44' 59.55"W	10071049.6089, 4358389.5599	1+77.45	59.26	50.0827
C3	100.00	68.68	S35° 58' 01.18"E	10070749.4870, 4358451.1416	4+97.79	67.34	39.3510
C4	100.00	72.24	S34° 56' 46.68"E	10070683.9778, 4358506.7938	5+89.54	70.68	41.3924

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Date : 8/21
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No.	Revisions	By	Checked	Date

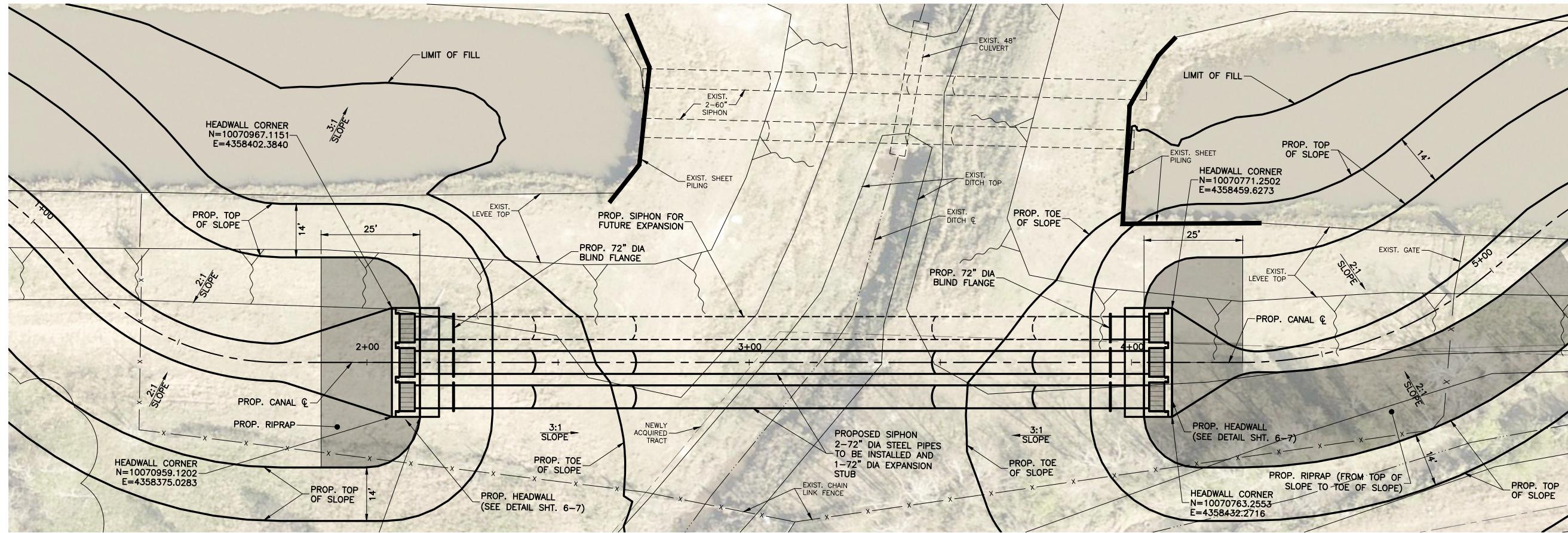
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 Beaumont, Texas 77702

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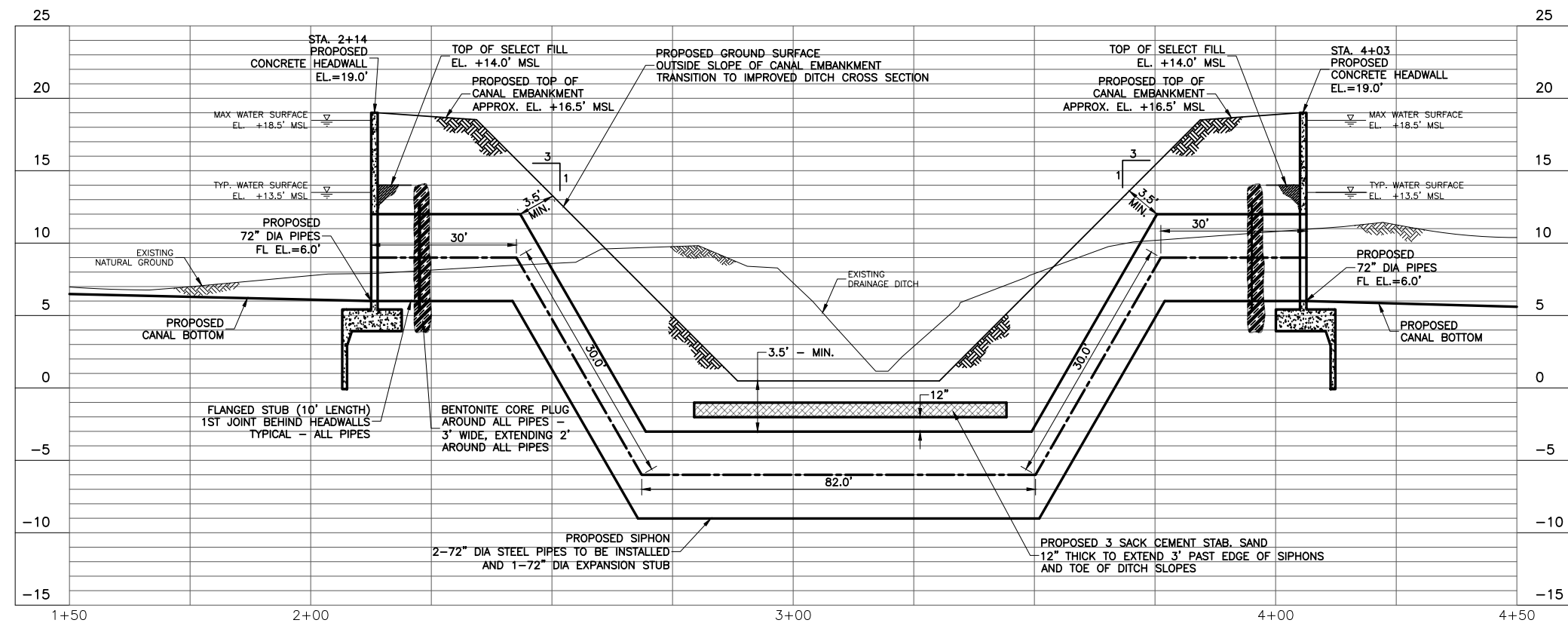
SABINE RIVER AUTHORITY
 WOMACK SIPHON REPLACEMENT

PROPOSED SITE PLAN

Action	Name	Date
Design	BA	8/21
Drawn	JS	8/21
Checked	BA	8/21
Approved	DP	8/21
Scale	SHOWN	
Sheet	3 of 11	



SCALE: 1" = 15'
WHEN PRINTED 22"x34"

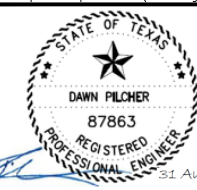


SCALE: HORZ. 1"=15'
VERT. 1"=5'

NOTE:
INSTALL 2 STRIPS OF "SIKA SWELLSTOP, OR APPROVED EQUAL" WATER STOP SEALANT TO PIPES PRIOR TO FORMING AND POURING HEADWALLS.

