

CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN

SAFETY ON THIS JOB
DEPENDS ON YOU

NO.		SYMBOL	REVISIONS	DATE	APPROVED
			DESCRIPTION		

PLANS
FOR CONSTRUCTION OF

STRUCTURE 96B AND TIEBACK LEVEE



ST. JOHNS RIVER
WATER MANAGEMENT DISTRICT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
1988

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AS-BUILT		
SECTION	CHIEF'S SIGNATURE	DATE
MECH. & ELEC.	<i>[Signature]</i>	7/29/88
LEVEE & WWS	<i>[Signature]</i>	7/29/88
STRUCTURES	<i>[Signature]</i>	7/29/88
GEOTECHNICAL	<i>[Signature]</i>	7/29/88
CON. OPS.	<i>[Signature]</i>	7/29/88

AS-BUILT

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.

PREPARED BY: *[Signature]*
CHECKED BY: *[Signature]*
SUBMITTED BY: *[Signature]*
APPROVED BY: *[Signature]*
DATE: *[Date]*

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE
GENERAL
INDEX TO DRAWING
SCALE: AS SHOWN
DATE: JULY 1988
SHEET 1 OF 48

SAFETY ON THIS JOB
DEPENDS ON YOU

REVISIONS			
NO.	SYN.	ZONE	DESCRIPTION
8	A	528	REVISED TO ACCOMPANY AMENDMENT NO. 0001
			DATE APPROVED
			3-18-88

LEGEND

- LEVY AND DESIGNATION
- CANAL AND DESIGNATION
- STRUCTURE NUMBER
- CULVERT
- SPILLWAY
- HURRICANE GATE
- LOCK
- PUMPING STATION
- COUNTY LINE
- ROAD OR HIGHWAY AND DESIGNATION
- RAILROAD
- NEW STRUCTURE 968 & S-164 HAUNCH REPAIR
- NEW TIEBACK LEVEE

PROPOSED, COMPLETED
OR UNDER CONSTRUCTION

- GENERAL NOTES:
- ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO NATIONAL GEODETIC VERTICAL DATUM (N.G.S.).
 - ALL ELEVATIONS ARE ABOVE THE REFERENCE PLANE, UNLESS PRECEDED BY A MINUS (-) SIGN.
 - ALL STATIONING IS ALONG C-54 AND C-164 LEVEE RANGE 1000.
 - COORDINATES ARE BASED ON THE STANDARD PLANE RECTANGULAR COORDINATE SYSTEM FOR THE EAST ZONE OF FLORIDA.
 - ALL AZIMUTHS (0° = SOUTH) REFER TO GRID.
 - F.C.E. (FLOOD CONTROL EVERGLADES) STATIONS ARE CORPS OF ENGINEERS TRAVERSE DISKS SET IN CONCRETE MONUMENTS OR 4" IRON PIPES AND ARE BENCH MARKS.

LOCATION
OF WORK

AS-BUILT

RECORD DRAWING NOTE
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"Remove," etc., indicates
work was accomplished under
the contract.

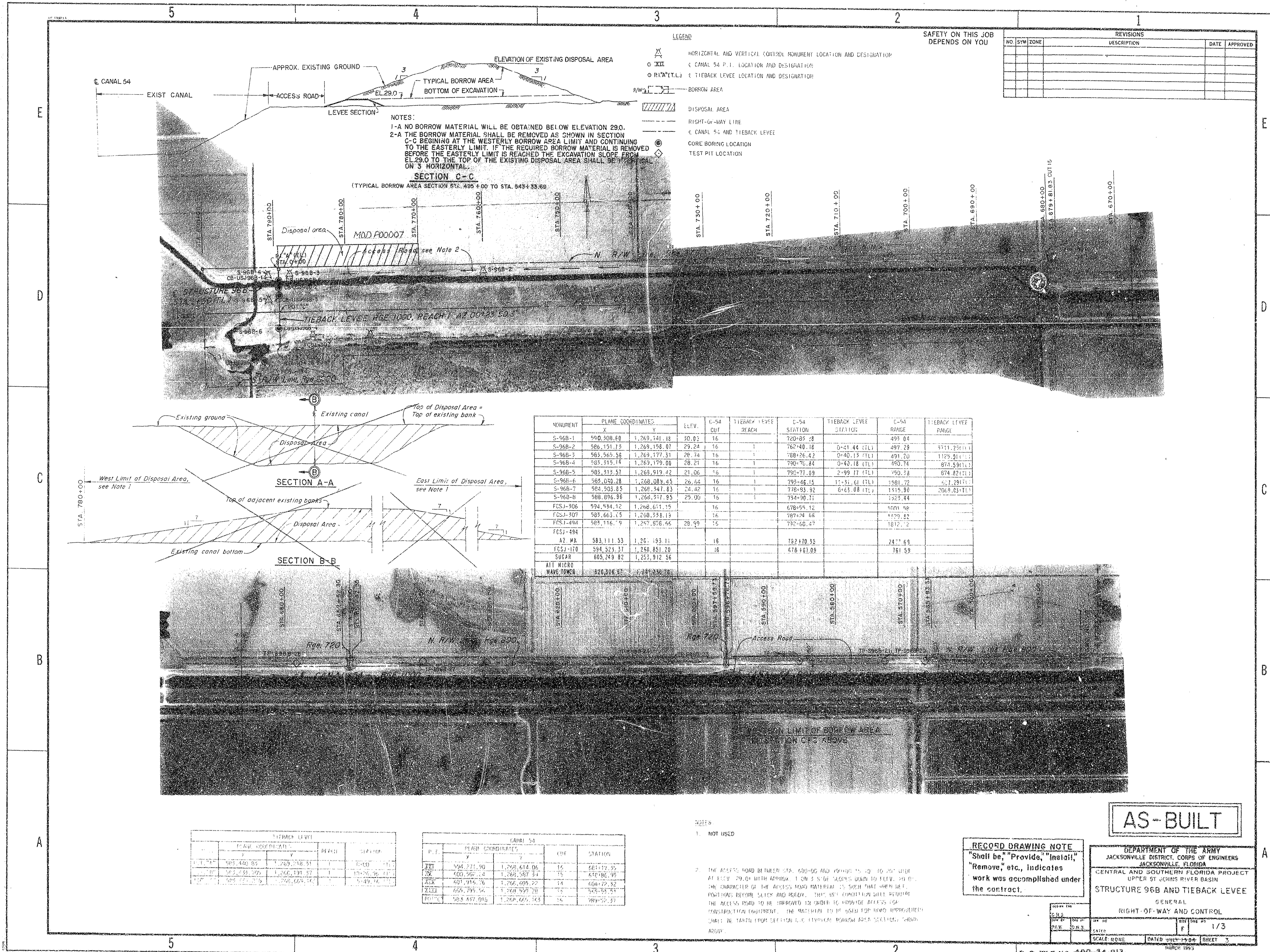
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 968 AND TIEBACK LEVEE

GENERAL
LOCATION MAP

DESIGN BY	CHK. BY	DATE	SCALE	SIZE	ENG. NO.
UNL	DAW	1/2	1/2	1/2	1/2
DATE	SCALE	AS SHOWN	DATE	BY	CHIEF
1/2	1/2	1/2	1/2	1/2	1/2

D. O. FILE NO. 490-34-013

490-36,389



SAFETY ON THIS JOB
DEPENDS ON YOU

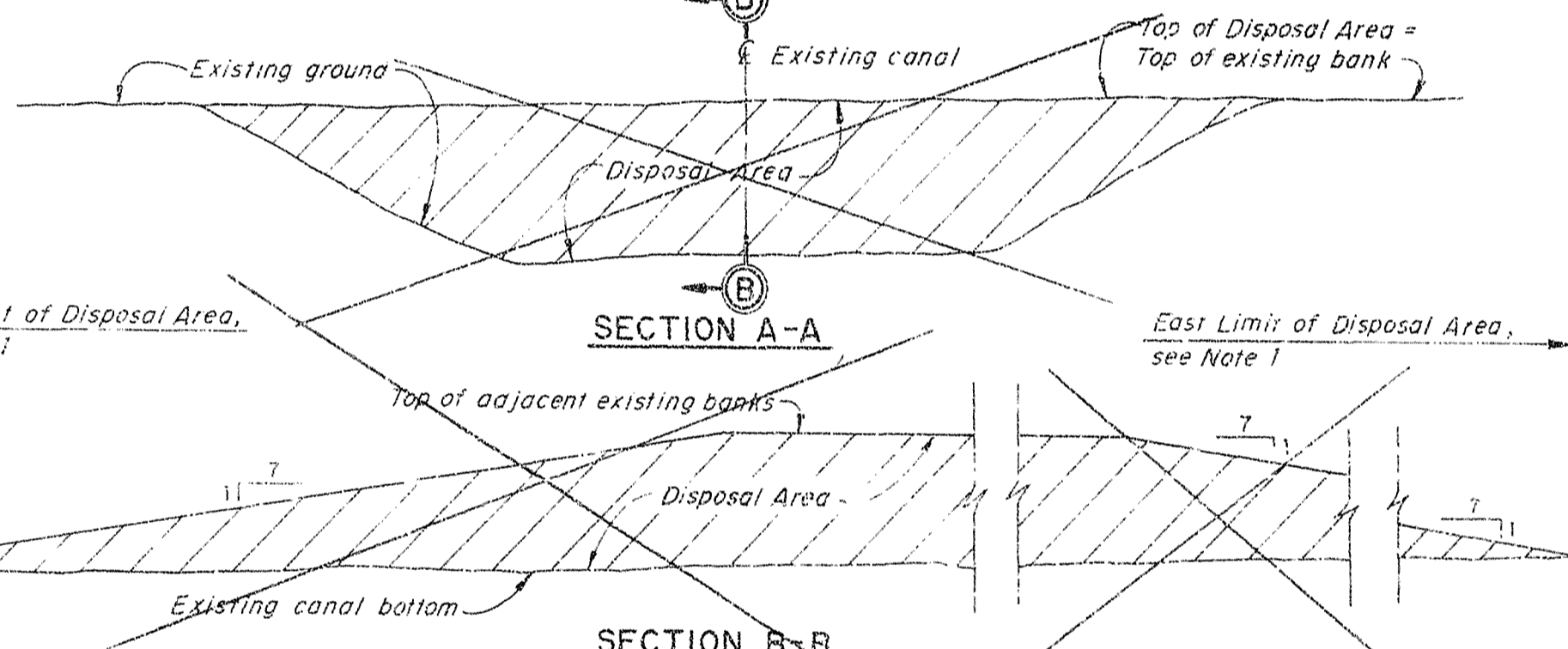
REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE

NOTES:

- 1-A NO BORROW MATERIAL WILL BE OBTAINED BELOW ELEVATION 290.
- 2-A THE BORROW MATERIAL SHALL BE REMOVED AS SHOWN IN SECTION C-C BEGINNING AT THE WESTERLY BORROW AREA LIMIT AND CONTINUING TO THE EASTERLY LIMIT. IF THE REQUIRED BORROW MATERIAL IS REMOVED BEFORE THE EASTERLY LIMIT IS REACHED THE EXCAVATION SLOPE FROM EL. 290 TO THE TOP OF THE EXISTING DISPOSAL AREA SHALL BE 1:1 HORIZONTAL ON 3' HORIZONTAL.

SECTION C-C

(TYPICAL BORROW AREA SECTION STA. 495+00 TO STA. 543+33.69)



MONUMENT	PLANE COORDINATES		ELEV.	C-54 CUT	TIEBACK LEVEE REACH	C-54 STATION	TIEBACK LEVEE STATION	C-54 RANGE	TIEBACK LEVEE RANGE
	X	Y							
S-96B-1	590,308.60	1,269,141.18	30.03	16		720+85.18		495.04	
S-96B-2	586,151.72	1,269,158.07	29.24	16	1	762+40.18	0+21.44 (TL)	497.29	5711.29(11)
S-96B-3	583,565.56	1,269,177.31	28.74	16	1	788+26.42	0+40.15 (TL)	491.20	1125.01(11)
S-96B-4	583,315.14	1,269,179.00	28.21	16	1	790+76.84	0+40.18 (TL)	490.74	874.59(11)
S-96B-5	585,312.57	1,268,919.42	21.06	16	1	795+71.09	2+99.17 (TL)	750.78	874.82(11)
S-96B-6	585,050.28	1,268,089.45	26.64	16	1	795+46.15	11+31.61 (TL)	1581.72	527.29(11)
S-96B-7	584,503.85	1,268,547.83	24.42	16	1	778+93.92	6+63.08 (TL)	1315.90	2069.03(11)
S-96B-8	588,096.96	1,268,317.95	25.00	16	1	754+90.71		1323.44	
FCSJ-306	594,534.12	1,268,611.15		16		678+59.12		1601.58	
FCSJ-307	589,663.15	1,268,338.13		16		787+24.06		1229.82	
FCSJ-494	583,116.79	1,267,876.66	28.99	16		732+60.47		1612.72	
FCSJ-494									
AZ. MK.	583,111.53	1,267,193.11		16		732+70.35		247.69	
FCSJ-170	594,523.37	1,268,851.20		16		678+61.09		761.59	
SUGAR	605,249.82	1,253,912.56							
ALT. MICRO	520,386.52	1,247,232.76							

TIEBACK LEVEE				
NO.	SYM.	ZONE	DESCRIPTION	DATE
1				
2				
3				
4				
5				
6				
7				
8				
9				

CANAL 54				
P.T.	PLANE COORDINATES	CUT	STATION	
	X	Y		
1	594,211.80	1,268,614.06	16	681+17.32
2	600,507.14	1,268,587.37	15	678+86.95
3	601,916.76	1,268,605.22	14	684+12.32
4	605,795.56	1,268,939.28	13	685+63.51
5	585,457.015	1,268,609.163	16	789+52.27

NOTES:

- 1. NOT USED
- 2. THE ACCESS ROAD BETWEEN STA. 680+00 AND 700+00 IS TO BE 20' WIDE AT ELEV. 29.04 WITH APPROX. 1:1 ON 2 SLOPE SLOPING DOWN TO ELEV. 24.00. THE CHARACTER OF THE ACCESS ROAD MATERIAL IS SUCH THAT WHEN RAIN FALLS, THE ROAD BECOMES SLICK AND HAZARDOUS. THIS HAZARDOUS CONDITION WILL REQUIRE THE ACCESS ROAD TO BE IMPROVED IN ORDER TO PROVIDE ACCESS FOR CONSTRUCTION EQUIPMENT. THE MATERIAL TO BE USED FOR ROAD IMPROVEMENT SHALL BE TAKEN FROM SECTION C-C (TYPICAL BORROW AREA SECTION) SHOWN ABOVE.

AS-BUILT

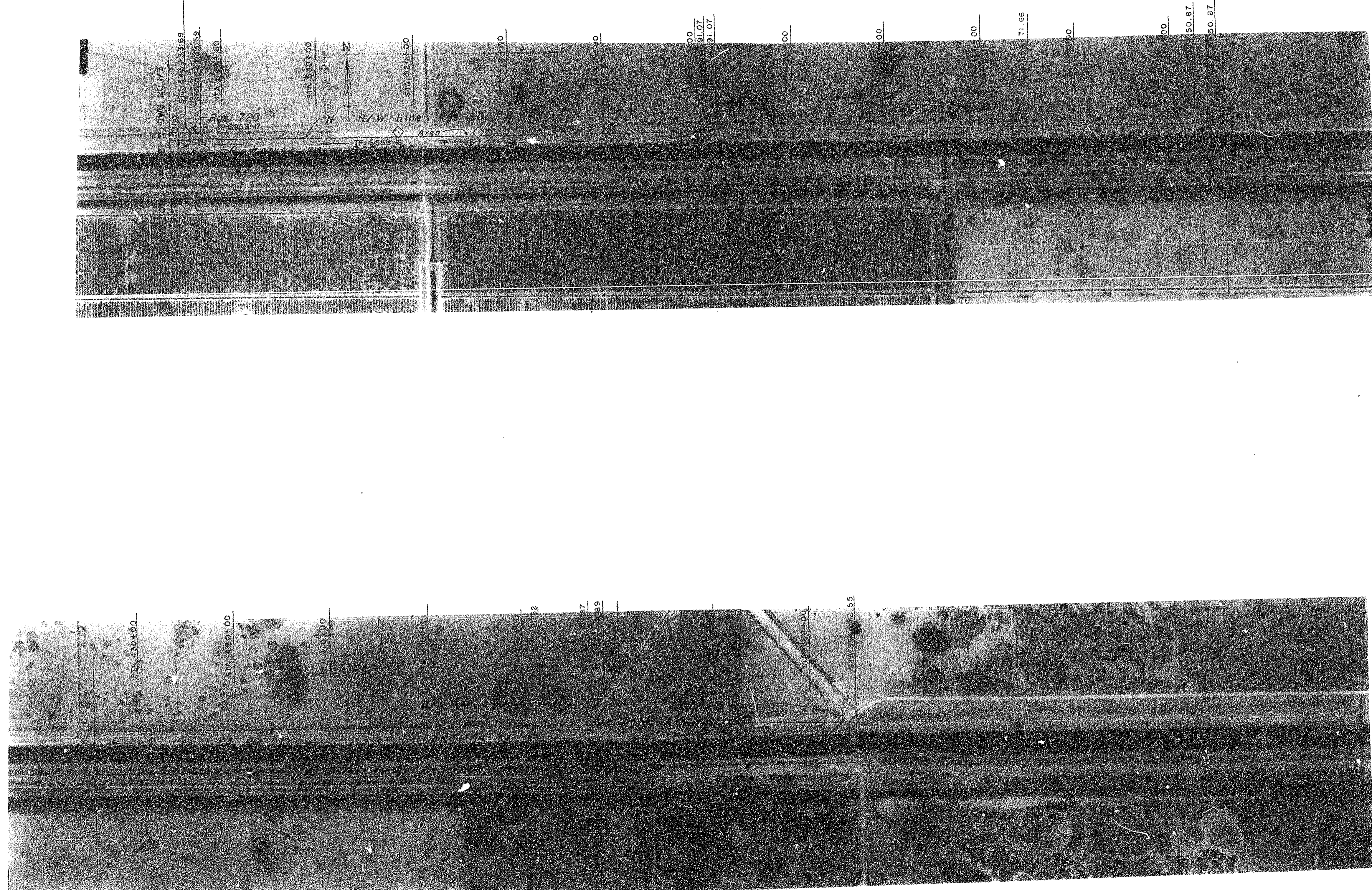
RECORD DRAWING NOTE
"Shall be," "Provide," "Install," "Remove," etc., indicates work was accomplished under the contract.

DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA			
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN			
STRUCTURE 96B AND TIEBACK LEVEE			
GENERAL			
RIGHT-OF-WAY AND CONTROL			
DATE	BY	CHKD BY	APP'D BY
1/3			
SCALE NONE		DATED JULY 1984 SHEET 3	

EASTERN LIMIT OF BORROW AREA
SEE SECTION C-C DWG. NO. 1/3

SAFETY ON THIS JOB
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REVISIONS				
NO.	SYM	ZONE	DESCRIPTION	DATE
1	A	4-5	REVISED TO CONFORM TO AMENDMENT NO. 0001	3-15-88



PLAN COORDINATES				
P.T.	N	E	QUT	STATION
11	611,259.82	1,268,951.78	11 & 12	515.15.82
12	611,257.69	1,268,951.78	10 & 11	420.51.87
13	611,625.17	1,268,921.80	9 & 10	307.55.70
14	612,916.14	1,268,929.11	8 & 9	374.52.55
15	616,576.22	1,268,568.92	7 & 8	324.42.43

PLANE COORDINATES				
MONUMENT	N	E	QUT	STATION
1654 126	621,633.23	1,268,717.96	9 & 10	407.54.57
1654 126	611,064.17	1,268,761.81	10 & 11	515.24.87

NOTE:
1 THE LANDS BETWEEN RGE. 1200 AND 1300 FROM STA. 354+1/2.55 TO STA. 382+10 AND LANDS BETWEEN RGE. 1200 AND 1250 FROM STA. 382+10 TO STA. 404+50 ARE NOT A PART OF THIS CONTRACT.

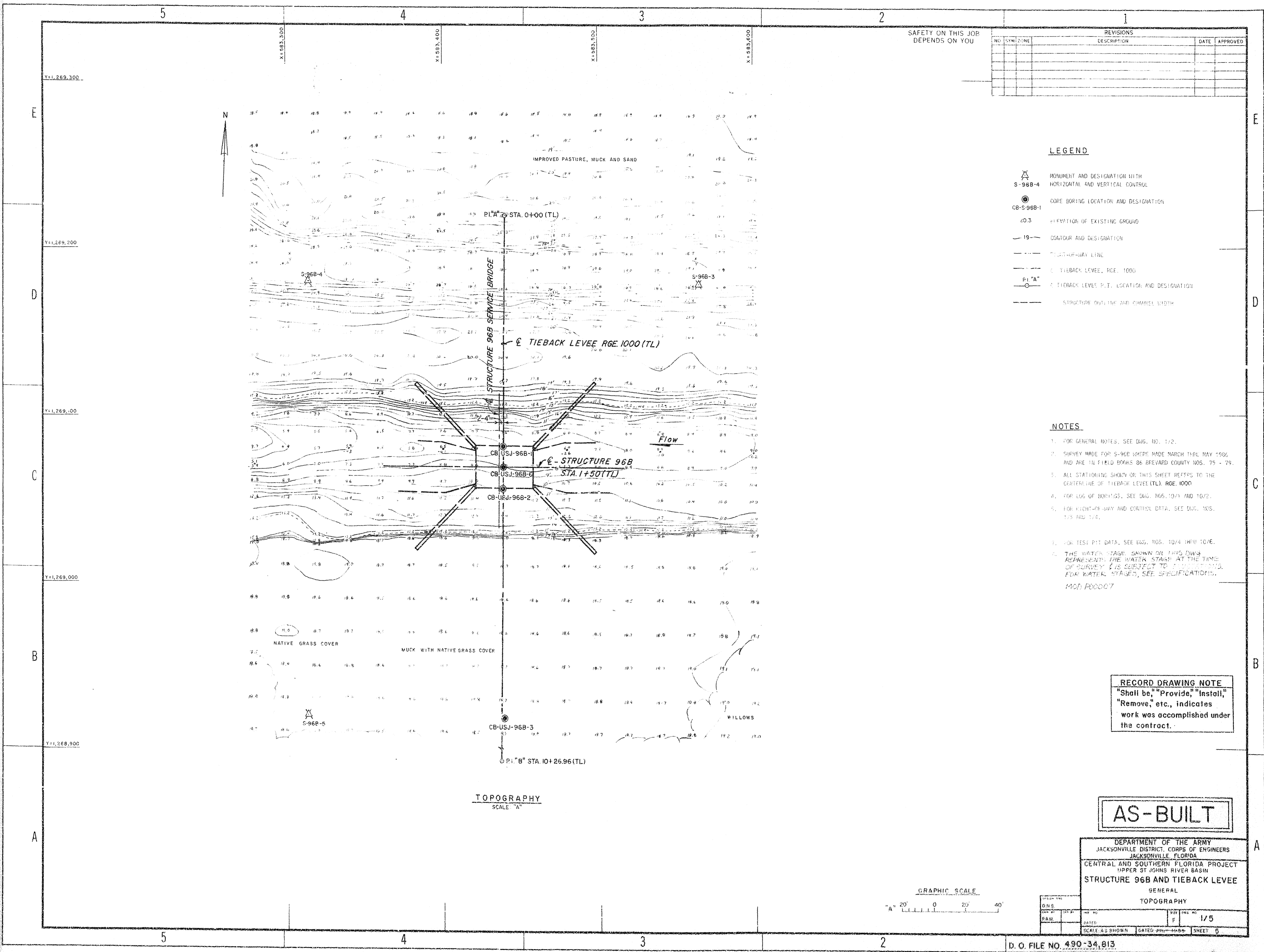
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CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN			
STRUCTURE 980 AND TIEBACK LEVEE			
GENERAL RIGHT-OF-WAY AND CONTROL			
DESIGNED BY D.N.S.	CHECKED BY D.N.S.	DATE 1/4	SHEET NO. 1/4
SCALE NONE	DATE 1/4		

D. O. FILE NO. 490-34,813

490-36,389



SAFETY ON THIS JOB
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REVISIONS			
NO.	SYMBOL	DESCRIPTION	DATE

LEGEND

- MONUMENT AND DESIGNATION WITH HORIZONTAL AND VERTICAL CONTROL
- CORE BORING LOCATION AND DESIGNATION
- ELEVATION OF EXISTING GROUND
- CONTOUR AND DESIGNATION
- RIGHT-OF-WAY LINE
- TIEBACK LEVEL, RGE. 1000
- TIEBACK LEVEL P.T. LOCATION AND DESIGNATION
- STRUCTURE OUTLINE AND CHANNEL WIDTH

NOTES

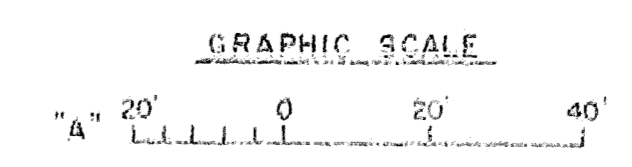
- FOR GENERAL NOTES, SEE DWG. NO. 1/2.
- SURVEY MADE FOR S-96B WHERE MADE MARCH THRU MAY 1996 AND ARE IN FIELD BOOKS 86 BREVARD COUNTY NOS. 75 - 79.
- ALL STATIONING SHOWN ON THIS SHEET REFERS TO THE CENTERLINE OF THE TIEBACK LEVEL (TL), RGE. 1000.
- FOR LOG OF BORINGS, SEE DWG. NOS. 10/1 AND 10/2.
- FOR RIGHT-OF-WAY AND CONTROL DATA, SEE DWG. NOS. 1/3 AND 1/4.
- FOR TEST PIT DATA, SEE DWG. NOS. 10/4 THRU 10/6.
- THE WATER STAGE SHOWN ON THIS DWG. REPRESENTS THE WATER STAGE AT THE TIME OF SURVEY. IT IS SUBJECT TO FLOODING AND, FOR WATER STAGES, SEE SPECIFICATIONS.

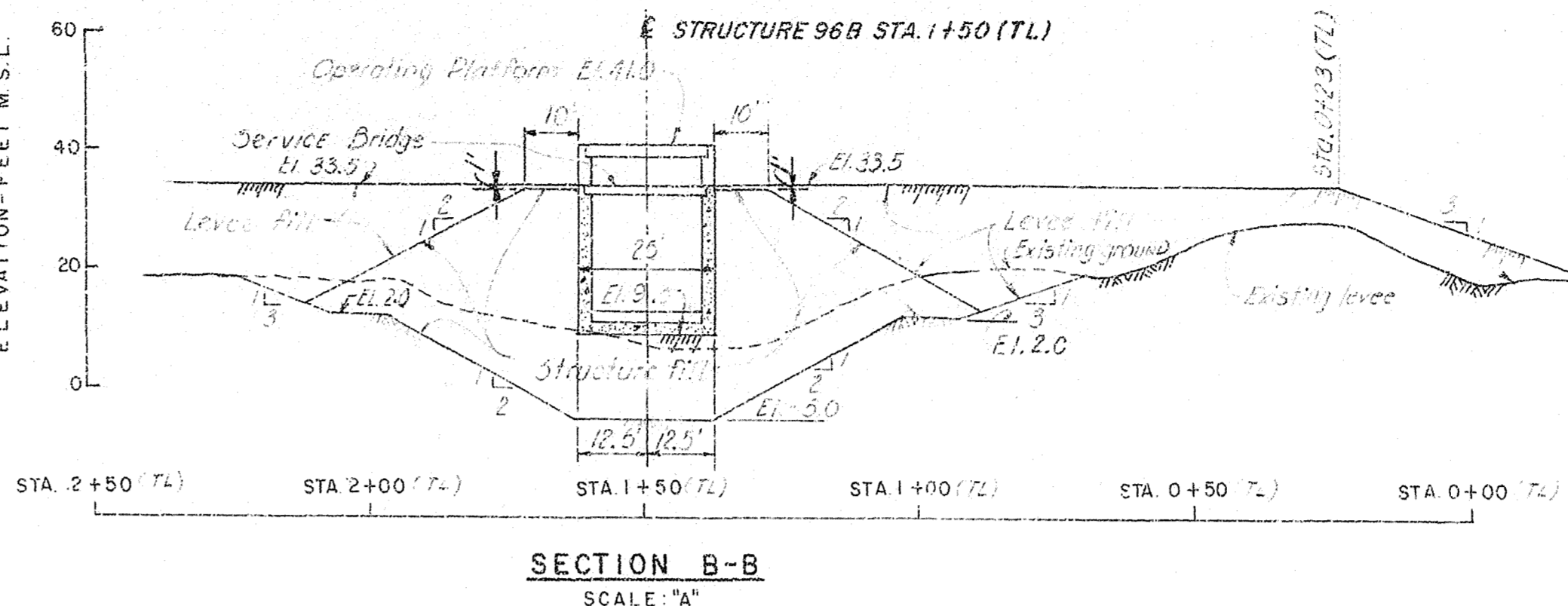
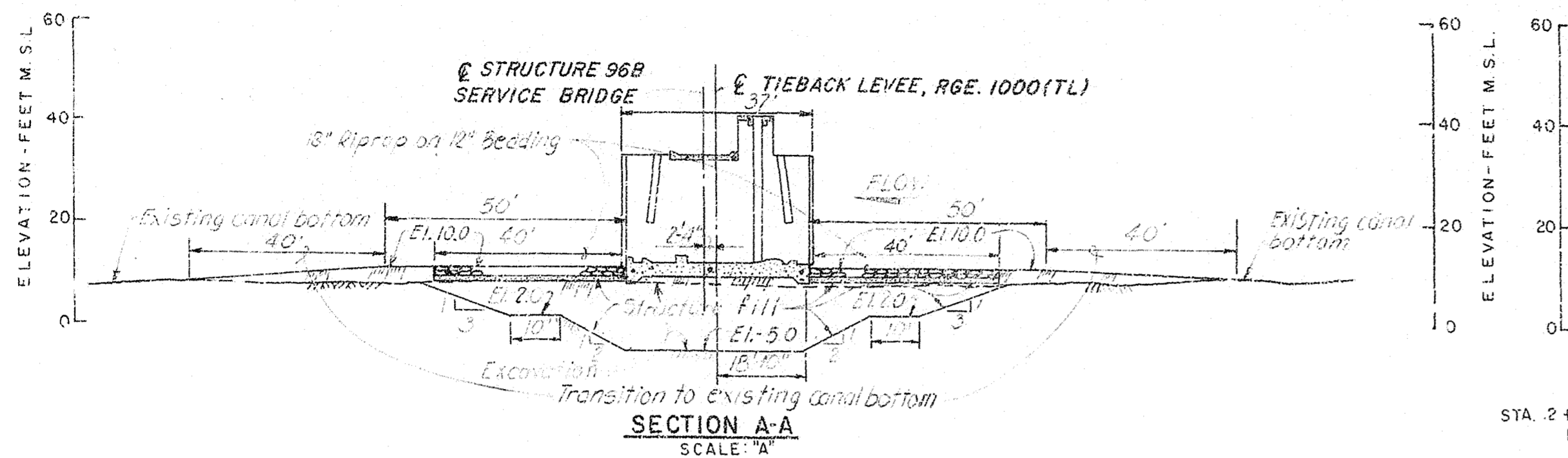
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JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE
GENERAL

TOPOGRAPHY

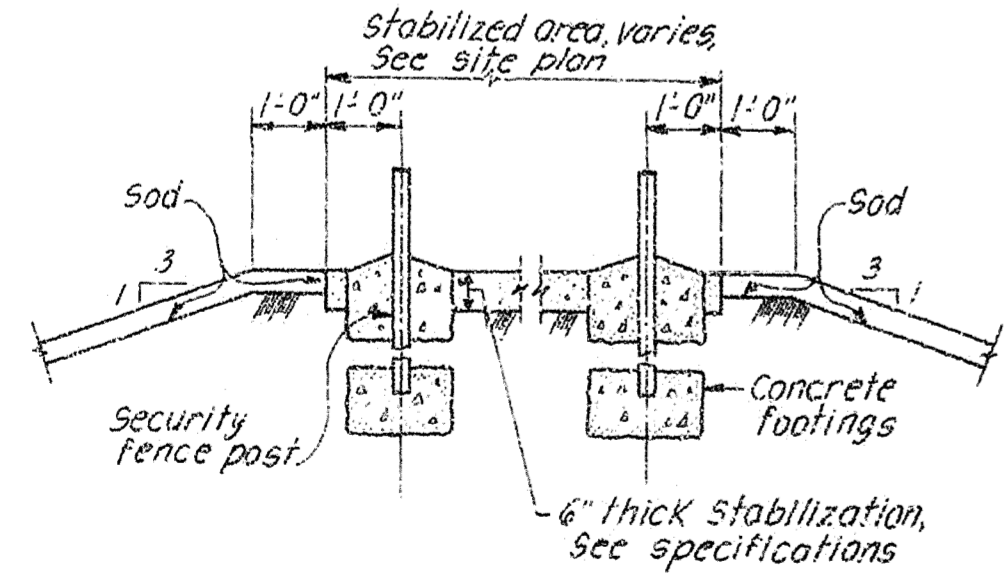
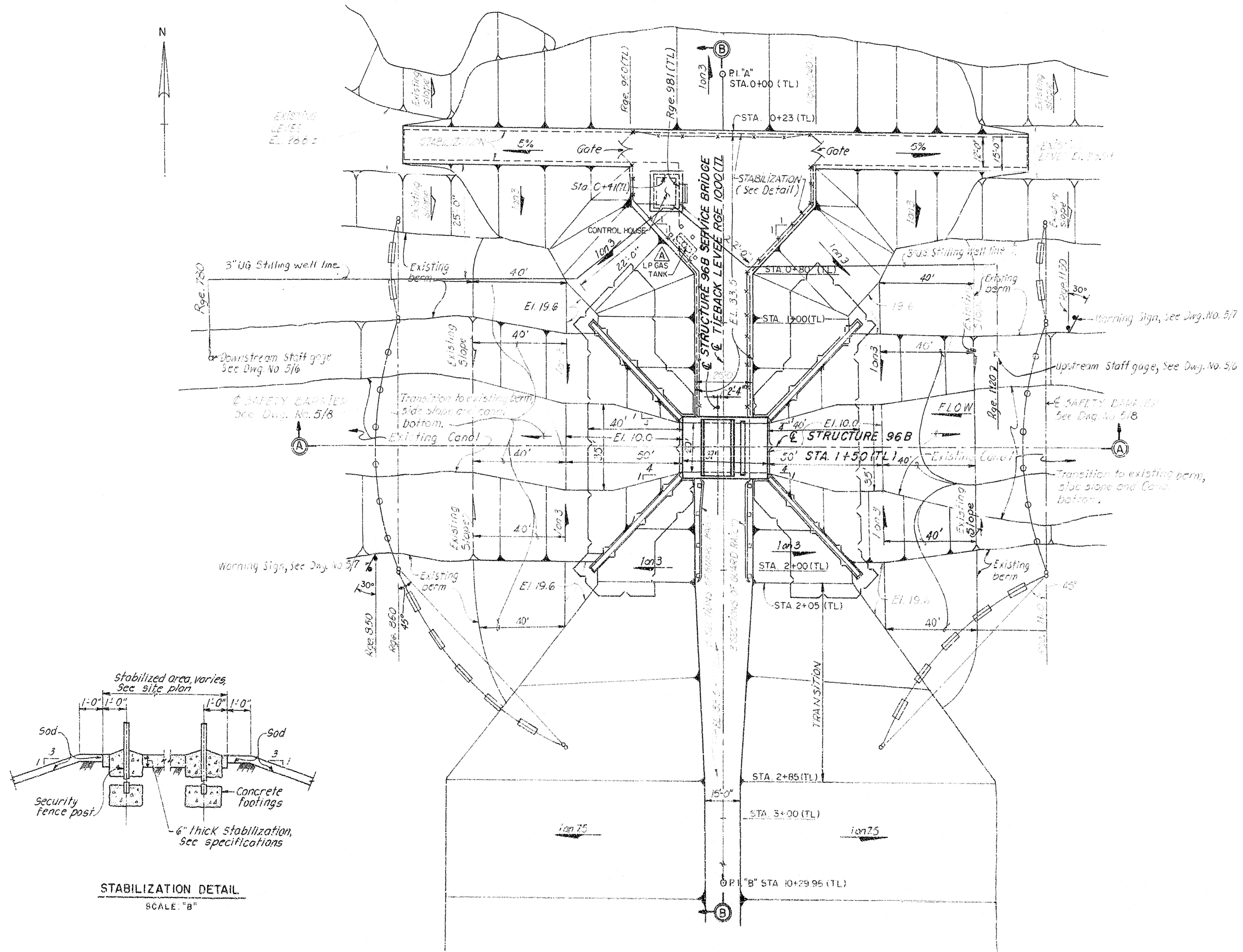




REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED
1	3/30/69	ADDED LOCATION OF LP GAS TANK AND GUARDRAIL POSTS TO ACCOMPANY MOD. SUTEX "E"	

- LEGEND**
- LIMITS OF SODDING
 - LIMITS OF 18" RIPRAP ON 12" BEDDING
 - DIRECTION OF REQUIRED SLOPE
 - DIRECTION OF EXISTING SLOPE
 - LIMITS OF SECURITY FENCING
 - 1 on 3 RATIO OF REQUIRED SLOPE (1 ON 3 = 1 VERTICAL ON 3 HORIZONTAL)
 - LIMITS OF STABILIZATION

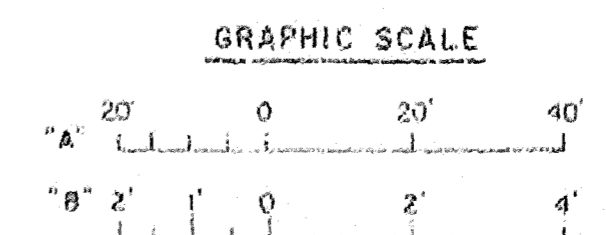
- NOTES:**
- STRUCTURE FENCING AND SODDING LIMITS NOT SHOWN ON SITE PLAN THIS SHEET. SEE DWG. NO. 1/3.
 - FOR SECURITY GATES AND DETAILS, SEE DWG. NO. 5/4.
 - THE DOWNSTREAM STAFF GAUGE IS LOCATED OUTSIDE THE PROPOSED DEWATERING DIKE. FLUCTUATIONS IN WATER STAGES MAY NECESSITATE THE USE OF DIVERS FOR THE INSTALLATION OF THE DOWNSTREAM STILLING WELL LINE.



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AS-BUILT

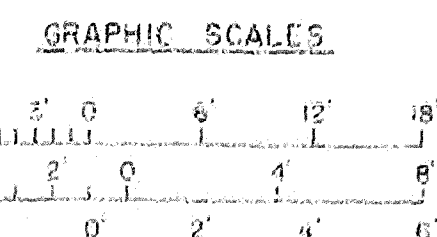
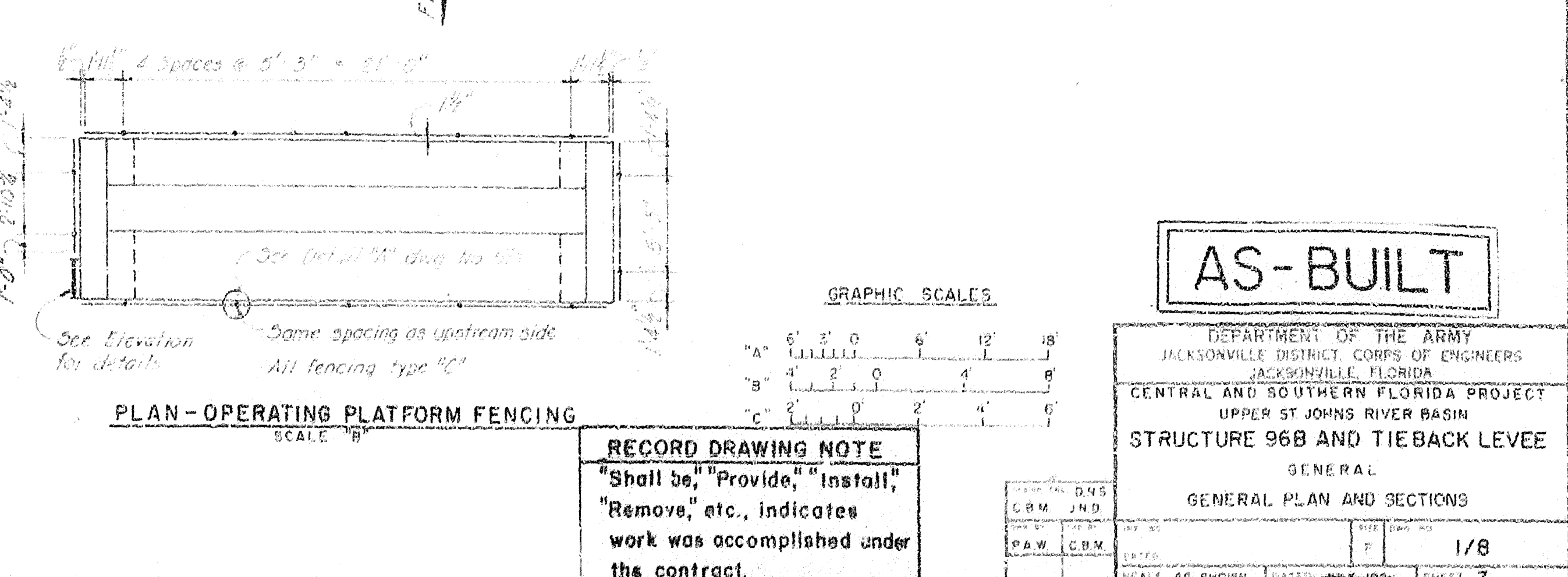
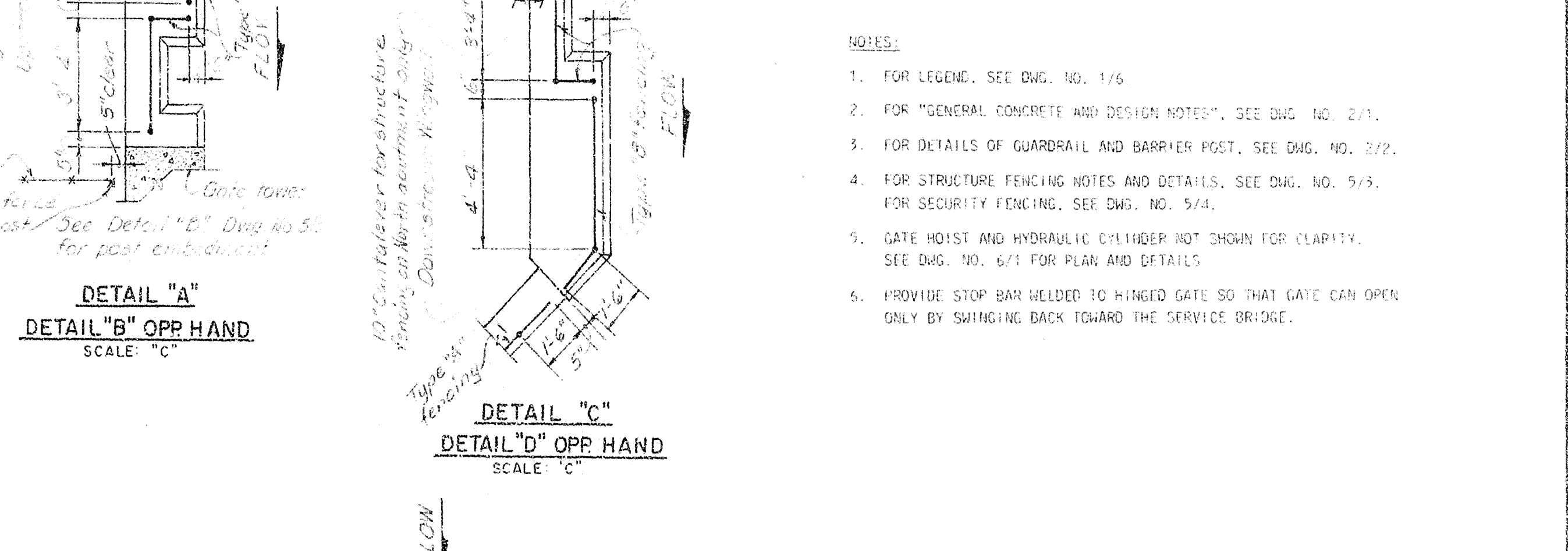
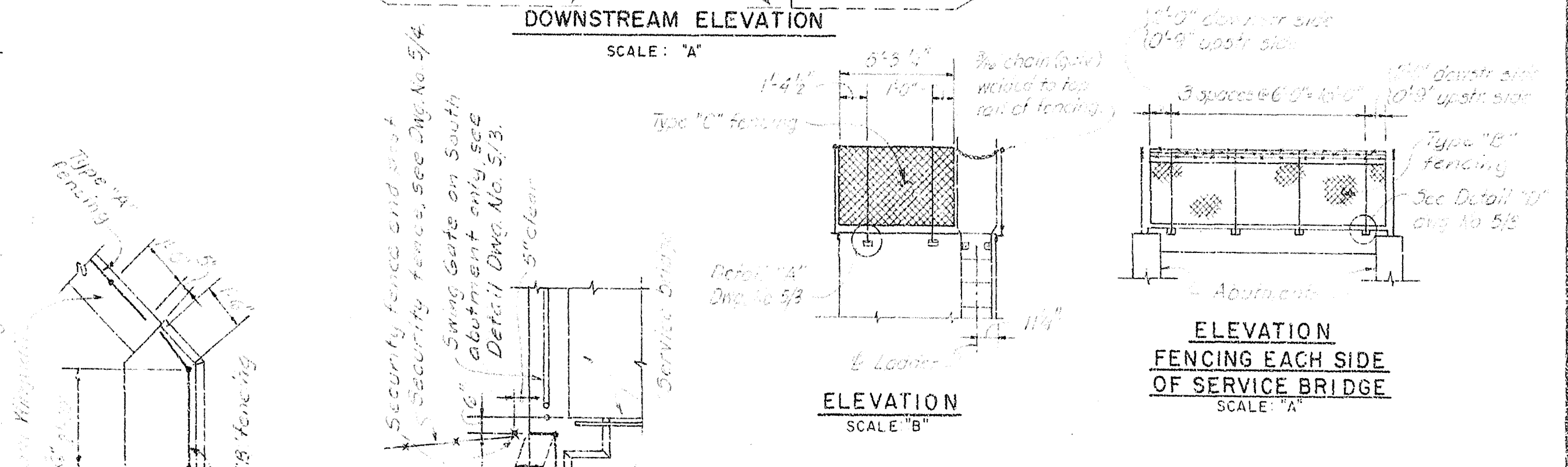
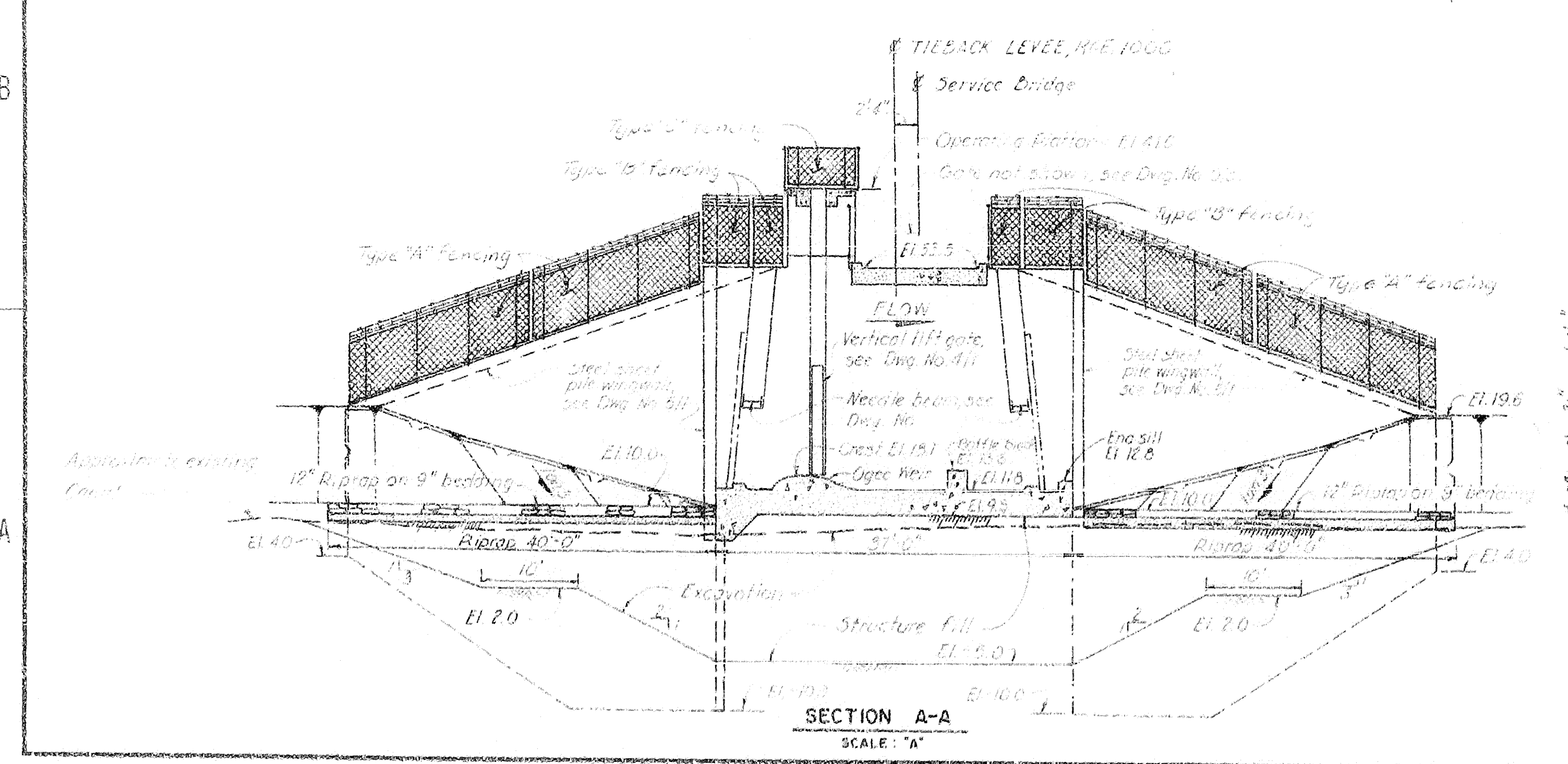
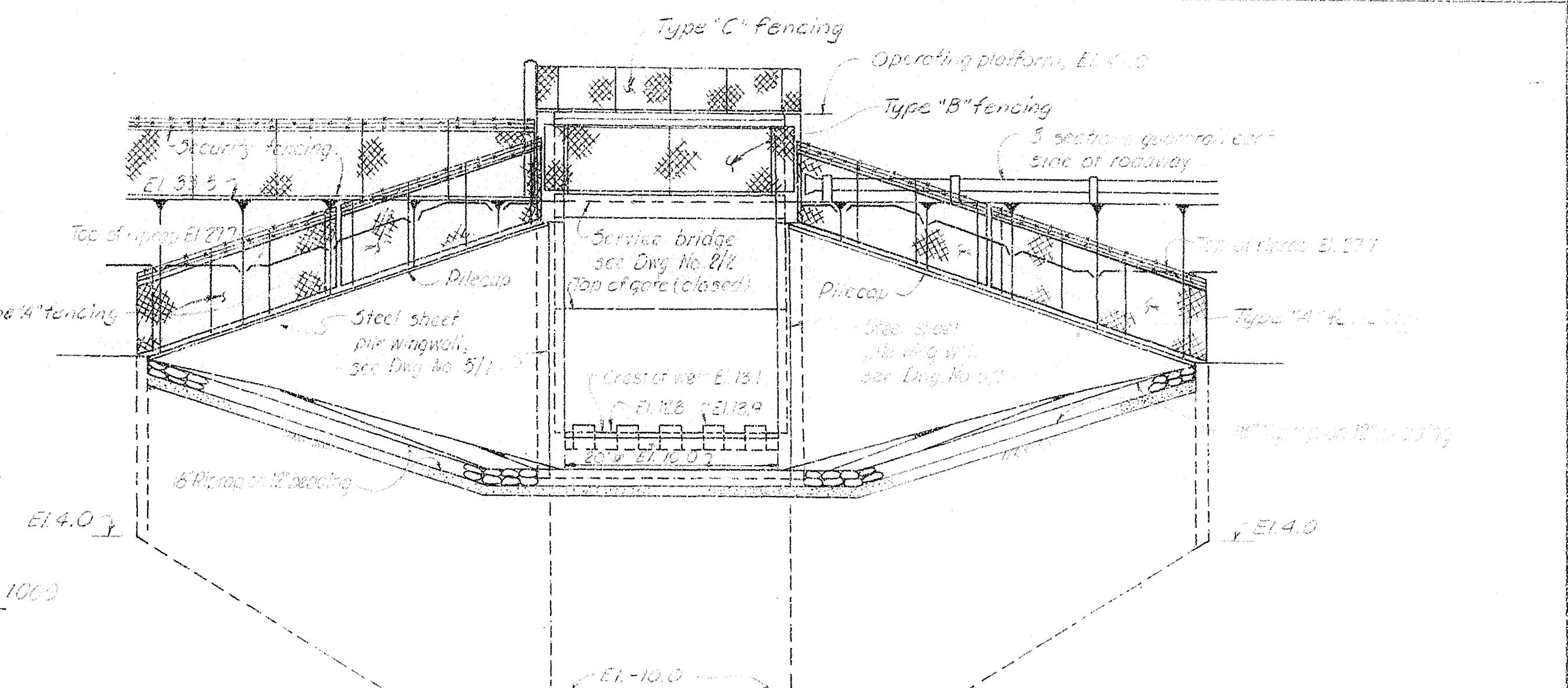
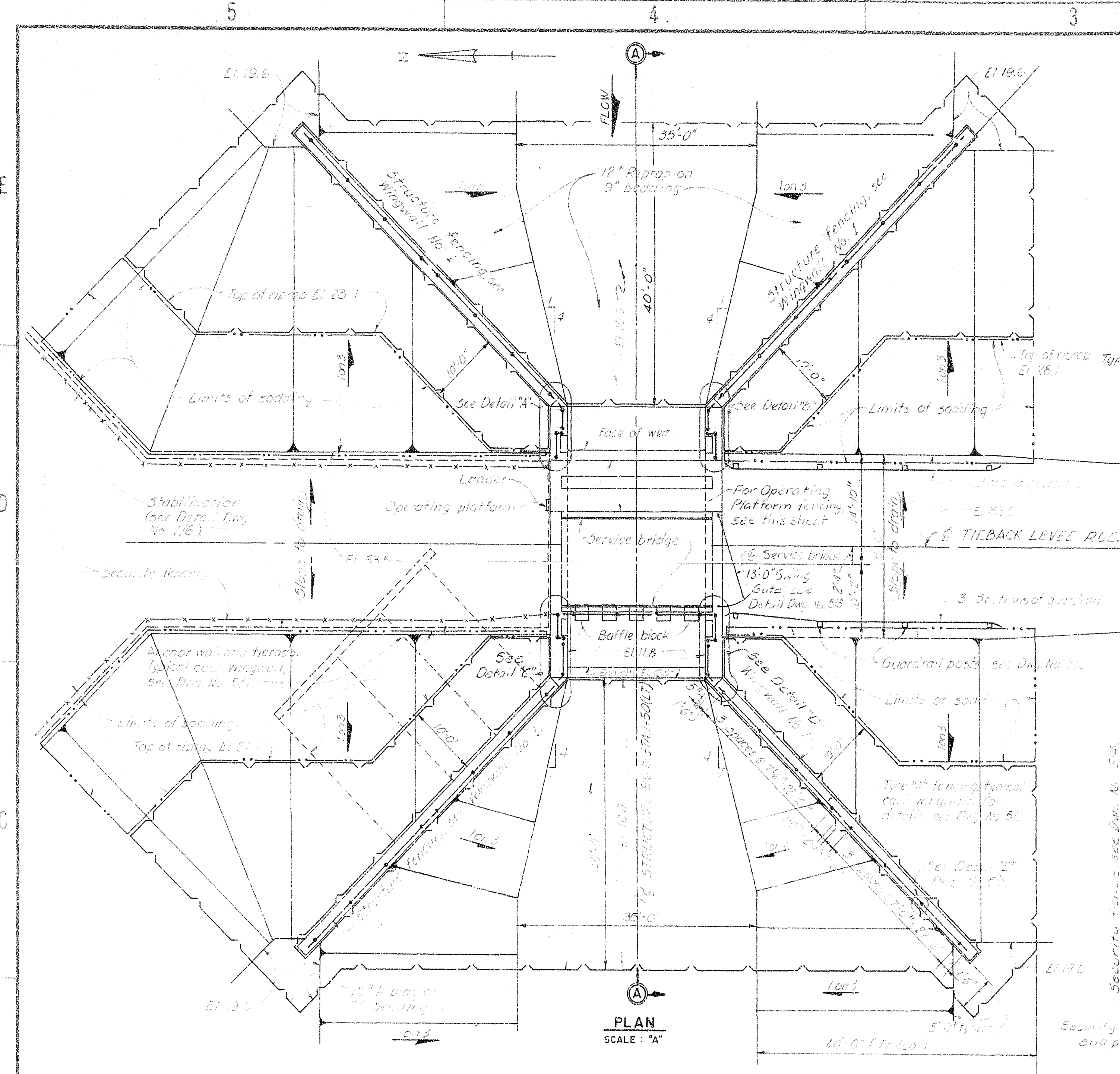
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE



GENERAL SITE PLAN			
DATE	NO.	BY	CHKD.
3/30/69	1	E.E.D.	D.M.S.
SCALE AS SHOWN	DATE	BY	CHKD.
1/5	1/5		

SAFETY ON THIS JOB
DEPENDS ON YOU

NO	SYM	ZONE	REVISIONS		DATE	APPROVED
			DESCRIPTION			



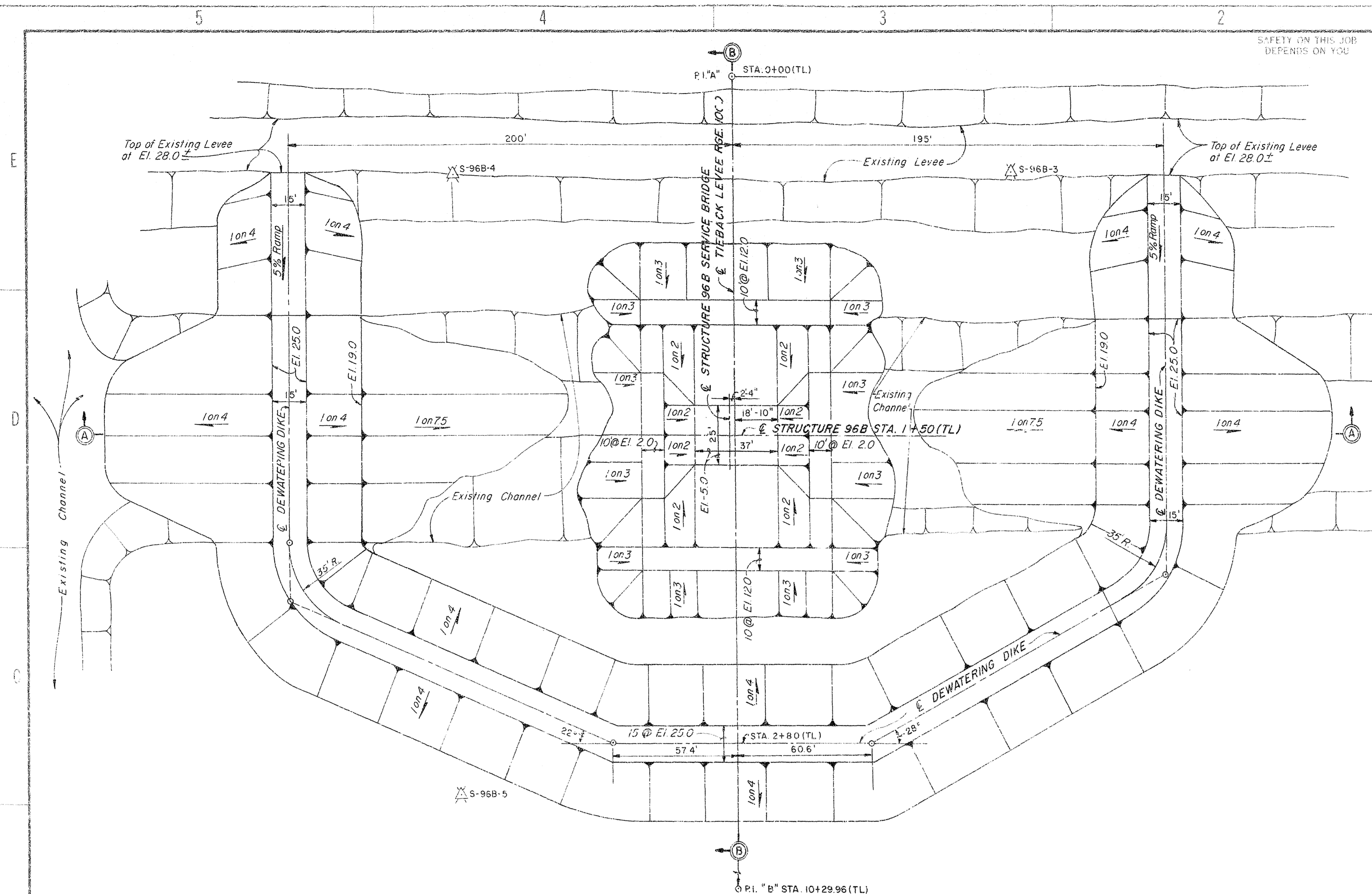
AS-BUILT

DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS JACKSONVILLE, FLORIDA			
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN			
STRUCTURE 96B AND TIEBACK LEVEE			
GENERAL			
GENERAL PLAN AND SECTIONS			
DESIGNED BY C.B.M. J.N.D.	DRAWN BY C.B.M. J.N.D.	CHECKED BY P.A.W. C.B.M.	DATE JULY 1953
SCALE AS SHOWN		SHEET	1/8
D.O. FILE NO. 430-34-013		NAT. 1953	

RECORD DRAWING NOTE
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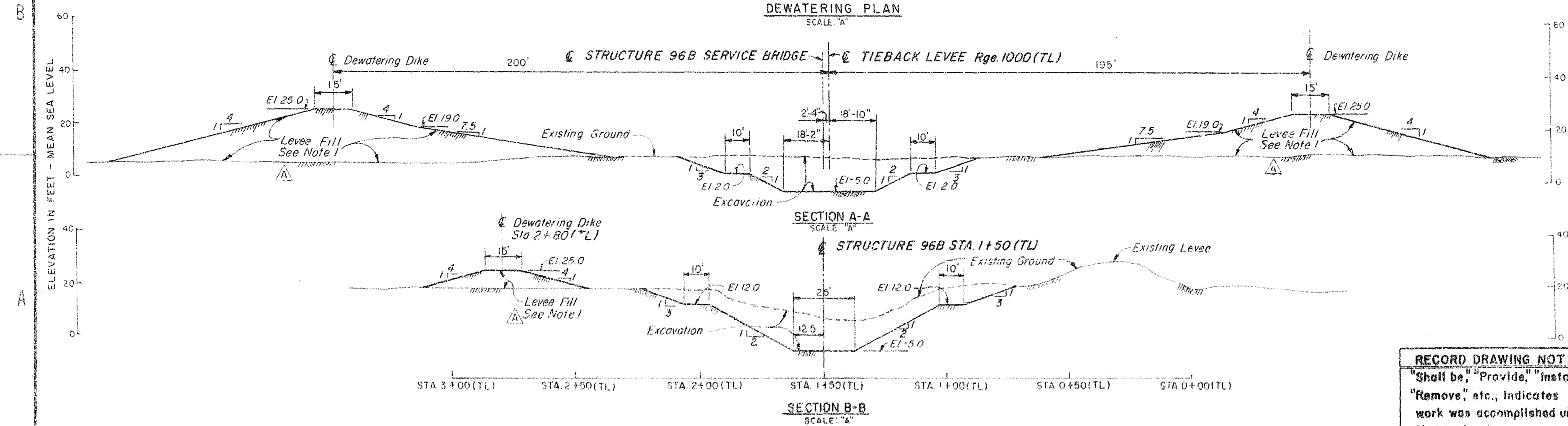
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NO.		SYMBOL	REVISIONS	DATE	APPROVED
4	Δ	—	REVISED TO CONFORM TO AMEND. 0001	3/15/88	ET



NOTE:
1. Remove levee fill used for dewatering dike down to existing ground upon completion of work required to be performed in the dry except for the Dewatering dike levee fill that falls within the Tieback Levee Prism. This levee fill shall remain as part of the tieback levee.

