SAFETY ON THIS JOB DEPENDS ON YOU

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

Y=1,243,000

Y=1,242,800

Y=1,242,600

X=594,000

X=594,200

X=594,400

P.I. VI (C) (N.T.S.)

P.C. STA. 5+38.16

P.C.C. STA. 4+99.09

P.I. V (C)

P.I. IV (C)

P.T. STA. 4+60

℄ STRUCTURE 96 D AND CHANNEL RGE. 1000 (C)

CUT 4

CUT 3

CUT 2

CB-S-96D-2

CB-S-96D-1

STRUCTURE 3

INV. 14.96

INV. 14.90

INV. 15.06

INV. 14.94

INV. 14.82

INV. 14.99

30.9

30.74

30.95

84" METAL PIPE

CATWALK

℄ STRUCTURE 96 D SERVICE BRIDGE

℄ EXISTING LEVEE, STA. 3+50

10" METAL PIPE W/ TIDE GAUGE

WOOD CATWALK

WOOD TIDE GAUGE

FCSJ-143

FCSJ-601

FLOW

P.C. STA. 2+21.42

P.I. III (C)

P.I. STA. 1+42.68

P.C. STA. 0+35.62

P.I. II (C)

TOPOGRAPHY

SCALE "A"

N

LEGEND

- FCSJ-601 — MONUMENT AND DESIGNATION WITH HORIZONTAL AND VERTICAL CONTROL
- CB-S-96D-1 — CORE BORING LOCATION AND DESIGNATION
- 20.3 — ELEVATION OF EXISTING GROUND
- —19— CONTOUR AND DESIGNATION
- ——— RIGHT-OF-WAY
- ——— ℄ CHANNEL RGE. 1000 (C)
- P.I. I(C) ——— ℄ CHANNEL P.I. LOCATION AND DESIGNATION
- ——— · ——— STRUCTURE OUTLINE AND CHANNEL BOTTOM WIDTH

NOTES:

1. FOR "GENERAL NOTES", SEE DWG. NO. 1/2.
2. ALL STATIONING SHOWN ON THIS SHEET REFERS TO THE CENTERLINE OF CHANNEL RGE. 1000(C).
3. FOR LOG OF BORINGS, SEE SPECIFICATIONS.
4. FOR RIGHT-OF-WAY AND CONTROL DATA, SEE DWG. NOS. 1/4 THRU 1/7.
5. FOR WATER STAGES, SEE SPECIFICATIONS.
6. FOR TEST PIT DATA, SEE SPECIFICATIONS
7. EXISTING LEVEE IS REINFORCED WITH TENSAR GEOGRID PLACED HORIZONTALLY AT 2 FOOT INTERVALS.

GRAPHIC SCALE

"A" 20' 0 20' 40'

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 PROJECT

STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96 D
SITE WORK
TOPOGRAPHY

DESIGNED: J.M. | DRAWN: | CHK BY: | INV. NO. | SHT NO. 10/1
DATED: | SCALE: AS SHOWN | DATED: OCT-1983 | JAN. 1984

D.O. FILE NO ~~490-36,354~~

FOR OFFICIAL USE ONLY

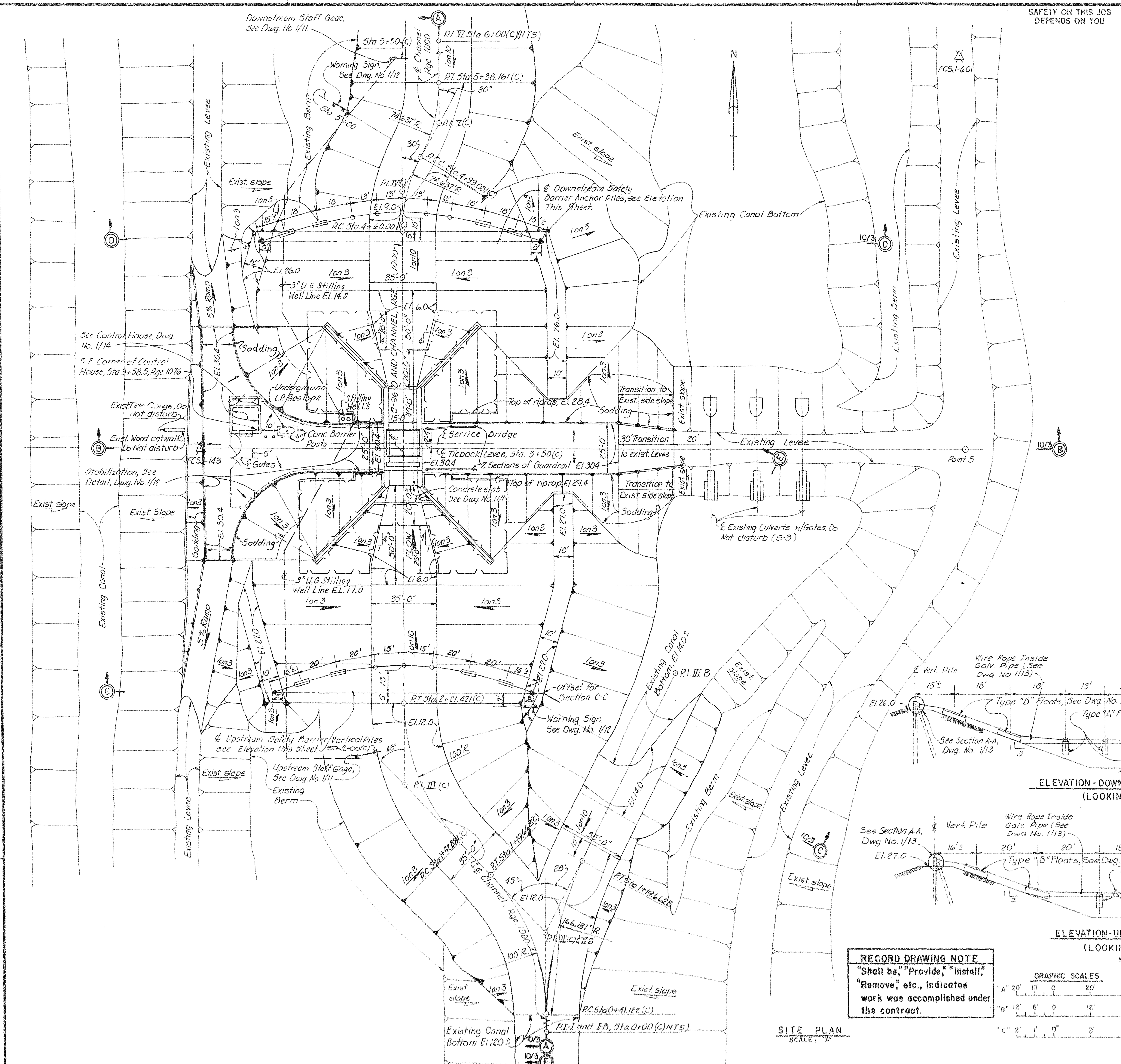
490-36,591

SAFETY ON THIS JOB DEPENDS ON YOU

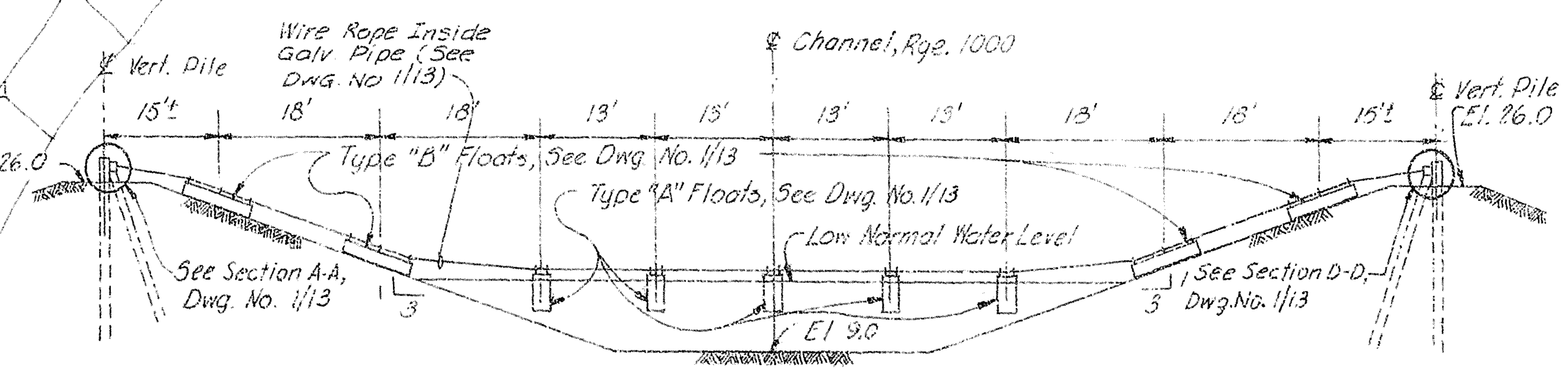
NO	SYM	ZONE	REVISIONS DESCRIPTION	DATE	APPROVED

NOTES:

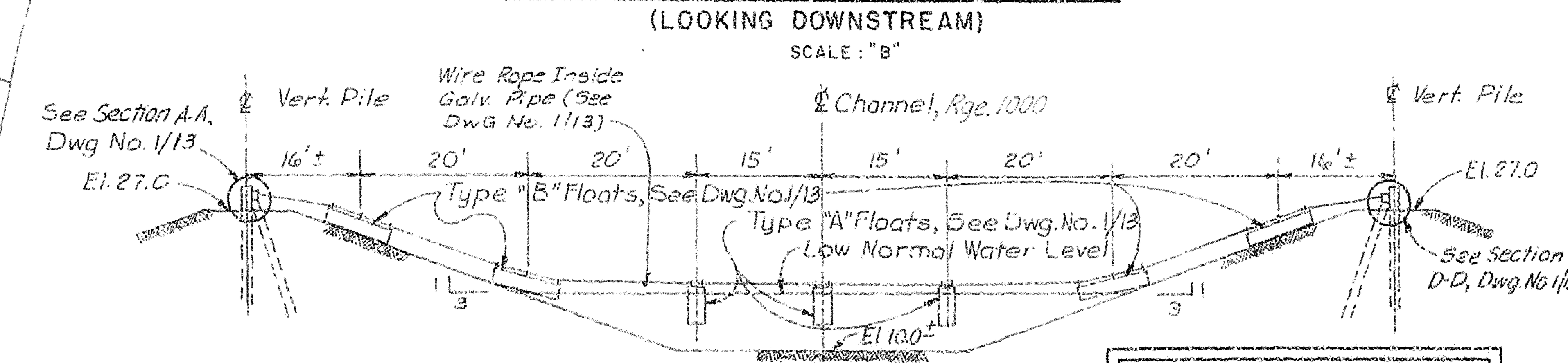
1. FOR LEGEND AND NOTES, SEE DWG. NO. 10/1.
2. SEE DWG. NO. 10/5 FOR DEWATERING PLAN AND SECTIONS.
3. SEE NOTE 11, DWG. NO. 1/2 FOR GRASSING LIMITS AT SITE OF S-96C.
4. OPERATIONS OF S-3 WILL CONSIST OF ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) PERSONNEL OPERATING THE EXISTING CULVERT GATES. THE CONTRACTOR SHALL NOT HINDER ACCESS TO, OR OPERATION OF THE GATES BY SJRWMD PERSONAL.



SITE PLAN
SCALE: "A"



ELEVATION - DOWNSTREAM SAFETY BARRIER
(LOOKING DOWNSTREAM)
SCALE: "B"



ELEVATION - UPSTREAM SAFETY BARRIER
(LOOKING DOWNSTREAM)
SCALE: "B"

AS-BUILT

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

GRAPHIC SCALES

"A" 20' 10' 0 20' 40'
"B" 12' 6 0 12' 24'
"C" 2' 1' 0" 2' 4'

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

CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER PROJECT
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
SITE WORK
SITE PLAN

SCALE: AS SHOWN | DATED: ~~OCT 1990~~ JAN. 1991 | 10/2

D/O. FILE NO. ~~490-35,354~~
490-36,591

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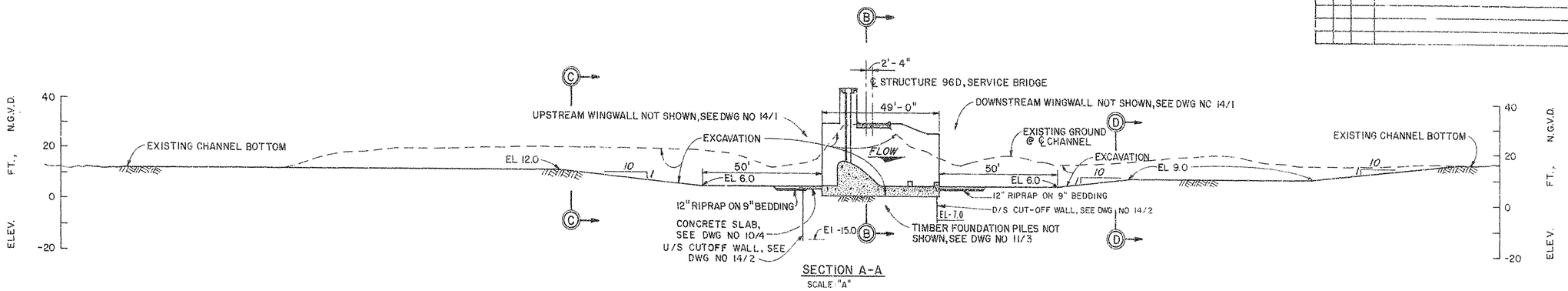
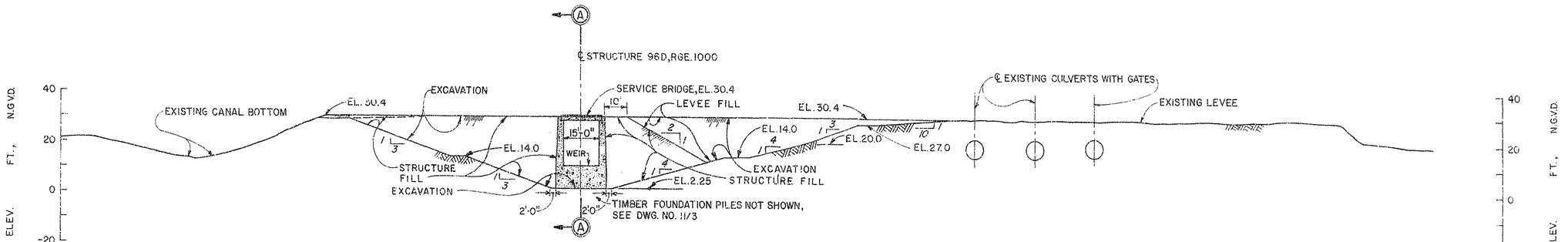
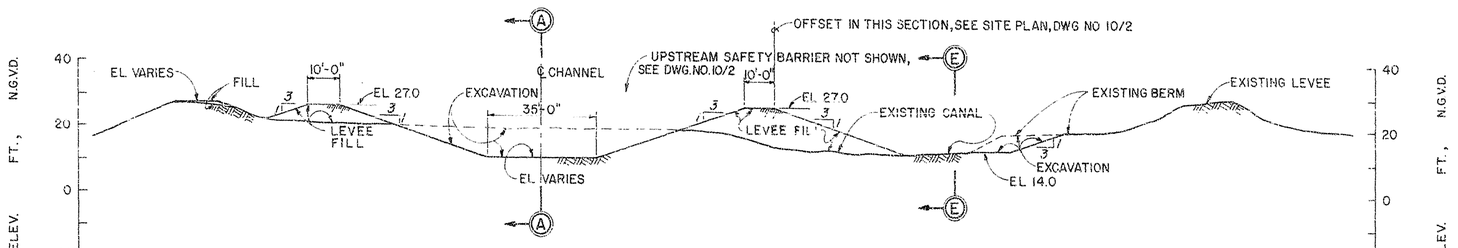
REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED



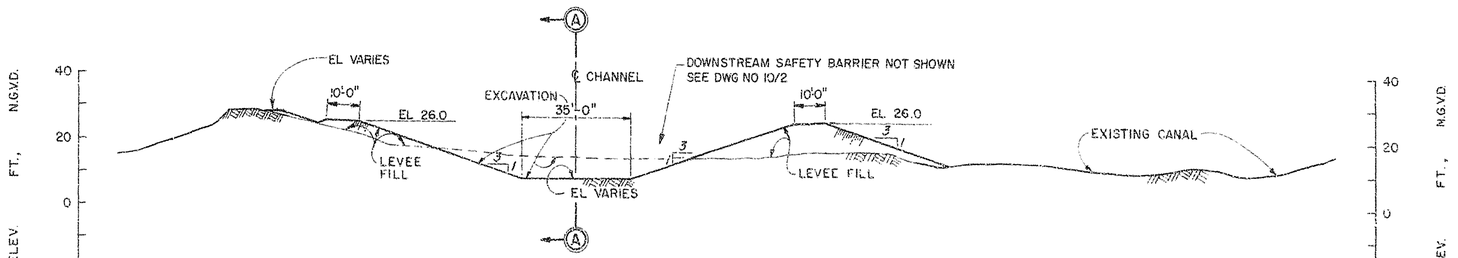
SECTION A-A
SCALE "A"



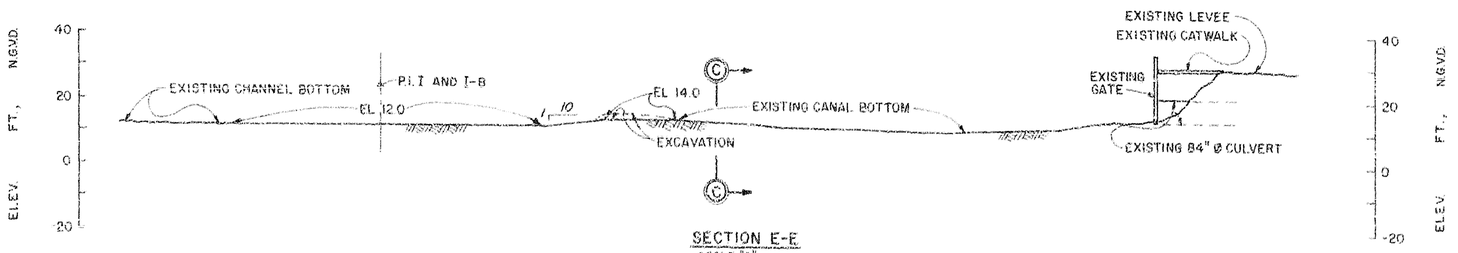
SECTION B-B
SCALE "A"



SECTION C-C
SCALE: "A"



SECTION D-D
SCALE "A"



SECTION E-E
SCALE "A"

NOTE:
1. FOR LOCATIONS OF SECTIONS SHOWN ON THIS SHEET, SEE DWG. NO. 10/2.

GRAPHIC SCALE
"A" 20' 10' 0 20' 40'

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 PROJECT
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
SITE WORK
EXCAVATION, FILL AND BACKFILL

DESIGN BY	DRAWN BY	TRACED BY	CHECKED BY	SIZE	IDENT. NO.	SHEET NO.	DWG NO.
				F	16750		10/3

SCALE: AS SHOWN DATED: ~~SEPTEMBER 1990~~ JAN. 1994

D. O. FILE NO. ~~490-35,354~~ 490-36,591

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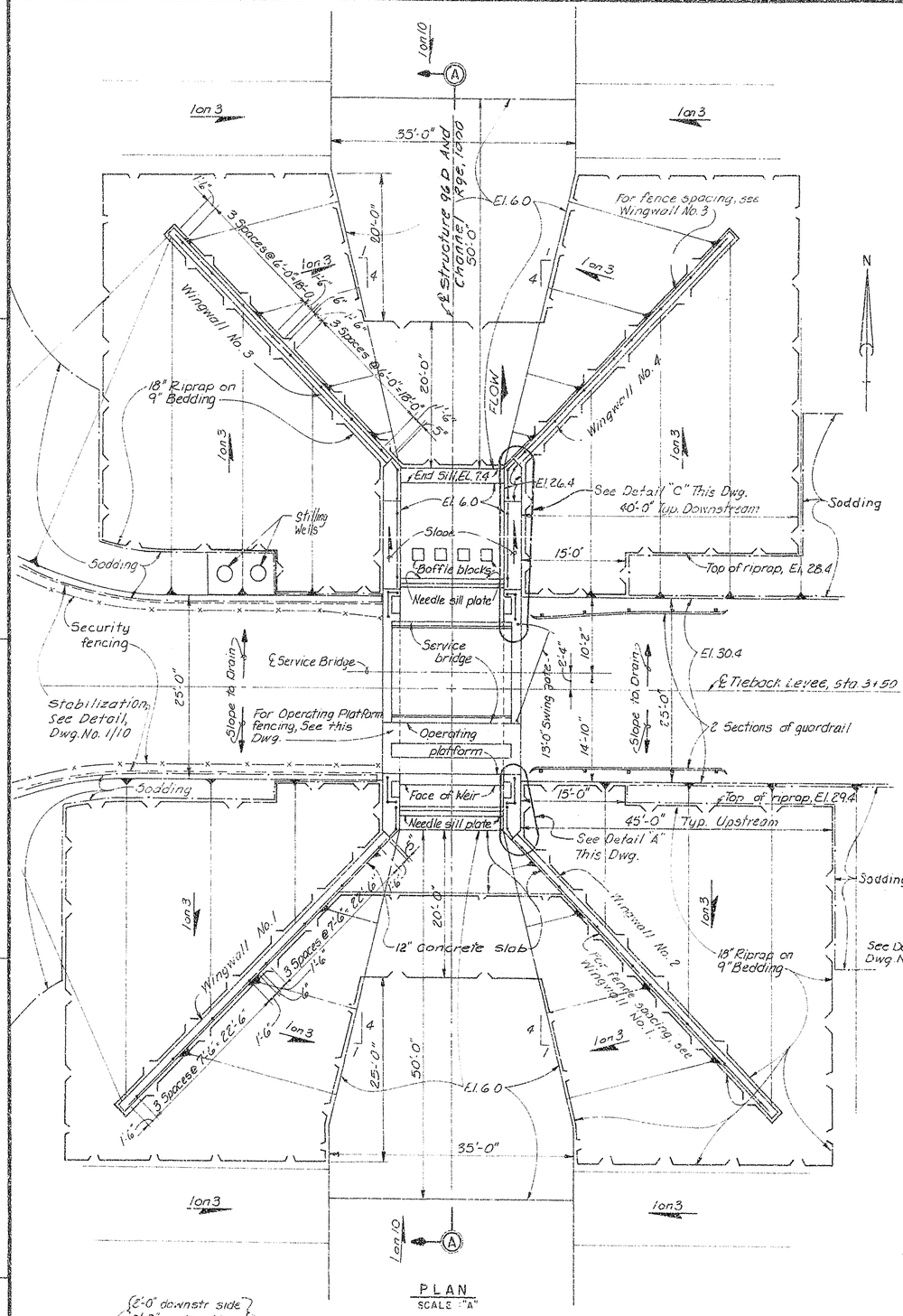
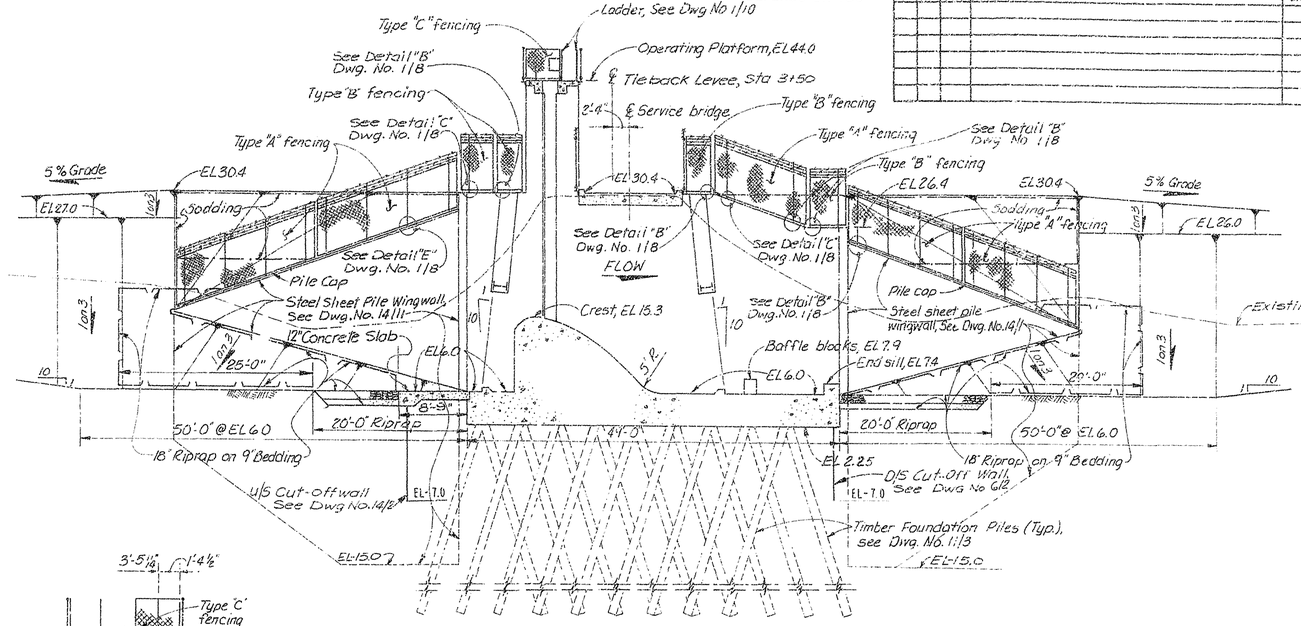
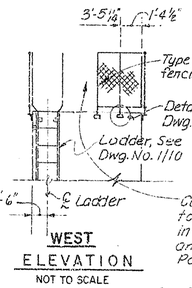
SAFETY ON THIS JOB DEPENDS ON YOU

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED



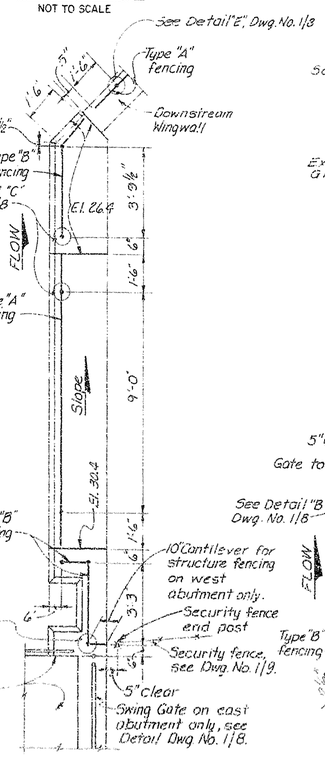


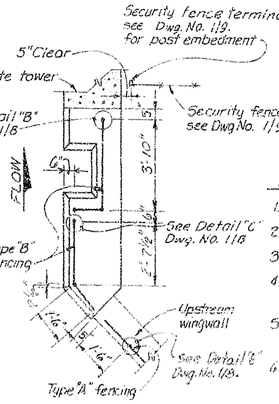
SECTION A - A
SCALE "A"

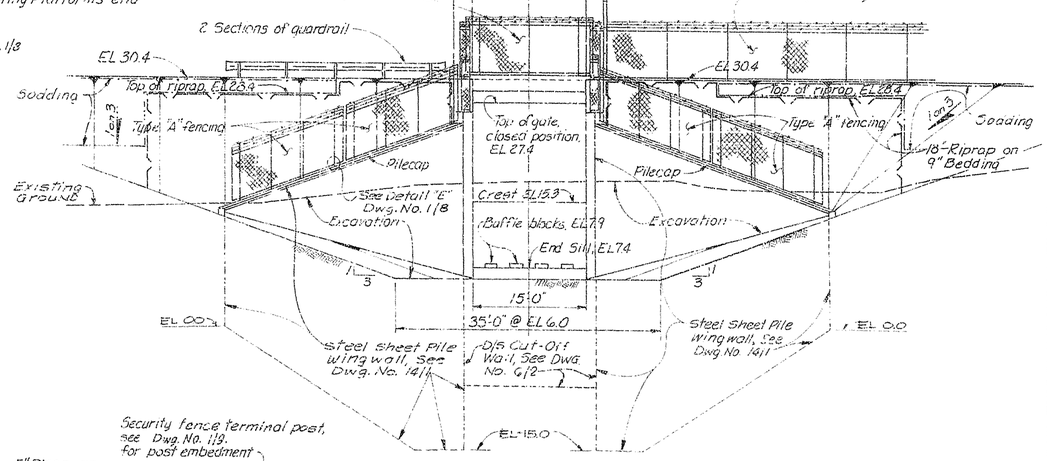


WEST ELEVATION
NOT TO SCALE

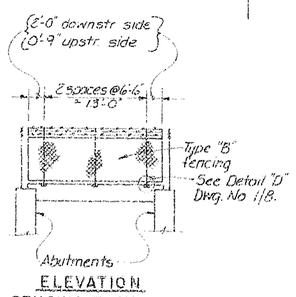
Contractor to Provide Opening to Accomodate Hydraulic Cylinder in the Type "C" fencing for the East and West Operating Platforms end Panels.



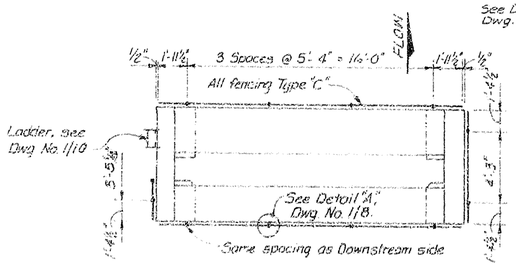




DOWNSTREAM ELEVATION
SCALE: "A"



ELEVATION
FENCING EACH SIDE OF SERVICE BRIDGE
SCALE: "A"



PLAN - OPERATING PLATFORM FENCING
SCALE: "B"

DETAIL "C"
DETAIL "D" (OPP HAND)
SCALE: "B"

DETAIL "A"
DETAIL "B" (OPP HAND)
SCALE: "C"

NOTES:

1. For legend, see Dwg No. 10/2.
2. For "General Concrete and Design Notes", See Dwg No. 1/1.
3. For details of guardrail and barrier post, See Dwg No. 1/12.
4. For structure fencing notes and details, See Dwg No. 1/8. For security fencing, See Dwg. No. 1/9.
5. Gate hoist and hydraulic cylinder not shown for clarity See Dwg No 15/1 for plan and details.
6. For grounding system See electrical drawings and Specs.

