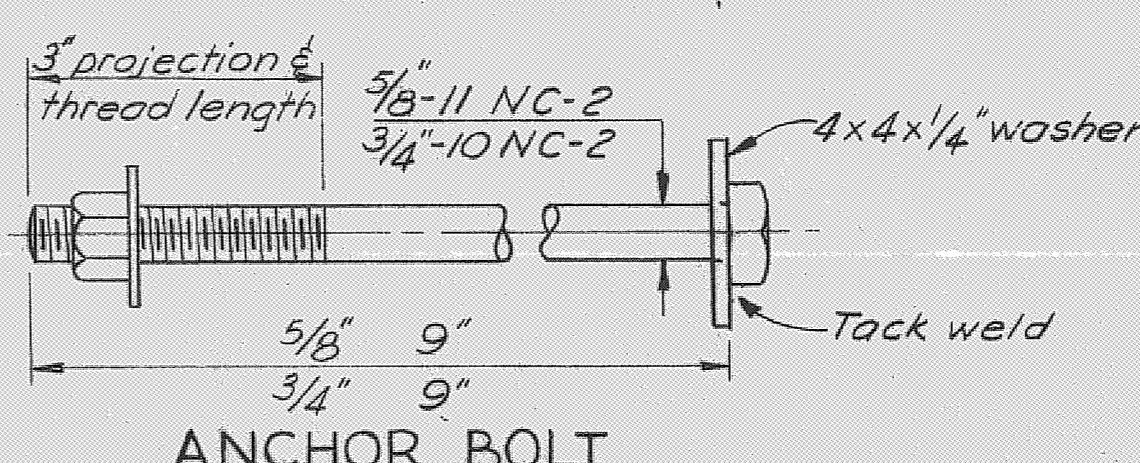
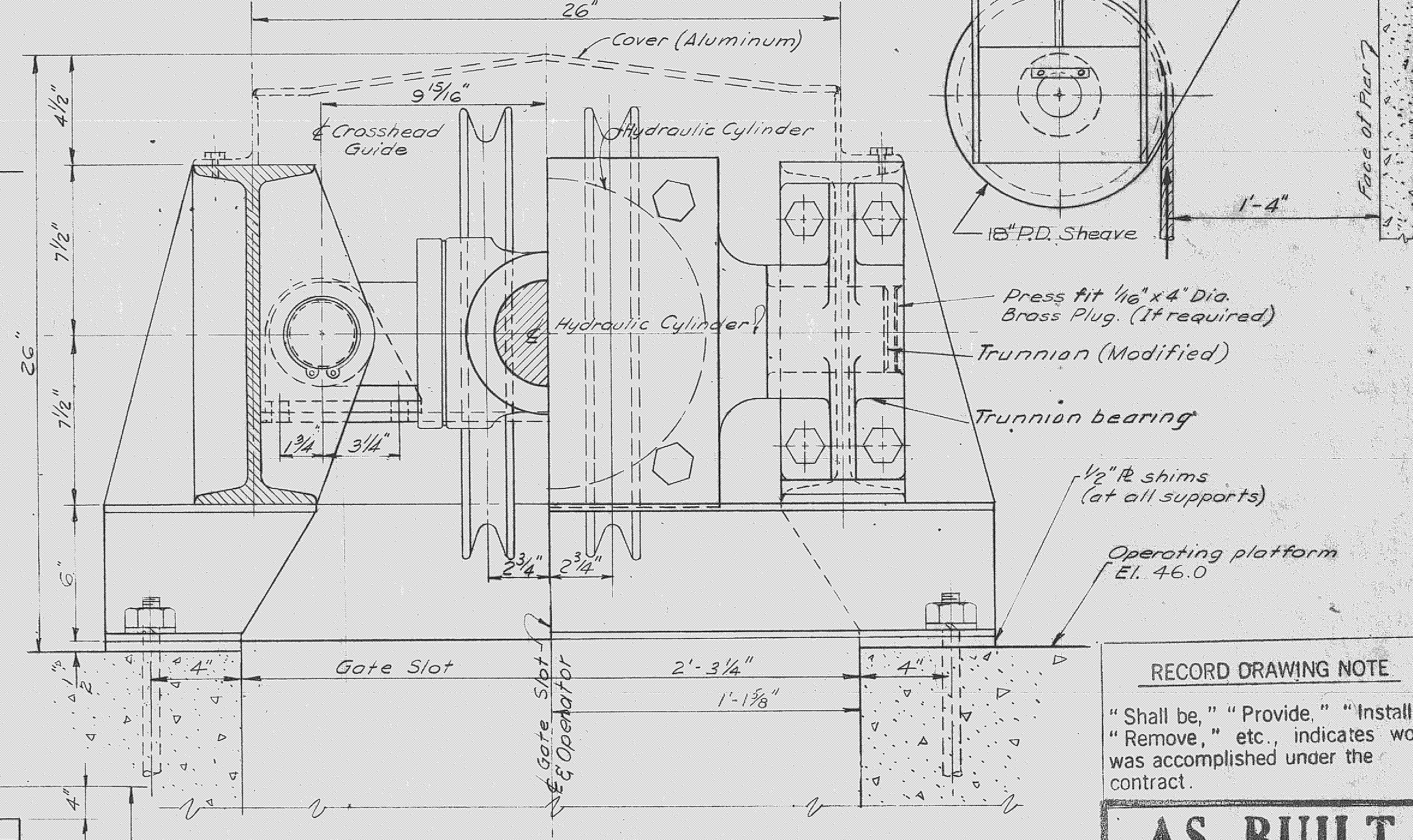
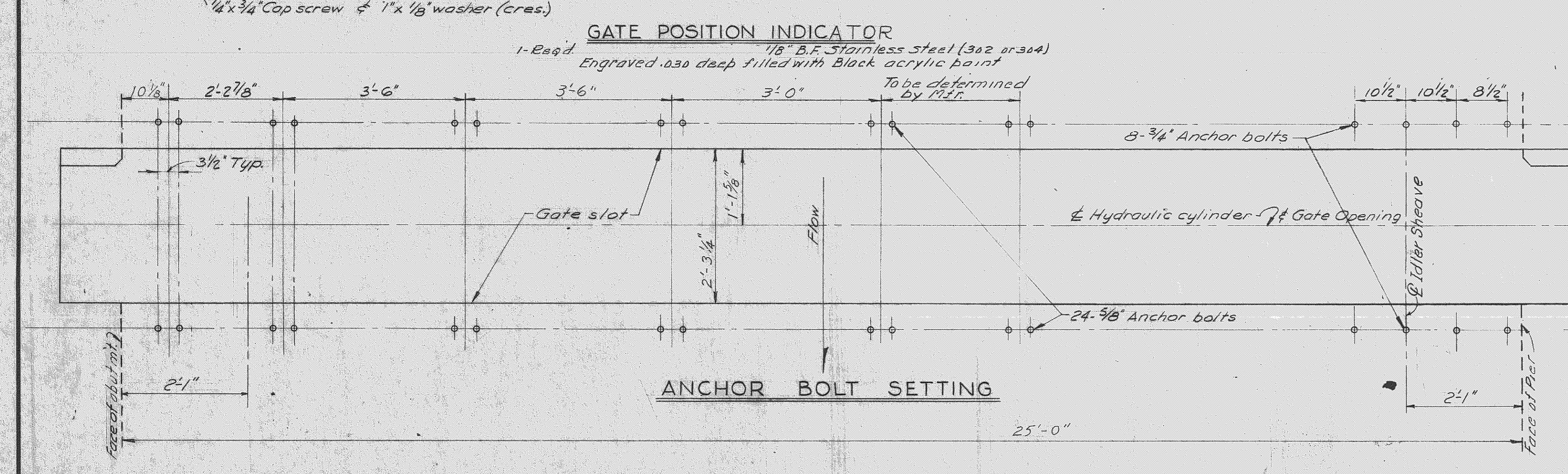
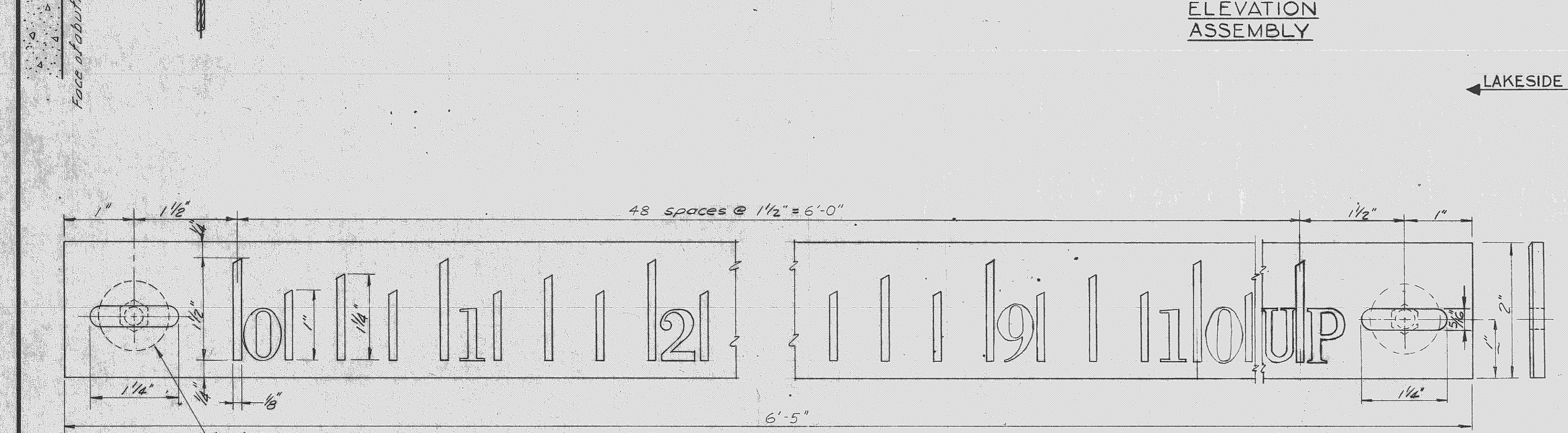
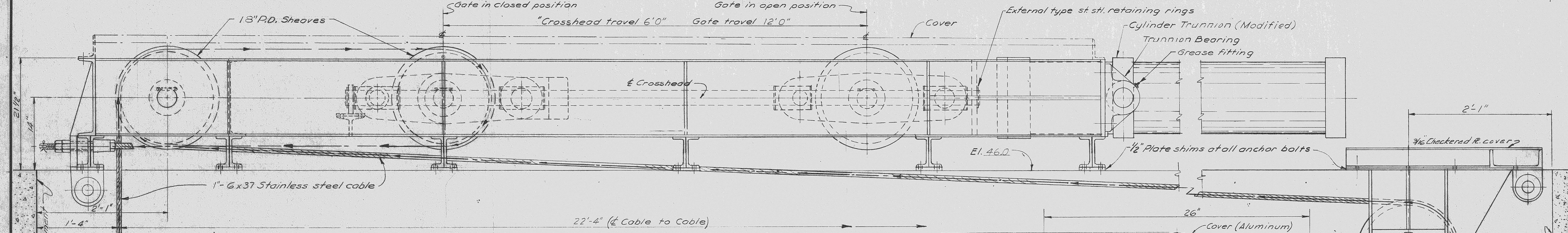
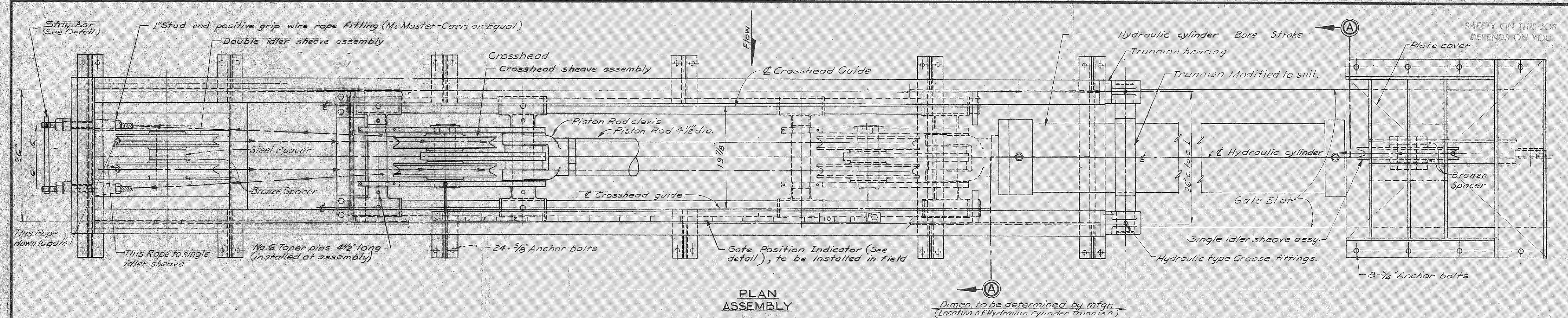