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Date : 8/21
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File Drawer No. : B883-1023/CAD



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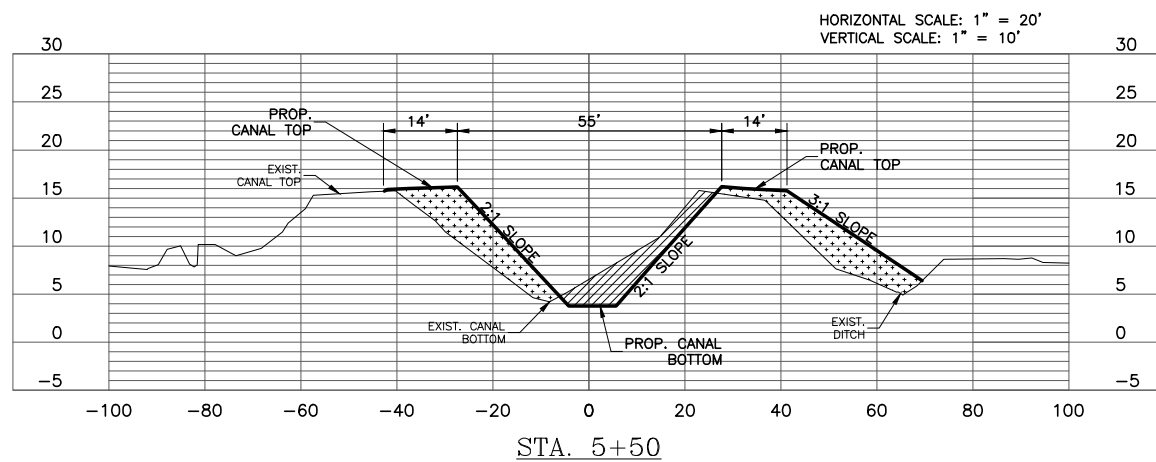
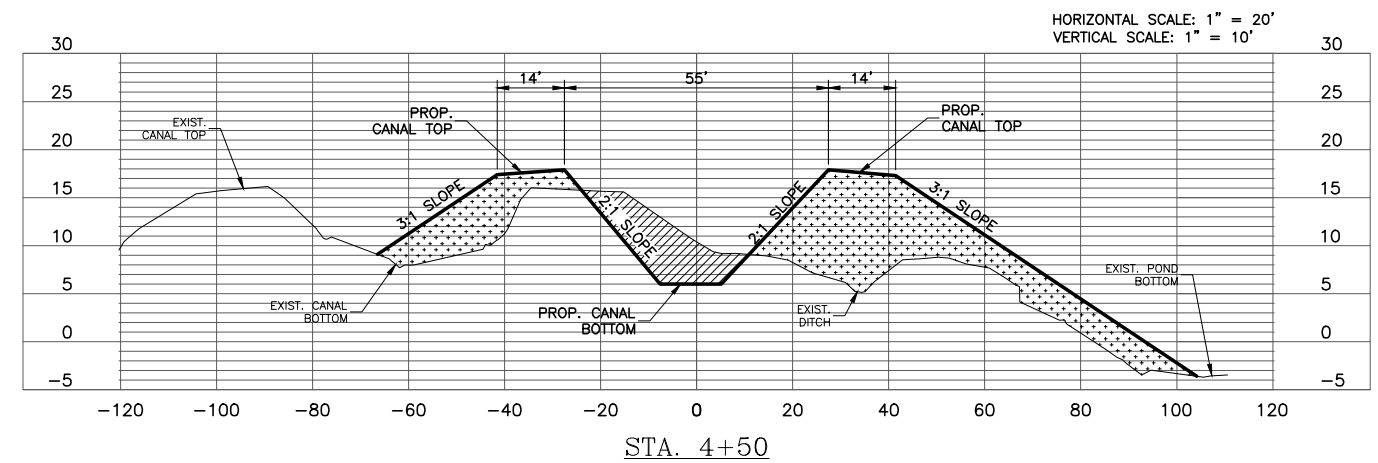
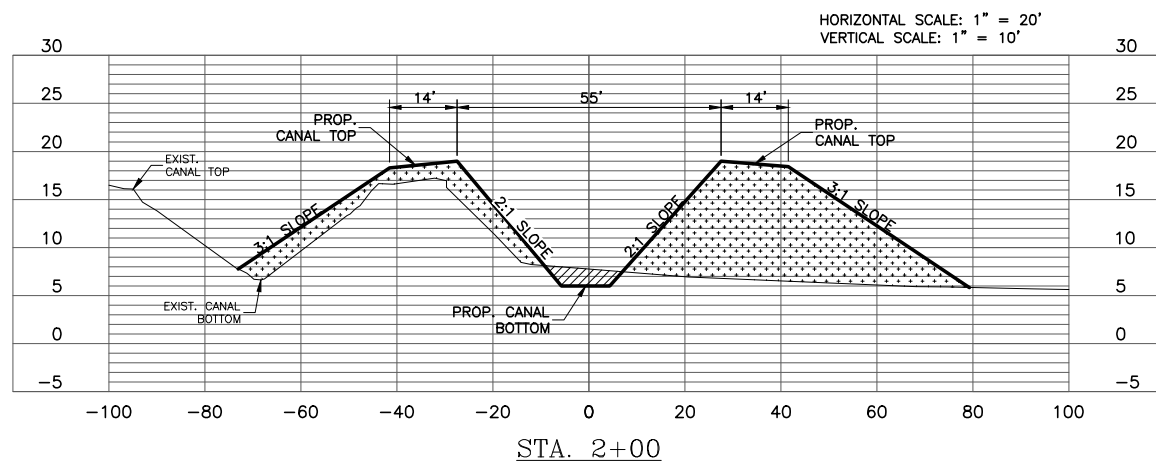
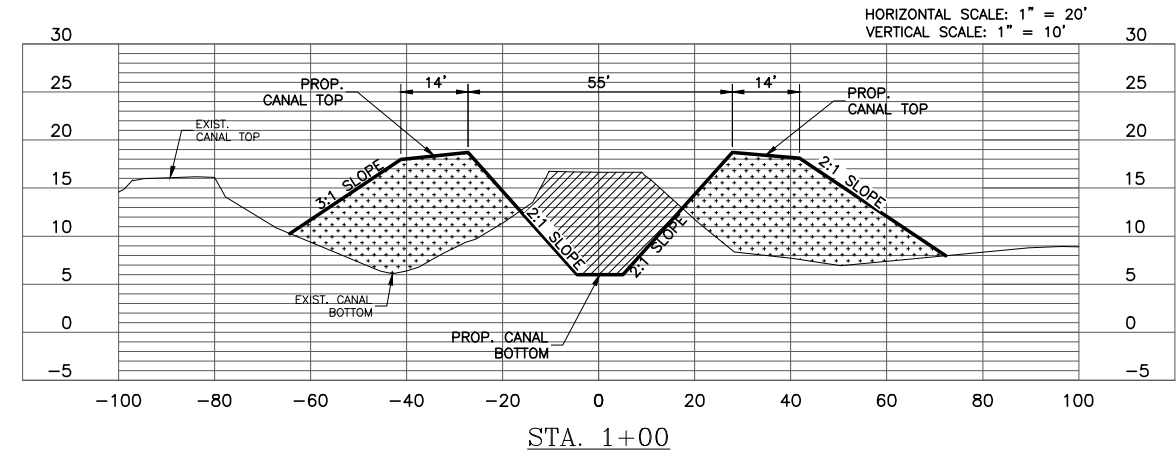
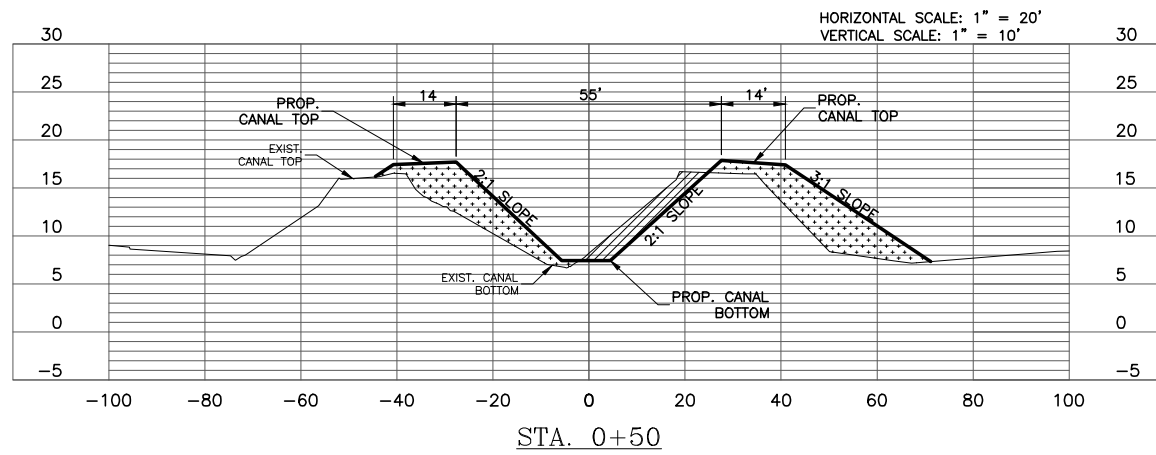