GRAPHIC SCALES

"A" 6' 3' 0 6' 12' 18'
"B" 4' 2' 0 4' 8'
"C" 2' 1' 0 2' 4' 6'

AS-BUILT

RECORD DRAWING NOTE
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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 96C AND STRUCTURE 96D
STRUCTURE 96D
SITE WORK
GENERAL PLAN AND SECTIONS

DESIGNED	DRAWN	TRACED	CHECKED	SUBMITTED	SIZE	DWG. NO.
					F	10/4

DATED: SCALE: AS SHOWN DATED: JAN. 1964

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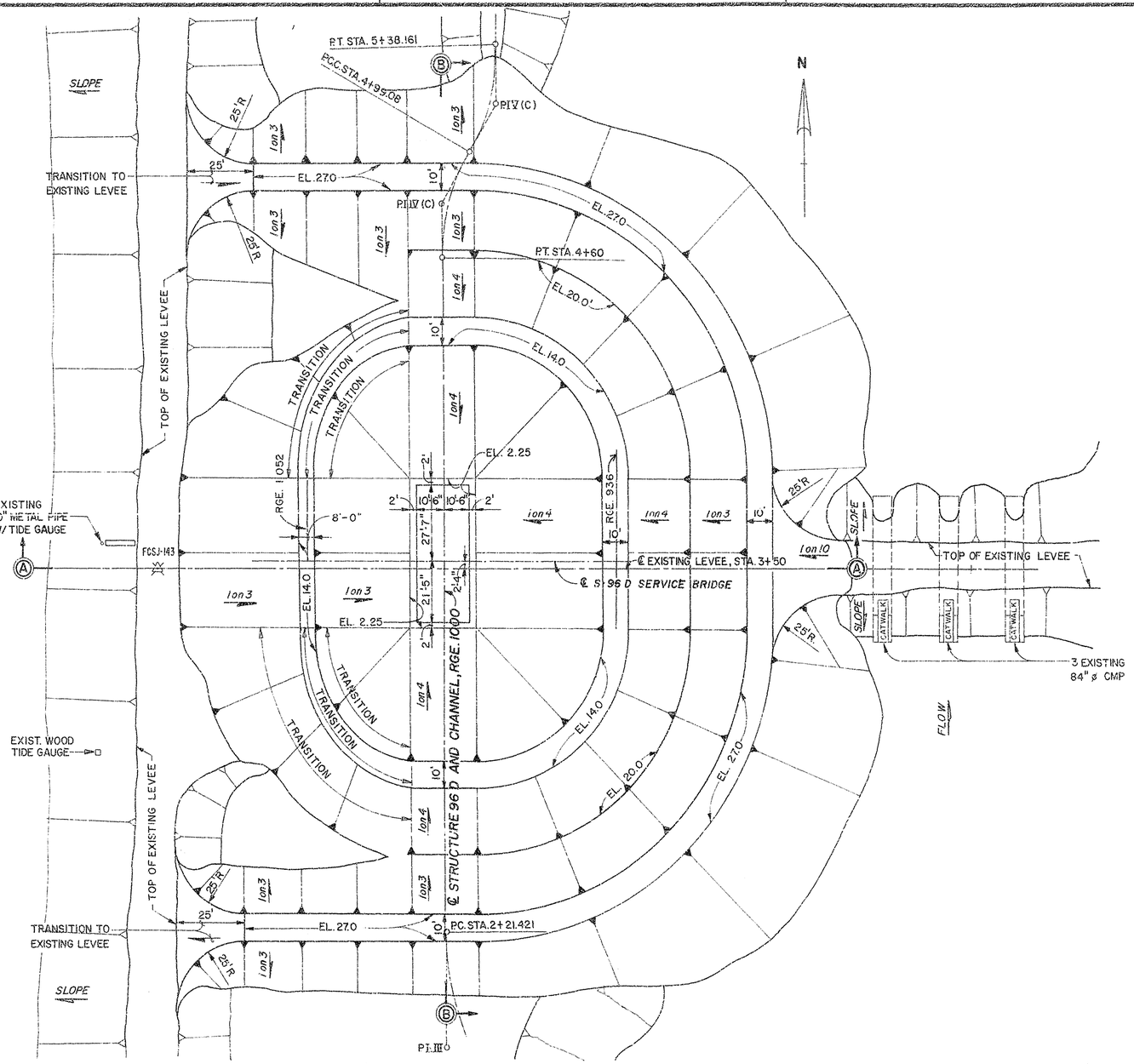
D. O. FILE NO ~~490-38,354~~ 490-36,591

SAFETY ON THIS JOB DEPENDS ON YOU

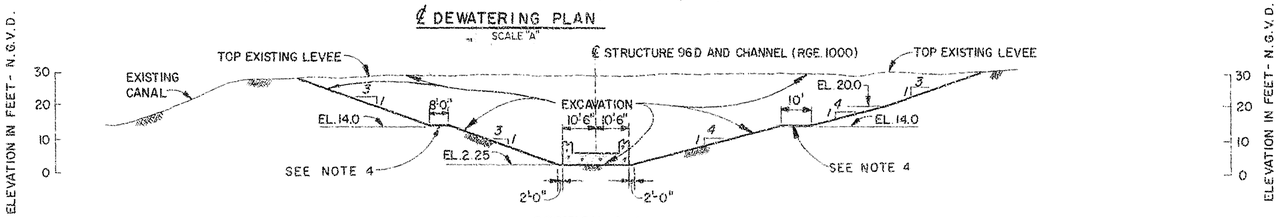
REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

NOTES:

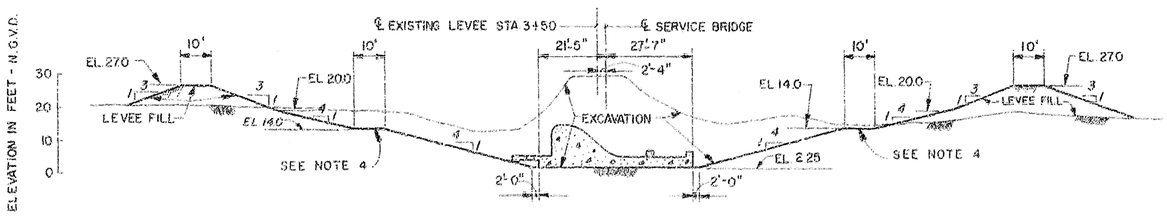
1. FOR "GENERAL NOTES" SEE DWG. NO. 1/2.
2. ALL STATIONING SHOWN ON THIS DRAWING REFERS TO THE ℄ CHANNEL RANGE 1000.
3. FOR RIGHT-OF-WAY AND CONTROL DATA, SEE DWG. NOS. 1/4 THRU 1/7.
4. EXCAVATION EQUIPMENT SHALL BE KEPT OFF OF BENCHES.
5. THE PIEZOMETER, THE VERTICAL DRAINS, THE PERIMETER TRENCH DRAIN LOCATED IN THE BENCH AT EL 14.0, AND THE COLLECTION SYSTEM LOCATED IN THE BOTTOM OF THE EXCAVATION ARE NOT SHOWN. FOR DETAILS SEE DWG. NO. 10/6.



℄ DEWATERING PLAN
SCALE "A"



SECTION A-A
SCALE "A"



SECTION B-B
SCALE "A"

AS-BUILT

GRAPHIC SCALE

"A" 20' 0 20' 40'

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 PROJECT
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
SITE WORK
DEWATERING PLAN AND SECTIONS

DESIGN BY	DRAWN BY	TRACED BY	CHECKED BY	SUPV. BY
DM	J.M.			

SIZE: F | DWG. NO. 10/5
DATES
SCALE: AS SHOWN | DATED: OCT 1986
JAN. 1994

D. O. FILE NO. ~~490-35,354~~ 490-36,591

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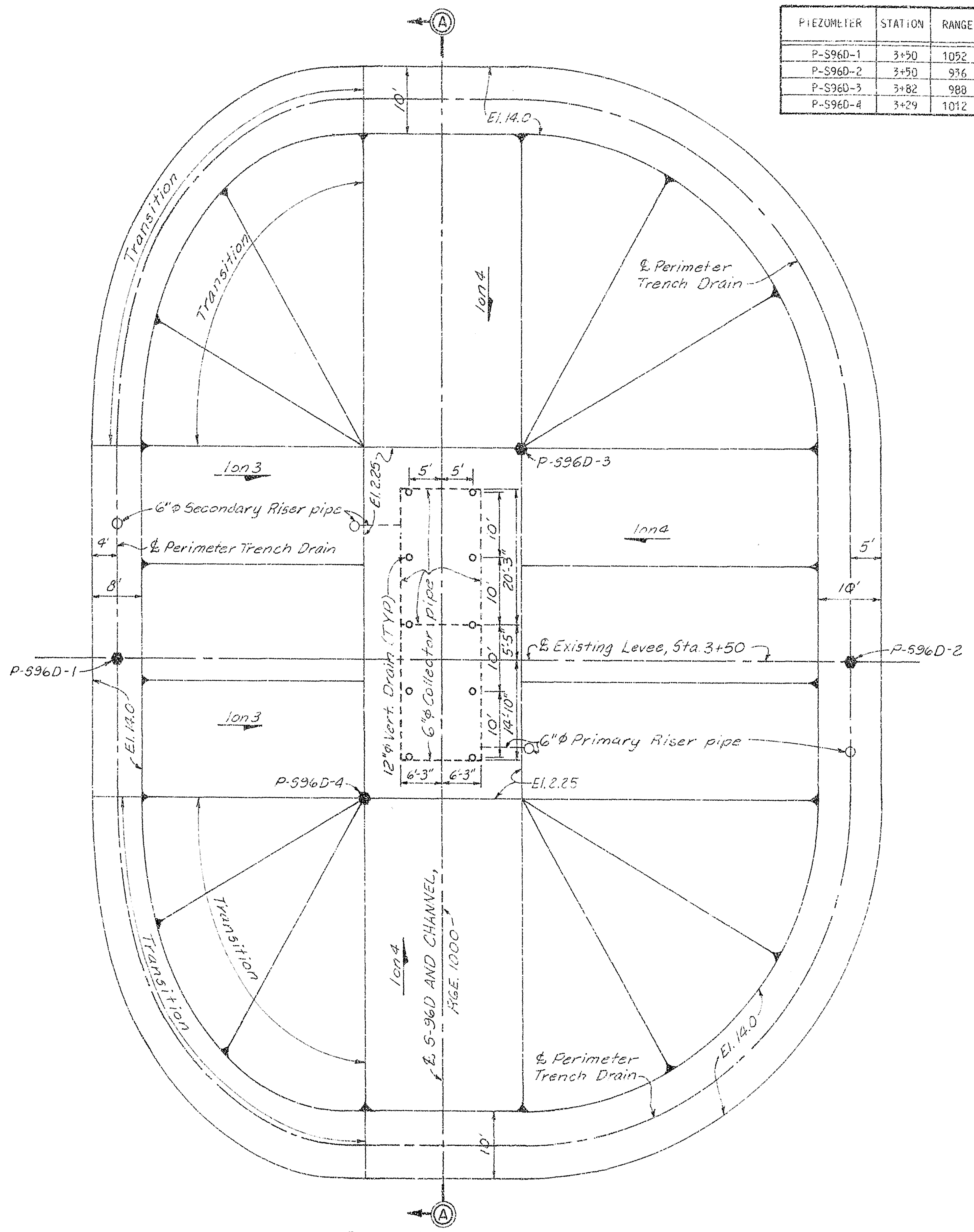
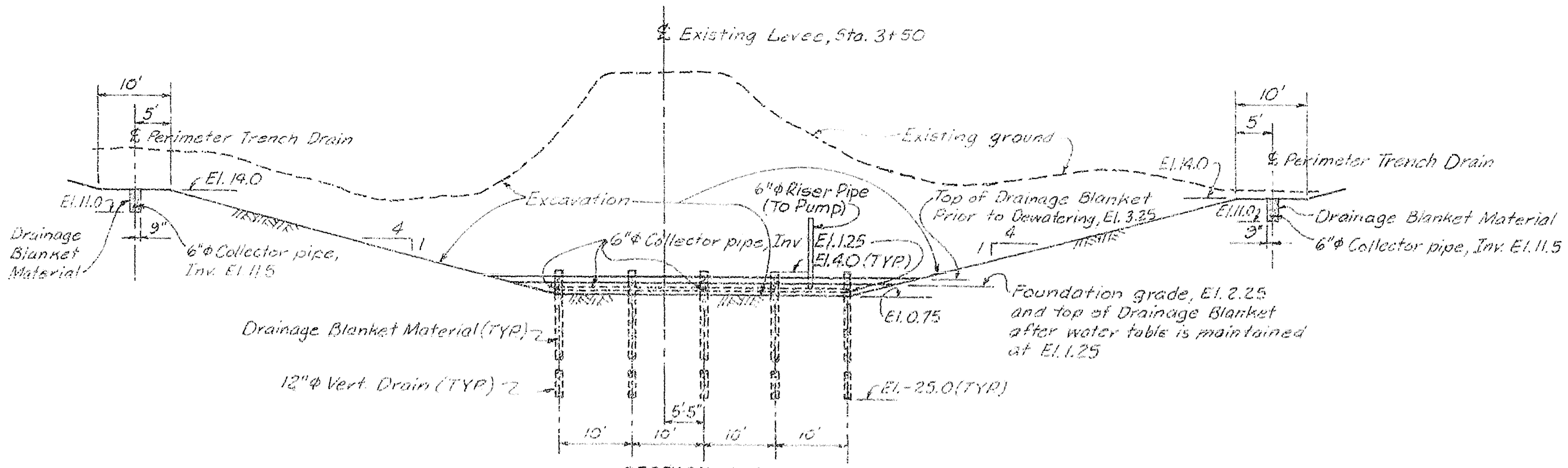
PIEZOMETER	STATION	RANGE	TIP ELEVATION "A" SEE DWG. NO 2/7
P-S96D-1	3+50	1052	-2.0
P-S96D-2	3+50	936	-2.0
P-S96D-3	3+82	988	-16.5
P-S96D-4	3+29	1012	-16.5

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED



PLAN AT ELEVATION 14.0

SCALE: "A"



SECTION A-A

SCALE: "A"

SEQUENCE OF CONSTRUCTION:

1. INSTALL VERTICAL DRAINS FROM EL -25.0 TO EL 4.0 PRIOR TO EXCAVATION.
2. EXCAVATE TO INDICATED GRADES AND SLOPES.
3. A. INSTALL 30" THICK DRAINAGE BLANKET AND PIPE.
   B. INSTALL PERIMETER TRENCH DRAIN.
4. INSTALL PIEZOMETERS PRIOR TO PUMPING.
5. PUMP FROM RISER PIPES AND MAINTAIN WATER TABLE AT OR BELOW EL 1.25.
6. REMOVE DRAINAGE BLANKET MATERIAL TO FOUNDATION GRADE, EL 2.25, AFTER WATER TABLE IS MAINTAINED AT OR BELOW EL 1.25.
7. MONITOR SYSTEM.

NOTES:

1. THE OUTLINED STEPS FOR "SEQUENCE OF CONSTRUCTION" SHALL BE USED AS A GENERAL GUIDELINE. NOT ALL THE FEATURES OR ALL THE ITEMS OF WORK ASSOCIATED WITH EACH STEP ARE COVERED ABOVE. REFER TO THE CONTRACT DOCUMENTS FOR THE TOTAL SCOPE AND DETAILS OF CONSTRUCTION.
2. FOR LEGEND AND PIEZOMETER DETAIL, SEE DWG. NO. 2/7.
3. ALL STATIONING SHOWN ON THIS DRAWING REFERS TO THE ℄ CHANNEL, RANGE 1000.
4. LOCATE RISER PIPES TO AVOID INTERFERENCE WITH STRUCTURAL CONCRETE.

GRAPHIC SCALE

"A" 10' 0 10' 20'

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 96C AND STRUCTURE 96D
STRUCTURE 96D
SITE WORK
DEWATERING SYSTEM

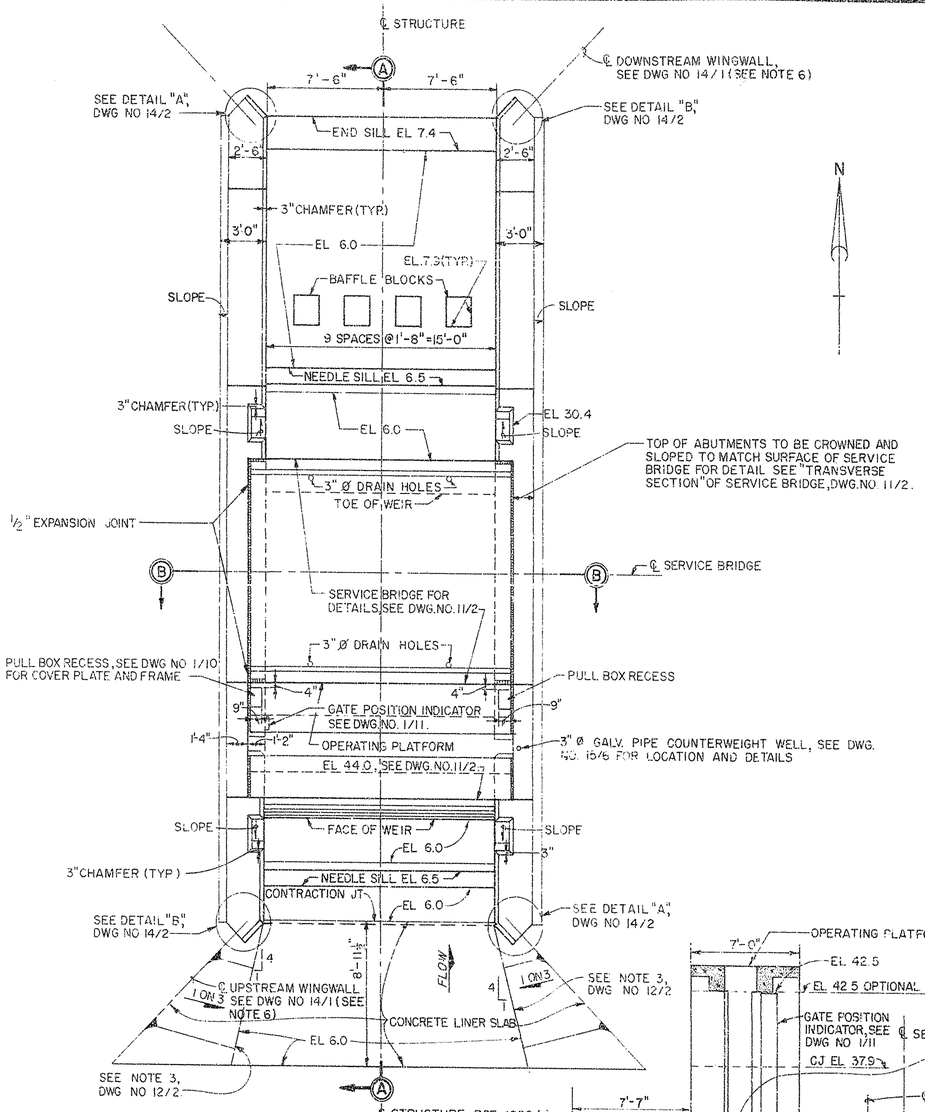
SIZE: F | DWG. NO. 10/6

SCALE: AS SHOWN | DATED: JAN. 1984

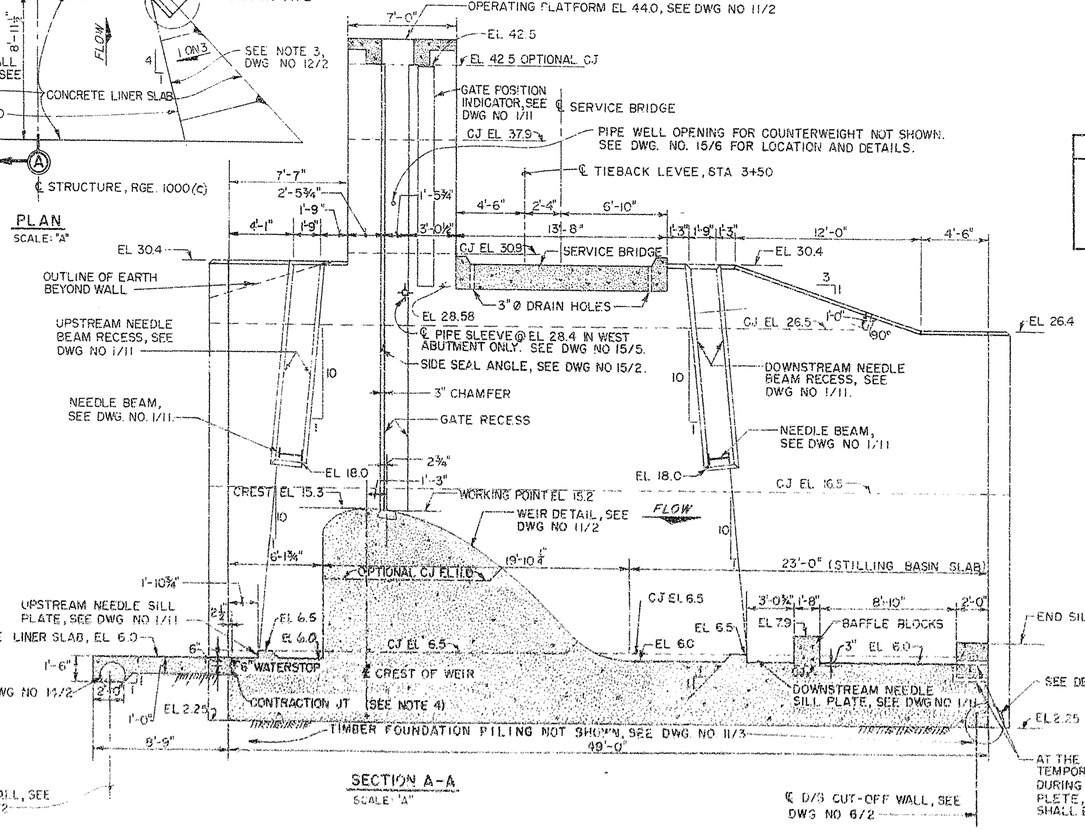
D. O. FILE NO. ~~490-35,354~~ 490-36,591

SAFETY ON THIS JOB DEPENDS ON YOU

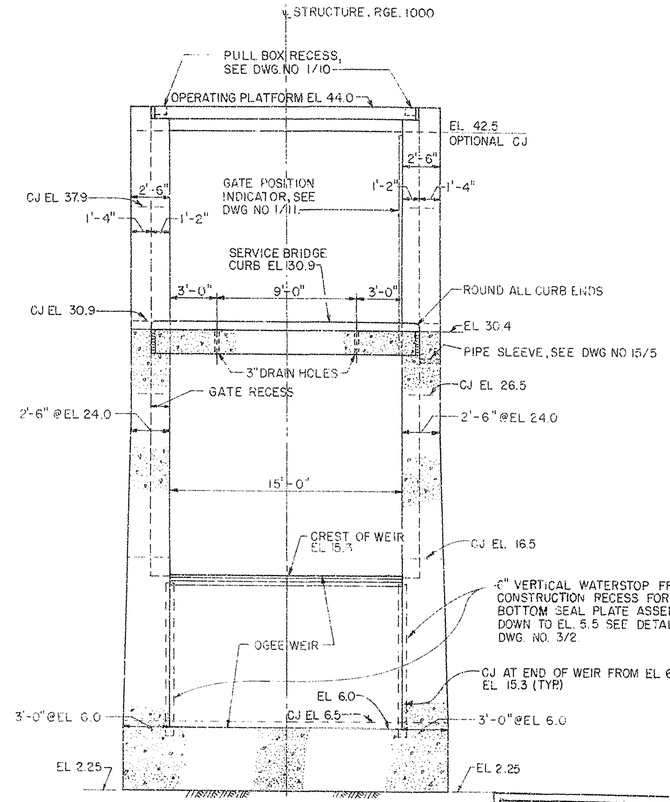
REVISIONS					
NO	SYM	ZONE	DESCRIPTION	DATE	APPROVED



PLAN
SCALE: "A"



SECTION A-A
SCALE: "A"



SECTION B-B
SCALE: "A"

AS-BUILT

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

NOTES:

1. FOR "GENERAL REINFORCEMENT NOTES", SEE DWG. NO. 12/1.
2. FOR DETAILS OF SERVICE BRIDGE, OPERATING PLATFORM AND WEIR, SEE DWG. NO. 11/2.
3. FOR EMBEDDED METALS REQUIRED FOR GATE RECESS AND GATE BOTTOM SEAL CONSTRUCTION, SEE DWG. NOS. 13/1 AND 13/2.
4. PAINT CONTRACTION JOINTS WITH 2 COATS OF ASPHALTIC PAINT AT ALL ABUTTING SURFACES.
5. ABBREVATION "C J" INDICATES CONSTRUCTION JOINT REQUIRED AT LOCATIONS INDICATED
6. UPSTREAM AND DOWNSTREAM WINGWALL STEEL SHEET PILING NOT SHOWN FOR CLARITY IN PLAN SEE DWG NOS 14/1 AND 14/2 FOR DETAILS.

GENERAL CONCRETE AND DESIGN NOTES:

1 A. PROVIDE 3/4" CHAMFER ON ALL EXPOSED CONCRETE CORNERS AND EDGES UNLESS OTHERWISE NOTED.

2 A. CONSTRUCTION JOINTS SHALL BE AS SHOWN OR APPROVED BY THE CONTRACTING OFFICE PROVIDED THE FOLLOWING CRITERIA ARE MET:
HORIZONTAL CONSTRUCTION JOINTS IN WALLS SHALL BE LIMITED TO A MAXIMUM LIFT OF 10'-0" AND VERTICAL JOINTS 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. 11/2.

3 A. FOR "GENERAL REINFORCEMENT NOTES" SEE DWG. NO. 12/1.

4 A. 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.

5 A. ALL EXPOSED UNFORMED SURFACES SHALL HAVE A FLOAT FINISH, UNLESS OTHERWISE NOTED

6 A. 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.

GRAPHIC SCALE
"A" 4' 2' 0 4' 8'

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER PROJECT
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
CONCRETE
PLAN AND SECTIONS

E.E.B.
DATES
SCALE: AS SHOWN | DATE: ~~OCT 1986~~ JAN. 1994
DRG NO 11/1

D. O. FILE NO. ~~490-35,364~~ 490-36,591

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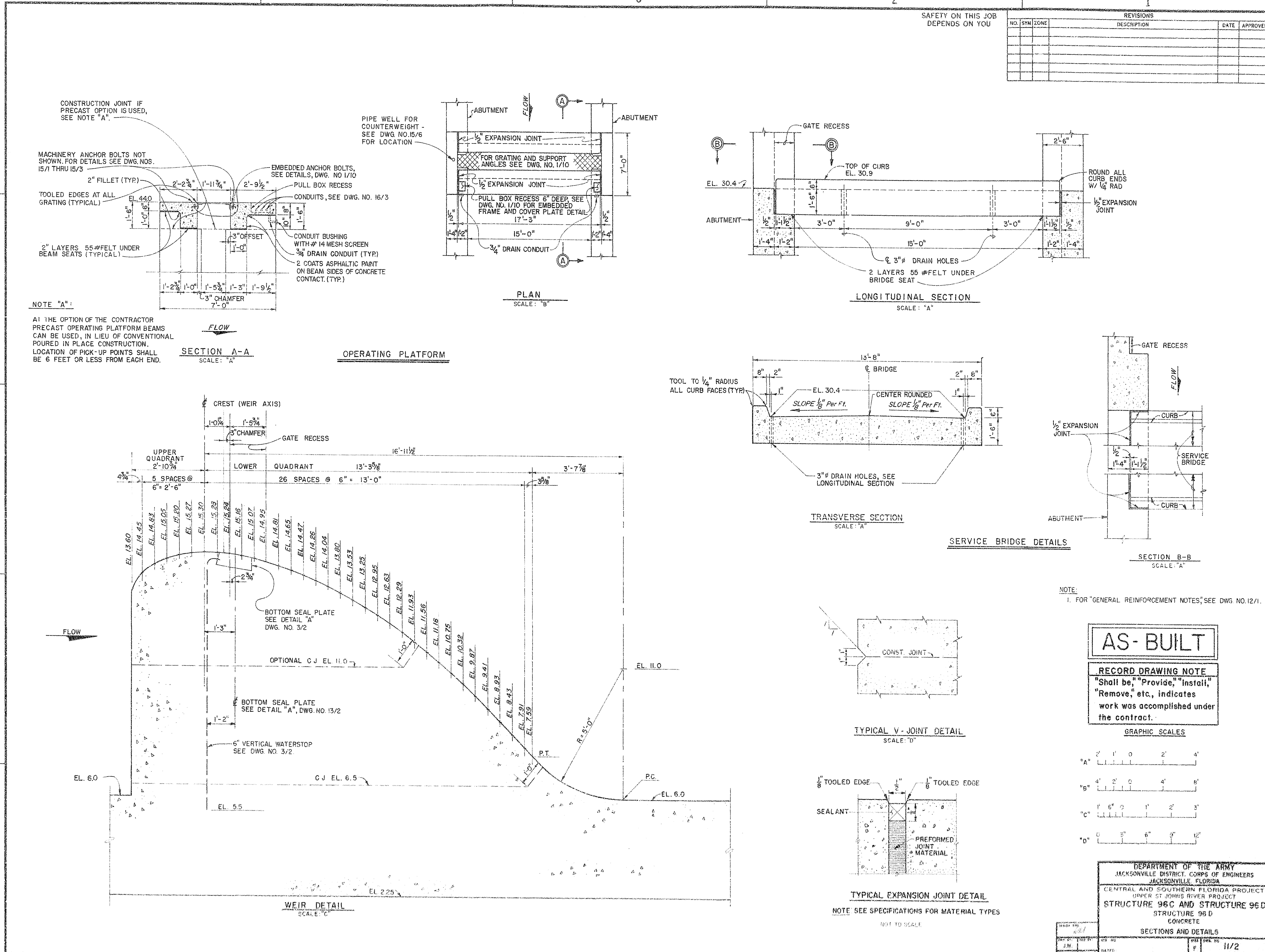


NOTE:
1. FOR "GENERAL REINFORCEMENT NOTES," SEE DWG. NO. 12/1.