DEWATERING PLAN
SCALE: "A"



AS BUILT

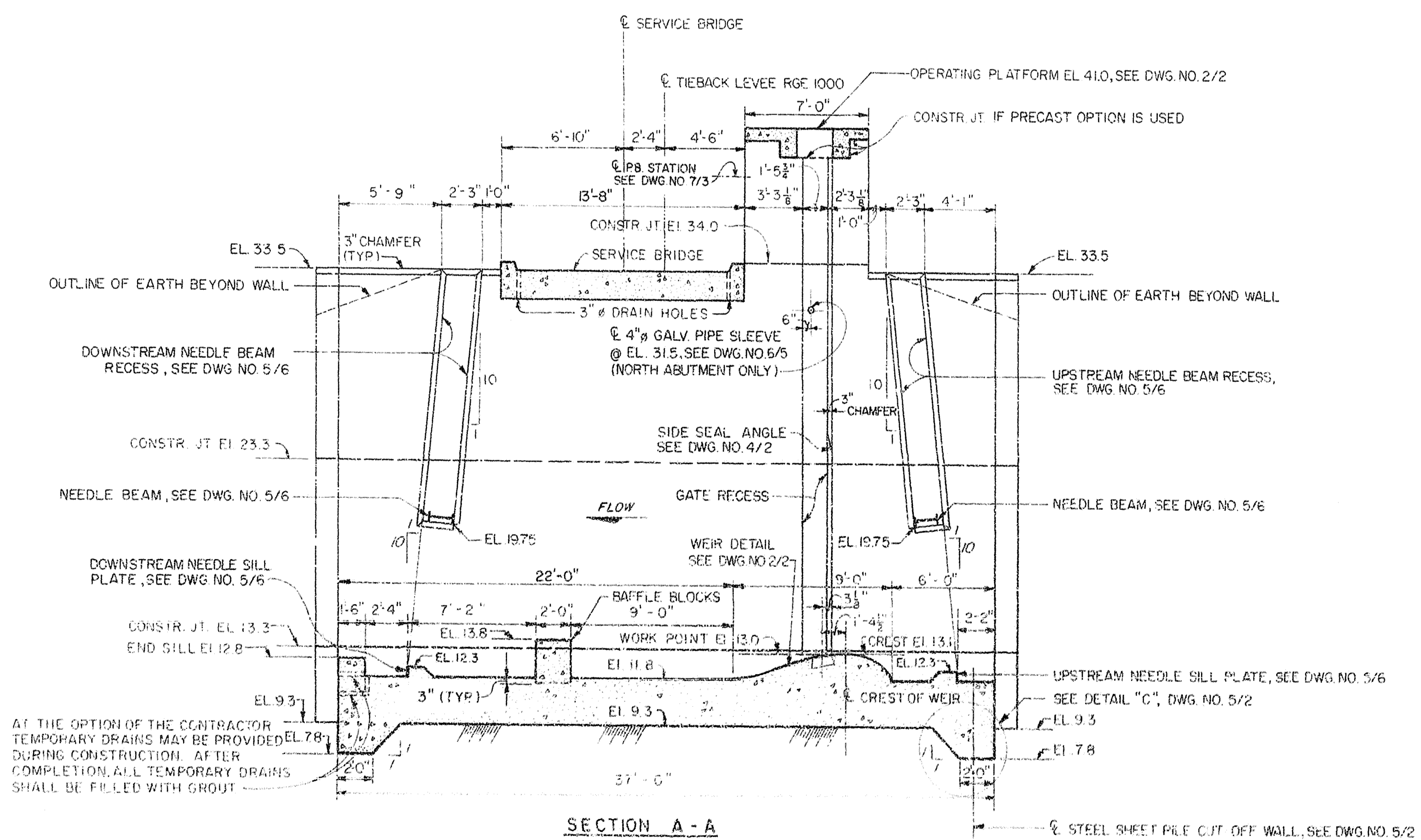
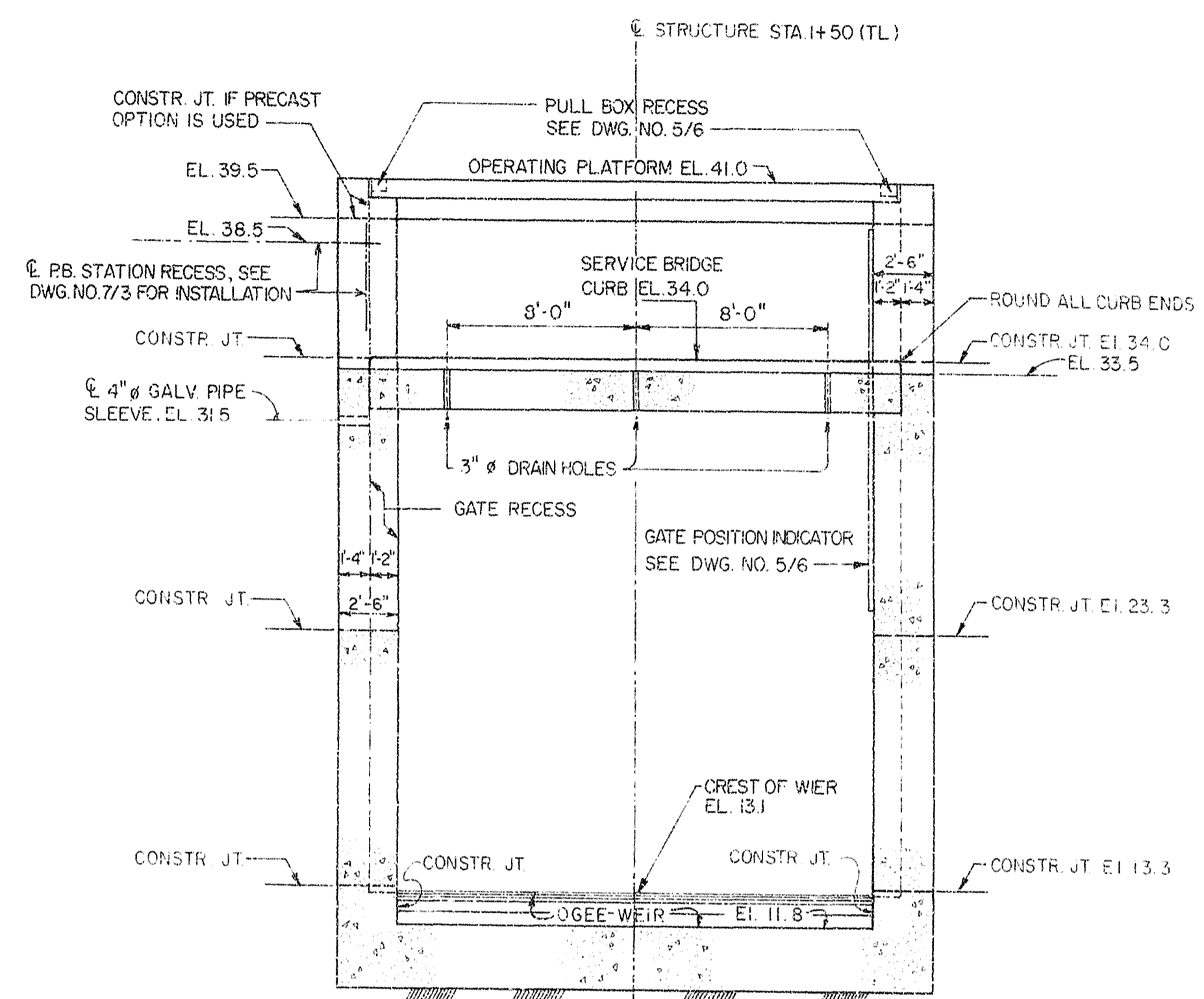
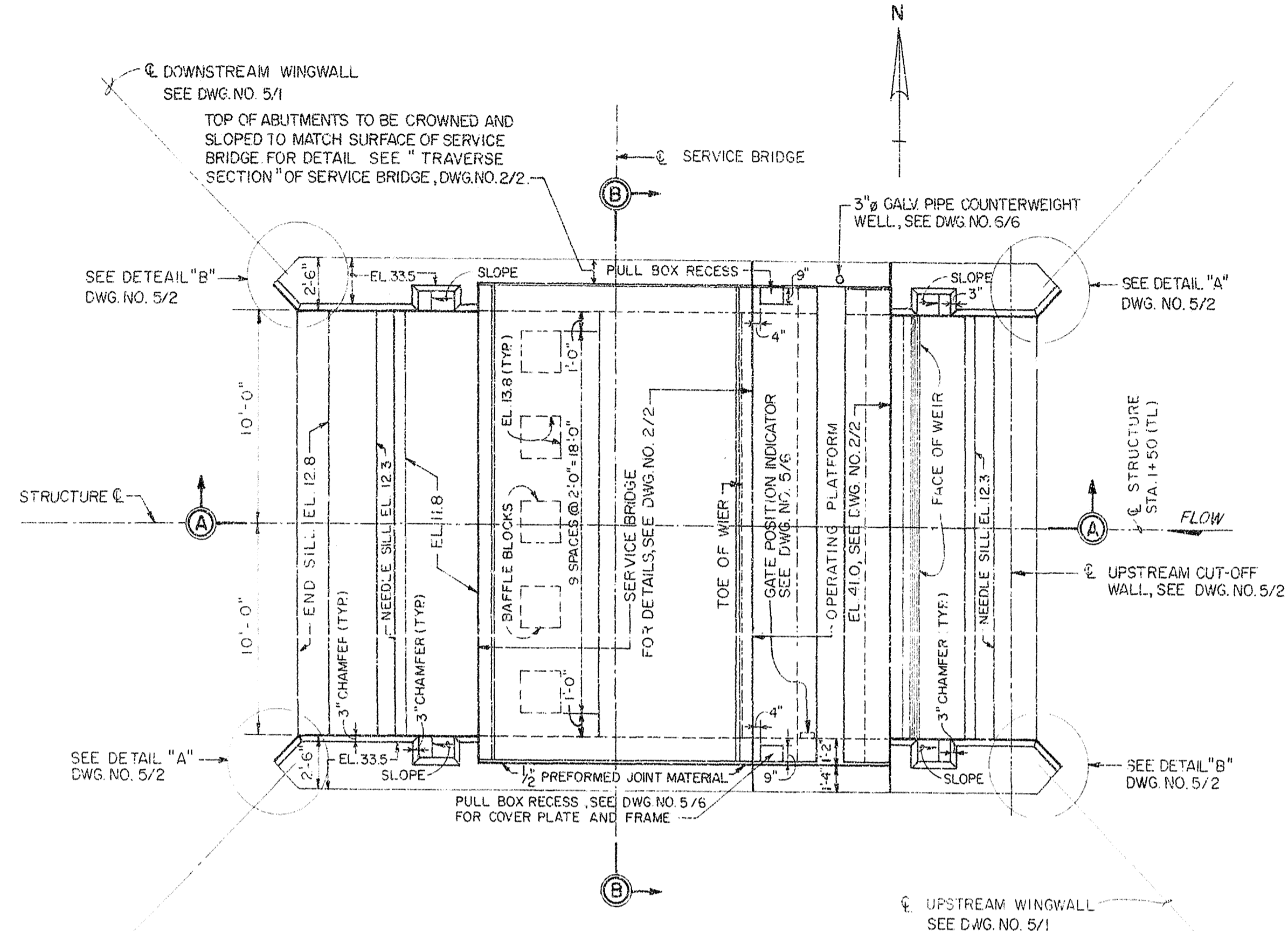


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DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS JACKSONVILLE, FLORIDA	
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN	
STRUCTURE 96B AND TIEBACK LEVEE	
GENERAL	
DEWATERING PLAN AND SECTIONS	
DATE	1/9
SCALE: AS SHOWN	DATE: JULY 1986
SCALE: 1"=40'	SCALE: 1"=40'

SAFETY ON THIS JOB
DEPENDS ON YOU

REVISIONS				DATE	APPROVED
NO	SYM	ZONE	DESCRIPTION		



- NOTES:
- FOR "GENERAL REINFORCEMENT NOTES", SEE DWG. NO. 5/1.
 - FOR DETAILS OF SERVICE BRIDGE, OPERATING PLATFORM AND WEIR, SEE DWG. NO. 2/2.
 - FOR EMBEDDED METALS REQUIRED FOR GATE RECESS AND GATE BOTTOM SEAL CONSTRUCTION, SEE DWG. NOS. 4/1 AND 4/2.

- GENERAL CONCRETE AND DESIGN NOTES:
- PROVIDE 3/4" CHAMFER ON ALL EXPOSED CONCRETE CORNERS AND EDGES UNLESS OTHERWISE NOTED.
 - CONSTRUCTION JOINTS SHALL BE AS SHOWN OR AS APPROVED BY THE CONTRACTING OFFICER PROVIDED THE FOLLOWING CRITERIA ARE MET:
 - HORIZONTAL CONSTRUCTION JOINTS IN WALLS SHALL BE LIMITED TO A MAXIMUM LENGTH OF 10'-0" AND VERTICAL JOINT LOCATIONS LIMITED TO A MAXIMUM LENGTH WHICH WILL ASSURE THAT THE CONCRETE CAN BE PROPERLY PLACED AND VIBRATED TO PREVENT FORMATION OF VOIDS OR HONEYCOMBS WITHIN THE CONCRETE.
 - V JOINTS SHALL BE PROVIDED AT ALL HORIZONTAL CONSTRUCTION JOINTS NOT COVERED BY BACKFILL FOR THE ABUTMENT WALLS. SEE "TYPICAL V-JOINT DETAIL", DWG. NO. 2/2.
 - FOR "GENERAL REINFORCEMENT NOTES", SEE DWG. NO. 5/1.
 - UNLESS OTHERWISE NOTED, FINISH FOR FORMED CONCRETE SURFACES SHALL BE AS FOLLOWS:
 - (1) CLASS-B ALL FORMED SURFACES, EXCEPT AS NOTED IN (2).
 - (2) CLASS-D SURFACES AGAINST WHICH CONCRETE OR FILL IS TO BE PLACED.
 - ALL EXPOSED UNFORMED SURFACES SHALL HAVE A FLOAT FINISH, UNLESS OTHERWISE NOTED.
 - WORKING STRESSES FOR STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO THE REQUIREMENTS OF THE A.I.S.C. ALLOWABLE STRESS UNLESS OTHERWISE SHOWN OR SPECIFIED.

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.

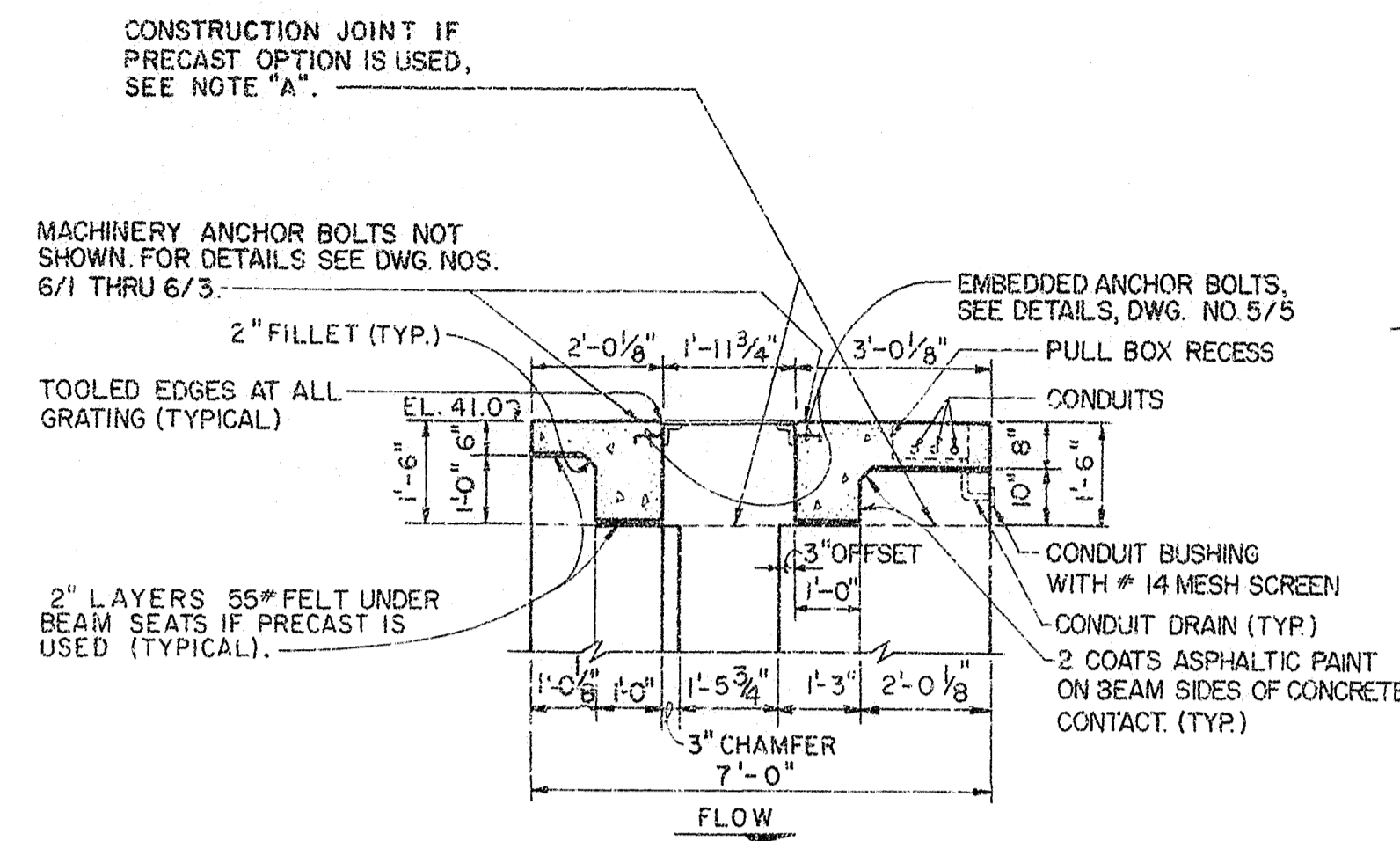
AS-BUILT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE
CONCRETE

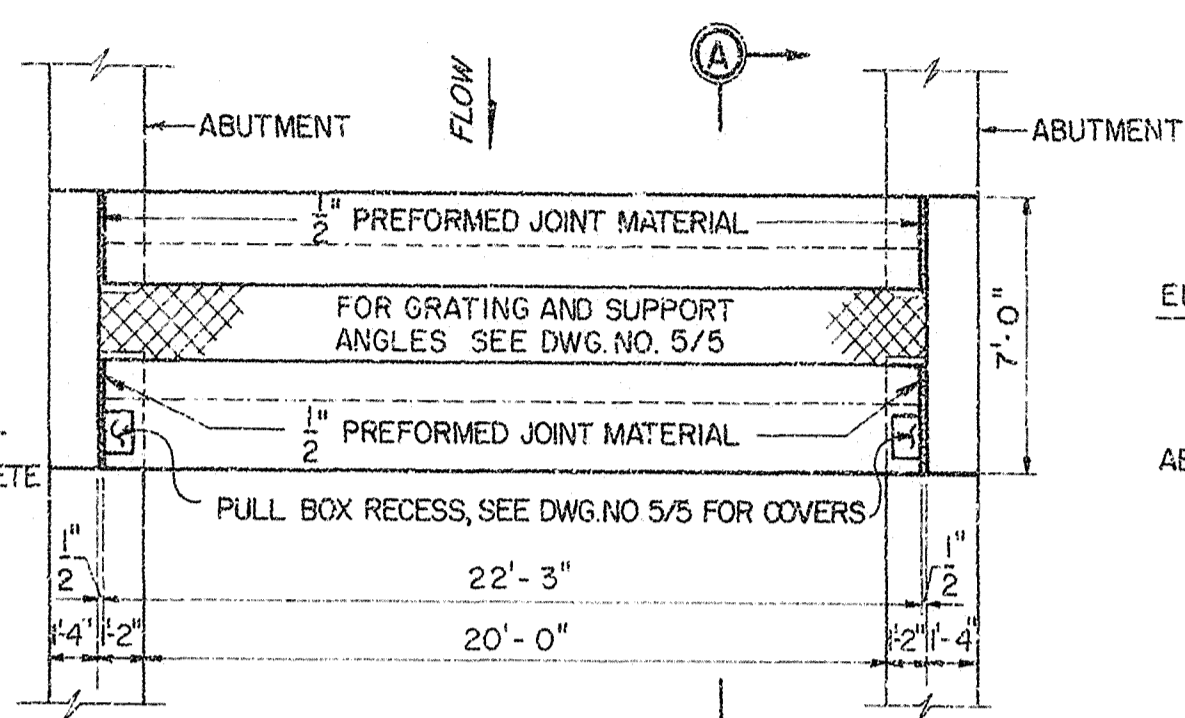
PLAN AND SECTIONS				SHEET	9
SCALE	DATE	DESIGNED BY	CHECKED BY		
1" = 10'	10/1/93	J.M.	J.M.	2/1	

SAFETY ON THIS JOB
DEPENDS ON YOU

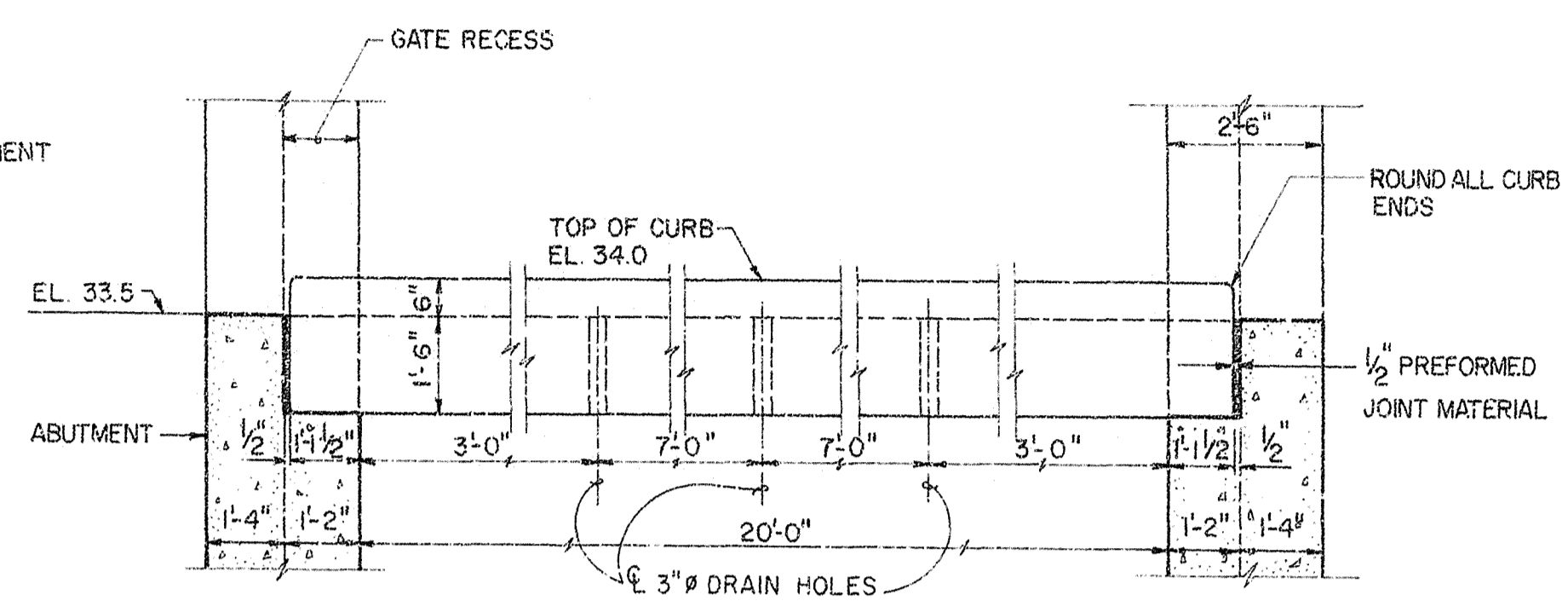
REVISIONS			
NO.	SYMBOL	DESCRIPTION	DATE
1	A	ADDED ADDITIONAL LOCATION FOR GUARDRAIL POSTS TO ACCOMPANY MOD. SUPPLY "E"	3/30/89



SECTION "A-A"
SCALE: "A"



HALF PLAN
SCALE: "B"

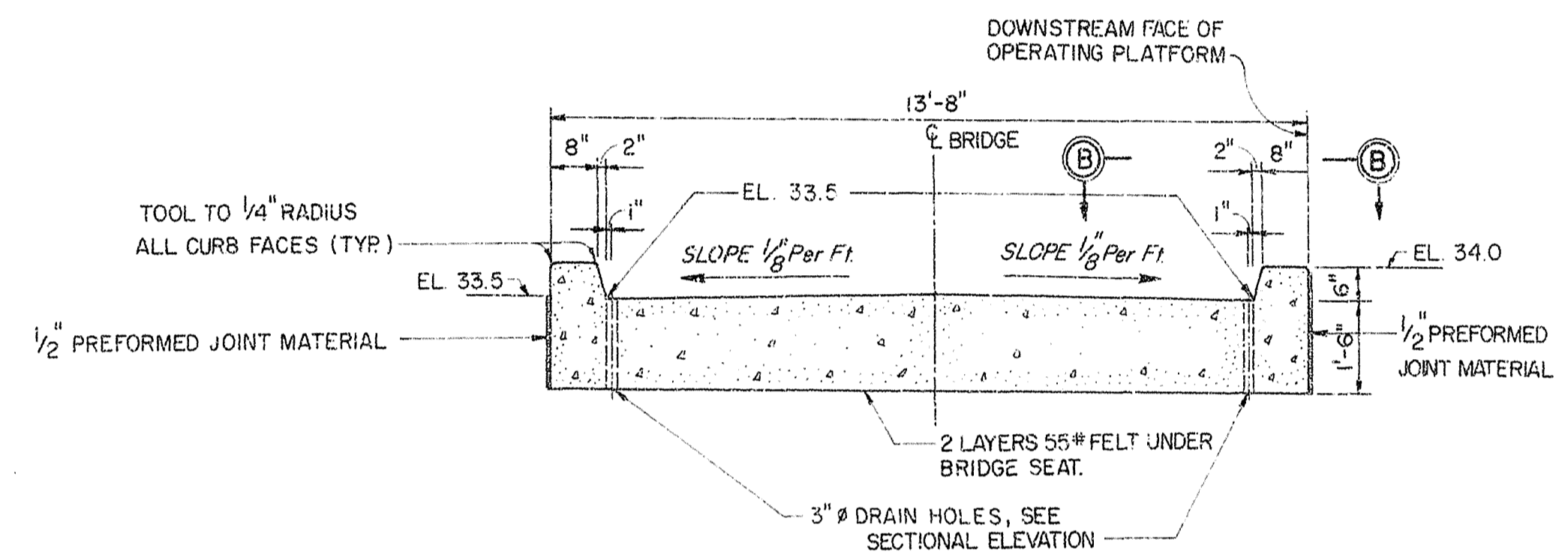


SECTIONAL ELEVATION
SCALE: "A"

NOTE "A":

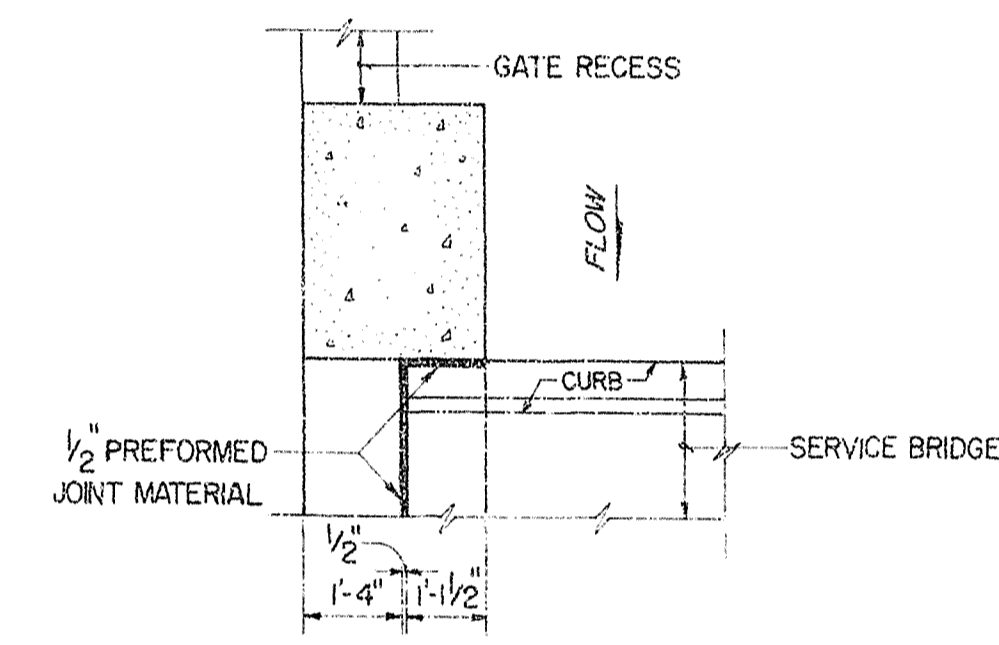
AT THE OPTION OF THE CONTRACTOR
PRECAST OPERATING PLATFORM BEAMS
CAN BE USED, IN LIEU OF CONVENTIONAL
POURED IN PLACE CONSTRUCTION.

OPERATING PLATFORM

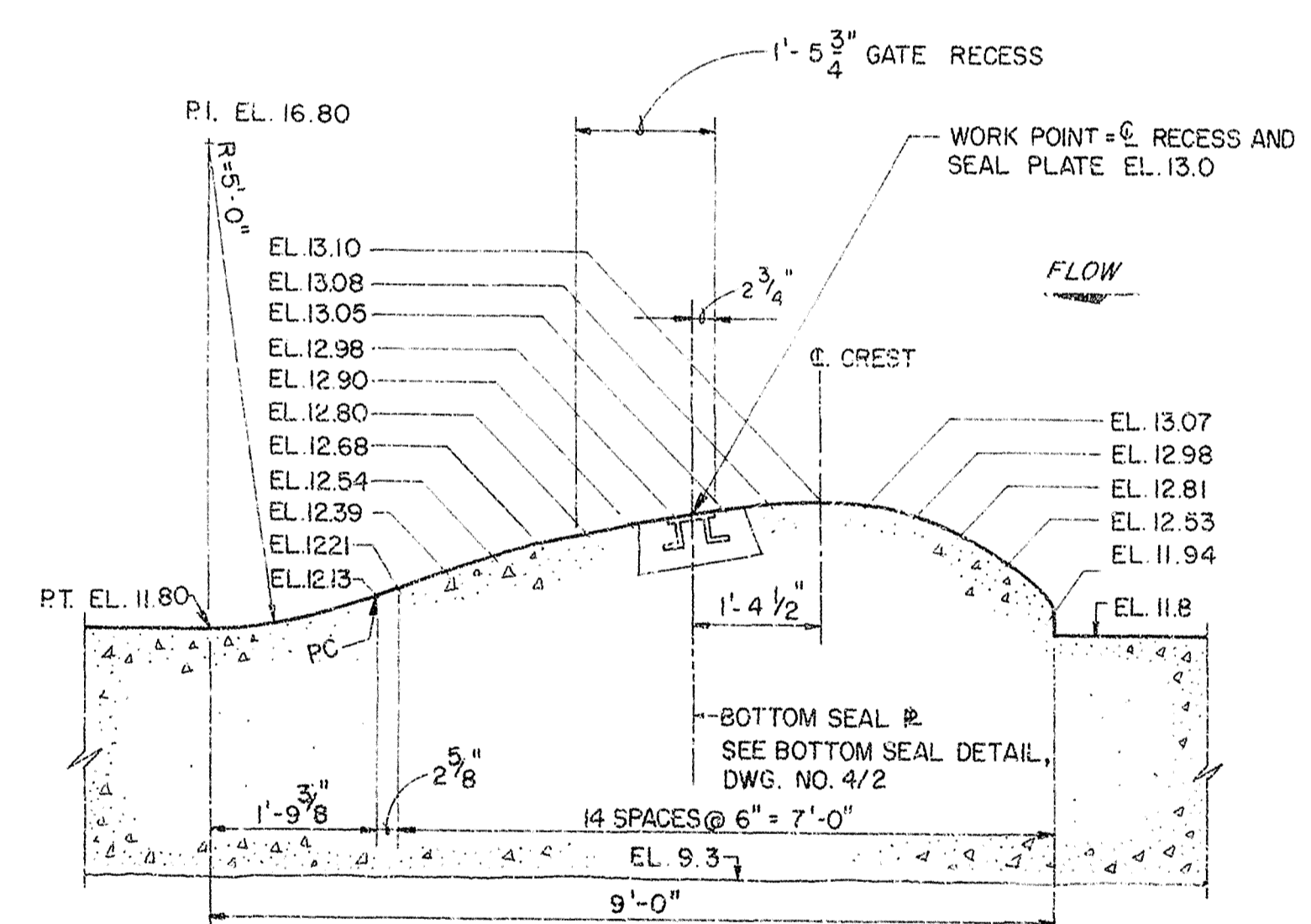


TRANSVERSE SECTION
SCALE: "A"

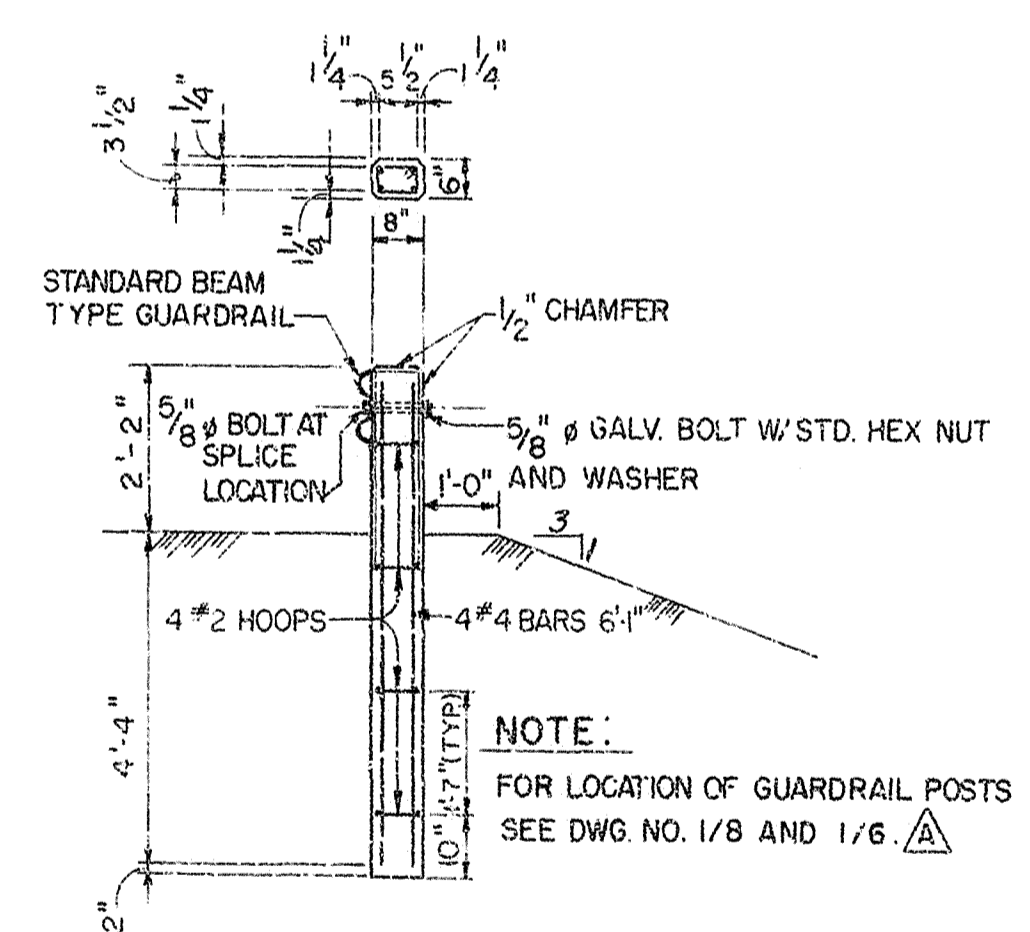
SERVICE BRIDGE



SECTION B-B
SCALE: "A"

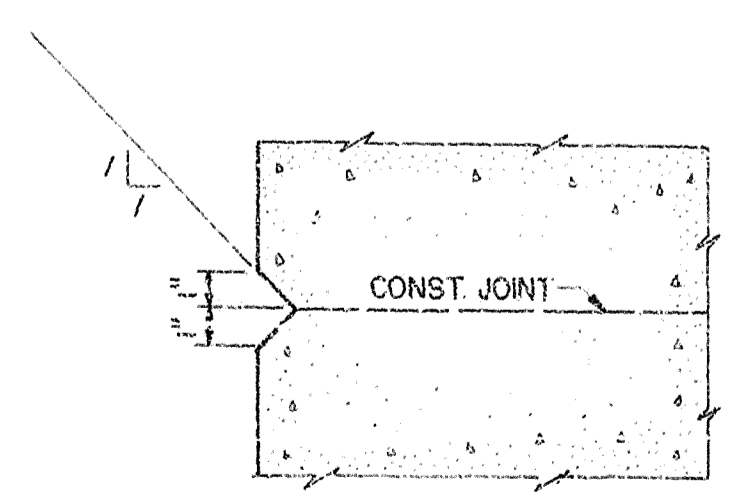


WEIR DETAIL
SCALE: "C"



GUARDRAIL
SCALE: "A"

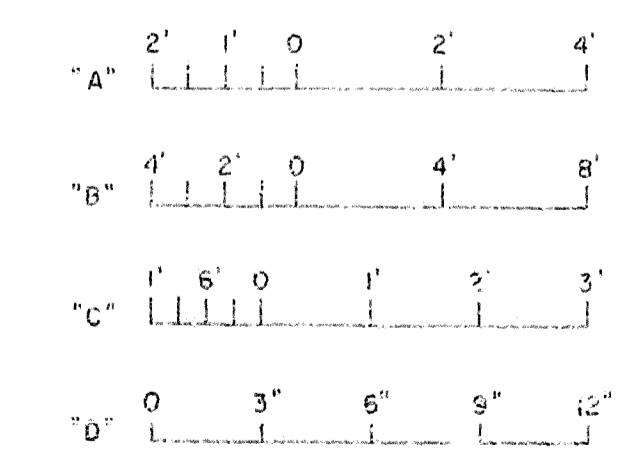
NOTE:
FOR LOCATION OF GUARDRAIL POSTS
SEE DWG. NO. 1/8 AND 1/6



TYPICAL V-JOINT DETAIL
SCALE: "D"

AS BUILT

GRAPHIC SCALES



RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.

DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS JACKSONVILLE, FLORIDA			
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN STRUCTURE 96B AND TIEBACK LEVEE CONCRETE SECTIONS AND DETAILS			
DATE	NO. 100	BY	2/2
SCALE AS SHOWN	DATE	FILE	10

SAFETY ON THIS JOB
DEPENDS ON YOU

REVISIONS			
NO.	SYMBOL	DESCRIPTION	DATE

PLAN - BASE SLAB, TOP FACE
SCALE "A"

PLAN - BASE SLAB, BOTTOM FACE
SCALE "A"

SECTION B-B
SCALE "A"

ELEVATION
SCALE "A"

OPERATING PLATFORM

ELEVATION - ABUTMENT, INSIDE FACE
SCALE "A"

SECTION C-C
SCALE "A"

SECTION D-D
SCALE "A"

ELEVATION - ABUTMENT, OUTSIDE FACE
SCALE "A"

SECTION E-E
SCALE "A"

SECTION O-O
SCALE "B"

SECTION A-A
SCALE "A"

TOP REINFORCEMENT
SCALE "A"

BOTTOM REINFORCEMENT
SCALE "A"

SECTION N-N
SCALE "B"

SERVICE BRIDGE

GENERAL REINFORCEMENT NOTES:

- The clear distance between the face of the concrete and reinforcing bars shall be 2 1/2" for formed surfaces and 4" where concrete is placed against earth or rock unless otherwise shown.
- Unless otherwise shown, the length of lap and embedment shall be in accordance with table:

Bar Size	#3	#4	#5	#6	#7	#8	#9	#10	#11
Lapped Splice	1'-0"	1'-2"	1'-6"	1'-10"	2'-1"	2'-6"	3'-3"	4'-1"	5'-0"
Embedment	0'-6"	1'-0"	1'-0"	1'-1"	1'-6"	1'-11"	2'-5"	3'-1"	3'-10"

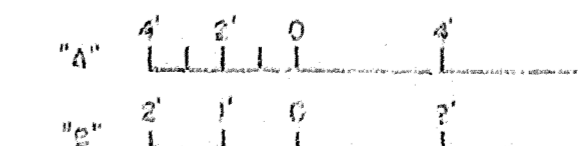
A. For different size bars, the splice length shall be based on the smaller bar.

B. Embedment means the amount of bar extension beyond the face of intersecting concrete members.

RECORD DRAWING NOTE
"Shall be," "Provide," "Install," "Remove," etc., indicates work was accomplished under the contract.

AS-BUILT

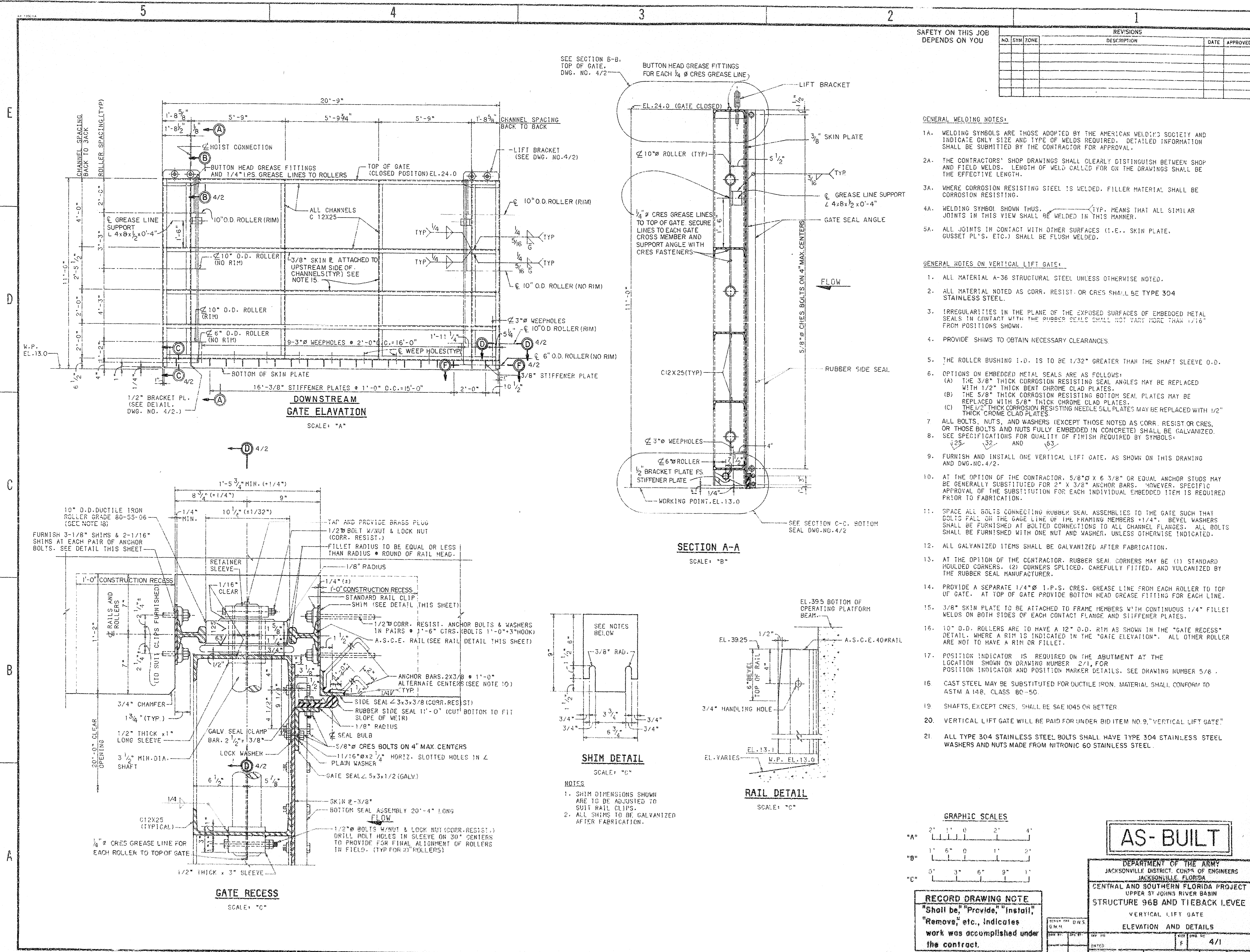
GRAPHIC SCALES



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS JACKSONVILLE, FLORIDA			
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN			
STRUCTURE 96B AND TIEBACK LEVEE			
REINFORCEMENT DETAILS NO. 1			
DATE	BY	CHECKED	DATE
3/1/91	JND	WJD	3/1/91
SCALE AS SHOWN		SHEET 11	

D. O. FILE NO. 490-34-813

490-36,389



SAFETY ON THIS JOB DEPENDS ON YOU		REVISIONS		DATE	APPROVED
NO.	SYM.	ZONE	DESCRIPTION		

- GENERAL WELDING NOTES:**
1. WELDING SYMBOLS ARE THOSE ADOPTED BY THE AMERICAN WELDING SOCIETY AND INDICATE ONLY SIZE AND TYPE OF WELDS REQUIRED. DETAILED INFORMATION SHALL BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL.
 2. THE CONTRACTORS' SHOP DRAWINGS SHALL CLEARLY DISTINGUISH BETWEEN SHOP AND FIELD WELDS. LENGTH OF WELD CALLED FOR ON THE DRAWINGS SHALL BE THE EFFECTIVE LENGTH.
 3. WHERE CORROSION RESISTING STEEL IS WELDED, FILLER MATERIAL SHALL BE CORROSION RESISTING.
 4. WELDING SYMBOL SHOWN THUS: TYP. MEANS THAT ALL SIMILAR JOINTS IN THIS VIEW SHALL BE WELDED IN THIS MANNER.
 5. ALL JOINTS IN CONTACT WITH OTHER SURFACES (I.E., SKIN PLATE, GUSSET PL'S, ETC.) SHALL BE FLUSH WELDED.
- GENERAL NOTES ON VERTICAL LIFT GATE:**
1. ALL MATERIAL A-36 STRUCTURAL STEEL UNLESS OTHERWISE NOTED.
 2. ALL MATERIAL NOTED AS CORR. RESIST. OR CRES. SHALL BE TYPE 304 STAINLESS STEEL.
 3. IRREGULARITIES IN THE PLANE OF THE EXPOSED SURFACES OF EMBEDDED METAL SEALS IN CONTACT WITH THE RUBBER SEALS SHALL NOT VARY MORE THAN 1/16" FROM POSITIONS SHOWN.
 4. PROVIDE SHIMS TO OBTAIN NECESSARY CLEARANCES.
 5. THE ROLLER BUSHING I.D. IS TO BE 1/32" GREATER THAN THE SHAFT SLEEVE O.D.
 6. OPTIONS ON EMBEDDED METAL SEALS ARE AS FOLLOWS:
(A) THE 3/8" THICK CORROSION RESISTING SEAL ANGLES MAY BE REPLACED WITH 1/2" THICK BENT CHROME CLAD PLATES.
(B) THE 5/8" THICK CORROSION RESISTING BOTTOM SEAL PLATES MAY BE REPLACED WITH 5/8" THICK CHROME CLAD PLATES.
(C) THE 1/2" THICK CORROSION RESISTING NEEDLE SILL PLATES MAY BE REPLACED WITH 1/2" THICK CHROME CLAD PLATES.
 7. ALL BOLTS, NUTS, AND WASHERS (EXCEPT THOSE NOTED AS CORR. RESIST. OR CRES. OR THOSE BOLTS AND NUTS FULLY EMBEDDED IN CONCRETE) SHALL BE GALVANIZED.
 8. SEE SPECIFICATIONS FOR QUALITY OF FINISH REQUIRED BY SYMBOLS.
 9. FURNISH AND INSTALL ONE VERTICAL LIFT GATE, AS SHOWN ON THIS DRAWING AND DWG. NO. 4/2.
 10. AT THE OPTION OF THE CONTRACTOR, 5/8" x 6 3/8" OR EQUAL ANCHOR STUDS MAY BE GENERALLY SUBSTITUTED FOR 2" x 3/8" ANCHOR BARS. HOWEVER, SPECIFIC APPROVAL OF THE SUBSTITUTION FOR EACH INDIVIDUAL EMBEDDED ITEM IS REQUIRED PRIOR TO FABRICATION.
 11. SPACE ALL BOLTS CONNECTING RUBBER SEAL ASSEMBLIES TO THE GATE SUCH THAT BOLTS FALL ON THE GAGE LINE OF THE FRAMING MEMBERS +1/4". BEVEL WASHERS SHALL BE FURNISHED AT BOLTED CONNECTIONS TO ALL CHANNEL FLANGES. ALL BOLTS SHALL BE FURNISHED WITH ONE NUT AND WASHER, UNLESS OTHERWISE INDICATED.
 12. ALL GALVANIZED ITEMS SHALL BE GALVANIZED AFTER FABRICATION.
 13. AT THE OPTION OF THE CONTRACTOR, RUBBER SEAL CORNERS MAY BE (1) STANDARD HOULED CORNERS, (2) CORNERS SPLICED, CAREFULLY FITTED, AND VULCANIZED BY THE RUBBER SEAL MANUFACTURER.
 14. PROVIDE A SEPARATE 1/4" Ø 1-P.S. CRES. GREASE LINE FROM EACH ROLLER TO TOP OF GATE. AT TOP OF GATE PROVIDE BOTTOM HEAD GREASE FITTING FOR EACH LINE.
 15. 3/8" SKIN PLATE TO BE ATTACHED TO FRAME MEMBERS WITH CONTINUOUS 1/4" FILLET WELDS ON BOTH SIDES OF EACH CONTACT FLANGE AND STIFFENER PLATES.
 16. 10" O.D. ROLLERS ARE TO HAVE A 12" O.D. RIM AS SHOWN IN THE "GATE RECESS" DETAIL. WHERE A RIM IS INDICATED IN THE "GATE ELEVATION", ALL OTHER ROLLER ARE NOT TO HAVE A RIM OR FILLET.
 17. POSITION INDICATOR IS REQUIRED ON THE ABUTMENT AT THE LOCATION SHOWN ON DRAWING NUMBER 2/1, FOR POSITION INDICATOR AND POSITION MARKER DETAILS. SEE DRAWING NUMBER 5/6.
 18. CAST STEEL MAY BE SUBSTITUTED FOR DUCTILE IRON. MATERIAL SHALL CONFORM TO ASTM A 148, CLASS 60-50.
 19. SHAFTS, EXCEPT CRES., SHALL BE SAE 1045 OR BETTER.
 20. VERTICAL LIFT GATE WILL BE PAID FOR UNDER BID ITEM NO. 9, "VERTICAL LIFT GATE".
 21. ALL TYPE 304 STAINLESS STEEL BOLTS SHALL HAVE TYPE 304 STAINLESS STEEL WASHERS AND NUTS MADE FROM NITRONIC 60 STAINLESS STEEL.

GRAPHIC SCALES

"A" 2' 1' 0' 2' 4'

"B" 1' 5' 0' 1' 2'

"C" 5' 3' 6' 9' 1'

AS-BUILT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE

VERTICAL LIFT GATE
ELEVATION AND DETAILS

RECORD DRAWING NOTE
"Shall be," "Provide," "Install," "Remove," etc., indicates work was accomplished under the contract.