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PROPOSED PLAN & PROFILE

Action	Name	Date
Design	BA	8/21
Drawn	JS	8/21
Checked	BA	8/21
Approved	DP	8/21
Scale	SHOWN	
Sheet	4	Of 11



LEGEND

PROPOSED FILL

PROPOSED CUT

C:\Projects\LJA B000 - BXXX\B883-SRA\B883-1023 Siphon Replacement\CAD dwgs\Womack\SHEETS\05 Proposed Sections.dwg

Date : 8/21
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File Drawer No. : B883-1023/CAD



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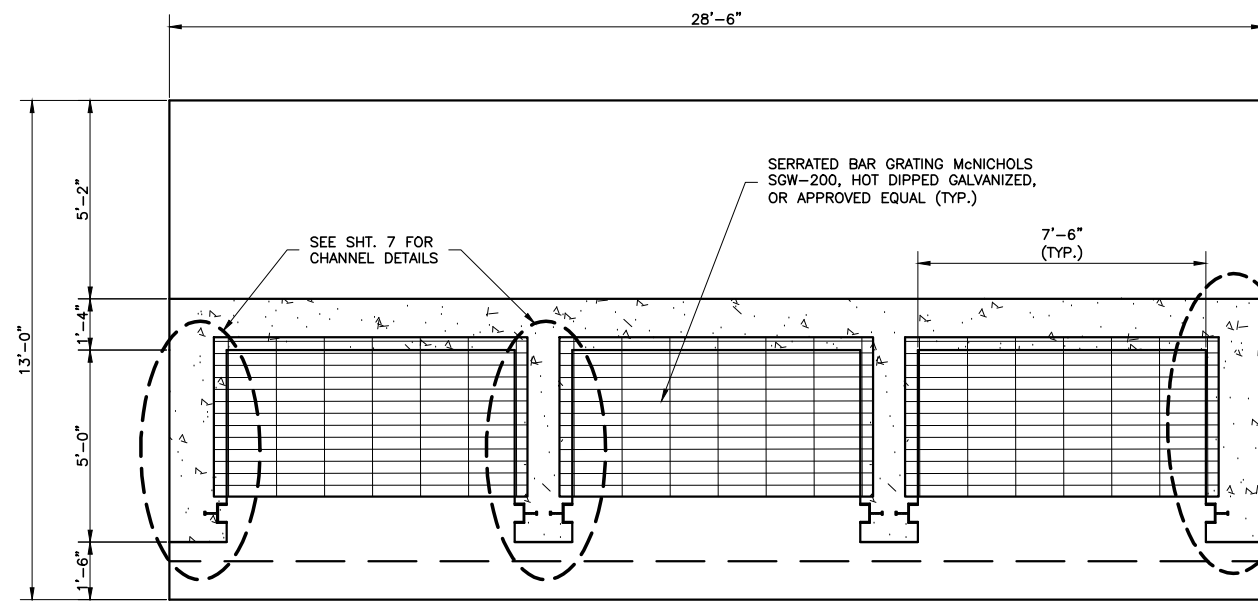


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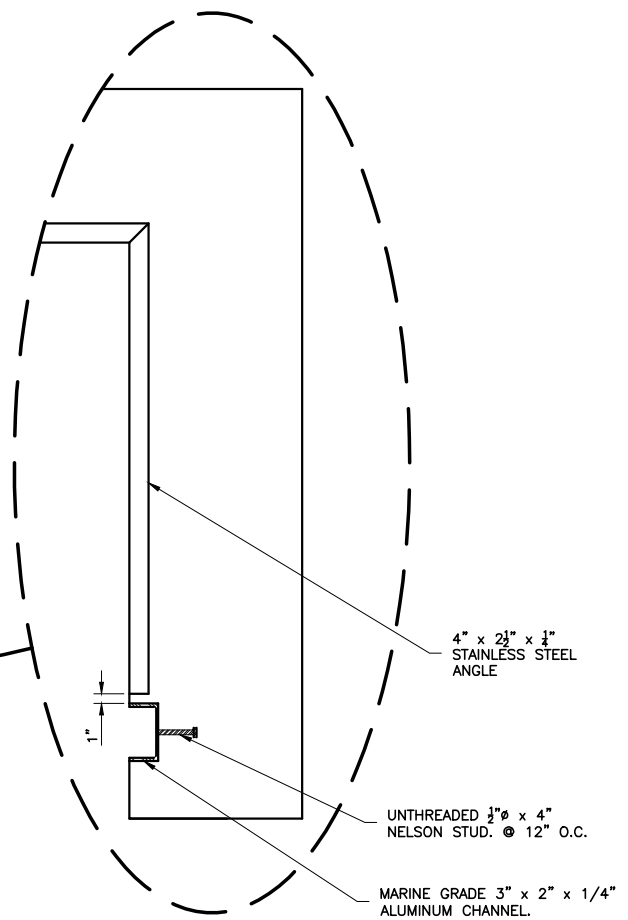
SABINE RIVER AUTHORITY
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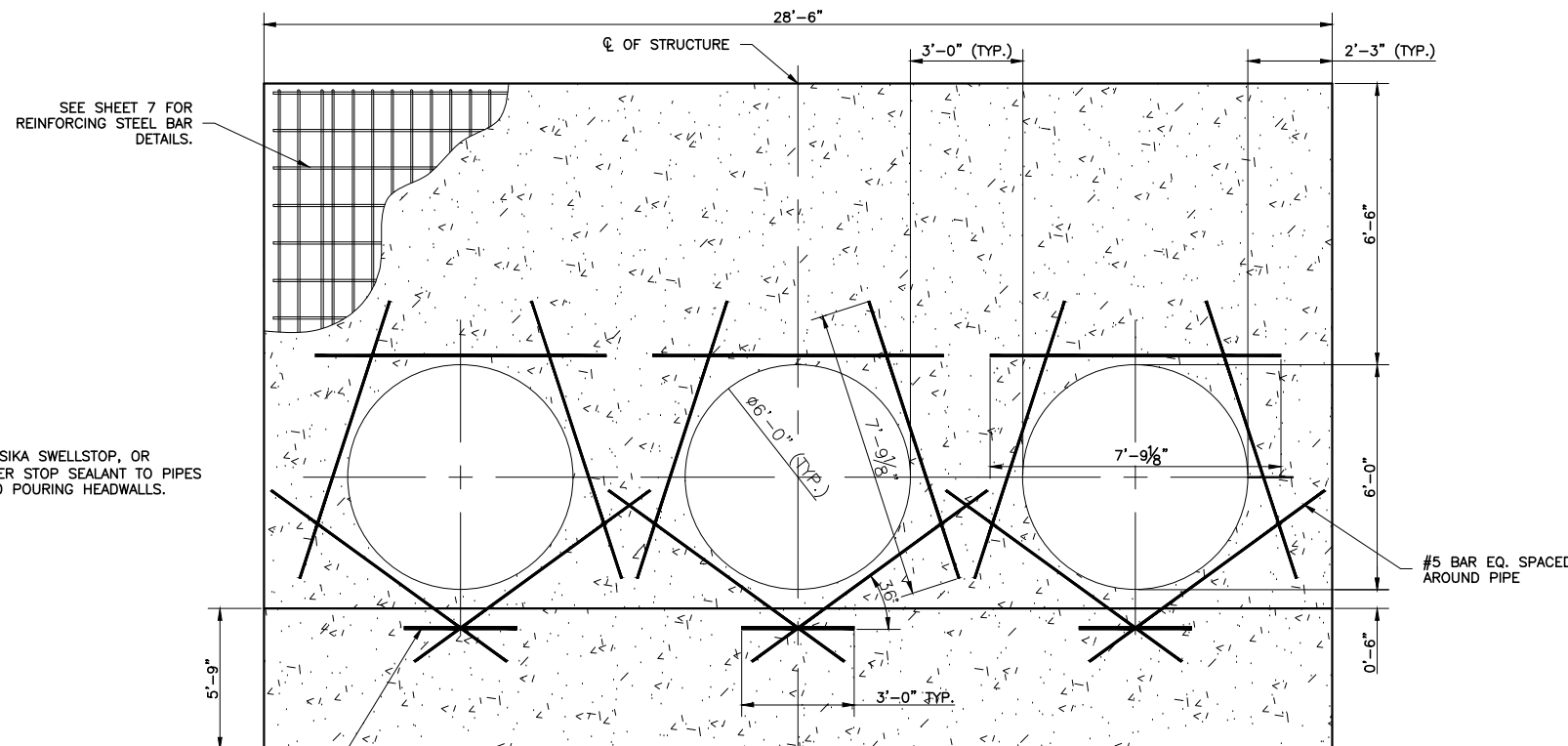
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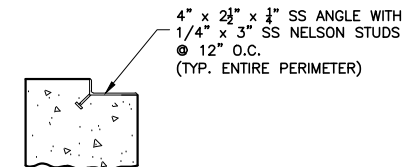
PLAN VIEW