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 PROJECT
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
CONCRETE
SECTIONS AND DETAILS

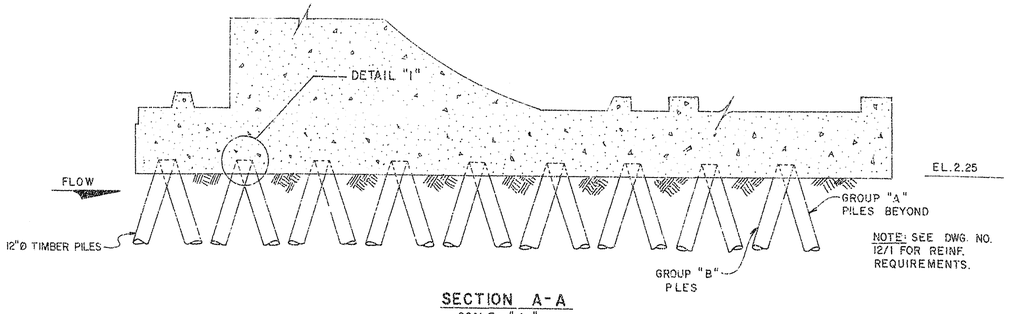
SCALE: AS SHOWN

11/2

D. O. FILE NO. ~~490-35,364~~
490-36,591

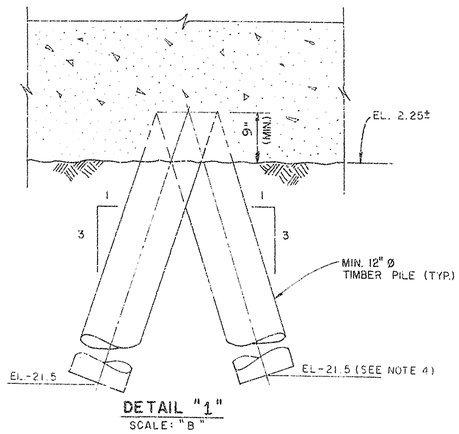
SAFETY ON THIS JOB DEPENDS ON YOU

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED



NOTE: SEE DWG. NO. 12/1 FOR REINF. REQUIREMENTS.

SECTION A-A
SCALE: "A"



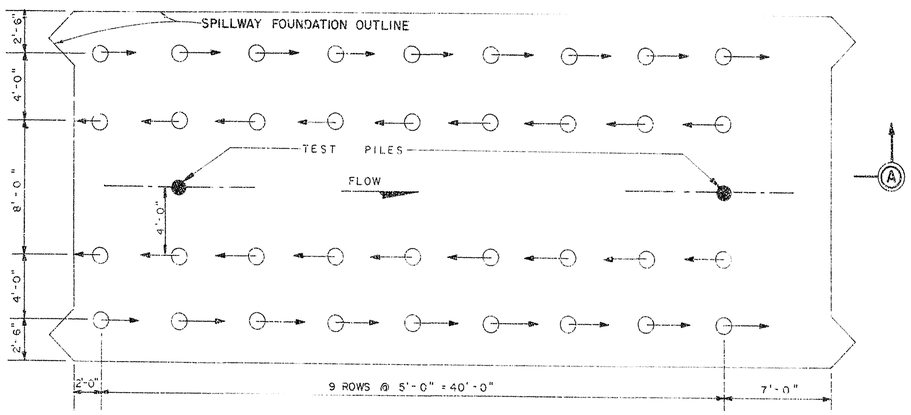
DETAIL "1"
SCALE: "B"

PILE LEGEND:

- GROUP "A" PILES
- GROUP "B" PILES
- TEST PILES (SEE NOTE 3.)

NOTES:

1. ALL PILES SHOWN ⊖→ ARE BATTERED TO SLOPE INDICATED AND IN THE DIRECTION OF THE ARROW.
2. ALL PILES SHOWN ON THIS SHEET ARE MINIMUM 12" DIA. TIMBER PILES. SEE SPECIFICATIONS.
3. ● INDICATES VERTICAL TEST PILES (TIP EL-21.5 N.G.V.D.). THE PILE DESIGN LOAD IS 25 TONS.
4. PILE TIP ELEVATIONS SHOWN ARE FOR BIDDING PURPOSES ONLY. SEE PARAGRAPH "PILE LENGTHS" IN SPEC. SECTION "ROUND TIMBER PILES"



FOUNDATION PILING PLAN AT EL. 3.0
SCALE: "A"

GRAPHIC SCALES

"A" 4' 2' 0 4' 8'

"B" 1' 6" 0 1' 2'

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 PROJECT

STRUCTURE 96 C AND STRUCTURE 96 D

STRUCTURE 96 D
CONCRETE
FOUNDATION PLAN

DESIGNED
DRAWN
TRACED
CHECKED
DATE
SCALE: AS SHOWN
DATED ~~APR 1966~~ JAN 1994
DIV NO
DIST DWG NO F 11/3

D. O. FILE NO ~~490-35,361~~

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490-36,591

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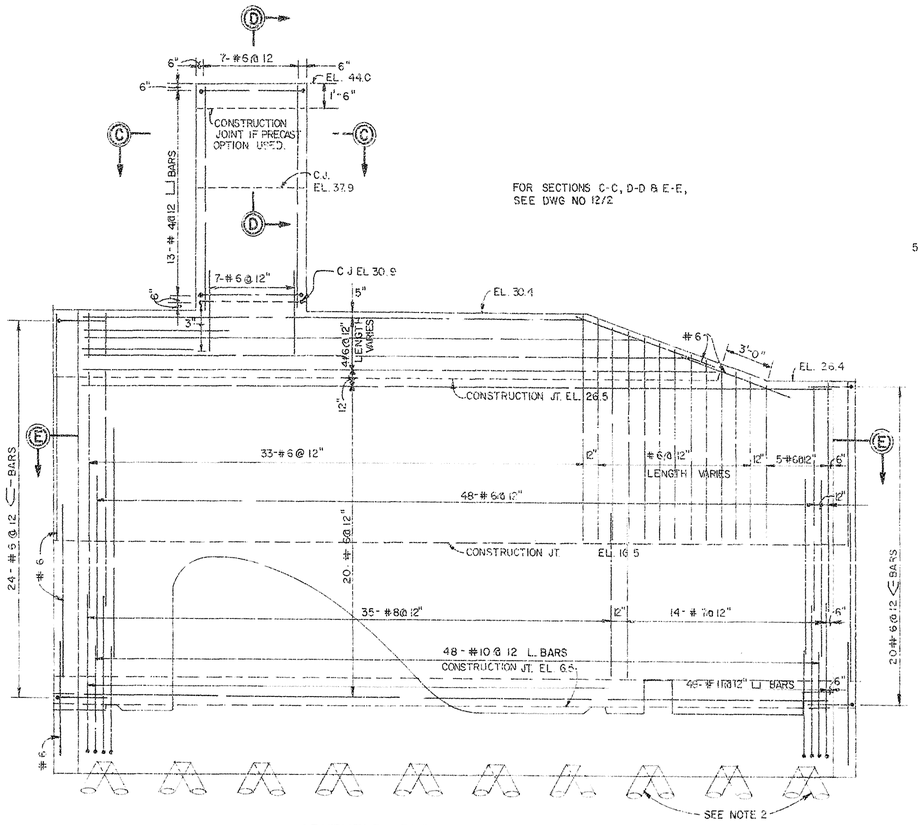
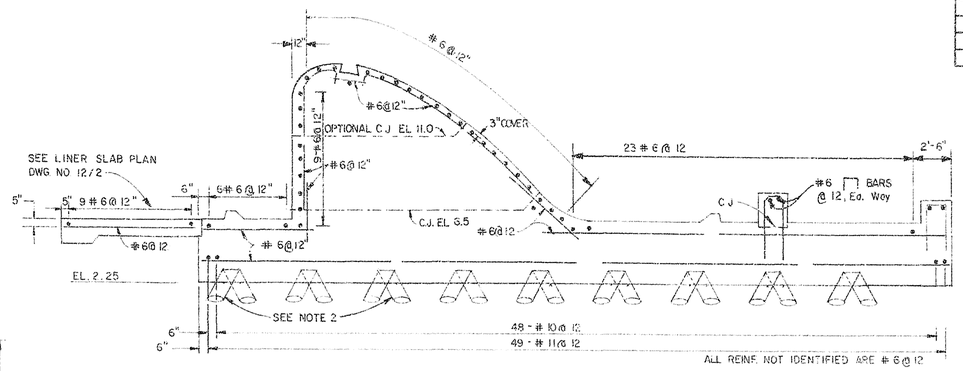
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED



FOR SECTIONS C-C, D-D & E-E, SEE DWG NO 12/2

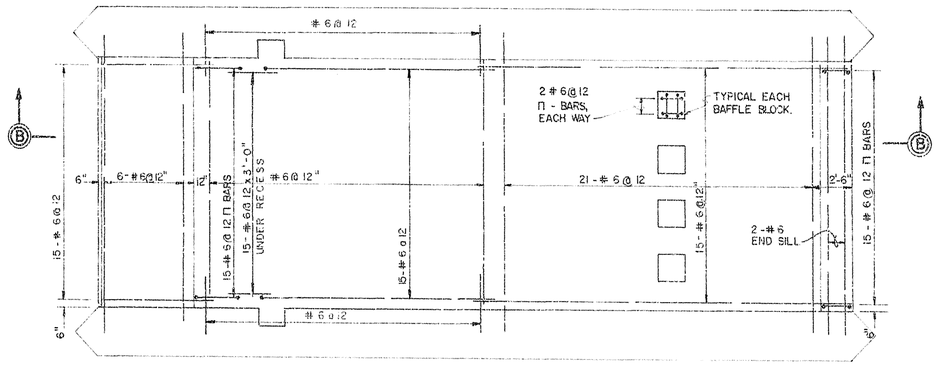
ABUTMENT ELEVATION - OUTSIDE FACE

SCALE: "A"



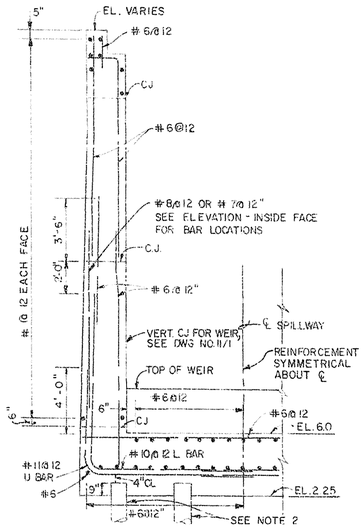
SECTION B-B

SCALE: "A"



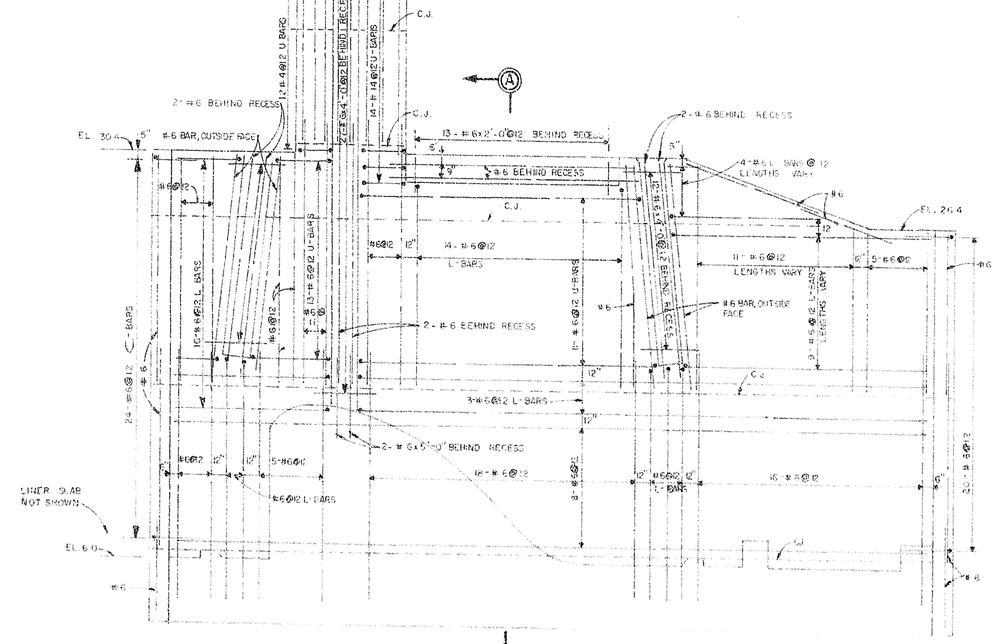
PLAN - BASE SLAB, TOP FACE

SCALE: "A"



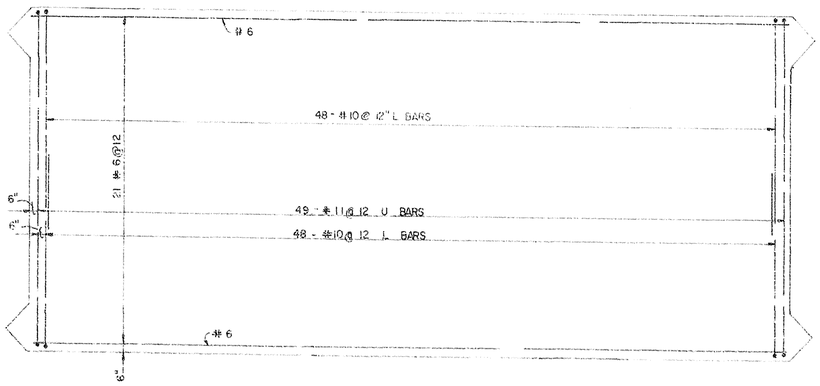
HALF SECTION A-A

SCALE: "A"



ABUTMENT ELEVATION - INSIDE FACE

SCALE: "A"



PLAN - BASE SLAB, BOTTOM FACE

SCALE: "A"

GENERAL REINFORCEMENT NOTES:

1A. The clear distance between the face of the concrete and reinforcing bars shall be 2½" for formed surfaces and 4" where concrete is placed against earth or rock unless otherwise shown.

2A. 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'-5"	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.

NOTES:

1. FOR SECTIONS C-C, D-D AND E-E, SEE DWG. NO. 12/2.

2. FOR TIMBER FOUNDATION PILE PLAN AND DETAILS, SEE DWG. NO. 11/3.

AS-BUILT

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

GRAPHIC SCALE
"A" 4' 2' 0 4' 8'

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER PROJECT
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96 D
REINFORCEMENT
DETAILS NO.I

DESIGN BR.	DRAWN BY	TRACED BY	CHECKED BY	SUPV. DWG. NO.	SHEET NO.
C.E.D.				F	12/1

SCALE: AS SHOWN | DATED: SEPT. 1986

D. O. FILE NO. 490-36,344

JAN. 1994

FOR OFFICIAL USE ONLY

490-36,591

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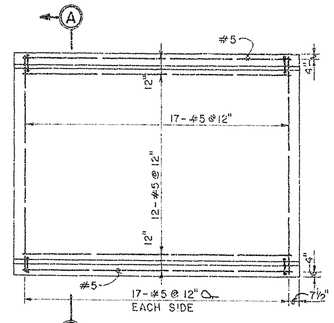
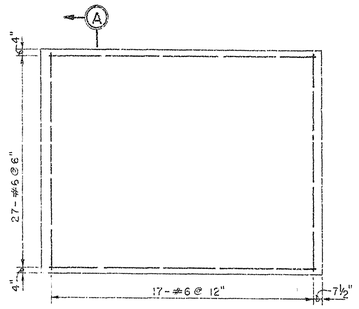
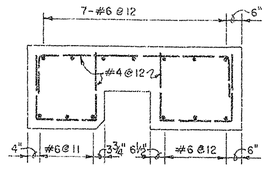
REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED



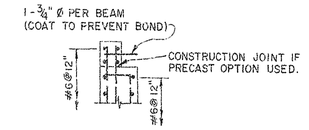
SLAB PLAN
TOP REINFORCEMENT
SCALE: "A"



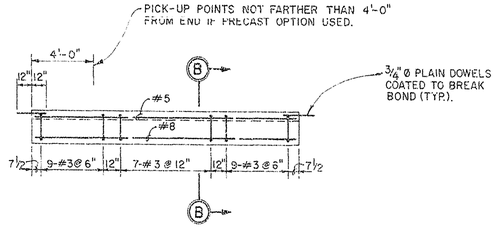
SLAB PLAN
BOTTOM REINFORCEMENT
SCALE: "A"



SECTION C-C
SCALE: "B"



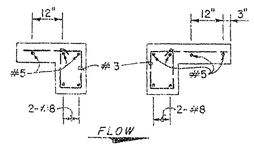
SECTION D-D
SCALE: "A"



ELEVATION
SCALE: "A"

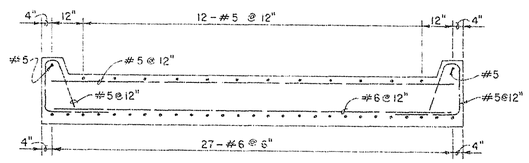
NOTE:

REINFORCEMENT SHALL BE CUT TO ACCOMODATE PULL BOX RECESS SEE DWG. NO. 11/2 FOR LOCATIONS AND DWG. NO. 1/10 FOR PULL BOX COVERS.

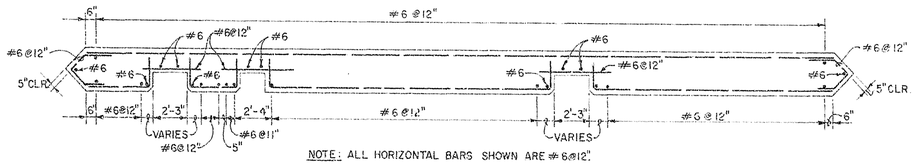


SECTION B-B
SCALE: "B"

OPERATING PLATFORM



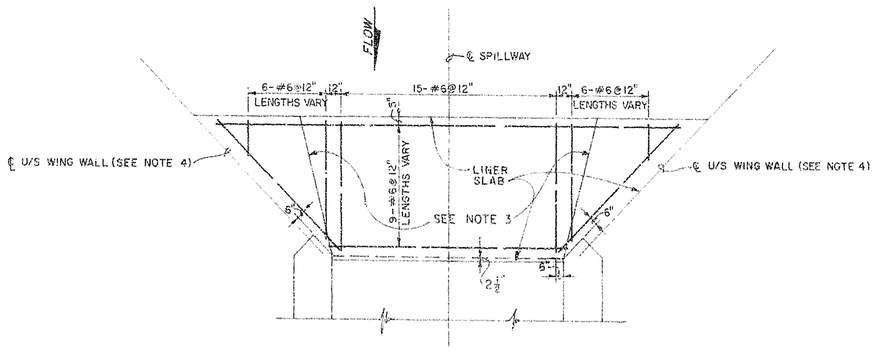
SECTION A-A
SCALE: "B"



NOTE: ALL HORIZONTAL BARS SHOWN ARE #6@12"

SECTION E-E
SCALE: "A"

SERVICE BRIDGE



LINER SLAB PLAN
SCALE: "A"

NOTES:

1. *For "General Reinforcement Notes", See dwg no. 12/1.*
2. *For location of Sections C-C, D-D, and E-E, See dwg no. 12/1.*
3. *Contractor has the option to provide a construction joint (C.J.) at the intersection of the horizontal and sloped portions of the liner slab. If a C.J. is provided, then a 6" waterstop shall be provided in the middle of the slab along the C.J.*
4. *Steel sheet piles for wingwalls not shown. See Upstream cutoff wall Half Plan, Dwg. No. 14/2.*

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

AS BUILT

GRAPHIC SCALES
"A" 4' 2' 0 4' 8'
"B" 2' 1' 0 2' 4'

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER PROJECT
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
REINFORCEMENT
DETAILS NO. 2

DESIGNED	DRAWN BY	CHK BY	SIZE	DWG. NO
C.T.S.			F	12/2

INV. DC
DATED
SCALE: AS SHOWN
DATED: OCT-1986
JAN 1994

D. O. FILE NO. ~~490-35,354~~
490-36,591

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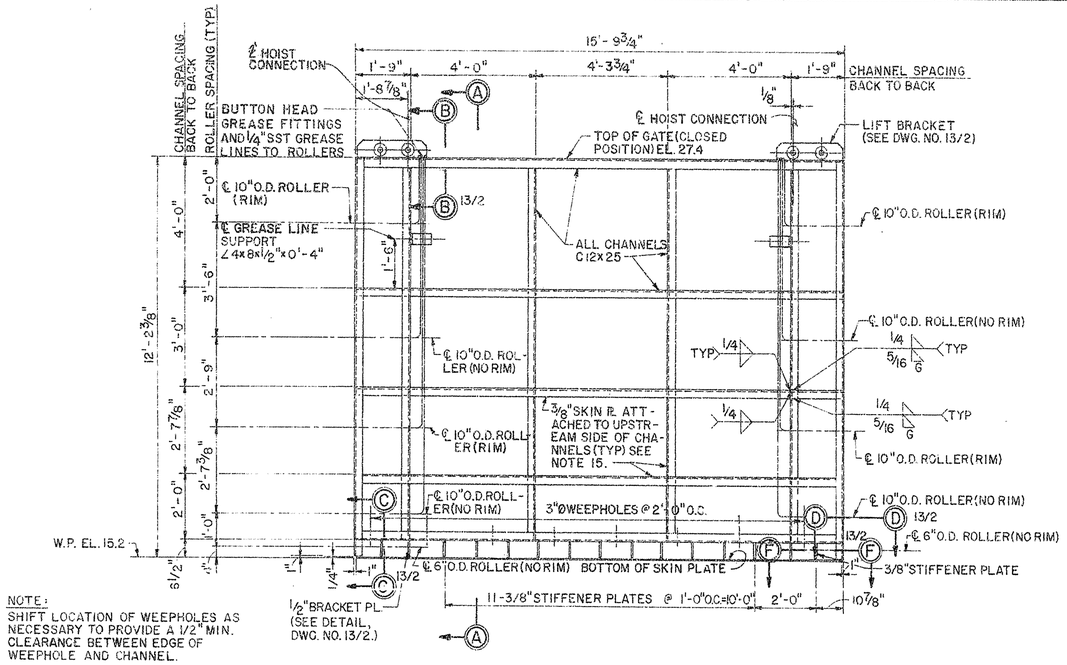
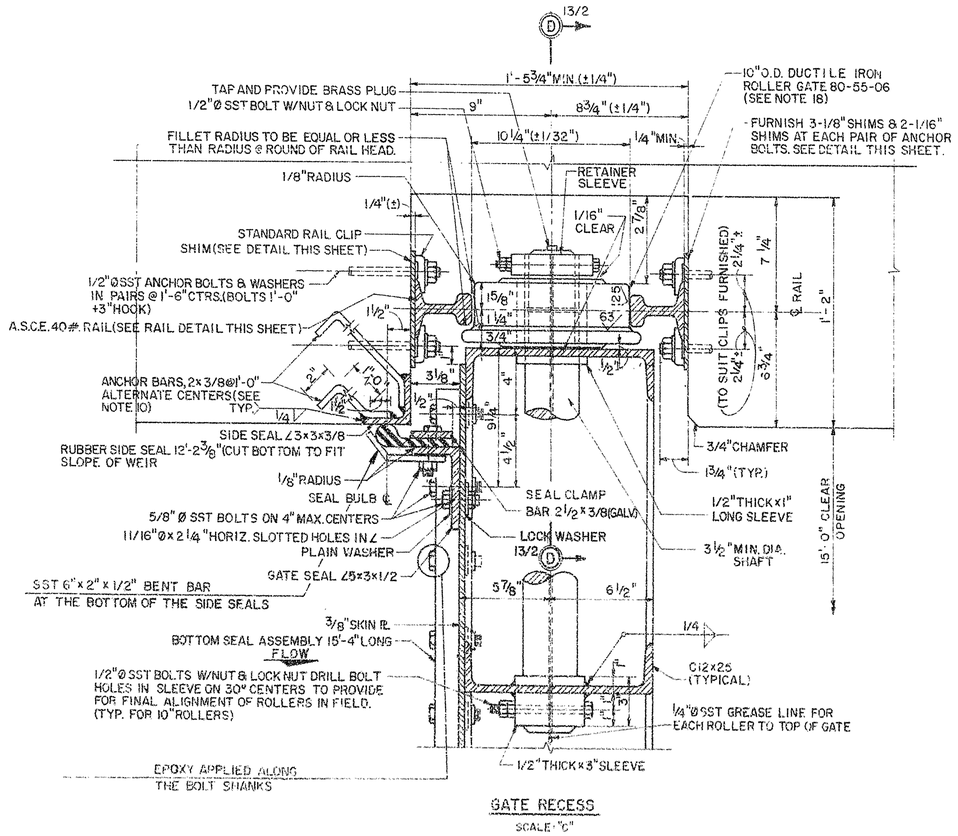


NOTE:
SHIFT LOCATION OF WEEPHOLES AS NECESSARY TO PROVIDE A 1/2" MIN. CLEARANCE BETWEEN EDGE OF WEEPHOLE AND CHANNEL.

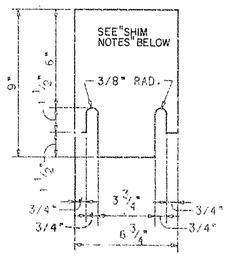
DOWNSTREAM GATE ELEVATION

SCALE: "A"



GATE RECESS

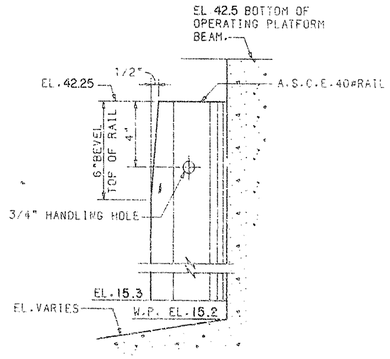
SCALE: "C"



SHIM DETAIL

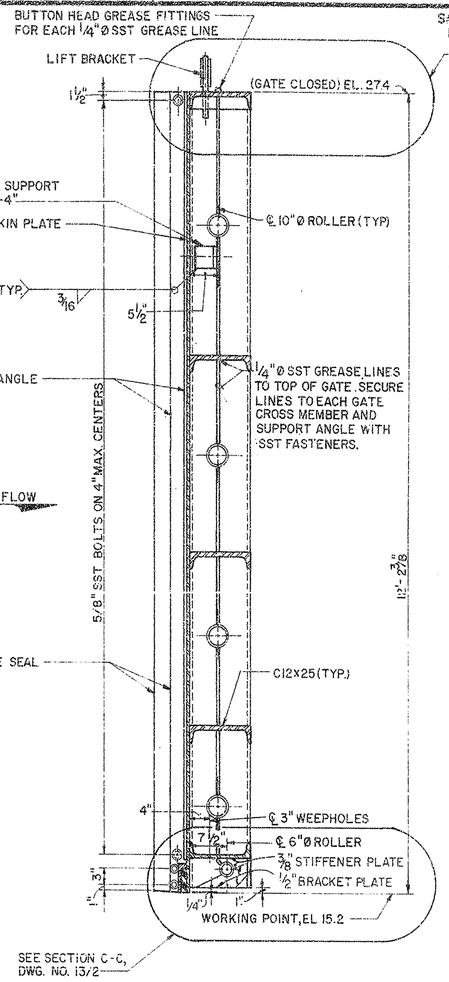
SCALE: "C"

SHIM NOTES:
1. SHIM DIMENSIONS SHOWN ARE TO BE ADJUSTED TO SUIT RAIL CLIPS.
2. ALL SHIMS TO BE GALVANIZED AFTER FABRICATION.



RAIL DETAIL

SCALE: "C"



SECTION A-A

SCALE: "B"

SAFETY ON THIS JOB DEPENDS ON YOU

SEE SECTION B-B TOP OF GATE, DWG. NO. 13/2

REVISIONS					
NO	SYM	ZONE	DESCRIPTION	DATE	APPROVED

GENERAL WELDING NOTES:

1A. 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.

2A. 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.

3A. WHERE CORROSION RESISTING STEEL IS WELDED, FILLER MATERIAL SHALL BE CORROSION RESISTING.

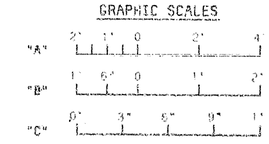
4A. WELDING SYMBOL SHOWN THUS, ——(TYP. MEANS THAT ALL SIMILAR JOINTS IN THIS VIEW SHALL BE WELDED IN THIS MANNER.

5A. 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 SST 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.
7. ALL BOLTS, NUTS, AND WASHERS (EXCEPT THOSE NOTED AS SST OR THOSE BOLTS AND NUTS FULLY EMBEDDED IN CONCRETE) SHALL BE GALVANIZED.
8. SEE SPECIFICATIONS FOR QUALITY OF FINISH REQUIRED BY SYMBOLS: 125 32 AND 63
9. FURNISH AND INSTALL ONE VERTICAL LIFT GATE, AS SHOWN ON THIS DRAWING AND DWG. NO. 13/2.
10. AT THE OPTION OF THE CONTRACTOR, 5/8"Ø 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 MOULDED CORNERS, (2) CORNERS SPLICED, CAREFULLY FITTED, AND VULCANIZED BY THE RUBBER SEAL MANUFACTURER.
14. PROVIDE A SEPARATE 1/4"Ø SST GREASE LINE FROM EACH ROLLER TO TOP OF GATE. AT TOP OF GATE PROVIDE BOTTON HEAD CREASE 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 11/1, FOR POSITION INDICATOR AND POSITION MARKER DETAILS, SEE DRAWING NUMBER 1/11.
18. CAST STEEL MAY BE SUBSTITUTED FOR DUCTILE IRON. MATERIAL SHALL CONFORM TO ASTM A 148, CLASS 80-50
19. SHAFTS EXCEPT CRES, SHALL BE SAE 1045 OR BETTER
20. VERTICAL LIFT GATE WILL BE PAID FOR UNDER BID ITEM NO. 3H, "VERTICAL LIFT GATE"
21. ALL TYPE 304 STAINLESS STEEL BOLTS SHALL HAVE TYPE 304 STAINLESS STEEL WASHERS AND ARMCO NITRONIC 60 OR EQUAL NUTS.