SAFETY ON THIS JOB  
DEPENDS ON YOU



**ANCHOR BOLT**  
24 Reqd. 5/8" Bolt steel  
8 Reqd. 3/4" Bolt steel

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

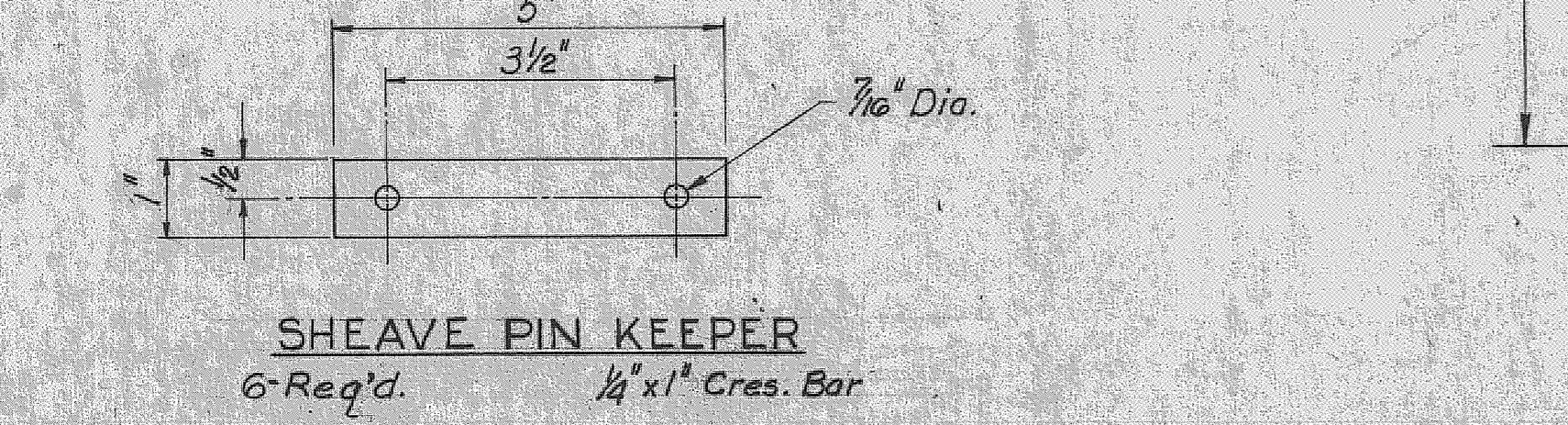
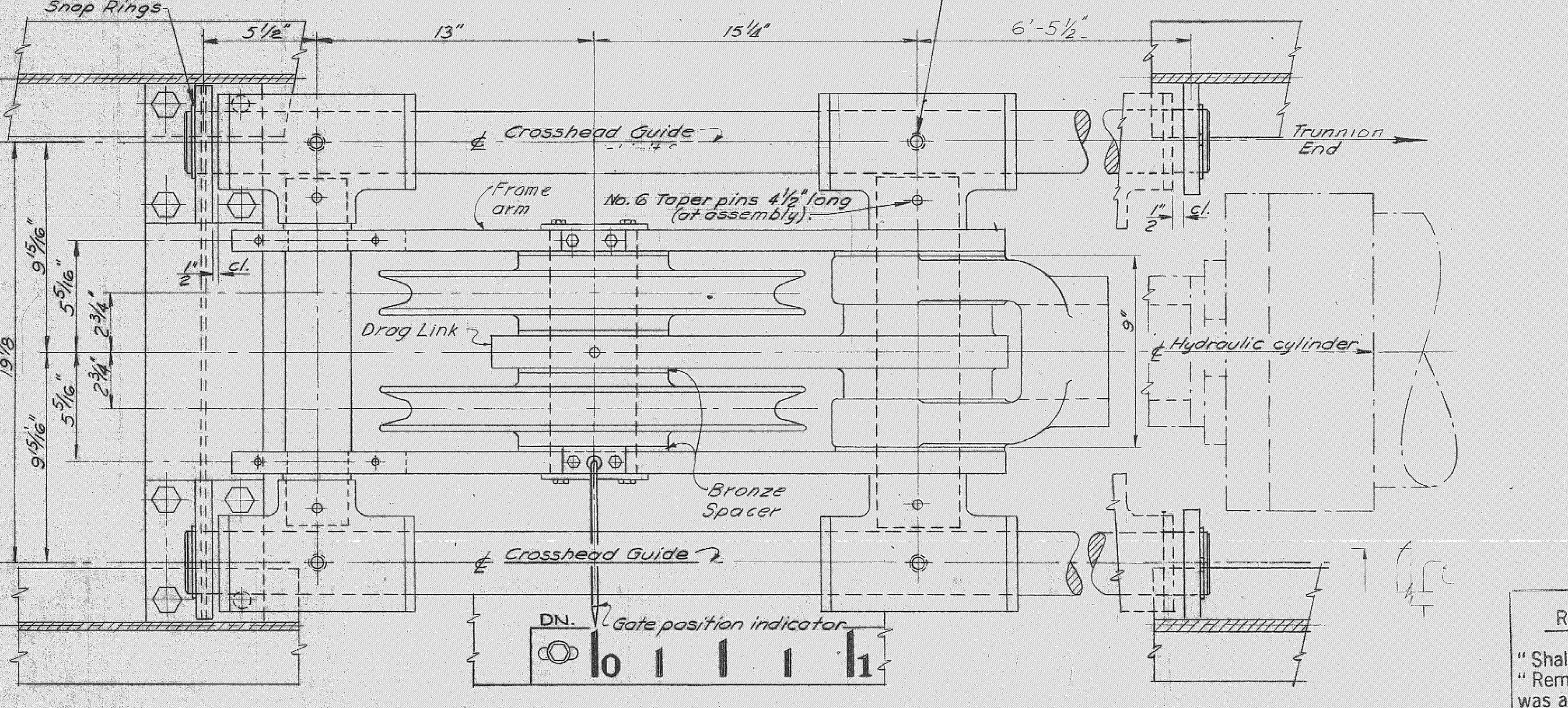
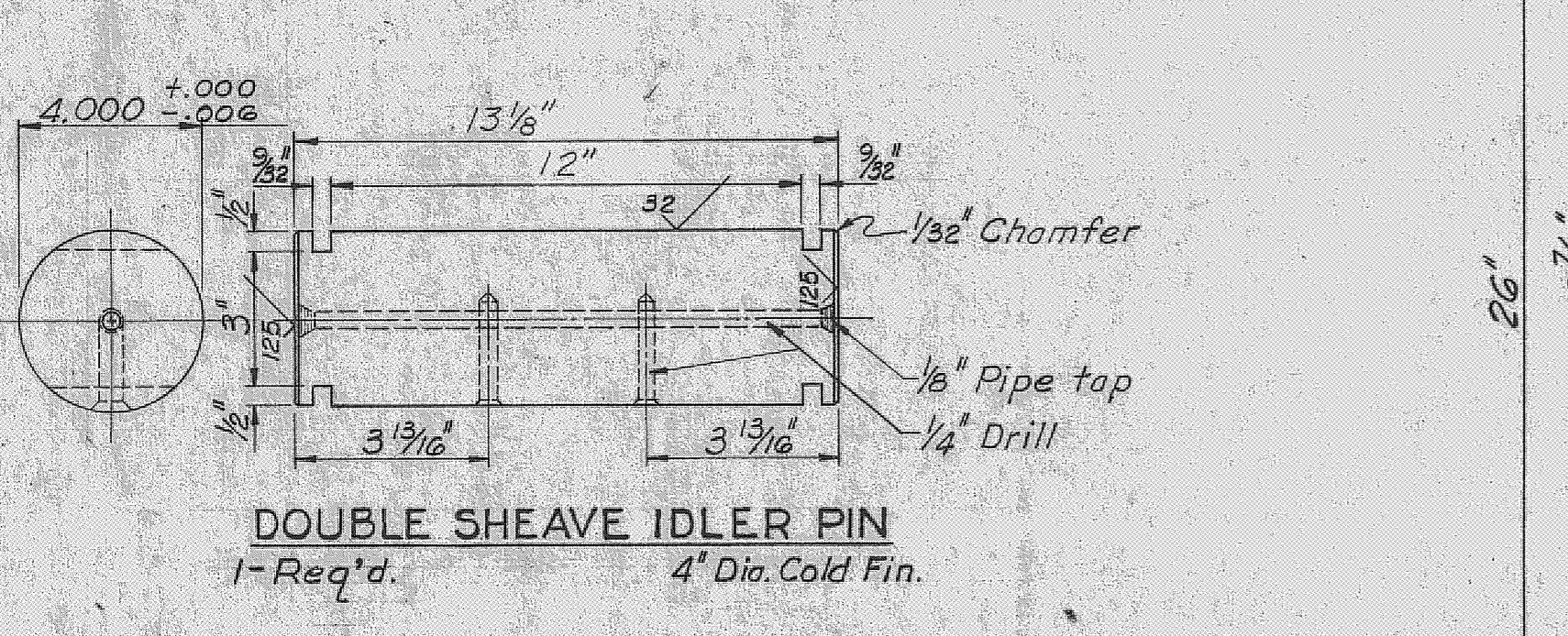
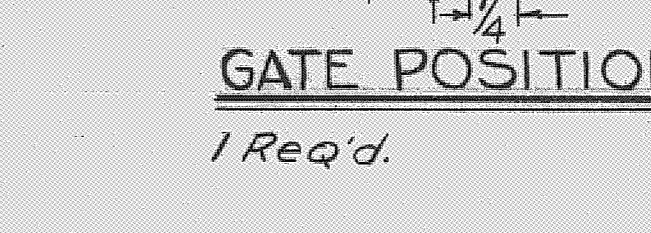