CHANNEL & STUD DETAILS



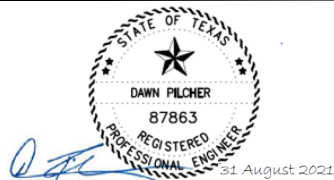
ELEVATION



TYP. EMBEDS FOR GRATING

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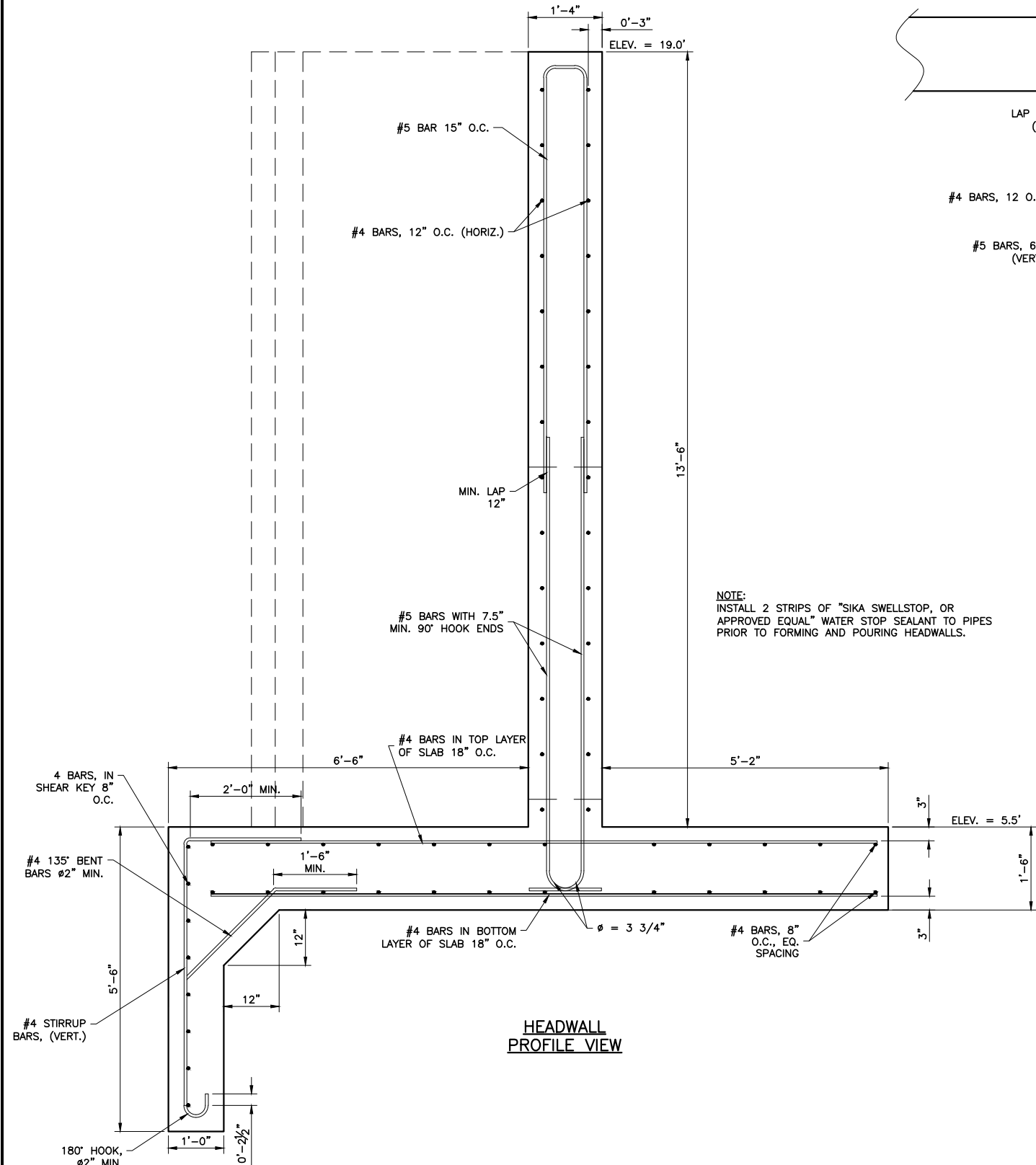


SABINE RIVER AUTHORITY
WOMACK SIPHON REPLACEMENT

HEADWALL ELEVATION AND PLAN VIEW

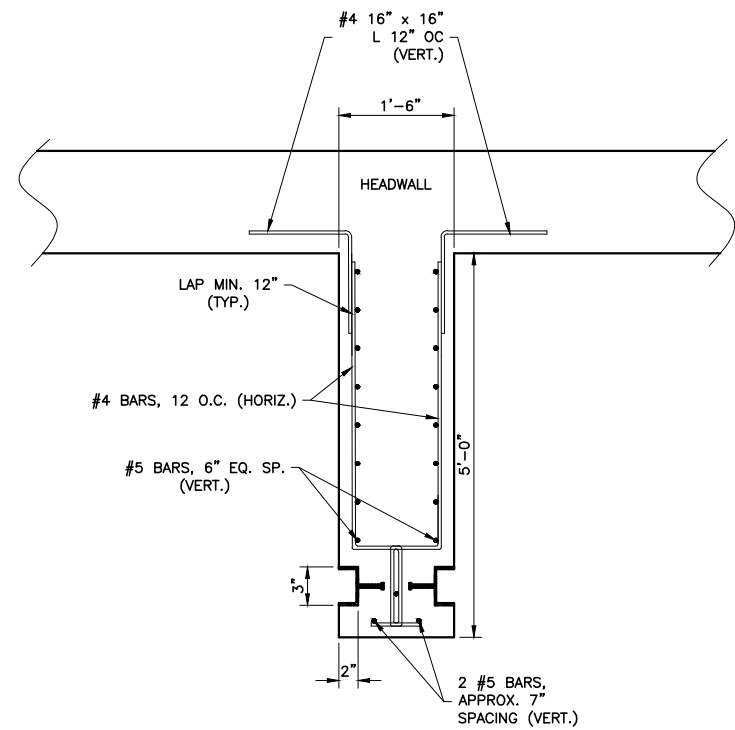
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Drawn	JS	8/21
Checked	BA	8/21
Approved	DP	8/21
Scale	1:30	
Sheet	6 of 11	