GRAPHIC SCALES



AS-BUILT

RECORD DRAWING NOTE
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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER PROJECT
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
VERTICAL LIFT GATE
ELEVATION AND DETAILS

DESIGN BY G.M.G.
DRAWN BY
TRACED BY
CHECKED BY
QUANTITIES BY
CHECKED BY
DATE
SCALE: AS SHOWN
DRAWING NO. F 13/1
DATED JAN. 1954

D. O. FILE NO. ~~490-36,354~~ 490-36,591

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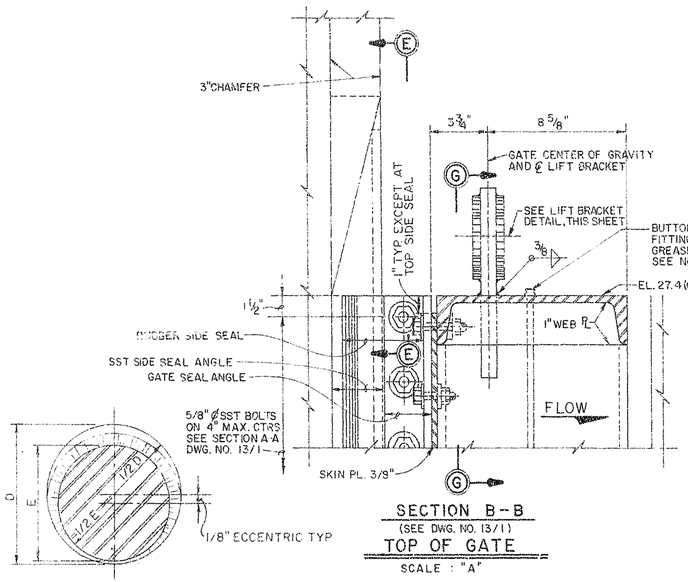
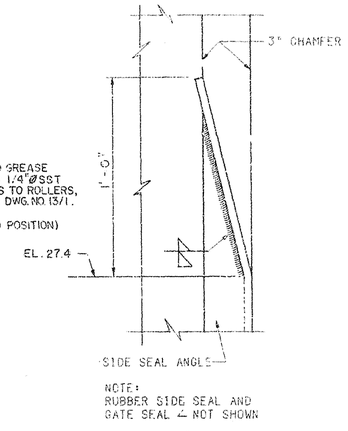
REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

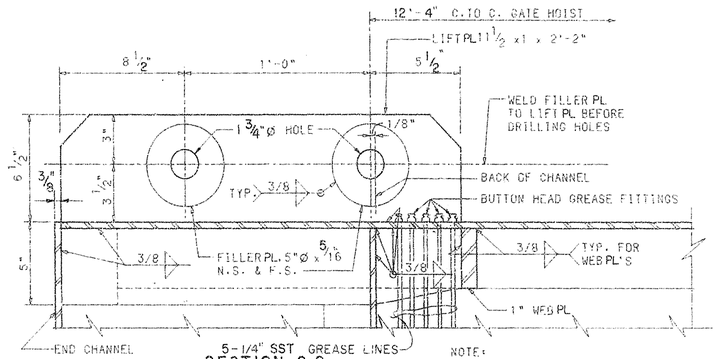


SECTION X-X



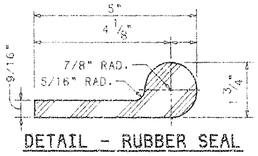
NOTE:
RUBBER SIDE SEAL AND GATE SEAL ∠ NOT SHOWN

SECTION E-E
SCALE: "A"

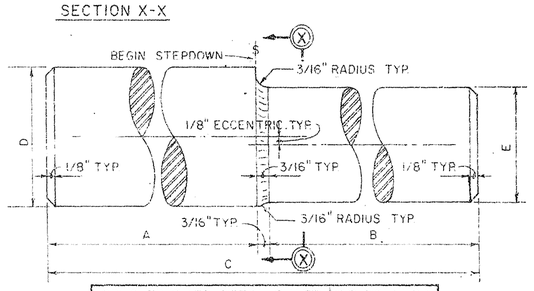


SECTION G-G
LIFT BRACKET DETAIL
SCALE: "A"

NOTE:
SLOT CHANNEL WEBS AND INSERT LIFT PLATE.

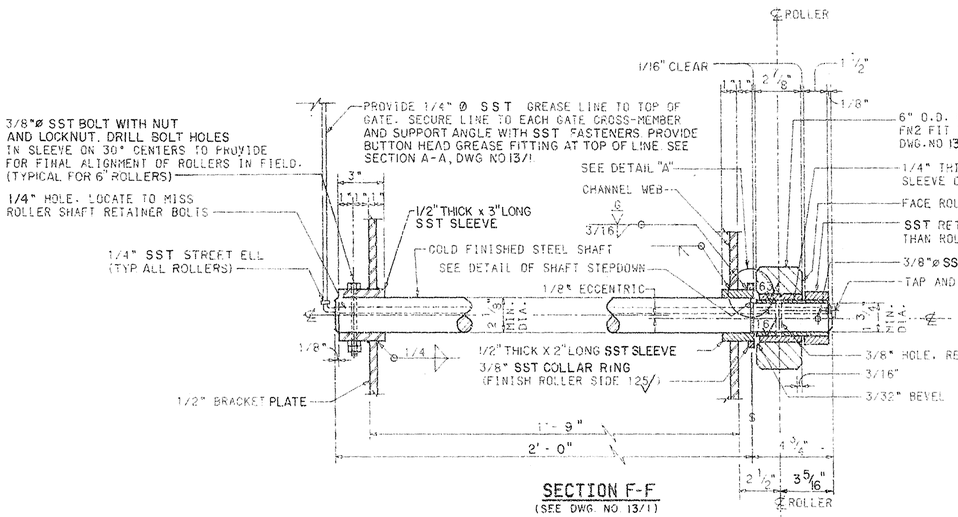


DETAIL - RUBBER SEAL
NOT TO SCALE

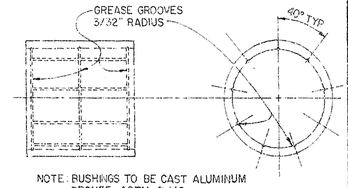


COLD FINISHED STEEL SHAFT FOR ROLLERS		
DIMENSION	6" ROLLER	10" ROLLER
A	2'-0"	1'-11"
B	4 9/16"	6 3/16"
C	2'-4 3/4"	2'-5 3/8"
D	2 1/8"	3 1/2"
E	1 3/4"	3 1/8"
2-6" STEEL ROLLER SHAFTS REQUIRED		
8-10" STEEL ROLLER SHAFTS REQUIRED		

DETAIL
SHAFT STEPDOWN
SCALE: "B"

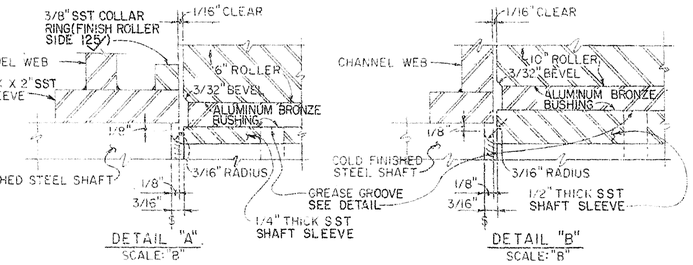


SECTION F-F
(SEE DWG. NO 13/1)
6" O.D. ROLLER
SCALE: "A"



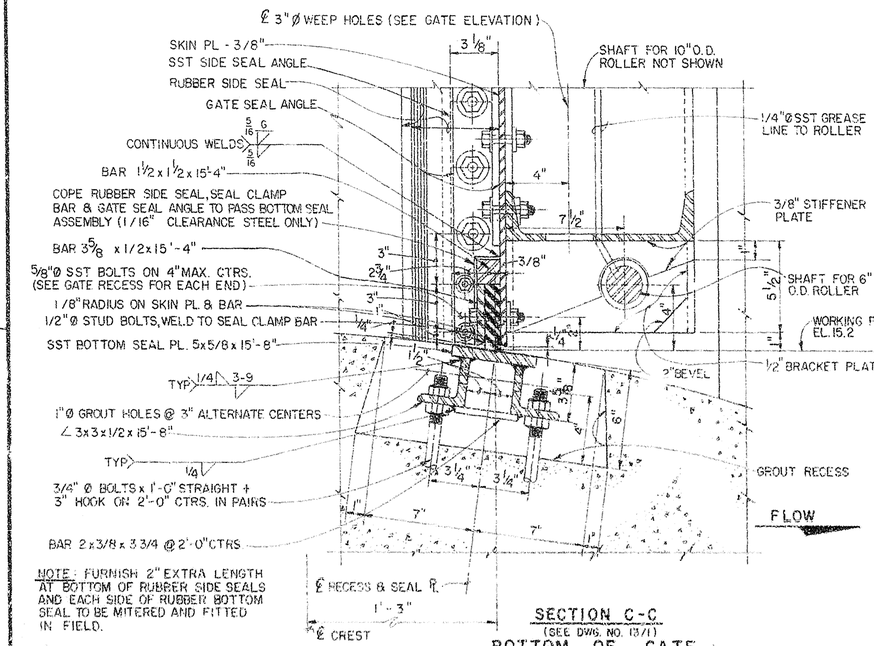
NOTE: BUSHINGS TO BE CAST ALUMINUM BRONZE ASTM-B 148

GREASE GROOVE DETAIL
NOT TO SCALE



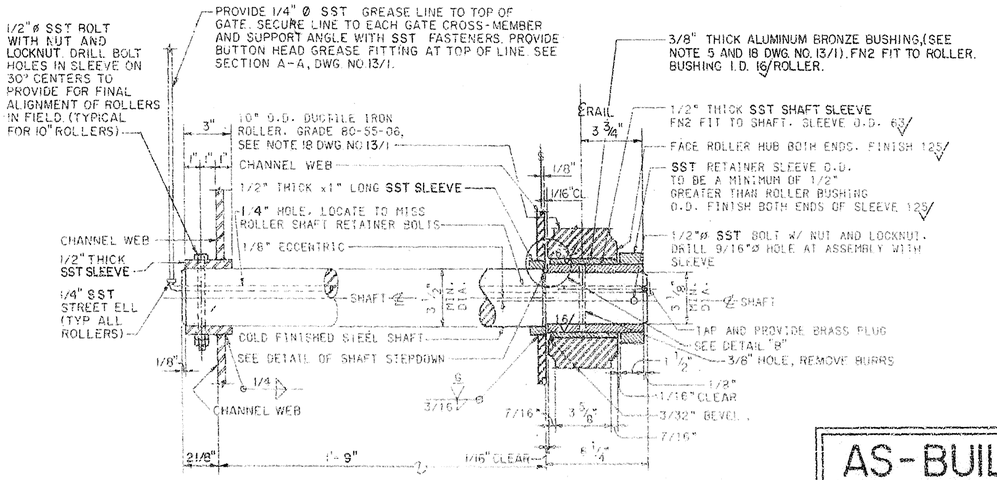
DETAIL "A"
SCALE: 8"

DETAIL "B"
SCALE: "B"



NOTE: FURNISH 2" EXTRA LENGTH AT BOTTOM OF RUBBER SIDE SEALS AND EACH SIDE OF RUBBER BOTTOM SEAL TO BE MITERED AND FITTED IN FIELD.

SECTION C-C
(SEE DWG. NO. 13/1)
BOTTOM OF GATE
SCALE: "A"



SECTION "D-D"
(SEE DWG NO 4/1)
10" O.D. ROLLER
NOT TO SCALE

NOTE:
SEE DRAWING NO. 13/1 FOR "GENERAL NOTES ON VERTICAL LIFT GATE" AND "GENERAL WELDING NOTES"

GRAPHIC SCALES

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 PROJECT
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
VERTICAL LIFT GATE
MISCELLANEOUS DETAILS

DESIGN	DRAWN	TRACED	CHK'D	QUAN.	SIZE	DWG. NO.	REV.
G.M.H.					F	13/2	

DATED: JUNE 1964
SCALE: AS SHOWN | DATED: JUNE 1964 | SHEET

D.O. FILE NO. ~~490-35.354~~

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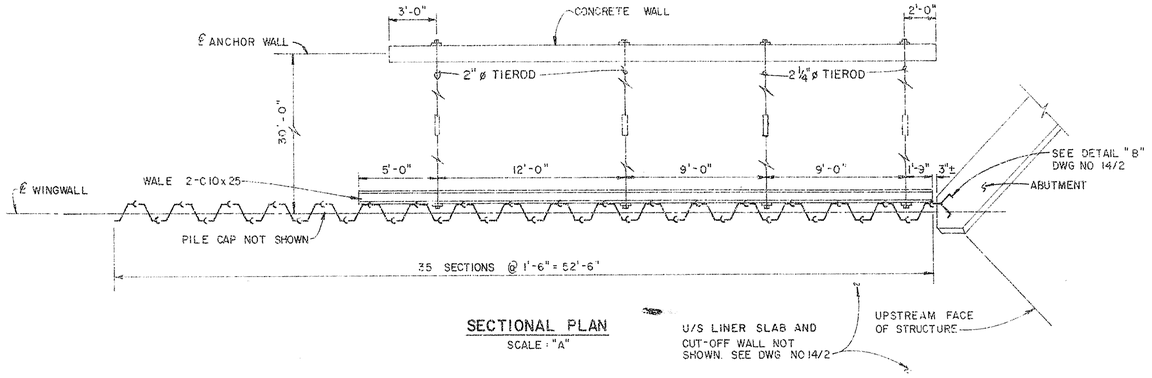
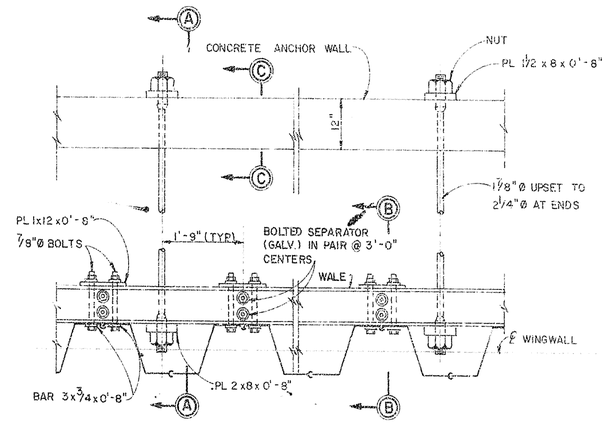
NO	SYM	ZONE	DESCRIPTION	DATE	APPROVED



SECTIONAL PLAN
SCALE : "A"

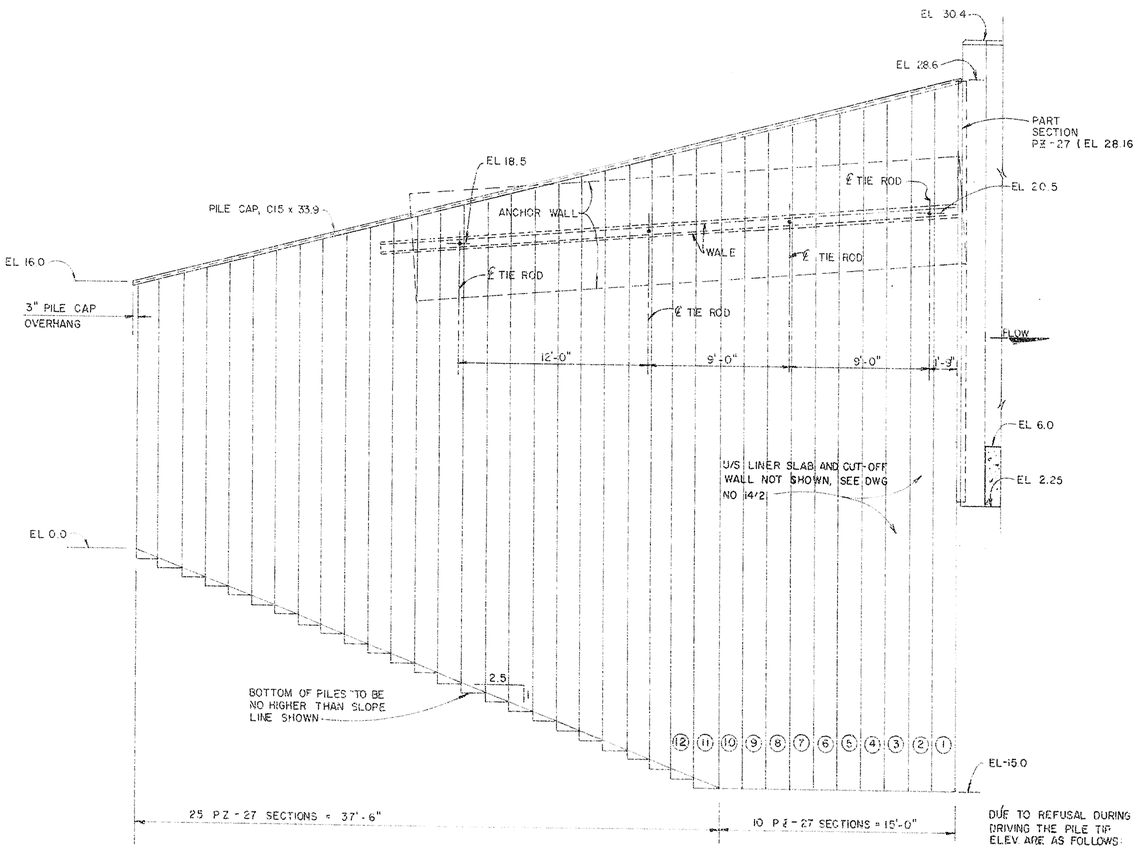


PARTIAL PLAN
WINGWALLS
SCALE: "B"

NOTE : THIS PLAN AND SECTIONS A-A, B-B & C-C BELOW ARE TYPICAL FOR DOWNSTREAM WINGWALLS ALSO.

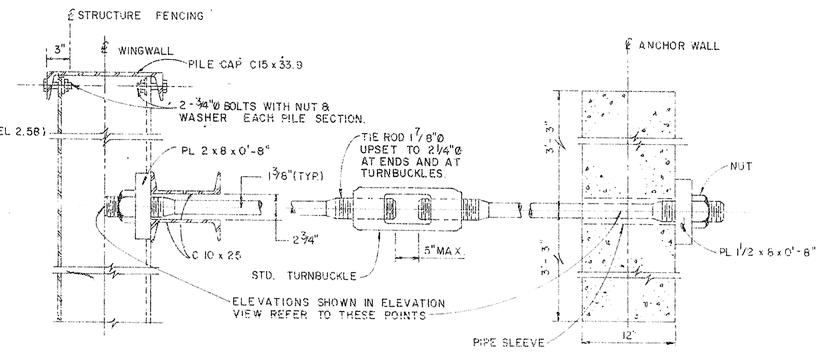
NOTES:

1. ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED UNLESS SPECIFIED OTHERWISE. ALL BOLTS SHALL BE FURNISHED WITH ONE NUT AND WASHERS, 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 (S.S.P), 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 0.335 IN. AND THEIR SECTION MODULUS PER LIN. FT. OF WALL IS EQUAL TO OR GREATER THAN 30.2 IN^3 THE CONTRACTOR SHALL SUBMIT DETAILS OF PROPOSED CHANGES TO THE WINGWALLS FOR APPROVAL BY THE CONTRACTING OFFICER.

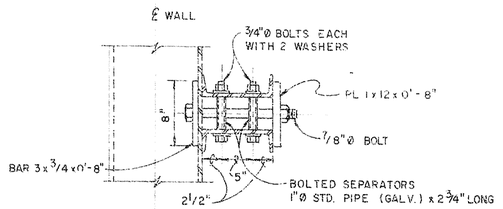


SECTIONAL ELEVATION
UPSTREAM WINGWALL - WEST SIDE (EAST SIDE IS SIMILAR)
SCALE "A"

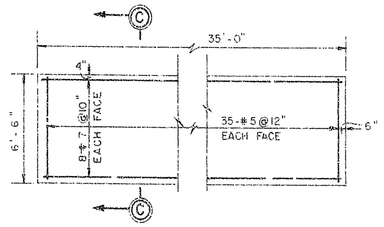
PILE NO.	UPSTREAM EAST SIDE	PILE NO	UPSTREAM WEST SIDE
②	-14.33	③	-14.33
④	-14.00	④	-13.66
⑤	-13.50	⑫	-10.40
⑥	-12.00		
⑦	-12.84		



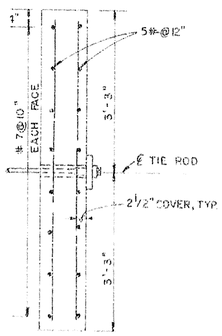
SECTION A-A
NOT TO SCALE



SECTION B-B
NOT TO SCALE



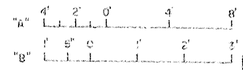
PARTIAL ELEVATION - ANCHOR WALL
SCALE "A"



SECTION C-C
SCALE "B"

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

GRAPHIC SCALES



AS-BUILT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER PROJECT

STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
METALS AND MISCELLANEOUS
UPSTREAM WINGWALLS

SIZE F | DWG. NO. 14/1
SCALE AS SHOWN | DATED ~~DEC 1963~~ JAN 1994

D. O. FILE NO. ~~490-36, 354~~ 490-36,591

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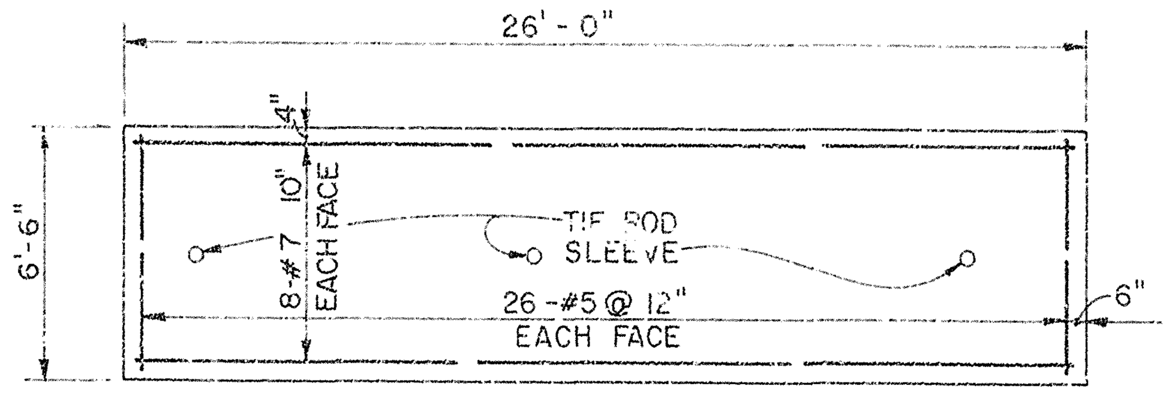
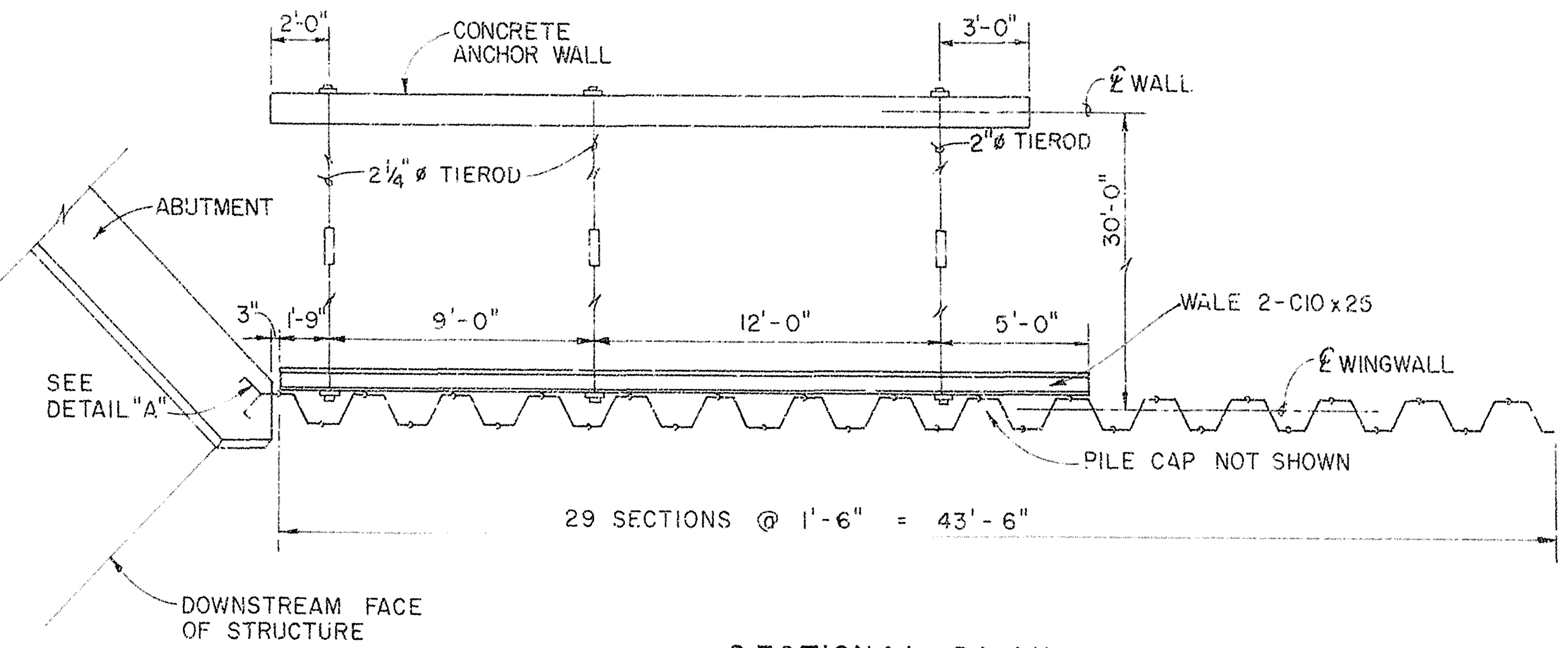
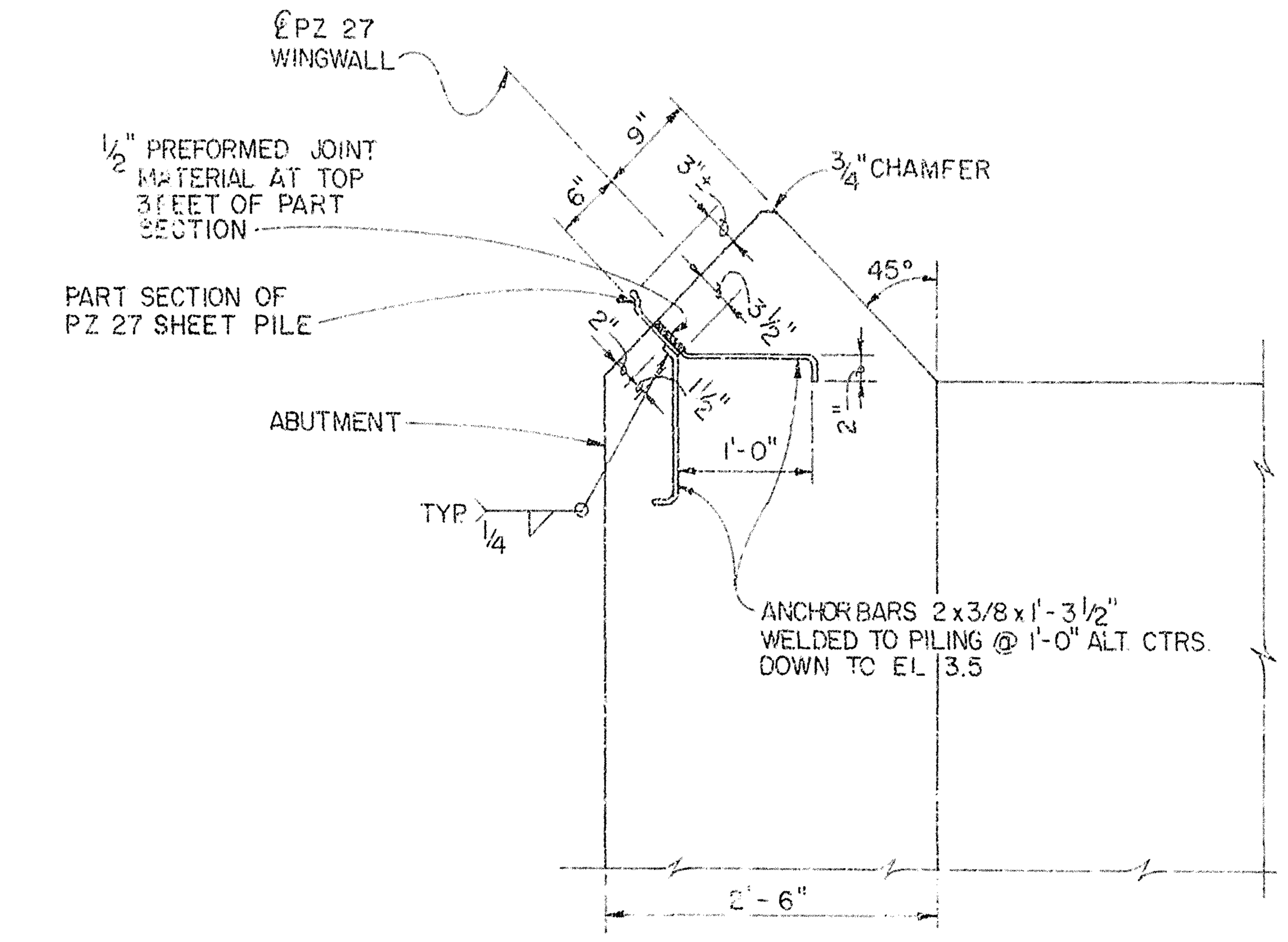


ELEVATION - ANCHORWALL
SCALE : "A"



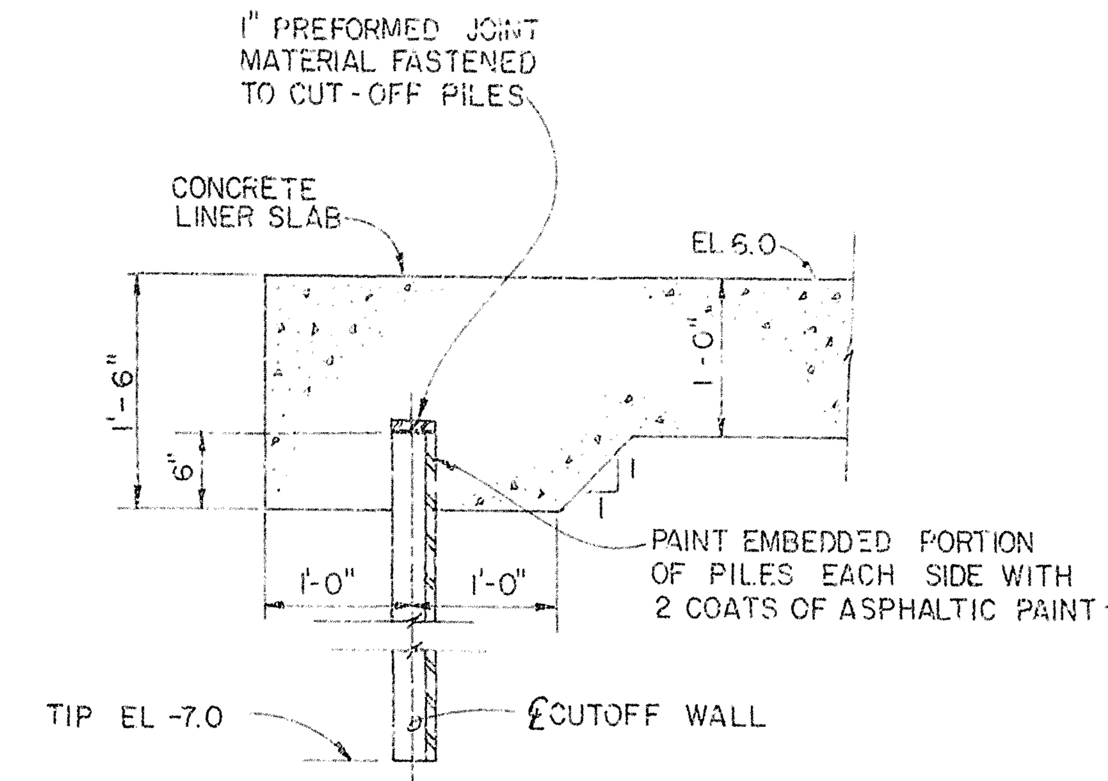
SECTIONAL PLAN
SCALE : "A"

NOTE SEE DWG NO. 14/1 FOR TYPICAL WINGWALL AND ANCHOR WALL INSTALLATION DETAILS.