DATE: 4/1
SCALE AS SHOWN
DRAWN BY: D.H.S.
CHECKED BY: J.W.B.
DATE: 4/1
SHEET 12

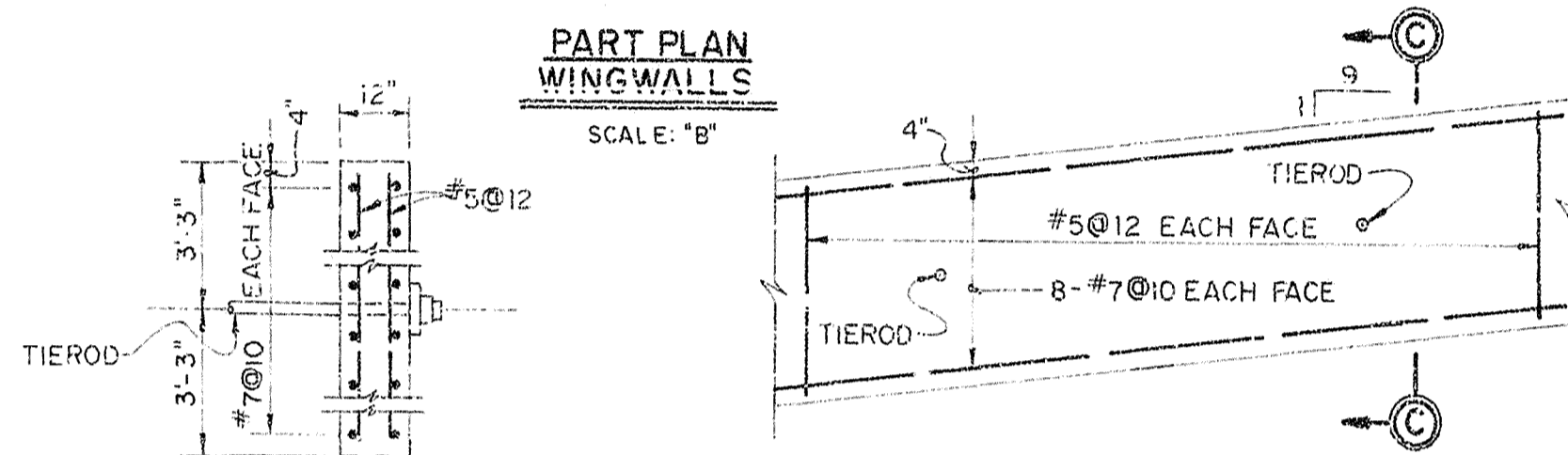
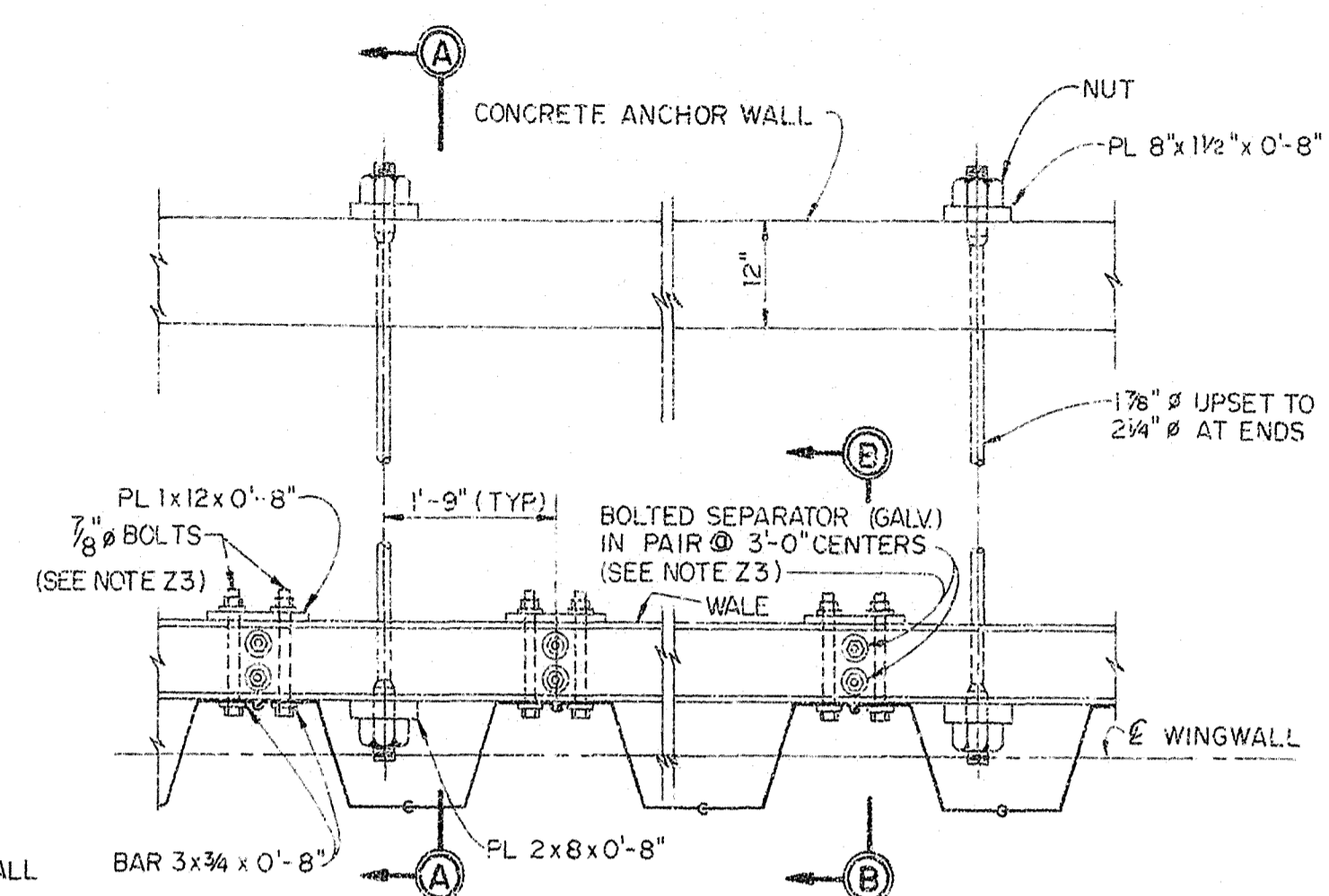
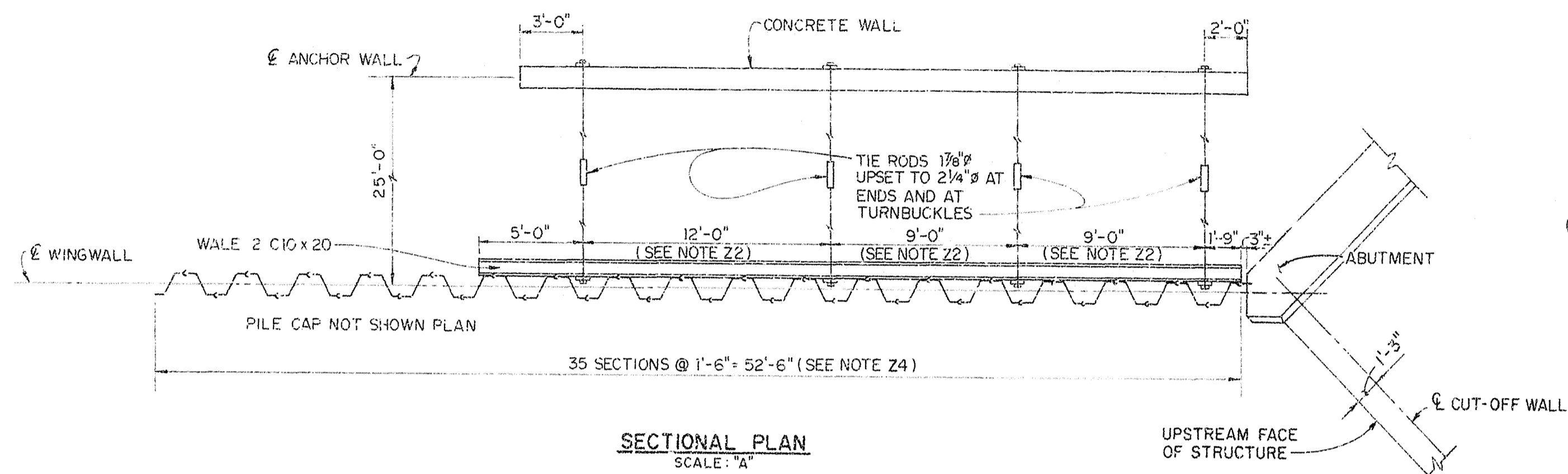
D.O. FILE NO. 499-34-013
490-36,389

SAFETY ON THIS JOB
DEPENDS ON YOU

REVISIONS		DATE	APPROVED
NO.	SYMBOL	DESCRIPTION	

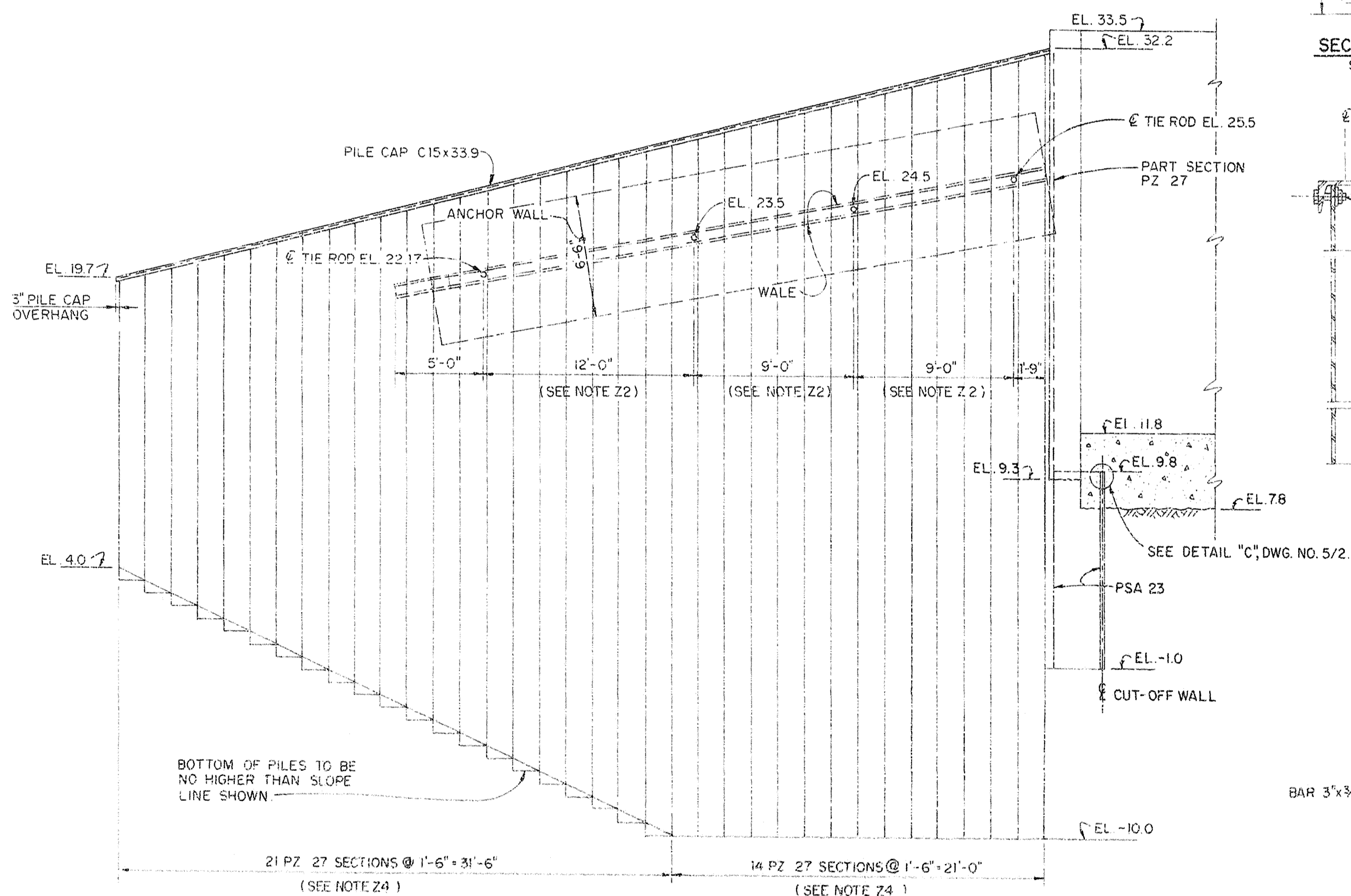
NOTES:

1. ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED UNLESS SPECIFIED OTHERWISE. ALL BOLTS SHALL BE FURNISHED WITH ONE NUT AND WASHER, UNLESS OTHERWISE INDICATED.
2. ALL STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO ASTM A 36.
3. ALL GALVANIZED ITEMS SHALL BE GALVANIZED AFTER FABRICATION.
4. WINGWALL STEEL SHEET PILING, STEEL PILE CAPS AND WALES SHALL BE PAINTED IN ACCORDANCE WITH THE SPECIFICATIONS.
5. OTHER S.S.P. SECTIONS MAY BE USED IN THE WINGWALLS IF THEIR NOMINAL THICKNESS IS EQUAL TO OR GREATER THAN 0.355 IN. AND THEIR SECTION MODULUS PER LIN. FT. OF WALL IS EQUAL TO OR GREATER THAN 30.2 IN³.

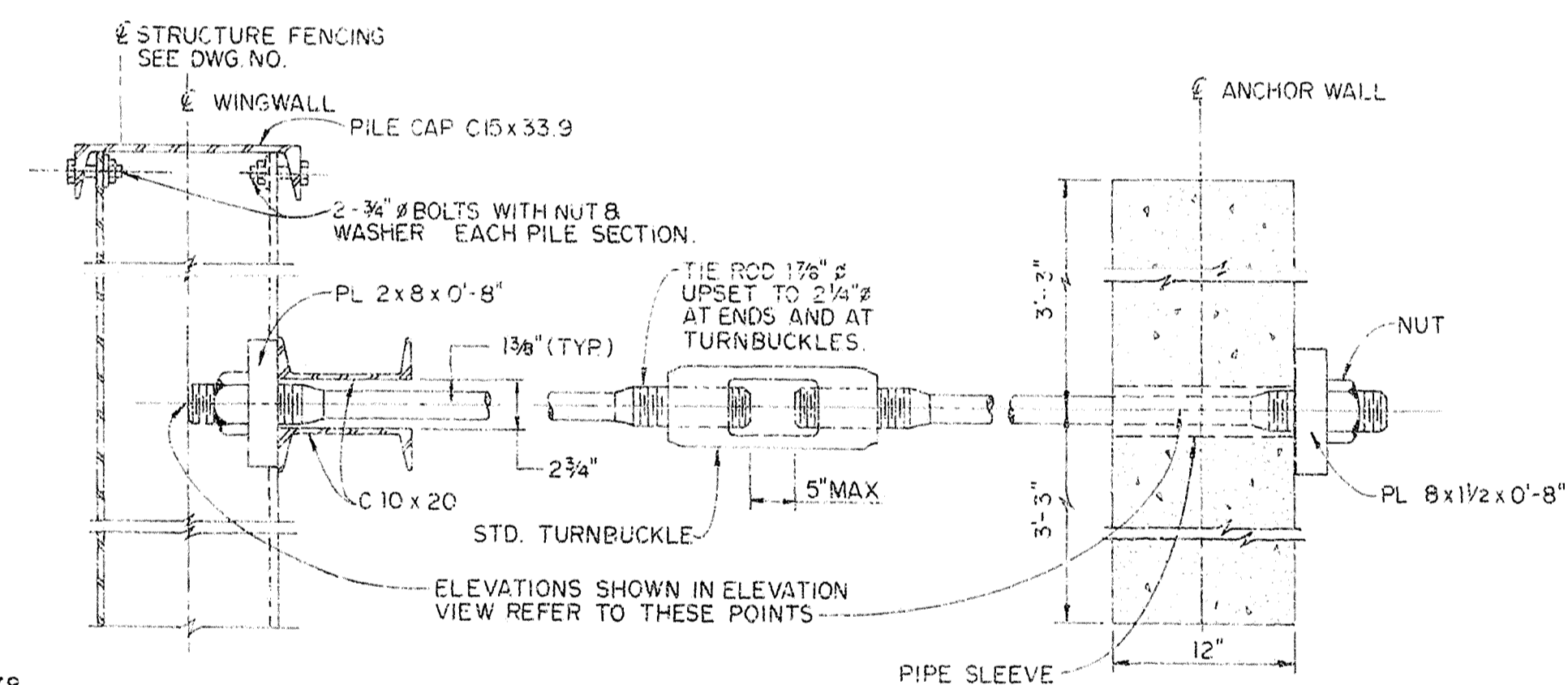


SECTION C-C
SCALE: 'C'

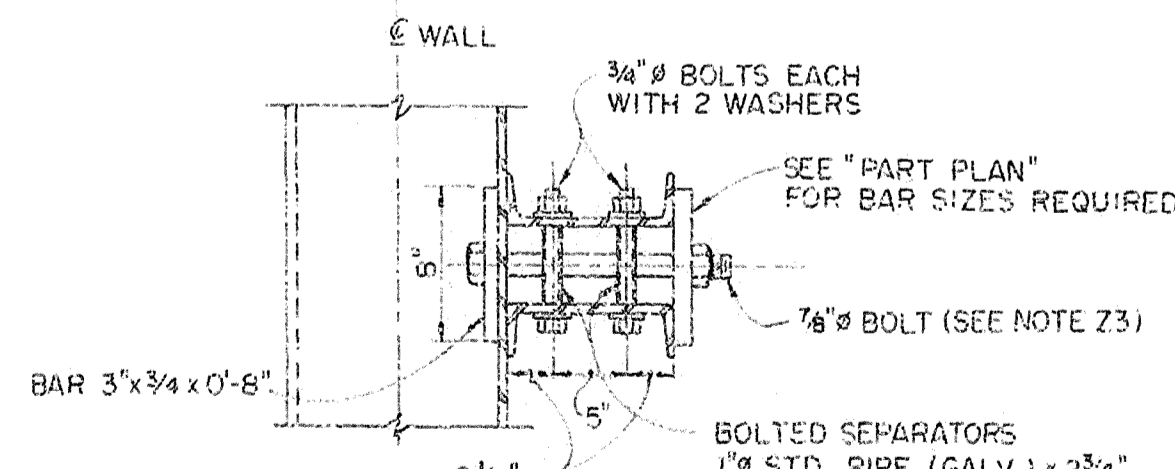
PARTIAL ELEVATION-ANCHOR WALL
SCALE: 'A'



SECTIONAL ELEVATION
WINGWALLS
SCALE: 'A'
4 REQUIRED



SECTION A-A
NOT TO SCALE

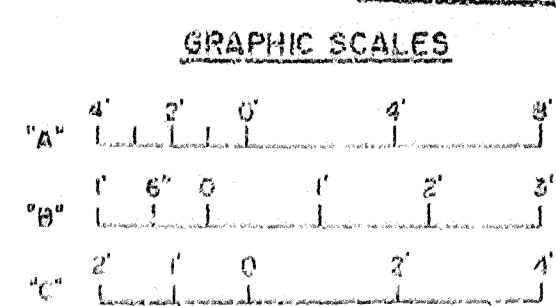


SECTION B-B
NOT TO SCALE

CHANGES TO USE Z PILE SECTION:

21. SOLD-FORMED SHEET PILING MAY BE USED INSTEAD OF PZ 27 SHOWN. THE DETAILS SHOWN HERE WILL REQUIRE CHANGES TO ACCOMMODATE THE PILING CHANGE.
22. DECREASE TIEROD SPACING OF 9'-0" TO 8'-0". MAINTAIN TIEROD SPACING OF 12'-0". MAINTAIN 36'-9" LONG WALE.
23. INCREASE SPACING OF BOLTED SEPARATORS TO 4'-0" CENTERS. INCREASE DIAMETER OF 7/8" BOLTS TO 1".
24. DECREASE LENGTH OF EACH WINGWALL TO 50'-0".

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.



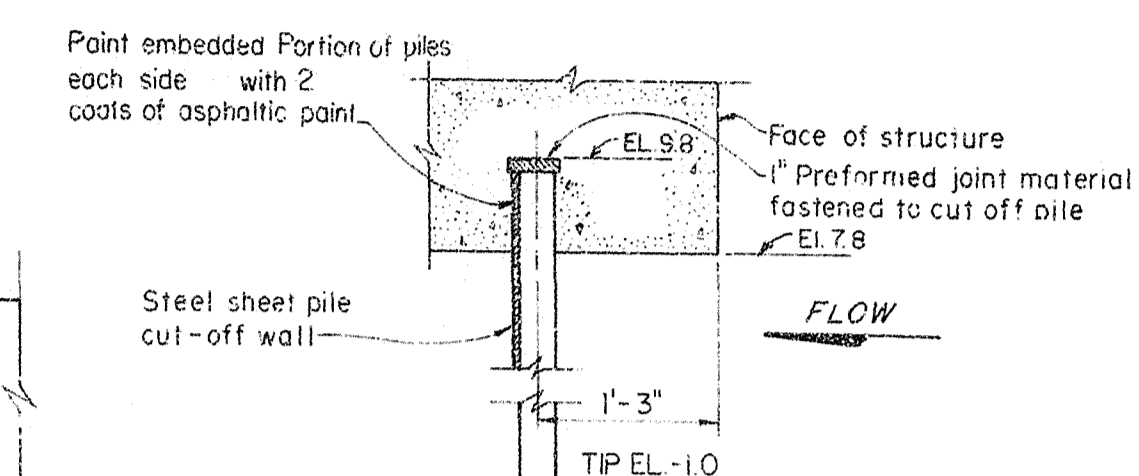
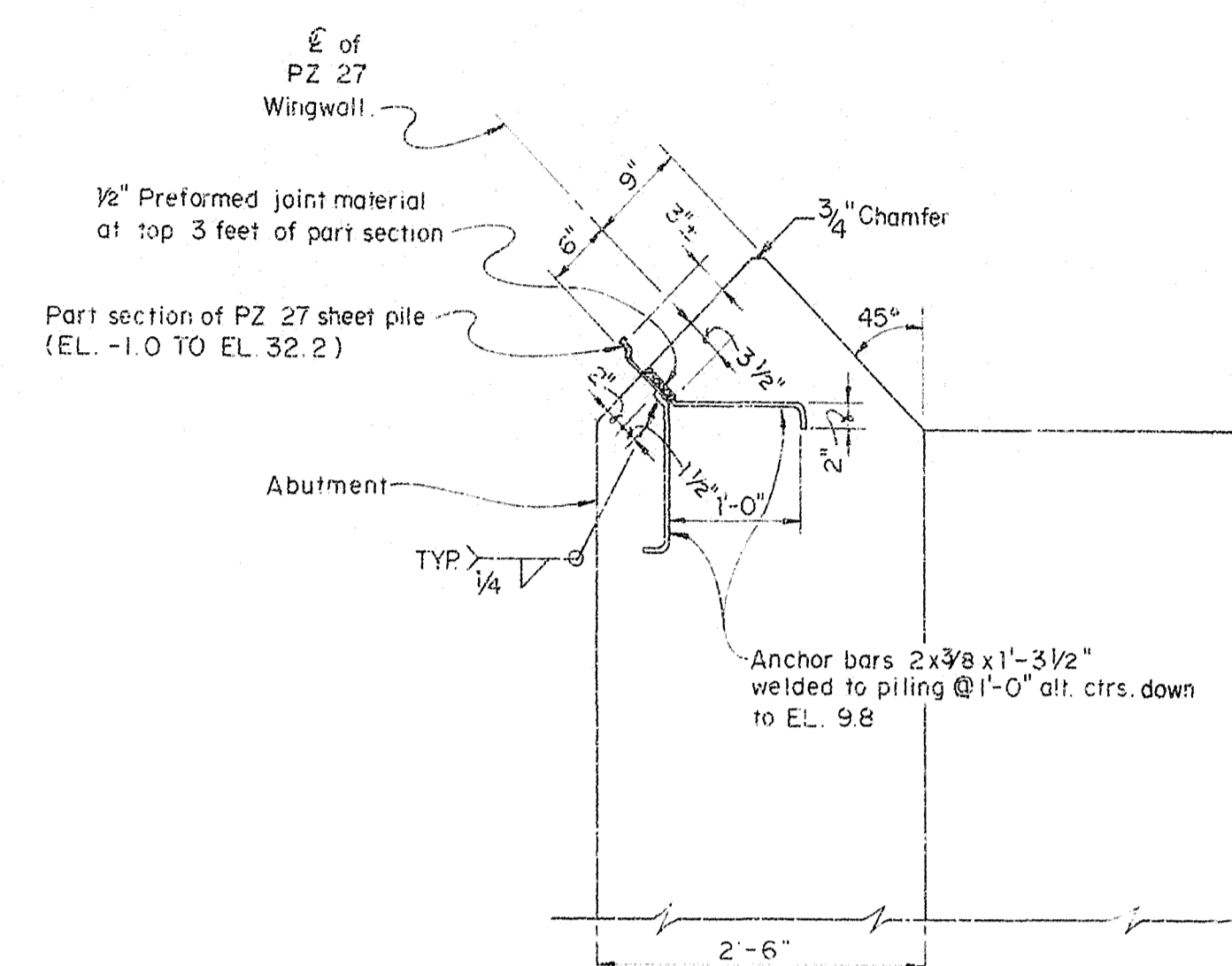
AS-BUILT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE
METALS AND MISCELLANEOUS
WINGWALLS

DESIGNED BY	CHS	CHECKED BY	JND
DATE	10/1/84	DATE	10/1/84
SCALE	AS SHOWN	DATE	10/1/84
SHEET	14	SHEET	14

D. O. FILE NO. 490-36-389

490-36,389



DETAIL "A"-AS SHOWN
SCALE: "A"

DETAIL "C"
NOT TO SCALE
FOR LOCATION, SEE DWG. NO. 5/1

OTHER S.S.P. SECTIONS MAY BE USED IN THE CUT-OFF WALL IF THEIR NOMINAL THICKNESS IS EQUAL TO OR GREATER THAN 0.1644 IN. (8 GAGE).

AS-BUILT

GRAPHIC SCALES

"A" 1' 5' 0 1' 2'

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc. Indicates
work was accomplished under
the contract.

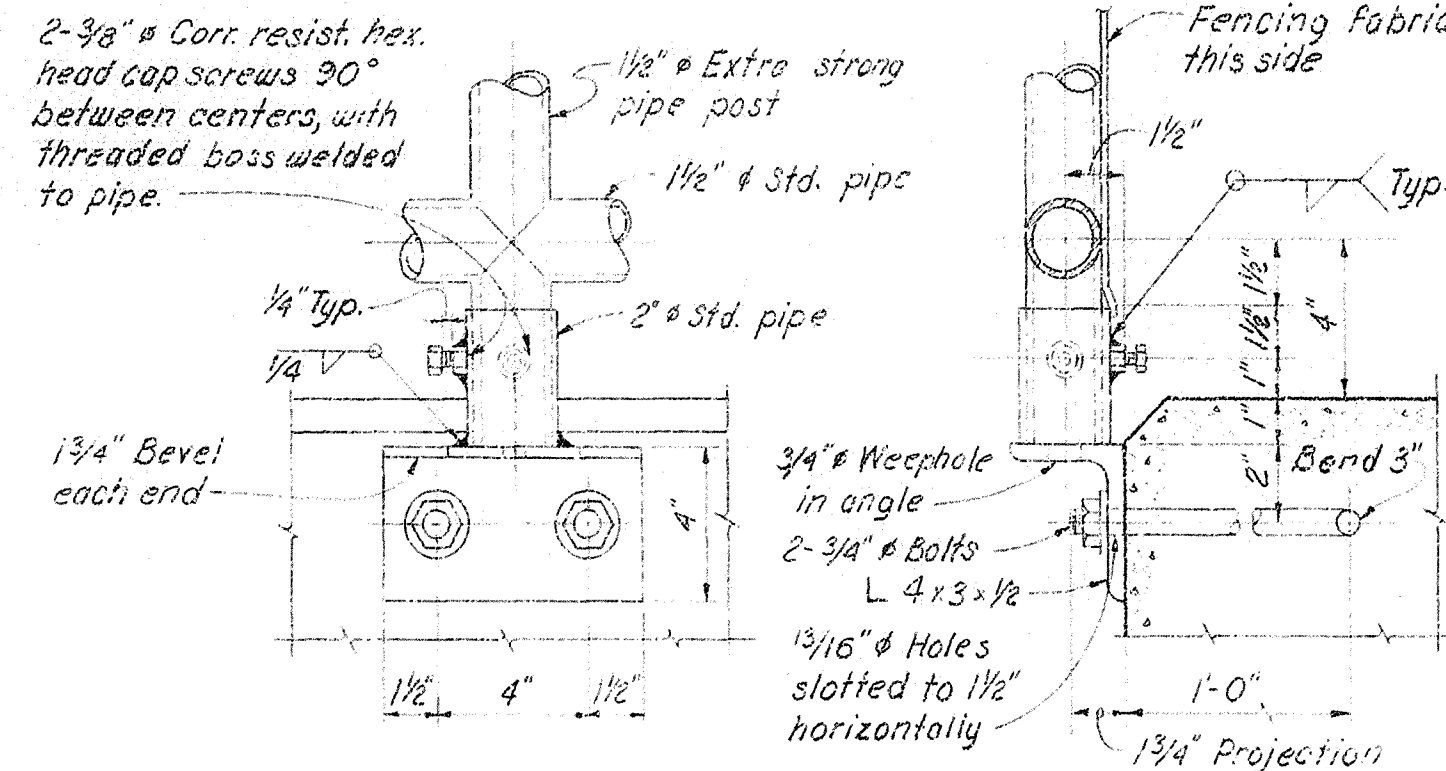
JND		JND		JND	
CBM		DNG		DNG	
EER		EER		EER	
DATE		DATE		DATE	
SCALE		SCALE		SCALE	
AS SHOWN		AS SHOWN		AS SHOWN	
DATE		DATE		DATE	
JULY 1968		JULY 1968		JULY 1968	
SHEET		SHEET		SHEET	
15		15		15	

D. O. FILE NO. ~~490-34,813~~
490-36,389

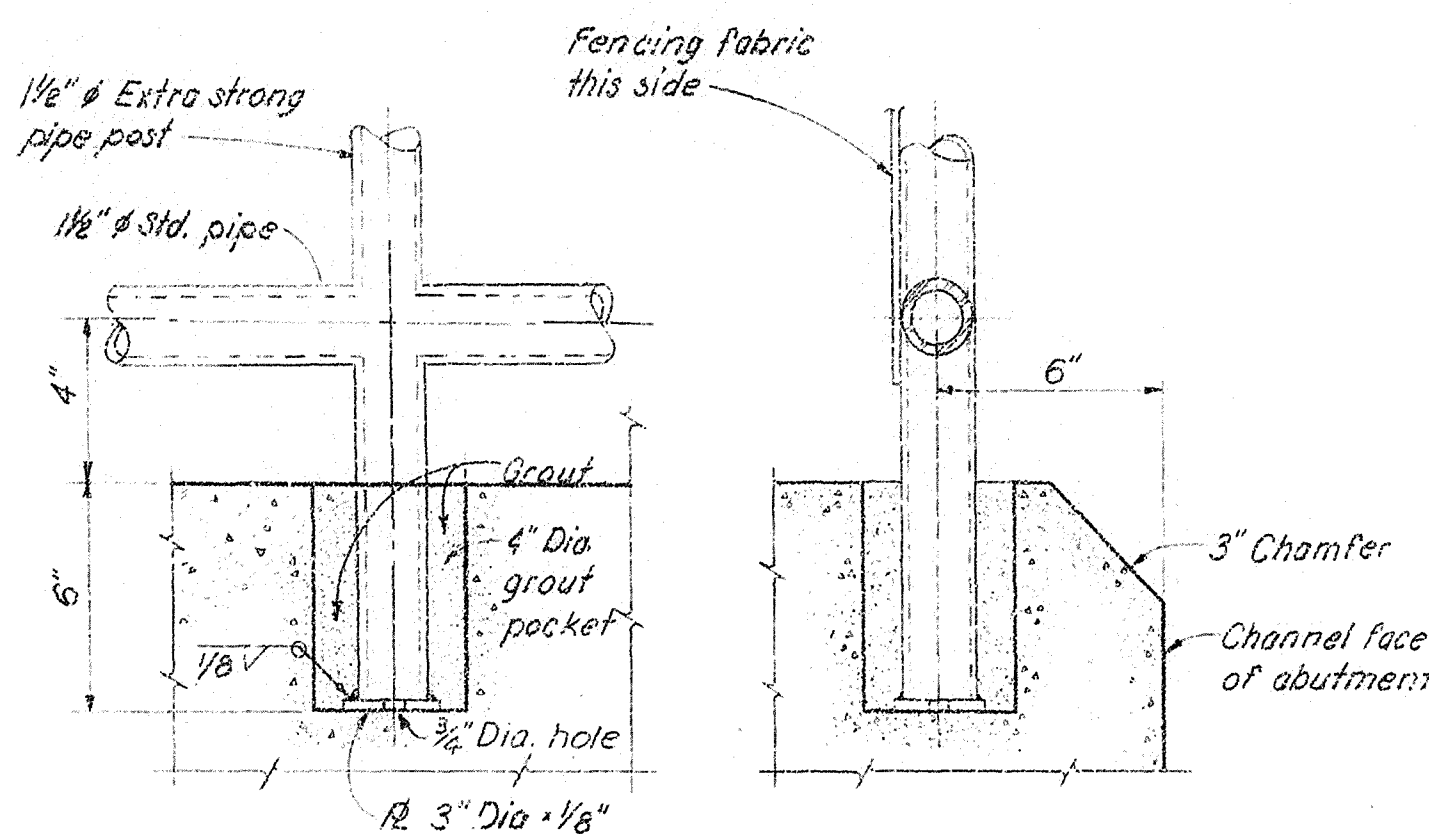
FENCE TYPE	FENCING FABRIC SCHEDULE		
	TOP SELVAGE	BOTTOM SELVAGE	FABRIC HEIGHT
"A"	BARBED	BARBED	72"
"B"	BARBED	BARBED	72"
"C"	BARBED	BARBED	72"
SECURITY FENCING	BARBED	BARBED	72"

SAFETY ON THIS JOB
DEPENDS ON YOU

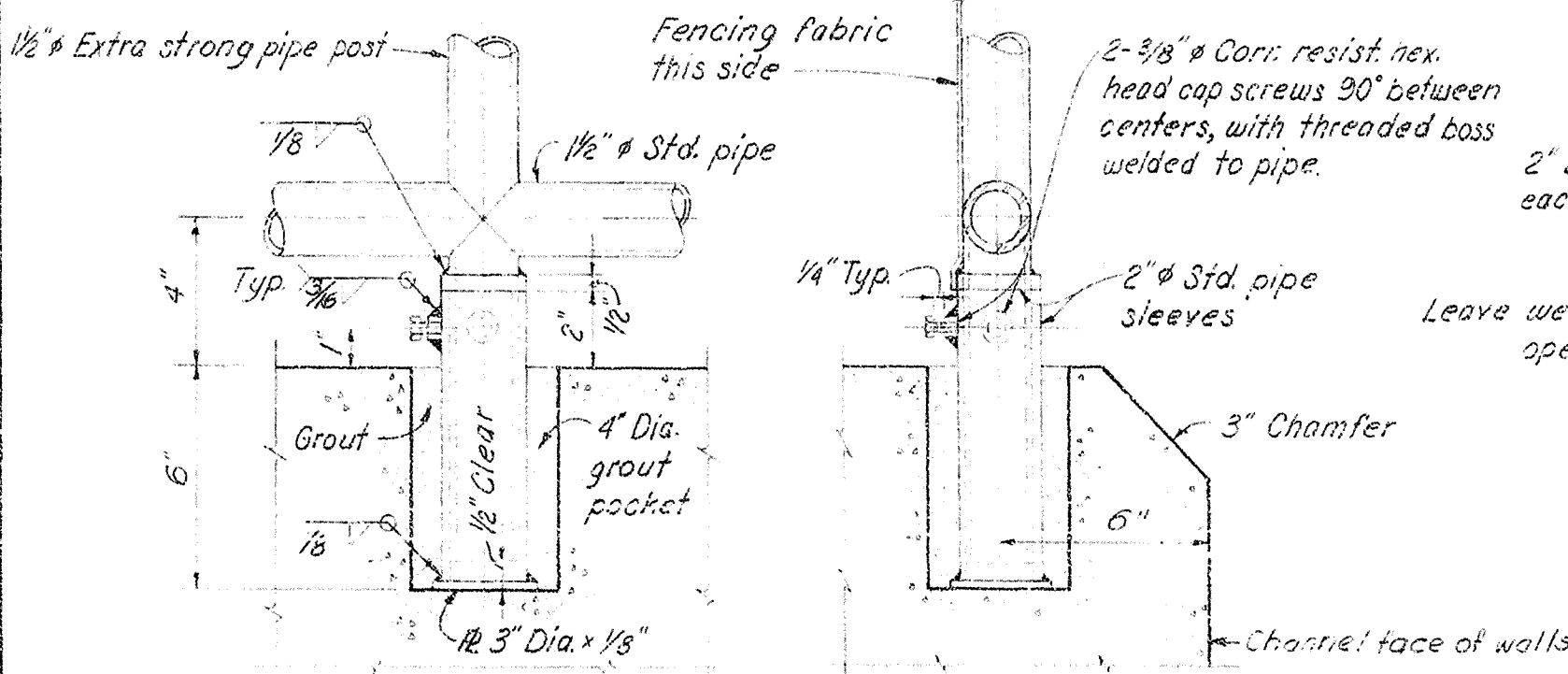
REVISIONS			
NO.	SYN.	DESCRIPTION	DATE
1	A	REVISED TO CONFORM TO AMENDMENT NO. 0001.	5/15/88
2	B		
3	C		
4	D		
5	E		
6	F		
7	G		
8	H		
9	I		
10	J		



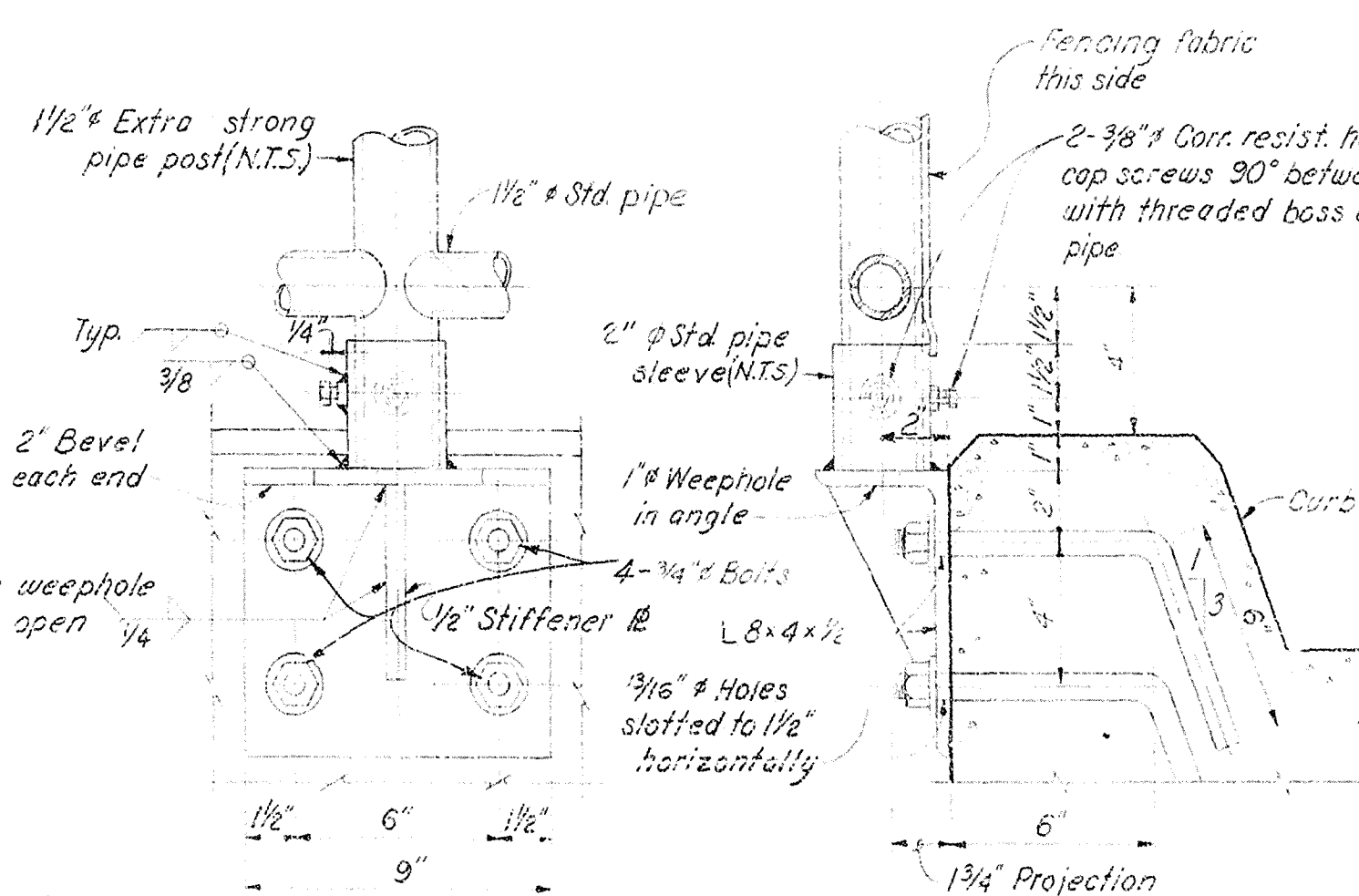
DETAIL "A"
SCALE "B"



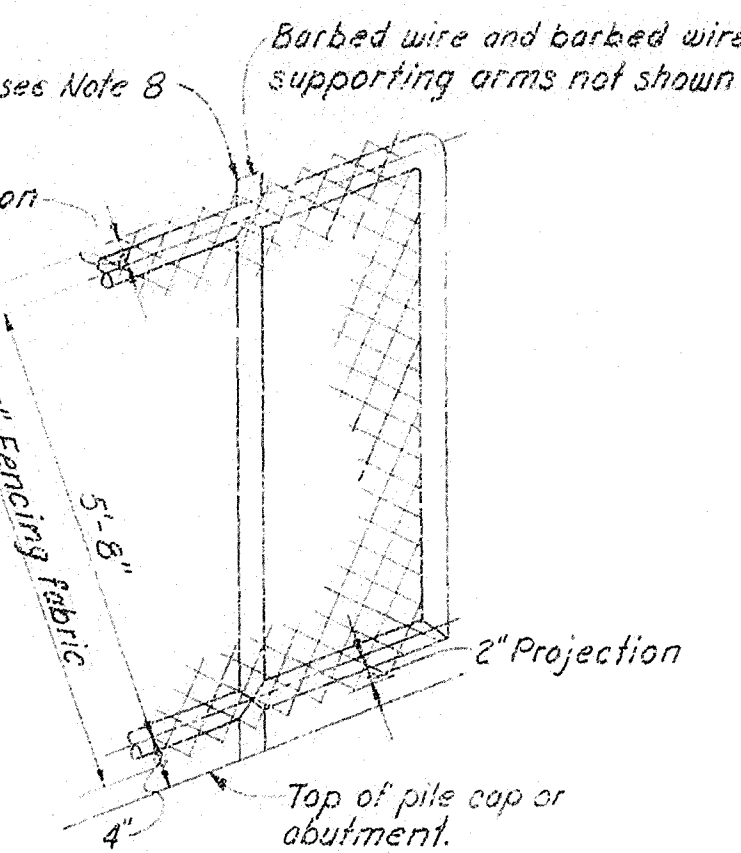
DETAIL "C"
SCALE "B"



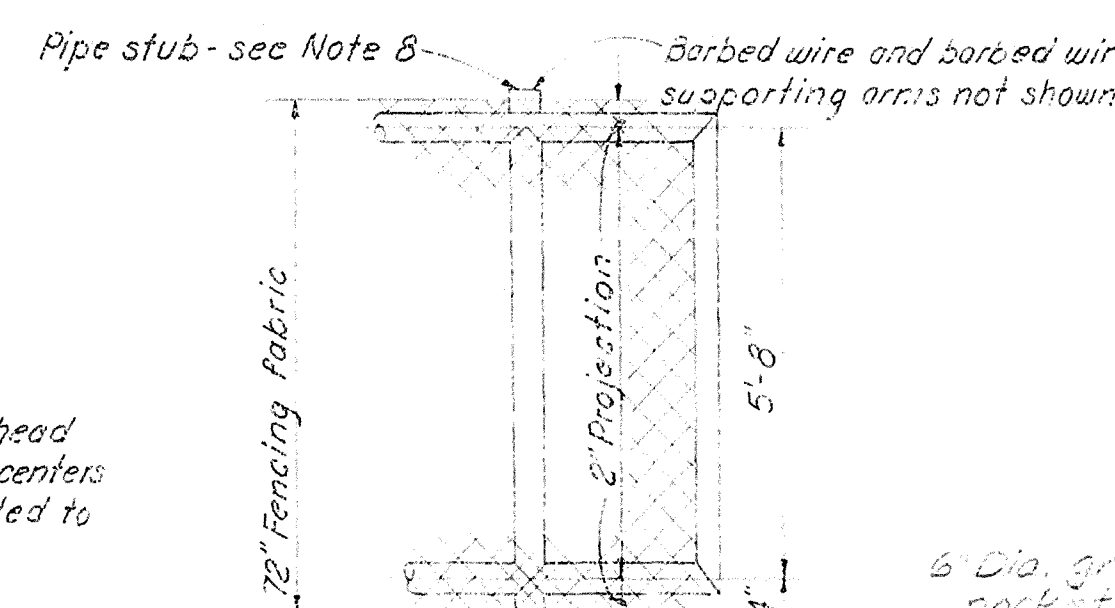
DETAIL "B"
SCALE "B"



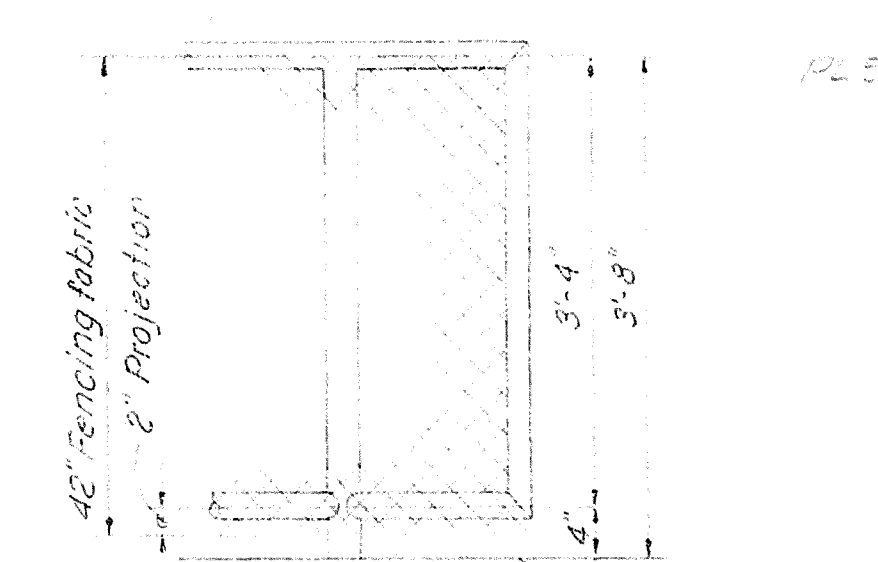
DETAIL "D"
SCALE "B"



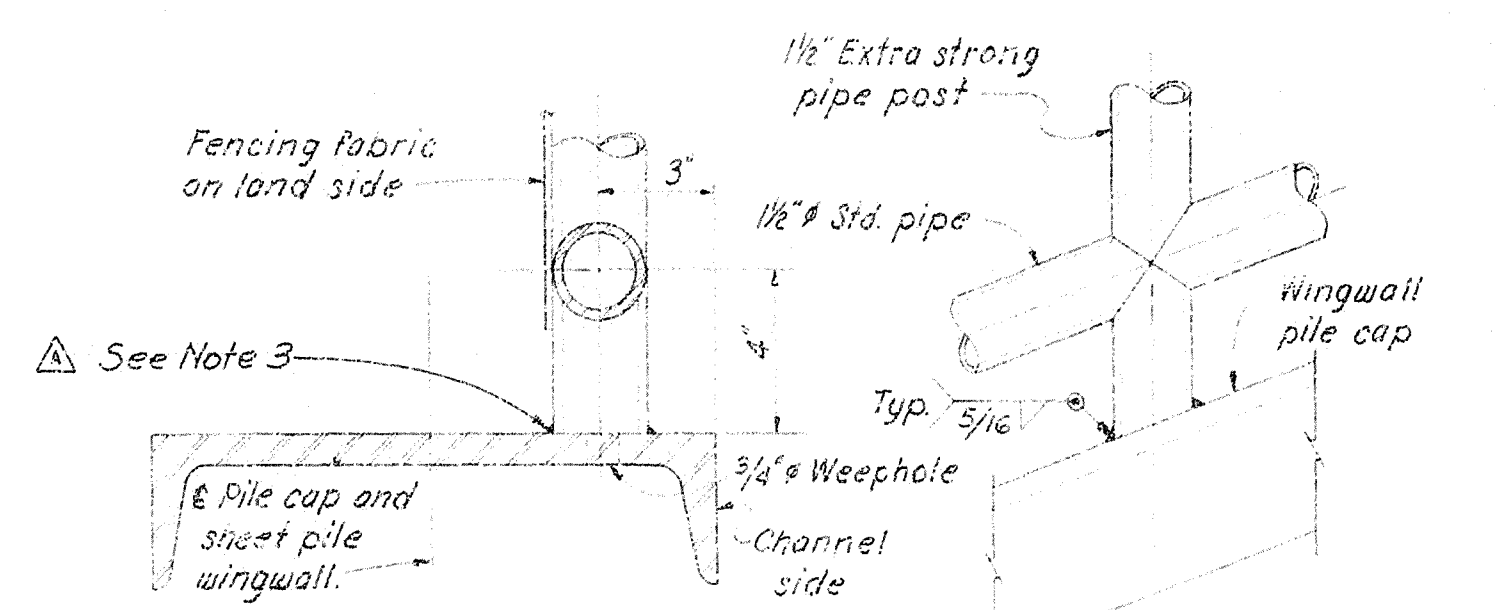
ELEVATION
NO SCALE
(TYPE "A")



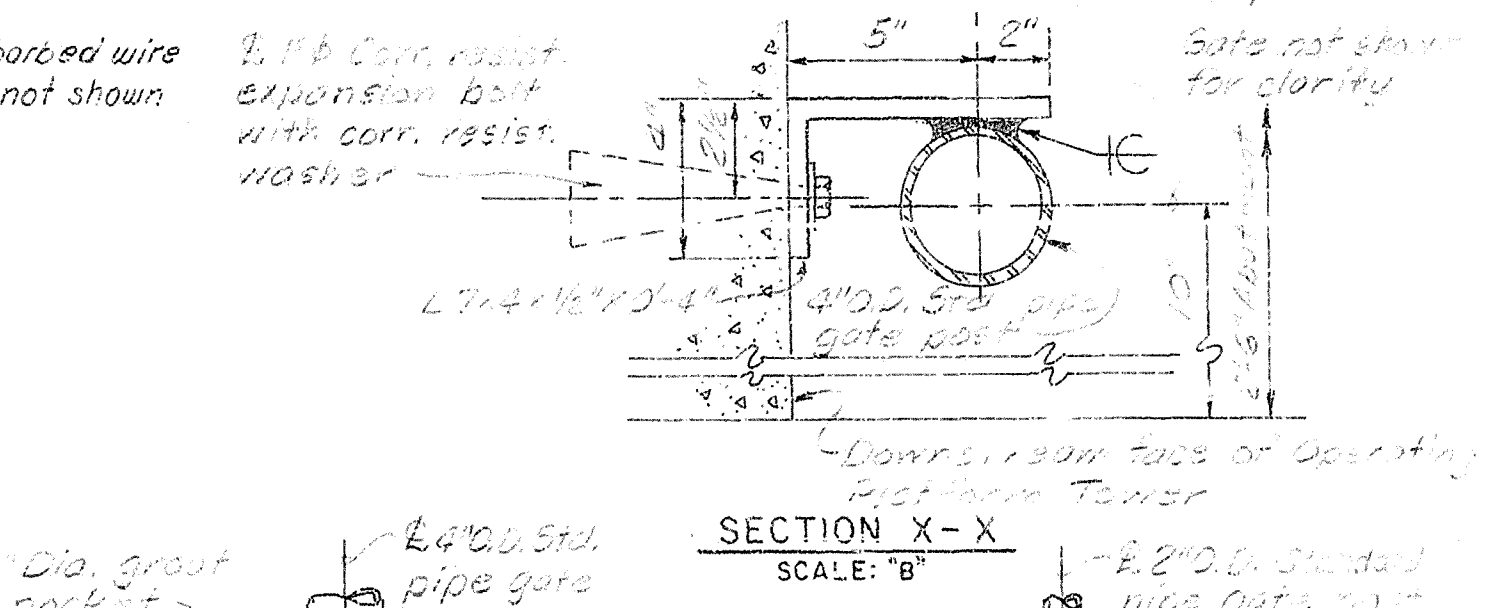
ELEVATION
NO SCALE
(TYPE "B")



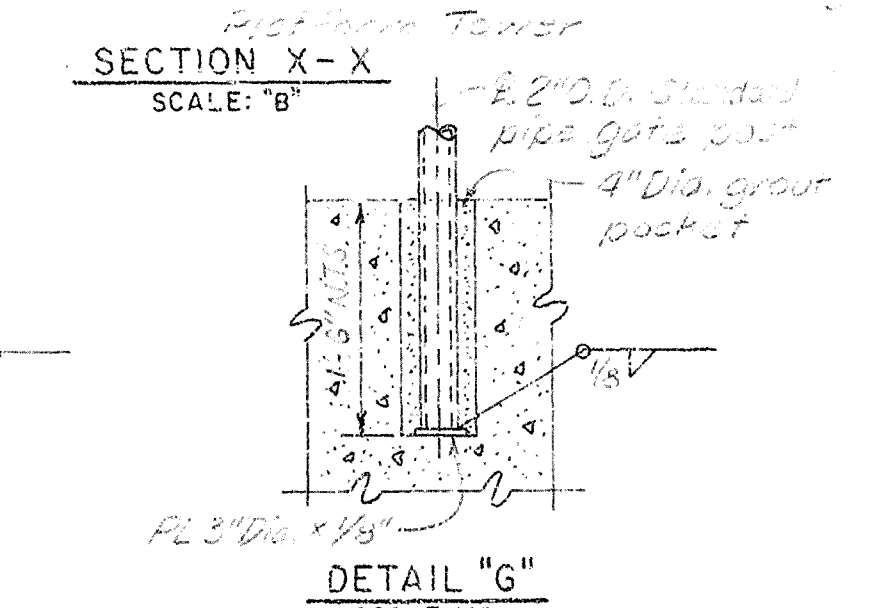
ELEVATION
NO SCALE
(TYPE "C")



DETAIL "E"
SCALE "B"



DETAIL "F"
SCALE "A"

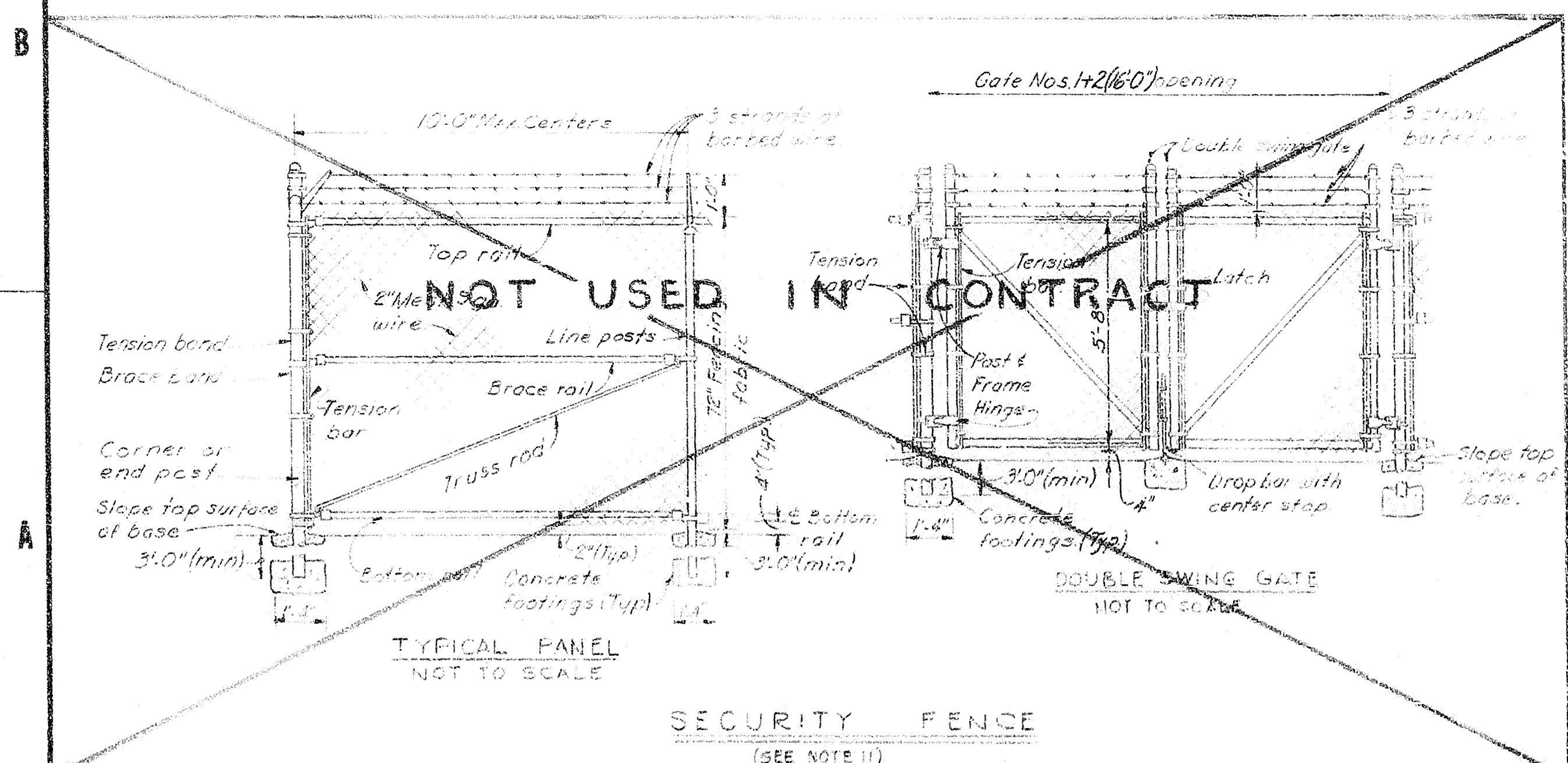


DETAIL "G"
SCALE "A"

FENCING NOTES:

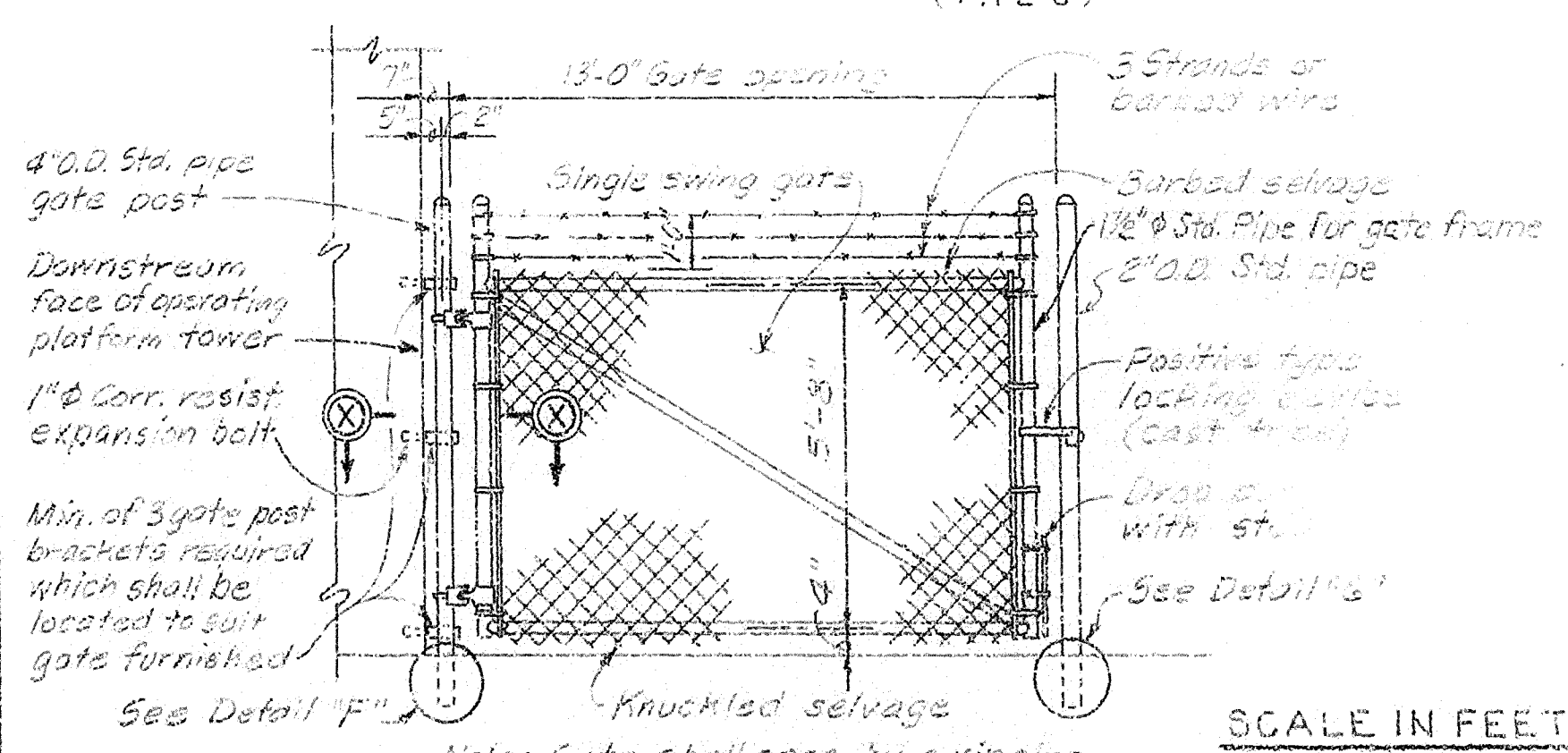
1. ALL FENCING POSTS, RAILS, CONNECTIONS AND FENCING FABRIC SHALL BE GALVANIZED.
2. ALL GALVANIZED ITEMS SHALL BE GALVANIZED AFTER FABRICATION.
3. WHERE GALVANIZED ITEMS LOSE THEIR COATING DUE TO FIELD WELDING OR CHIPPING, GALVANIZING REPAIRS SHALL BE MADE IN ACCORDANCE WITH THE SPECIFICATIONS.
4. STRUCTURE FENCING POST & RAIL CONNECTIONS SHALL BE FLUSH-WELDED TYPE. WELDS SHALL BE GRIND SMOOTH.
5. ALL MATERIAL NOTED AS CORR. RESIST. SHALL BE CORROSION RESISTING STEEL, TYPE 304 UNLESS SHOWN OR SPECIFIED OTHERWISE.
6. FOR "GENERAL WELDING NOTES," SEE DWG. NO. 4/1.
7. FOR TYPES "A", "B", & "C", FENCING, ALL POSTS SHALL BE 1 1/2" EXTRA STRONG PIPE AND ALL HORIZONTAL AND SLOPING PIPE SHALL BE 1 1/2" STANDARD PIPE.
8. WELD PIPE STUBS TO TOP RAIL AT EVERY POST LOCATION AND AT END OF RUNS WHERE NEEDED FOR BARBED WIRE SUPPORTING ARMS. STUB SIZE SHALL SUIT BARBED WIRE SUPPORTING ARM FURNISHED. THIS NOTE IS APPLICABLE TO STRUCTURE FENCING ONLY.
9. FOR LAYOUT OF STRUCTURE AND SECURITY FENCING, SEE DWG. NOS. 1/5 & 1/8.
10. FOR LOCATION OF SINGLE SWING GATE, SEE DWG. NO. 1/9.
11. ALL BOLTS, NUTS, AND WASHERS (EXCEPT THOSE NOTED AS CORR. RESIST.) BE GALVANIZED.
12. FENCE FABRIC SHALL BE ZINC-COATED OR ALUMINUM-COATED 9-GAUGE WIRE WOVEN IN A 2-INCH MESH. INSTALL FABRIC SIMILAR TO SECURITY FENCING.
13. SUPPORTING ARMS FOR BARBED WIRE SHALL POINT TOWARDS LAND, UNLESS OTHERWISE SHOWN.