- NOTES:**
 1.) ALL DIMS TO BE FIELD VERIFIED AND ARE SUBJECT TO CHANGE.
 2.) REINFORCING STEEL IN HEADWALL PLAN VIEW ARE OMITTED TO SHOW CLARITY. SEE SHEET 4 FOR DETAILS.
 3.) REINFORCING STEEL AROUND PIPE IN PROFILE VIEW ARE OMITTED TO SHOW CHARITY SEE SHEET 4 FOR DETAILS.
 4.) 3" COVER ON ALL REINFORCING STEEL.

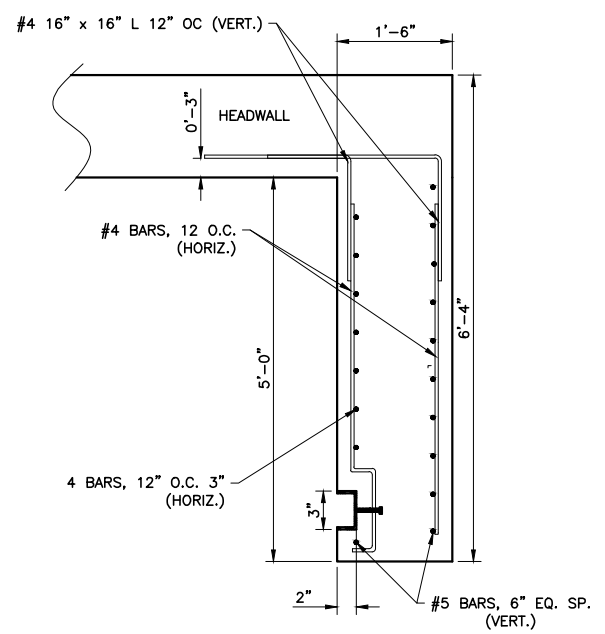


**HEADWALL
PROFILE VIEW**

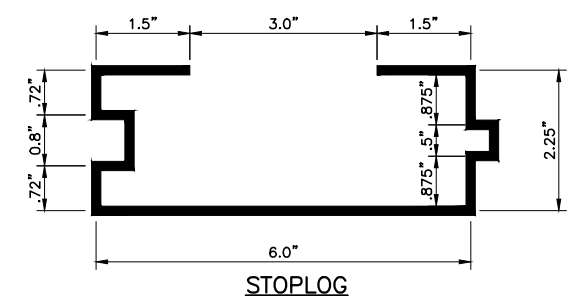
NOTE:
 INSTALL 2 STRIPS OF "SIKA SWELLSTOP, OR APPROVED EQUAL" WATER STOP SEALANT TO PIPES PRIOR TO FORMING AND POURING HEADWALLS.