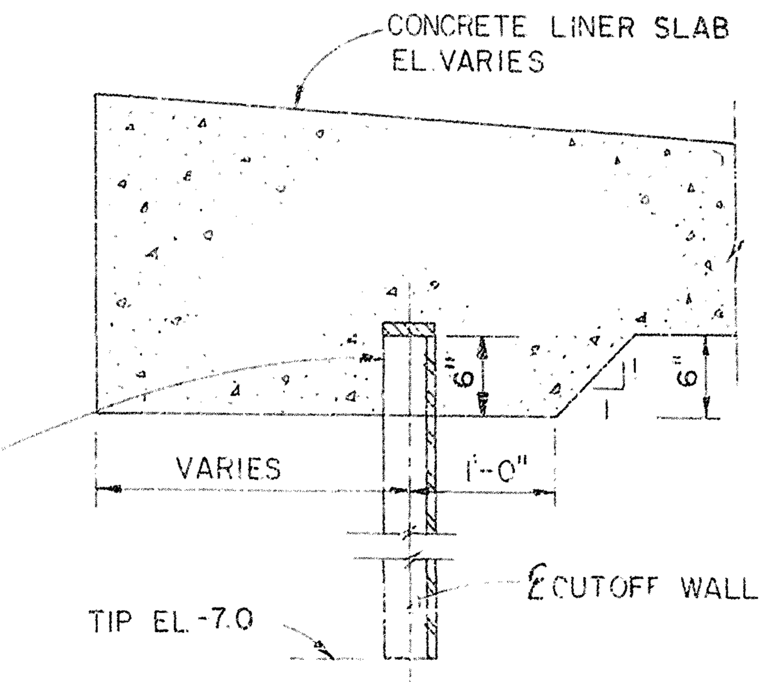


DETAIL "A" - AS SHOWN
SCALE "B"

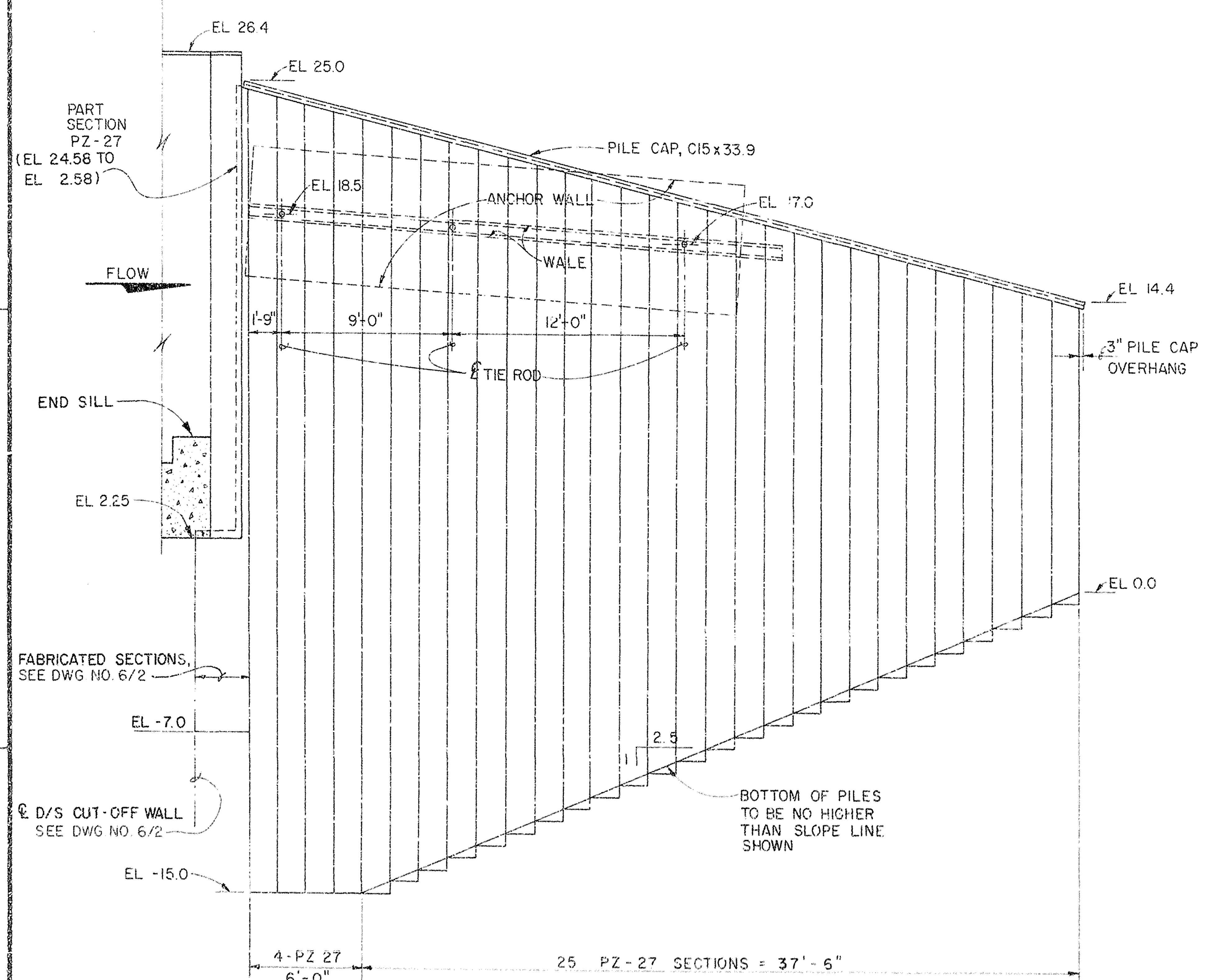
DETAIL "B" - OPP. HAND
SCALE "B"



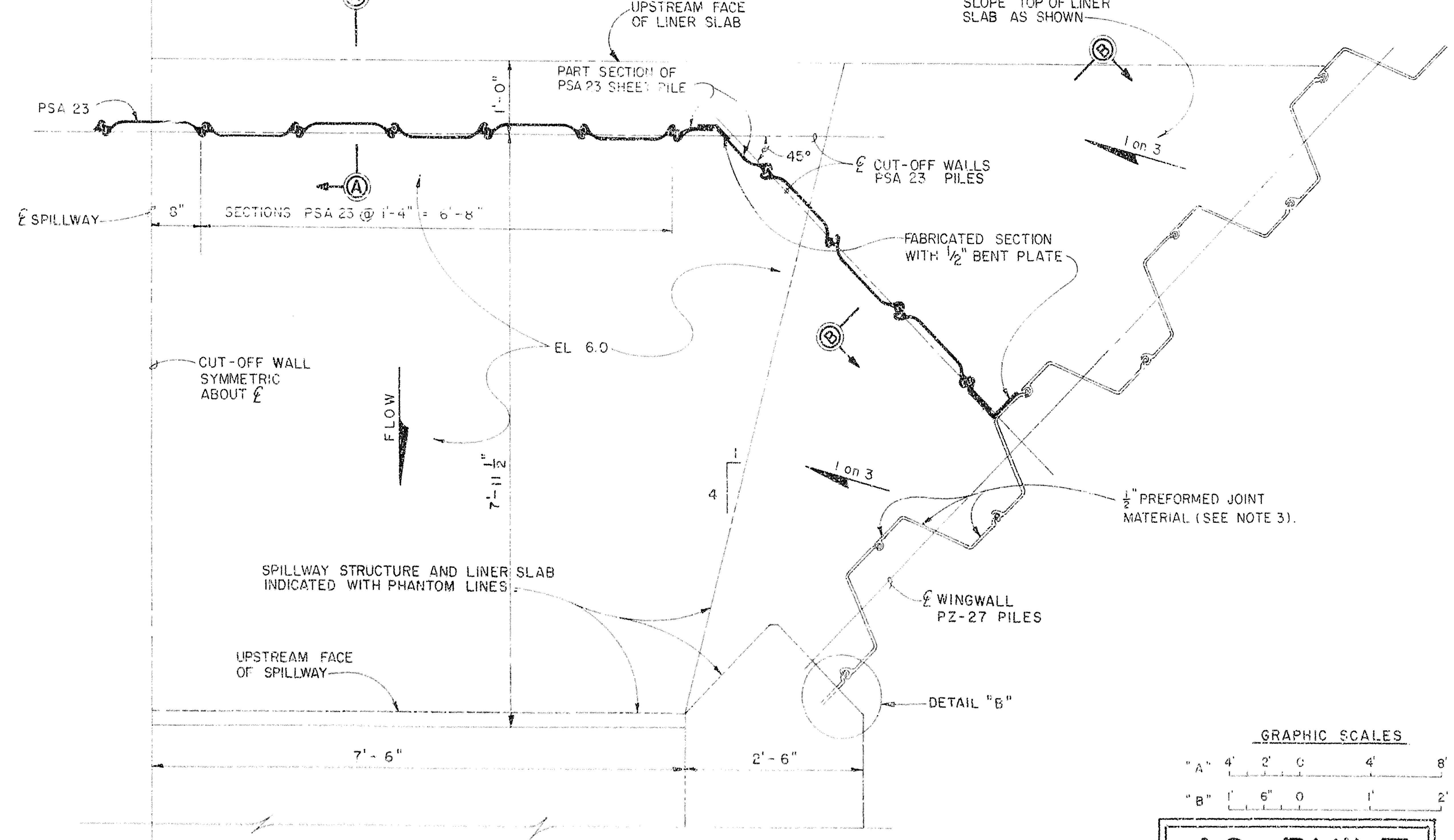
SECTION A-A
SCALE : "B"



SECTION B-B
SCALE : "B"



SECTIONAL ELEVATION
DOWNSTREAM WINGWALL - WEST SIDE (EAST SIDE SIMILAR)
SCALE "A"



UPSTREAM CUT-OFF WALL HALF PLAN
SCALE "B"

GRAPHIC SCALES

"A" 4' 2' 0 4' 8'

"B" 1' 6" 0 1' 2'

AS-BUILT

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

NOTES:
1. FABRICATED SECTIONS MAY BE RIVETED, BOLTED OR WELDED. FABRICATED SECTIONS SHALL CONFORM TO THE PILING MANUFACTURER'S RECOMMENDATIONS FOR FABRICATED SECTIONS AND SHALL BE THE SAME LENGTH AS THE CUT-OFF WALL.
2. SEE DWG NO 14/1 FOR "NOTES"
3. ½" PREFORMED JOINT MATERIAL REQUIRED ON ALL ABUTTING SURFACES OF CONCRETE LINER SLAB ON WINGWALL PILING (TYP).

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

CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER PROJECT

STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
METALS AND MISCELLANEOUS
DOWNSTREAM WINGWALLS AND UPSTREAM CUT-OFF WALL

F 14/2

SCALE: AS SHOWN DATED: ~~OCT 1984~~ JAN. 1986

D. O. FILE NO. ~~498-35,354~~
490-36,591

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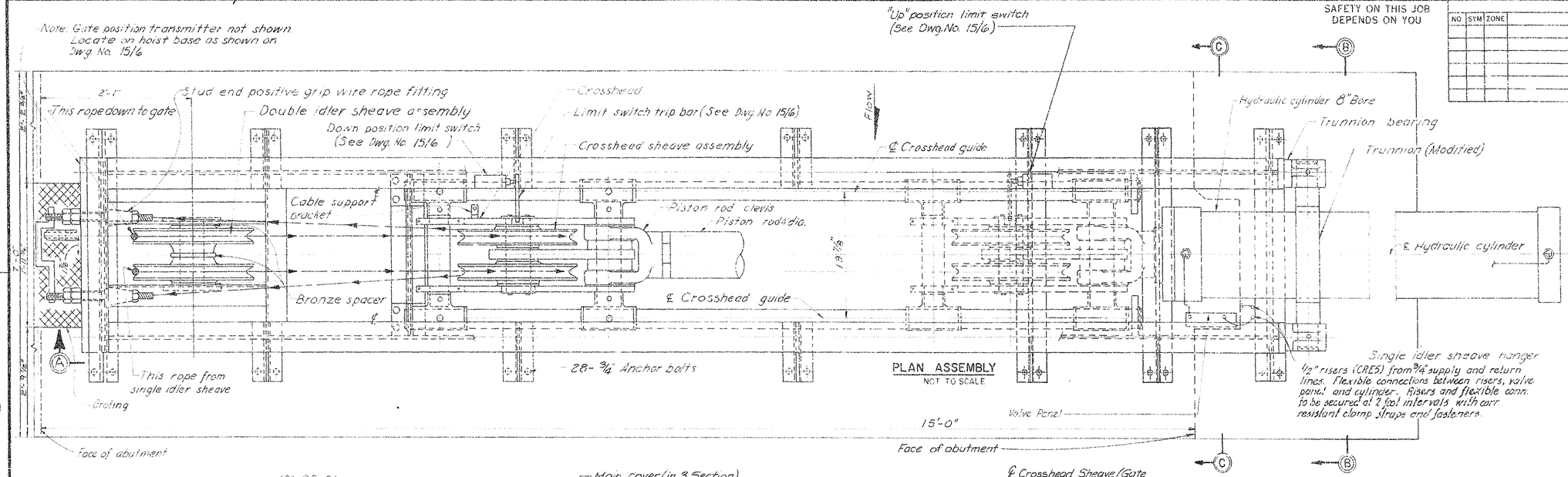
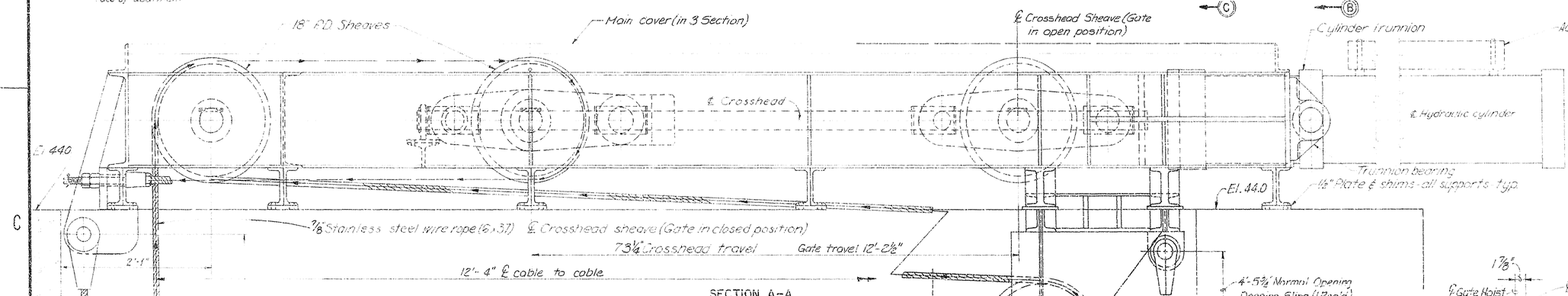
REVISIONS					
NO	SYM	ZONE	DESCRIPTION	DATE	APPROVED

Note: Gate position transmitter not shown. Locate on hoist base as shown on Dwg. No. 15/6





NOTES

1. (a) ESTIMATED GATE WEIGHT 11,160 LBS
   (b) ESTIMATED JOINT LOAD 16,400 LBS
   (c) ESTIMATED PISTON LOAD 48,000 LBS
2. 8" BORE HYDRAULIC CYLINDER 4" ROD, 73 1/4" STROKE
3. OPERATING PRESSURE 1250 PSI
4. GATE SHALL OPERATE AT 6 INCHES / MINUTE (±10%) WHEN RAISING AND LOWERING
5. DOGGING SLINGS SAME SIZE AND TYPE AS HOIST ROPES

RECORD DRAWING NOTE
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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER PROJECT
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
MECHANICAL
GATE HOIST-GENERAL ARRANGEMENT

DESIGNED	DRAWN	TRACED	CHECKED	SUBMITTED	SCALE	SIZE	DWG. NO.
M. de A.		D.C.	M. AS	M. AS	SCALE AS SHOWN	F	15/1

DATE: DEC. 1954
JAN. 1994

D. O. FILE NO. ~~490-35,954~~ 490-36,591

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REVISIONS					
NO	SYM	ZONE	DESCRIPTION	DATE	APPROVED

Flow

PLAN

SECTION A-A

SECTION B-B

SECTION C-C

SECTION E-E

SECTION F-F

BASE ELEVATION

IDLER SHEAVE HANGER

For details of Idler Sheave Hanger see Details this Drawing.

Typical hasp & hinge brackets, 1/4" ℔, weld all around. Drill to suit for assembly to cover. (For quantity & location see cover detail, Dwg. No. 15/3.)

NOTES:

1. ITEMS SHOWN ON THIS SHEET ARE TO BE OF ALL WELDED CONSTRUCTION, UNLESS OTHERWISE NOTED. ALL ITEMS MARKED STR. STEEL SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED.
2. ALL WELDS NOT SPECIFICALLY DESIGNATED AS TO TYPE AND SIZE SHALL BE MINIMUM WELD 3/8" CONT. FILLET OR FULL PENETRATION BUTT WELD ALL AROUND.
3. CRES = CORROSION RESISTING STEEL ASTM A276 TYPE 304.
4. PROVIDE 1/2" BEARING PLATES AT ALL ANCHOR BOLTS, PLATES TO EXTEND 1/2" BEYOND ITEM SUPPORTED ALL AROUND ALSO PROVIDE NECESSARY LAMINATED BRASS SHIMS FOR PROPER ALIGNMENT AT INSTALLATION.
5. SUPPORT MEMBERS SHALL BE MC 6x18 EXCEPT FOR IDLER SHEAVE HANGER. IDLER SHEAVE HANGER SUPPORT MEMBERS SHALL BE W 6x15.

AS-BUILT

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

GRAPHIC SCALE
1' 0" 3" 6" 9"

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

CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER BASIN
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
MECHANICAL
GATE HOIST - DETAILS NO. 1

DESIGN M. da J.
DRAWN
TRACED D.C.
CHECKED
DATED JAN. 1994
SIZE F
DRG. NO. 15/2
SCALE AS SHOWN
DATED 1966-1988

D. O. FILE NO. ~~490-75,754~~ 490-36,591

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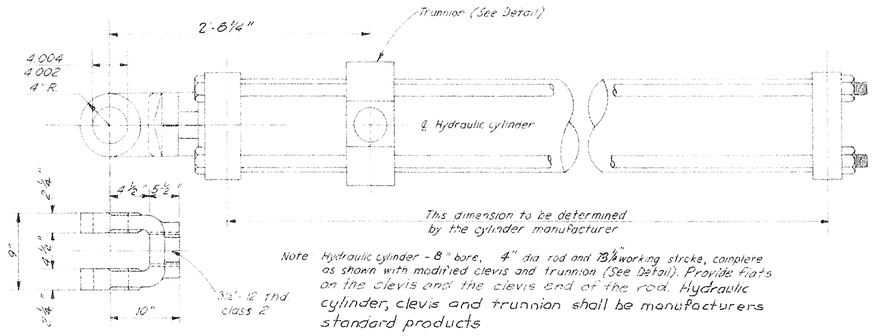
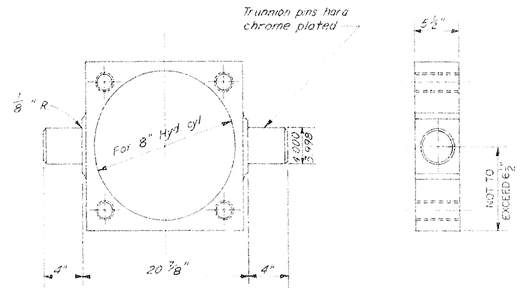


Note Hydraulic cylinder - 8" bore, 4" dia rod and 78¼" working stroke, complete as shown with modified clevis and trunnion (See Detail). Provide flats on the clevis and the clevis end of the rod. Hydraulic cylinder, clevis and trunnion shall be manufacturers standard products.

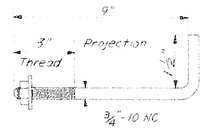
HYDRAULIC CYLINDER

MARK 1 REQUIRED MFRS. STANDARDS
NOT TO SCALE



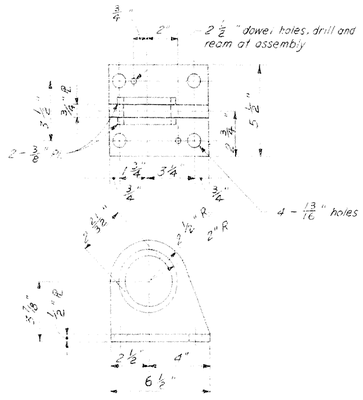
HYDRAULIC CYLINDER TRUNNION

MARK 1 REQUIRED STR. STEEL
NOT TO SCALE



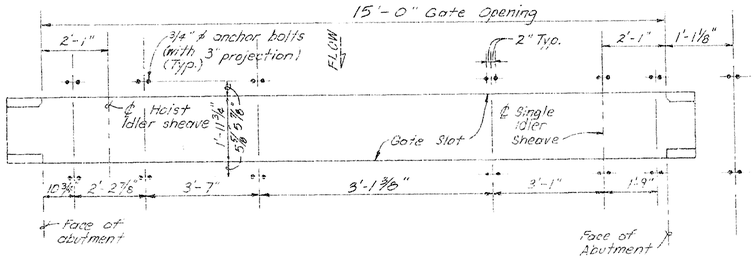
ANCHOR BOLT

MARK 28 REQUIRED BOLT STEEL (CRES)
NOT TO SCALE



CROSSHEAD GUIDE BRACKET

MARK 2 REQUIRED STR STEEL
NOT TO SCALE



ANCHOR BOLT SETTING

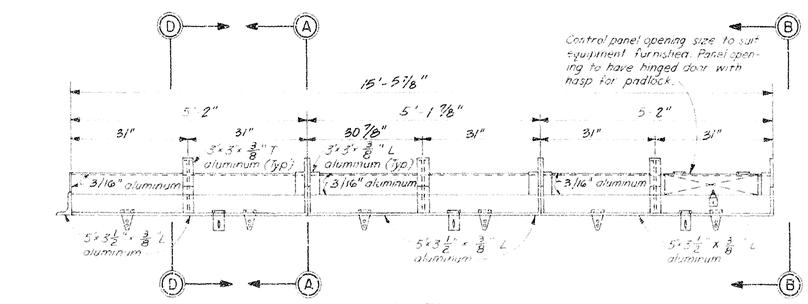
NOT TO SCALE

TRUNNION BEARING

MARK 2 REQUIRED DUCTILE IRON OR CAST STEEL
NOT TO SCALE

NOTES:

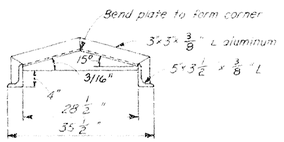
1. Notes 1 thru 4 on Drawing No. 15/2 , also apply to this sheet.
2. The galvanized fittings for the interconnecting links shall be equal in strength to the 7/8" 6 K 37 wire rope (s.s.).



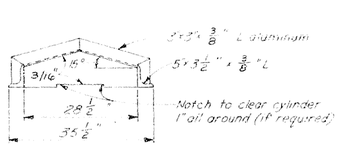
COVER

MARK 1 REQUIRED (3 SECTIONS) ALUMINUM
NOT TO SCALE

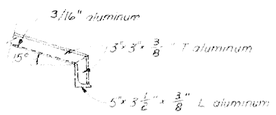
Note: Cover, three (3) sections to be all welded construction unless otherwise noted. Each section to have 2 extra heavy stainless steel hinges and 1 extra heavy stainless steel hasp secured to cover with stainless steel countersunk rivets. Cover to be installed on base (see base detail) with stainless steel countersunk rivets or stainless steel Bolts and nuts, upset threads after installation. Hinges shall be similar or equal to Hagar #BB-1199, 6"x 1.5".



SECTION A-A



SECTION B-B



SECTION D-D

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 96C AND STRUCTURE 96D
STRUCTURE 96 D
MECHANICAL
GATE HOIST - DETAILS NO. 2

DESIGN BRC	DRAWN	TRACED	CHK. BY
M. de J.		D.C.	

ENG. NO.	SIZE	ENG. NO.
	F	15/3

DATED
SCALE NONE DATED ~~905-1980~~ JAN. 1994

D.O. FILE NO. ~~490-33,354~~ 490-36,591

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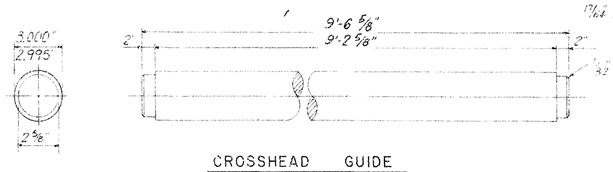
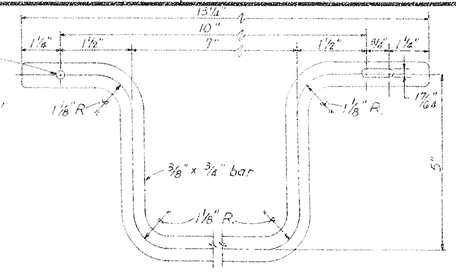


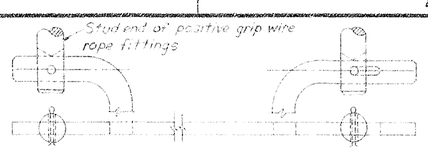
CROSSHEAD GUIDE
2-Req'd. 3" Dia. Cold Fin (CRES)
NOT TO SCALE

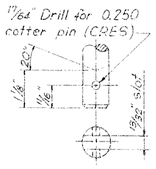


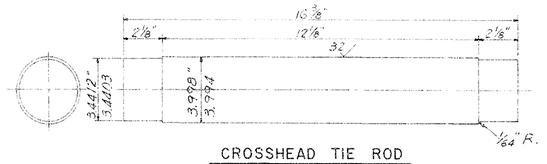
STAY BAR & DETAILS

Mark	
1-Req'd.	Str. steel bar (Galv)

NOT TO SCALE

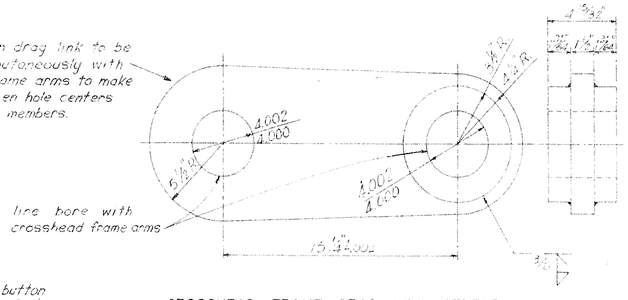






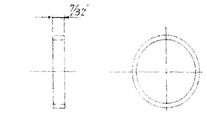
CROSSHEAD TIE ROD
1-Req'd. 4" Dia. Cold Fin.
NOT TO SCALE

Note: All holes in drag link to be line bored simultaneously with holes in two frame arms to make distance between hole centers identical on all members.