STRUCTURE FENCING DETAILS

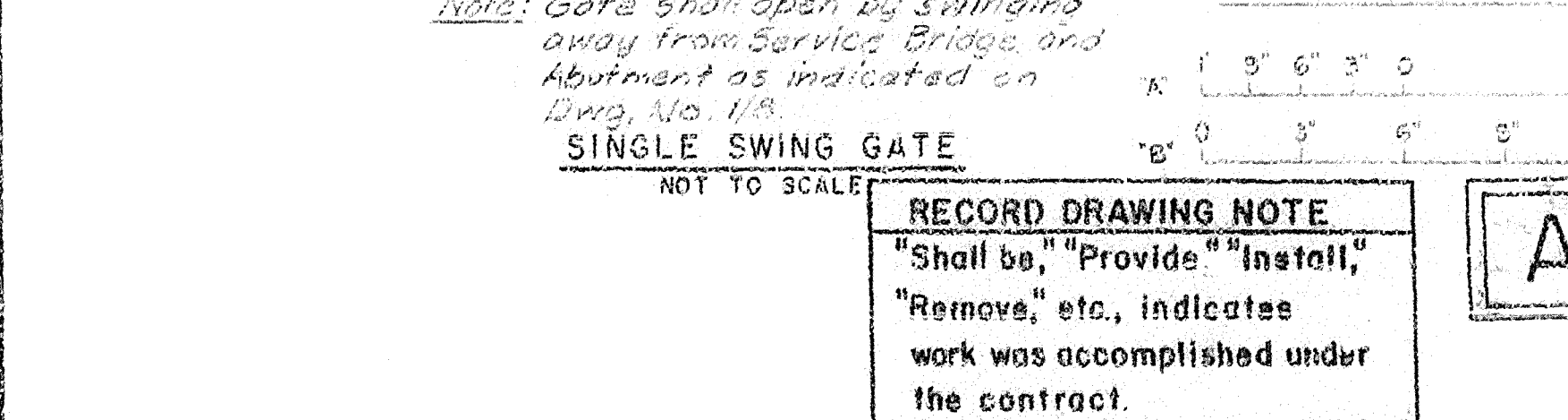


TYPICAL PANEL
NOT TO SCALE

SECURITY FENCE
(SEE NOTE 11)



DOUBLE SWING GATE
NOT TO SCALE

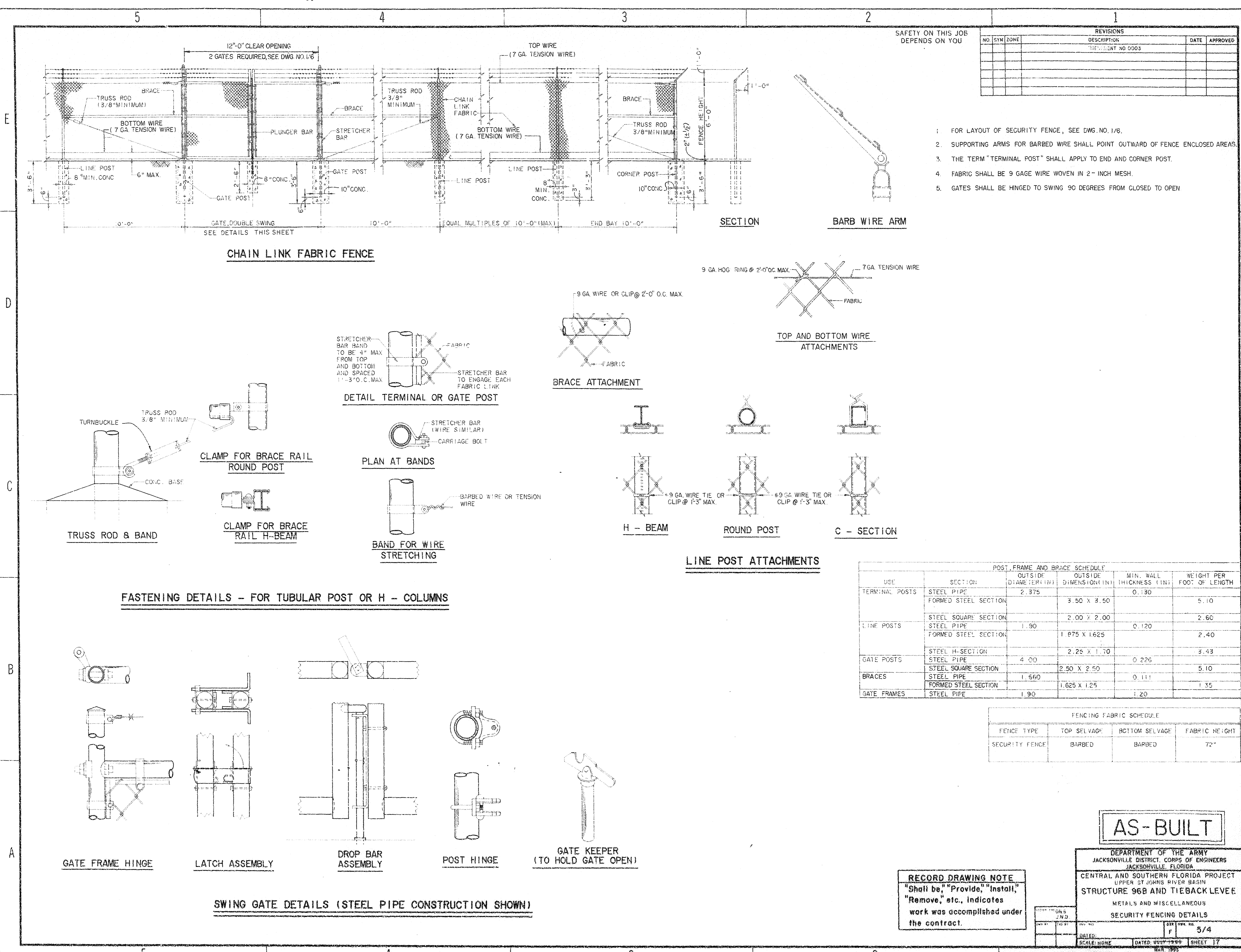


SINGLE SWING GATE
NOT TO SCALE

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.

AS-BUILT

DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA	
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHN'S RIVER BASIN	
STRUCTURE 96B AND TIEBACK LEVEE	
METALS AND MISCELLANEOUS FENCING DETAILS	
DRAWN BY: J.M.S. CHECKED BY: J.M.D.	DATE: 5/15/88
SCALE: AS SHOWN	SHEET: 16



REVISIONS				DATE	APPROVED
NO.	SYM.	ZONE	DESCRIPTION		

1. FOR LAYOUT OF SECURITY FENCE, SEE DWG. NO. 1/6.
2. SUPPORTING ARMS FOR BARBED WIRE SHALL POINT OUTWARD OF FENCE ENCLOSED AREAS.
3. THE TERM "TERMINAL POST" SHALL APPLY TO END AND CORNER POST.
4. FABRIC SHALL BE 9 GAGE WIRE WOVEN IN 2-INCH MESH.
5. GATES SHALL BE HINGED TO SWING 90 DEGREES FROM CLOSED TO OPEN.

CHAIN LINK FABRIC FENCE

SECTION

BARB WIRE ARM

9 GA. HOG RING @ 2'-0" O.C. MAX. 7 GA. TENSION WIRE

9 GA. WIRE OR CLIP @ 2'-0" O.C. MAX.

TOP AND BOTTOM WIRE ATTACHMENTS

BRACE ATTACHMENT

DETAIL TERMINAL OR GATE POST

PLAN AT BANDS

LINE POST ATTACHMENTS

FASTENING DETAILS - FOR TUBULAR POST OR H - COLUMNS

POST, FRAME AND BRACE SCHEDULE				
USE	SECTION	OUTSIDE DIAMETER (IN)	OUTSIDE DIMENSION (IN)	MIN. WALL THICKNESS (IN)
TERMINAL POSTS	STEEL PIPE	2.375	3.50 X 3.50	0.130
	FORMED STEEL SECTION			
LINE POSTS	STEEL SQUARE SECTION	1.90	2.00 X 2.00	0.120
	FORMED STEEL SECTION		1.875 X 1.625	
GATE POSTS	STEEL H-SECTION	4.00	2.25 X 1.70	0.225
	STEEL PIPE		2.50 X 2.50	
BRACES	STEEL SQUARE SECTION	1.560	1.625 X 1.25	0.111
	FORMED STEEL SECTION			
GATE FRAMES	STEEL PIPE	1.90		1.20

FENCING FABRIC SCHEDULE			
FENCE TYPE	TOP SELVAGE	BOTTOM SELVAGE	FABRIC HEIGHT
SECURITY FENCE	BARBED	BARBED	72"

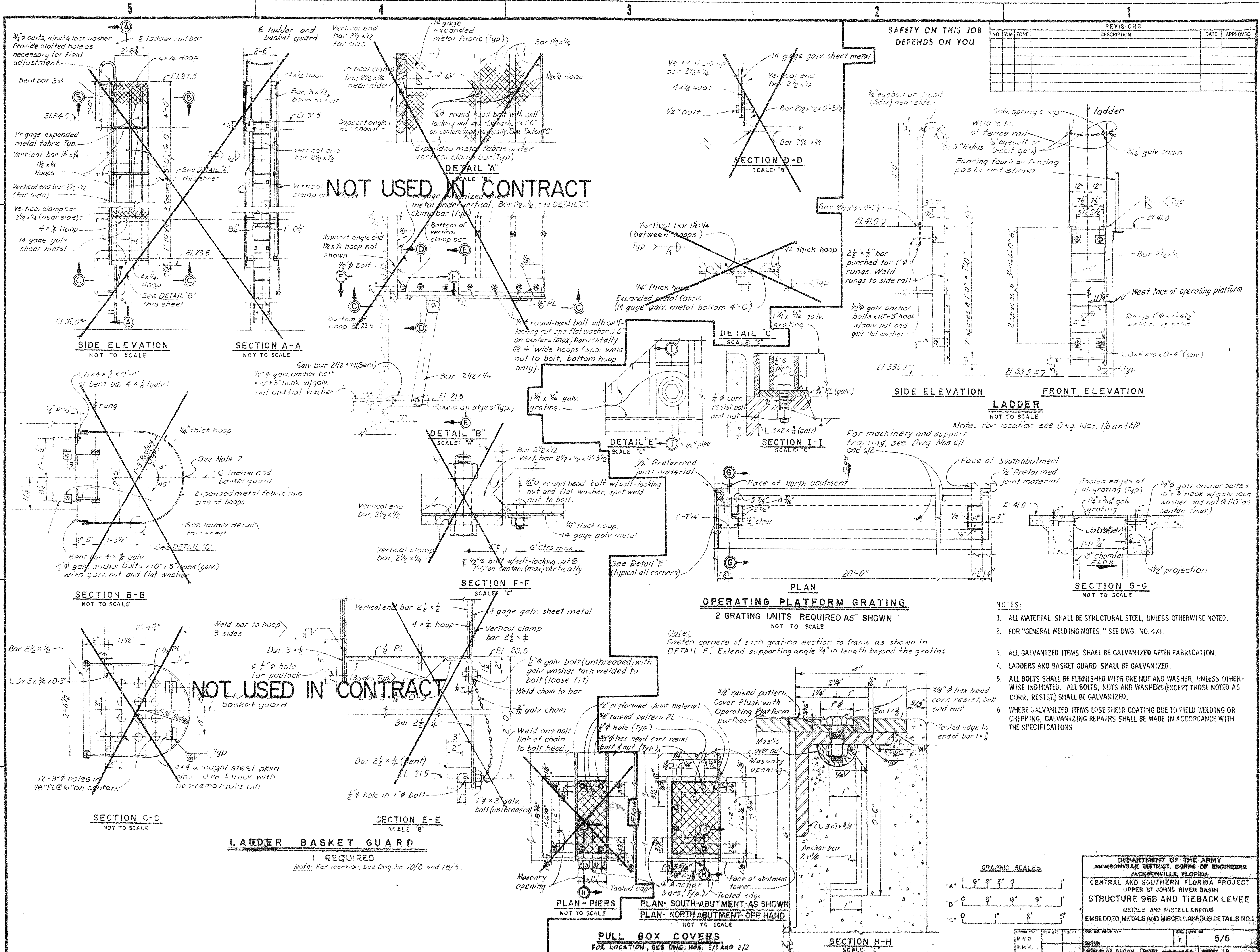
AS-BUILT

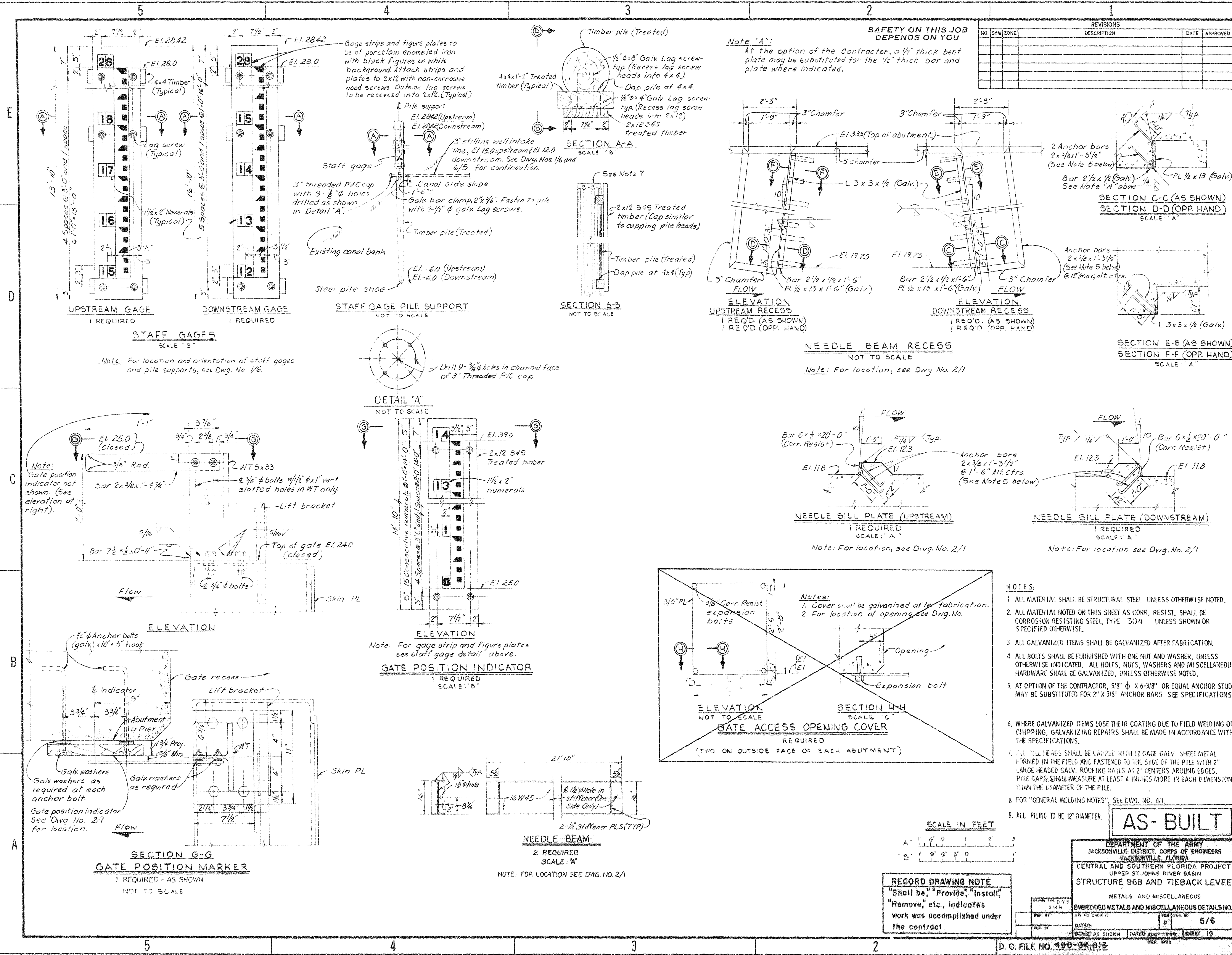
RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 968 AND TIEBACK LEVEE
METALS AND MISCELLANEOUS
SECURITY FENCING DETAILS

DATE: JULY 1988
SCALE: NONE
SHEET 17

5/4

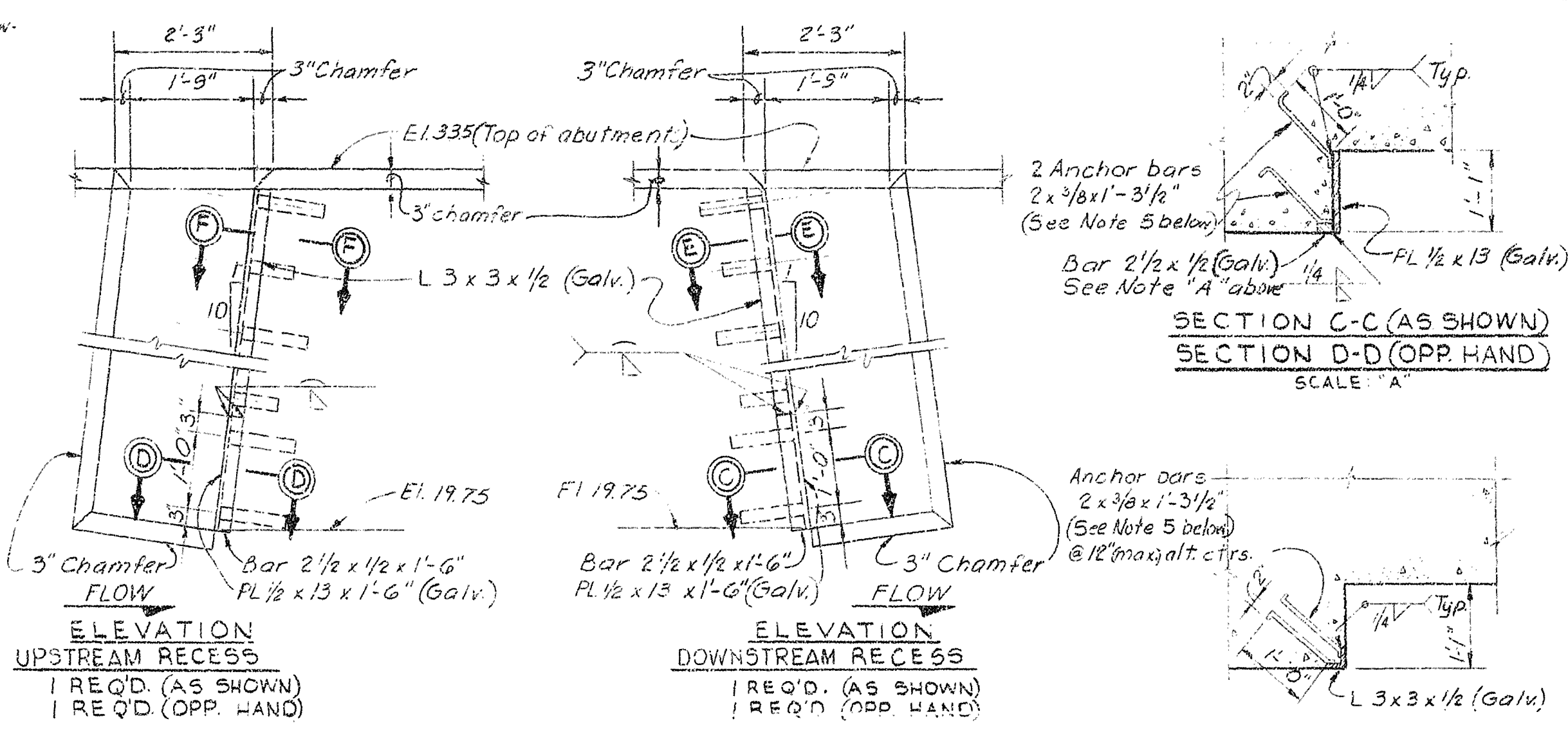
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REVISIONS			
NO.	SYM.	ZONE	DESCRIPTION

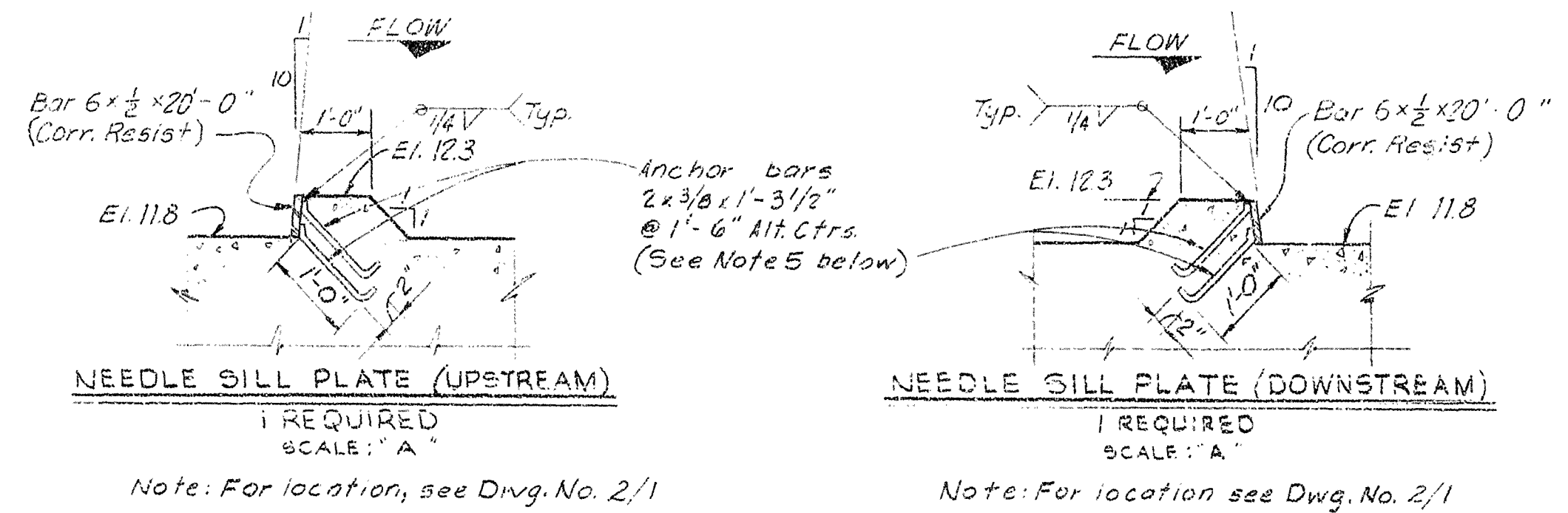
SAFETY ON THIS JOB DEPENDS ON YOU

Note "A": At the option of the Contractor, a 1/2" thick bent plate may be substituted for the 1/2" thick bar and plate where indicated.



NEEDLE BEAM RECESS
NOT TO SCALE

Note: For location, see Dwg. No. 2/1

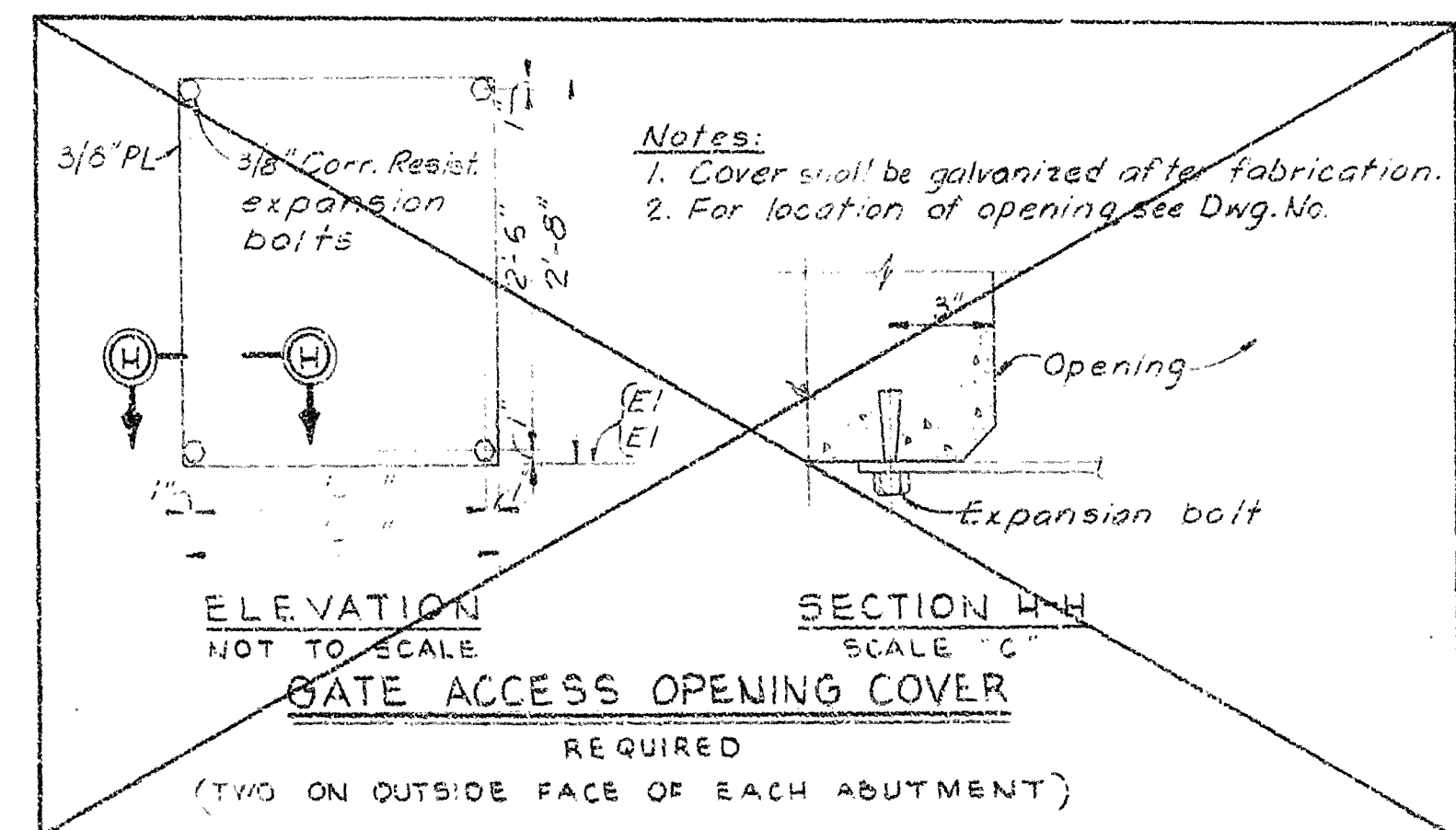


NEEDLE SILL PLATE (UPSTREAM)
1 REQUIRED
SCALE: "A"

Note: For location, see Dwg. No. 2/1

NEEDLE SILL PLATE (DOWNSTREAM)
1 REQUIRED
SCALE: "A"

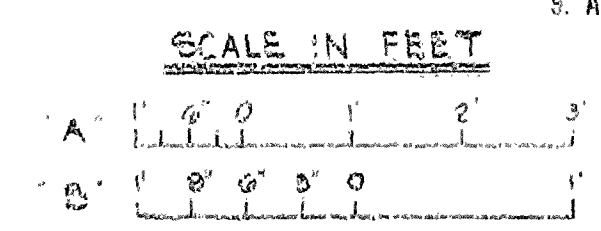
Note: For location see Dwg. No. 2/1



GATE ACCESS OPENING COVER
REQUIRED
(TWO ON OUTSIDE FACE OF EACH ABUTMENT)

Notes:
1. Cover shall be galvanized after fabrication.
2. For location of opening see Dwg. No. 2/1

- NOTES:**
1. ALL MATERIAL SHALL BE STRUCTURAL STEEL, UNLESS OTHERWISE NOTED.
 2. ALL MATERIAL NOTED ON THIS SHEET AS CORR. RESIST. SHALL BE CORROSION RESISTING STEEL, TYPE 304 UNLESS SHOWN OR SPECIFIED OTHERWISE.
 3. ALL GALVANIZED ITEMS SHALL BE GALVANIZED AFTER FABRICATION.
 4. ALL BOLTS SHALL BE FURNISHED WITH ONE NUT AND WASHER, UNLESS OTHERWISE INDICATED. ALL BOLTS, NUTS, WASHERS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED, UNLESS OTHERWISE NOTED.
 5. AT OPTION OF THE CONTRACTOR, 5/8" ϕ X 6-3/8" OR EQUAL ANCHOR STUDS MAY BE SUBSTITUTED FOR 2" X 3/8" ANCHOR BARS. SEE SPECIFICATIONS.
 6. WHERE GALVANIZED ITEMS LOSE THEIR COATING DUE TO FIELD WELDING OR CHIPPING, GALVANIZING REPAIRS SHALL BE MADE IN ACCORDANCE WITH THE SPECIFICATIONS.
 7. ALL PILE HEADS SHALL BE CAPPED WITH 12 GAGE GALV. SHEET METAL PROVIDED IN THE FIELD AND FASTENED TO THE SIDE OF THE PILE WITH 2" LARGE HEADED GALV. ROOFING NAILS AT 2" CENTERS AROUND EDGES. PILE CAPS SHALL MEASURE AT LEAST 4 INCHES MORE IN EACH DIMENSION THAN THE DIAMETER OF THE PILE.
 8. FOR "GENERAL WELDING NOTES" SEE DWG. NO. 4/1.
 9. ALL PILING TO BE 12" DIAMETER.

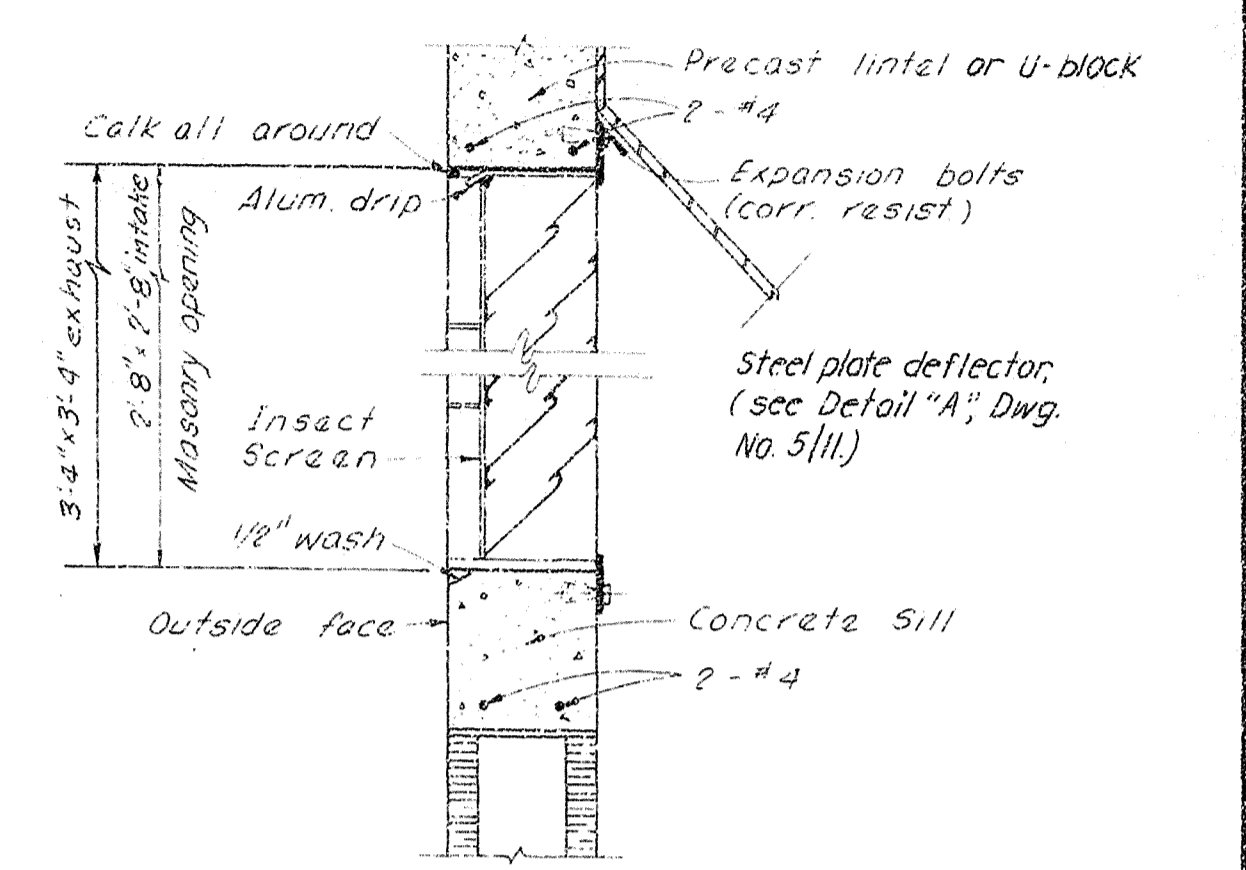


RECORD DRAWING NOTE
"Shall be," "Provide," "Install," "Remove," etc., indicates work was accomplished under the contract

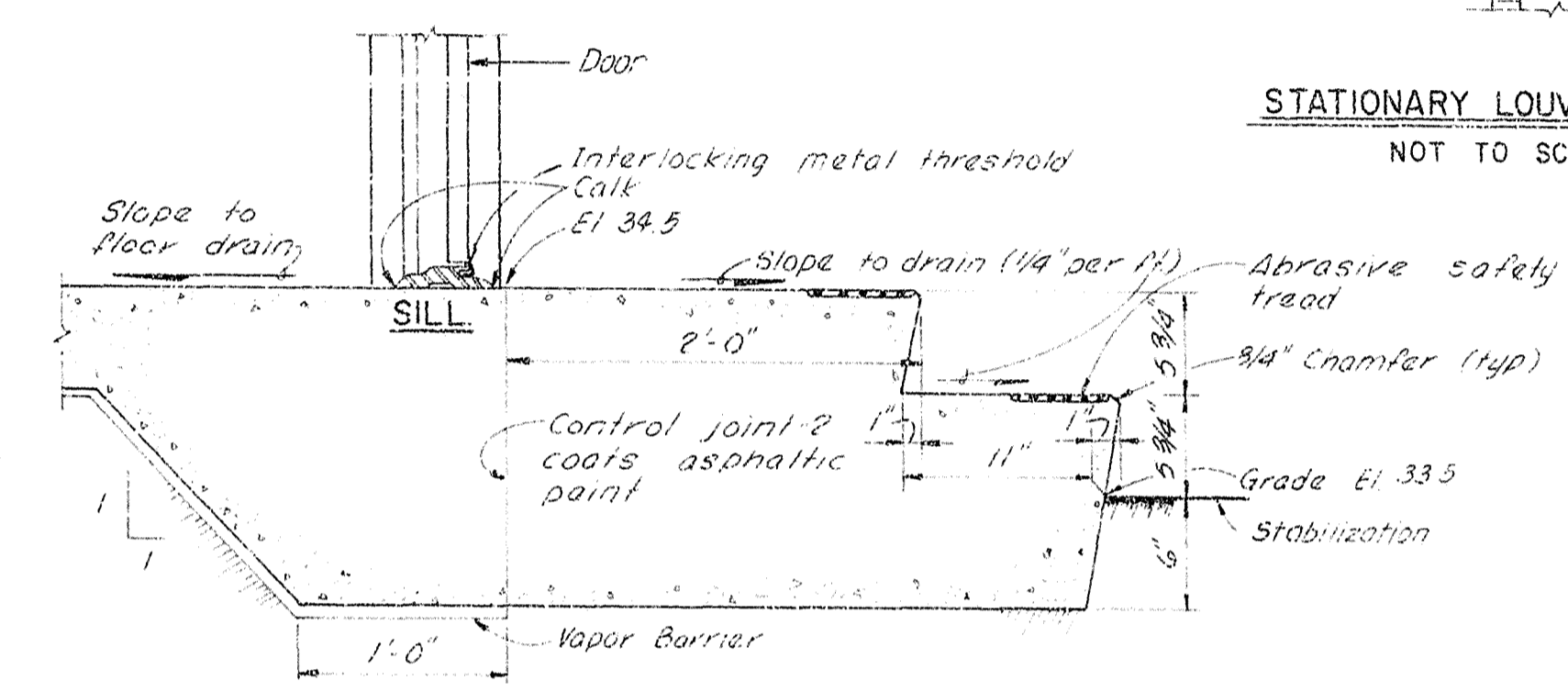
AS-BUILT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE

METALS AND MISCELLANEOUS			
NO.	DATE	BY	CHKD.

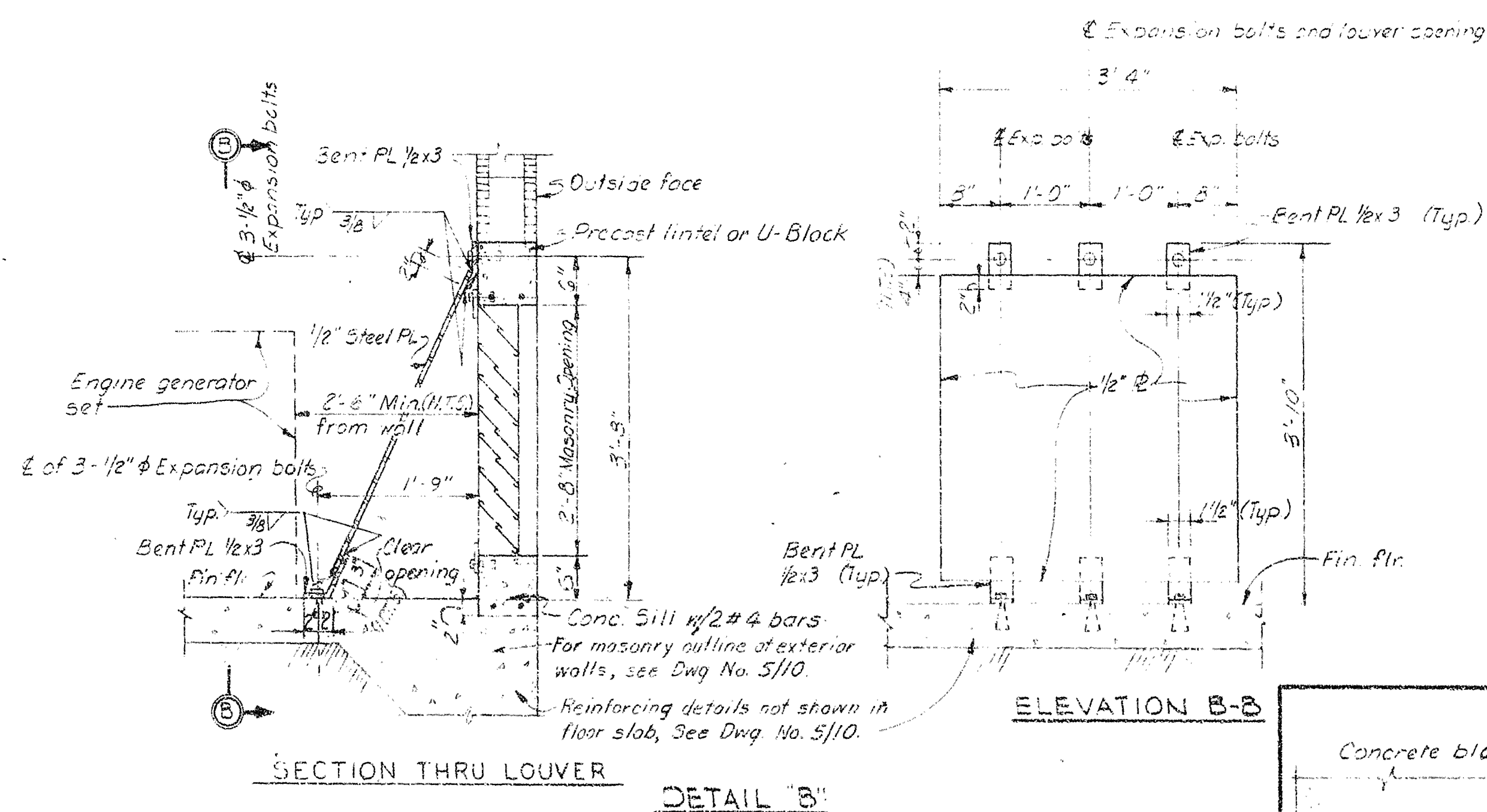
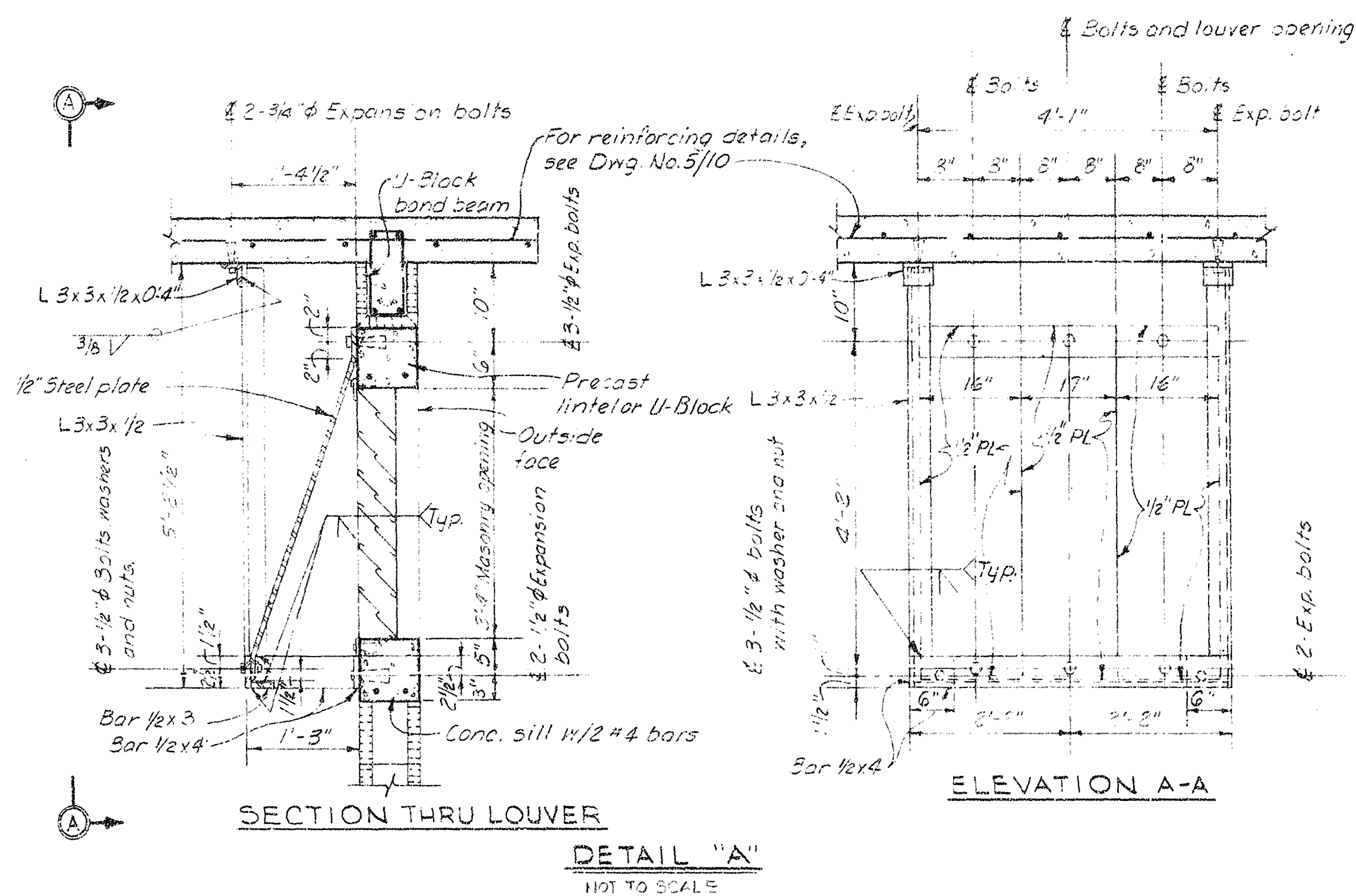


1. PRINCIPAL LINTEL REINFORCEMENT 1-1/2" CLEAR
2. PRINCIPAL FOOTING REINFORCEMENT 1-1/2" CLEAR, IF CONCRETE IS PLACED DIRECTLY AGAINST EARTH 3" CLEAR.
3. REFER TO DRAWING NO. 2/1 FOR "GENERAL CONCRETE AND DESIGN NOTES."
4. FOR LOCATION OF STILLING WELL LINES AND RECORDERS, SEE DRAWING NO. 6/5 AND 1/6
5. FOR LOCATION AND ORIENTATION OF CONTROL HOUSE SEE DRAWING NOS 1/6 AND 1/8.
6. ALL GALVANIZED ITEMS TO BE GALVANIZED AFTER FABRICATION.
7. PROVIDE A GALV. SHEET METAL DUCT WITH A FLEX. SECTION FROM THE ENGINE TO REMOVE HEATED ENGINE AIR AS RECOMMENDED BY THE ENGINE - GENERATOR MANUFACTURER.
8. OVERALL DIMENSIONS FOR GENERATOR PAD SHALL BE ADJUSTED TO SUIT EQUIPMENT FURNISHED. CONTRACTOR SHALL PROVIDE ANCHOR BOLTS OF SIZE AND LENGTH, NUMBER AND SPACING AS REQUIRED BY GENERATOR MANUFACTURER
9. FOR PAINTING REQUIREMENTS, SEE SPECIFICATIONS.
10. THE VERTICAL REINFORCEMENT INTO FOOTING AND BOND BEAM.
11. JOINT REINFORCEMENT IN CONCRETE MASONRY UNIT WALL TO BE EVERY 16".

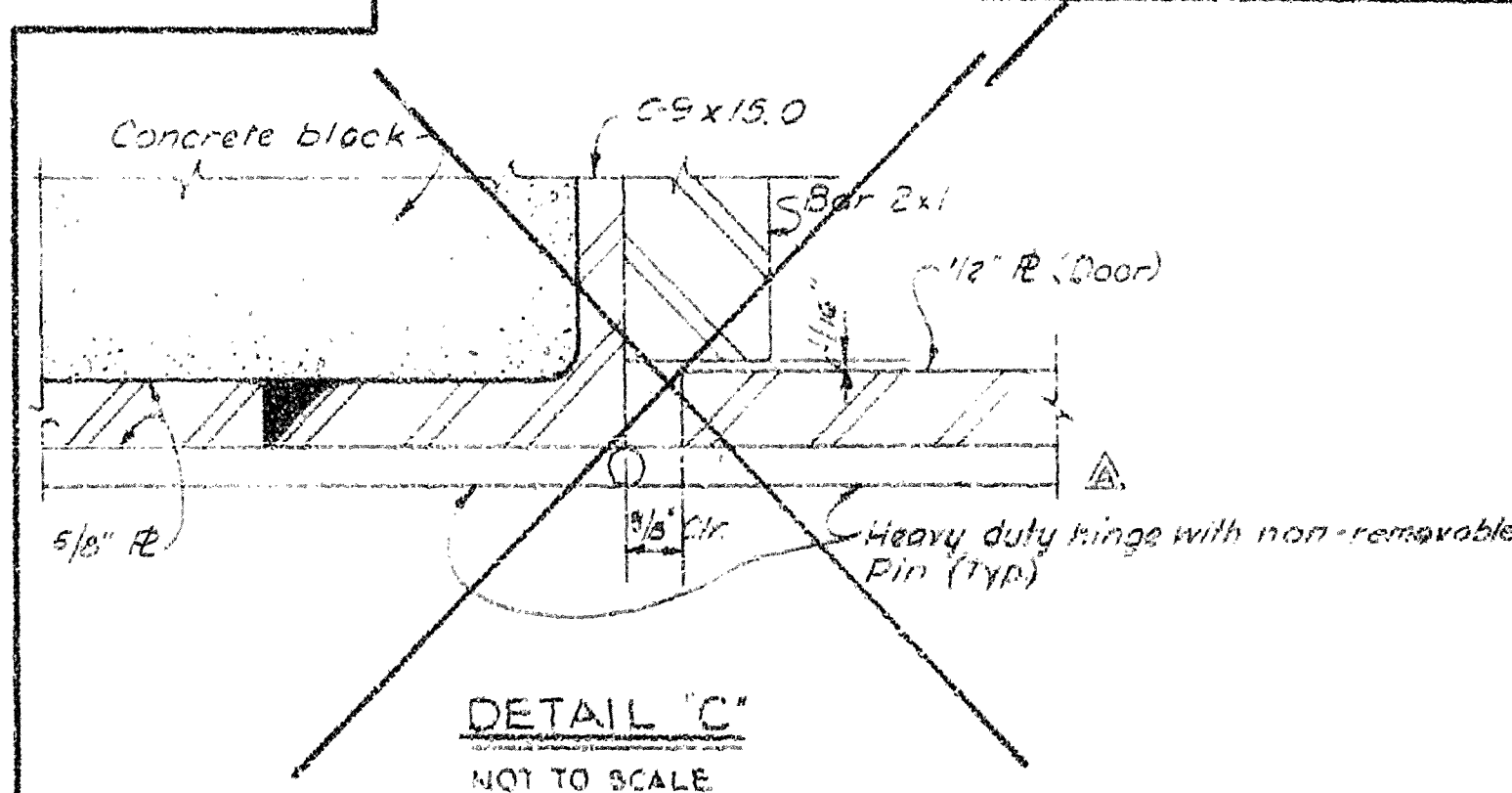
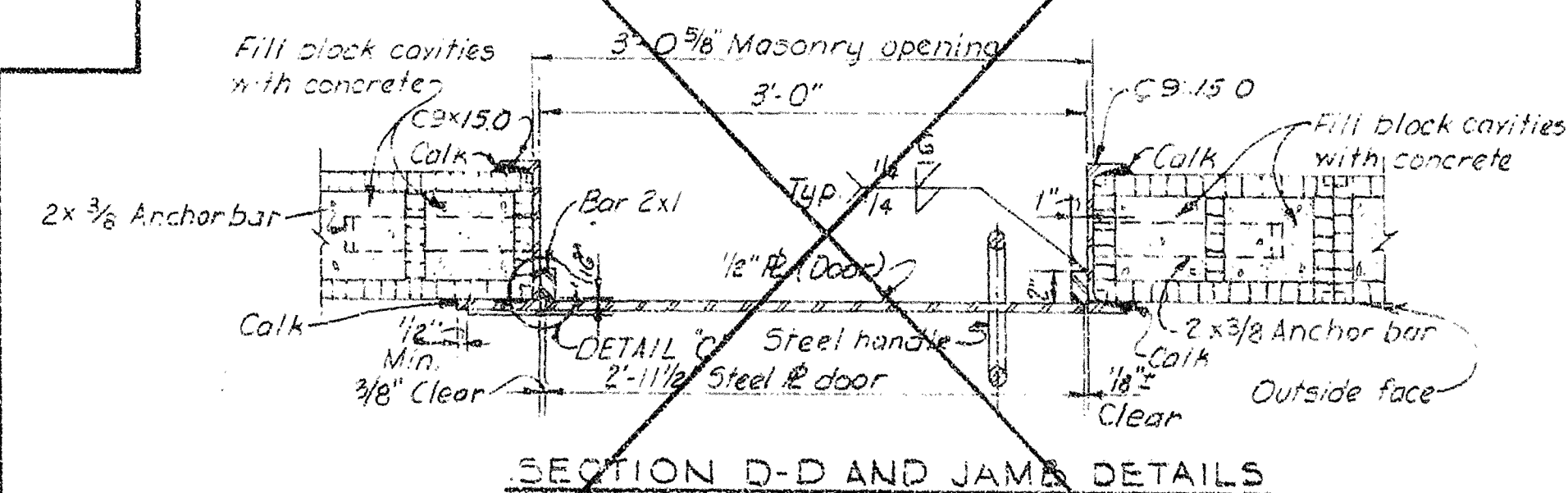
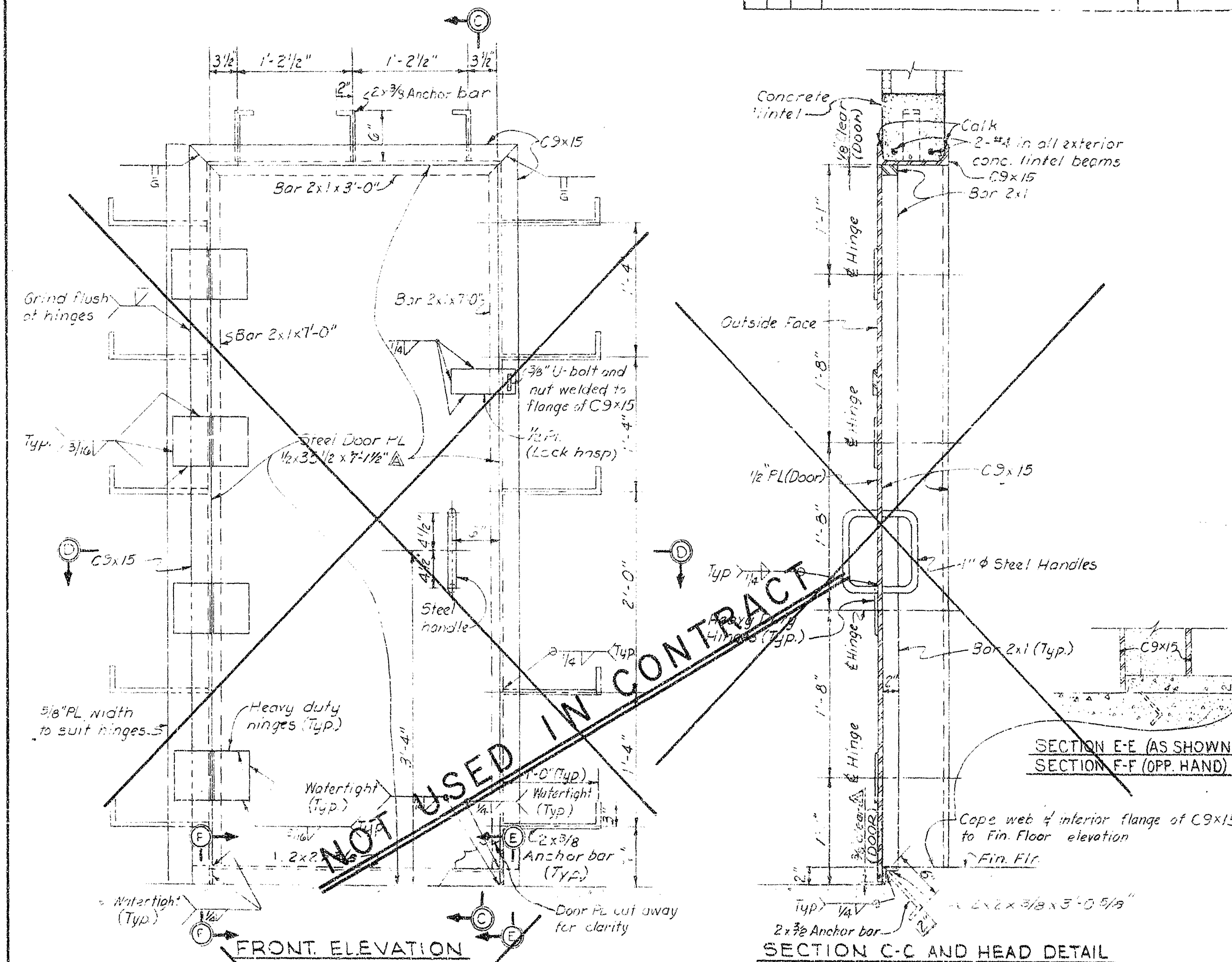


METAL ANGLE DETAIL
SCALE: "B"

DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS JACKSONVILLE, FLORIDA	
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN	
STRUCTURE 96B AND TIEBACK LEVEE METAL AND MISCELLANEOUS CONTROL HOUSE	
PROJECT ENG. NO. 044H, D.C.	DATE DES. BY T.M.B.
DATE BY T.M.B.	DATE F
SCALE AS SHOWN	SHEET 83
MARCH 1962	

[illegible]

STEEL DEFLECTOR PLATES (Galv.)