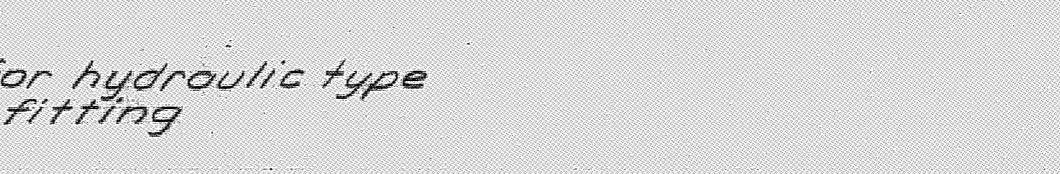
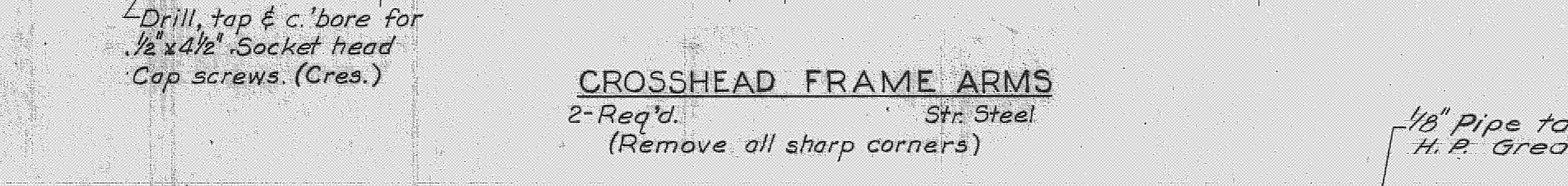
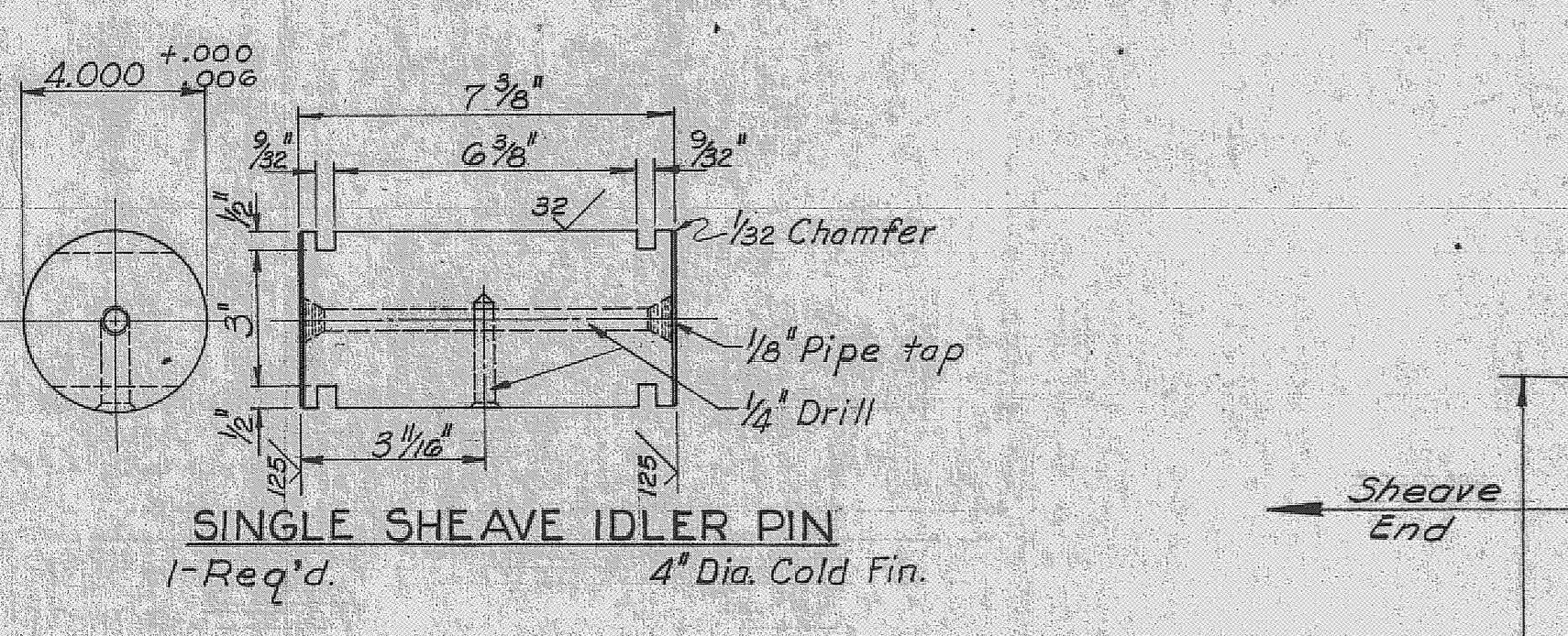
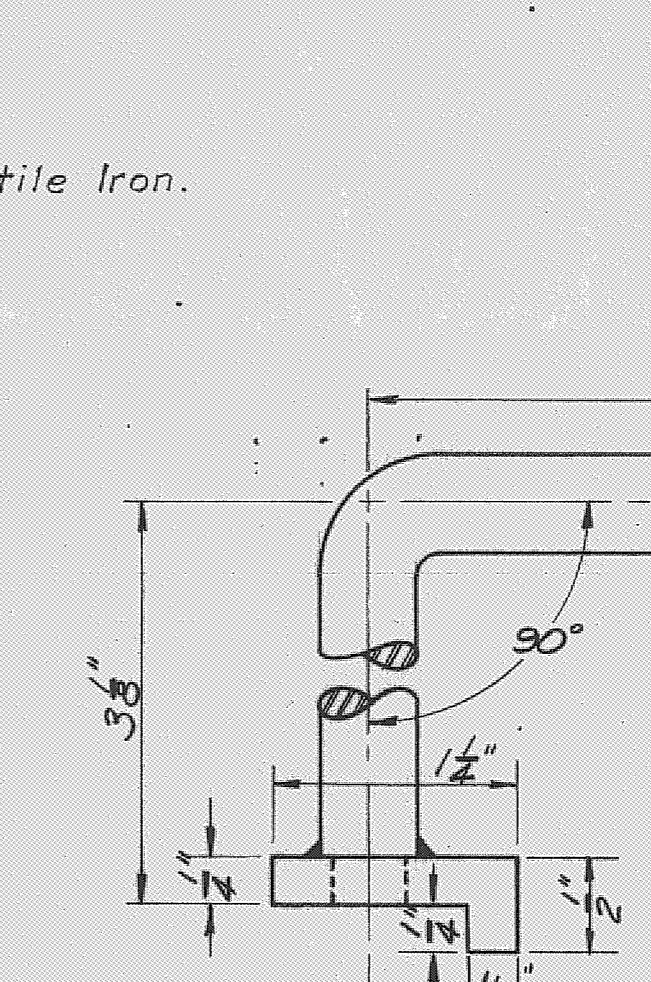
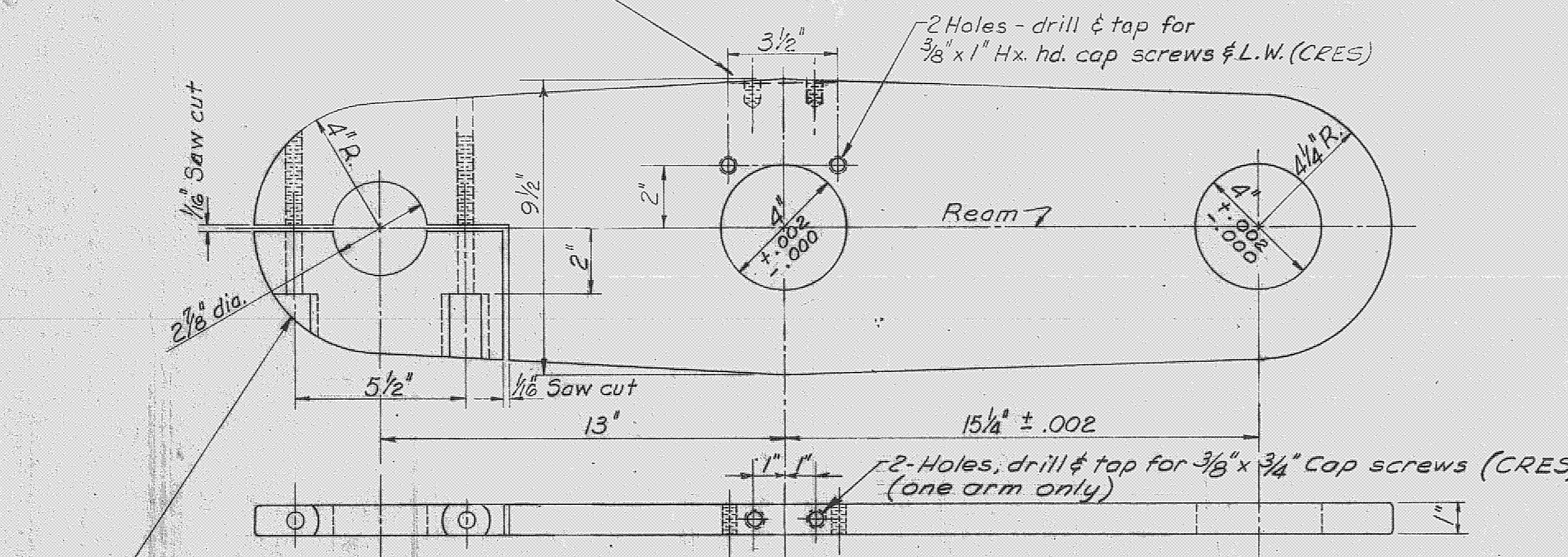
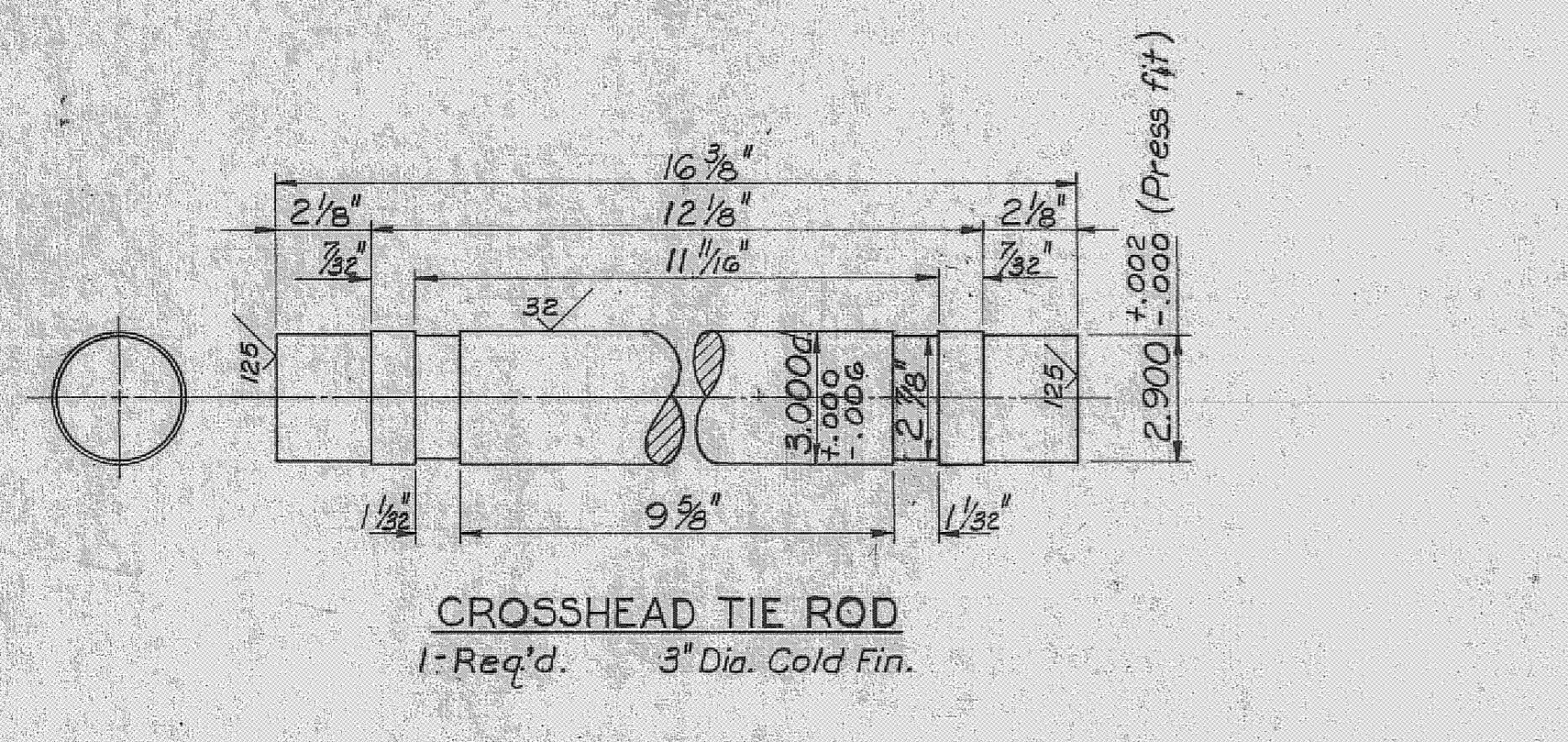
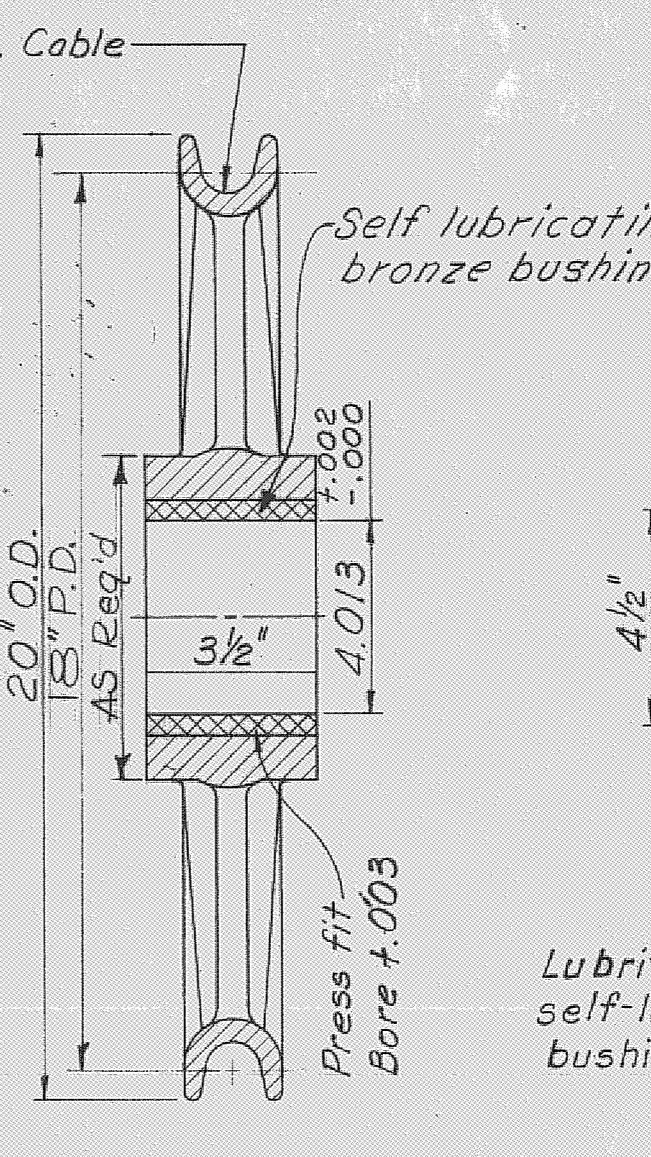