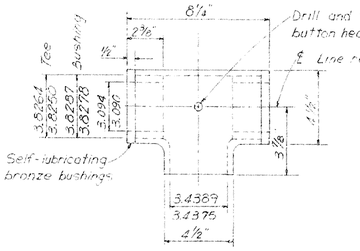


Line bore with crosshead frame arms

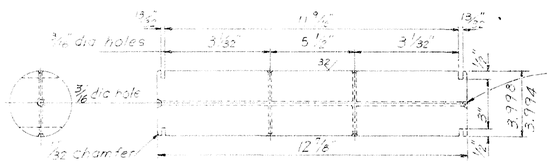
CROSSHEAD FRAME DRAG LINK CENTER
1-Req'd. Str. Steel
(Remove all sharp corners)
NOT TO SCALE



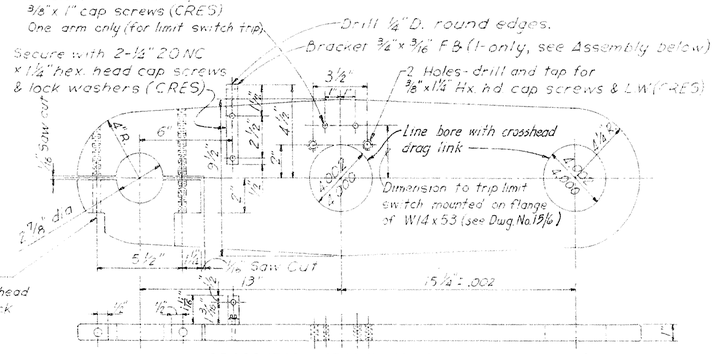
CROSSHEAD CLEVIS SPACER
2-Req'd. 4" Sched. 40 Galv. steel pipe
Remove all sharp corners
NOT TO SCALE



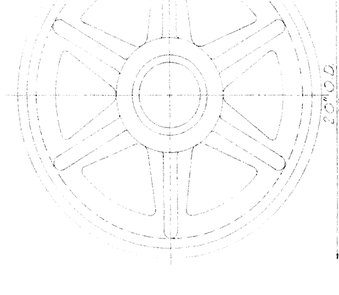
CROSSHEAD GUIDE BEARING
4-Req'd. Welding fittings (4x4x4)
(Taylor forge or equal double extra strong tees)
NOT TO SCALE



CROSSHEAD SHEAVE SHAFT
1-Req'd. 4" Dia. Cold Fin.
NOT TO SCALE

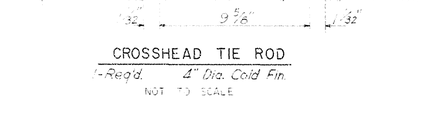


CROSSHEAD FRAME ARMS
2 Req'd. Str. Steel
(Remove all sharp corners)
NOT TO SCALE

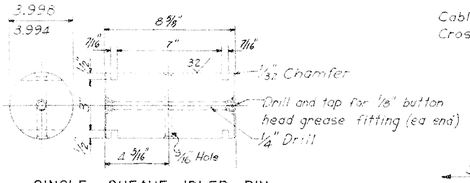


SHEAVE SPACER
11-Req'd. Bronze
Finish all over
NOT TO SCALE

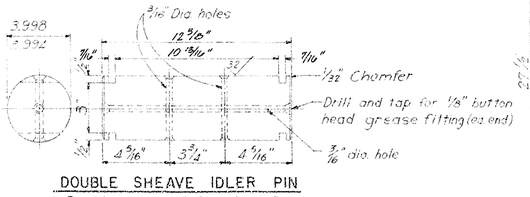
SHEAVE
6-Req'd. Cast Steel or Ductile Iron
NOT TO SCALE



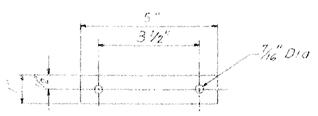
CROSSHEAD TIE ROD
1-Req'd. 4" Dia. Cold Fin.
NOT TO SCALE



SINGLE SHEAVE IDLER PIN
1-Req'd. 4" Dia. Cold Fin.
NOT TO SCALE

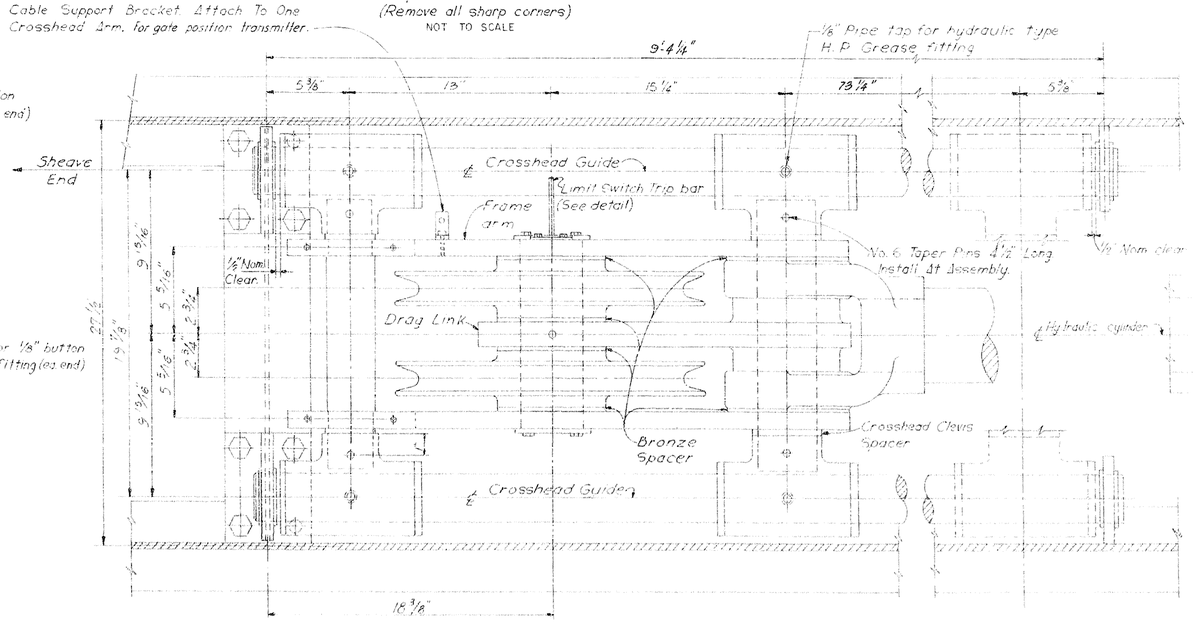


DOUBLE SHEAVE IDLER PIN
1-Req'd. 4" Dia. Cold Fin.
NOT TO SCALE



SHEAVE PIN KEEPER
6-Req'd. 3/8" x 1" Cres. Bar
NOT TO SCALE

Cable Support Bracket Attach To One Crosshead Arm. for gate position transmitter.



CROSSHEAD ASSEMBLY
NOT TO SCALE

NOTES

1. INSTALL ALL DOWELS & TAPER PINS AT ASSEMBLY
2. ALL ITEMS MARKED CRES. SHALL BE CORROSION RESISTING STEEL, TYPE 304
3. ALL ITEMS MARKED STR. STEEL SHALL BE ASTM A-36, UNLESS OTHERWISE NOTED
4. CATALOG NUMBERS AND TRADE NAMES INDICATE EXAMPLES OF STANDARD PRODUCTS OTHER MANUFACTURERS' PRODUCTS APPROVED EQUAL MAY BE SUBSTITUTED
5. ALL SHAFT, EXCEPT CRES. SHALL BE SAE 1045 OR BETTER

AS-BUILT

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

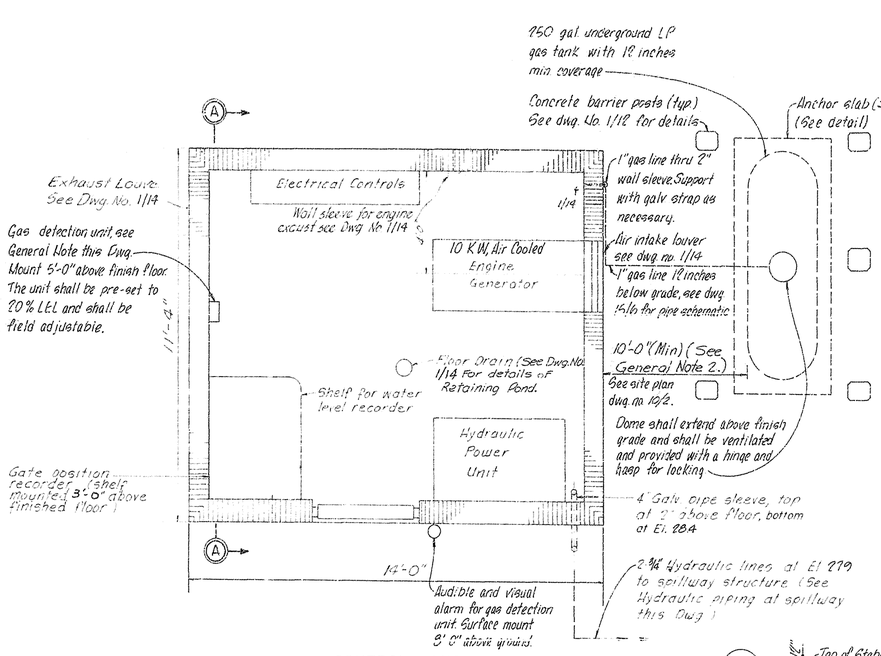
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER BASIN
STRUCTURE 96C AND STRUCTURE 96D
~~STRUCTURE 96 D~~
MECHANICAL
GATE HOIST - DETAILS NO. 3

DESIGN ENG.	INV. NO.	SIZE	DWG NO.
M. de J		F	15/4
DRW BY	DATED		
C.C. BY D.C.	SCALE: NONE	DATED: ~~OCT. 1980~~ JAN. 1984	

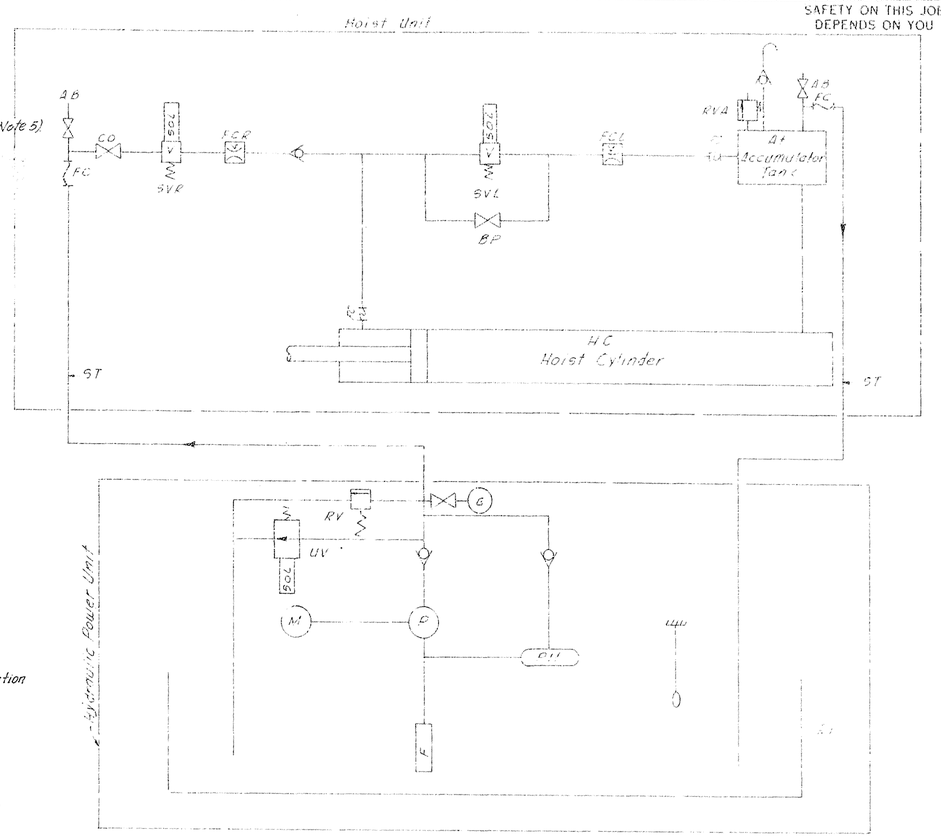
D. O. FILE NO. ~~490-35,354~~ 490-36,591

SAFETY ON THIS JOB DEPENDS ON YOU

REVISIONS					
NO	SYM	ZONE	DESCRIPTION	DATE	APPROVED



CONTROL HOUSE



HOIST HYDRAULIC SYSTEM

NOT TO SCALE

HYDRAULIC SYSTEM

LEGEND

HC = HYDRAULIC HOIST CYLINDER

FC = FLEXIBLE CONNECTION

SOL = SOLENOID

AB = AIR BLEEDER VALVE

AT = ACCUMULATOR TANK

M = ELECTRIC MOTOR 240/480 V, 3 Ø, 2 HP, 1800 RPM

P = POSITIVE DISPLACEMENT PUMP 0.7 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.)

RV = RELIEF VALVE

F = FILTER

RV = RELIEF VALVE SET AT 1400 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

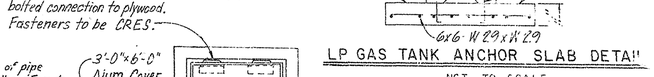
G = PRESSURE GAGE (0-3000 PSI)

RT = RESERVOIR TANK

ST = ALL TUBING TO BE STAINLESS STEEL, SIZE AND WALL THICKNESS AS SHOWN HEREON AND IN SPECIFICATIONS

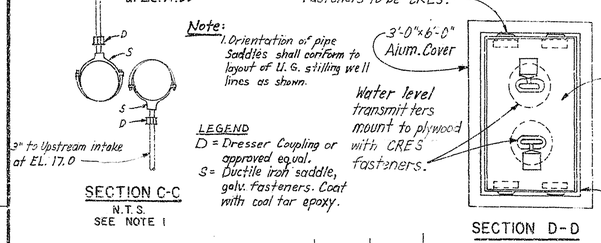
NOTES:

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



LP GAS TANK ANCHOR SLAB DETAIL

NOT TO SCALE



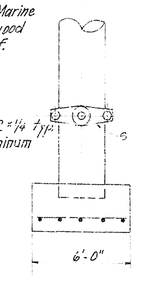
SECTION C-C

N.T.S.

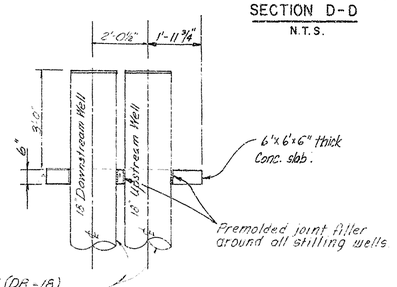
SEE NOTE 1

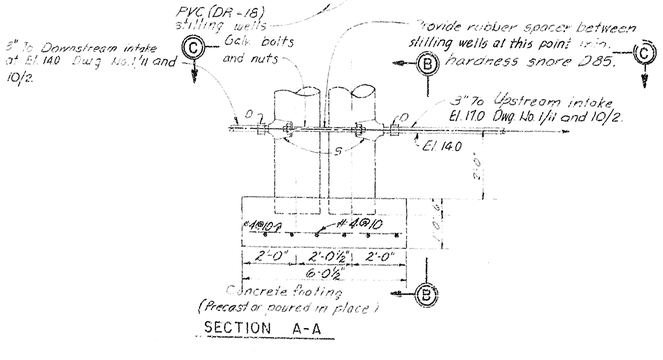
SECTION D-D

N.T.S.



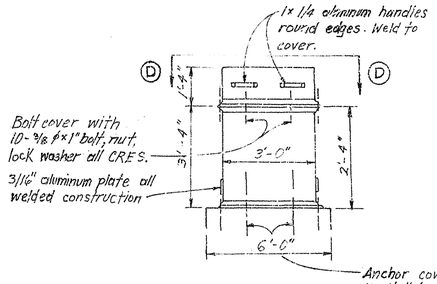
SECTION B-B

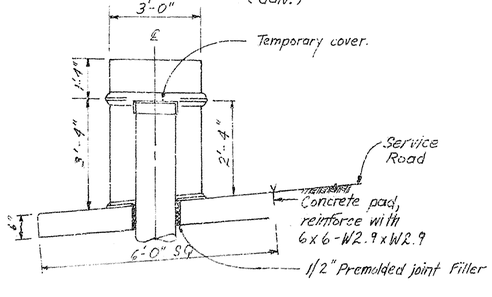




SECTION A-A

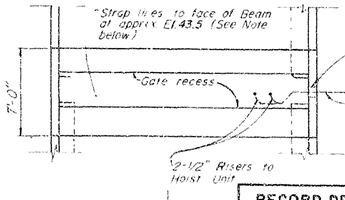
DETAILS OF STILLING WELL





STILLING WELLS COVER DETAILS

NOT TO SCALE



NOTE

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

HYDRAULIC PIPING AT SPILLWAY

NOT TO SCALE

AS-BUILT

RECORD DRAWING NOTE

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

GENERAL NOTE:

1. THE GAS DETECTION UNIT SHALL BE WALL MOUNTED, SIMILAR OR EQUAL TO GAS TECH INC. MODEL 1220-110212 (FOR SPECIAL FEATURES, SEE DWG. NO. 16/2). AC POWER SOURCE WITH DC BATTERY BACK-UP. REMOTE AUDIBLE AND VISUAL ALARMS SHALL BE PROVIDED AS SHOWN, SUITABLE FOR EXTERIOR INSTALLATION. AN 8" X 10" METAL SIGN SHALL BE PROVIDED, PAINTED WHITE WITH BLACK LETTERS, BELOW THE ALARM LIGHT, STATING THAT THE ALARM IS INDICATING DANGEROUS LP GAS CONCENTRATION LEVEL INSIDE THE BUILDING.
2. FOR EXACT ORIENTATION OF LPG TANK IN REFERENCE TO CONTROL HOUSE SEE DWG. NO. 10/2.

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

CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER BASIN
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
MECHANICAL
HYDRAULIC DIAGRAM AND CONTROL HOUSE

DESIGN BY	DRAWN BY	TRACED BY	CHECKED BY	SUPV.
M. de J.		DC		

DWG. NO. F 15/5

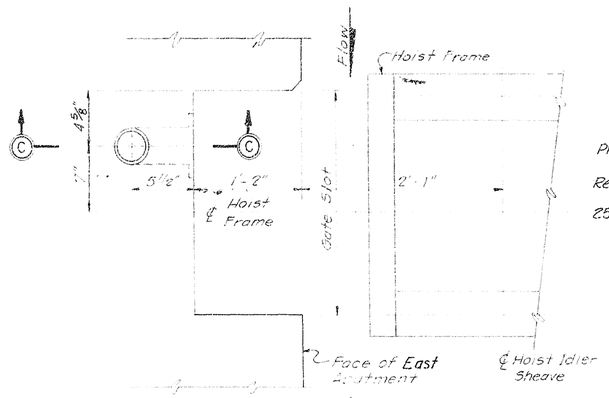
SCALE: NONE

DATED: ~~SEPT. 1988~~ JAN. 1994

D. O. FILE NO. ~~490-36,354~~ 490-36,591

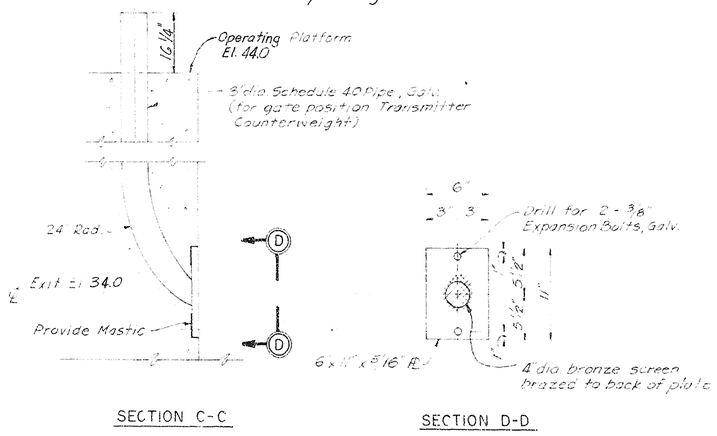
SAFETY ON THIS JOB DEPENDS ON YOU

REVISIONS					
NO	SYM	ZONE	DESCRIPTION	DATE	APPROVED



PLAN

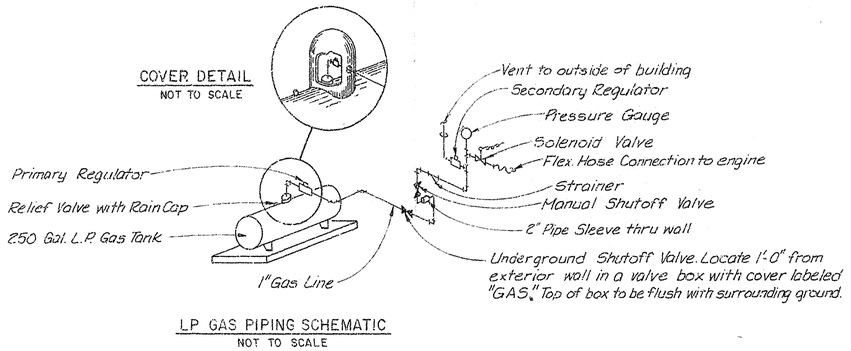
See Dwg. No. 11/2 For Pipe Well Approximate Location on Operating Platform.



SECTION C-C

SECTION D-D

PIPE WELL FOR COUNTERWEIGHT
NOT TO SCALE

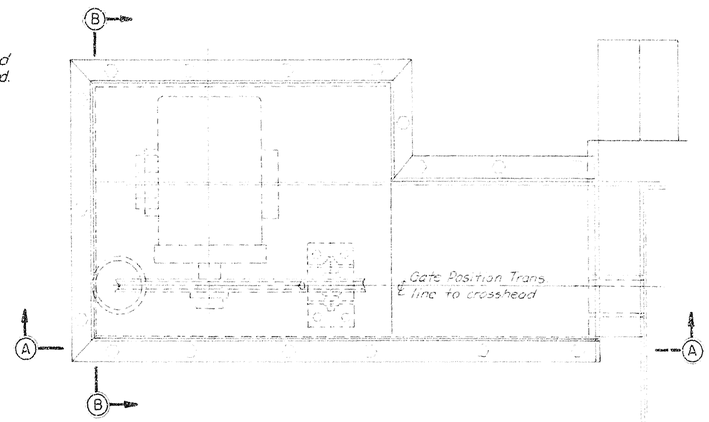


LP GAS PIPING SCHEMATIC
NOT TO SCALE

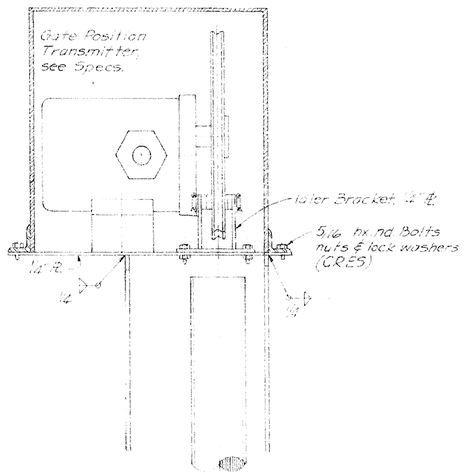
LIMIT SWITCH NOTES:

1. FOR LOCATION AND ORIENTATION, SEE DWG. NO. 15/1.

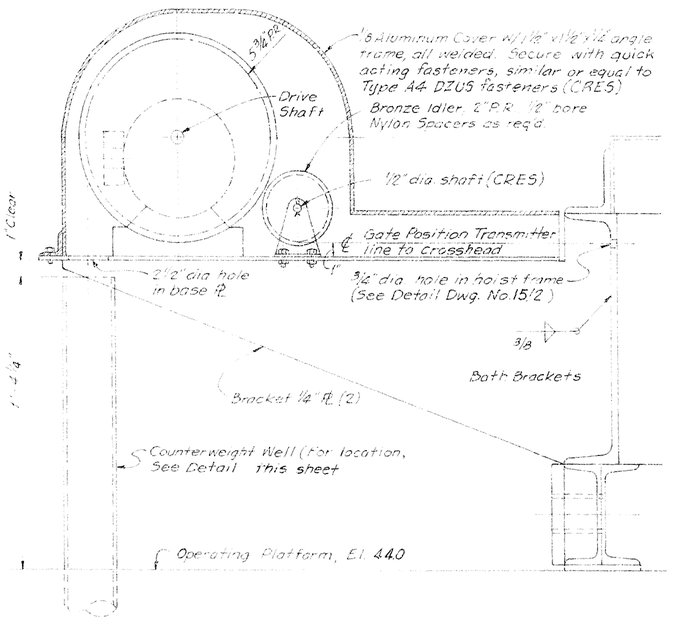
2. MOUNTING HOLES FOR LIMIT SWITCHES SHALL BE SLOTTED TO PERMIT 1/2" ADJUSTMENT TOWARD CENTER OF GATE BAY FROM POSITION INDICATED ON CROSSHEAD ASSEMBLY. (DWG NO. 15/9).



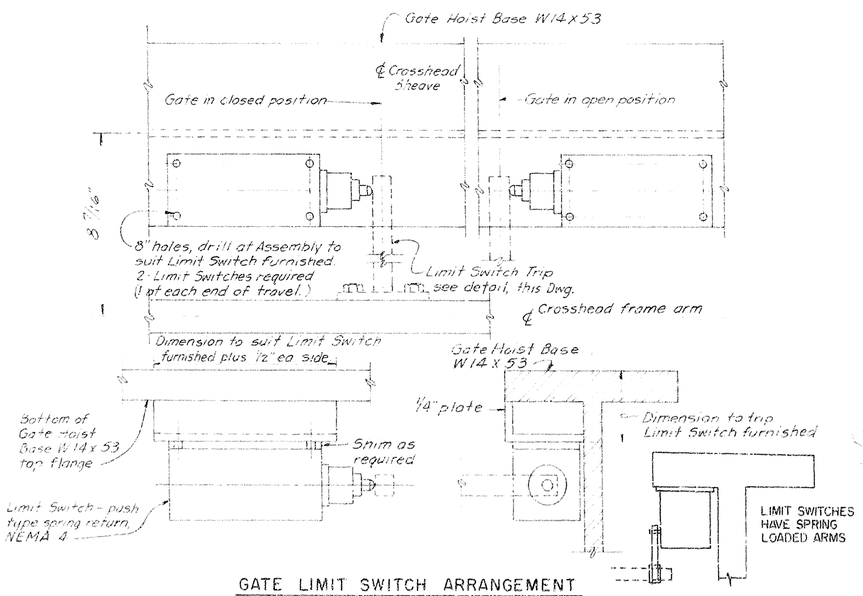
PLAN



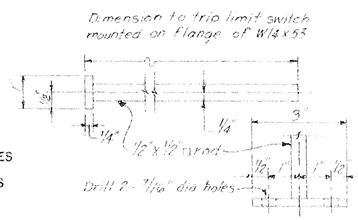
SECTION B-B



SECTION A-A



GATE LIMIT SWITCH ARRANGEMENT
NOT TO SCALE



LIMIT SWITCH TRIP
MARK 1 REQ'D 1/2" x 1 1/2" SQUARE
SCALE "B"

GATE POSITION TRANSMITTER BRACKET ASSEMBLY
SCALE: "B"

NOTES:

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

AS-BUILT

NOTE: NOTE 3 ON DWG. NO. 15/2 ALSO APPLIES TO THIS DWG.