NOTES:

1. FOR PLAN AND DETAILS OF CONTROL HOUSE, SEE DWG. NO.5/10
2. FOR "GENERAL WELDING NOTES," SEE DWG. NO. 4/1
3. ALL MATERIALS SHALL BE STRUCTURAL STEEL UNLESS OTHERWISE NOTED.
4. STRUCTURAL STEEL ITEMS DETAILED ON THIS DRAWING SHALL BE GALVANIZED.

RECORD DRAWING NOTE
 "Shall be," "Provide," "Install,"
 "Remove," etc., indicates
 work was accomplished under
 the contract.

AS - BUILT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER BASIN
STRUCTURE 95B AND TIEBACK LEVEE
METALS AND MISCELLANEOUS
CONTROL HOUSE DETAILS

DATED: 11/1/54 D.M.S.	DIV. TWO BLACKS DATED: 11/1/54	LARK: 11/1/54 F	5/11
11/1/54 11/1/54	11/1/54 11/1/54	11/1/54 11/1/54	11/1/54 11/1/54

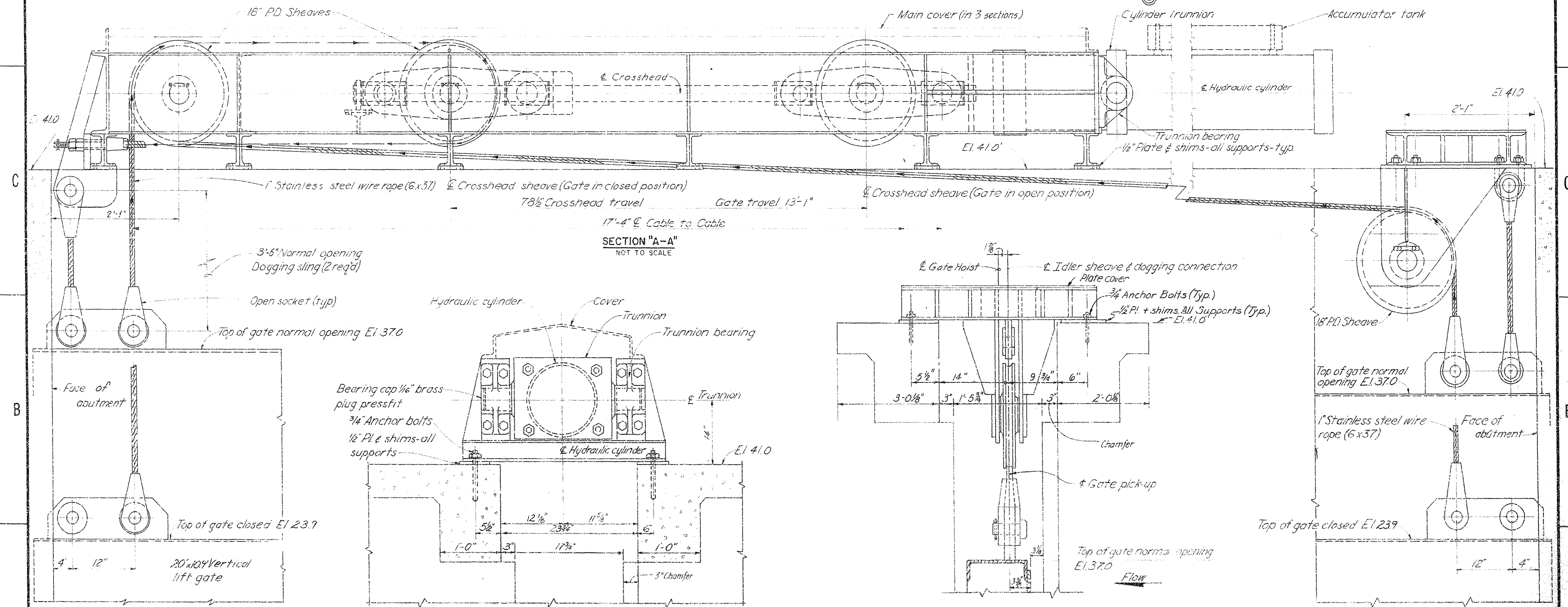
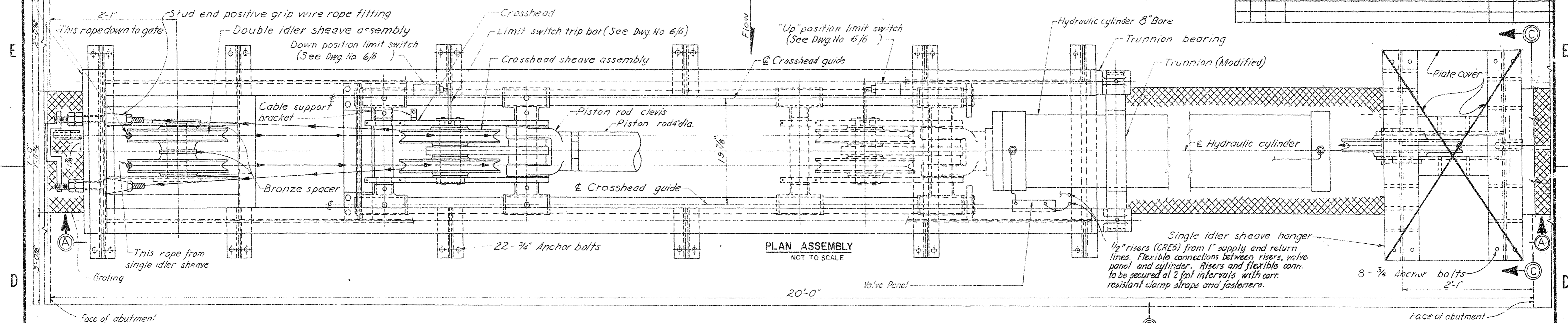
D. O. FILE NO. ~~100-34-813~~

490-36,389

Note: Gate position transmitter not shown.
Locate on hoist base as shown on
Dwg. No. 6/6

SAFETY ON THIS JOB
DEPENDS ON YOU

REVISIONS		DATE	APPROVED
NO.	SYM.	ZONE	DESCRIPTION



SECTION "B-B"
NOT TO SCALE

SECTION "C-C"
NOT TO SCALE

NOTES

- (a) ESTIMATED GATE WEIGHT 12,000
- (b) ESTIMATED HOIST LOAD 20,500
- (c) ESTIMATED PISTON L.D. 52,000
- 6" BORE HYDRAULIC CYLINDER 4 (C.D. 70) STROKE
- OPERATING PRESSURE 1400 P.S.I.
- GATE SHALL OPERATE AT 6 INCHES / MINUTE (±10%) WHEN RAISING AND LOWERING
- DOGGING SLINGS SAME SIZE AND TYPE AS HOIST ROPES.

AS-BUILT

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.

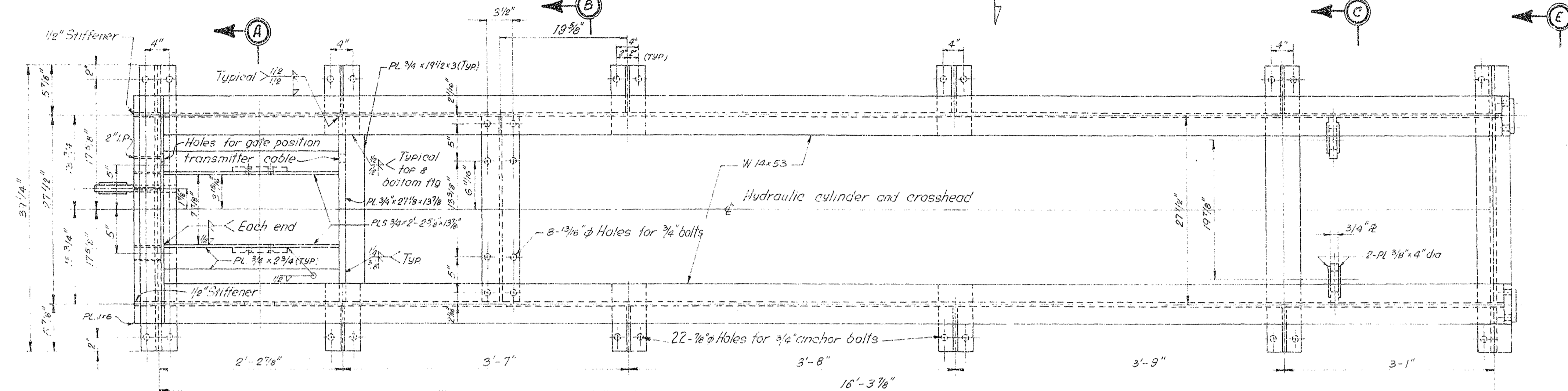
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
FOR FLOOD CONTROL AND OTHER PURPOSES

STRUCTURE 96B
MECHANICAL
GATE HOIST - GENERAL ARRANGEMENT

DATE: 1955
SCALE: AS SHOWN
DRAWN: D.C.
CHECKED: F
BY: 6/1
SHEET: 25

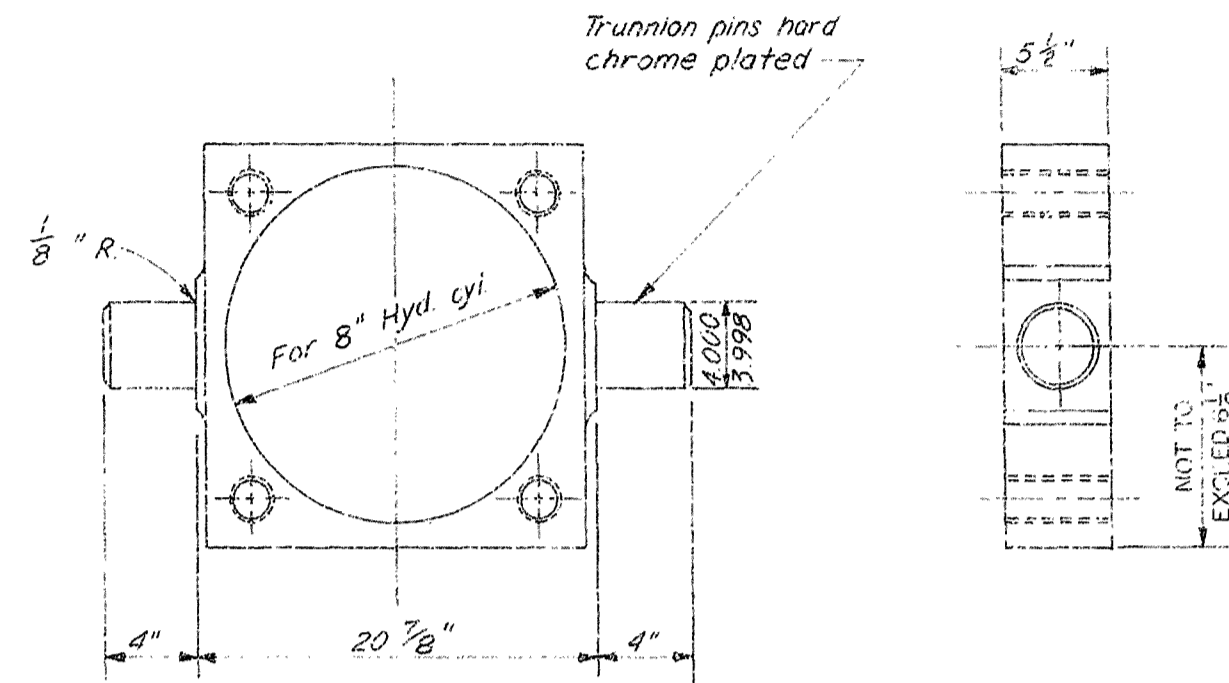
REVISIONS				DATE	APPROVED
NO.	SYM.	ZONE	DESCRIPTION		

SAFETY ON THIS JOB
DEPENDS ON YOU



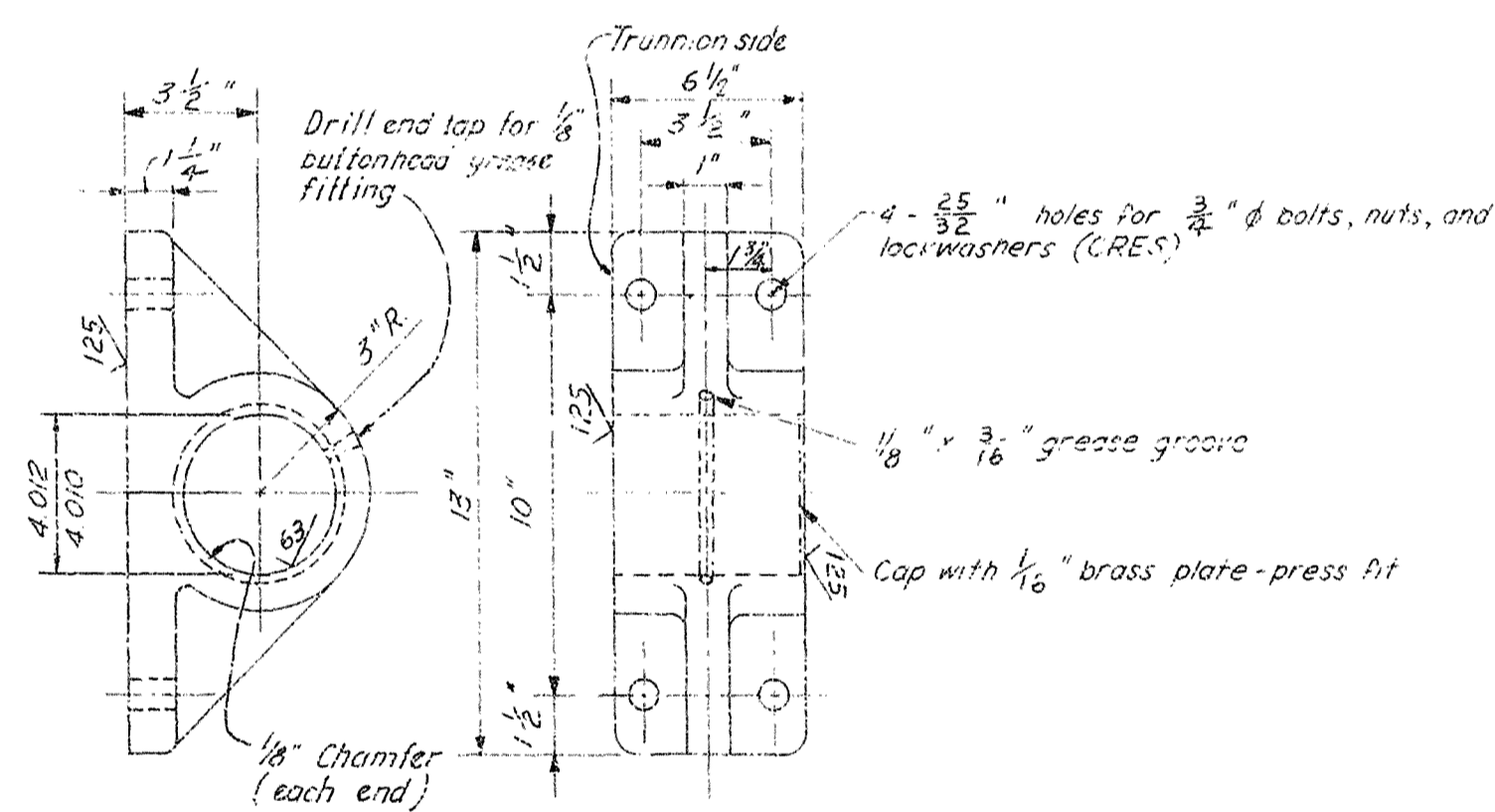
ANCHOR BOLT

MARK	30 REQUIRED	BOLT STEEL (CRES)
	NOT TO SCALE	



HYDRAULIC CYLINDER TRUNNION

MARK	I REQUIRED	STEEL
	NOT TO SCALE	



TRUNNION BEARING

Technical drawing of a mechanical assembly showing a top view and a side view.

Top View Dimensions:

- Overall width: $5\frac{1}{2}"$
- Overall height: $5\frac{1}{2}"$
- Central rectangular hole: $2"$ wide by $2"$ high.
- Four circular holes, each with a diameter of $\frac{1}{2}"$, located at the corners.
- Distance from center to corner holes: $2\frac{1}{2}"$ R.
- Distance from center to side holes: $2\frac{1}{2}"$ R.

Side View Dimensions:

- Plate thickness: $\frac{1}{2}"$
- Central hole depth: $2"$
- Overall width: $5\frac{1}{2}"$
- Overall height: $4\frac{1}{2}"$

Notes:

- $2\frac{1}{2}"$ dowel holes, drill and ream at assembly
- $4 - \frac{13}{16}"$ holes

CROSSHEAD GUIDE BRACKET

MARK	2 REQUIRED	STR. STEEL
	NOT TO SCALE	

NOTE:
Notes 1 thru 4 on Drawing No. 6/2, also apply to this sheet.

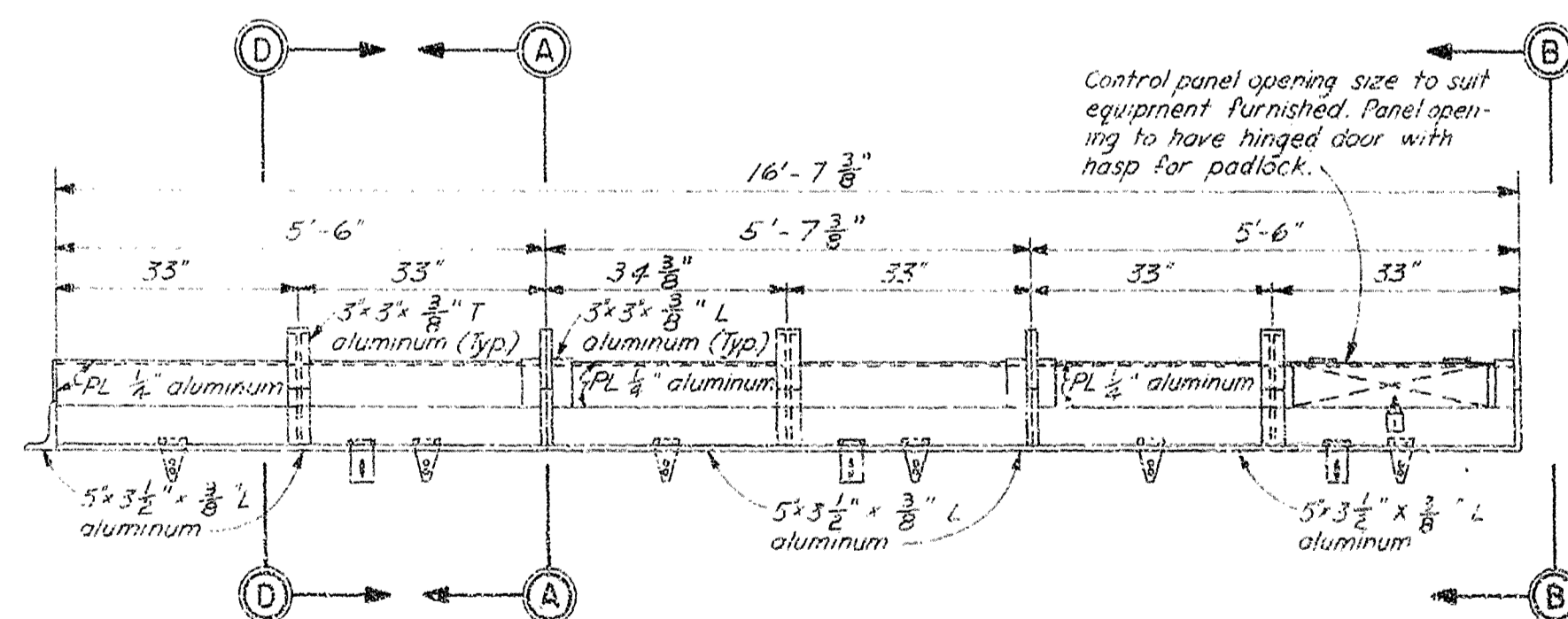
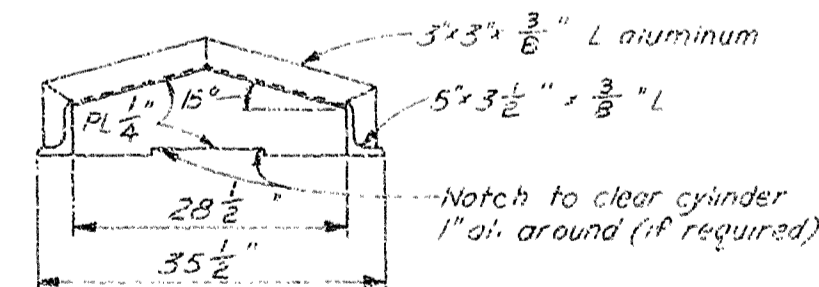


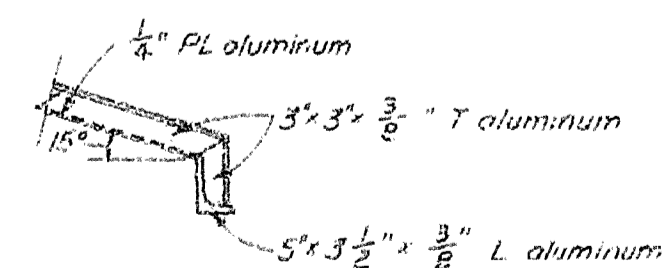
Diagram of a gabled roof structure with dimensions and material specifications:

- Bend plate to form corner** (indicated by an arrow pointing to the ridge)
- 3" \times 3" \times $\frac{3}{8}$ " L aluminum** (indicated by an arrow pointing to the ridge beam)
- 5" \times 3" \times $\frac{1}{2}$ " \times $\frac{3}{8}$ " L** (indicated by an arrow pointing to the rafters)
- 15°** (angle of the rafters)
- 8"** (width of the base)
- 28 $\frac{1}{2}$ "** (length of the base)
- 35 $\frac{1}{2}$ "** (total width of the base)

SECTION A-A



SECTION B - B



SECTION D - D

MARK 1 REQUIRED (3 SECTIONS) ALUMINUM
NOT TO SCALE

Note: Cover, three (3) sections to be all welded construction unless otherwise noted. Each section to have 2 extra heavy stainless steel hinges and 1 extra heavy stainless steel hasp required to cover with stainless steel countersunk rivets. Cover to be installed on base (see base detail) with stainless steel countersunk rivets or stainless steel bolts and nuts, spaced three (3) inches after installation. Hinges shall be similar or equal to #8B-1199, 6"x3".

RECORD DRAWING NOTE
 "Shall be," "Provide," "Install,"
 "Remove," etc., indicates
 work was accomplished under
 the contract.

AS-BUILT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE

MECHANICAL
GATE HOIST - DETAILS NO.2

P. O. FILE NO. ~~400-34,813~~

490-36,389

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE
3	A		REVISED TO ACCOMPANY MOD. SUFFIX "F"	3-30-89

HYDRAULIC SYSTEM

LEGEND:

- HC - HYDRAULIC HOIST CYLINDER
FC - FLEXIBLE CONNECTION
SOL - SOLENOID
AB - AIR BLEEDER VALVE
AT - ACCUMULATOR TANK
M - ELECTRIC MOTOR 240V, 1Ø, 3 HP, 1800 RPM
P - POSITIVE DISPLACEMENT PUMP 0.5 GPM, 2000 PSI, 1800 RPM
FCR - FLOW CONTROL - RAISE (ADJUST TO RAISE GATE 6 IN/MIN.)
FCL - FLOW CONTROL - LOWER (ADJUST TO LOWER GATE 6 IN/MIN.)
SVR - SOLENOID VALVE - RAISE (NORMALLY CLOSED VALVE, SOLENOID ACTUATED, SPRING RETURN, ENERGIZE TO RAISE GATE)
SVL - SOLENOID VALVE - LOWER (NORMALLY CLOSED VALVE, SOLENOID ACTUATED, SPRING RETURN, ENERGIZE TO LOWER GATE)
PH - HAND PUMP
F - FILTER
RV - RELIEF VALVE SET AT 1500 PSI
UV - UNLOADING VALVE (SOLENOID OFFSET, SPRING RETURN) - WILL CLOSE ON STARTING AFTER 3 SEC. TIME DELAY
BP - BYPASS VALVE (NORMALLY CLOSED)
CO - CUT-OFF VALVE (NORMALLY OPEN)
RVA - ACCUMULATOR RELIEF - SET AT 40 PSI
G - PRESSURE GAGE, 0-3000 PSI
RT - RESERVOIR TANK
ST - ALL TUBING TO BE STAINLESS STEEL, SIZE AND WALL THICKNESS AS SHOWN HEREON AND IN SPECIFICATIONS

NOTES:

- WITH THIS SYSTEM OIL IS PUMPED TO THE CYLINDER ONLY WHEN GATE IS RAISED
- DRAIN LINES TO COMPONENTS REQUIRING SAME SHALL BE PROVIDED ALTHOUGH NOT SHOWN
- AIR BLEEDING VALVES SHALL BE PROVIDED AT HIGH POINTS OF SYSTEM
- CRES - CORROSION RESISTING STEEL - ASTM A276 TYPE 304

GENERAL NOTES:

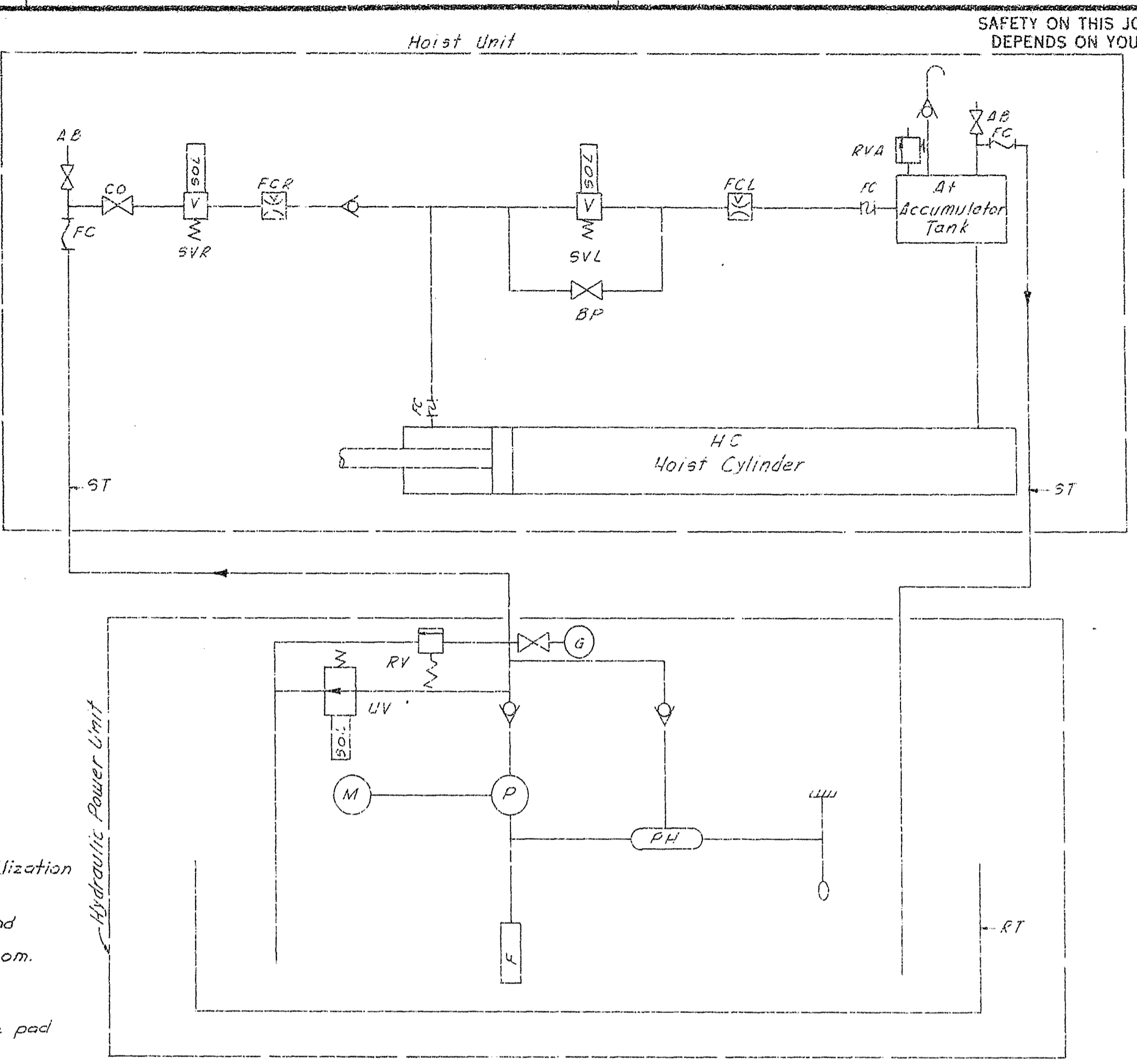
- GAS DETECTION UNIT SHALL BE SIMILAR OR EQUAL TO GAS TECH INC. MODEL 1220-110212, (FOR SPECIAL FEATURES SEE DWG. NO. 712). AC POWER WITH DC BATTERY BACK-UP, REMOTE AUDIBLE AND VISUAL ALARMS SHALL BE PROVIDED AS SHOWN, SUITABLE FOR EXTERIOR INSTALLATION, PROVIDE 8" x 10" ALUMINUM SIGN PAINTED WHITE WITH BLACK LETTERS, STATING THAT ALARM IS INDICATING DANGEROUS LP GAS CONCENTRATION LEVEL INSIDE BUILDING. LOCATE BELOW ALARM LIGHT PRESET GAS DETECTION UNIT TO 20% L.E.L. (FIELD VERIFY SETTING).

AS-BUILT

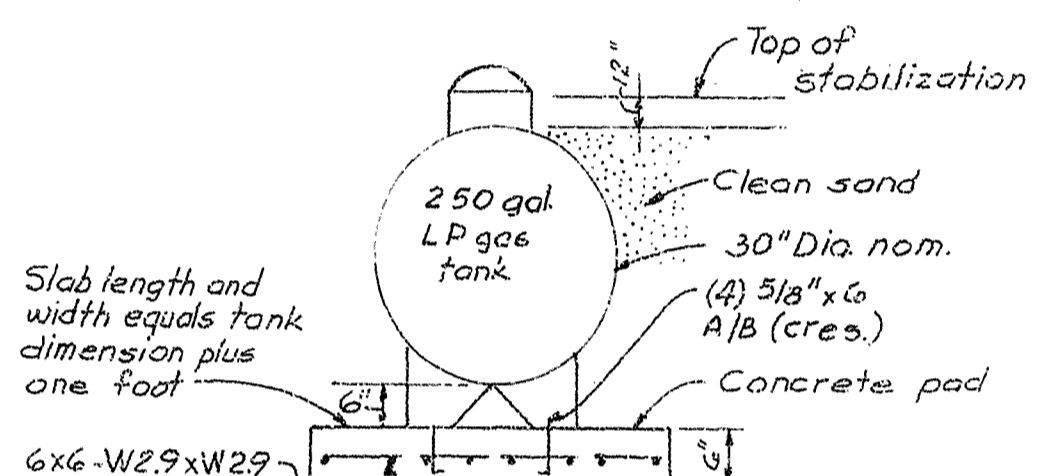
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHN RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE
MECHANICAL
HYDRAULIC DIAGRAM AND CONTROL HOUSE
JUL 89
F. 6/5
SCALE: NONE
DATE: 11-27-1989
SHEET: 28

RECORD DRAWING NOTE
"shall be," "provide," "install," "remove," etc., indicates work was accomplished under the contract.

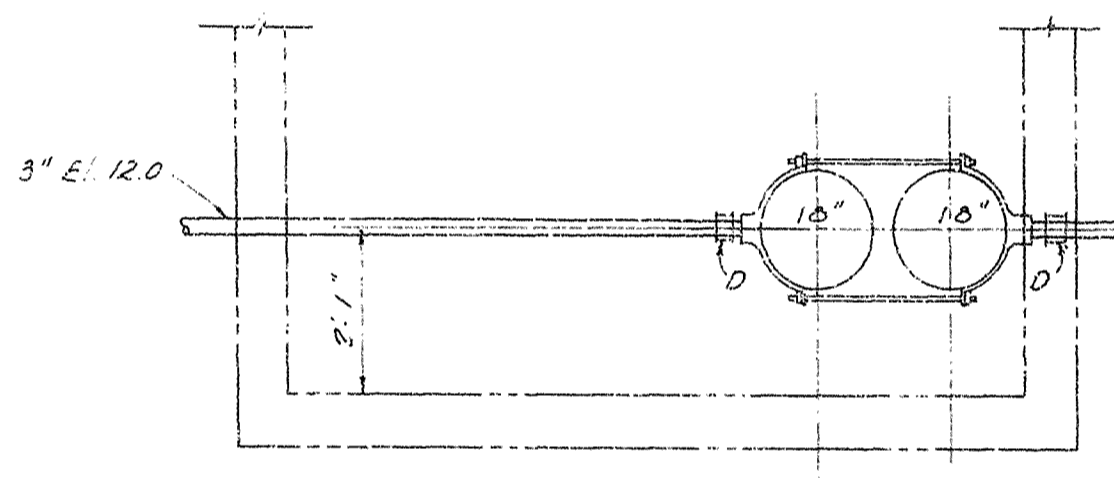
HOIST HYDRAULIC SYSTEM
NOT TO SCALE



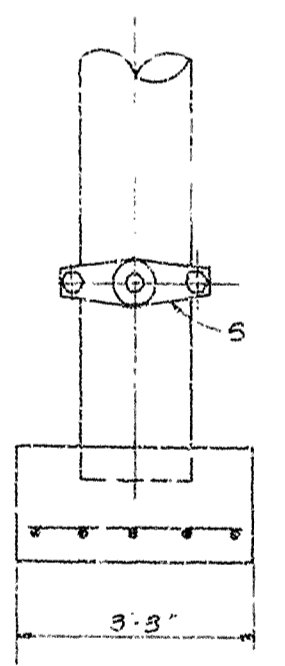
LP GAS TANK ANCHOR SLAB DETAIL
NOT TO SCALE



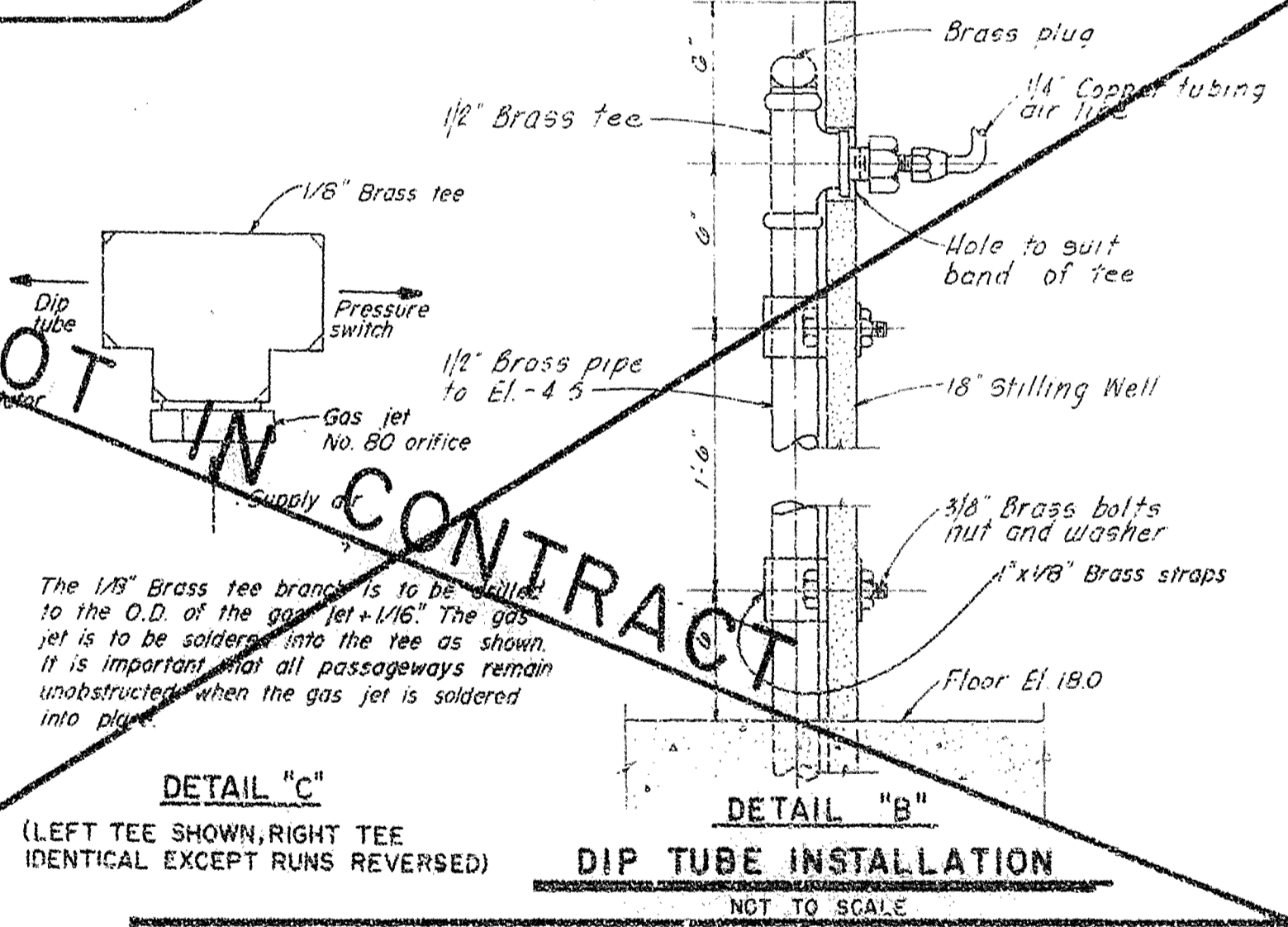
PART PLAN AT EL. 12.5



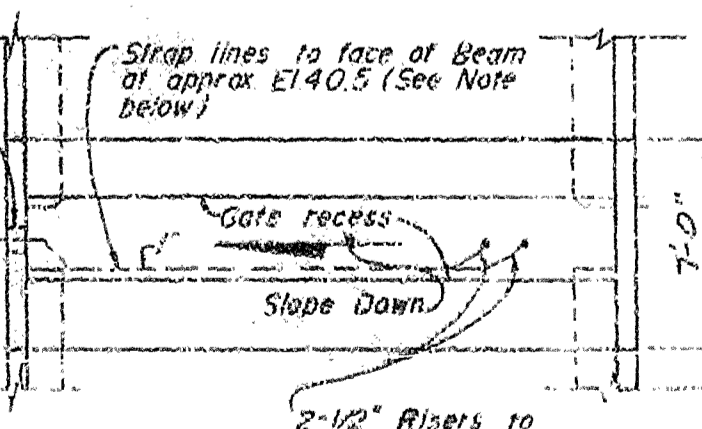
SECTION B-B



DETAIL "C"
(LEFT TEE SHOWN, RIGHT TEE IDENTICAL EXCEPT RUNS REVERSED)



DIP TUBE INSTALLATION
NOT TO SCALE

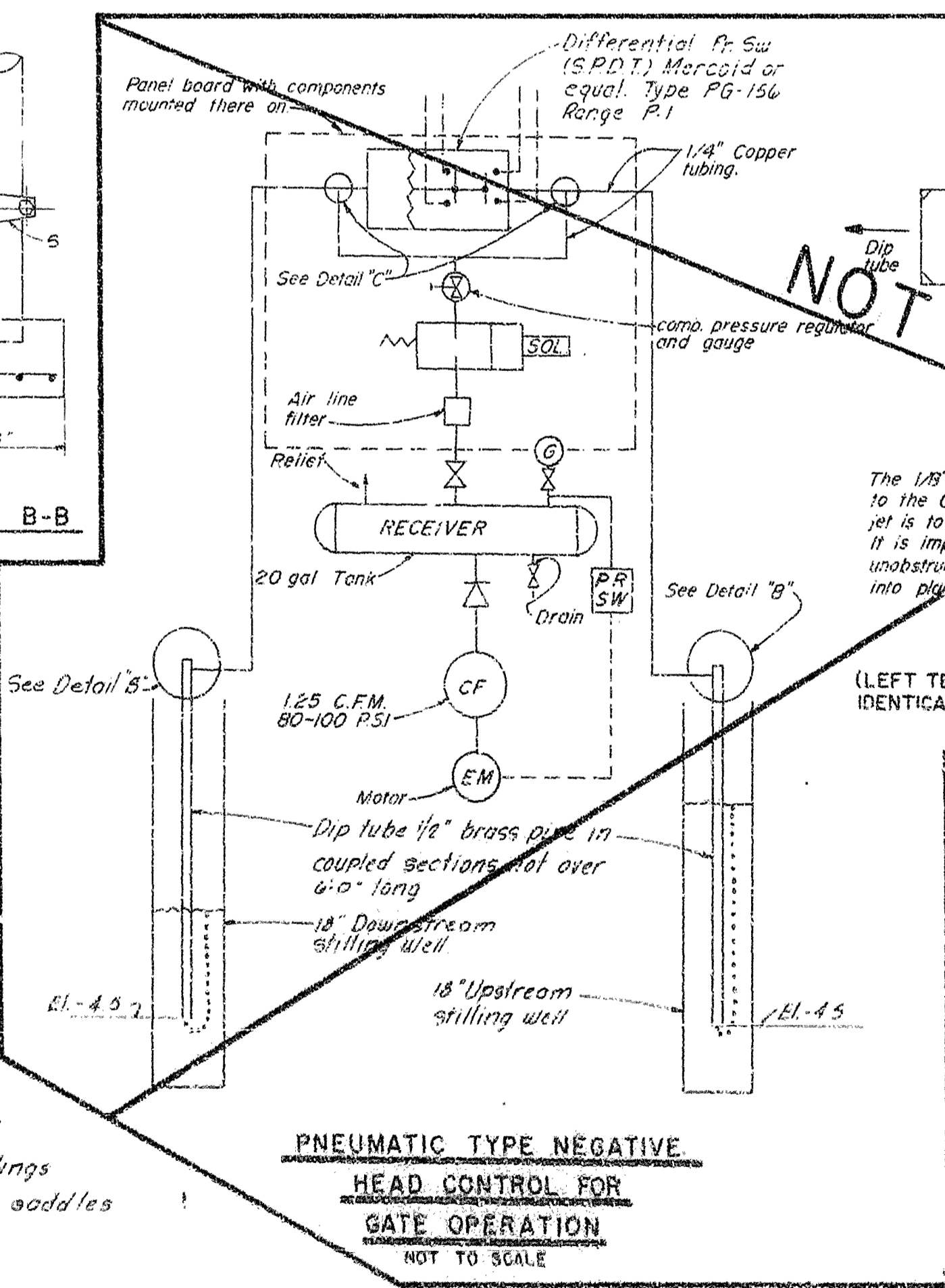


NOTE:

Hydraulic lines to be supported at 4'-0" intervals with CRES straps and Posteners Headers to have constant down slope from South Abutment to North Abutment.

HYDRAULIC PIPING AT SPILLWAY
NOT TO SCALE

PNEUMATIC TYPE NEGATIVE
HEAD CONTROL FOR
GATE OPERATION
NOT TO SCALE

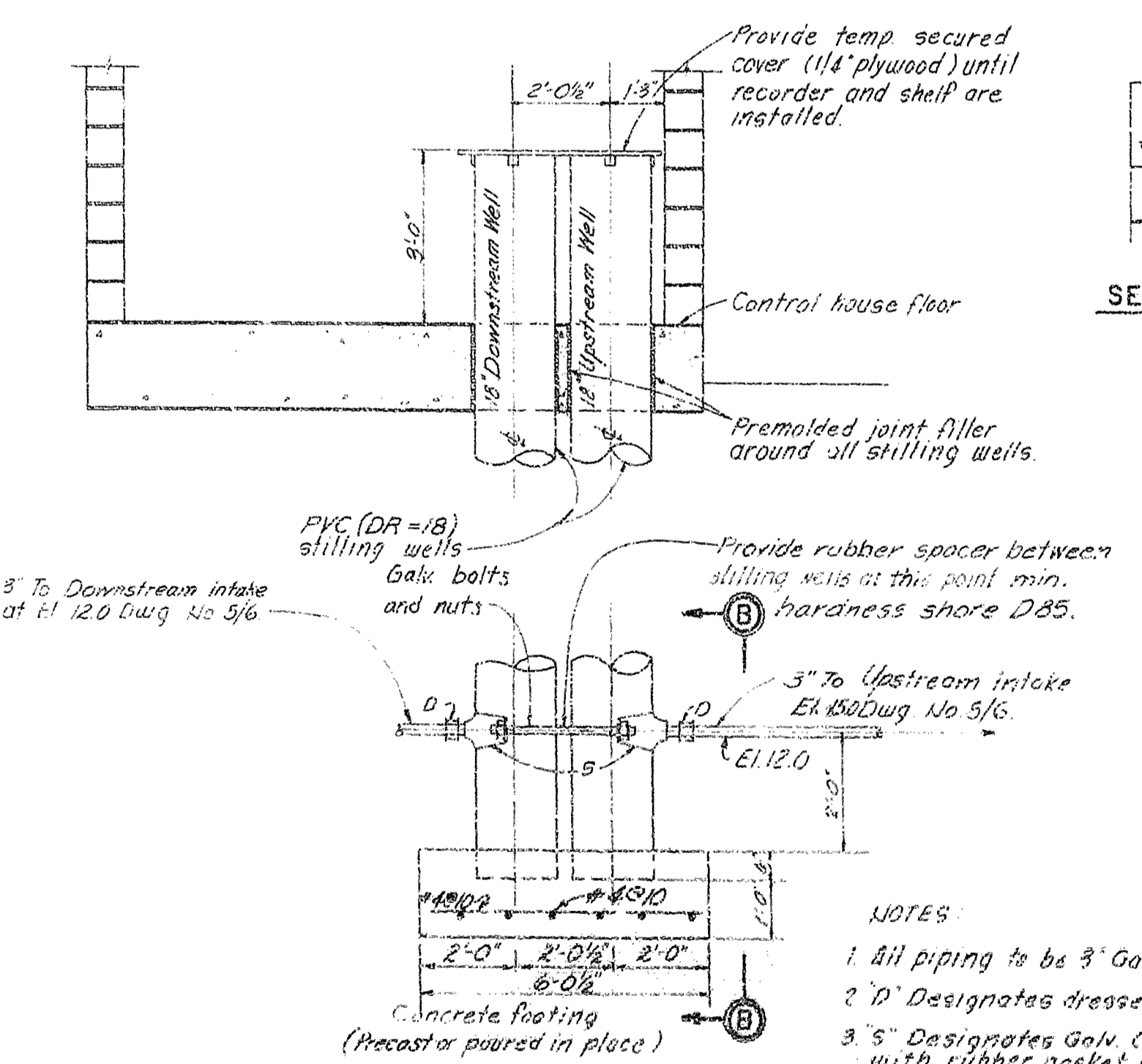


NOTES:

- All piping to be 3" Galv. steel
- "D" Designates dresser couplings
- "S" Designates Galv. C.I. pipe saddles with rubber gasket seals

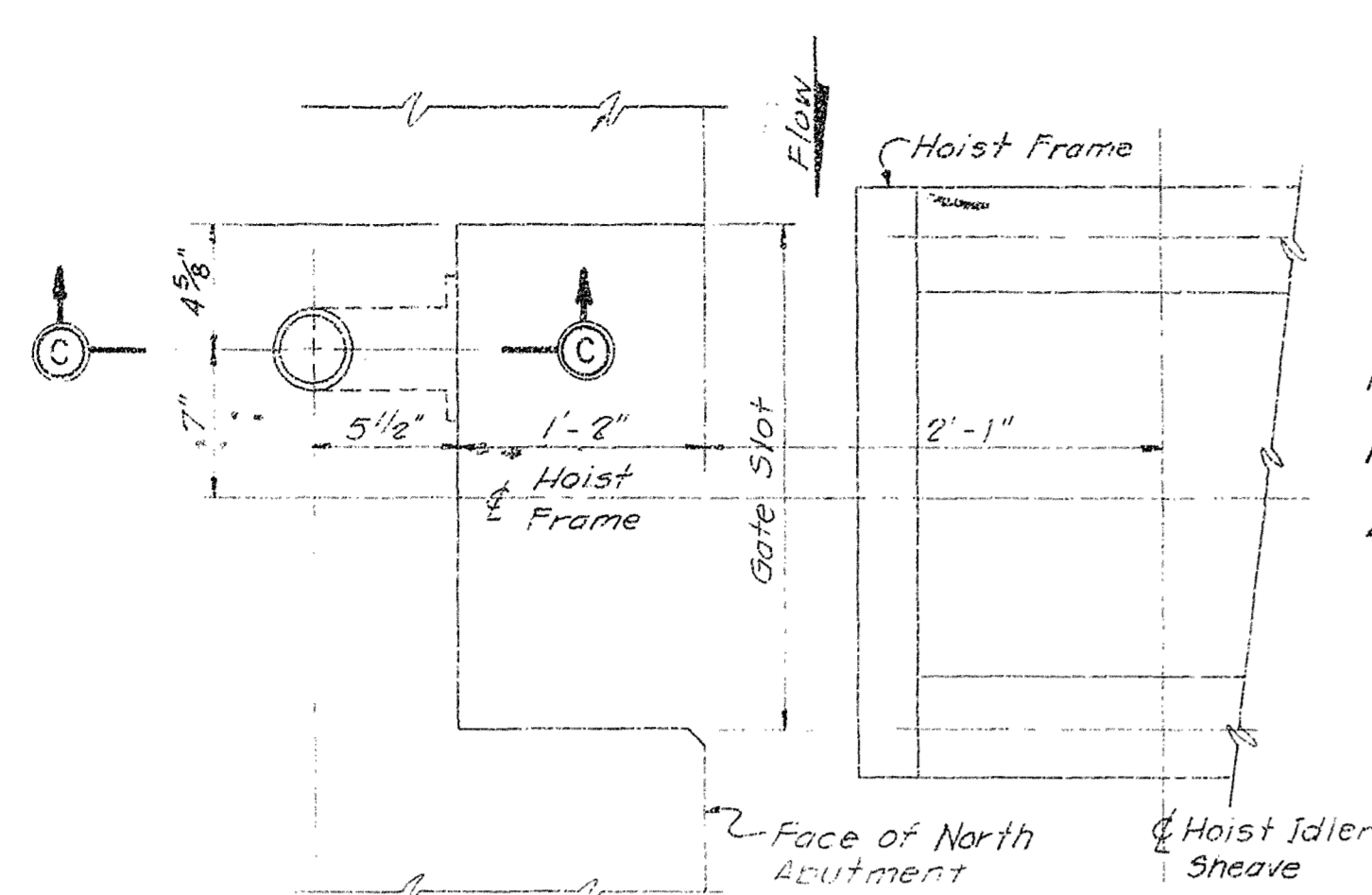
SECTION A-A
From Control House plan

DETAILS OF STILLING WELL

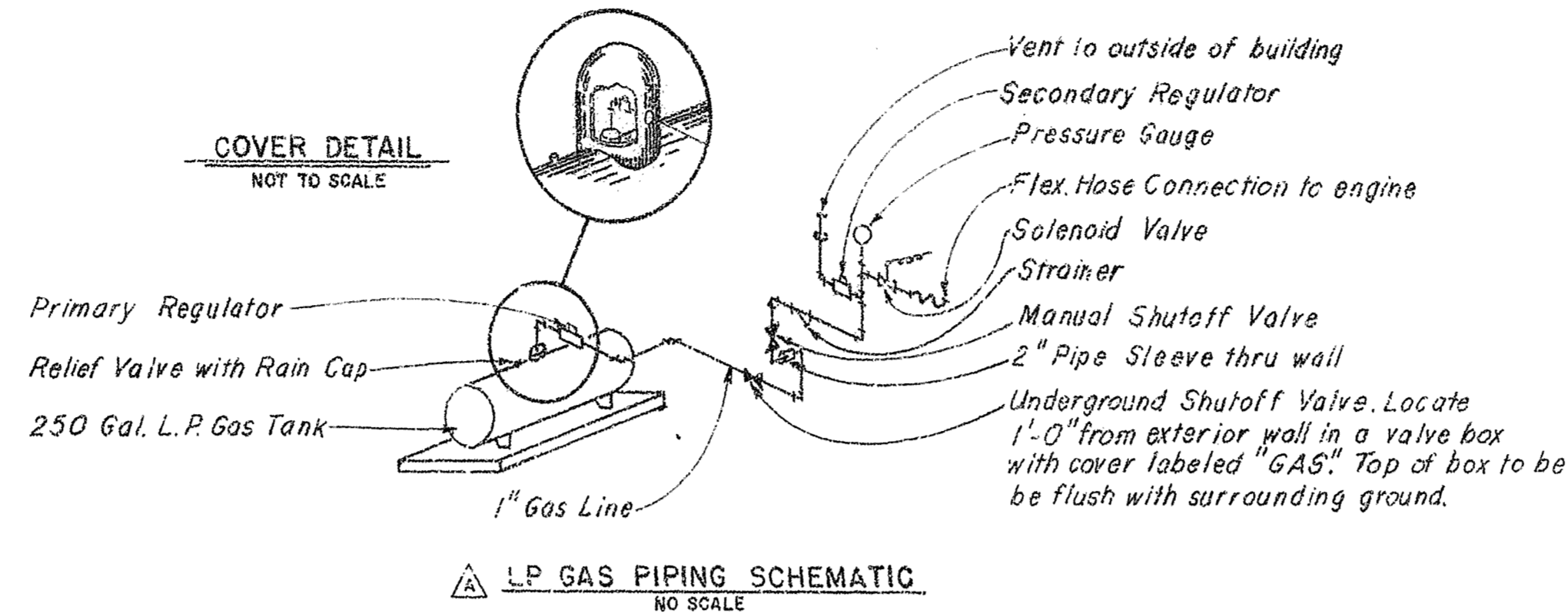


SAFETY ON THIS JOB
DEPENDS ON YOU

REVISIONS				DATE	APPROVED
NO.	SYMBOL	ZONE	DESCRIPTION		
1	A	E-4	REVISED TO ACCOMPANY MOD. SUFFIX F	10/25/67	ML

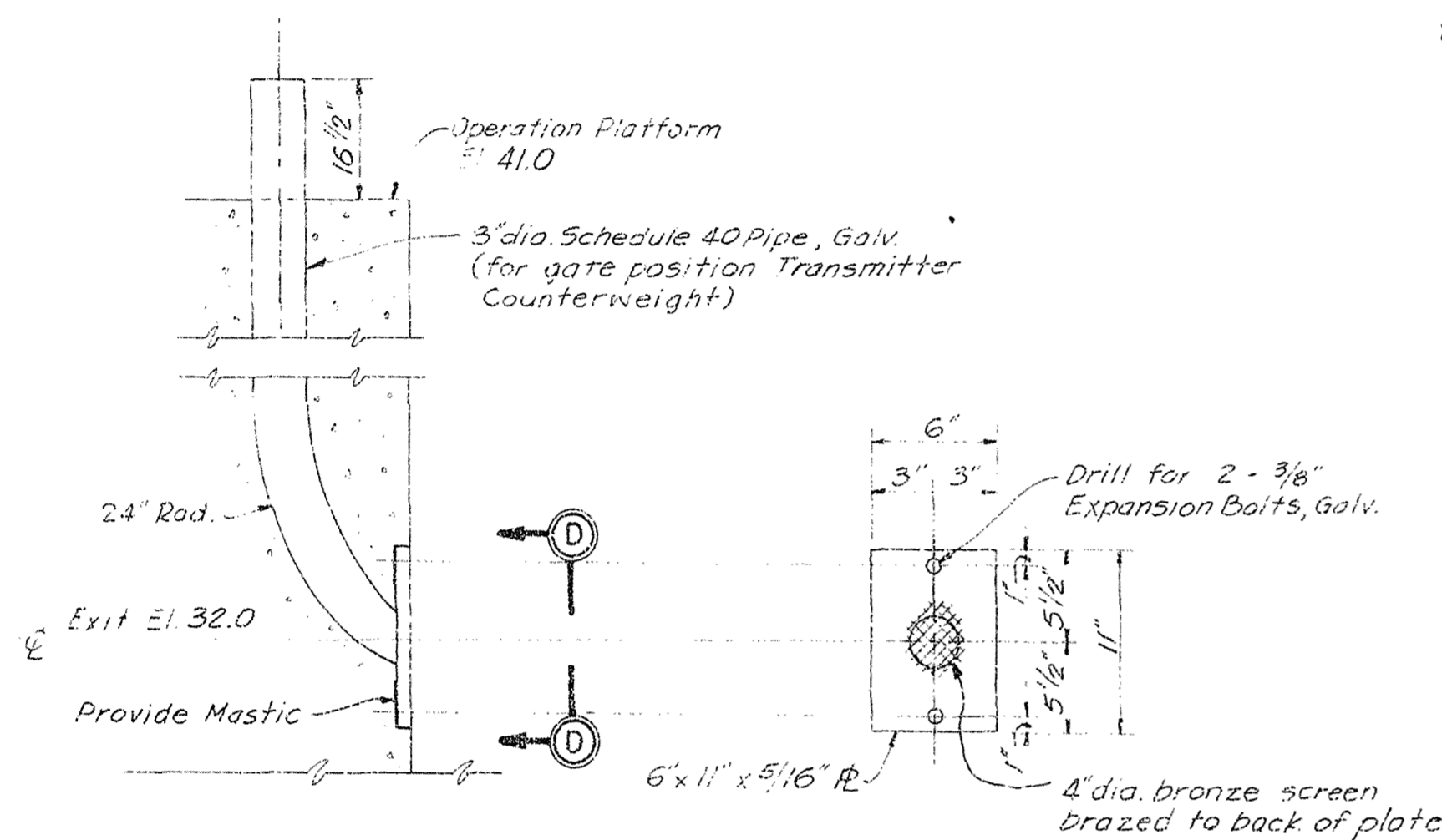


PLAN



LIMIT SWITCH NOTES:

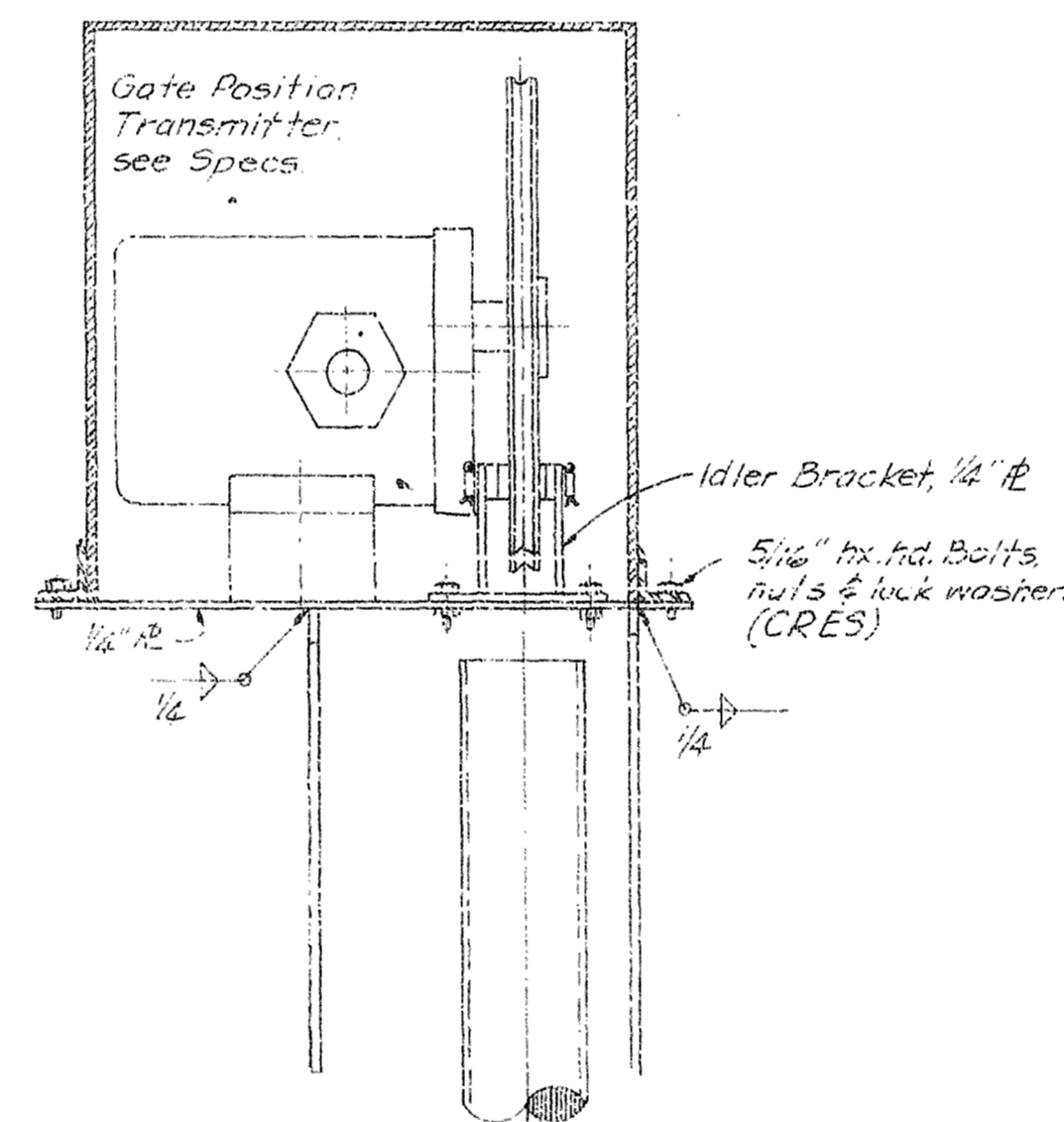
- FOR LOCATION AND ORIENTATION, SEE DWG. NO. 6/1.
- MOUNTING HOLES FOR LIMIT SWITCHES SHALL BE SLOTTED TO PERMIT 1/2" ADJUSTMENT TOWARD CENTER OF GATE BAY FROM POSITION INDICATED ON CROSSHEAD ASSEMBLY. (DWG. NO. 6/4).