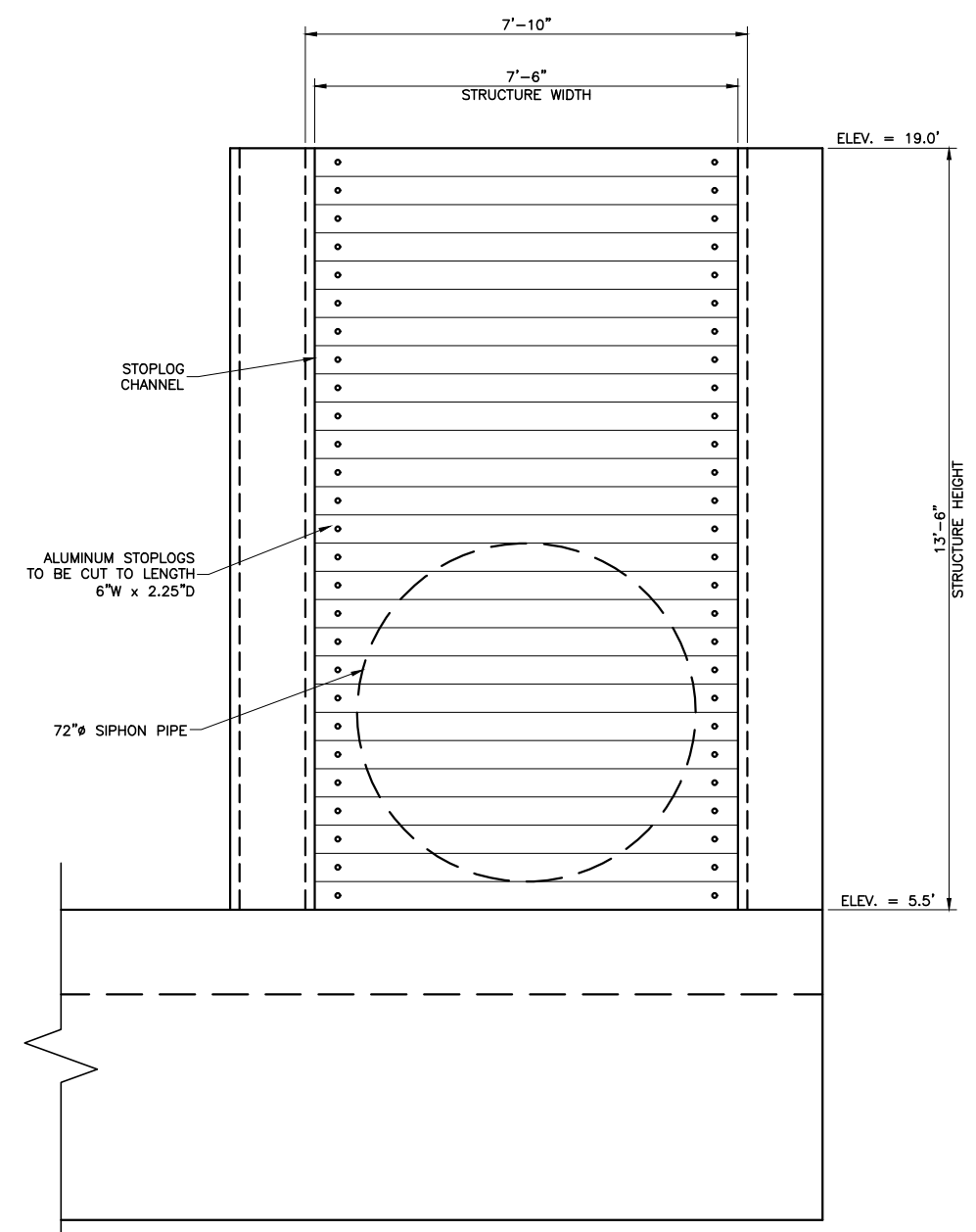
**INNER CHANNEL
(QTY. 2)**



**END CHANNEL
(QTY. 2)**



STOPLOG



**STOPLOG
DETAILS**

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31 August 2021

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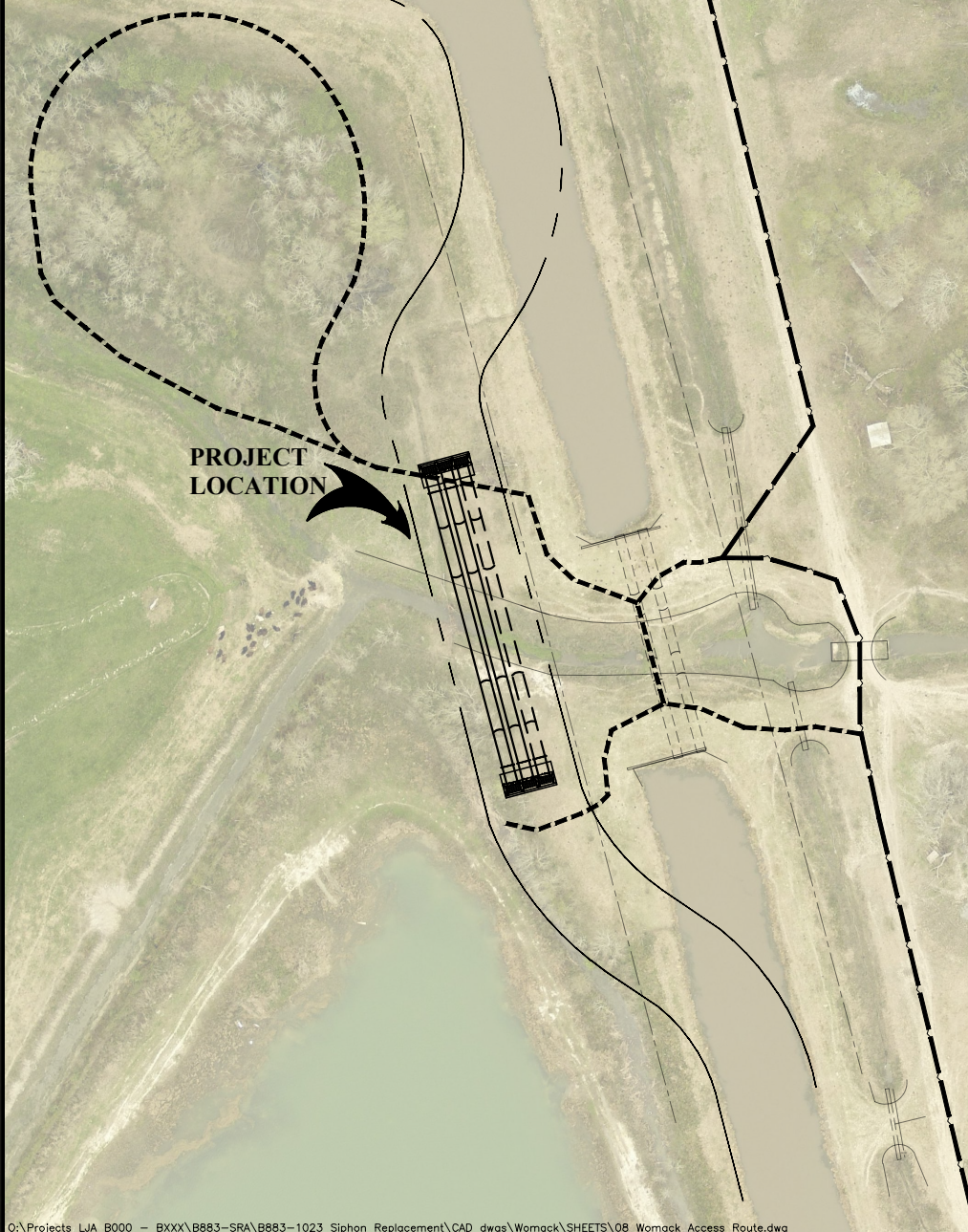
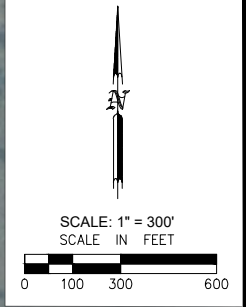
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HEADWALL DETAILS

Action	Name	Date
Design	BA	8/21
Drawn	JS	8/21
Checked	BA	8/21
Approved	DP	8/21
Scale	1:15	
Sheet	7 of 11	



LEGEND	
	APPARENT ALL-WEATHER TRAVEL
	LEVEE ACCESS ROUTE
	UNIMPROVED ACCESS ROUTE
	PROPOSED 10' ALL WEATHER LIMESTONE SURFACE
	R.O.W.

Date : 8/21
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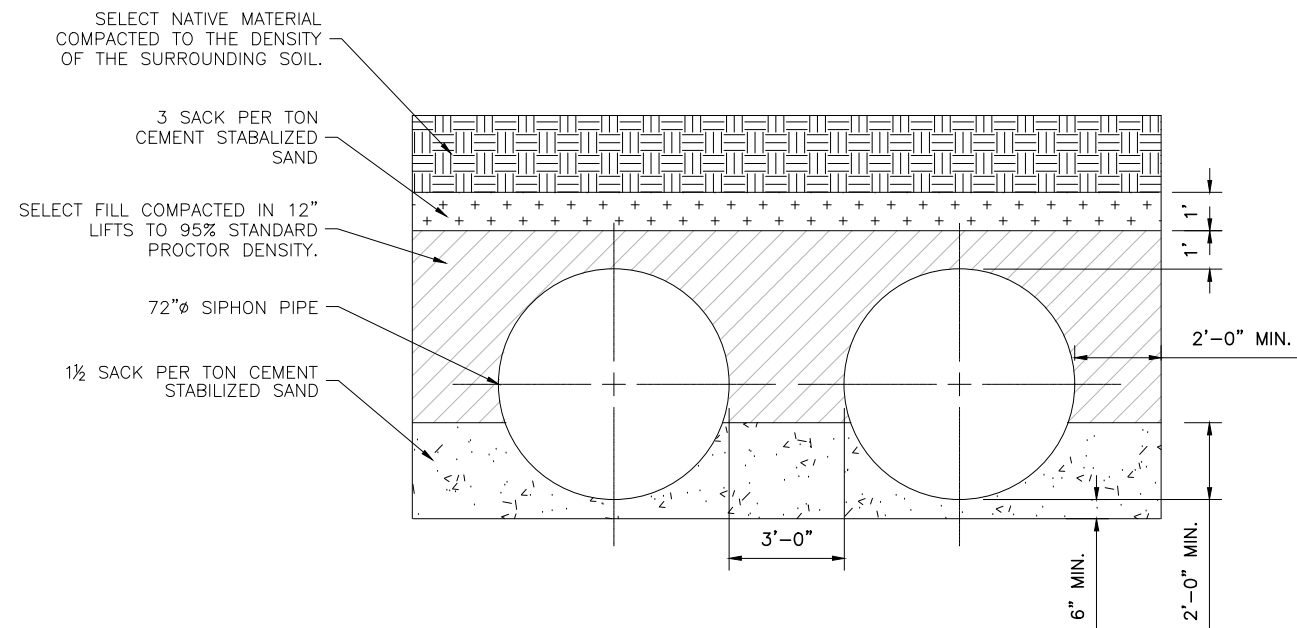
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ACCESS ROUTE

Action	Name	Date
Design	BA	8/21
Drawn	JS	8/21
Checked	BA	8/21
Approved	DP	8/21
Scale	SHOWN	
Sheet	8 of 11	