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 96C AND STRUCTURE 96D
STRUCTURE 96D
MECHANICAL
GATE LIMIT SWITCHES AND POSITION TRANSMITTER

DESIGNED M. de J.	DRAWN D.C.	TRACED	CHECKED
SUBMITTED	SCALE AS SHOWN	DATED ~~DEC 1990~~ JAN. 1994	

DWG. NO. 15/6 SHT. NO. F

D. O. FILE NO. ~~490-35,354~~ 490-36,591

FOR OFFICIAL USE ONLY

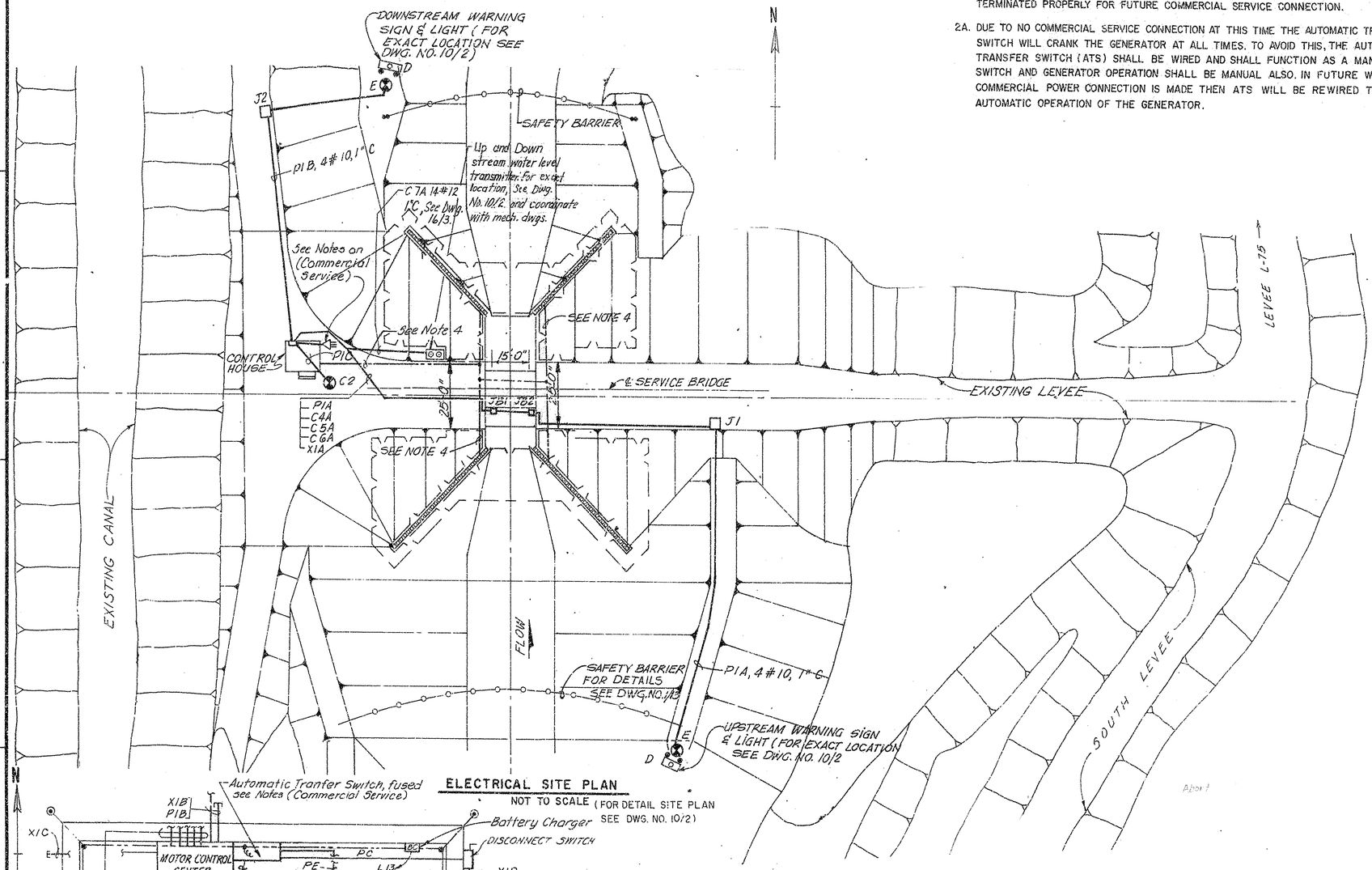
SAFETY ON THIS JOB DEPENDS ON YOU

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

NOTES: (COMMERCIAL SERVICE)

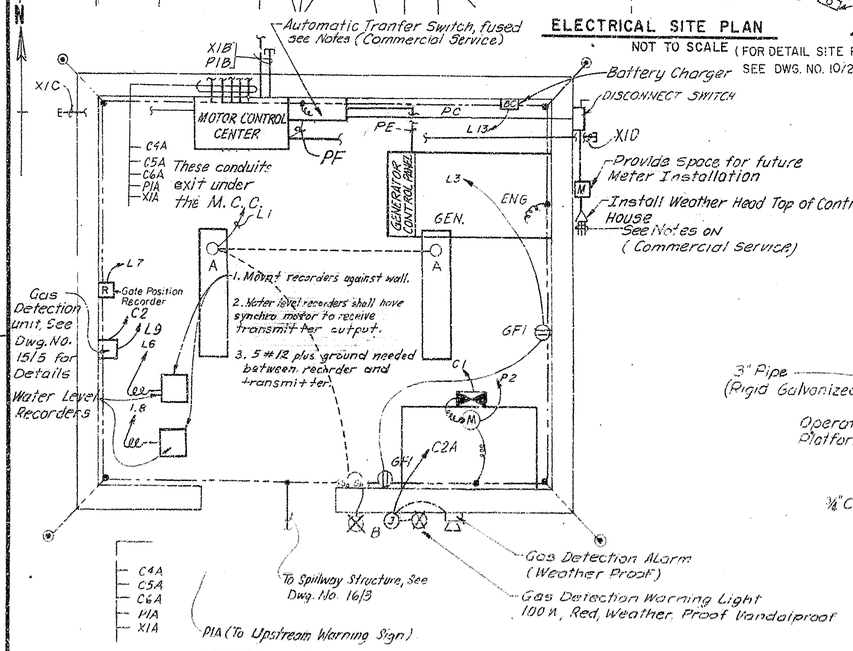
1A. COMMERCIAL POWER WILL BE AVAILABLE TO THE STRUCTURE AFTER L-75 OR LEVEE SOUTH OF S-96 D IS BUILT. THIS MAY TAKE 2 TO 3 YEARS, TILL THEN STRUCTURE WILL OPERATE ON EMERGENCY POWER ONLY. BUT IN THIS CONTRACT ELECTRICAL CONTRACTOR WILL PROVIDE ALL WIRING NECESSARY UP TO THE WEATHER HEAD AND LEAVE WIRING TERMINATED PROPERLY FOR FUTURE COMMERCIAL SERVICE CONNECTION.

2A. DUE TO NO COMMERCIAL SERVICE CONNECTION AT THIS TIME THE AUTOMATIC TRANSFER SWITCH WILL CRANK THE GENERATOR AT ALL TIMES. TO AVOID THIS, THE AUTOMATIC TRANSFER SWITCH (ATS) SHALL BE WIRED AND SHALL FUNCTION AS A MANUAL SWITCH AND GENERATOR OPERATION SHALL BE MANUAL ALSO. IN FUTURE WHEN COMMERCIAL POWER CONNECTION IS MADE THEN ATS WILL BE REWIRED TO PROVIDE AUTOMATIC OPERATION OF THE GENERATOR.



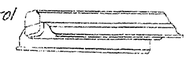
ELECTRICAL SITE PLAN

NOT TO SCALE (FOR DETAIL SITE PLAN SEE DWG. NO. 10/2)

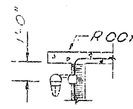


CONTROL HOUSE

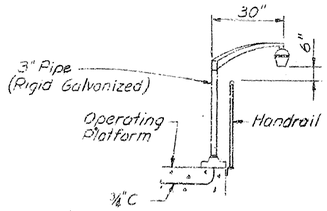
NOT TO SCALE



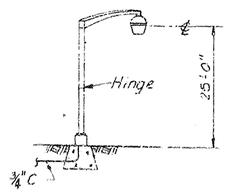
TYPE "A"



TYPE "B"



TYPE "C1"



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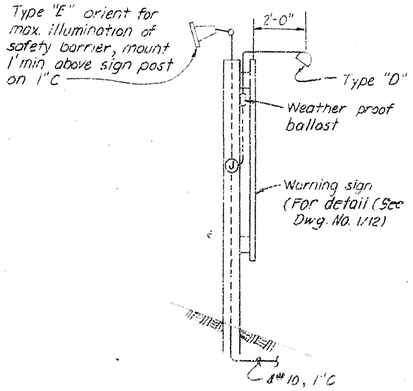

TYPES "D" AND "E"

TYPICAL LIGHTING FIXTURE INSTALLATION DETAILS

NOT TO SCALE

REV.	NO.	SYMBOL	LEGEND ITEM DESCRIPTION
	1		LIGHTING FIXTURE, INCANDESCENT
	2		LIGHTING FIXTURE, FLUORESCENT
	3		AREA LUMINAIRE "TYPE C"
	4	(W)	INDICATOR LIGHT, NEON
	5	(R)	INDICATING LIGHT: R-RED, G-GREEN
	6	W	DUPLEX CONVENIENCE OUTLET: W - WEATHERPROOF
	7	GFI	DUPLEX RECEPTACLE - GROUND FAULT INTERRUPTING TYPE
	8	$	SWITCH, TOGGLE, SINGLE POLE
	9		SWITCH, 3 POSITION, H-O-A OR AS NOTED
	10	LS	LIMIT SWITCH, NEMA 4
	11		PB CONTACT NORMALLY OPEN
	12		PB CONTACT NORMALLY CLOSED
	13		MOTOR STARTER
	14		PANELBOARD
	15		CONTACT, CONTROL RELAY, N.O. AND N.C.
	16		GROUND WIRE
	17		MAIN CONTACTOR
	18	(K)(C)	COIL, CONTACTOR, CONTROL RELAY, 120V
	19	PB# JB#	PULL BOX OR JUNCTION BOX (SEE NOTE 2)
	20	(M)	MOTOR
	21	(S)	SOLENOID OPERATED VALVE, 120V
	22		SOLENOID VALVE PANELBOARD
	23	R T	GATE POSITION RECORDER, TRANSMITTER
	24		HOMERUN TO PANELBOARD OR AS NOTED
	25		GROUND CONNECTION
	26		CONDUIT EXPOSED
	27		CONDUIT CONCEALED IN CEILING
	28		CONDUIT CONCEALED IN FLOOR, WALLS OR EARTH
	29		CONDUIT, STUB OUT AND CAP
	30		CONDUIT EQUIPMENT DRAIN
	31	M	SERVICE ENTRANCE WEATHERHEAD AND METER SOCKED
	32		FUSE, DEAD FRONT INSTALLATION
	33		LIGHTING FIXTURE, IODINE QUARTZ (TYPE "E")
	34		PUSH BUTTON STATION, O-C-S WITH 2 INDICATING LTS
	35		GROUND ROD, 3/4" DIA. x 8' LONG
	36		EQUIPMENT GROUND CONNECTION
	37		GROUND WIRE
	38		MAIN GROUND, SHEET STEEL PILE WINGWALL (SEE NOTE 3)
	39		

NOTES:

1. SCHEMATIC WIRING DIAGRAMS, CONDUIT AND CABLE SCHEDULE, AND CONDUIT PLANS SHALL BE WORKED TOGETHER AND SHALL TAKE PREFERENCE IN THAT ORDER IN CASES OF CONFLICT.
2. NO SPLICES SHALL BE PERMITTED IN PULL BOXES ON THE SPILLWAY STRUCTURE FOR LIGHTING OR POWER CIRCUITS. SPLICES FOR CONTROL CIRCUITS SHALL BE KEPT TO A MINIMUM BUT, WHERE REQUIRED, SHALL BE OF A WEATHER PROOF TYPE.
3. PROJECT MAIN GROUNDS SHALL CONSIST OF SHEET PILE WINGWALLS WITH INDIVIDUAL PILES BONDED TOGETHER AND GROUND RODS INSTALLED NEAR EACH CORNER OF THE CONTROL HOUSE.
4. PRIMARY GROUNDING SHALL BE PROVIDED BY NO.4/0AWG WIRE INSTALLATIONS CONSISTING OF AN EMBEDDED LOOP IN THE CONTROL HOUSE, EMBEDDED GRID IN THE WEIR CREST AND EACH PIER ON THE SPILLWAY STRUCTURE, AND INTER-CONNECTIONS BETWEEN THE LOOP, GRID AND PROJECT MAIN GROUNDS. SECONDARY GROUND CONNECTIONS AS INDICATED SHALL CONFORM TO SPECIFICATION REQUIREMENTS AND SHALL BE AWG NO. 2 MINIMUM.

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 96 C AND STRUCTURE 96 D
STRUCTURE 96 D
ELECTRICAL SYSTEMS
CONDUIT PLANS

DESIGN BY	DRAWN BY	CHK BY
E.M.	J.M.	S.M.

SIZE F | DWG. NO. 16/1
DATED: SCALE: AS SHOWN | DATED: 8/7-1990 JAN. 1994

D. O. FILE NO. ~~490-55,354~~ 490-36,591

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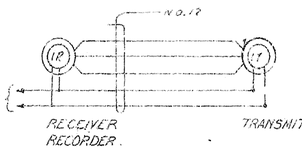
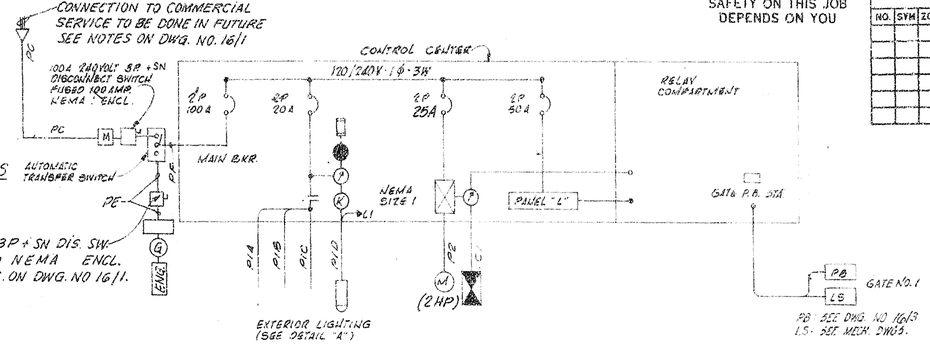
REVISIONS				
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

CONTROL CENTER

	EQUIPMENT OR NAMEPLATE DATA	CIRC. BKR. NO POLES	CIRC. BKR. TRIP AMPS	MOTOR STARTER NEMA SIZE	MOTOR STARTER AUXILIARY CONTACTS	CONTROL DEVICES SEL. SW	CONTROL DEVICES PUSH BUTTON	CONTROL DEVICES 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		PEO
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	R&G
5C	FUSE BLOCK, IND. LT. CIRCUITS							
6	GAS DETECTION, ALARM AND HORN CONTROL					2 POS		
6A	GAS DETECTION ALARM AND HORN RELAY 'R'							
7	TERMINAL BLOCK COMPARTMENT							



SELSYN GATE POSITION RECORDERS
(Similar wiring for gate position indicator)



ONE LINE DIAGRAM

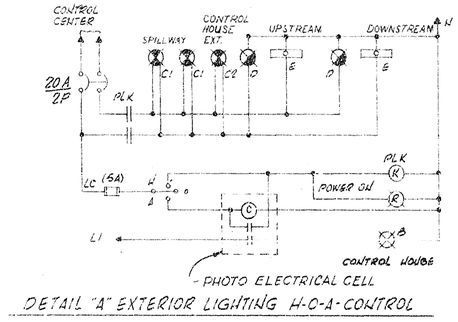
PANEL BOARD "L"

120/240V - 1Φ 3W SN — MOUNTED IN CONTROL CENTER — CIRCUIT BREAKER TYPE 100 AMP MAINLUGS ONLY

CKT NO	NO POLES	BR'K TRIP	WIRE SIZE	COND SIZE	CIRCUIT IDENTIFICATION	CKT NO	NO POLES	BK'R TRIP	WIRE SIZE	COND SIZE	CIRCUIT IDENTIFICATION
1	1	20	4 #12	3/4"	CONTROL HOUSE LIGHTING	2	1	20	AS REQ'D		GATE CONTROLS
3	1	20			CONTROL HOUSE RECEPTACLES	4	1	20	AS REQ'D		PB STATION INDICATING LIGHTS
5	1	20	2 #1	3/4"	HEATER IN CONTROL CENTER & GEN	6	1	20	—	—	WATER LEVEL RECORDER UPSTREAM
7	1	20	2 #12	3/4"	* GATE POSITION RECORDER/TRANSMITTER	8	1	20	—	—	" " " DOWNSTREAM
9	1	20	2 #12	3/4"	GAS DETECTION UNIT	10	1	20	—	—	SPARE
11	1	20	AS REQ'D		GAS DETECTION ALARM (REMOTE)	12	1	20	3 #10	△	RECEPTACLES ON SPILLWAY STRUCTURE
13	1	20	2 #12	3/4"	BATTERY CHARGER	14	1	20			SPARE

* SEE CONDUIT AND CABLE SCHEDULE. PROVIDE AT LEAST 6 EXTRA SPACES IN PANELBOARD 'L'

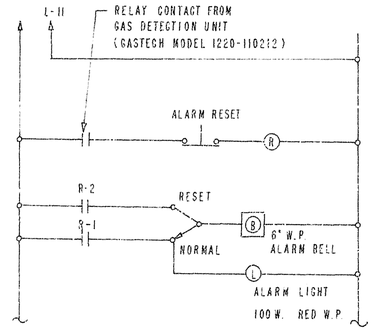
△ — RUN CKT 12 IN CONDUIT WITH SPILLWAY LIGHT; NC



DETAIL "A" EXTERIOR LIGHTING H-O-A-CONTROL

NOTES:

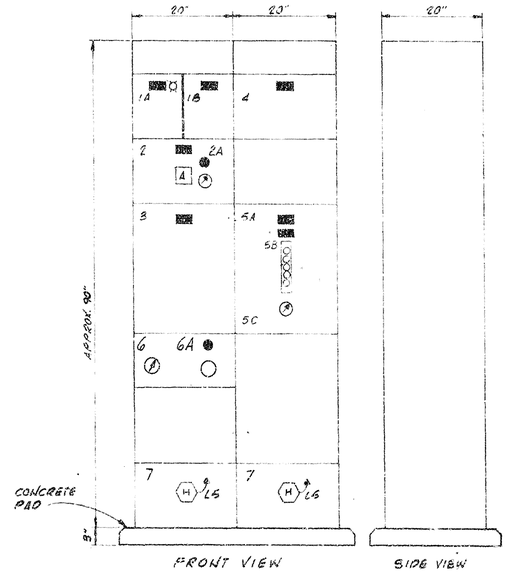
1. TIME DELAY RELAY "TD" SHALL PROVIDE A FIVE-SECOND ENERGIZATION DELAY TO A "DUMP" SOLENOID VALVE TO PERMIT NO LOAD STARTING OF THE HYDRAULIC UNIT MOTOR.
2. GAS DETECTION UNIT SHALL BE AS SPECIFIED ON DWG. NO. 15/5 AND SHALL BE GAS TECH MODEL 1220-110212 OR EQUAL. THE UNIT COMES WITH MANUFACTURER-FUNISHED AUDIBLE ALARM AND LIGHT. THE SPECIAL FEATURE SHALL BE THAT THE UNIT SHOULD INCLUDE A RESET BUTTON TO TURN THE AUDISLE ALARM OFF. KEEPING THE LIGHT ON TILL THE PROBLEM IS SOLVED. THIS AVOIDS UNNECESSARY NOISE DURING PROBLEM SOLVING.
3. CONTROL POWER CIRCUIT (L-2) SHALL BE CONTROLLED BY A KEY TYPE SWITCH, SUCH THAT IN "ON" POSITION KEY SHALL NOT BE REMOVABLE AND WILL COMPLETE THE CONTROL POWER CIRCUIT. IN THE "OFF" POSITION, THE KEY SHALL BE REMOVABLE AND SHOULD DISCONNECT CONTROL POWER COMPLETELY SO THAT SPILLWAY GATES CANNOT BE OPERATED FROM PUSHBUTTONS LOCATED AT THE SPILLWAY AND IN CONTROL HOUSE.
4. PROVIDE INDICATOR LIGHT FOR COMMERCIAL SERVICE. INSTALL INDICATOR LIGHT (AMBER) IN SECTION 1A OF CONTROL CENTER.



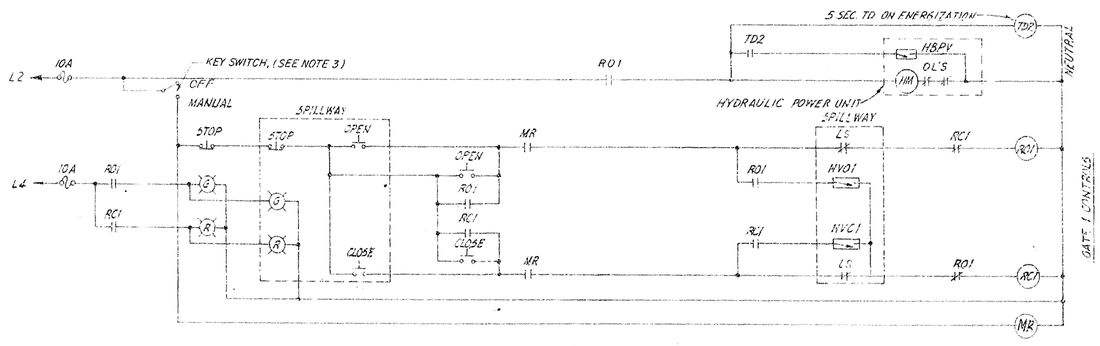
GAS DETECTION REMOTE INDICATION CONTROL CIRCUIT

LIGHTING FIXTURE SCHEDULE

MARK		EST. QUANT.	LAMPS NO.	LAMPS WATTS	LAMPS 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 2	1 1	100 100	240 240		HIGH PRESSURE SODIUM STREET LIGHT UNIT (SEE SPECIFICATIONS)
D	SAFETY BARRIER	2	1	250	120		SYLVANIA CAT. NO. SFL 135-102 OR EQUAL
E	WARNING SIGN	2	1	100	120		6' WEATHER PROOF FLUORESCENT SIGN FIXTURE, SIMKAR LIGHTING FIXTURE CO. INC. PHILA., PA. CAT. NO. OS172 H.O WITH 1-72" 800 M.A. LAMP OR EQUAL



CONTROL CENTER
SCALE: "A"



GATE CONTROL SCHEMATIC

LEGEND

- TD — TIME DELAY
- HVO — HYDRAULIC VALVE OPEN
- RO — RELAY OPEN NO.
- RC — RELAY CLOSE NO.
- HVC — HYDRAULIC VALVE CLOSE
- HM — HYDRAULIC MOTOR STARTER
- HBPV — HYDRAULIC BYPASS VALVE
- MR — MANUAL RELAY
- G — GREEN IND. LIGHT
- R — RED IND. LIGHT

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

AS BUILT

GRAPHIC SCALE
"A" 0" 6" 0 1' 2'

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

CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER BASIN
STRUCTURE 96C AND STRUCTURE 96D
STRUCTURE 96D
ELECTRICAL SYSTEMS
WIRING DIAGRAMS

DESIGN BY: S.M.
DRAWN BY:
CHD BY:
APPROVED:
DATE:
DWG. NO. 16/2
SCALE: AS SHOWN
DATED: OCT 1986
JAN. 1994

D. O. FILE NO. ~~490-35,764~~ 490-36,591

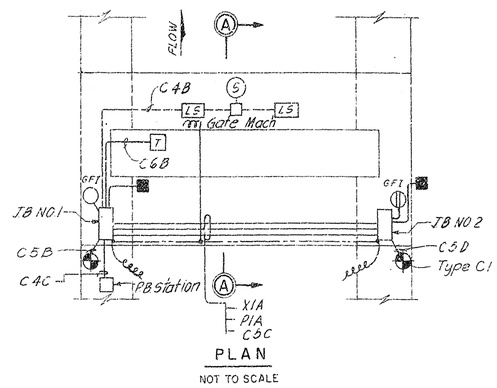
SAFETY ON THIS JOB DEPENDS ON YOU

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

CONDUIT AND CABLE SCHEDULE

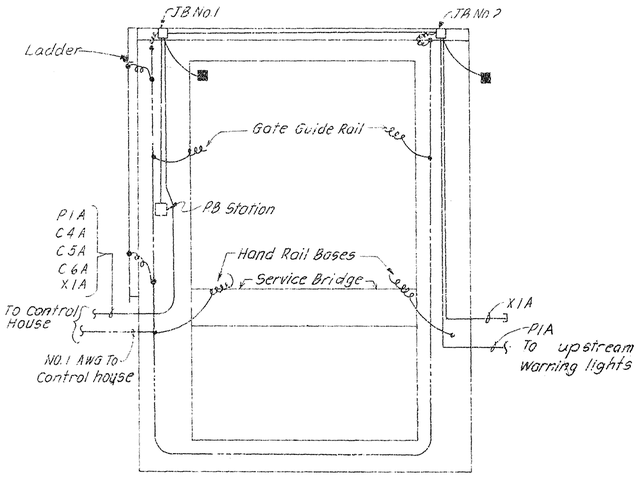
MARK	WIRE DATE SIZE	WIRE DATE GRD	CONDUIT SIZE	CIRCUIT	FROM	TO	REMARKS
PC	3 # 2	1 # 2	1 ½"	COMMERCIAL SERVICE	SERVICE ENTRANCE	AUTO TRANSFER SWITCH	THRU 100A DISCONNECT SWITCH
PE	3 # 2	1 # 2	1 ½"	EMERGENCY SERVICE	ENG. GEN. PANEL **	AUTO TRANSFER SWITCH	
PF	3 # 2	1 # 2	1 ½"	FEEDER, CONTROL CENTER	AUTO TRANSFER SWITCH	CONTROL CENTER	
P1A	3 #10	1 #10	1"	EXTERIOR LTG. UPSTREAM	CONTROL CENTER	LIGHTING FIXTURE "D" & "E"	THRU JB1 AND JB
P1B	3 #10	1 #10	1"	EXTERIOR LTG. DOWNSTREAM	CONTROL CENTER	LIGHTING FIXTURE "D" & "E"	DOWN STREAM
P1C	2 #10	1 #10	1"	EXTERIOR LIGHT	CONTROL CENTER	LIGHTING FIXTURE C2	
P1D	4 #12	1 #12	1"	CONTROL	CONTROL CENTER	PHOTO ELECTRIC SWITCH	CONTAINS L1
P2	2 # 8	1 # 8	1"	HYDRAULIC POWER UNIT	CONTROL CENTER	HPU	
C1	3 #12	1 #12	1"	GATE CONTROL	CONTROL CENTER	SOLENOID VALVES	ON HYDRAULIC POWER UNIT
C2	2 #12	1 #12	1"	GAS DETECTION REMOTE ALARM CKT.	GAS DETECTION UNIT	CONTROL CENTER	RELAY POINT OF GAS DETECTION UNIT
C2A	3 #12	1 #12	1"	GAS DETECTION REMOTE LIGHT & ALARM	CONTROL CENTER	ALARM AND HORN	POWER AND CONTROL CIRCUIT
C4A	13 #12	6 #12	2"	LIMIT SWITCHES & P.B. STATIONS	CONTROL CENTER	JB 1	
C4B	6 #12	1 #12	1"	LIMIT SWITCHES GATE 1	JB 1	GATE NO. 1 LIMIT SWITCHES	
C4C	7 #12	1 #12	1"	PUSH BUTTON STA. GATE 1	JB 1	GATE NO. 1 P.B. STATION	
C5A	5 #10	1 #10	1"	SPILLWAY LIGHTING	CONTROL CENTER	JB 1	CONTAINS 3 #10 FOR RECEPTACLES
C5B	2 #12	1 #12	1"	SPILLWAY LIGHTING	JB 1	TO LIGHTING FIXTURE	
C5C	5 #10	1 #10	1"	SPILLWAY LIGHTING	JB 1	JB 2	CONTAINS 3 #10 FOR RECEPTACLES
C5D	2 #12	1 #12	1"	SPILLWAY LIGHTING	JB 1	LIGHTING FIXTURE	
C6A	7 #12	1 #12	1 ½"	TRANSMITTER GATE 1	CONTROL CENTER	JB 1	INCLUDES 2 SPARES
C6B	10 # 12	2 #12	1"	TRANSMITTER GATE 1	JB 1	TO GATE TRANSMITTER	CONTAINS 5 # 12 FOR POS. INDICATOR
C7A	12 #12	2 #12	1"	UP & DOWN STREEM TRANSMITTERS	CONTROL HOUSE RECORDERS	TRANSMITTER THRU JUNCTION BOX	INCLUDES 2 #12 SPARE POWER AND CONTROL CIRCUITS
X-1A			1 ½"	SPARE	CONTROL HOUSE	STUB OUT AND CAP-JB 2	THRU JB 1.
X-1B			1"	SPARE	CONTROL HOUSE	STUB OUT AND CAP	
X-1C			1"	SPARE	CONTROL HOUSE	STUB OUT AND CAP	
X-1D			1"	SPARE	CONTROL HOUSE	STUB OUT AND CAP	

* ALL WIRING UP TO WEATHERHEAD DONE IN THIS CONTRACT. SEE NOTES ON COMMERCIAL POWER DWG. NO. 16/1.



PLAN

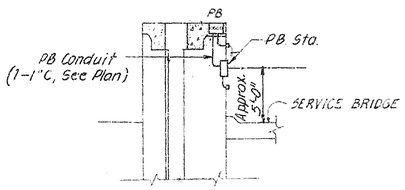
NOT TO SCALE



ELEVATION

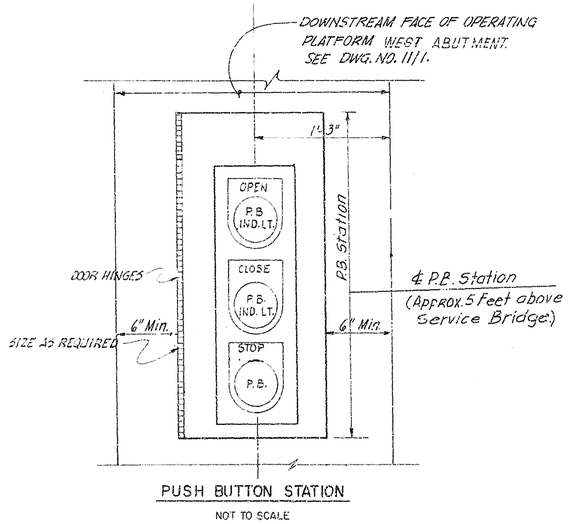
CONDUIT AND GROUNDING - SPILLWAY STRUCTURE

NOT TO SCALE



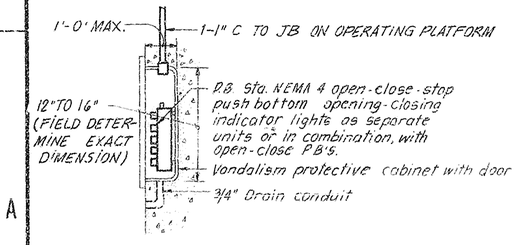
SECTION A-A (TYPICAL)

NOT TO SCALE



PUSH BUTTON STATION

NOT TO SCALE



TYPICAL P.B. STATION INSTALLATION

NOT TO SCALE

(See Note on this Sheet)

NOTES:

1. SEE DWG. NO. 11/1 FOR EXACT LOCATION OF PUSH BUTTON RECESS IN WEST ABUTMENT.
2. ALL MACHINERY, FENCES, FUEL TANKS, LADDER, ELECTRICAL EQUIPMENT AND OTHER METALLIC ITEMS SHALL BE BONDED AND GROUNDED PER SPECIFICATIONS AND NATIONAL ELECTRICAL CODE.