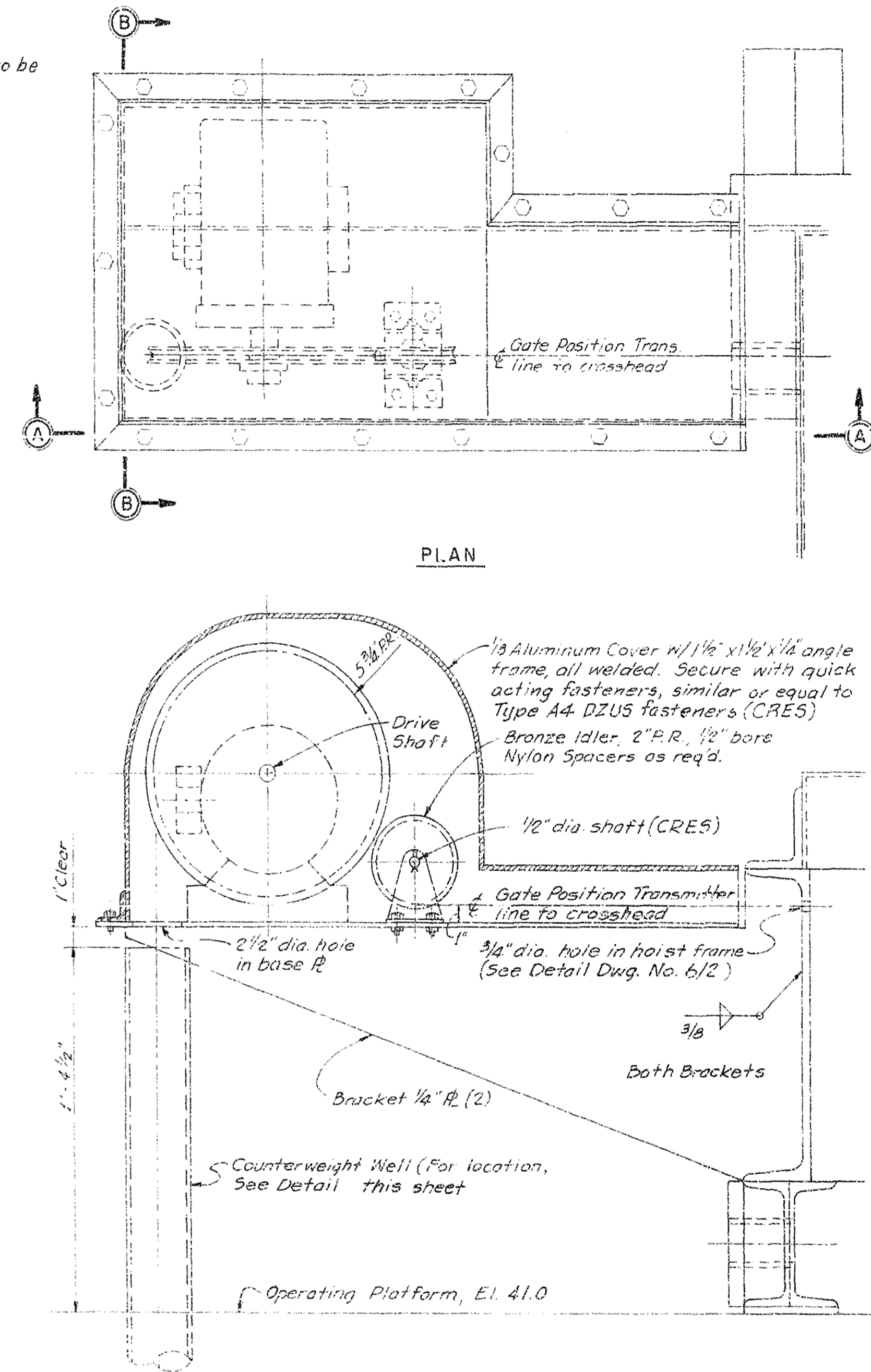
SECTION C-C

SECTION D-D

PIPE WELL FOR COUNTERWEIGHT
NOT TO SCALE



SECTION B-B



SECTION A-A

NOTES:

- DETAILS OF TRANSMITTER MOUNTING AND DRIVE TO SUIT EQUIPMENT FURNISHED.

GATE POSITION TRANSMITTER BRACKET ASSEMBLY

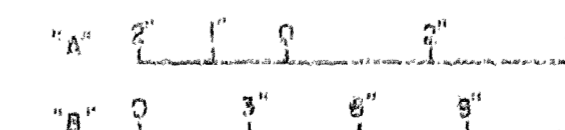
SCALE: 3"=1'-0"

AS-BUILT

NOTE: NOTE 3 ON DWG. 6/2 ALSO APPLIES TO THIS SHEET.

RECORD DRAWING NOTE
"Shall be," "Provide," "Install," "Remove," etc., indicates work was accomplished under the contract.

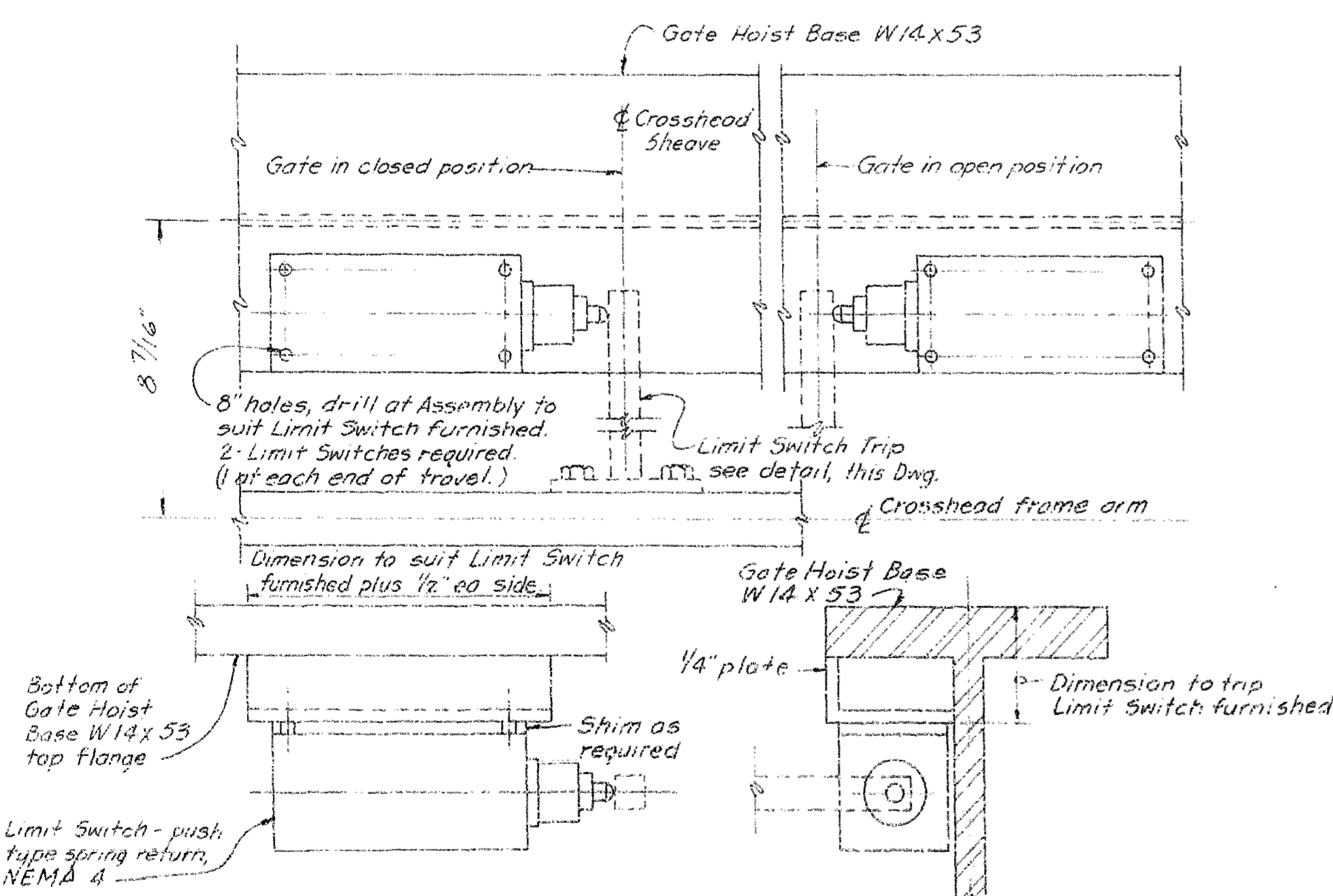
GRAPHIC SCALES



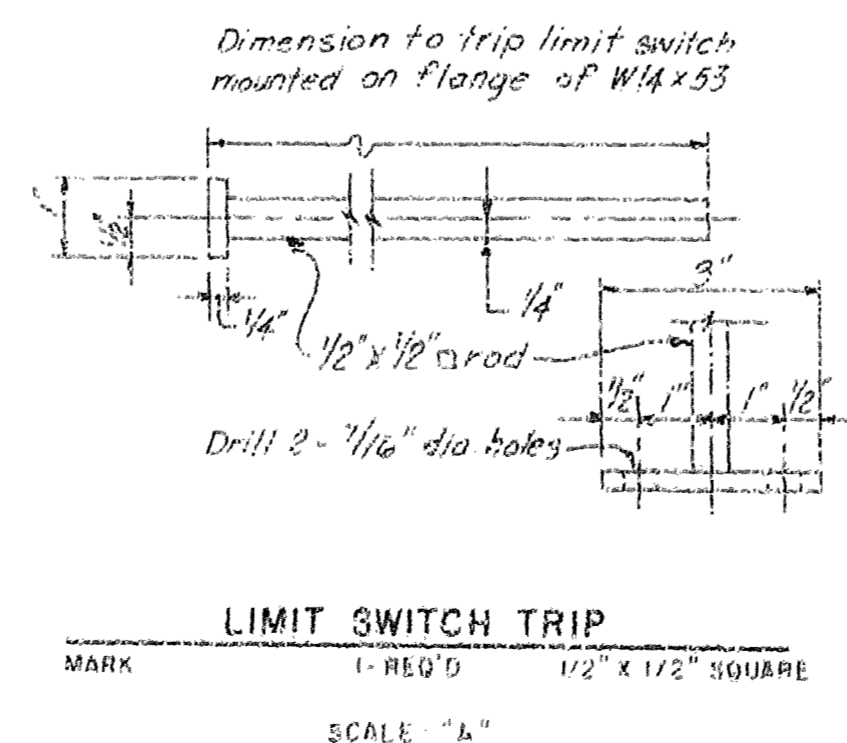
DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA			
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN STRUCTURE 968 AND TIEBACK LEVEE			
MECHANICAL			
GATE LIMIT SWITCHES AND POSITION TRANSMITTER			
DATE: 10/25/67	BY: ML	CHK: F	6/6
SCALE: AS SHOWN	DATE: 10/25/67	BY: ML	6/6
SHEET 30			

D. O. FILE NO. 490-36,389

490-36,389



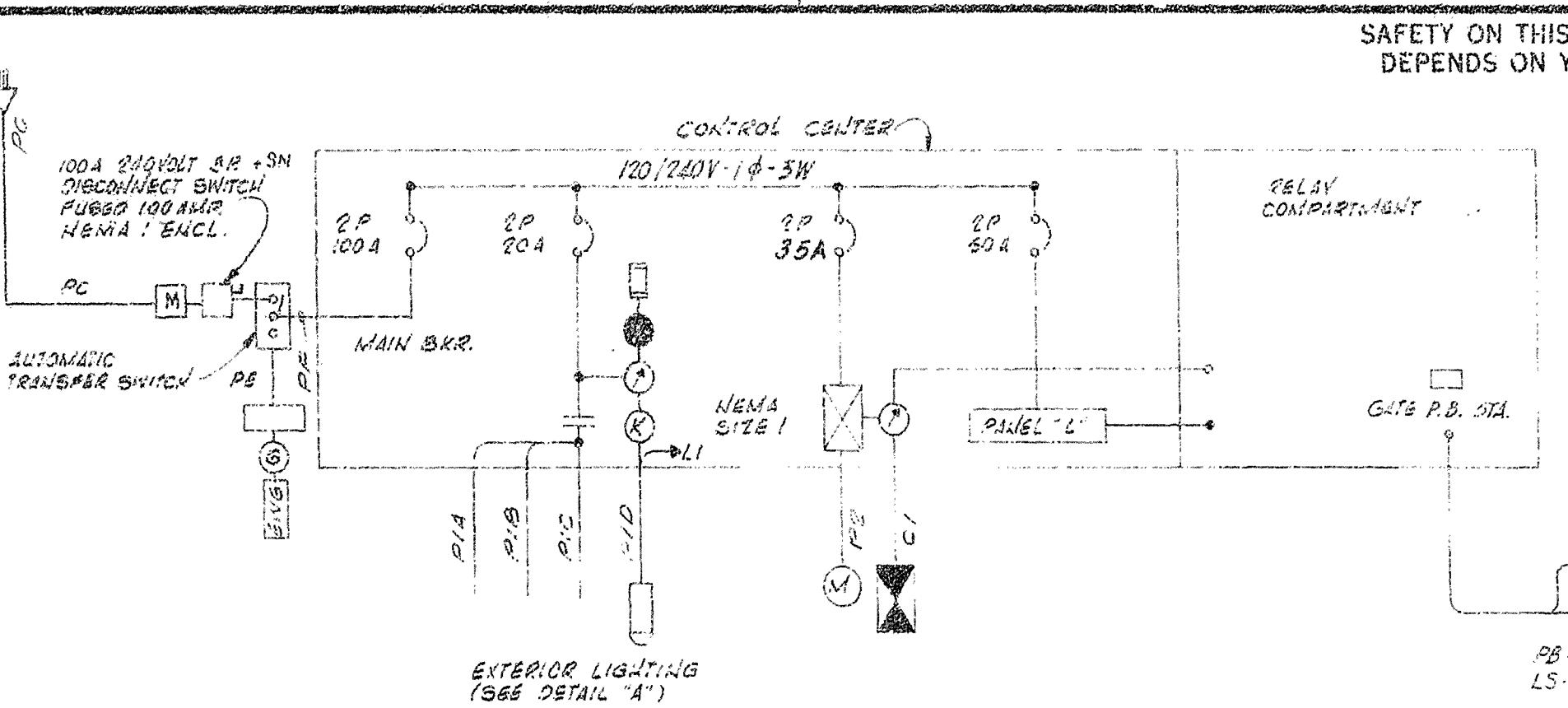
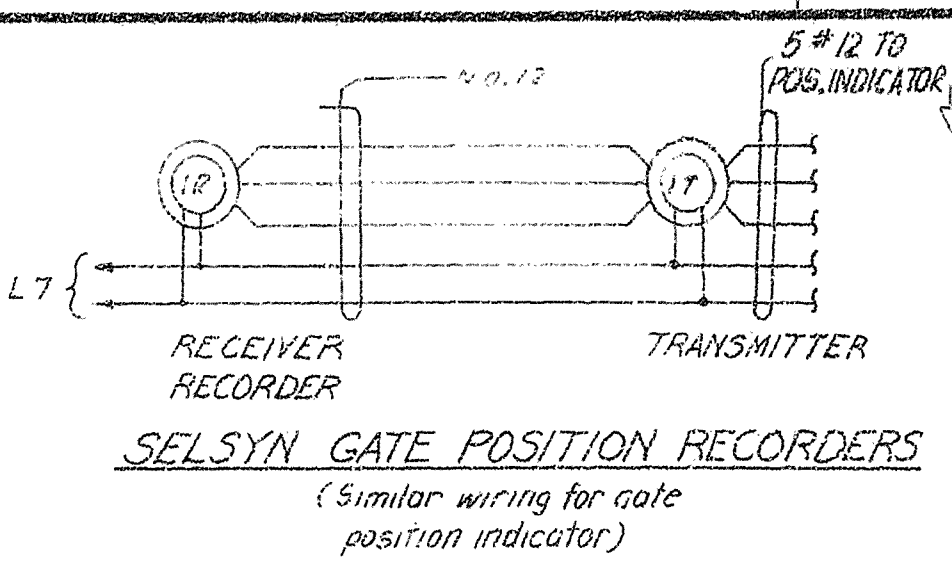
GATE LIMIT SWITCH ARRANGEMENT
NOT TO SCALE



LIMIT SWITCH TRIP

SCALE: 1"=1'-0"

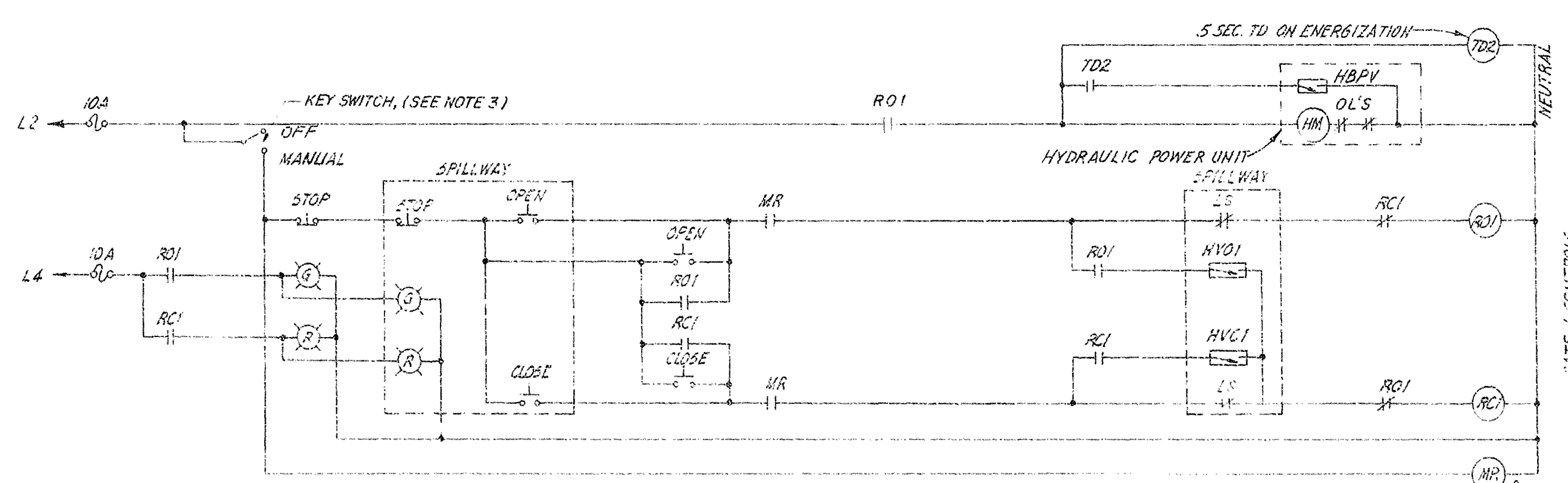
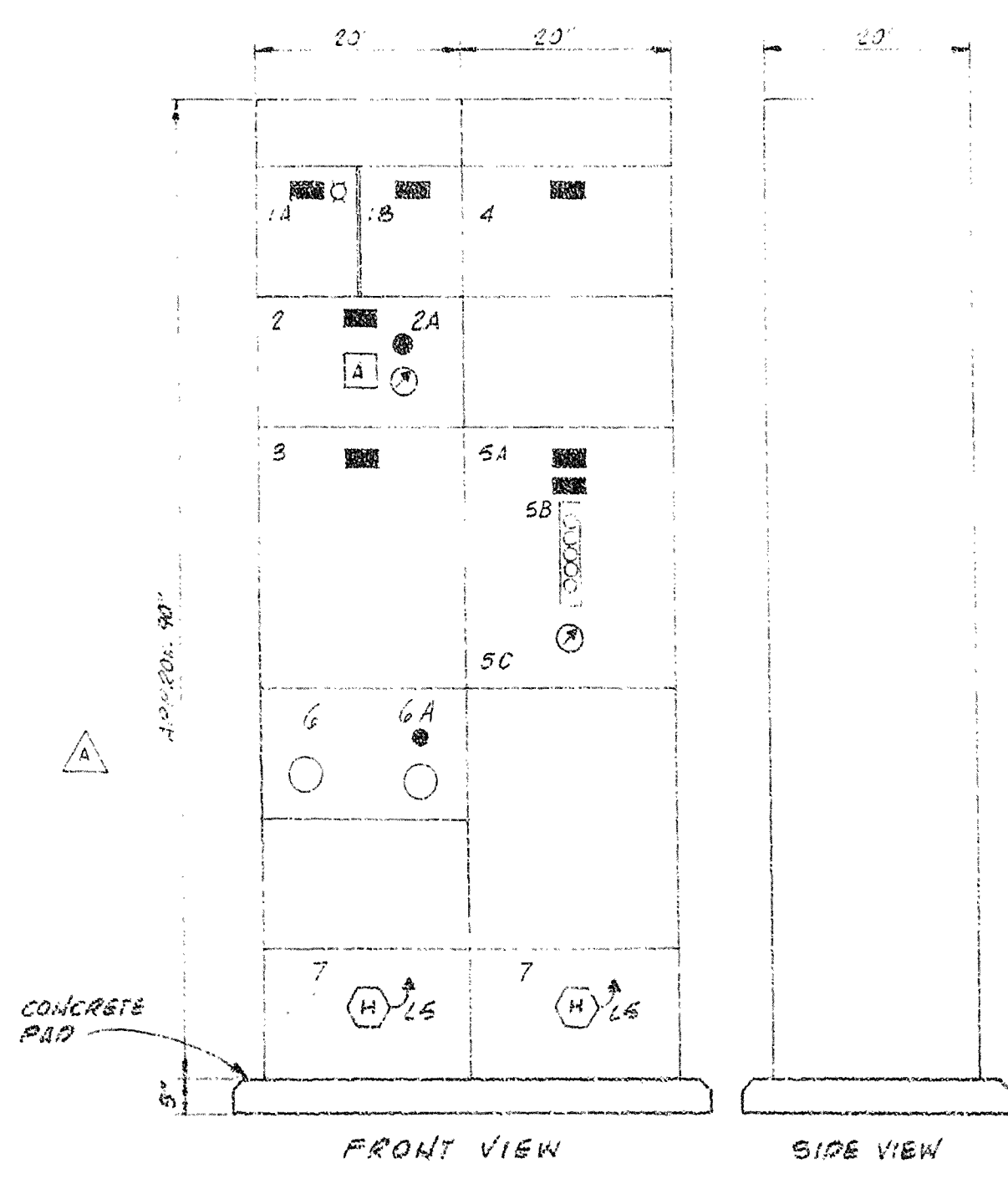
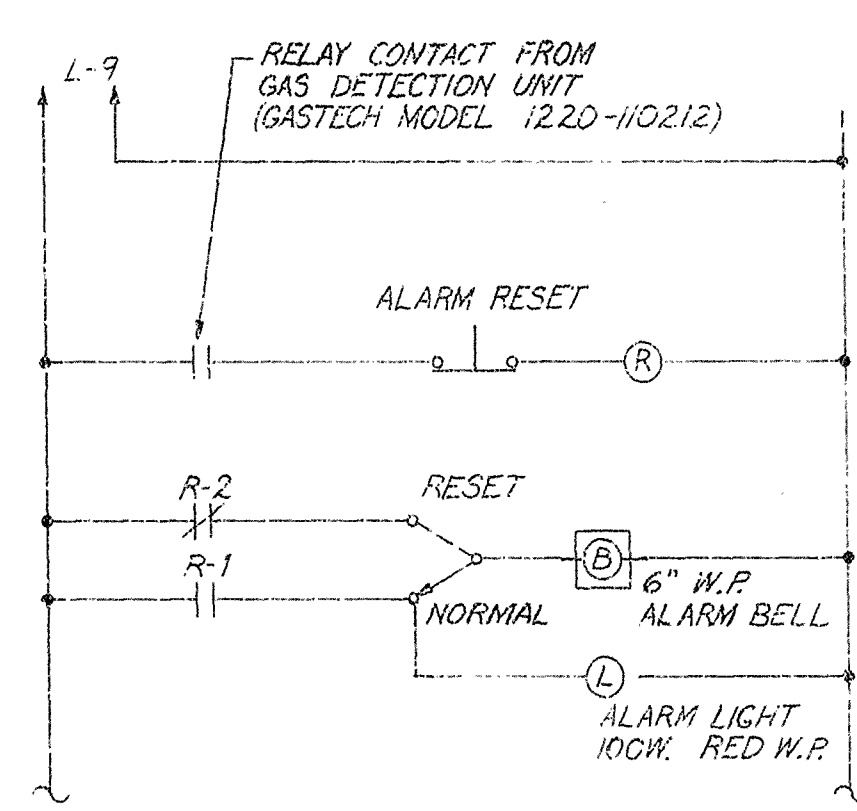
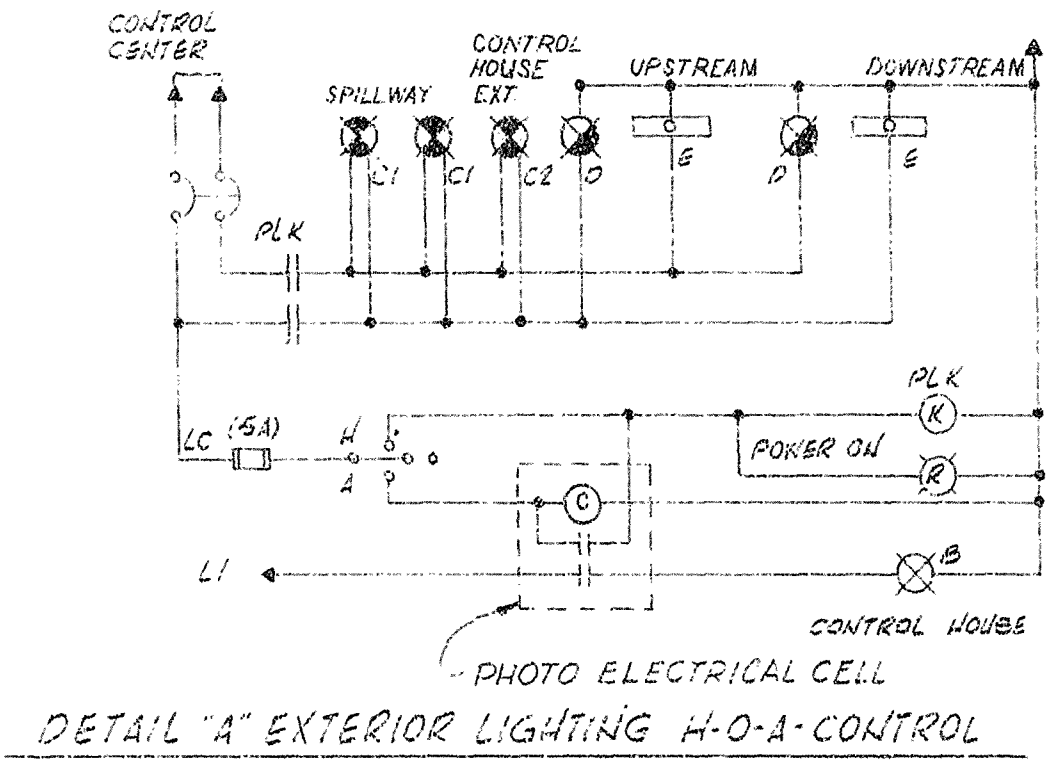
CONTROL CENTER							
EQUIPMENT OR NAMEPLATE DATA	C.I.P.C. NO.	B.R.R. NO.	MOTOR STARTER	CONTROL DEVICES	NO. POLES	TRIP AMPS	IND. LIGHTS
1A MAIN BREAKER	2	100					
1B PANEL BOARD FEEDER	2	50					
2 EXTERIOR LIGHTING FEEDER	2	20					
2A LIGHTING CONTACTOR "PLK"				H-O-A			RED
3 PANEL BOARD "L"							
4 GATE HYDRAULIC POWER UNIT	2	35		H-O-R			
5A GATE CONTROL RELAYS				H-O-A			
5B GATE NO. 1 CONTROL				O-C-S, RAG			
5C FUSE BLOCK, IND. LT. CIRCUITS							
6 GAS DETECTION ALARM & HORN CONTROL				2 POS			
6A GAS DETECTION ALARM & HORN RELAY							
7 TERMINAL BLOCK COMPARTMENT							



REVISIONS			
NO.	SYMBOL	DESCRIPTION	DATE
6	A	REVISED TO ACCOMPANY MOD. SUFFIX F	2-30-89

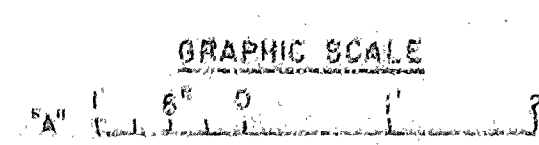
PANEL BOARD "L"							
120/240V - 1Ø 3Ø 3W				CIRCUIT BREAKER TYPE 100 AMP. MAINLUGS ONLY			
CKT. NO.	NO. POLES	WIRE SIZE	COND. SIZE	CIRCUIT IDENTIFICATION	CKT. NO.	NO. POLES	WIRE SIZE
1	1	20	1/2"	CONTROL HOUSE LIGHTING	2	1	20
3	1	20	1/2"	CONTROL HOUSE RECEPTACLES	4	1	20
5	1	20	1/2"	HEATER IN CONTROL CENTER AGEN	6	1	20
7	1	20	1/2"	* GATE POSITION RECORDER	8	1	20
9	1	20	1/2"	GAS DETECTION UNIT	10	1	20
11	1	20	1/2"	BATTERY CHARGER	12	1	20
13	1	20	1/2"		14	1	20

LIGHTING FIXTURE SCHEDULE							
MARK	DESCRIPTION	EST. QUANT.	LAMPS	WATTS	VOLTS	MOUNTING HEIGHT	DESCRIPTION
A	CONTROL HOUSE INTERIOR	2	2	40	120	CEILING	TYPE 215, SHEET 23 DWG. 40-06-04
B	CONTROL HOUSE EXTERIOR	1	1	60	120	WALL MOUNTED 1' BELOW EAVES	TYPE 124, SHEET 15 DWG. 40-06-04
C	AREA LIGHTING SPILLWAY BRIDGE	1	1	100	240		HIGH PRESSURE SODIUM STREET LIGHT UNIT (SEE SPECIFICATIONS)
D	SAFETY BARRIER	2	1	250	120		SYLVANIA CAT. NO. SFL-25010 OR EQUAL
E	WARNING SIGN	2	1	100	120		6" WEATHER PROOF FLUORESCENT SIGN FIXTURE, SIMLAR LIGHTING FIXTURE CO. INC. PHILA., PA. CAT. NO. CS172 H.O. WITH 1-72" 800 M.A. LAMP OR EQUAL



- LEGEND**
- TIME DELAY
 - HYDRAULIC VALVE OPEN
 - RELAY OPEN NO.
 - RELAY CLOSE NO.
 - HYDRAULIC VALVE CLOSE
 - HYDRAULIC MOTOR STARTER
 - HYDRAULIC BYPASS VALVE
 - MANUAL RELAY
 - GREEN IND. LIGHT
 - RED IND. LIGHT

RECORD DRAWING NOTE
"Shall be," "Provide," "Install," "Remove," etc., indicates work was accomplished under the contract.

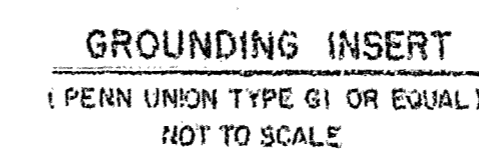


AS-BUILT

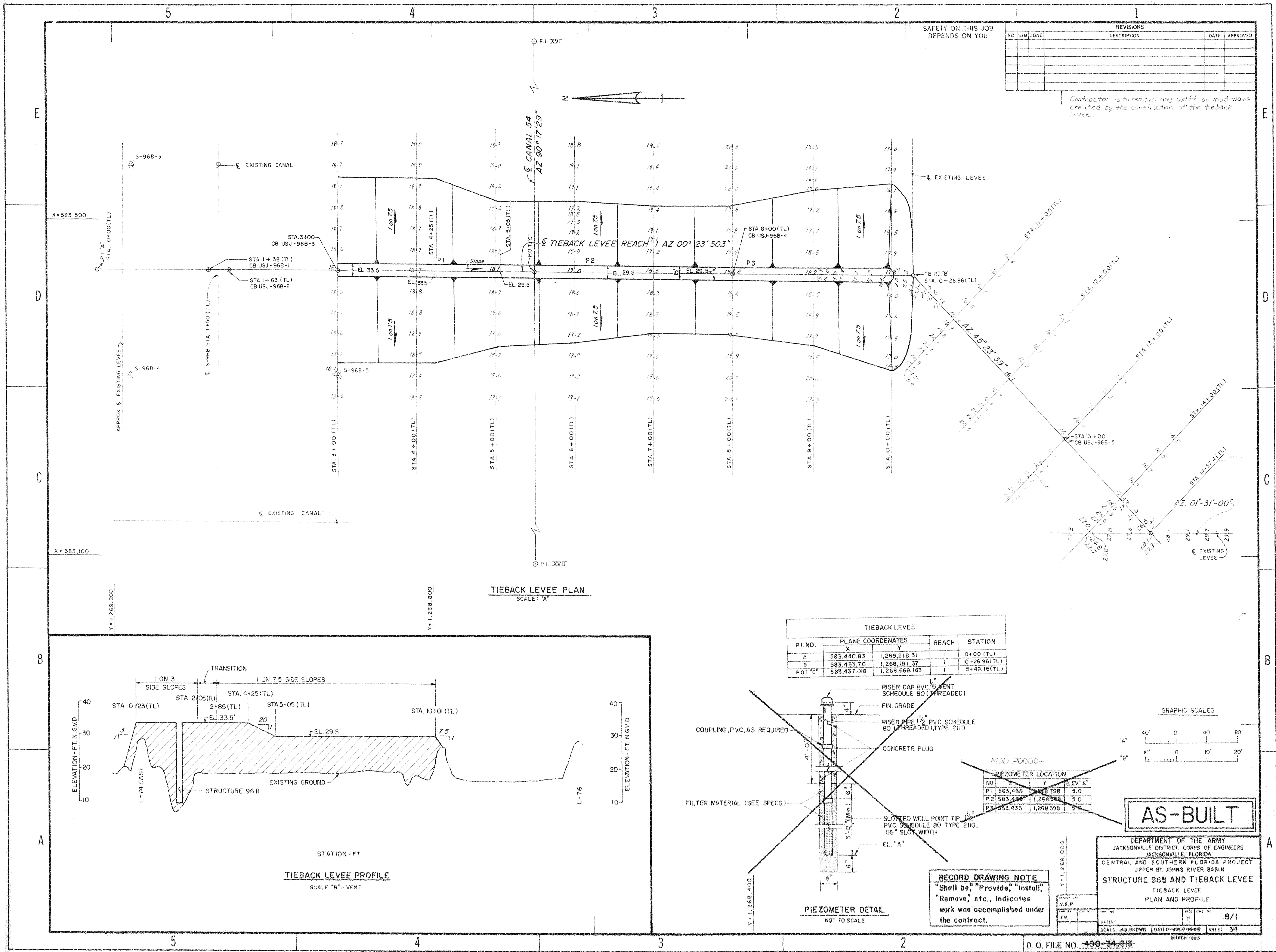
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE

ELECTRICAL SYSTEM WIRING DIAGRAMS			
DATE	NO.	REV.	DATE
SCALE AS SHOWN	DATE 10/25/80	SHEET	32

450-36,389



(PENN UNION TYPE GI OR EQUAL)
NOT TO SCALE

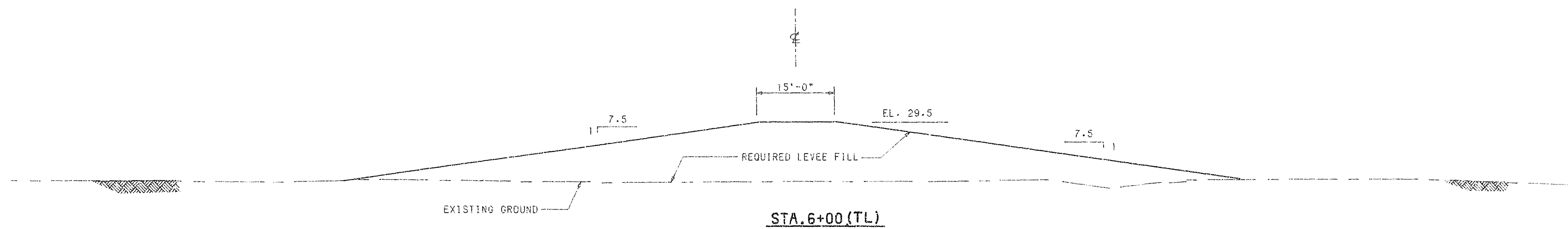


SAFETY ON THIS JOB
DEPENDS ON YOU

REVISIONS				
NO.	SYM	ZONE	DESCRIPTION	DATE
1	A	-	REVISED TO ACCOMPANY AMENDMENT NO. 0001	11/7/86

E

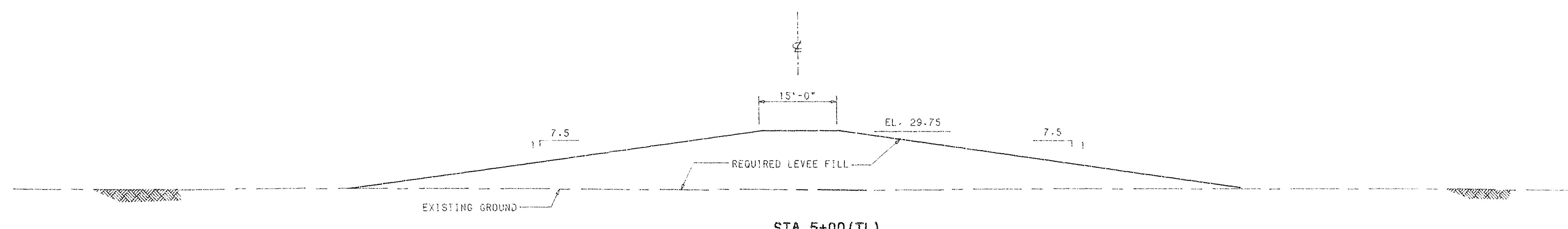
ELEVATION - FT. NGVD
30
20
10



ELEVATION - FT. NGVD
30
20
10

D

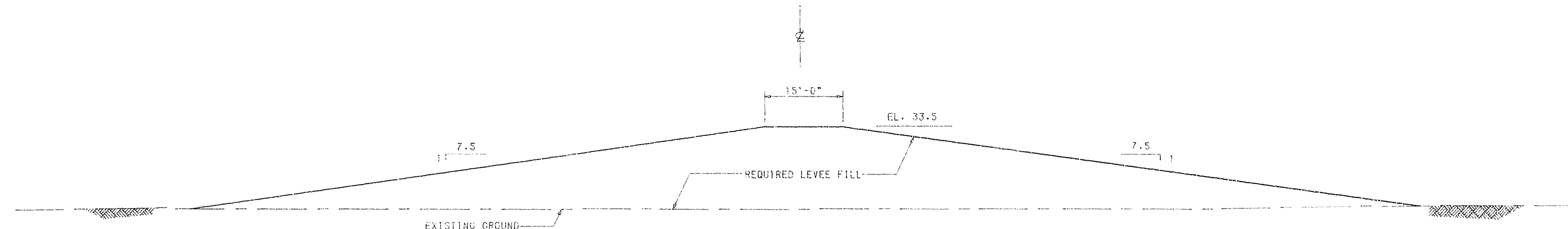
ELEVATION - FT. NGVD
30
20
10



ELEVATION - FT. NGVD
30
20
10

C

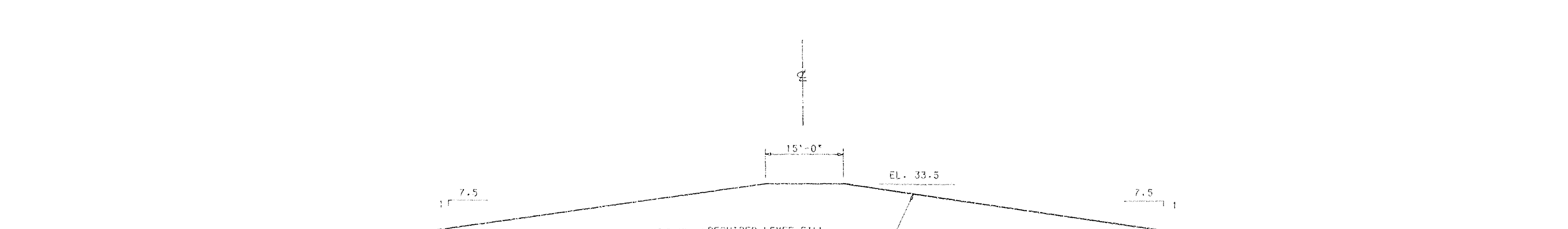
ELEVATION - FT. NGVD
30
20
10



ELEVATION - FT. NGVD
30
20
10

B

ELEVATION - FT. NGVD
30
20
10



ELEVATION - FT. NGVD
30
20
10

A

△ RANGE - FT.

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.

AS-BUILT

GRAPHIC SCALE

10' 0 10' 20'

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHN RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE
TIEBACK LEVEE

CROSS SECTIONS

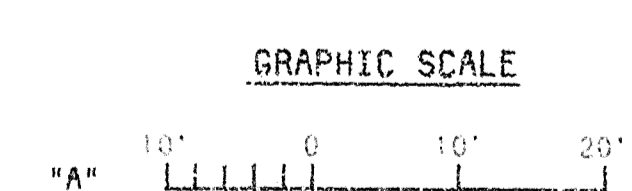
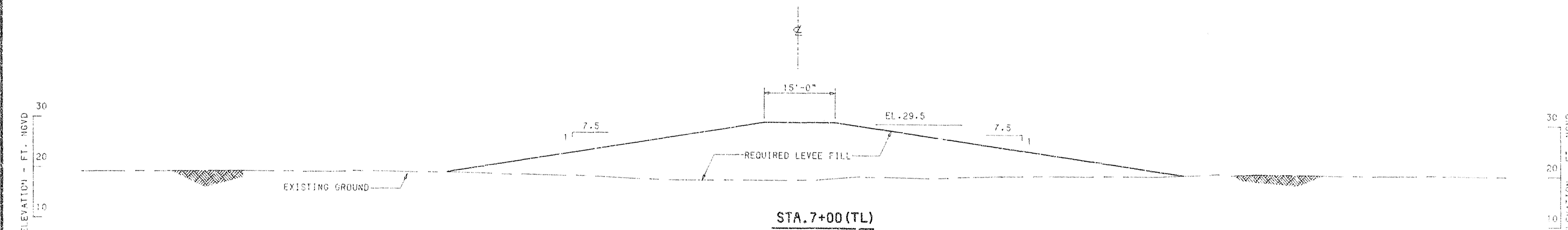
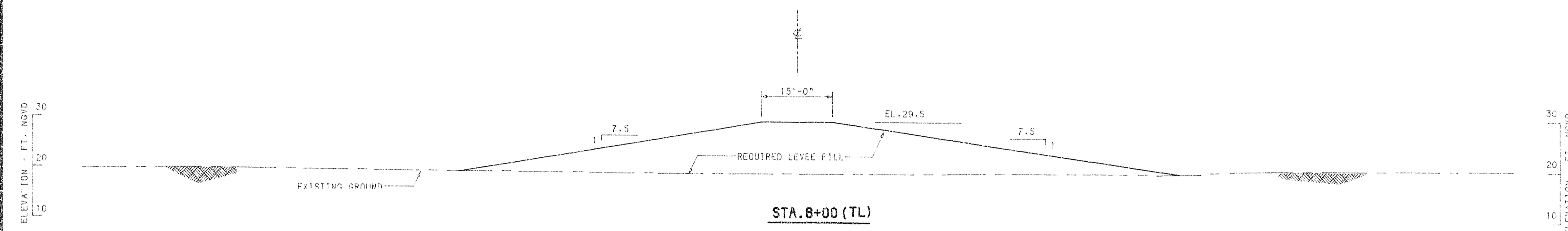
NO.	REV.	DATE	BY	CHK.
1	1	8/2	F	8/2

D. O. FILE NO. 490-34-013

490-36,389

SAFETY ON THIS JOB
DEPENDS ON YOU

REVISIONS			
NO.	SYMBOL	DESCRIPTION	DATE
1	A	REVISED TO ACCOMPANY AMENDMENT NO. 0001	11/7/86



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS JACKSONVILLE, FLORIDA			
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN STRUCTURE 96B AND TIEBACK LEVEE TIEBACK LEVEE			
CROSS SECTIONS		8/3	
SCALE AS SHOWN	DATED JAN 1984	SHEET	39

D. O. FILE NO. 499-34-013

490-36,389

D. O. 0077

SAFETY ON THIS JOB
DEPENDS ON YOU

REVISIONS			
NO.	SYMBOL	DESCRIPTION	DATE
1	A	REVISED TO ACCOMPANY AMENDMENT NO. 0301	11/7/86

ELEVATION IN FEET - N.G.V.D.

ELEVATION IN FEET - N.G.V.D.

ELEVATION IN FEET - N.G.V.D.

ELEVATION IN FEET - N.G.V.D.

RANGE - FT.