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BACKFILL AND BEDDING DETAIL

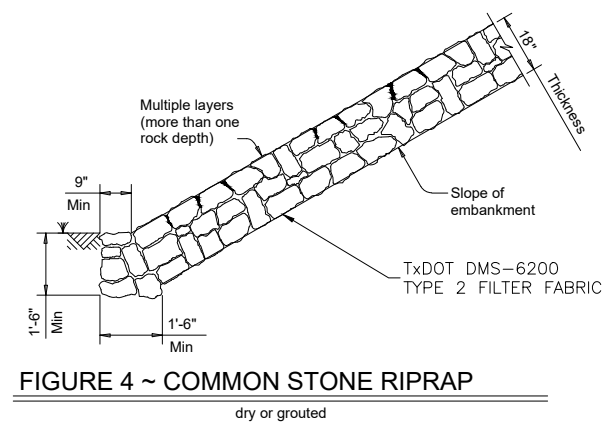
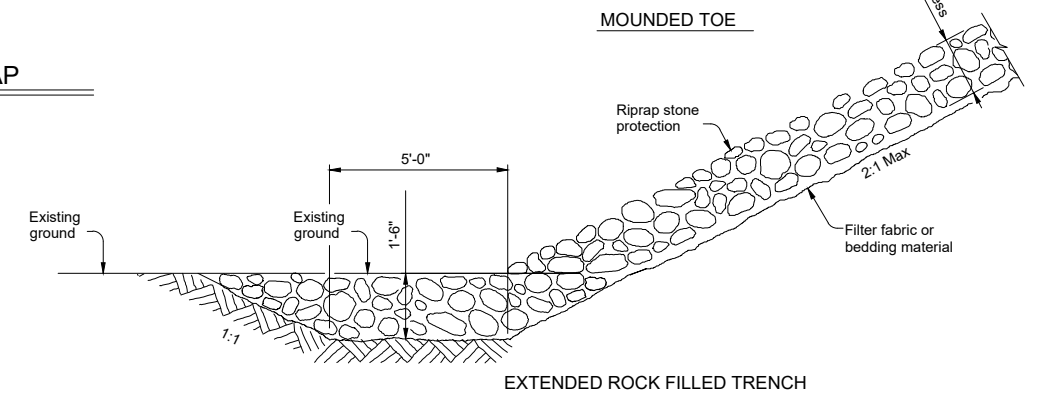
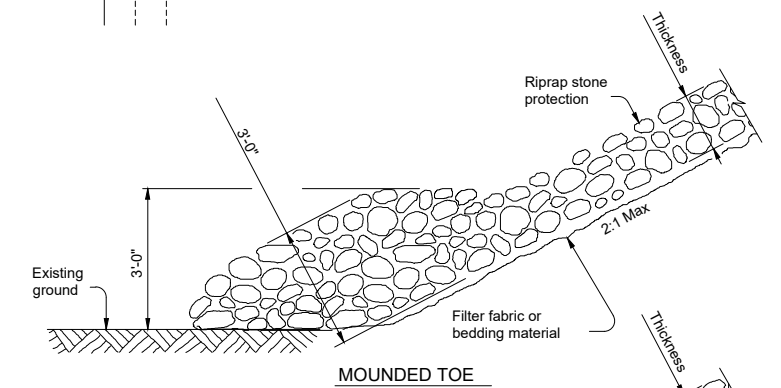
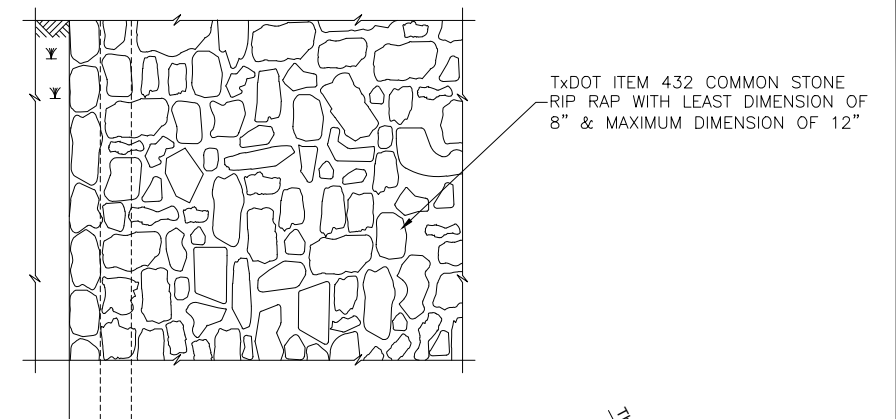


FIGURE 4 ~ COMMON STONE RIPRAP



PROTECTION STONE RIPRAP TOE OPTIONS

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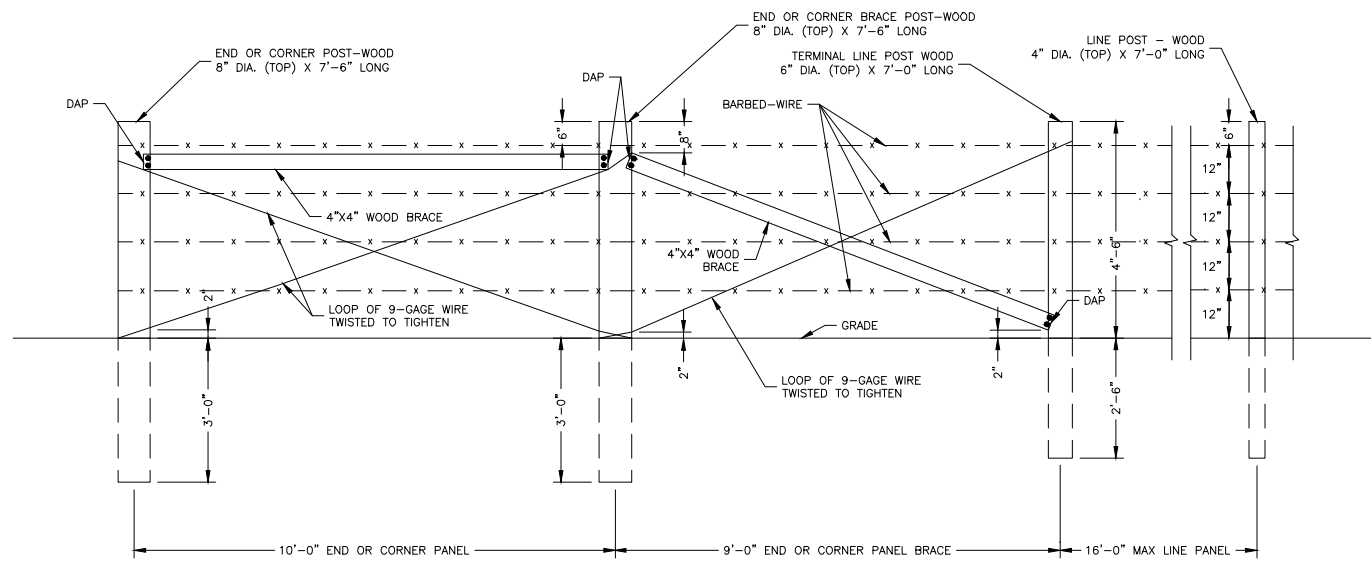


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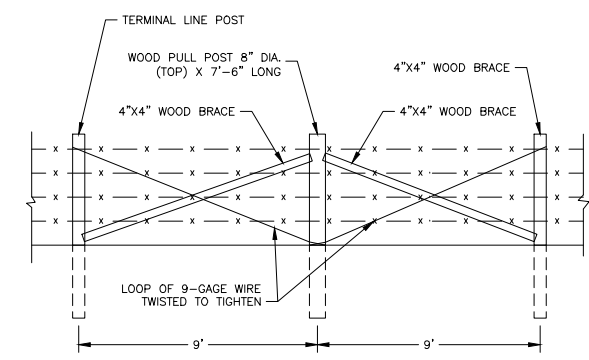
SABINE RIVER AUTHORITY
 WOMACK SIPHON REPLACEMENT

MISCELLANEOUS DETAILS

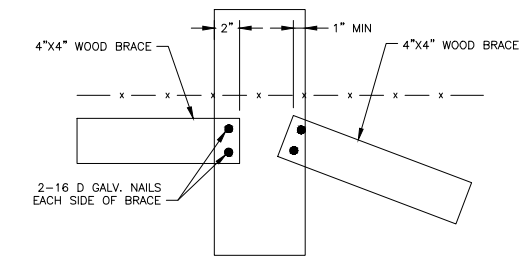
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Approved	DP	8/21
Scale	NTS	
Sheet	9	of 11