AS-BUILT

RECORD DRAWING NOTE

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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 96C AND STRUCTURE 96D
STRUCTURE 96D
ELECTRICAL SYSTEMS
DETAILS

DESIGN CHK	S.M.
DRWN BY	J.M.
CHK BY	S.M.
SIZE	F
DRWG. NO.	16/3
SCALE: AS SHOWN	DATED: ~~OCT 1956~~ JAN. 1964

D. O. FILE NO. ~~430-35,364~~ 490-36,591

AB1196A

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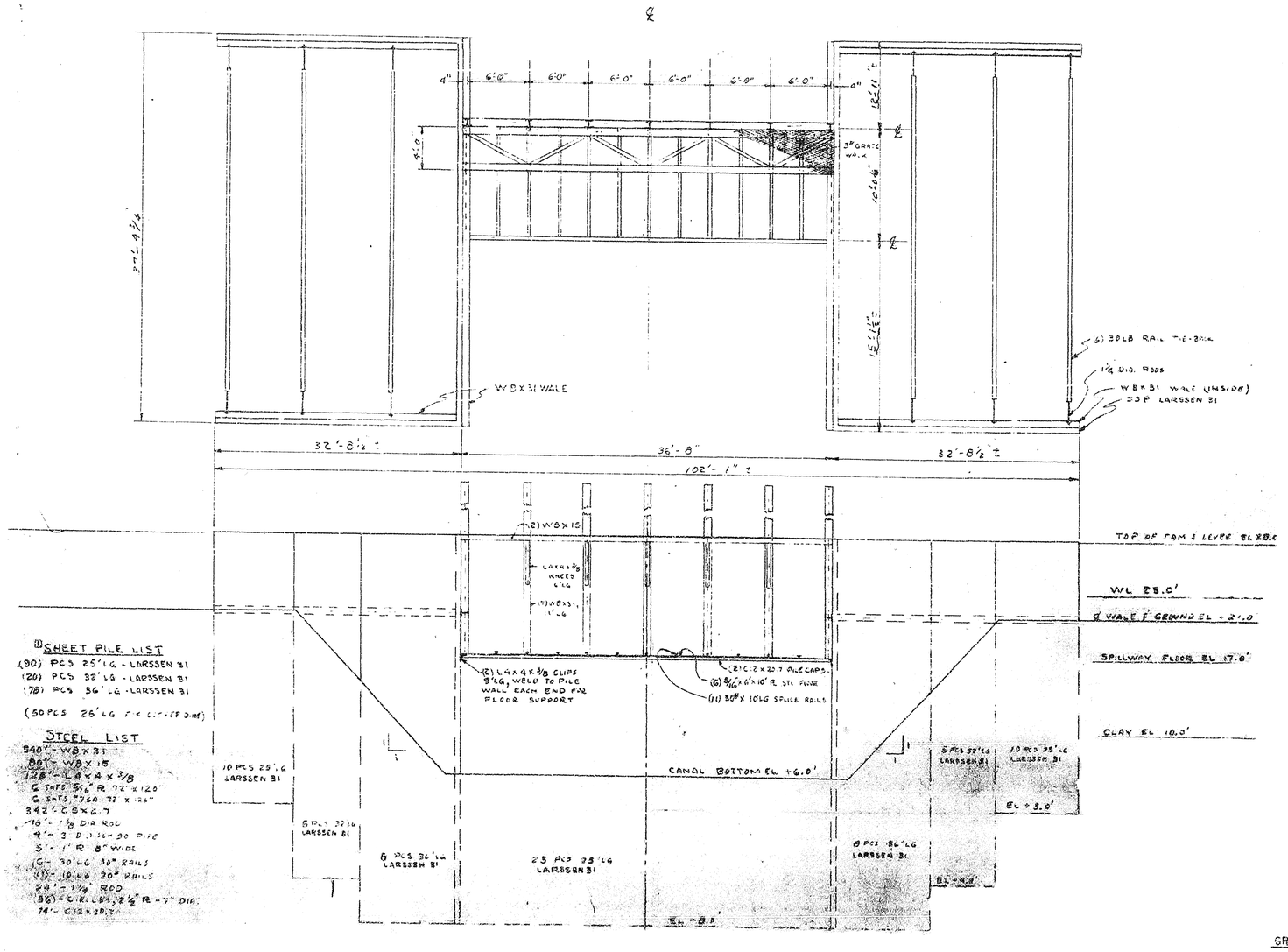
REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

GATED CANAL SPILLWAY 1

FIRIFELLSMERE DIV (O.S.R. INC) FELLSMERE, FLA.
BY: COUCH MFG CO. GRANT, FLA.
7 AUGUST 1972 SCALE: "A"

N=8339
SHT 3 OF 5
FILED 5/21/72



SHEET PILE LIST

(90) PCS 25'LG - LARSSEN 31
(20) PCS 32'LG - LARSSEN 31
(78) PCS 36'LG - LARSSEN 31

(50 PCS 26'LG FOR CUT-OFF DAM)

STEEL LIST

340'- W8X31
80'- W8X15
128'- L4X4X⅜
2 SETS ⅝" R 72"X120"
2 SETS 7/16 72"X36"
342'- C9X6.7
16'- 1¼ DIA ROD
4'- 3" D.I. H-80 PIPE
5'- 1" R 8" WIDE
6- 30'LG 30" RAILS
(1)- 10'LG 30" RAILS
24'- 1¼ ROD
36'- C12X20.7
74'- C12X20.7

AS-BUILT

GRAPHIC SCALE
"A" 4' 2' 0 4' 8' 12'

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 PROJECT
STRUCTURE 96C AND STRUCTURE 96D
EXISTING STRUCTURE 1 DRAWINGS
PLAN AND ELEVATION

DESIGN BR. | DRN. BY | CHK. BY
INV. NO.
SIZE | CODE NO. F 17/1
DATED:
SCALE: AS SHOWN | DATED: 9874-4068- JAN. 1974

D. O. FILE NO. ~~490-35,364-~~ 490-36,591

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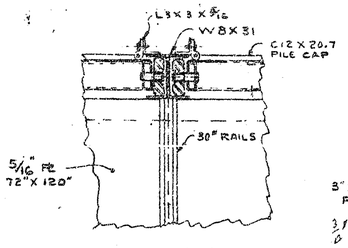
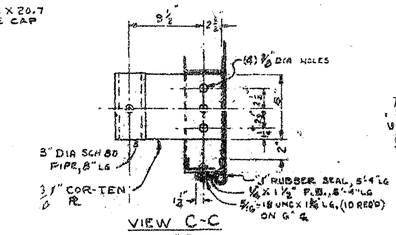
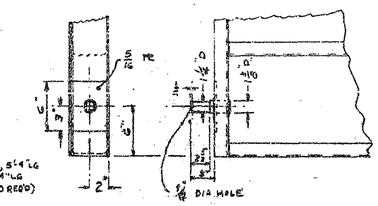
REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED



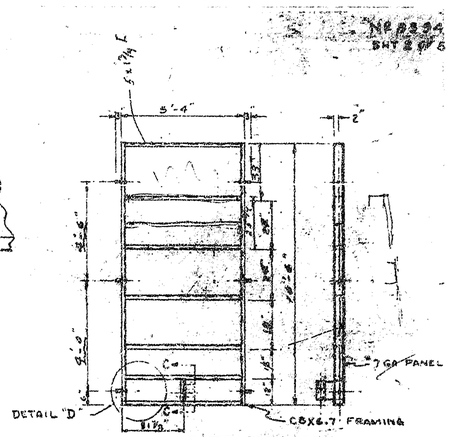
SECT. A-A
SCALE: "C"
SEE SHT 8 FOR ENLARGED DETAIL



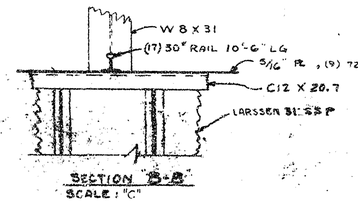
VIEW C-C
SCALE: "D"



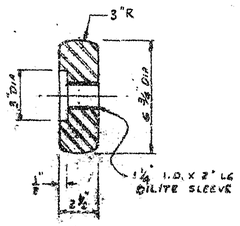
DETAIL "B"
SCALE: "D"



GATE DETAIL
SCALE: "B"
(6 REQ'D)



SECTION B-B
SCALE: "C"



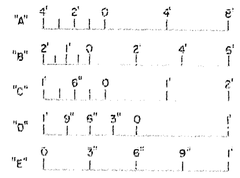
GATE ROLLER DETAIL
(36 REQ'D)
SCALE: "E"

SIDE ELEVATION
SCALE: "A"

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 PROJECT
STRUCTURE 96C AND STRUCTURE 96D
EXISTING STRUCTURE 1 DRAWINGS
SECTIONS AND DETAILS
DESIGN BY: JJE
DRN BY: CKD BY:
INV NO. | NOTE | DWG. NO. F 17/2
DATED
SCALE: AS SHOWN | DATED: ~~OCT 1980~~ JAN. 1994

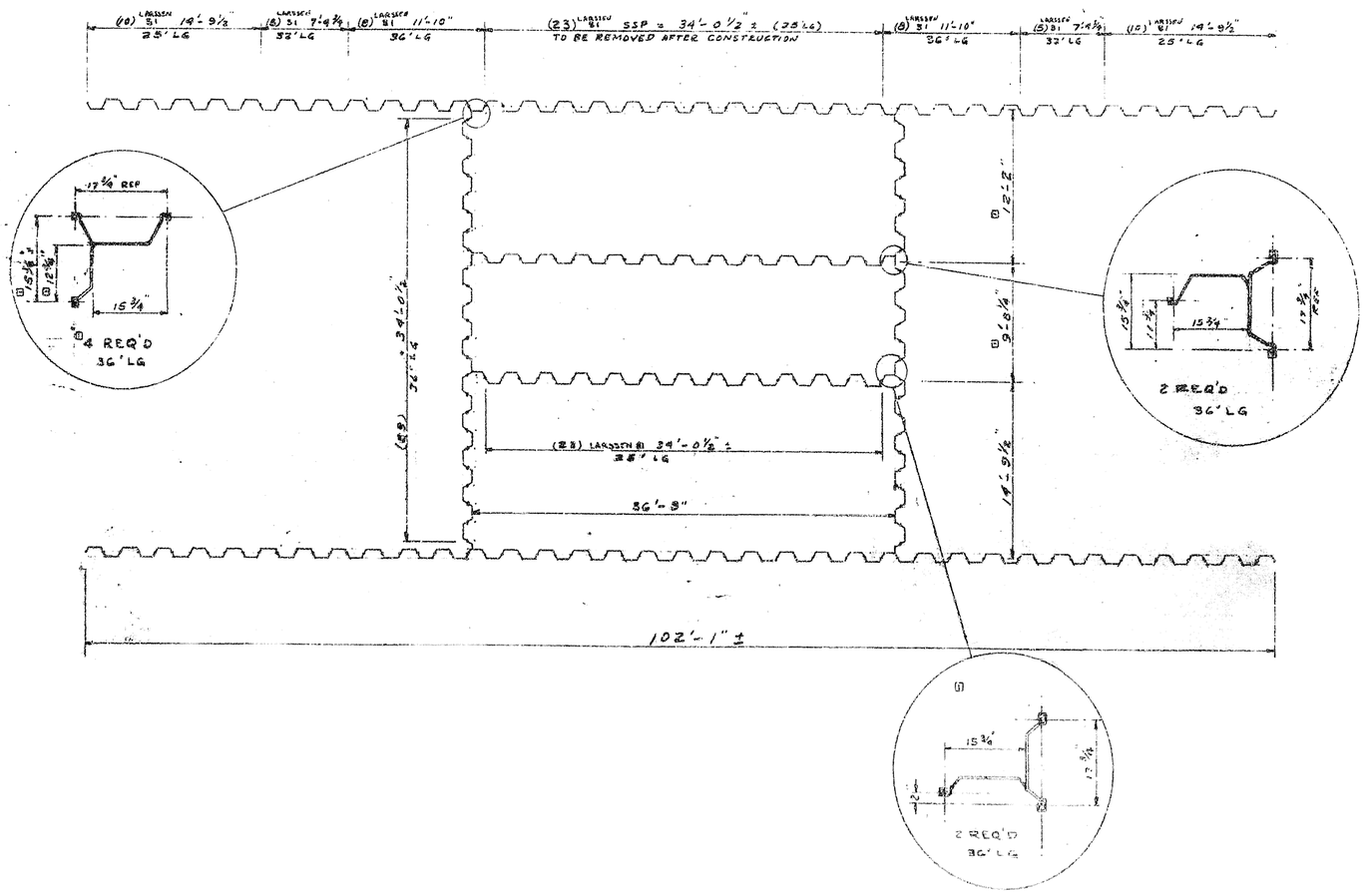
D. O. FILE NO. ~~490-35,764~~ 490-36,591

SAFETY ON THIS JOB DEPENDS ON YOU

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

SHT 3 OF 5
REV 5,11,72

SHEET PILE LAYOUT
SCALE: "A"



GRAPHIC SCALE
"A" 4' 2' 0 4' 8' 12'

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 PROJECT
STRUCTURE 96C AND STRUCTURE 96D
EXISTING STRUCTURE 1 DRAWINGS
SHEET PILE LAYOUT

DRAWING END	DES. BY	DRN. BY	CHK. BY	DATED	SHEET NO.	DRG. NO.
					F	17/3

SCALE: AS SHOWN DATED: ~~SEP 1968~~ JAN. 1974

D. O. FILE NO. ~~490-36,454~~ 490-36,591

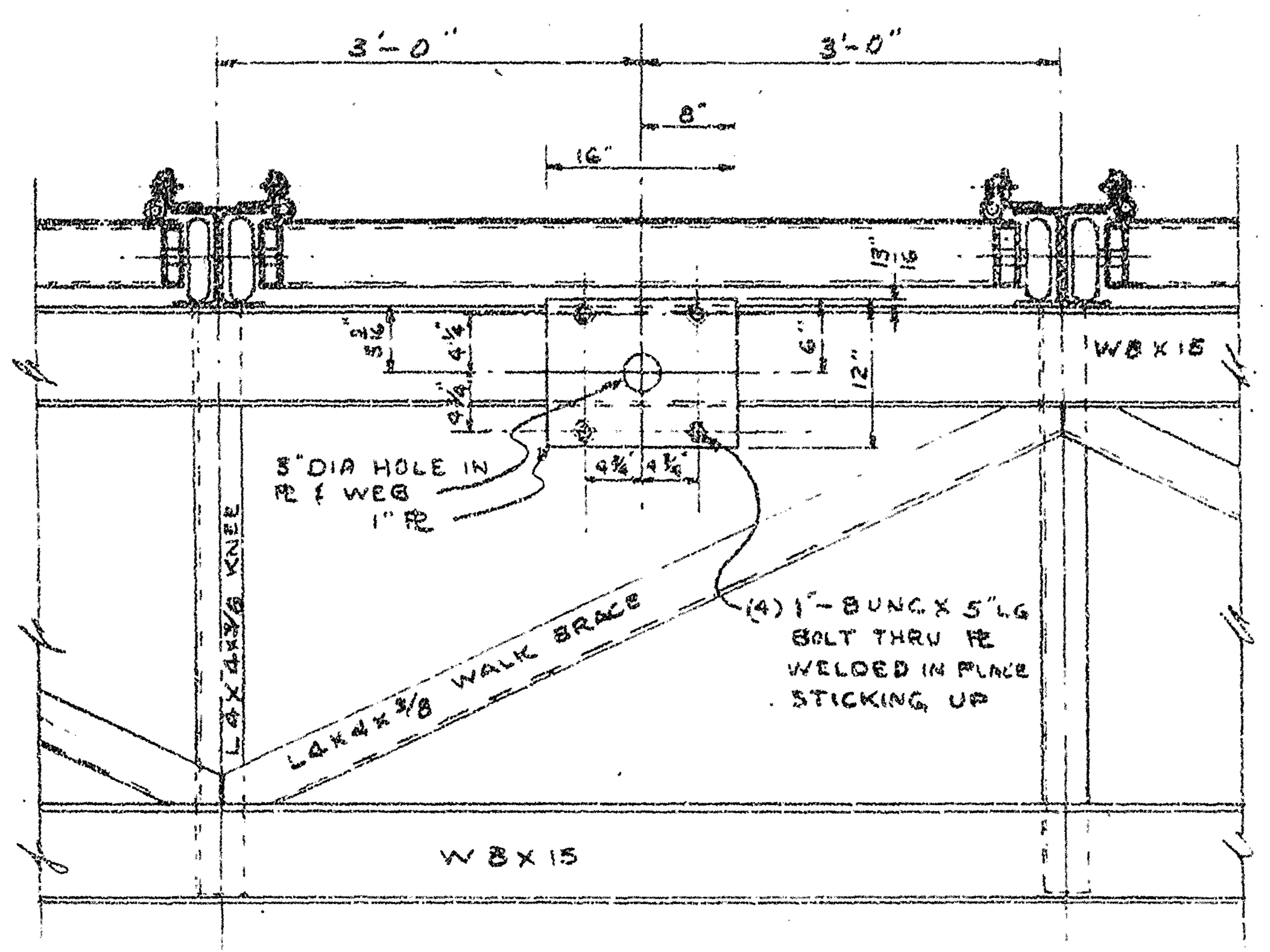
SAFETY ON THIS JOB DEPENDS ON YOU

NO.	SYM	ZONE	REVISIONS DESCRIPTION	DATE	APPROVED

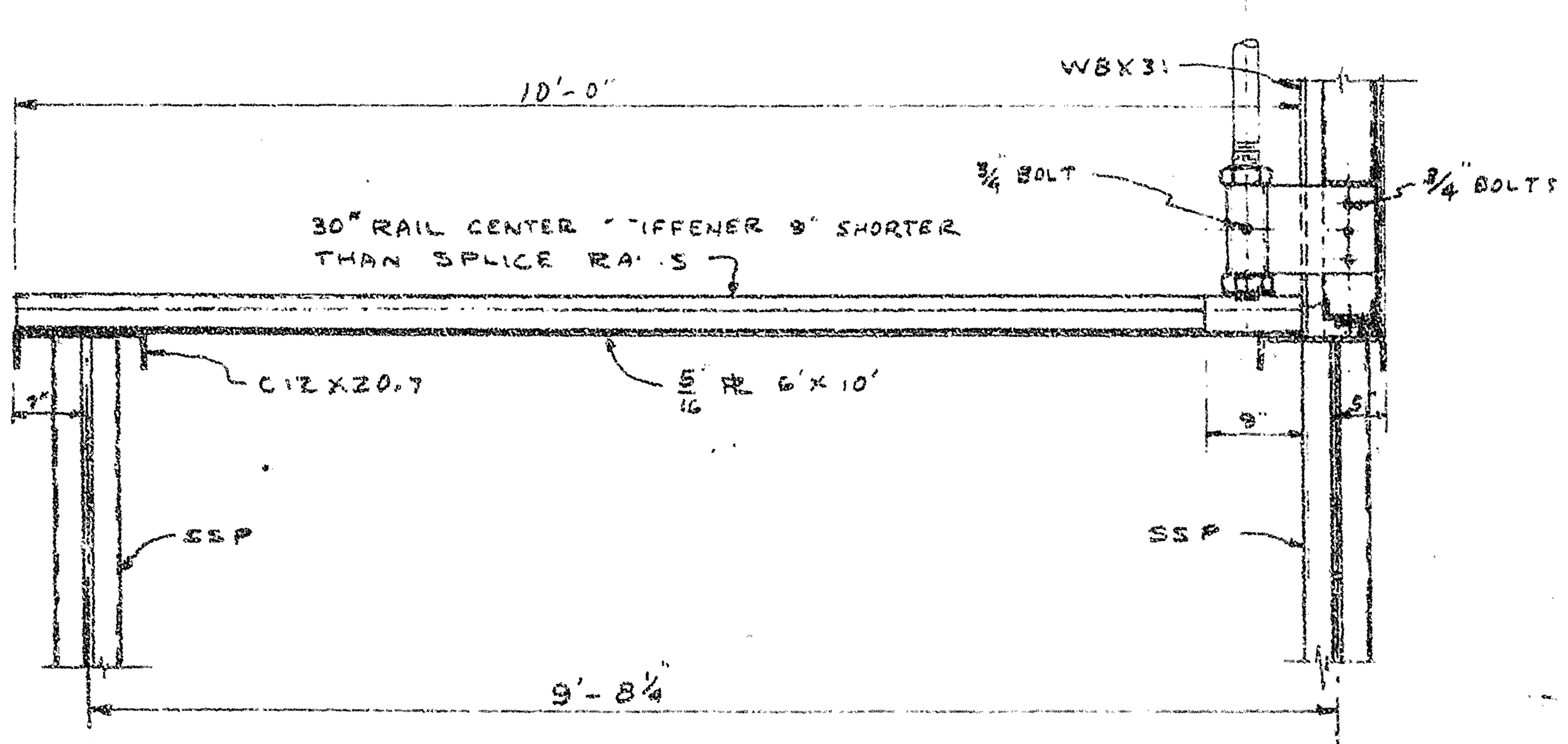
Nº 8394
SHT 4 of 5

GATE SEAL APPLICATION DETAIL
FOR: FELLESMERE DIV (O.S.R. INC.) FELLESMER, FLA.
BY: COUCH MFG CO. GRANT, FLA
22 SEPTEMBER 1972 SCALE: "B"

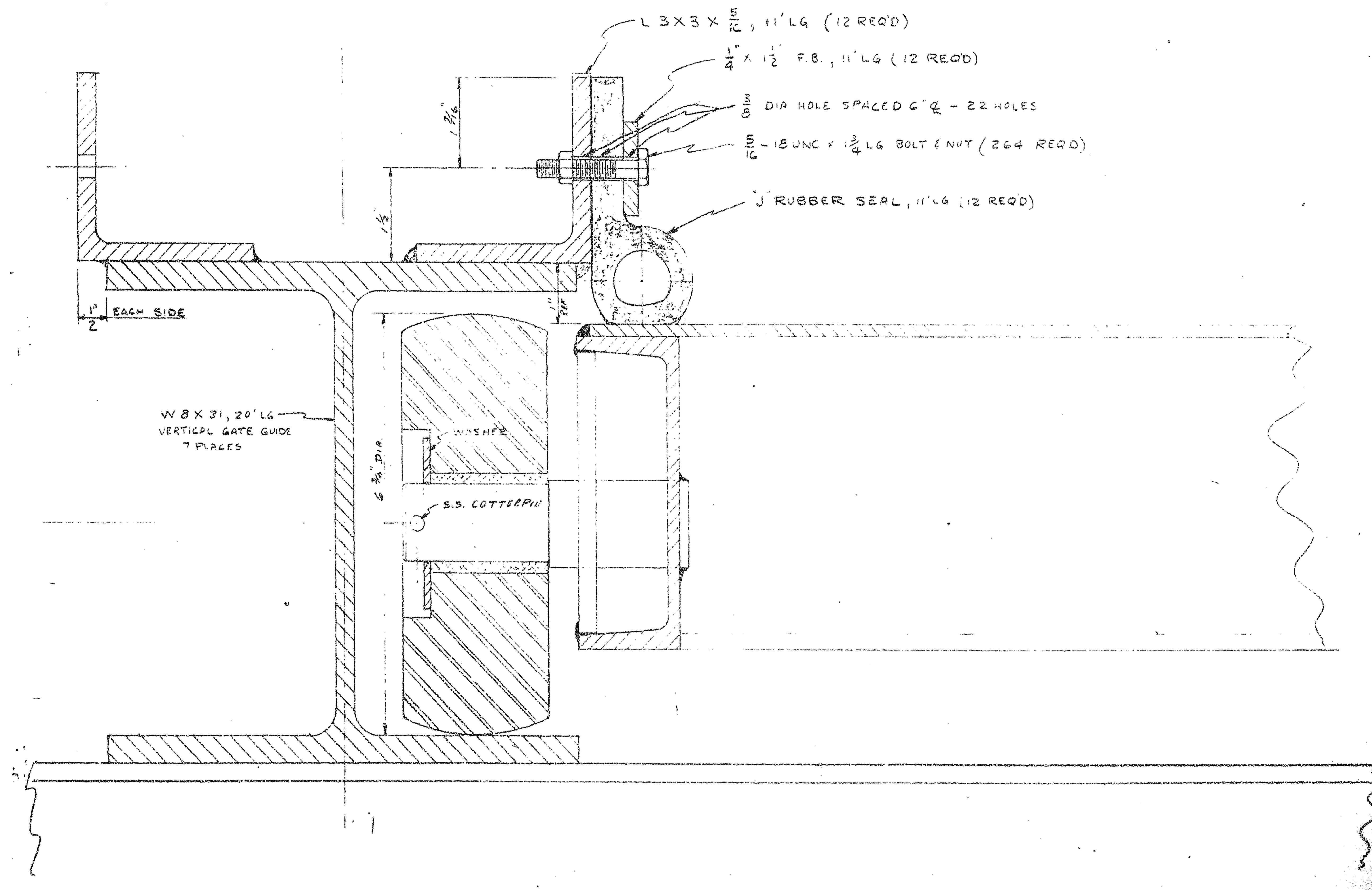
Nº 8394
SHT 5 of 5



PEDESTAL MOUNTING PAD DETAIL
SCALE: "A"



SPILLWAY DECK DETAIL CROSS SECTION
SCALE: "A"



AS-BUILT

RECORD DRAWING NOTE
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GRAPHIC SCALES
"A" 1' 6" 0 1' 2'
"B" 0 1" 2" 3"

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

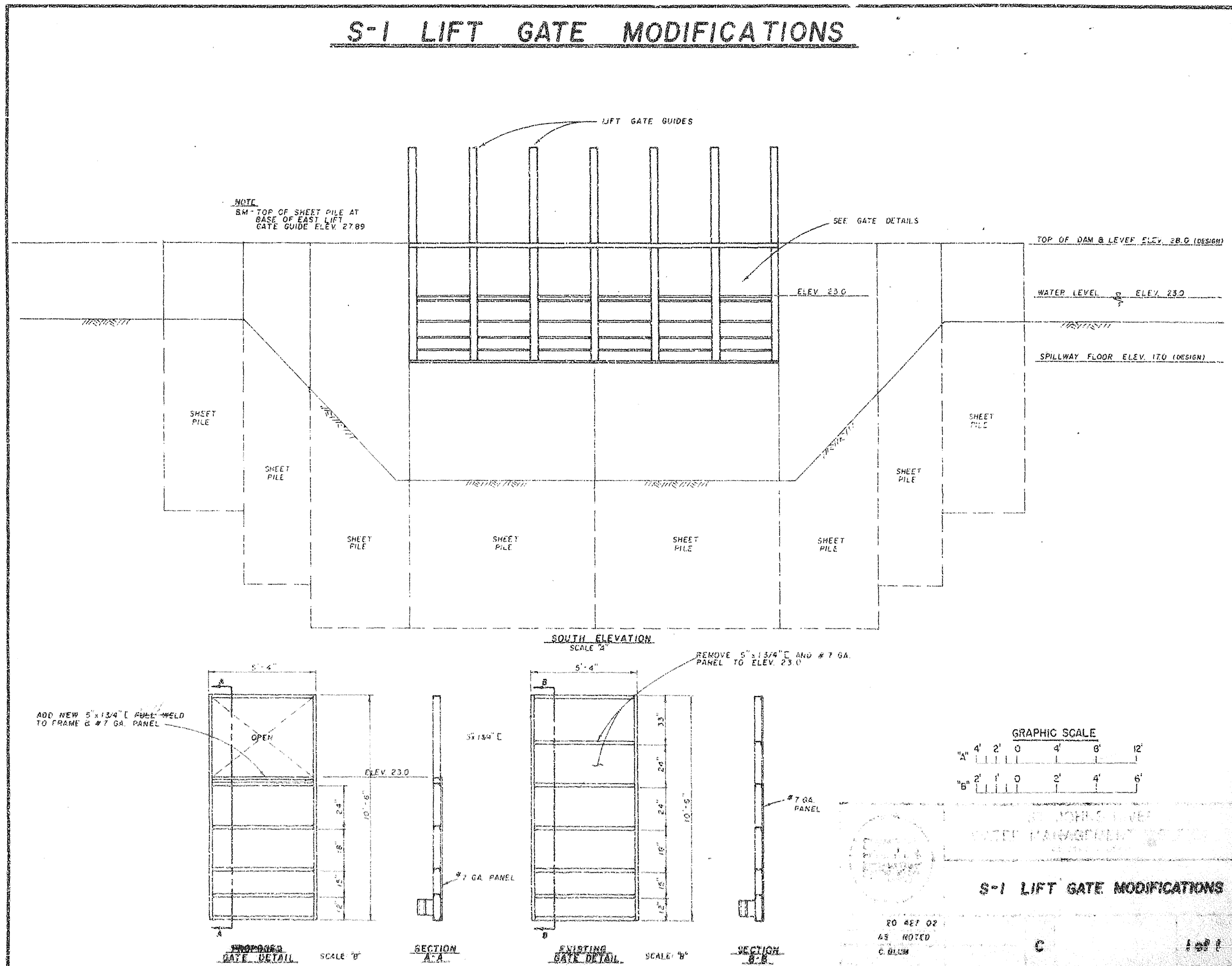
CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST JOHNS RIVER PROJECT
STRUCTURE 96C AND STRUCTURE 96D
EXISTING STRUCTURE 1 DRAWINGS
DETAILS

SIZE F 17/4
SCALE: AS SHOWN

D. O. FILE NO. ~~490-35,354~~
490-36,591

SAFETY ON THIS JOB DEPENDS ON YOU

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED



AS-BUILT

RECORD DRAWING NOTE

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

CENTRAL AND SOUTHERN FLORIDA PROJECT
UPPER ST. JOHNS RIVER PROJECT
STRUCTURE 96C AND STRUCTURE 96D
EXISTING STRUCTURE 1 DRAWINGS
GATE MODIFICATIONS

SIZE: F — DWG. NO. 17/5
SCALE: AS SHOWN — DATED: ~~OCT. 1991~~ JAN. 1994

D. O. FILE NO. ~~490-35,354~~ 490-36,591