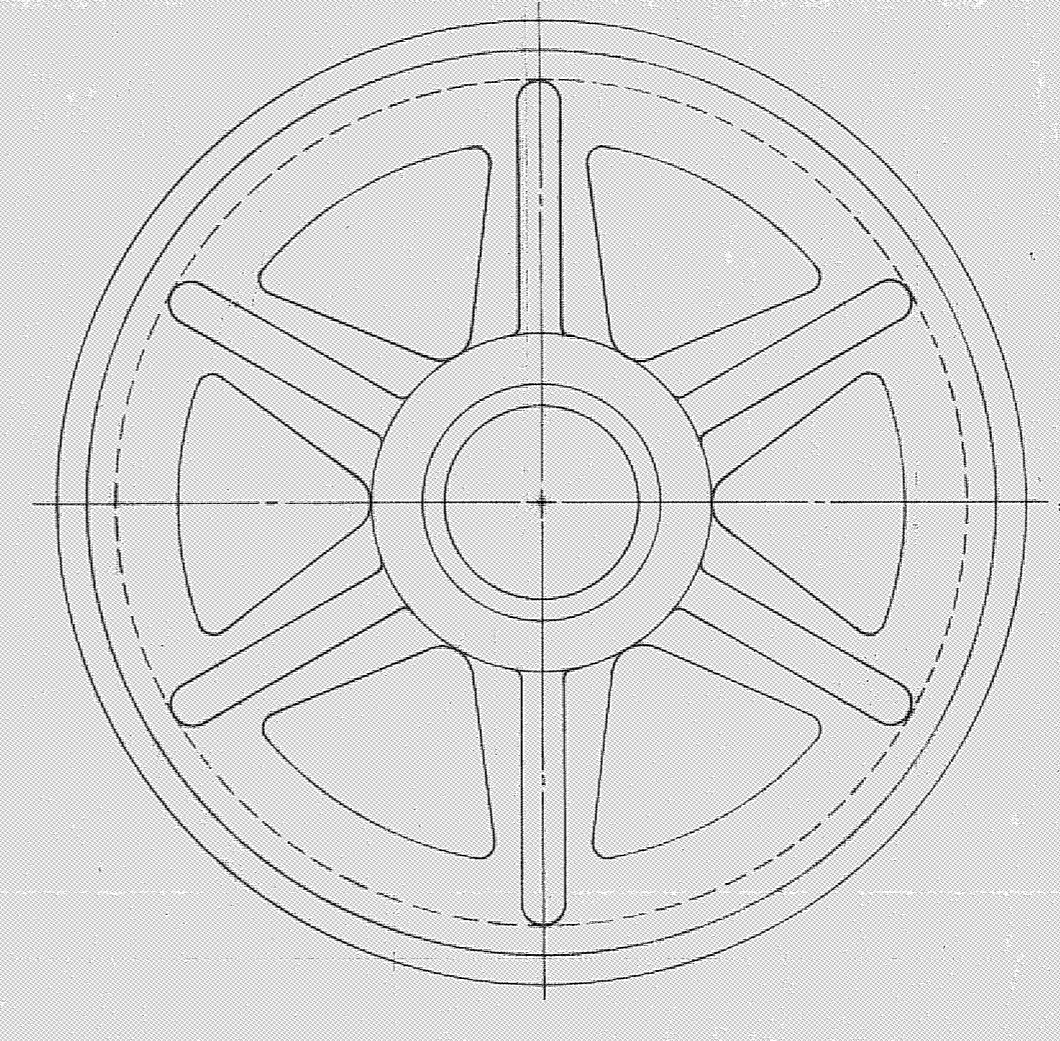
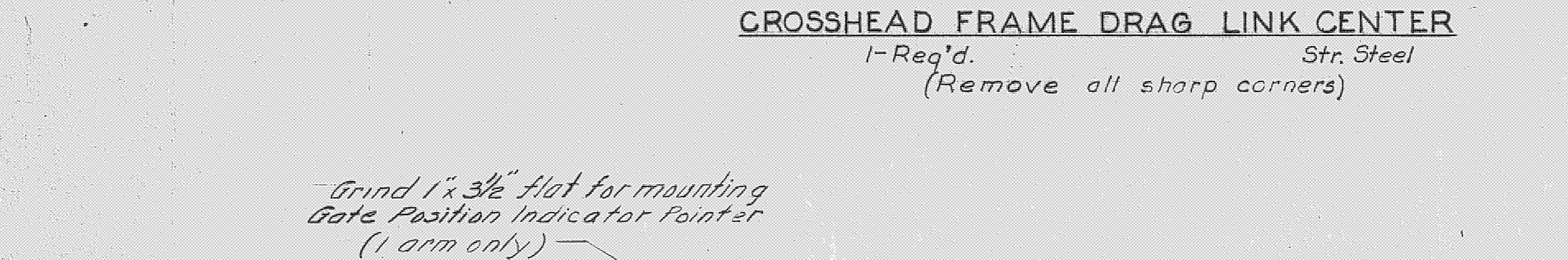
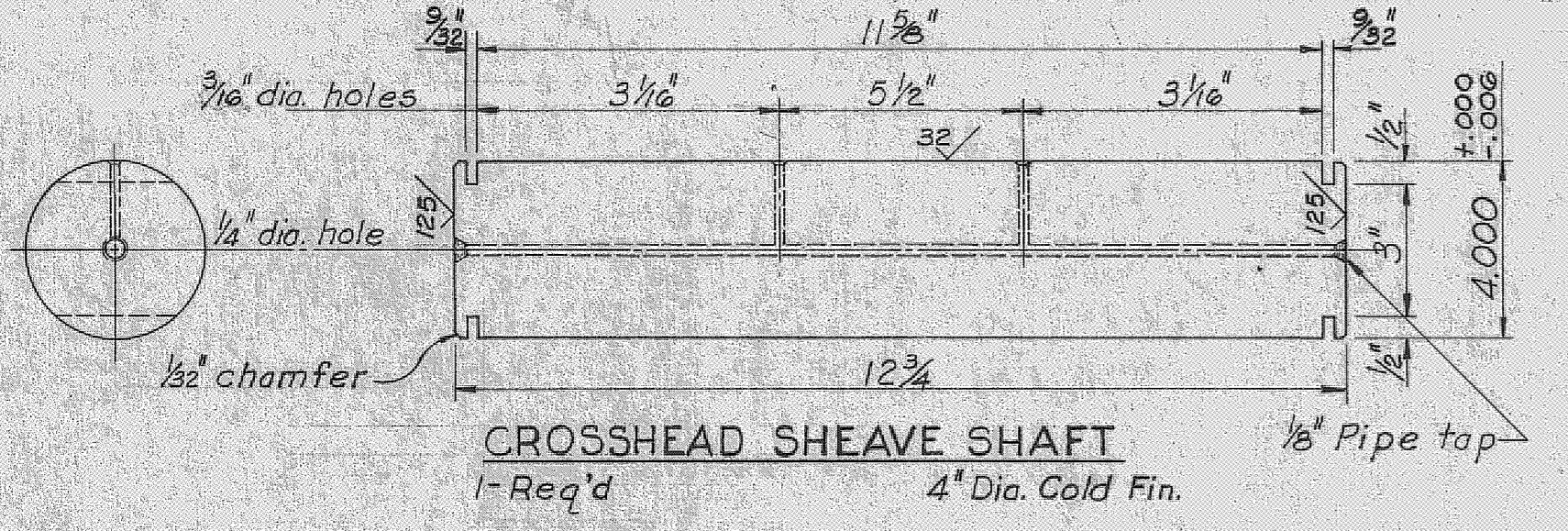
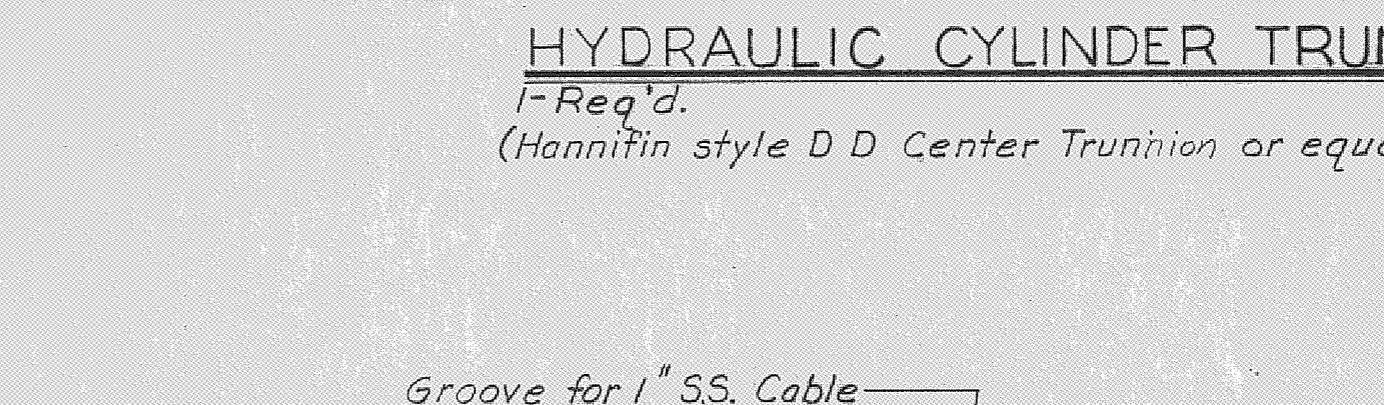
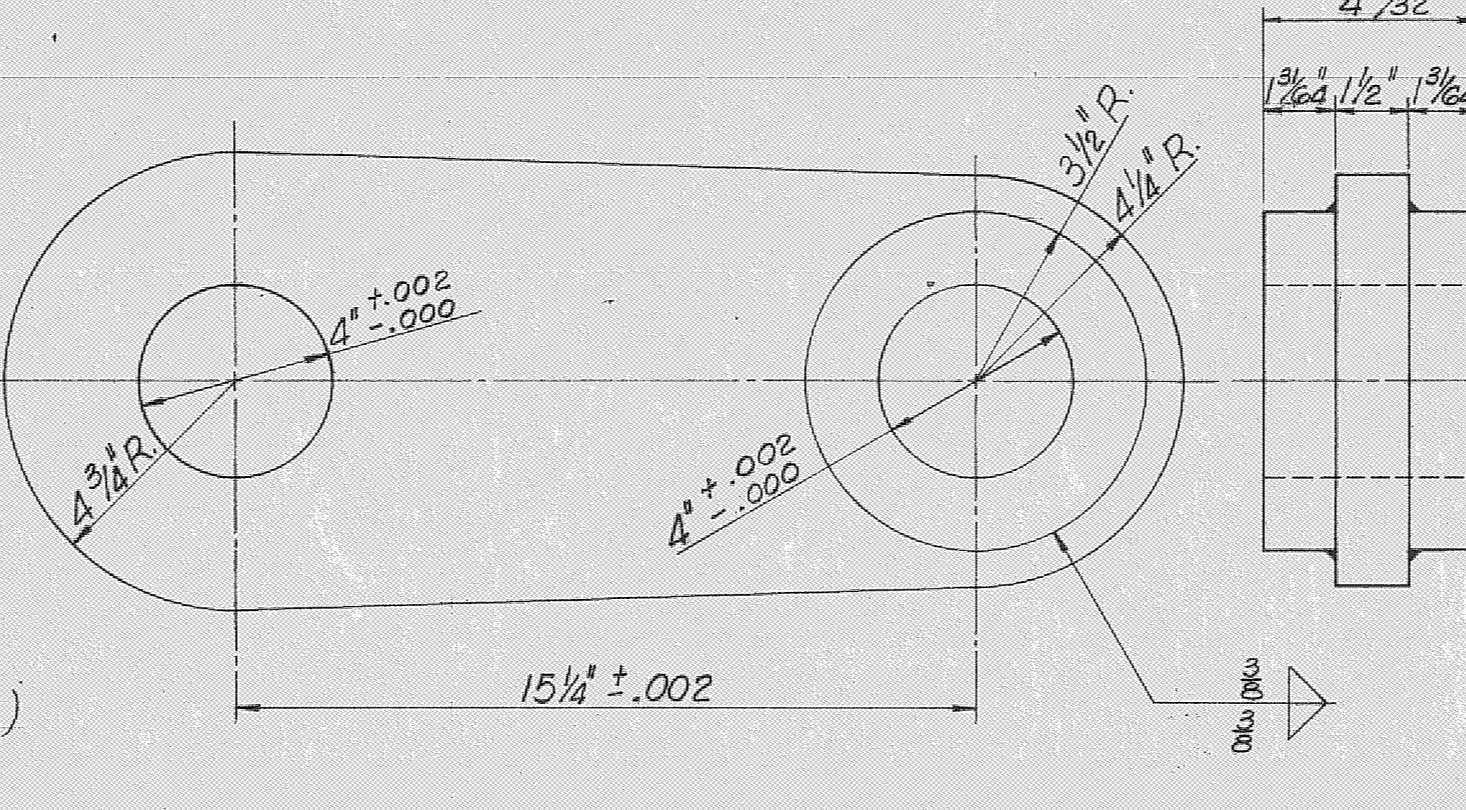
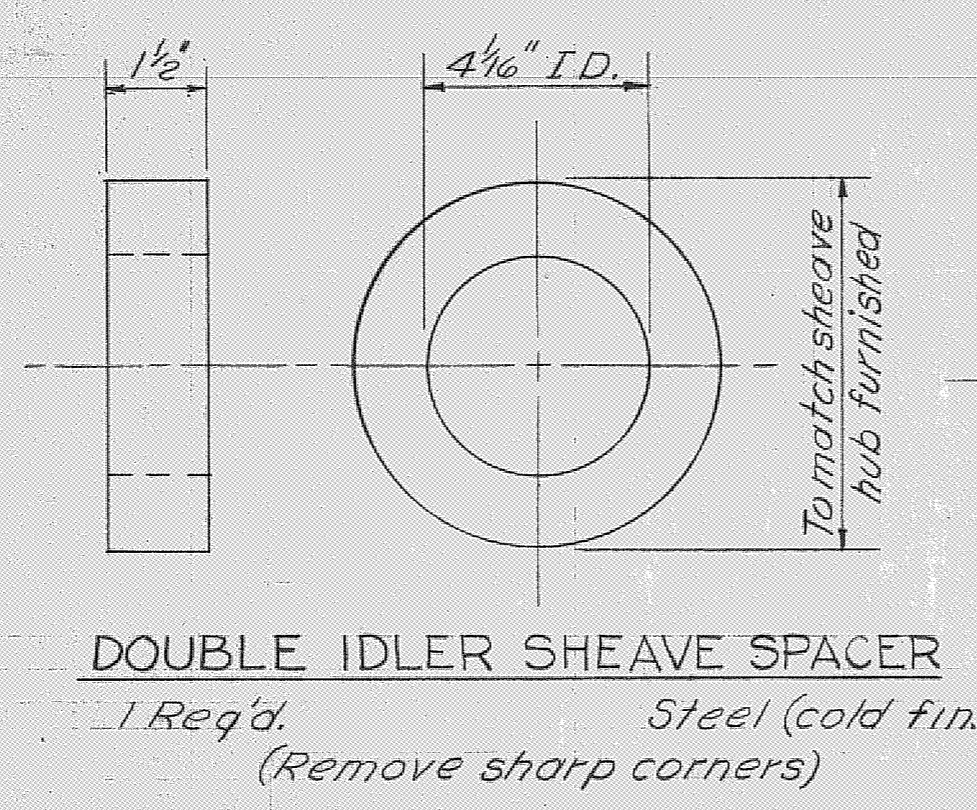
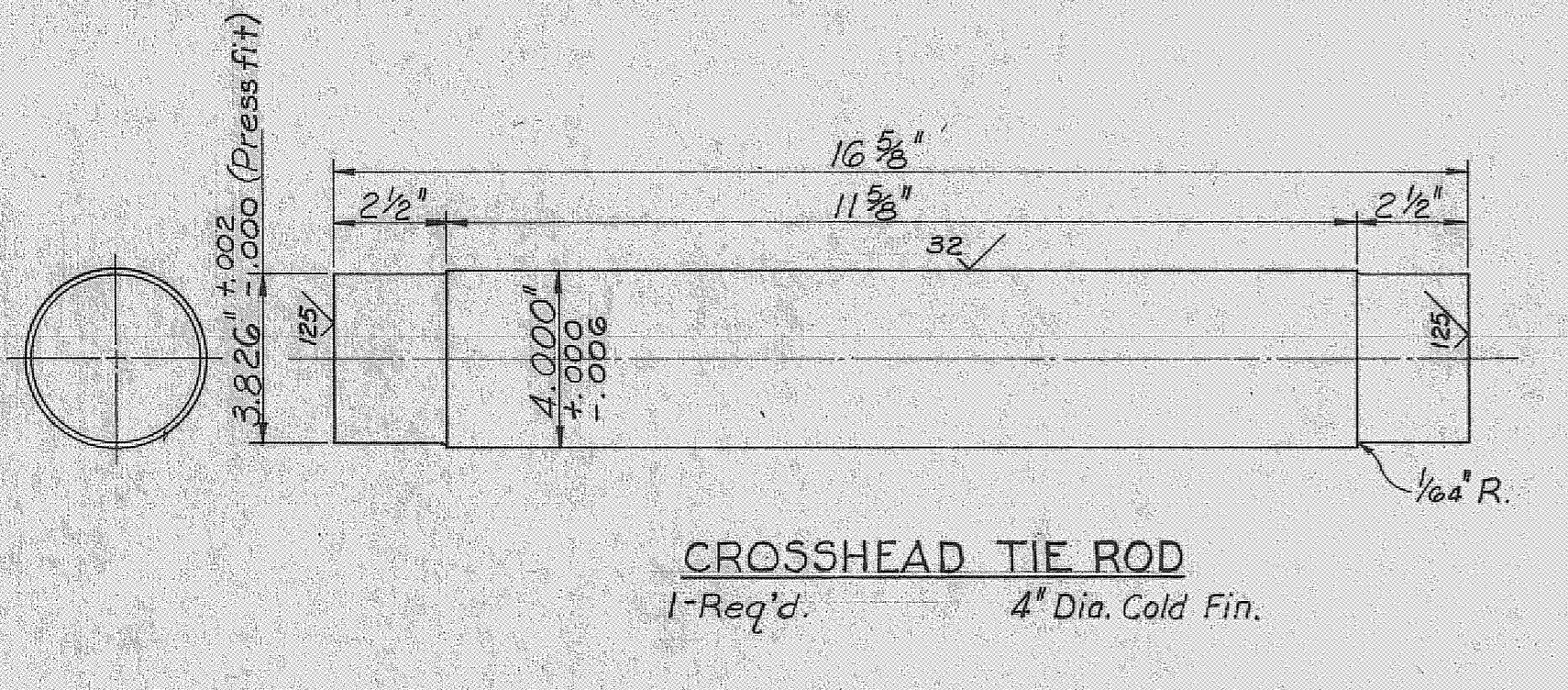
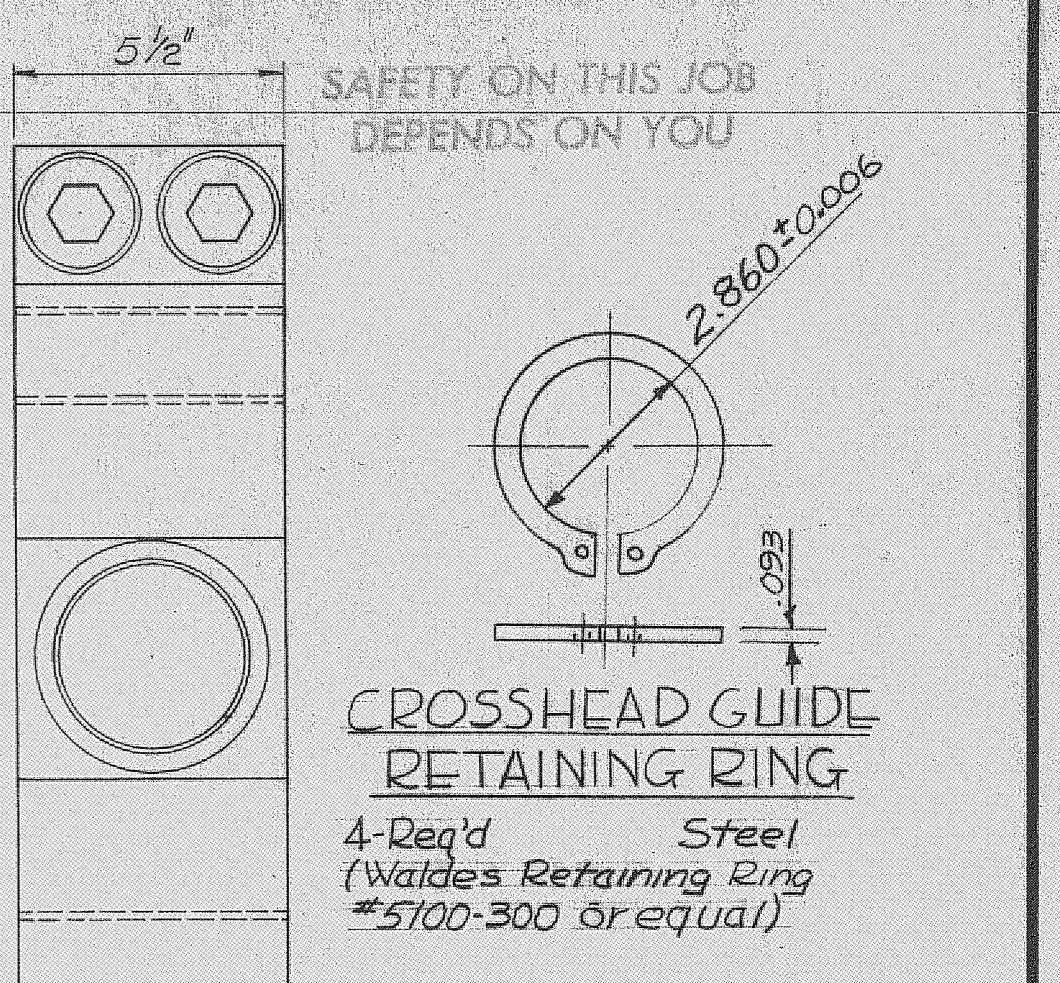