GRAPHIC SCALE

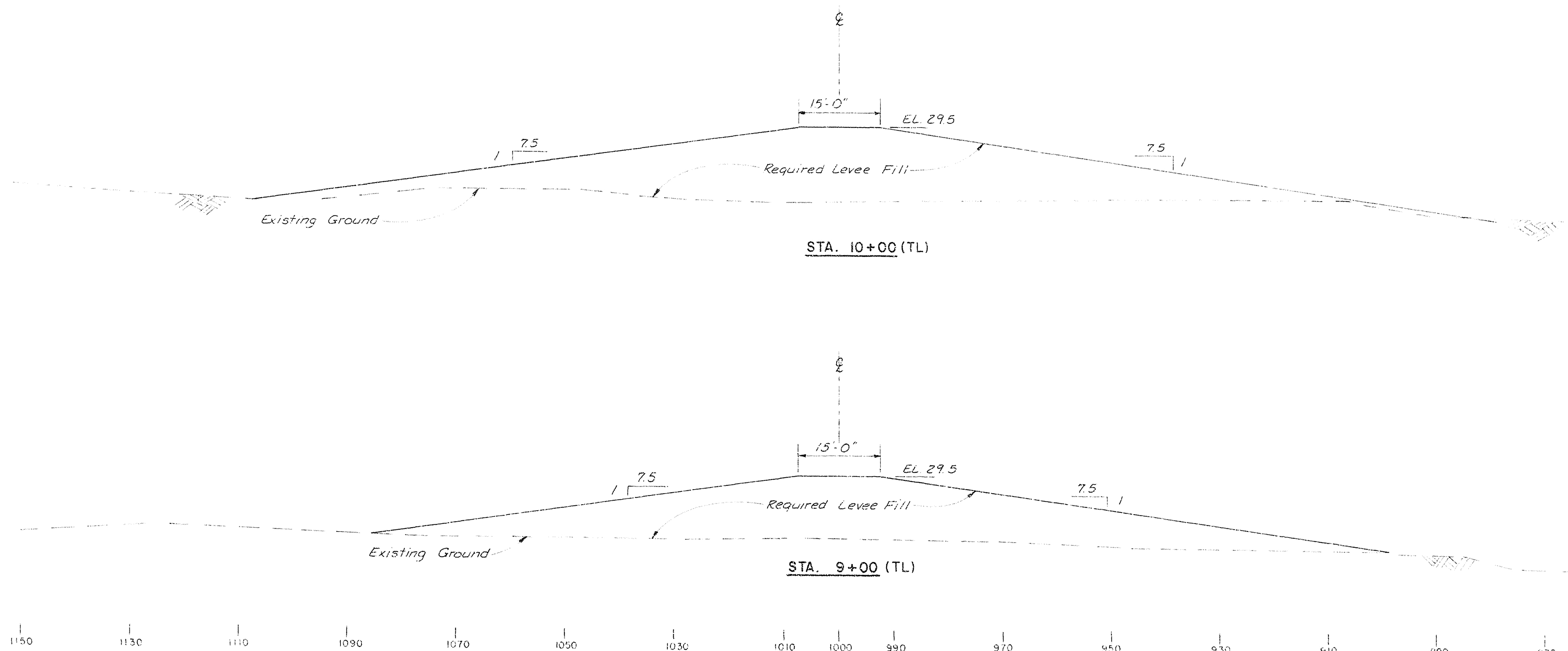
10' 0' 10' 20'

AS-BUILT

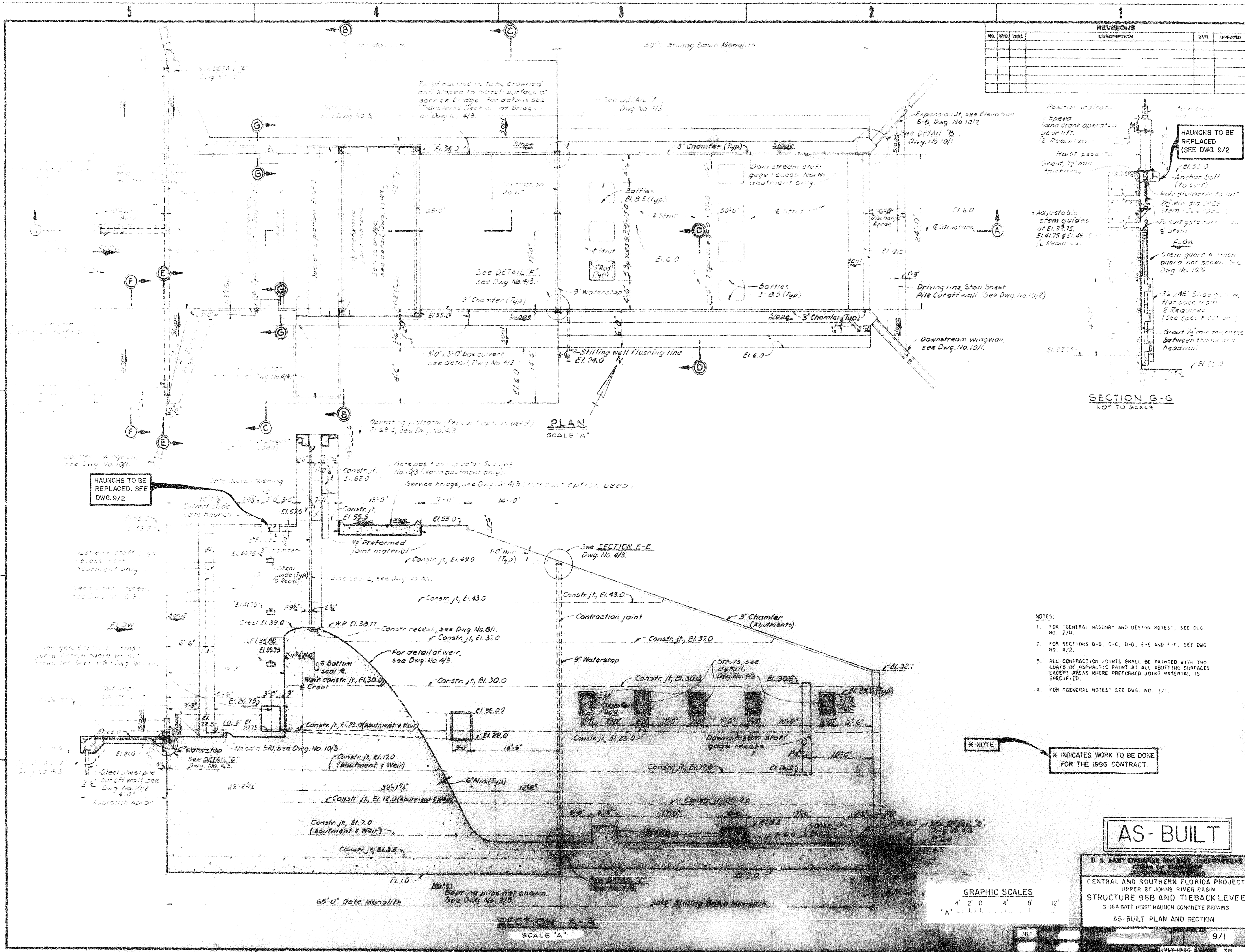
RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc. indicates
work was accomplished under
the contract.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
FOR FLOOD CONTROL AND OTHER PURPOSES
STRUCTURE 96B AND TIEBACK LEVEE
TIEBACK LEVEE
CROSS SECTIONS
SCALE: AS SHOWN DATED: JULY-1986 SHEET 37
8/4
MAR, 1988

D.O. FILE NO. 490-34,813
490-36,389



REVISIONS				
NO.	DATE	DESCRIPTION	DATE	APPROVED

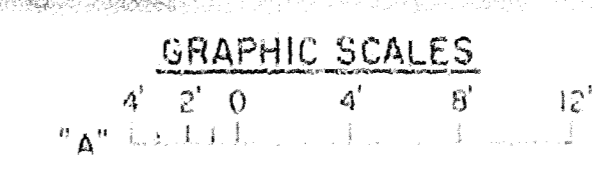


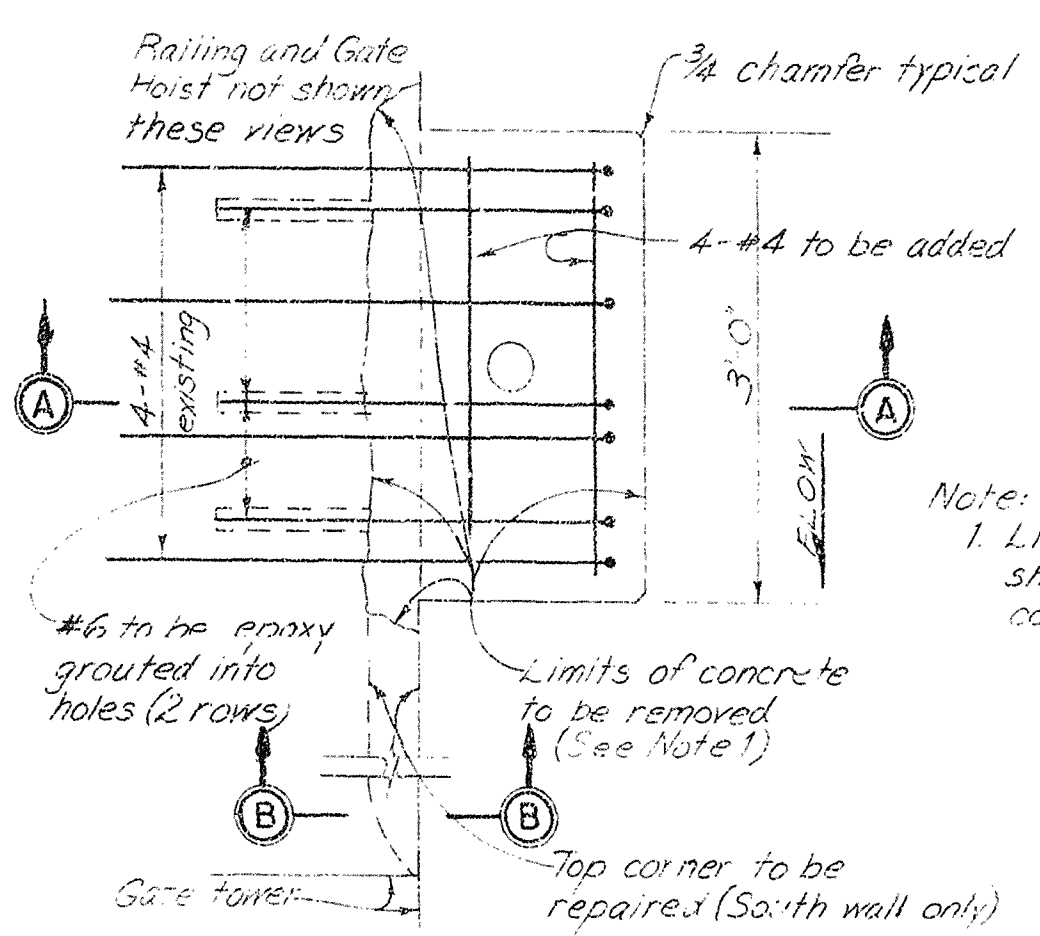
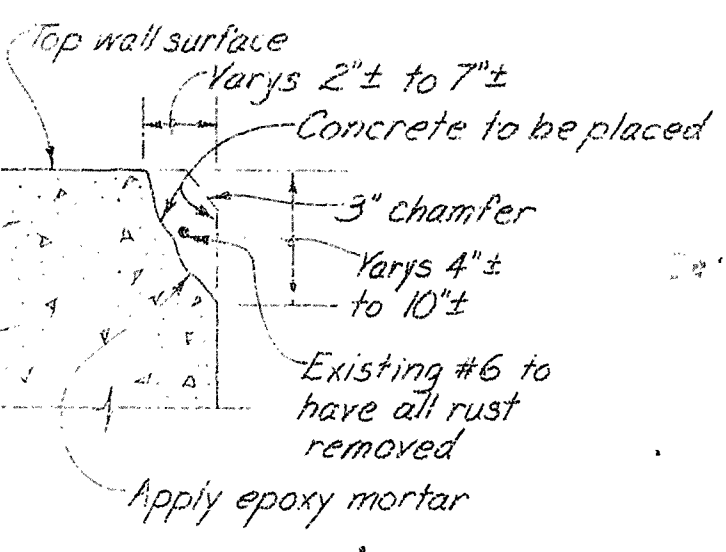
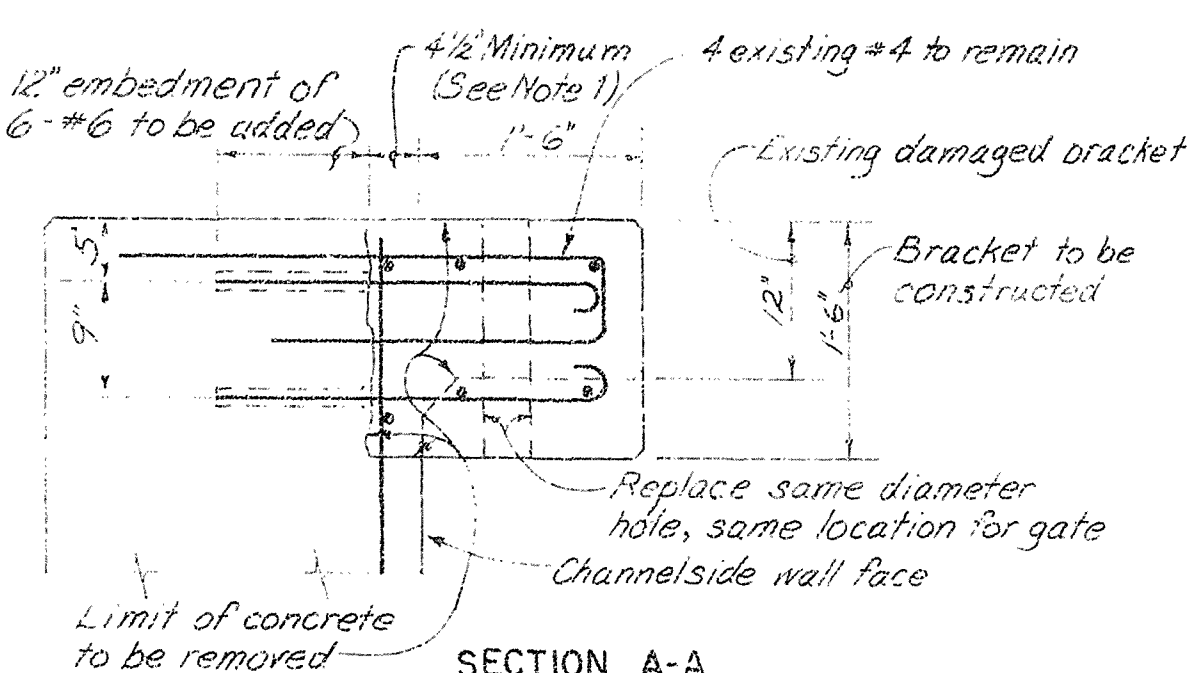
- NOTES:
1. FOR "GENERAL MASONRY AND DESIGN NOTES", SEE DWG. NO. 2/11.
 2. FOR SECTIONS B-B, C-C, D-D, E-E AND F-F, SEE DWG. NO. 4/2.
 3. ALL CONTRACTION JOINTS SHALL BE PAINTED WITH TWO COATS OF ASPHALTIC PAINT AT ALL ABUTMENT SURFACES EXCEPT AREAS WHERE PREFORMED JOINT MATERIAL IS SPECIFIED.
 4. FOR "GENERAL NOTES" SEE DWG. NO. 1/1.

X NOTE
X INDICATES WORK TO BE DONE FOR THE 1996 CONTRACT.

AS-BUILT

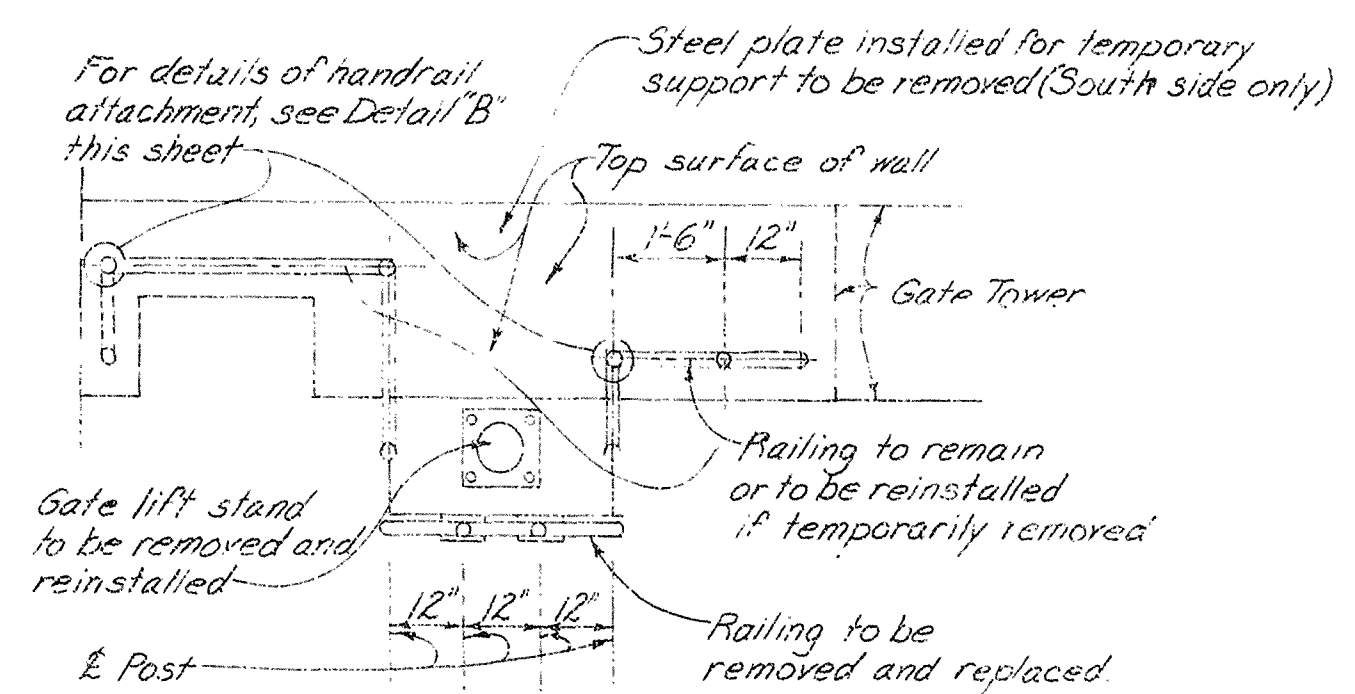
U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE
 CENTRAL AND SOUTHERN FLORIDA PROJECT
 UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEL
 5:16.4 GATE HAUNCH CONCRETE REPAIRS
 AS-BUILT PLAN AND SECTION



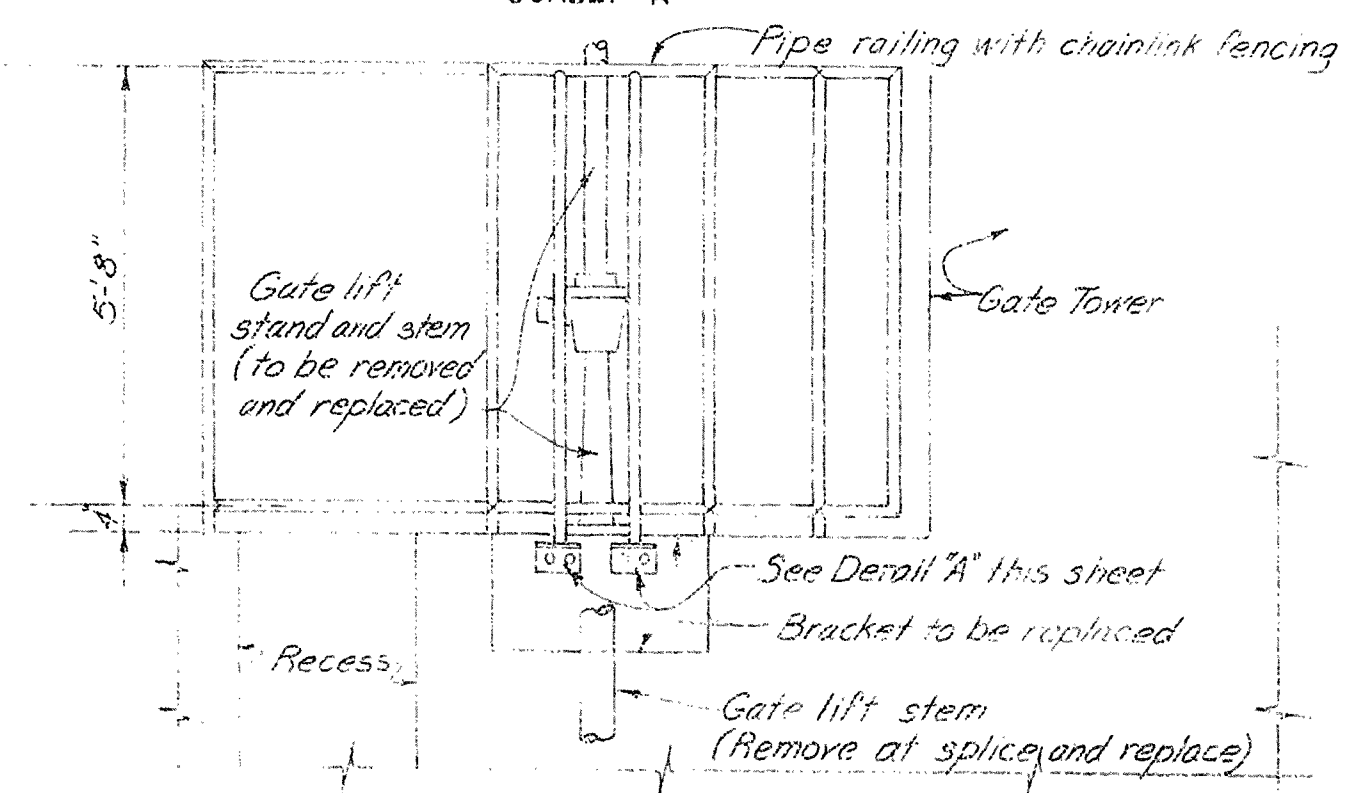


Note:
1. Limits of concrete to be removed are shown, however all cracked, loose concrete shall be removed.

PLAN BRACKET AREA
SHOWING CONCRETE AND REINFORCEMENT
SCALE: "B"



PLAN-HANDRAIL
SCALE: "A"



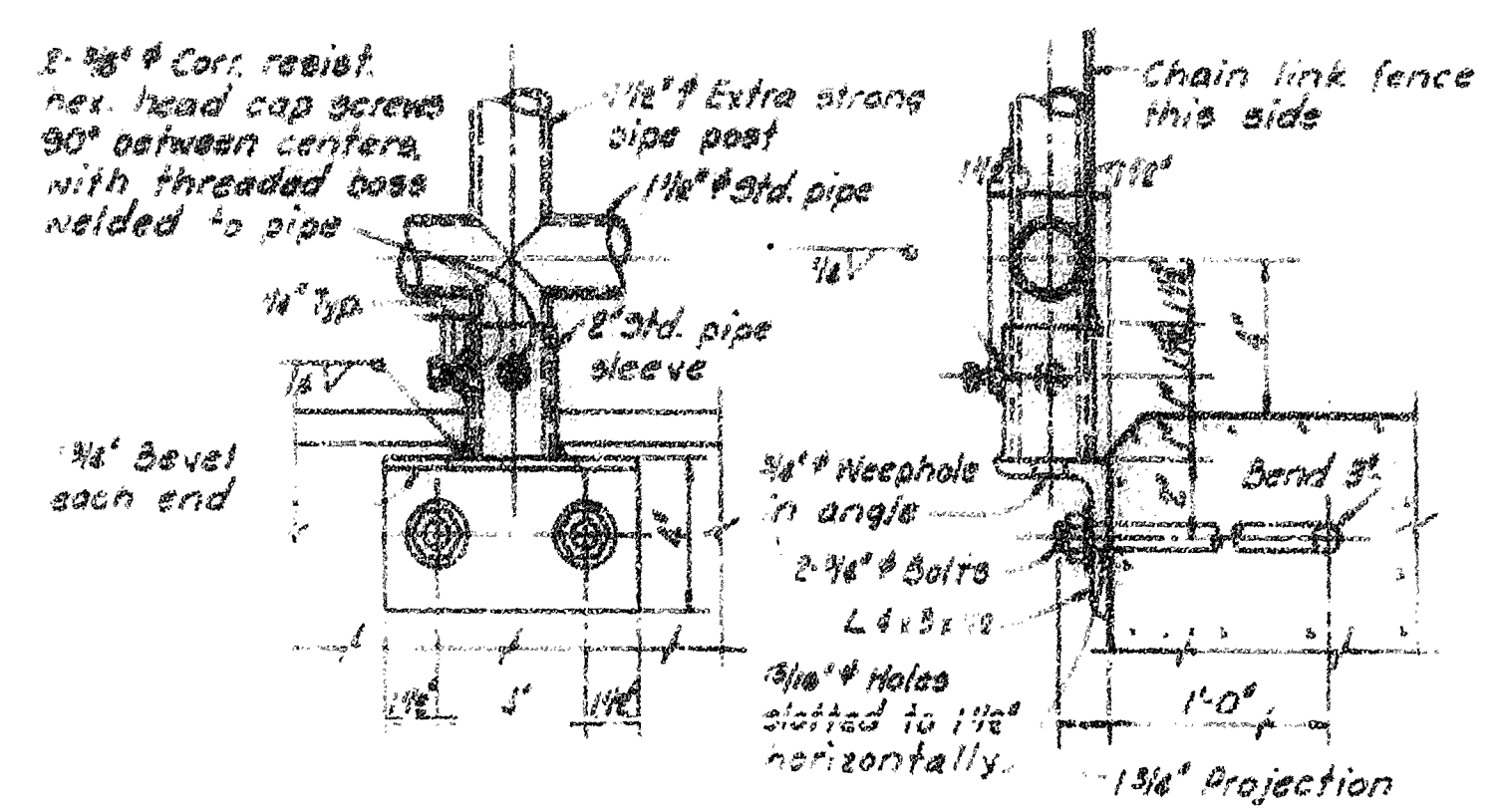
ELEVATION-BRACKET AREA
HANDRAIL
SCALE: "A"

GRAPHIC SCALE

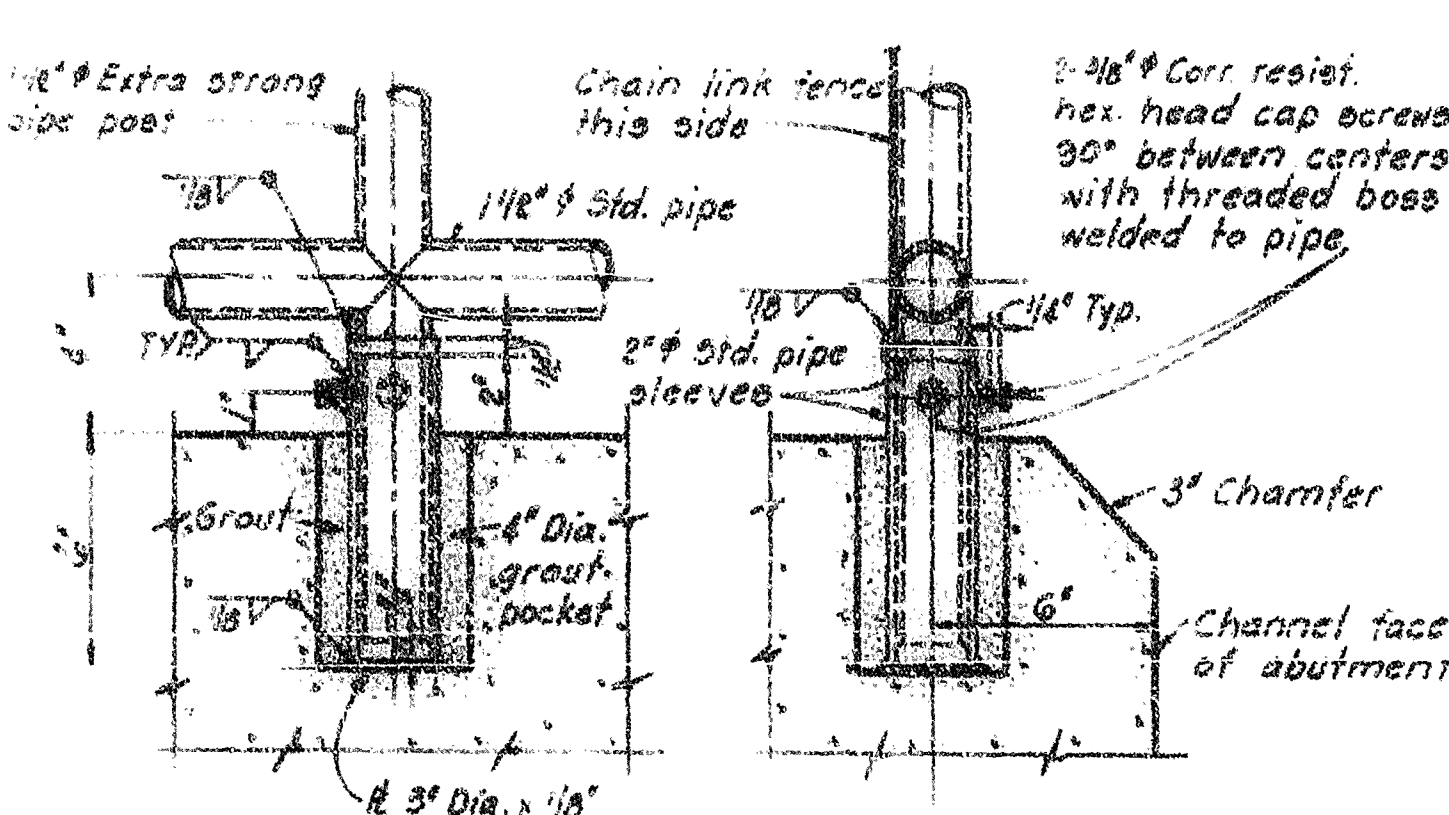
"A"	2'	1'	0'	2'	4'
"B"	1'	0'	0'	2'	2'

DETAILS FOR THIS CONTRACT
THIS SIDE OF LINE

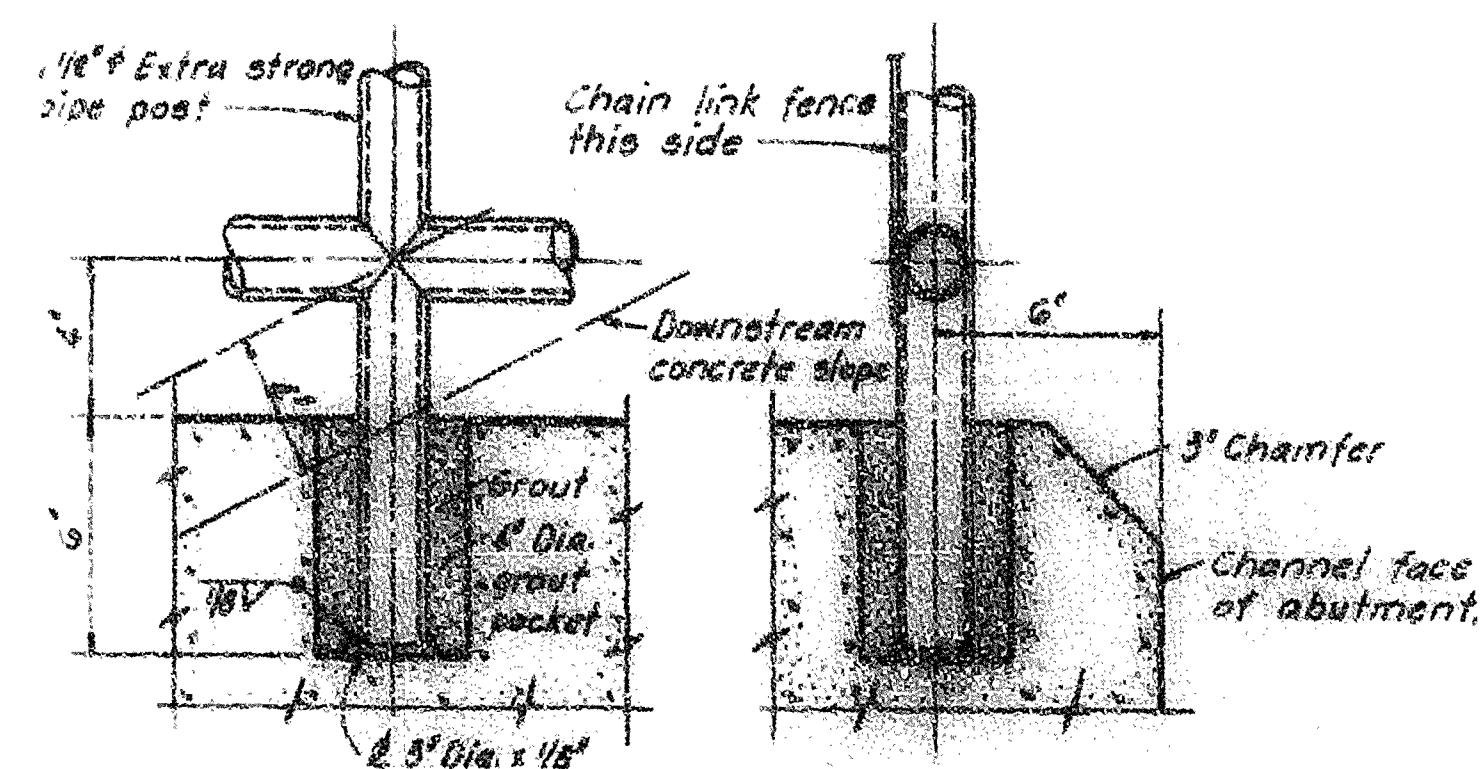
DETAILS THIS SIDE OF LINE FROM ORIGINAL CONTRACT.
ONLY SPECIFIC DETAILS REQUIRED FOR THIS CONTRACT



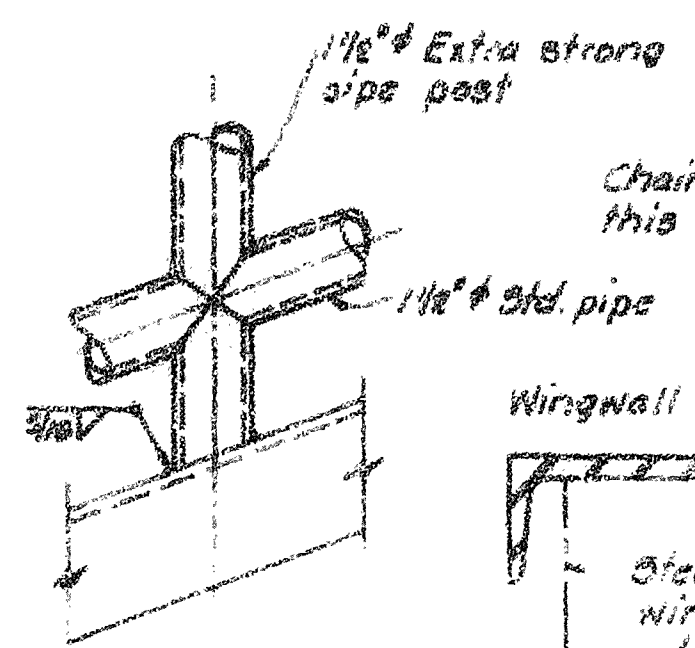
DETAIL "A"
SCALE: "B"



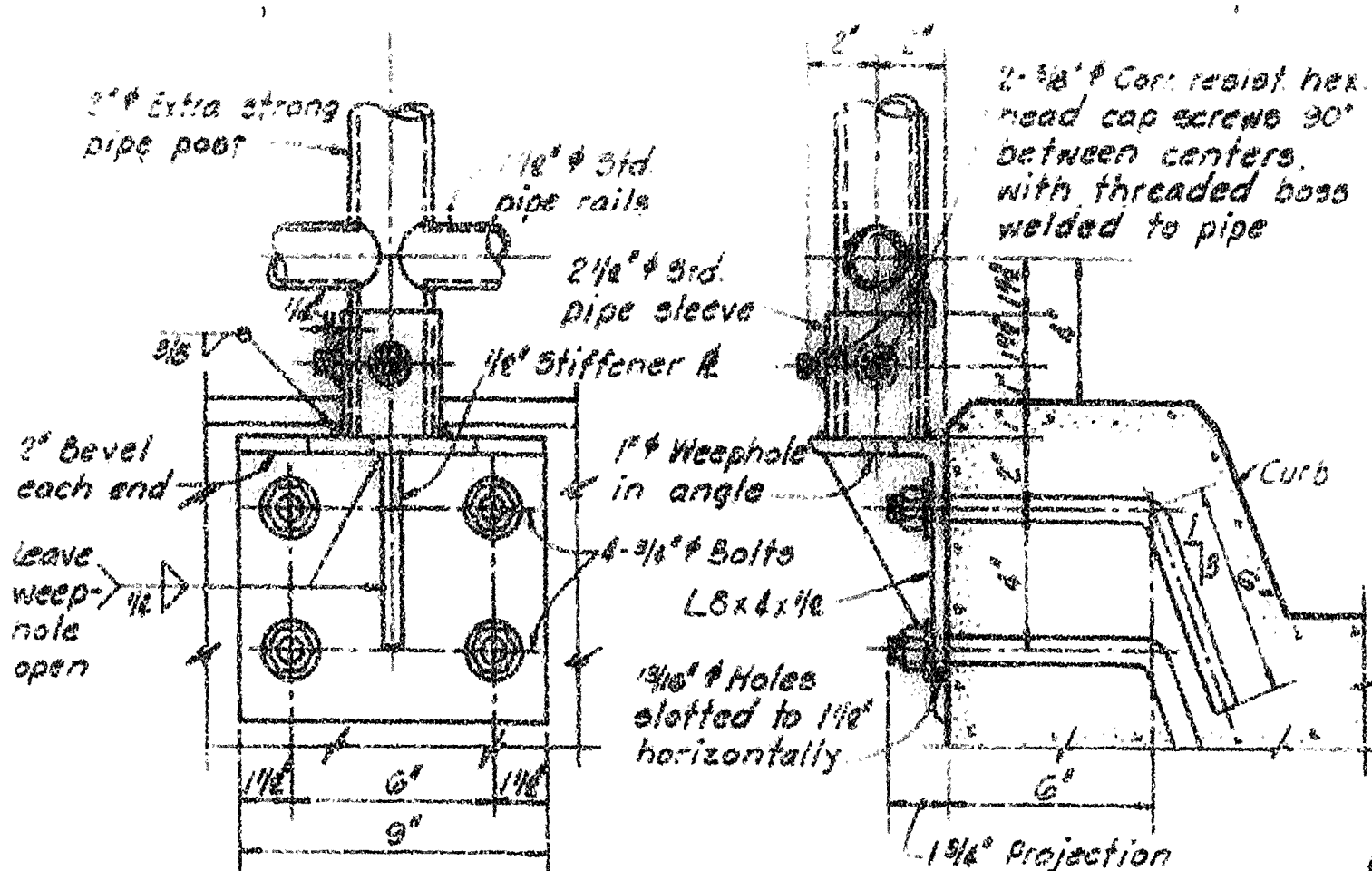
DETAIL "B"
SCALE: "B"



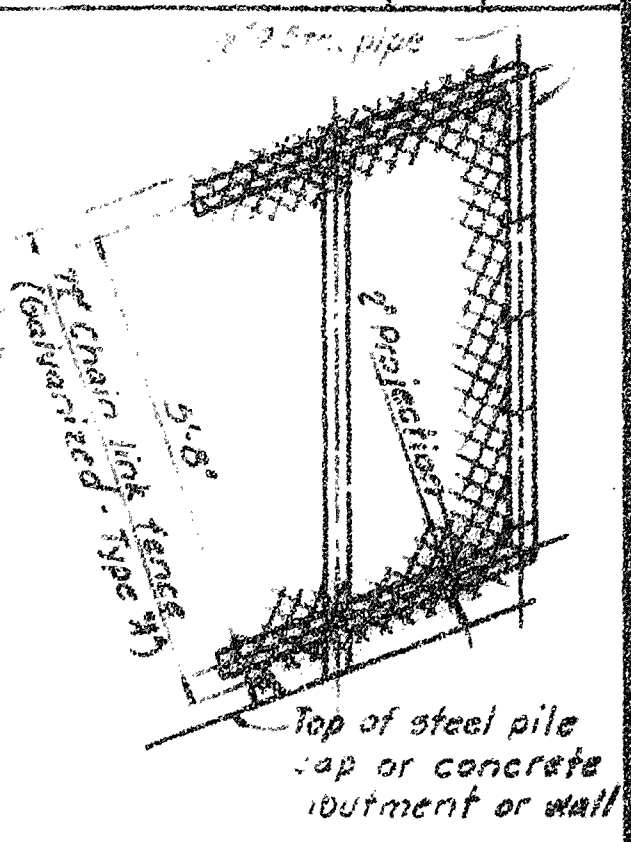
DETAIL "C"
SCALE: "B"



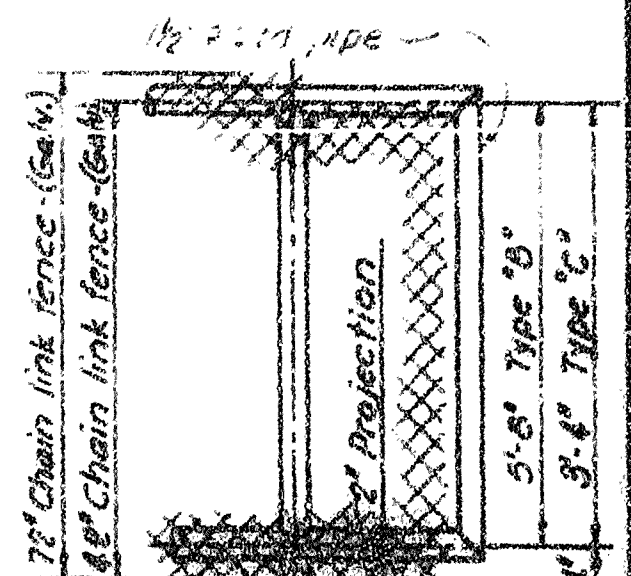
DETAIL "D"
SCALE: "B"



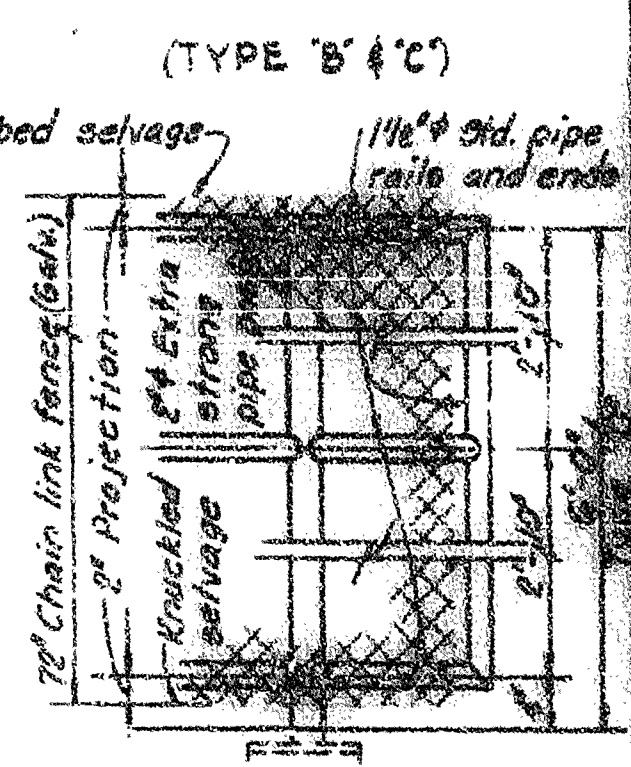
DETAIL "E"
SCALE: "B"



ELEVATION
NOT TO SCALE
(TYPE "A")



ELEVATION
NOT TO SCALE
(TYPE "B" & "C")



ELEVATION
TYPE "D" FENCE FOR
SERVICE BRIDGE HANDRAIL
NOT TO SCALE

GENERAL NOTES:

- ALL HANDRAILS AND CONNECTIONS TO BE GALVANIZED.
- ALL GALVANIZED ITEMS TO BE GALVANIZED AFTER FABRICATION.
- WHEN GALVANIZED ITEMS LOSE THEIR COATING DUE TO FIELD WELDING, GALVANIZING REPAIRS SHALL BE MADE IN ACCORDANCE WITH THE SPECIFICATIONS.
- HANDRAILS TO BE FLUSH WELDED TYPE.
- ALL MATERIAL NOTED AS COR. RESIST. SHALL BE CORROSION RESISTING STEEL, TYPE 304 OR 316 UNLESS SPECIFIED OTHERWISE.
- FOR LARGER DETAILS, SEE DWG. NO. 10/5.
- GALVANIZED CHAIN LINK FENCE TO BE ATTACHED TO ALL HANDRAIL POSTS AND RAILS IN SUCH A MANNER THAT MEETS THE STANDARDS RECOMMENDED BY THE FENCE MANUFACTURER.
- FOR TYPE "A", "B" AND "C" FENCING ALL POSTS SHALL BE 1 1/2" X 1/2" X 1/2" EXTRA STRONG PIPE AND ALL HORIZONTAL AND SLOPING PIPE SHALL BE 1 1/2" X 1/2" X 1/2" STANDARD PIPE UNLESS OTHERWISE SHOWN. FOR TYPE "D" FENCING, ALL POSTS AND RAILS SHALL BE PIPE OF THE SIZE INDICATED IN THE ABOVE DETAILS.
- FOR "GENERAL WELDING NOTES", SEE DWG. NO. 5/1.

CHAIN LINK FENCE SCHEDULE

TYPE	TOP SELVAGE	BOTTOM SELVAGE	FENCE HEIGHT
"A"	BARBED	KNICKLED	75"
"B"	BARBED	KNICKLED	72"
"C"	KNICKLED	KNICKLED	72"
"D"	BARBED	KNICKLED	72"

AS-BUILT

RECORD DRAWING NOTE
"Shall be," "Provide," "Install," "Remove," etc., indicates work was accomplished under the contract.

TYPICAL HANDRAIL DETAILS

GRAPHIC SCALE

"A"	4'	2'	0'	2'	4'
"B"	0'	3'	0'	6'	9'

U. S. ARMY
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 968 AND TIEBACK LEVEE
S-16-4 GATE HOIST HAUNCH CONCRETE REPAIRS
HAUNCH CONCRETE REPAIRS DETAILS NO. 1
SCALE AS SHOWN DATED 10-1-1964 SHEET 39

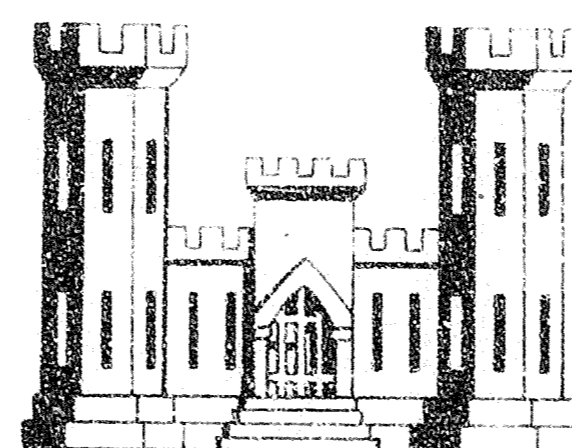
CENTRAL AND SOUTHERN FLORIDA PROJECT UPPER ST. JOHNS RIVER BASIN

SAFETY ON THIS JOB
DEPENDS ON YOU

PLANS

FOR CONSTRUCTION OF

STRUCTURE 96B AND TIEBACK LEVEE



ST. JOHNS RIVER
WATER MANAGEMENT DISTRICT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

1988

AS BUILT

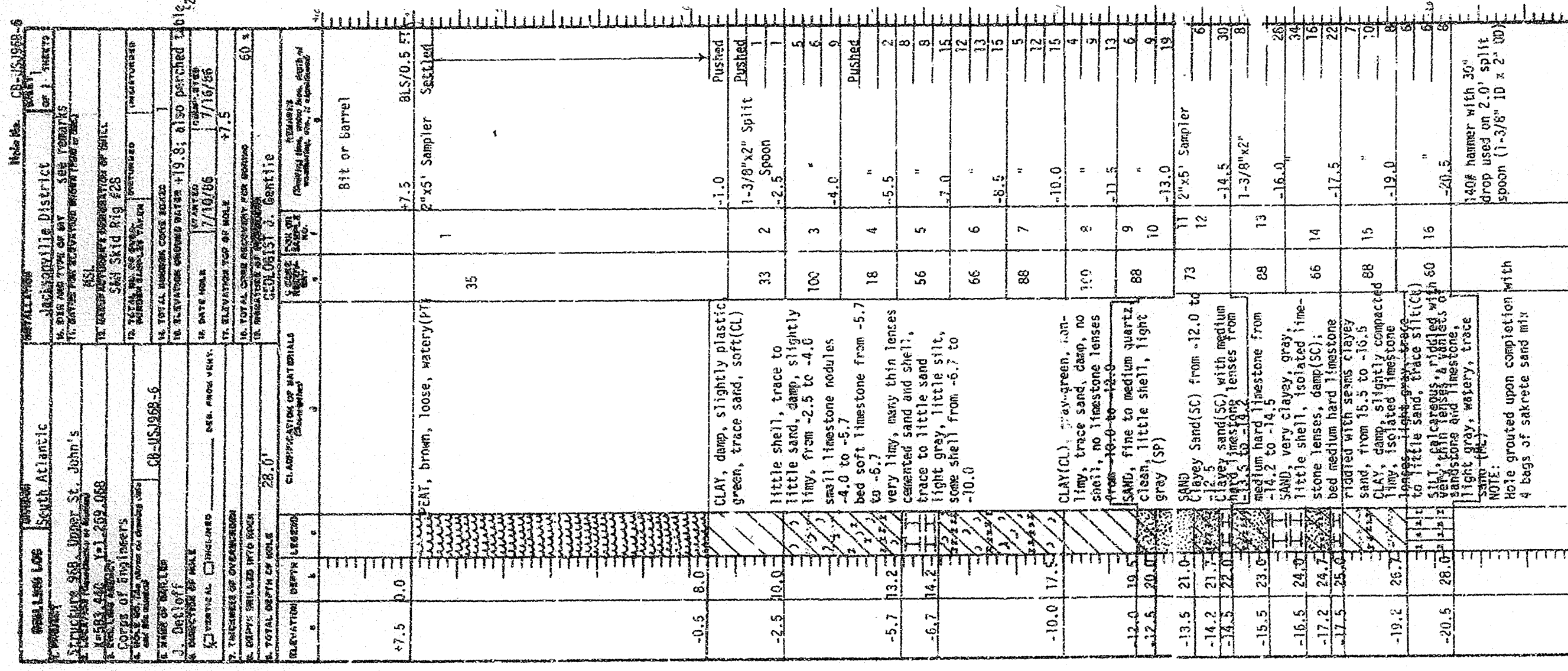
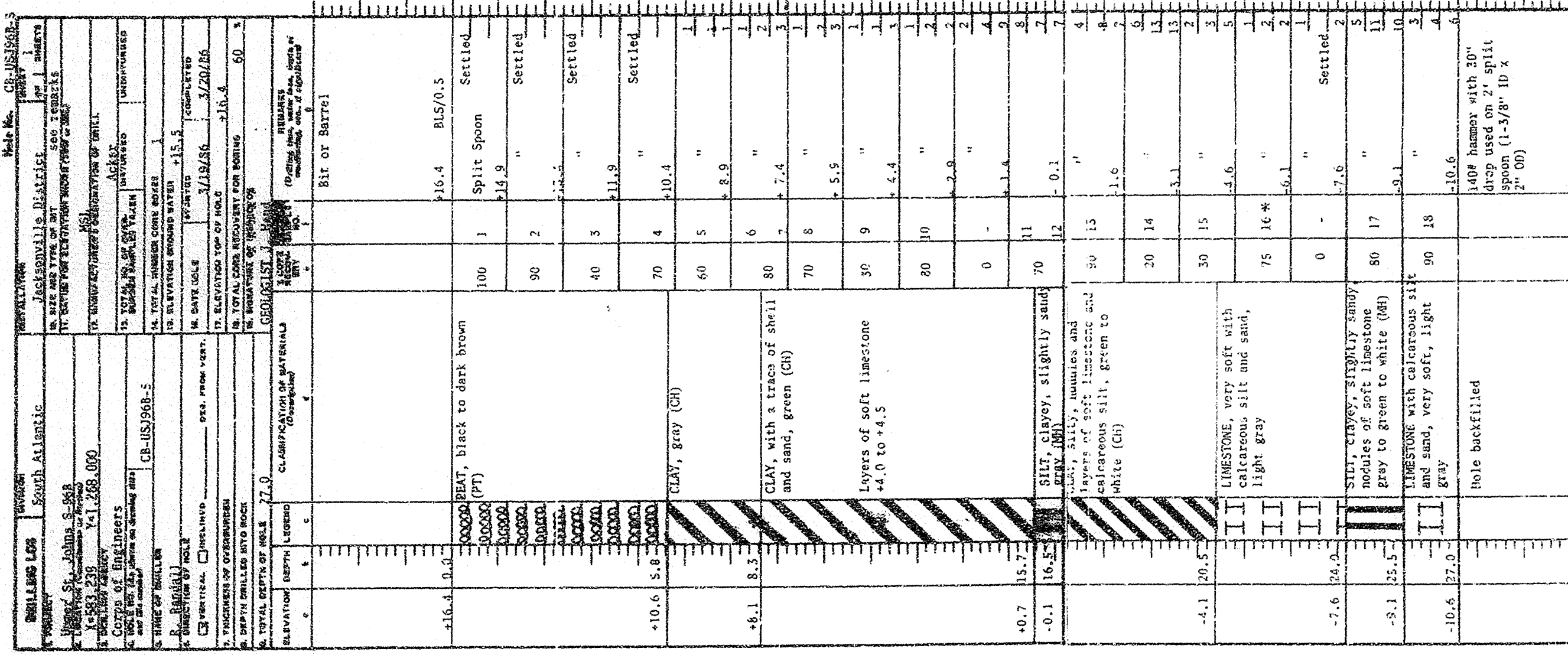
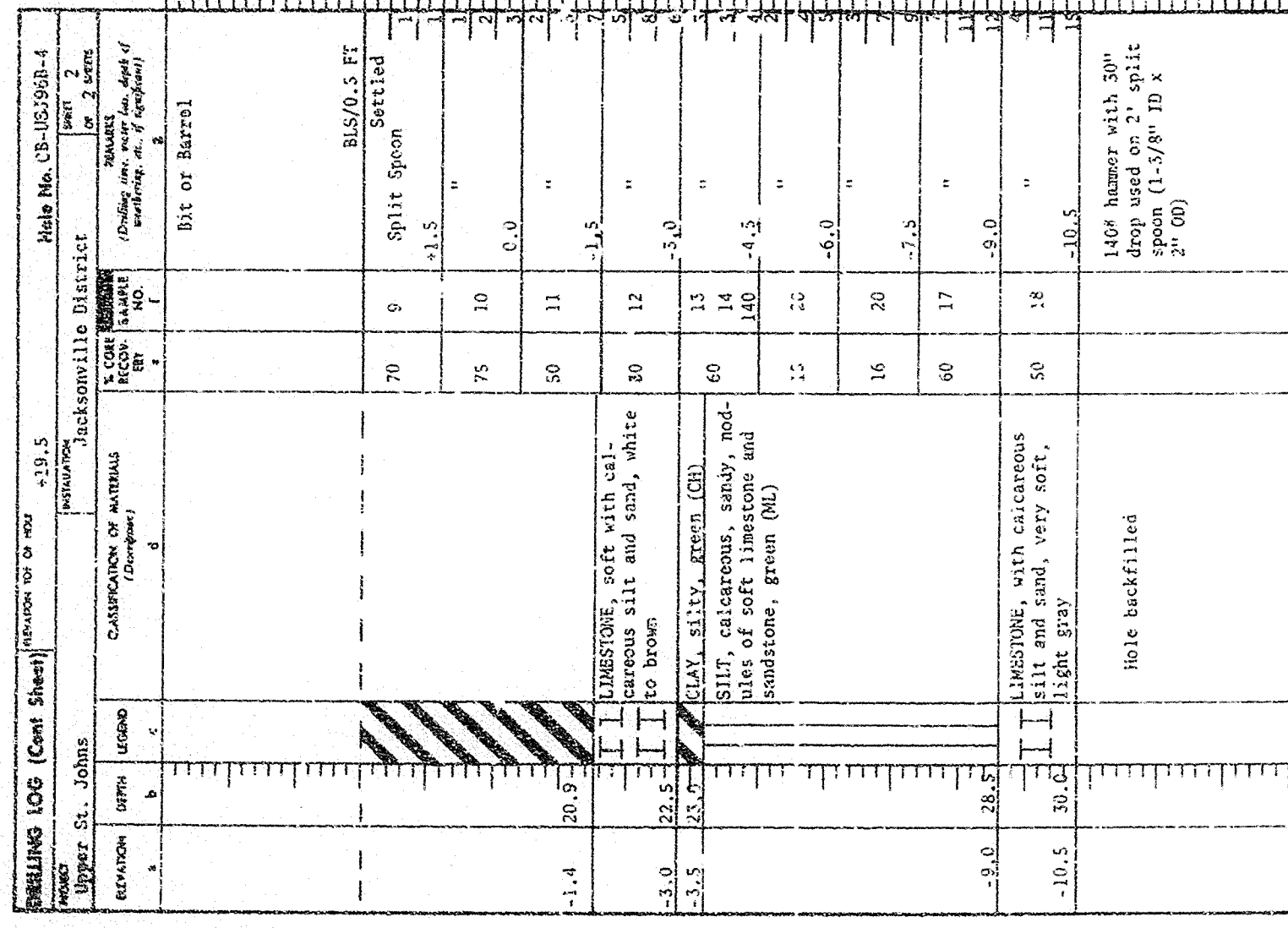
TO ACCOMPANY INVITATION
NO. DACW17-88-B-0008
DATED: 22 FEBRUARY 1988

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.

VE INCREASE PROFIT - SUBMIT VECP'S

SNOLIA3E

A



RECHARGE TEST FOR CB-USJ96B-6

RECHARGE TEST FOR CB-59J6B-6				
TEST NO.	BOTTOM OF CASING DEPTH (FT.)	BOTTOM OF HOLE DEPTH (FT.)	GPM/FT. HEAD	REMARKS
1	13.9	17.5	0.45	LEAKAGE MECHANISM CASING NO TEST
2	12.5	17.5	—	
3	17.3	22.3	1.03	
4	22.0	28.0	0.65	

NOTES: FOR CORE BORING NOTES, SEE DWG. NO. 10/107
SEE TABLE ON DWG NO 10/3 FOR LAB.
SOIL CLASSIFICATION.

AS-BUILT

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHN'S RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE
CASE RECORDS AND MISCELLANEOUS

SCALE AS SHOWN	(DATED 08-17-96)	SHEET 41
DATE	BY	
10/2	F	
100 OF BORING		
SHEET Dwg No.		
51.2	51.2 ft.	
SECTION 105		

3
FOR OFFICIAL USE ONLY

4

6

D. O. FILE NO. ~~490-3401~~
490-34,389

490-34,388

REVISIONS		DATE	APPROVED
NO.	SYNOPSIS		
1			
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SAFETY ON THIS JOB
DEPENDS ON YOU

GENERAL TEST REPORT		DISTRICT OFFICE	
U.S. ARMY ENGINEER DIVISION LABORATORY, SOUTH ATLANTIC		JACKSONVILLE	
CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060		CONTRACT NO.	
PROJECT: Upper St. Johns Project		DATE: 15 June 1986	
STRUCTURE: 968		WORK ORDER NO.	
TYPE SAMPLE: Jct. Samples of Disturbed Soils		REQ. NO. 4860	
HOLE NO. CBUSJ-968-1 thru CBUSJ-968-5		NAME UNIT COST	
TESTED FOR: Investigation		DATE: 15 JUN 86	
LAB. CLASSIFICATION AND ATTENDANCE LIMITS:		LAB NO. 72/2113-2123	
Lab. No.		Sample No.	
2113		4	
2114		5	
2115		6	
2116		7	
2117		8	
2118		9	
2119		10	
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REVISIONS	DESCRIPTION
1	Initial Design
2	Revised Design
3	Final Design

[illegible]

TP-5868-1	Date Excavated: July 1966
Location: 18-100 ft. East of S-46 C-34 North Spoil Bank	Equipment Used: Hydraulic Backhoe (Case 680) Geologist: Joe Gentile
Surface Elevation: +42.3 ft.	
Sand, fine to medium, quartz, little clay, tan. (SL), streak of organic stain	Depth (ft.) 0' 1'
Tan, little clay, trace of shell (SC)	2'
Many seams and irregular masses of gray sand, up to 2-foot thick, clayey, isolated, leached soft limestone nodules and fragments, trace gravel, trace decayed shell (SC)	7' 10'
	14'

NOTES: 1. Ground water not reached.
2. Hole caved in at 14.0 ft.

<p>TP-5986-2 10,150 ft. East of S-96 on centerline of C-54 North Spur 1 Bank Surface Elevation: 441.3 ft.</p>	<p>Date Excavated: July 85 Equipment Used: Case 880 Hydraulic Backhoe Geologist: Joe Gantile</p>	<p>Depth (ft.)</p>	<p>SAND, fine to medium grained quartz, little clay, trace shell, tan (S1)</p>	<p>5</p>	<p>Gray, little to some clay, isolated soft weathered limestone fragments few nodules, trace gravel, trace weathered shell, from 5.5 ft. to 10.0 ft. (S2)</p>	<p>10</p>
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NOTES: 1. Groundwater table not reached.
2. Hole caved in at 10.0 ft.

TP-5368-3	Location:	Date Excavated:	Equipment Used:	Backhoe (case 880)	Geologist: Joe Gentile	Depth (ft.)	0	1	2	3	4	5	6	7	8	9	10
TP-5368-3	Location: 18,300 ft. East of T-96 on centerline of C-5; of North Spill Bank	Date Excavated: July 1966	Equipment Used: Hydraulic	Backhoe (case 880)	Geologist: Joe Gentile	Depth (ft.)	0	1	2	3	4	5	6	7	8	9	10
						Surface Elevation: +40.6 ft.											
							S&M, fine to medium quartz, little clay, tan, fractured irregular masses of sandy (ll.) clay, trace shell (SC)										
																	Gray, some clay, isolated soft limestone nodules and fragments, trace gravel, trace shell from 9' soil (SC)

NOTES: 1. Groundwater not reached.
2. Hole caved in at 11.0 ft.

TP-5964-4 Location: East of S-66 on centerline of C-54 North Spoil Bank Surface Elevation: 40.9 ft.	Date Excavated: July 1966 Equipment Used: Hydraulic Backhoes (Case 880) Geologist: Joe Gentile	Depth (ft.) 0'	SAND, fine to medium, quartz, little clay, tan, some irregular masses of stiff fat clay, some clay (35)	5'	12'	15'
CLAY, plastic, gray, sandy, many seams clayey sand, nodules of weathered soft limestone, (ch)						

NOTES: 1. Groundwater not reached.
2. Hole stayed open to 15.0 ft.