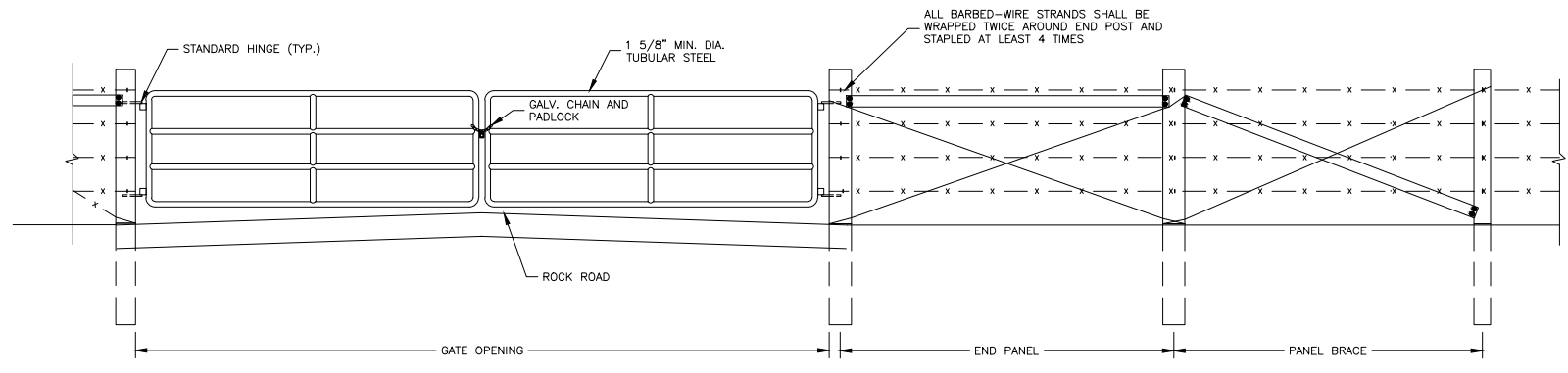
TYPICAL 4 STRAND BARBED-WIRE FENCE
NTS



NOTE:
ALL BARBED-WIRE STRANDS SHALL BE WRAPPED TWICE AROUND PULL POST AND STAPLED AT LEAST 4 TIMES
PULL POST BRACE PANEL DETAIL
NTS



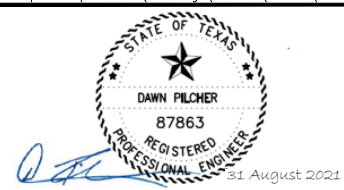
DAP DETAIL
NTS



TYPICAL BARBED-WIRE PANEL GATE DETAIL
NTS

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Date : 8/21
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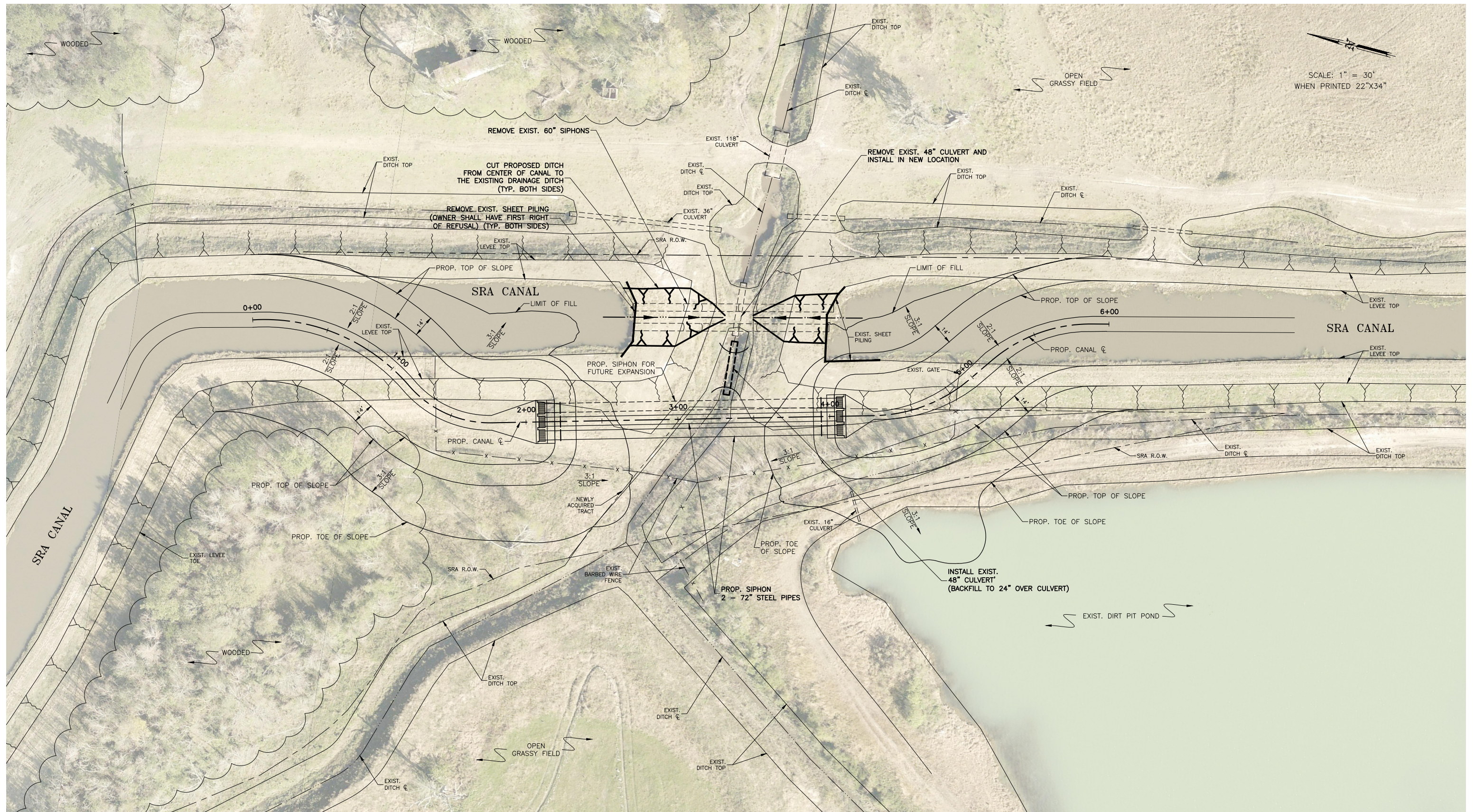
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SABINE RIVER AUTHORITY
WOMACK SIPHON REPLACEMENT

BARBED WIRE FENCE AND GATE DETAILS

Action	Name	Date
Design	BA	8/21
Drawn	JS	8/21
Checked	BA	8/21
Approved	DP	8/21
Scale	NTS	
Sheet	10	Of 11



SCALE: 1" = 30'
WHEN PRINTED 22"X34"

0:\Projects\LJA B000 - BXXX\B883-SRA\B883-1023 Siphon Replacement\CAD dwgs\Womack\SHEETS\11 Proposed Site Plan - Alternate Bid.dwg

Date : 8/21 File Name : B883-1023 File Drawer No. : B883-1023/CAD		No.	Revisions	By	Checked	Date

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SABINE RIVER AUTHORITY
 WOMACK SIPHON REPLACEMENT

REMOVAL OF EXISTING SIPHON
 (ALTERNATE BID)

Action	Name	Date
Design	BA	8/21
Drawn	JS	8/21
Checked	BA	8/21
Approved	DP	8/21
Scale	SHOWN	
Sheet	11	Of 11