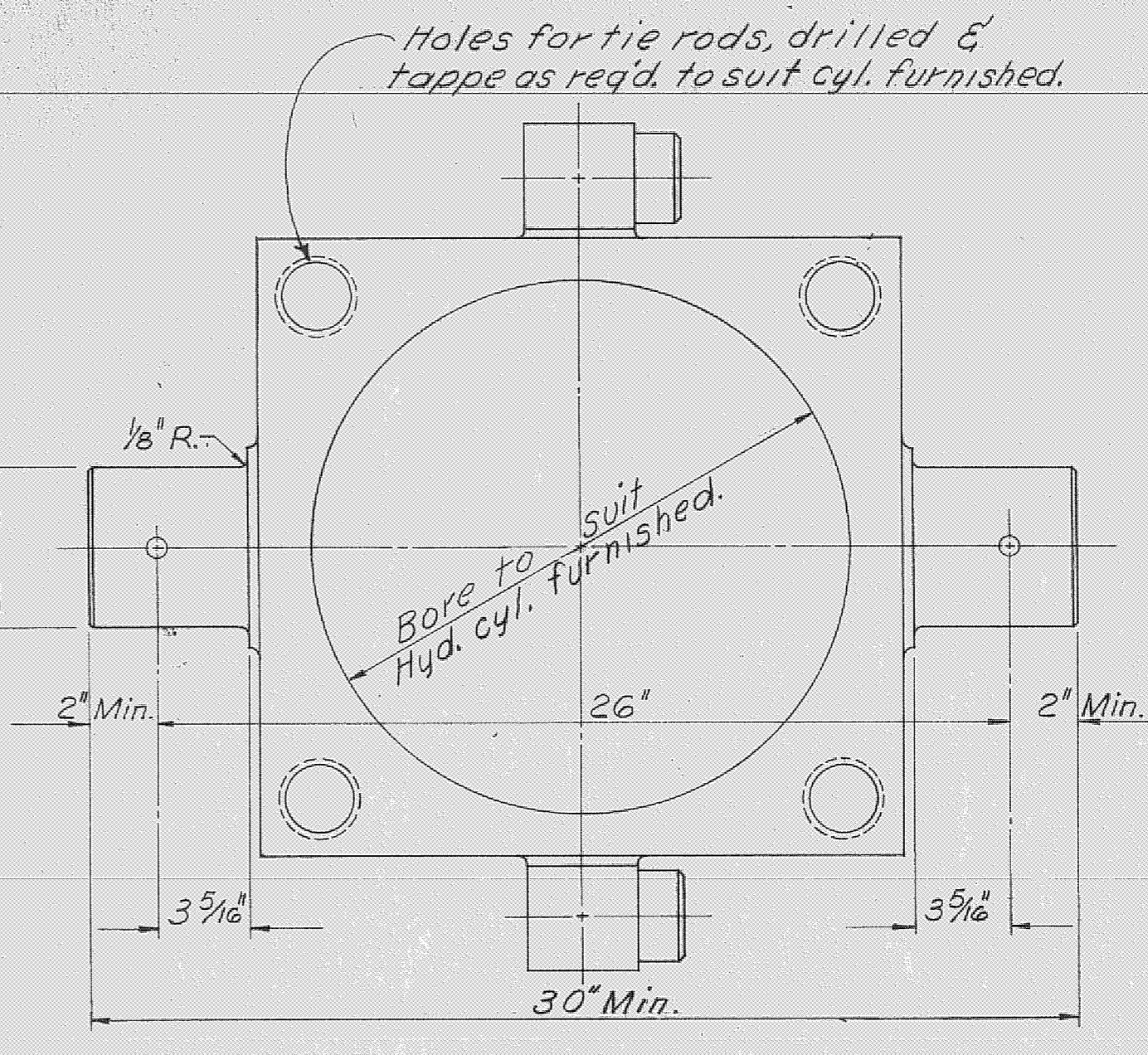
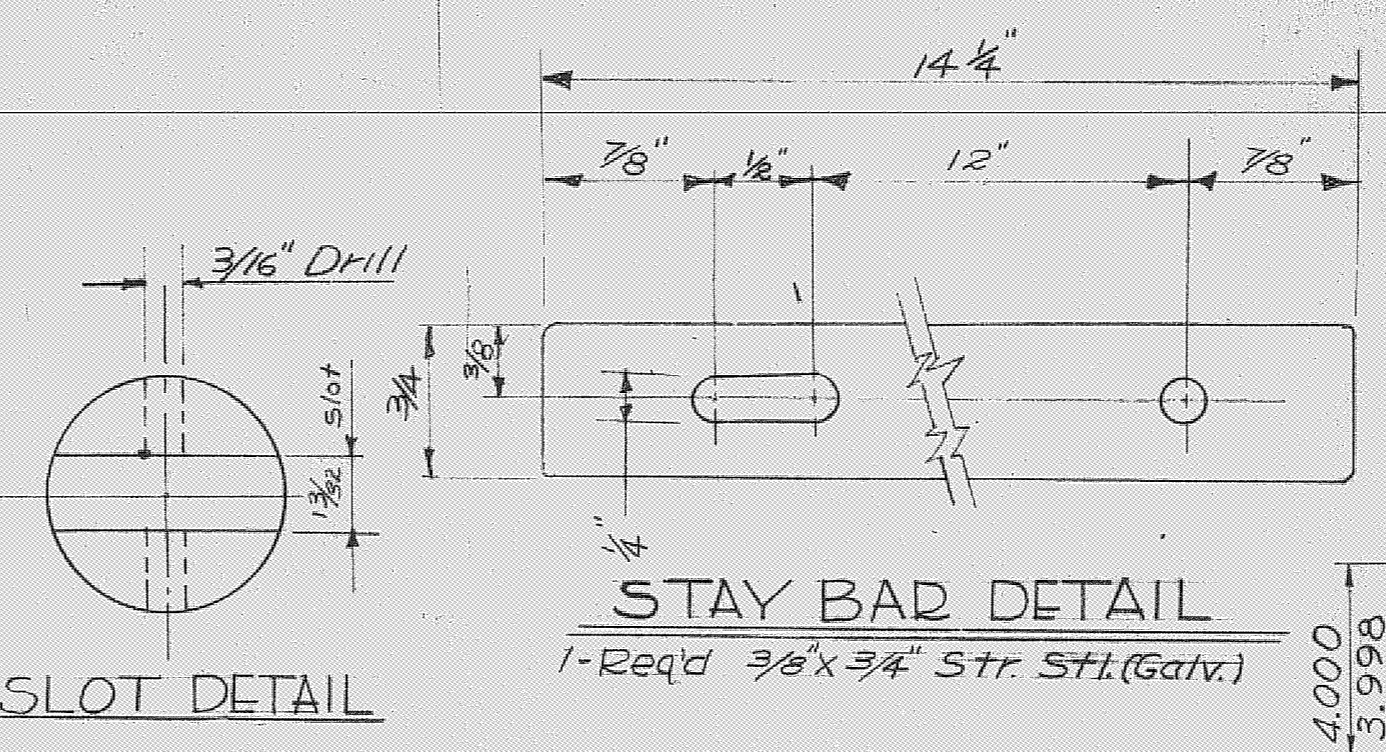
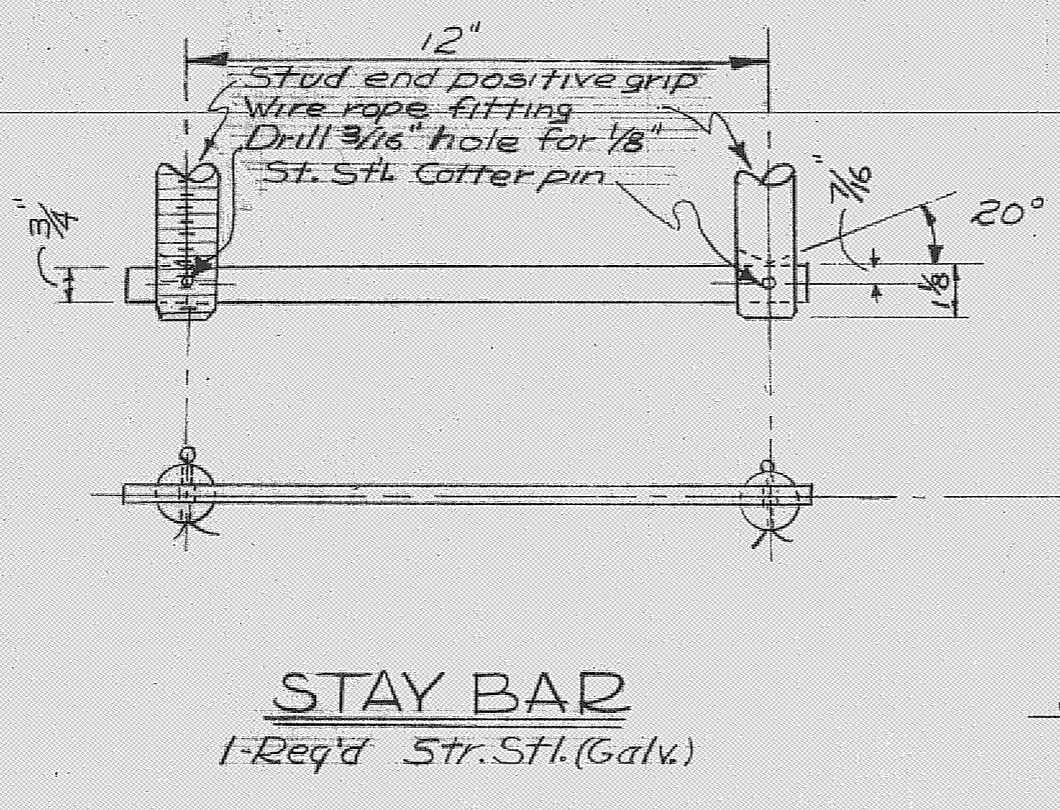
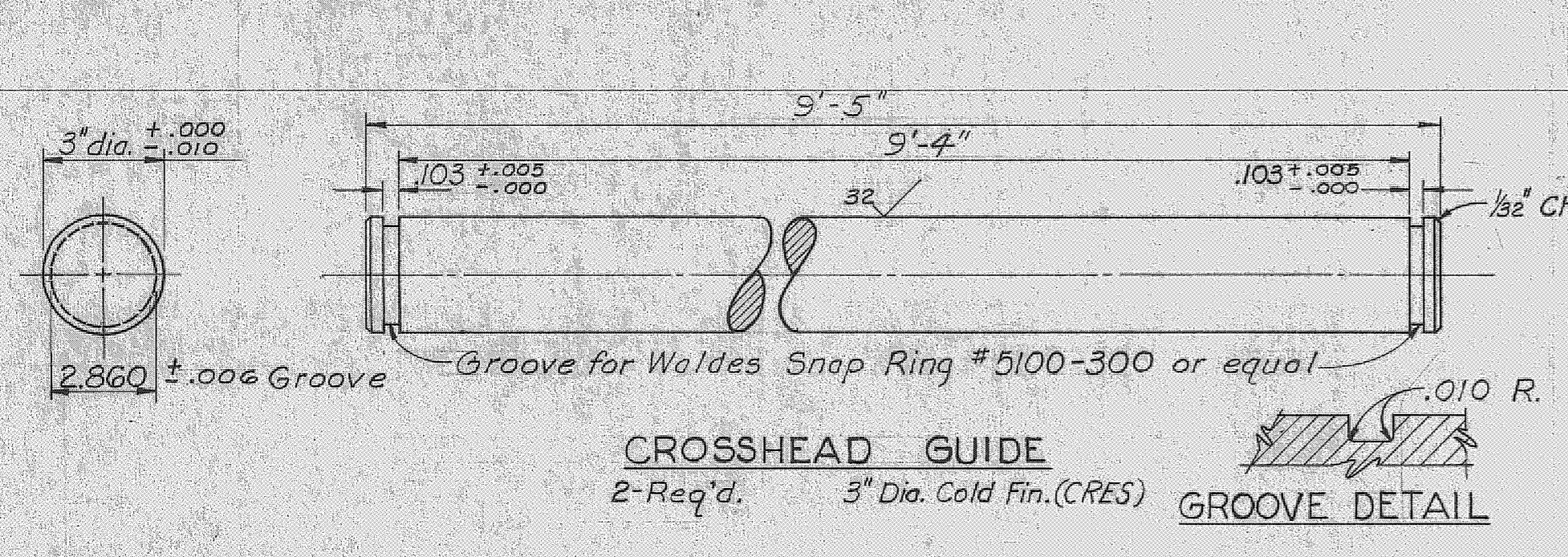
**AS BUILT**  
1. Quantities shown on this sheet are for one gate only.  
2. All taper pins & dowels to be installed at assembly.