TP-3908-5	Location: 100' West of on centerline of C-3d North Spit Bank	Date Excavated: July 1986	Equipment Used: Hydraulic Backhoe (Case 380)	Geologist: Joe Gentile	Depth (ft.)	0'	5'	66'	10'	10'
TP-3908-5	Location: 100' West of on centerline of C-3d North Spit Bank	Date Excavated: July 1986	Equipment Used: Hydraulic Backhoe (Case 380)	Geologist: Joe Gentile	Depth (ft.)	0'	5'	66'	10'	10'
	Surface Elevation: +40.8 ft.					SAND, fine to medium, quartz, little clay with seams very clayey limb, tan, many seams clay, trace cobb, (SC)				
								CLAY, plastic, stiff, sandy, with seams clayey sand, gravel, slightly limb, with trace gravel, limestone fragments, (m)		

NOTES: 1. Groundwater not reached.
2. Hole stayed open to 15.0 ft.

TP-S88B-6 Location: 18,750 ft. east of S-36, on of C-54 North Spool Bank Surface Elevation: +47.6 ft.	Date Excavated: July 88 Equipment: Case 680 Hydraulic Backhoe Geologists: Joe Gentile
SMD, fine to medium grained, quartz, little clay, brown, organic stain (SO)	Depth (ft.) 0'
SMD, fine to medium grained, quartz, white, trace clay, some shell (SP)	15'
CLAY, slightly plastic, stiff, trace sand and gravel, yellow (CL)	5'

NOTES: 1. Ground water table not reached.
2. Hole caved in at 19.0 ft.

TP-5968-7	Date Excavated: July 36	Depth	
Location:	Equip. Used: Hydraulic	ft. 0'	
18,300 ft. East of S-96	Backhoe (Case 880)	1-5	
on E of North Soil Bank	Geologist: Joe Gentile		
Surface Elevation: 422.3			
</			

NOTES: 1. Ground water table not reached.
2. Hole caved in at 10.6 ft.

TP-5968-8	Date Excavated: July 1986	Depth (ft., in.)
Location: 83,000 ft., East of S-06 at intersection of E-54 (North Spur) Bank	Equipment Used: Hydraulic Excavator Geologist: Joe Gentile	
Surface Elevation: 442.8 ft.		
	SAND, fine to medium quartz, little to some clay, brown, organic stain (SC)	1'
	SAND, fine to medium quartz, little shell, trace clay, tan (SP)	2'
	Shelly, yellow - brown, clean from 4.5' to 12'	3'
		4'
		5'
		6'
		7'
		8'
		9'
		10'
		11'
		12'

NOTES: 1. Groundwater not reached.
2. Hole caved in at 12.0 ft.

<p>Tr S-368-9 Section 15-350 ft. east of S-36 on centerline of C-54 North Spot 1 Bank</p>	<p>Date excavated: July 1966 Equipment used: Hydraulic Batching (Case 880) Geologist: Joe Gentile</p>	<p>Depth 0' (1)</p>	<p>3' 5'</p>	<p>10'</p>
<p>Surface Elevation: +46.6 ft.</p>	<p>SND, fine to medium, quartz, clayey, brown, organic stain, sams and lumps of sandy (CL) clay (SC)</p>		<p>SMD, fine to medium quartz, clean, some shell, tan, (SP)</p>	

NOTES: 1. Groundwater not reached.
2. Hole stayed open to 15.0 ft.

TP-5895-10 Location: 19500 ft. east of S-96 on centerline of L-54 North Spill Bank	Surface Elevation: +46.2 Ft.	Date Excavated: July 1986 Excavator: R. S. Berry Backhoe (Case #80) Geologist: Joe Gentile	Depth (ft.)	0'									
					SAND, fine to medium, quartz, some clay, brown, some dark brown (CL) clay lumps. (SC)								
					SAND, fine to medium, quartz, little shell, trace clay, many lumps, seams and irregular masses of sandy (CL) clay, some clay lumps. (SP)								
								</					

NOTES: 1. Ground water not reached.
2. Hole cased in at 15.0 ft.

AS-BUILT

RECORD DRAWING NOTE
 "Shall be," "Provide," "Install,"
 "Remove," etc., indicates
 work was accomplished under
 the contract

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT COMPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 36B AND TIEBACK LEVEE
CORE BORINGS AND MISCELLANEOUS

[illegible]

TP-9GB-14 Location: T3, 800 ft., East of S-95 one of C-54 North Spoil Bank Surface Elevation: +40.6 ft.	Date Excavated: 7/31/56 Excavated by: Backhoe (Cone #80) Geologist:: Joe Gentile
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NOTES: 1. Ground water not reached.
2. Hole caved in at 10.0 ft.

TP-5958-13	Date Excavated: 8/1/68 Equipment Used: Hydraulic Backhoe Case 6801 680103/51: One Gentle	Depth [ft]	10'
Location: East of C-46 on centerline of C-54 North Spoil Bank	Surface Elevation: ≈ 41.3 ft.		
	SAND, fine to medium, quartz, some clay, scattered stiff clay lumps, tan (5Y)		5'
	SAND, fine to medium, quartz, trace clay, brown-yellow, some small, few clay lumps (5P)		11'
	CLAY, sandy, many seams of silty (5N) gray sand, xeffr, slightly plastic, blue-gray (CL)		15'

NOTES: 1. Groundwater not reached.
2. Hole stayed open at 15.0 ft.

TP-5969-13	Date Excavated: 8/4/86 Equipment Used: Hydraulic Backhoe Location: 13,000 ft. east of S-96 Grid Coordinates: T-59 North Spot 1 Bank	Surface Elevation: +20.9 ft.	Depth (ft.)
SAND, fine to medium, quartz, clayey, trace shell, tan, some stiff clay lumps (SC)	6'	Many seams of shaly (SF) sand, many clay lumps	13'
CLAY, stiff, plastic, sandy, grey (CL)	15'	15'	NOTES: 1. Ground water not reached.

Salon ! : pour vous aider

Date Excavated:	Equipment Used:	Geologist:	Depth (ft.)	
TP-5982-20	Hydraulic Excavator	Joe Gentile	0'	10'
Location: 12,000 ft. East of S-86 about 1/2 mile S of Hwy 61 S-54 north Spot 1 Bank.			SAND, fine to medium, quartz., very clayey, numerous stiff fat clay bands, tan (30)	
Surface Elevation: 437.5 ft.			SAND, fine to medium, quartz., trace shell, tan, scattered stiff clay lumps (SP)	

NOTES

1. Ground water not reached.
2. Hole cased in at 10.0 ft.

"Remove," etc. indicates work was accomplished under the contract.

AS-BUILT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE
CORE BORINGS AND MISCELLANEOUS

TEST BITS
CORE BORINGS AND MIXCE

DATE REC'D					
SCALE: AS SHOWN	DATE: MAY 1966	SHEET: 44			
	F		10/5		
			515 000 NO.		

FOR OFFICIAL USE ONLY

25

D. O. FILE NO. ~~430-34-013~~

450-36.389

REVISIONS

REVISIONS

To Core ->	Date Excavated:	Equipment Used:	Geologist:	Depth	Description
Location: 11,350 ft. east of S-36 on centerline and top of C-54 North Spoil Bank	8/4/88	Hydraulic Backhoe (Case 889)	Joe Gentile	0	SAND, fine to medium, quartz, clayey, many stiff (ch) clay lumps, tan, trace gravel, (SC)
				1 ft.	
				5	SAND, fine to medium, quartz, tan, some (ch) clay lumps, trace shell, (SP)
				5	
				CLAY, stiff, plastic, sandy, gray, many seams of silty gray sand, (CH)	

NOTES: 1. Groundwater not reached.
2. Hole stayed open to 16.0 ft.

TP-5989-22	Date Excavated: 8/4/86	Equipment Used: Hydraulic Backhoe (Case 880)	Geologist: Joe Gentile	Depth (ft.)	100	90	80	70	60	50
Location: 70,000 ft. east of S-96 about 1/2 mile NW of top of C-54 North Spot Bank				SAND, fine to medium, quartz, little clay, trace shell, tan, some fat clay lumps (SC)						
Surface Elevation: 437.4 ft.				CLAYEY SAND, blue-gray, mottled with seams gray silty sand (SC)						

NOTES: 1. Groundwater not reached.
2. Hole caved in at 12.0'.

Date Excavation Equipment Used (Case No.) Geologist	Location Elevation Direction North-South East-West Surface Elevation	Description Soil Rock Fossils Other	Depth (ft.)	Notes Remarks Observations
8/4/86 Hydraulic Backhoe (Case 190) Joe Gentile	8,000 ft., east of S-96 8,000 ft. North-South East-West Surface Elevation: +31.1 ft.	SAND, fine to medium, quartz, clayey, tan, little shell. trace gravel, many fat clay (04) lumps (5%)	4.0'	Green-gray, some clay lumps, little shell from 4' to 9.5'
				SAND, fine, to medium, quartz, tan-gray, trace silt, trace clay (5%)

NOTES: 1. Ground water not reached.
2. Hole caved in at 14.0'.

TP-S560-24 Location: east of S-96 on centerline and top of C-5A North Spit Bank	Date Excavated: 8/4/56 Equipment Used: Hydraulic backhoe (Case 386) Geologist: Joe Santile	Depth 0' 1' 2' 3' 4' 5' 6' 7' 8' 9' 10'	SWS: fine to medium quartz, trace clay, trace shell, little gravel trace cobble, tan, silty to streak of clay (CL), one trace thick (SP) CLM, sandy, tan-gray, damp, trace gravel and cobble (CL)
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NOTES: 1. Ground water not reached.
2. Hole caved in at 12.0 ft.

TP-5948-25 Location: 6,000 ft. east of S-96 on centerline and top of C-54 North Spoil Bank	Date Excavated: 2/5/86 Equipment Used: Hydraulic Backhoe (Case 880) Geologist: Joe Gentile	Depth (ft)	0'
SAND, fine to medium, quartz, clayey, many silt clay lumps, some gravel. (SC)		5'	
SANDY, dark brown, little gravel, many clay lumps from 5' to 10.5'		10'	
SAND, fine to medium, quartz, some silt, trace clay, dark gray, some clay lumps. (SH)		15'	

NOTES: 1. Groundwater not reached.
2. Hole caved in at 13.0 ft.

TP-5568-26	Date Excavated: 8/5/66	Depth (ft.)	Description
5,000 ft. east of S-95 on centerline and top of C-54 North Spit Bank	excavated by backhoe (Case 600) Geologist: Joe Gentile		SAND, fine to medium, quartz, clayey, gravelly (limestone fragments), some shell, tan, some stiff clay lumps. (SC)
Surface Elevation: +35.6 ft.		3'	CLAY, stiff, slightly plastic, sandy, some gravel, grey-tan, many shell (SP) sand seams (CL)
			SAND, fine to medium, quartz, loose clay, silty, scattered clay lumps, organic stains. (SH)

NOTES: 1. Groundwater not reached.
2. Hole caved in at 11.0 ft.

TP-568-27	Date Excavation: 9/5/96	Depth
Location: A. 000' E., Pitt of C-06 on converging and top of C-54 North Shale Bank	Equipment Used: Hydraulic Excavator (Case 580) Geologist: Joe Dentile	(ft.)
Surface Elevation: 136.6 ft.	SAND, fine to medium, quartz, trace clay. Isolated clay lumps, some shell, some gravel, isolated limestone cobbles and boulders, light tan. (24')	7
	SAND, fine to medium, quartz, clayey, gravelly, limy, little shell, tan. (56')	10
	CLAY, stiff, sandy, gray-tan, many zones of silty sand. (CL)	

NOTES: 1. Groundwater not reached.
2. Hole caved in at 12.0 ft.

<p> 7N-5580-20 2,085 ft. east of S-06 on centerline and top of r. 54 North Spur, bank Surface Elevation: +32.4 ft. </p>	<p> Date Encountered: 8/5/08 Equipment Used: Nonmagnetic Barrow Core Number: 7Case 8800 Geologist: Joe Gentile </p>	<p> Depth (ft.) </p>	<p> CLAY, plastic, stiff, tan-brown, sandy, many seams of silty sand with organic siltin, little gravel (CL) </p>	<p> 6 </p>	<p> SAND, fine to medium, quartz, trace clay lumps, tan-gray, (SP) </p>
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NOTES: 1. Groundwater not reached.
2. Hole caved in at 11.0 ft.

TR-5969-20 Location: 1,000 ft. east of S-06 on center-line and top of C-54 North Spit Bank	Date Entered: 4/2/68 Equipment Used: Hydraulic Machine (Case 886) Geologist: Joe Gentile	Depth (ft.)	CLAY, stiff, tan-green, little sand, trace gravel (limestone fragments), (GL)	ft.
Surface Elevation: +31.7 ft.			SAND, fine to medium, quartz, little silt, dark gray, organic stain. (38)	

NOTES: 1. Groundwater not reached.
2. Hole stayed open to 12.0 ft.

AS-BUILT

RECORD DRAWING NOTE
"Shall be," "Provide," "Install,"
"Remove," etc., indicates
work was accomplished under
the contract.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96B AND TIEBACK LEVEE

COAL SPRINGS AND MISCELLANEOUS

TEST PIT

10/2	10/2
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11	10/3	50	10/3
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8581 87W

D. O. FILE NO. 400-36369

3
FOR OFFICIAL USE ONLY

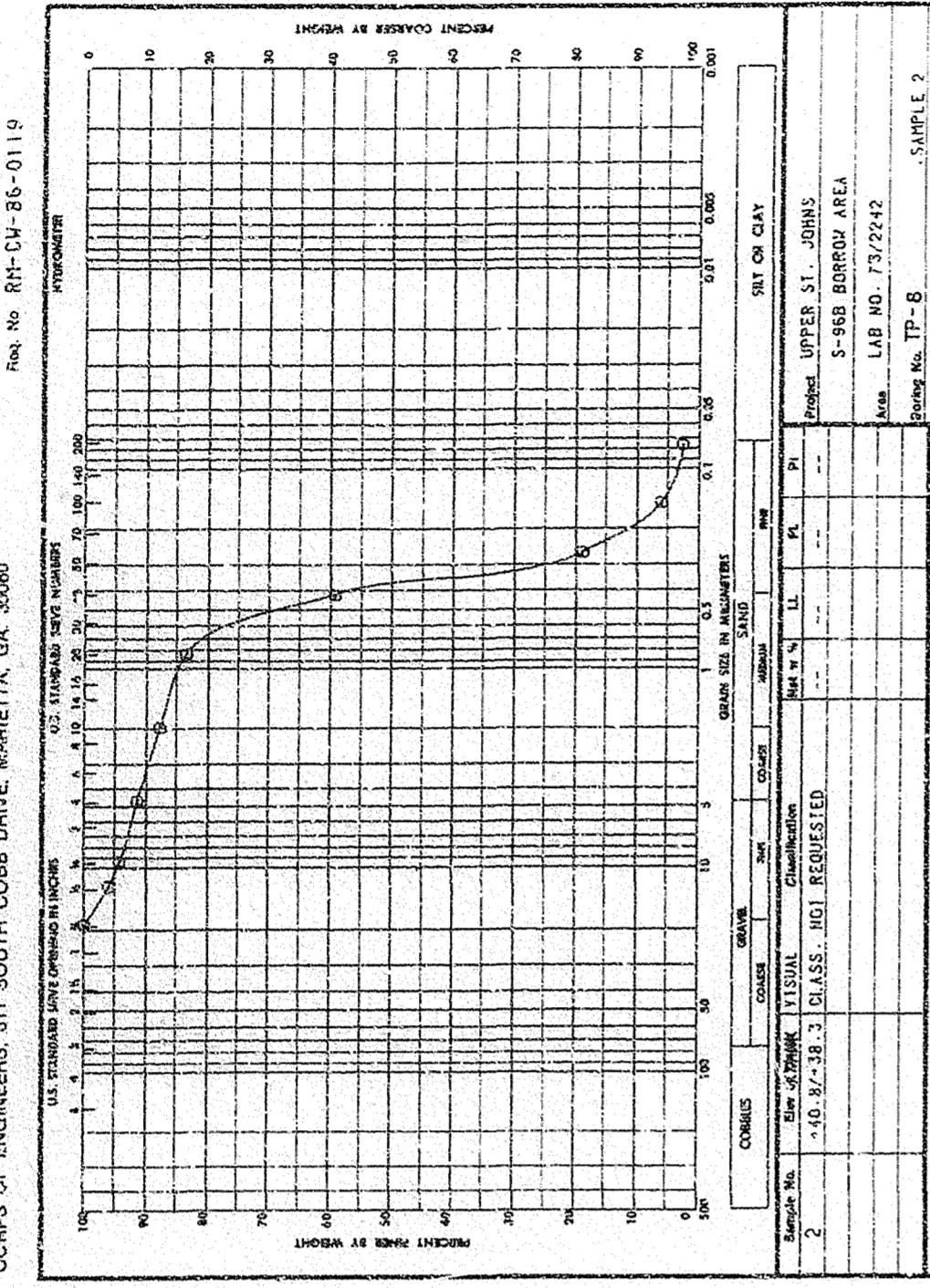
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5

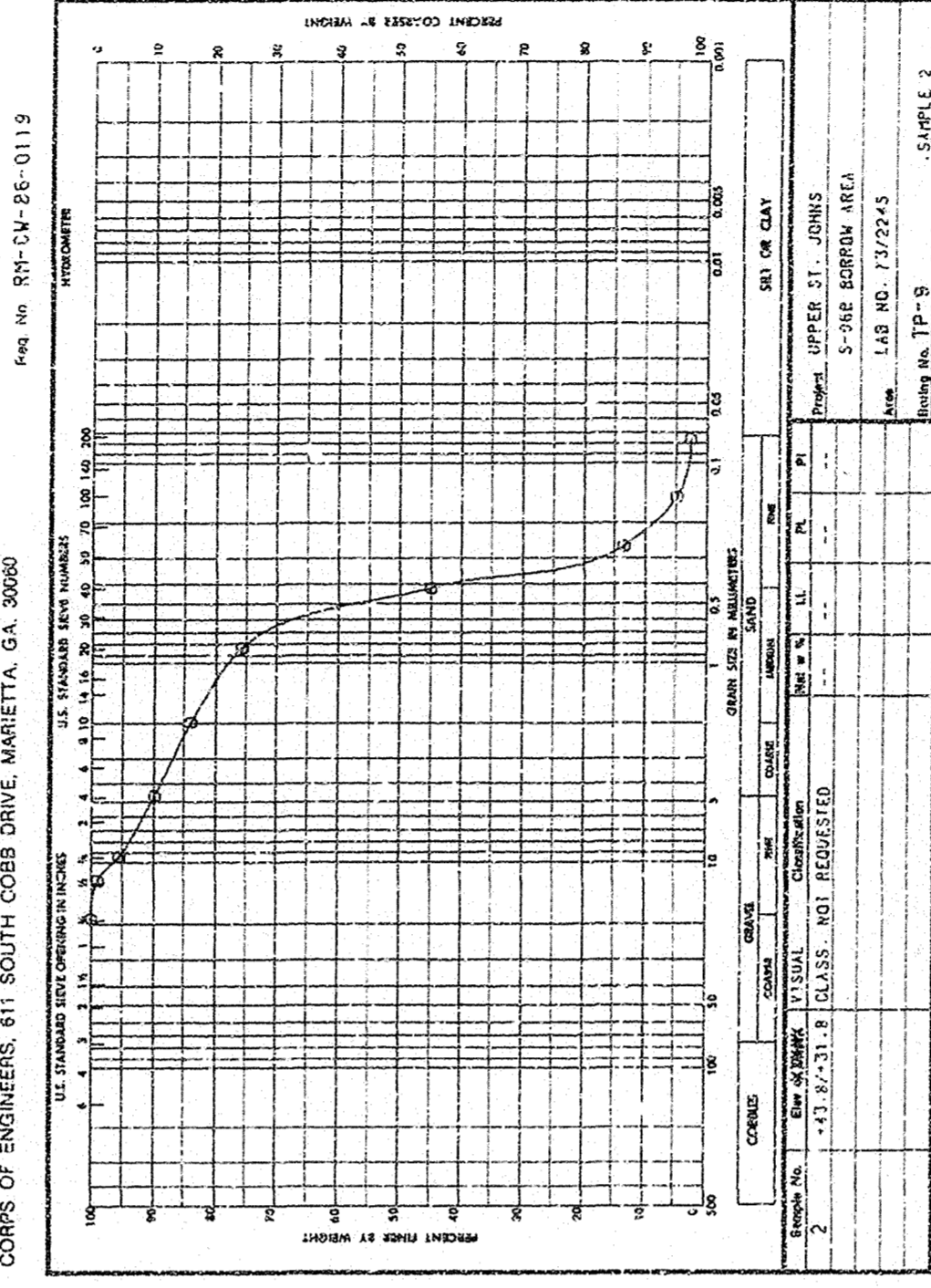
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DESCRIPTION	DATE	APPROVED
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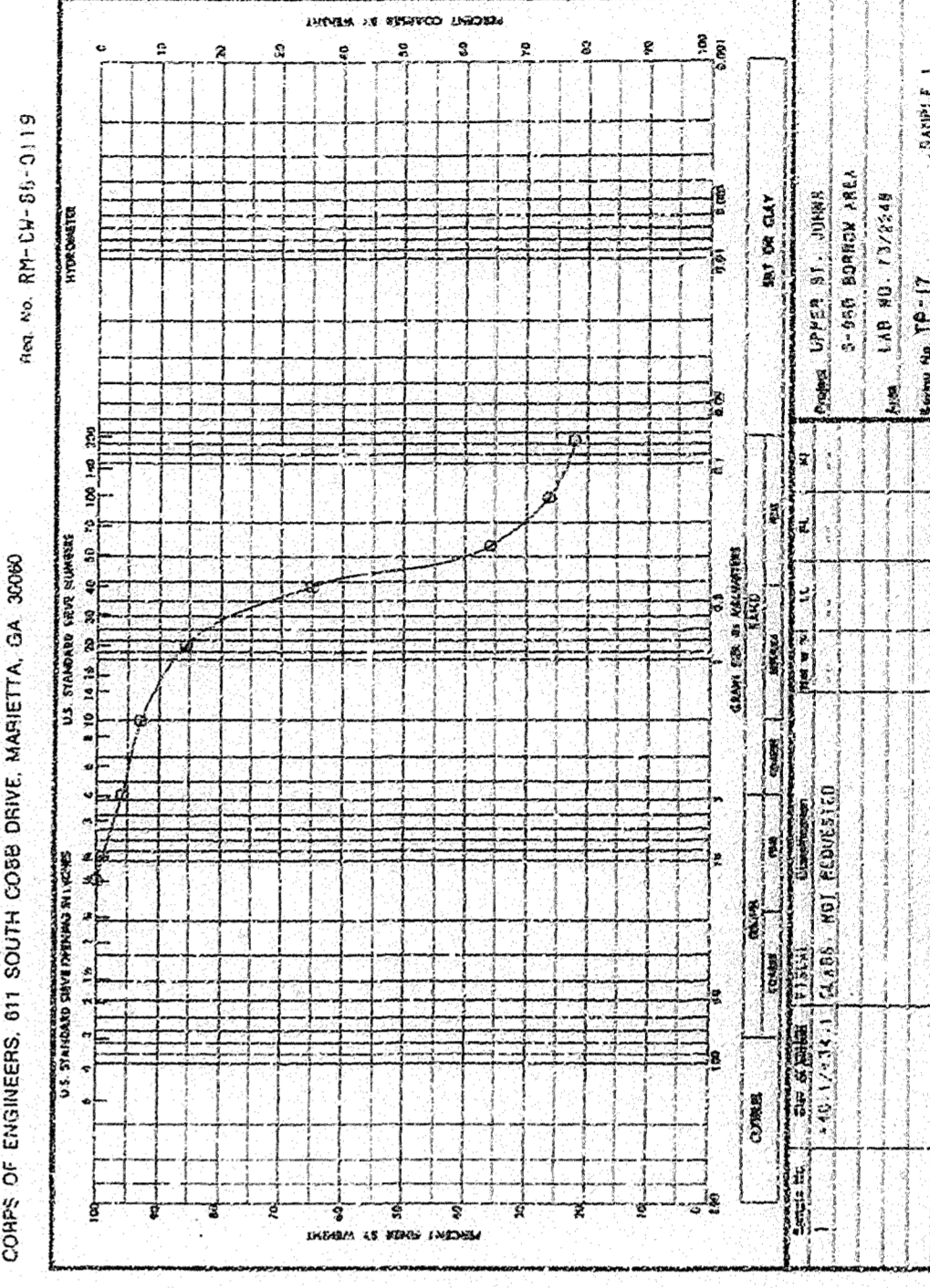
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W.O. No. 4995



W.C. No. 4995



RECORD DRAWING NOTE
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"Remove," etc., indicates
work was accomplished under

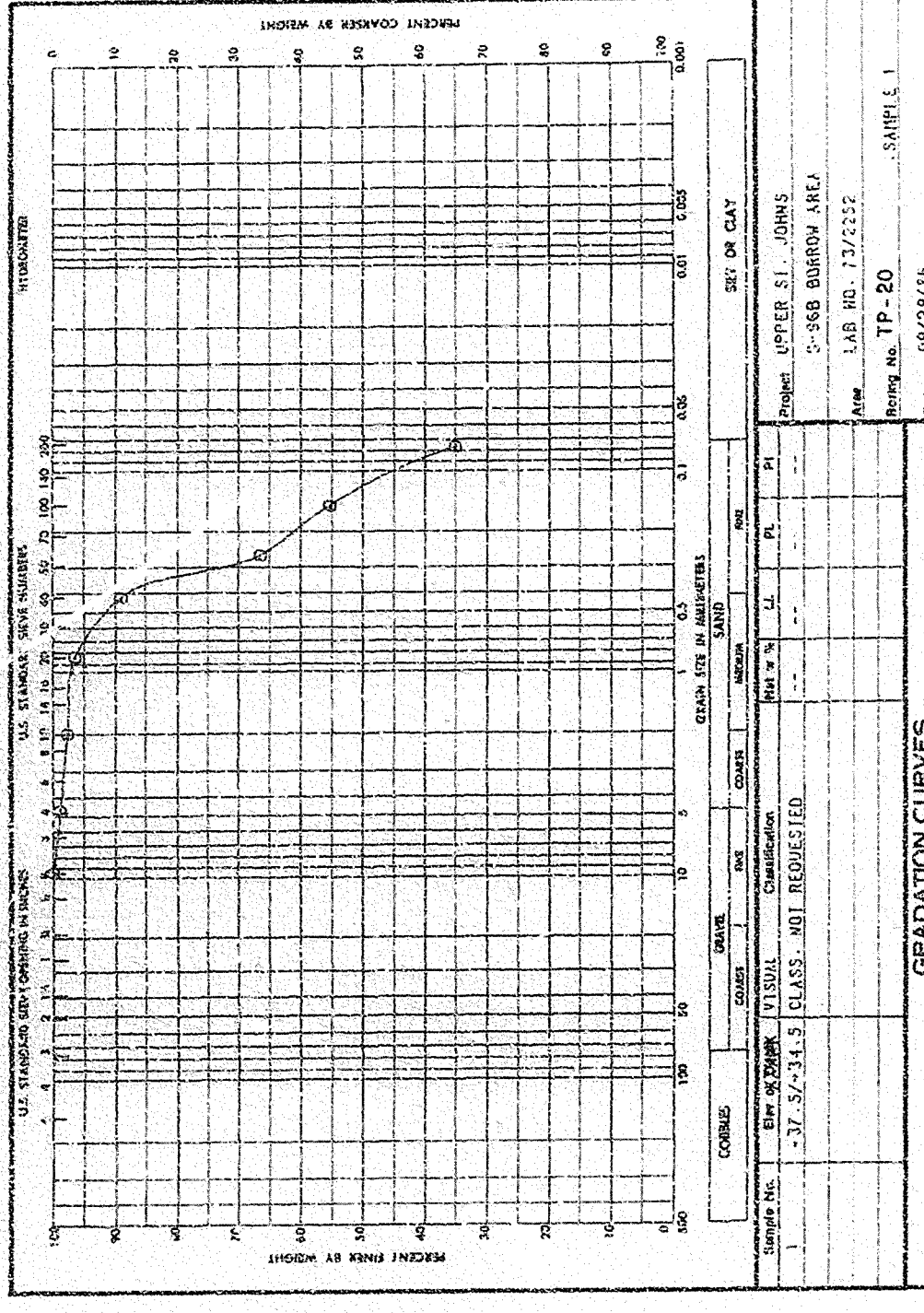
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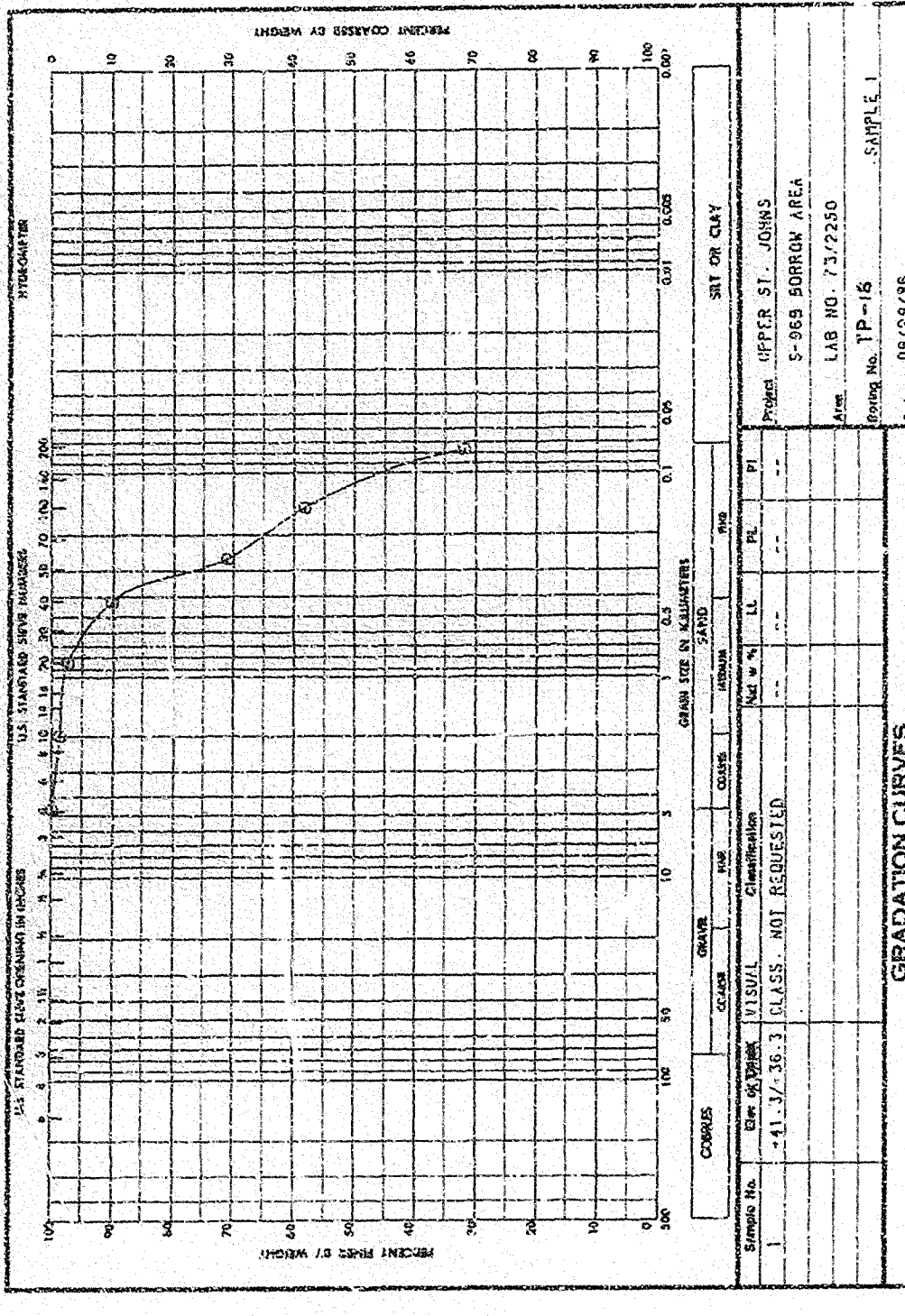
REVISIONS		DATE	APPROVED
NO.	DESCRIPTION		

SAFETY ON THIS JOB
DEPENDS ON YOU

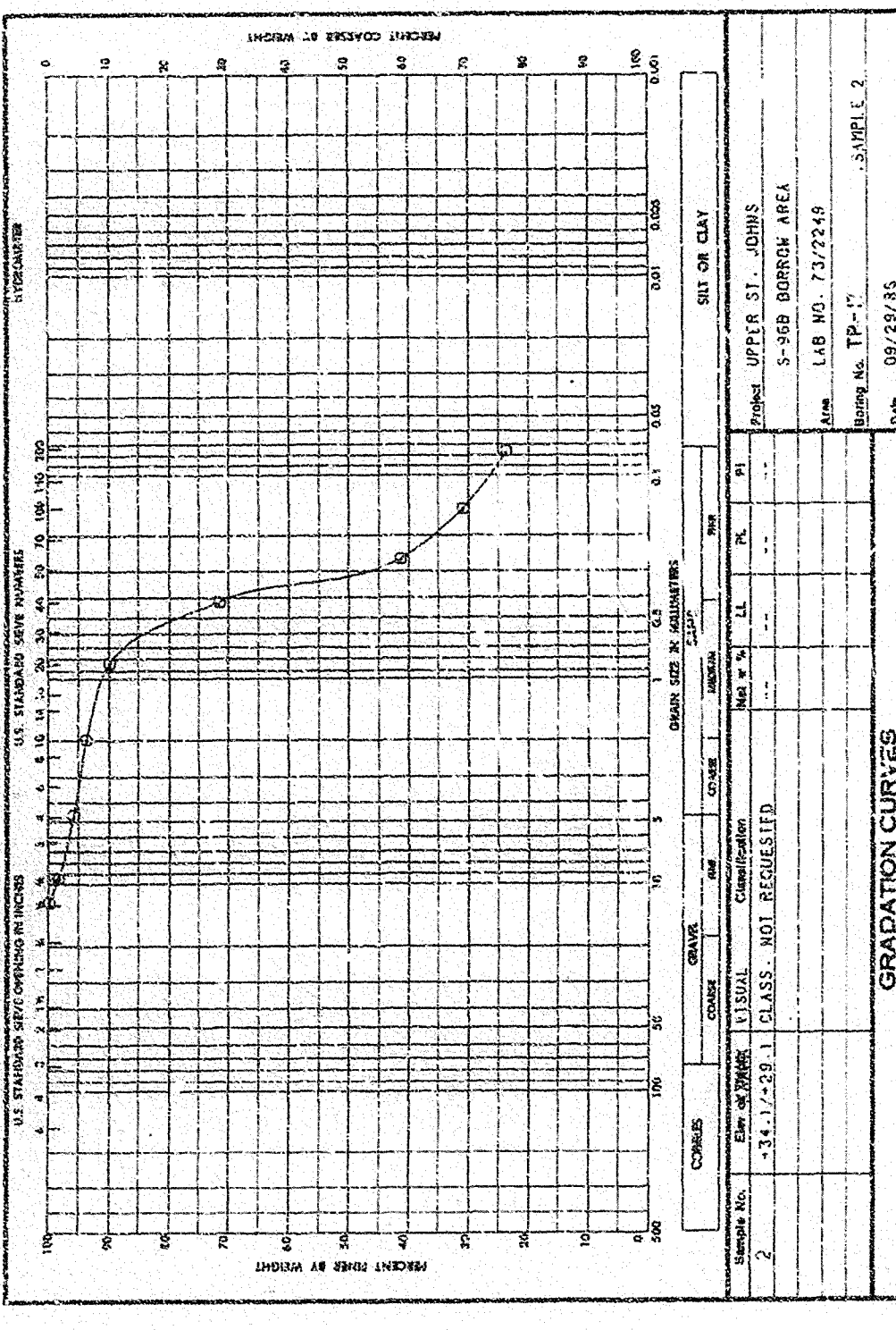
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CORPS OF ENGINEERS, 611 SOUTH COBB DRIVE, MARIETTA, GA. 30060



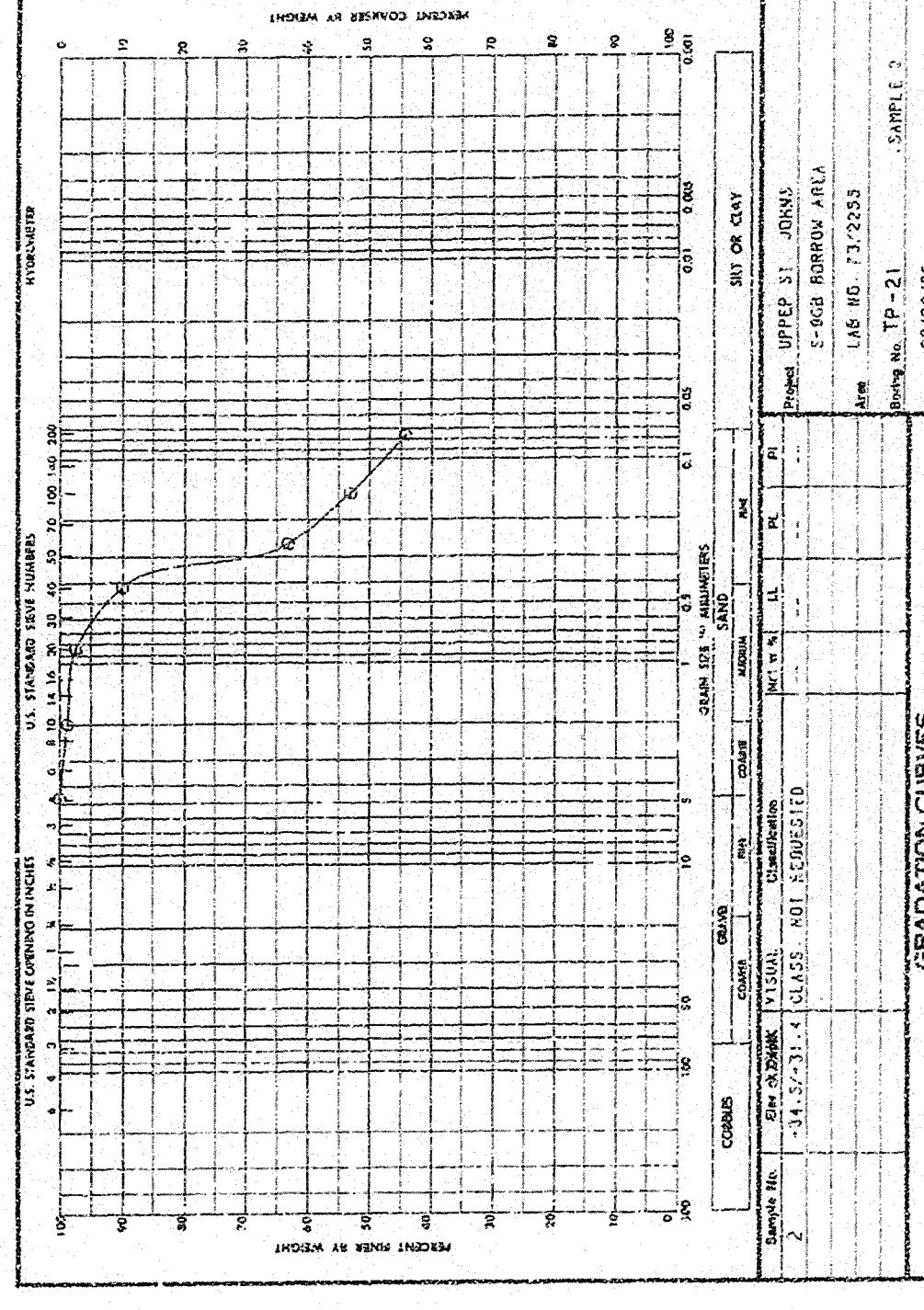
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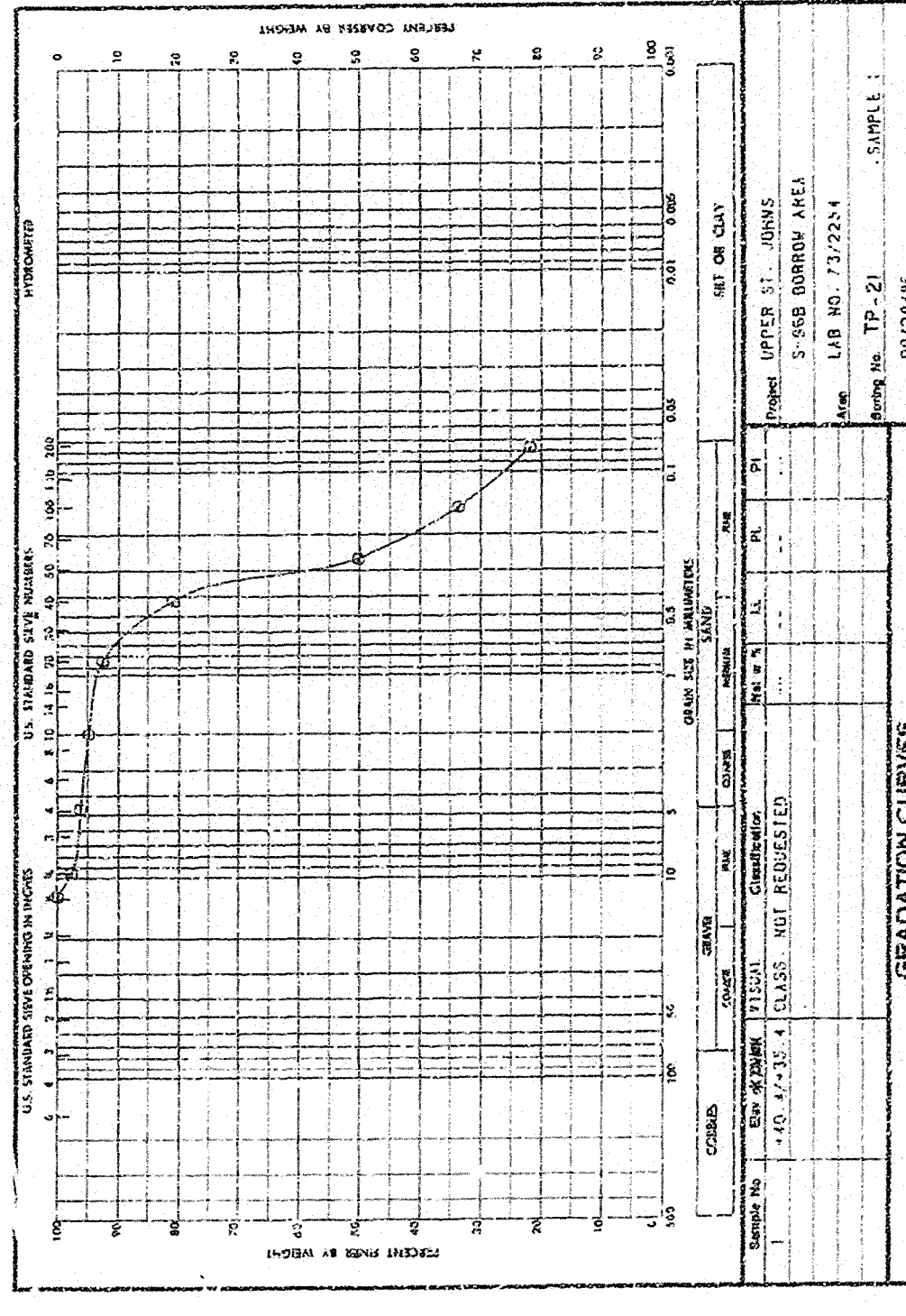
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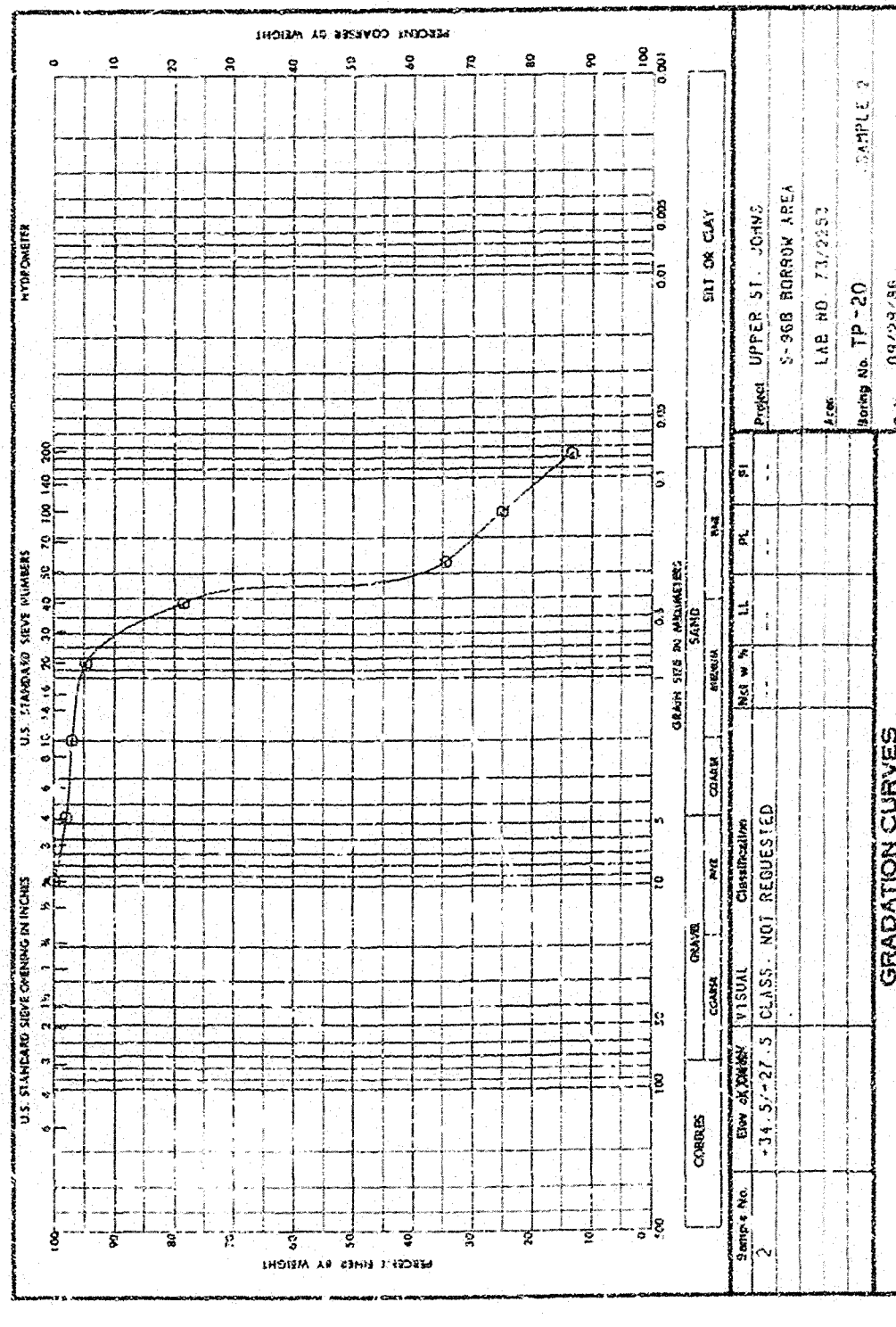
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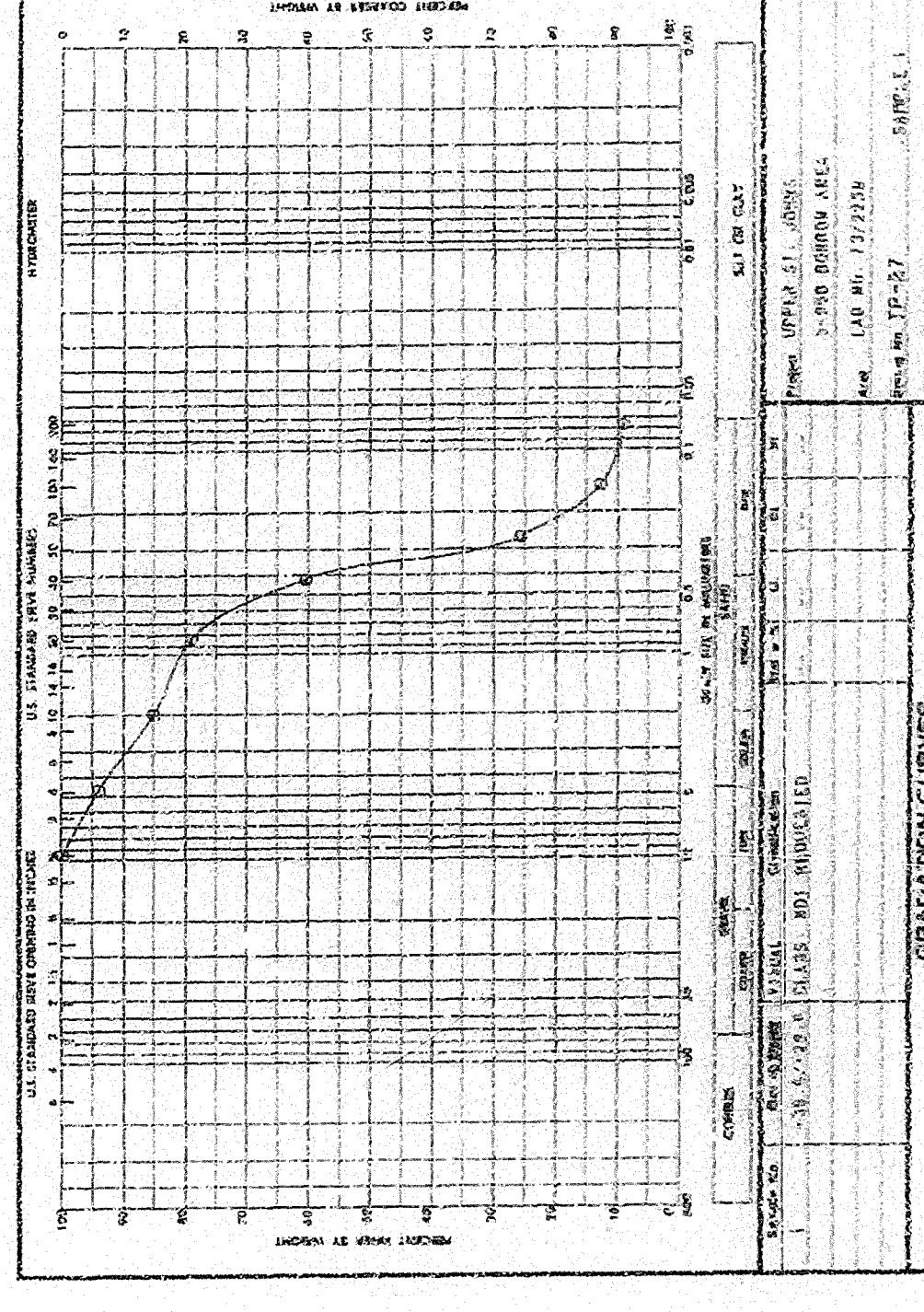
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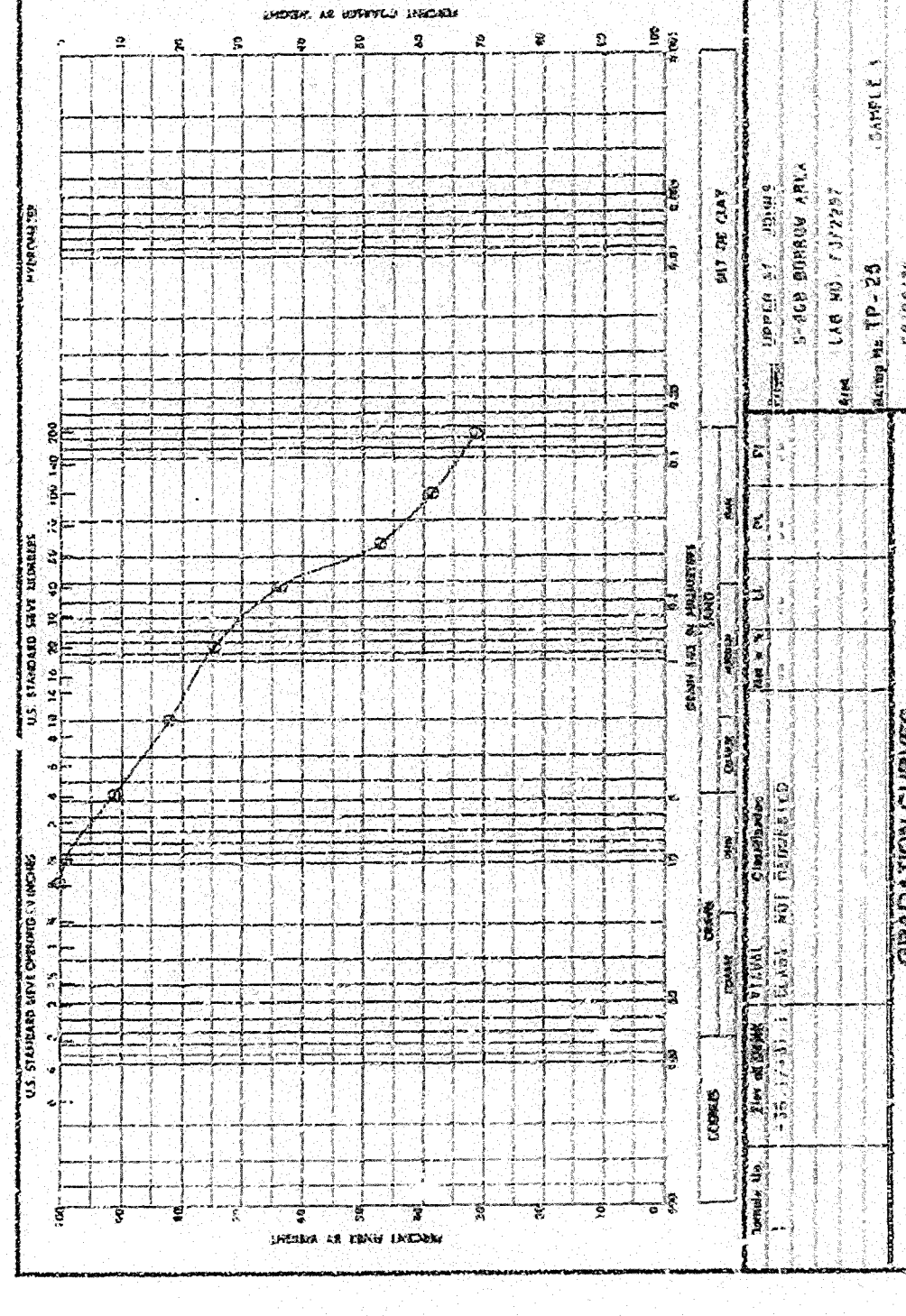
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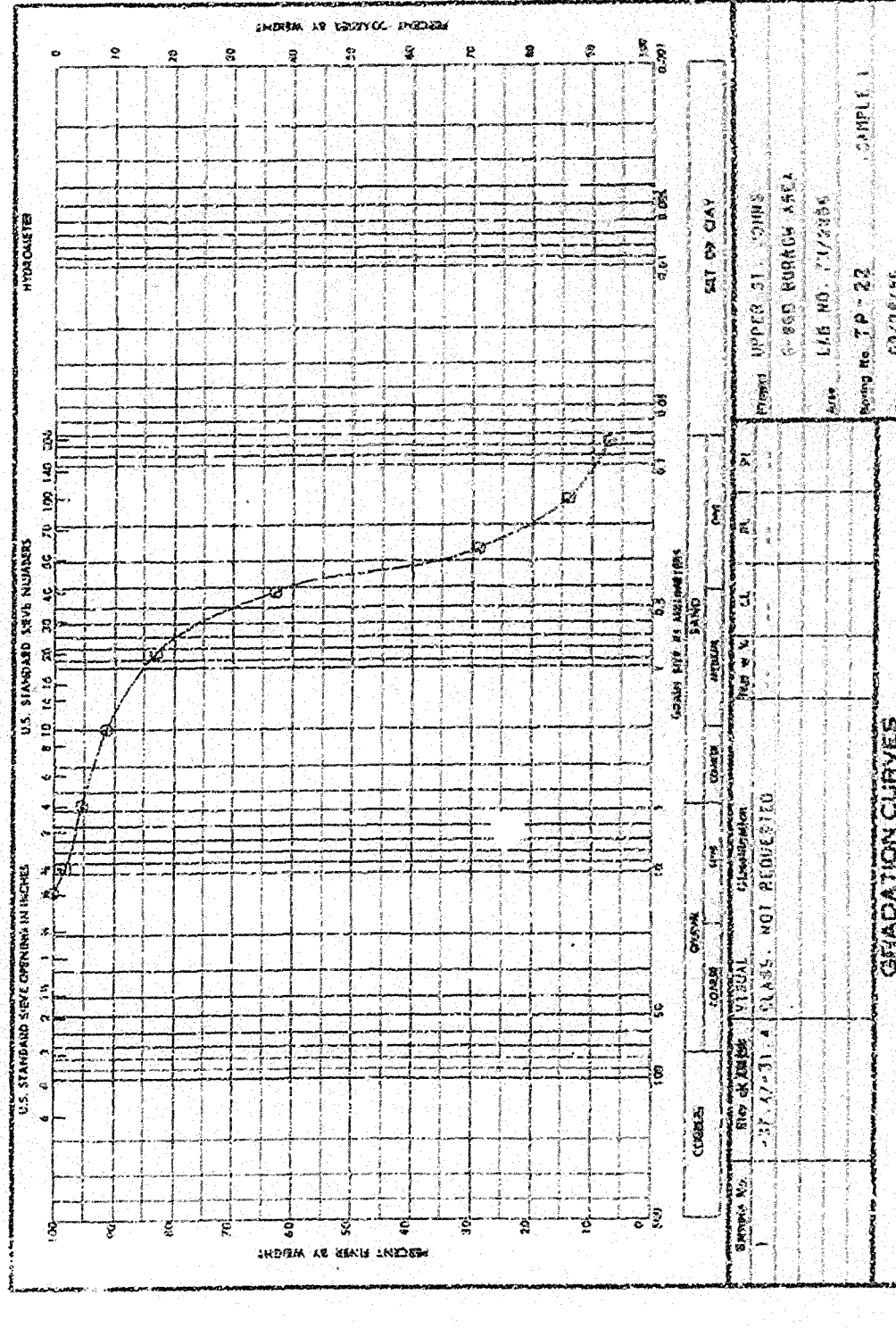
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STRUCTURE 96B AND TIEBACK LEVEE
CORE BORINGS AND MISCELLANEOUS
GRADATION CURVES
SCALE: AS SHOWN
DATE: 10/9
SHEET: 48
D.O. FILE NO: 100-34813
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