NO.	SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS				
U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE CORPS OF ENGINEERS JACKSONVILLE, FLORIDA CENTRAL AND SOUTHERN FLORIDA PROJECT FOR FLOOD CONTROL AND OTHER PURPOSES CANAL 54, SECTION 2 STRUCTURE - 96				
GATE HOIST - ASSEMBLY				
INVESTIGATION NO. CIV. ENG. 08-123-66-00 DATE: 23 APRIL 1966 SCALE: AS SHOWN DATE: APRIL 1966 SHEET 46 OF 72				









Notes:  
1. Quantities shown on this sheet are for one gate hoist only.  
2. CRES - Corrosion resisting steel ASTM A276, Type 304.

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
REVISIONS					

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

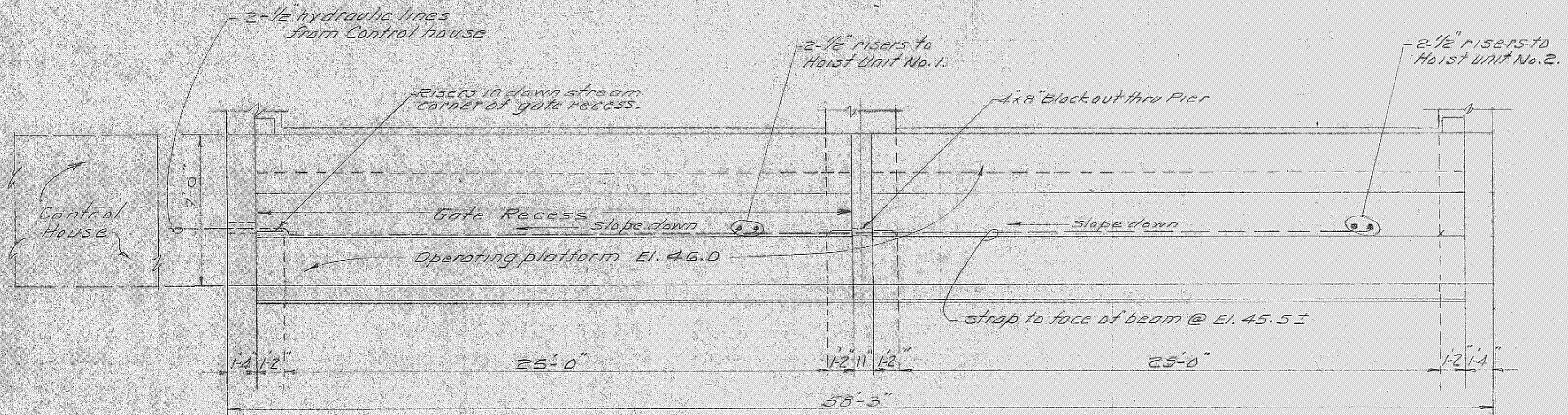
U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE  
CORPS OF ENGINEERS  
JACKSONVILLE, FLORIDA  
**CENTRAL AND SOUTHERN FLORIDA PROJECT**  
FOR FLOOD CONTROL AND OTHER PURPOSES  
CANAL 54, SECTION 2  
**STRUCTURE - 96**  
GATE HOIST - DETAILS NO. 2  
INVIATION NO. CIV. ENG. 08-129-66-66  
DATE: 20 APRIL 1966  
SCALE: AS SHOWN DATE: APRIL 1966 SHEET 48 OF 74

**AS BUILT**



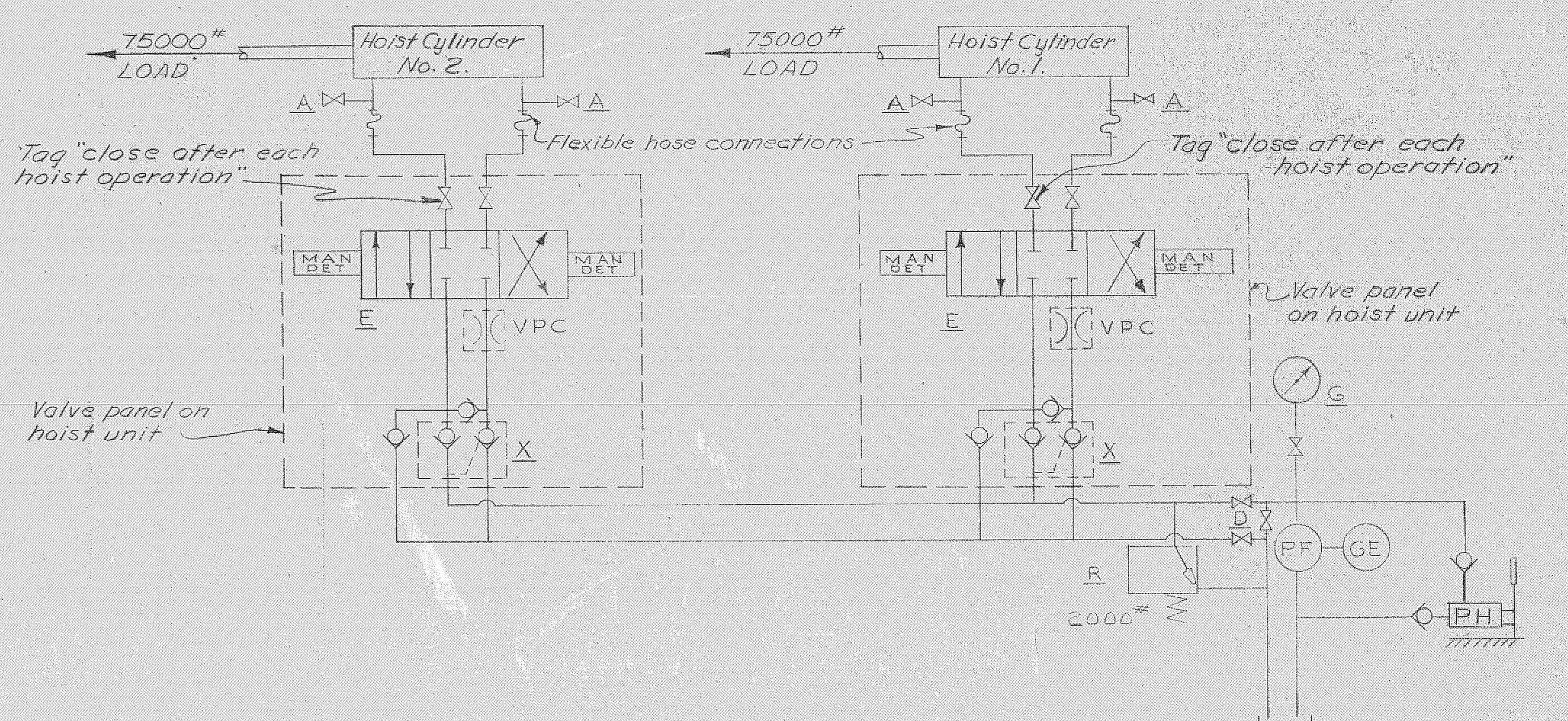
SAFETY ON THIS JOB  
DEPENDS ON YOU

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
4	△		DELETED FUEL OIL TANK, REVISED HOIST HYDRAULIC SYSTEM, TO ACCOMMODATE AMENDMENT NO. 1	5-12-66	△



PLAN  
HYDRAULIC PIPING AT SPILLWAY  
SCALE 1/4" = 1'-0"

Notes:  
1. Hydraulic lines to be supported at not more than 4'-0" intervals using galv. or corrosion resisting straps & fasteners.  
2. All piping 1/2" stainless steel tubing 0.035" wall.



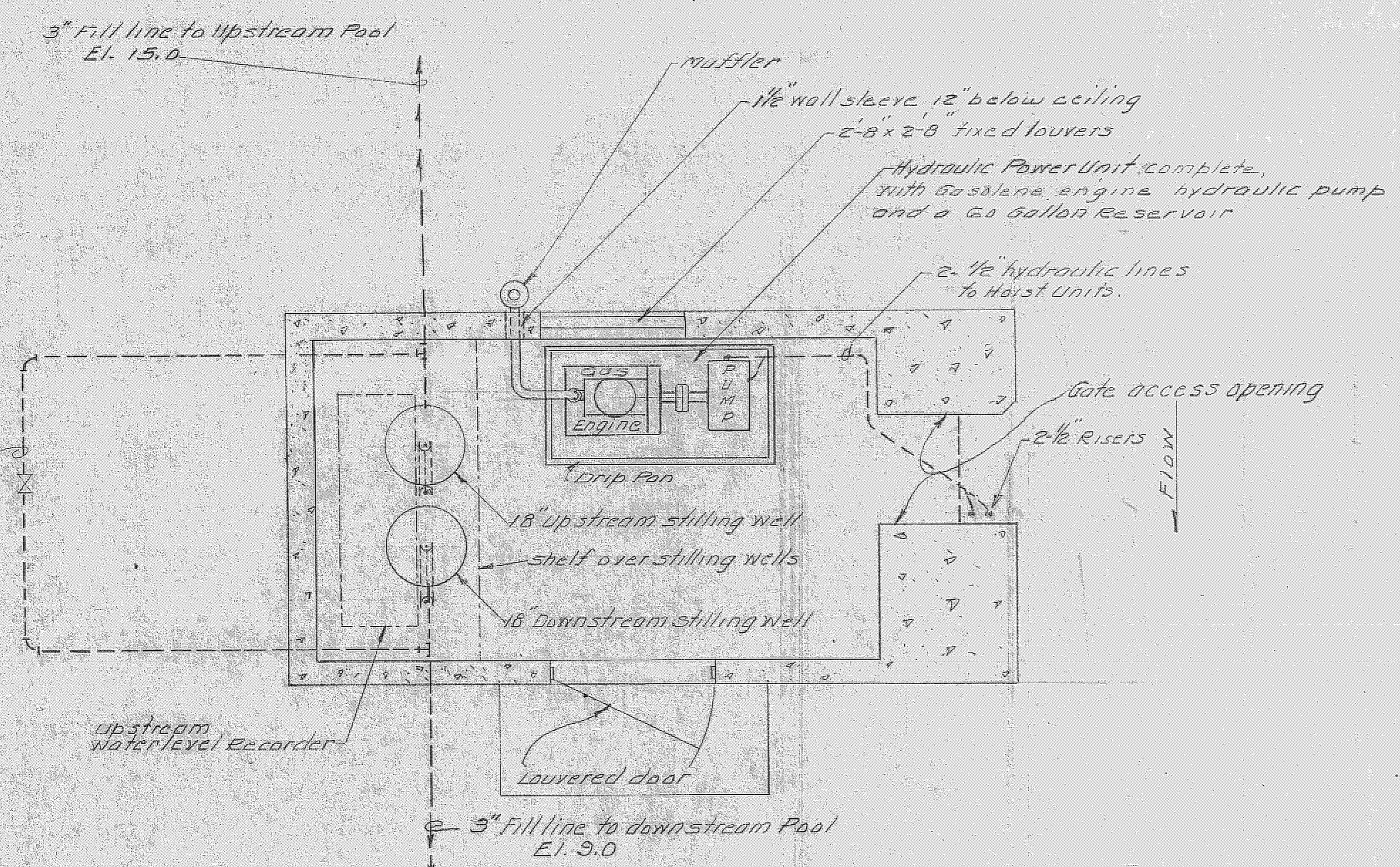
LEGEND

- 1. - HYDRAULIC HOIST CYLINDER; 10" BORE, 72" STROKE, 4 1/2" DIA. ROD.
- 2. - HOIST (GATE) SPEED; 6"/MIN.
- 3. - ALL PIPE STAINLESS STEEL TUBING, 0.035" WALL.
- A - AIR BLEEDER VALVE.
- GE - GASOLINE ENGINE.
- PF - HYDRAULIC PUMP, 0.8 GAL./MIN. @ 2000 P.S.I.
- PH - HAND PUMP.
- E - MULTI-PORT DIRECTION CONTROL VALVE MANUAL DETENT.
- VPC - FLOW CONTROL, PRESSURE COMPENSATED, MANUALLY ADJUSTABLE. (SET FOR 6"/MIN. GATE SPEED)
- G - PRESSURE GAGE 0 - 3000 P.S.I.
- R - RELIEF VALVE (SET AT 2000 P.S.I.)
- O - CHECK.
- D - UNLOADING VALVE.
- X - DOUBLE PILOT CHECK (LOCK VALVE) WATERMAN MODEL 271 OR EQUAL.

HOIST HYDRAULIC SYSTEM

NOTES:

1. WHERE COMPONENTS ARE REFERRED TO A SPECIFIC MANUFACTURER'S NAME AND/OR MODEL NUMBER, THE WORDS "OR APPROVED EQUAL" SHALL BE UNDERSTOOD TO APPLY.
2. DRAIN LINES TO COMPONENTS REQUIRING SAME SHALL BE PROVIDED ALTHOUGH NOT SHOWN.
3. AIR BLEEDING VALVES SHALL BE PROVIDED AT ALL HIGH POINTS OF SYSTEM.



CONTROL HOUSE PLAN  
SCALE 1/2" = 1'-0"

RECORD DRAWING NOTE

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

AS BUILT

U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE  
CORPS OF ENGINEERS  
JACKSONVILLE, FLORIDA  
CENTRAL AND SOUTHERN FLORIDA PROJECT  
FOR FLOOD CONTROL AND OTHER PURPOSES  
CANAL 54, SECTION 2  
STRUCTURE - 96  
CONTROL HOUSE AND HYDRAULIC PIPING

DESIGNED BY H.H.	DRAWN BY H.S.	CHECKED BY H.S.	DATE 28 APRIL 1966	SCALE AS SHOWN	DATE APRIL 1966	SHEET 49 OF 72
---------------------	------------------	--------------------	-----------------------	-------------------	--------------------	-------------------

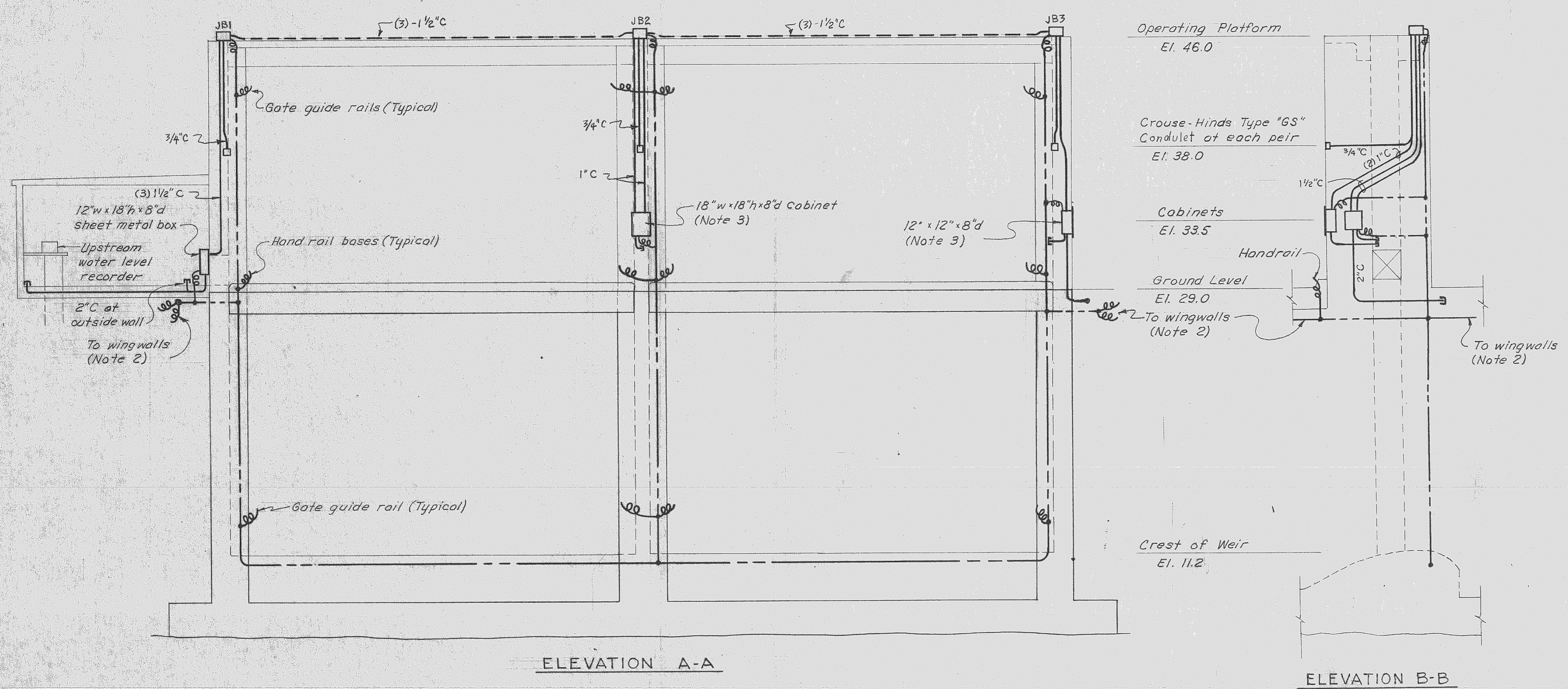
D. O. FILE NO. 496-29,370 496-30,952



REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED

**NOTES**

- A GALVANIZED RIGID STEEL CONDUIT SYSTEM SHALL BE INSTALLED AS SHOWN TO PROVIDE FOR FUTURE ELECTRICAL OPERATION. INSTALL ONE NO. 12 BNG GALVANIZED IRON WIRE IN EACH CONDUIT RUN EXCEEDING 25 FEET.
- AT EACH WINGWALL, BOND THE INDIVIDUAL SHEET STEEL PILES TOGETHER BY SPOT WELDING A CONTINUOUS 1/2" REINFORCING ROD TO EACH PILE JUST BELOW THE CONCRETE CAP. EXOTHERMIC WELD OR BOLT AND THEN BRAZE A AWG#1 GROUND WIRE TO EACH WINGWALL.
- FLUSH MOUNTED CABINETS SHALL BE INSTALLED ON THE CENTER PIER AND THE NORTH ABUTMENT PIER AS SHOWN. THE CABINETS SHALL HAVE GALVANIZED CAST IRON BOX, TRIM AND HINGED DOORS, CONDUIT BOSSES AND NO EXPOSED MOUNTING SCREWS. THEY SHALL BE SIMILAR TO TYPE H8200 SERIES CABINETS AS MANUFACTURED BY HOPE ELECTRICAL PRODUCTS, CO., HILLSIDE, N.J. AND HEAVY DUTY HASPS SHALL BE PROVIDED FOR PADLOCKING.

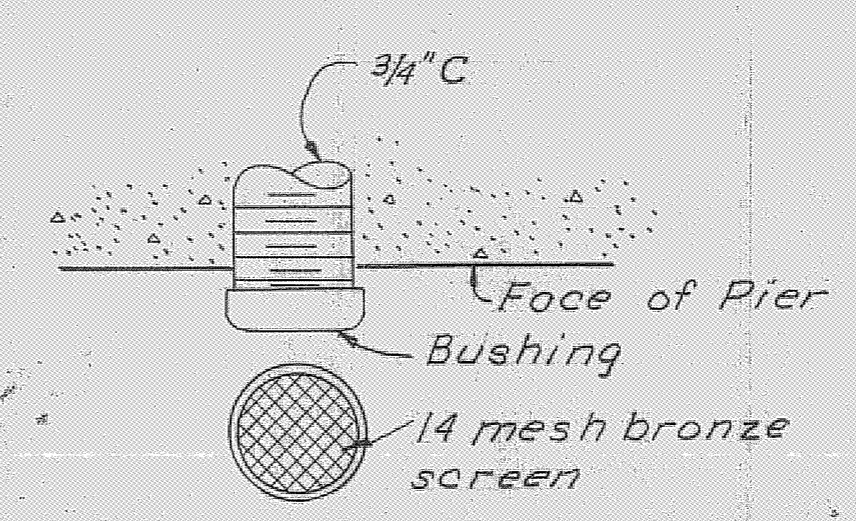
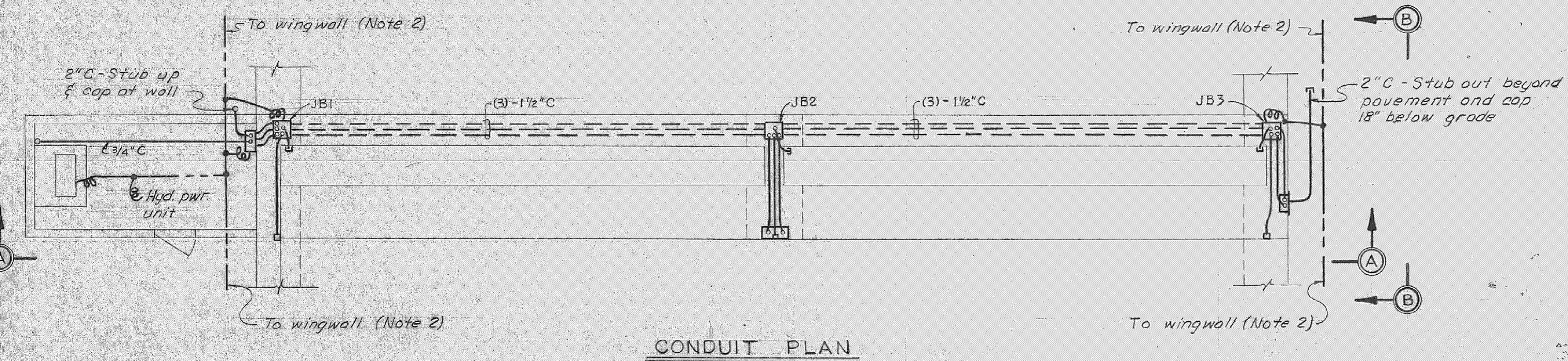


**SYMBOL LIST**

- CONDUIT - EXPOSED
- CONDUIT - CONCEALED
- GROUND WIRE - AWG#1
- ⊕ EQUIPMENT GROUND CONNECTION

SCHEDULE "A" JUNCTION BOXES				
DRILL	JB1	JB2	JB3	DRILL TEMPLATE
A	1 1/2" C	BLANK	BLANK	
B	1 1/2" C	BLANK	BLANK	
C	1 1/2" C	1" C	BLANK	
D	BLANK	BLANK	BLANK	
E	3/4" DRAIN	3/4" DRAIN	3/4" DRAIN	
F	3/4" C	3/4" C	3/4" C	
G	BLANK	BLANK	BLANK	
H	BLANK	BLANK	1 1/2" C	
I	BLANK	1" C	1 1/2" C	
J	1" PLUG	1 1/2" C	1 1/2" C	
K	BLANK	1 1/2" C	1 1/2" C	
L	BLANK	1 1/2" C	1 1/2" C	
M	1 1/2" C	1 1/2" C	BLANK	
N	1 1/2" C	1 1/2" C	BLANK	
O	1 1/2" C	1 1/2" C	BLANK	
P	1" PLUG	1" PLUG	1" PLUG	
Q	1" PLUG	1" PLUG	1" PLUG	
R	1" PLUG	1" PLUG	1" PLUG	

DRILL A-1: PROVIDE SLIP FIT AS NOTED  
 J-R: PROVIDE CONDUIT BOSSES-MINIMUM 5 FULL THREADS  
 J-L: PROVIDE CONDUIT EXPANSION FITTING-OZ TYPE "EX"  
 JUNCTION BOXES SHALL BE MOUNTED ON NOT LESS THAN 1/2" MASTIC.  
 JUNCTION BOXES SHALL BE SIMILAR TO OZ TYPE "YH"  
 FOR DRAIN, SEE DETAIL "A"



Drains shall be provided for junction boxes and cabinets on the spillway structure.

**RECORD DRAWING NOTE**

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

**AS BUILT**  
 U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE  
 CORPS OF ENGINEERS  
 JACKSONVILLE, FLORIDA  
 CENTRAL AND SOUTHERN FLORIDA PROJECT  
 FOR FLOOD CONTROL AND OTHER PURPOSES  
 CANAL 54, SECTION 2  
**STRUCTURE 96**  
 ELECTRICAL-CONDUIT PLAN

DRW. BY H.H. BMI	INV. NO. CIV. ENG. 08-123-66-66	SIZE F	DWG. NO.
CHK. BY J.S.	DATED: 25 APRIL 1966	SCALE: NONE	SHEET 50 OF 72
D. O. FILE NO. 496-29-370		496-30,952	

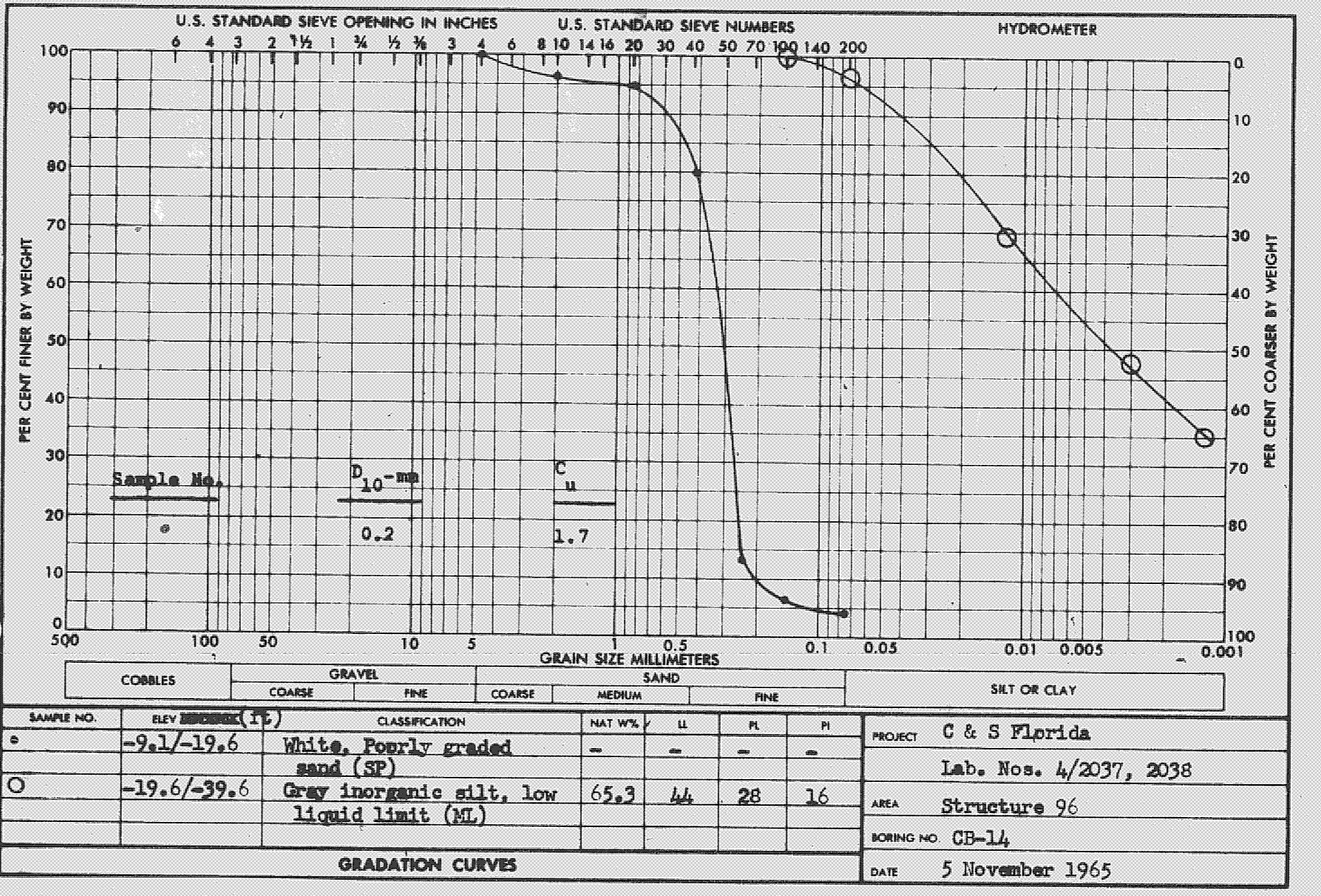
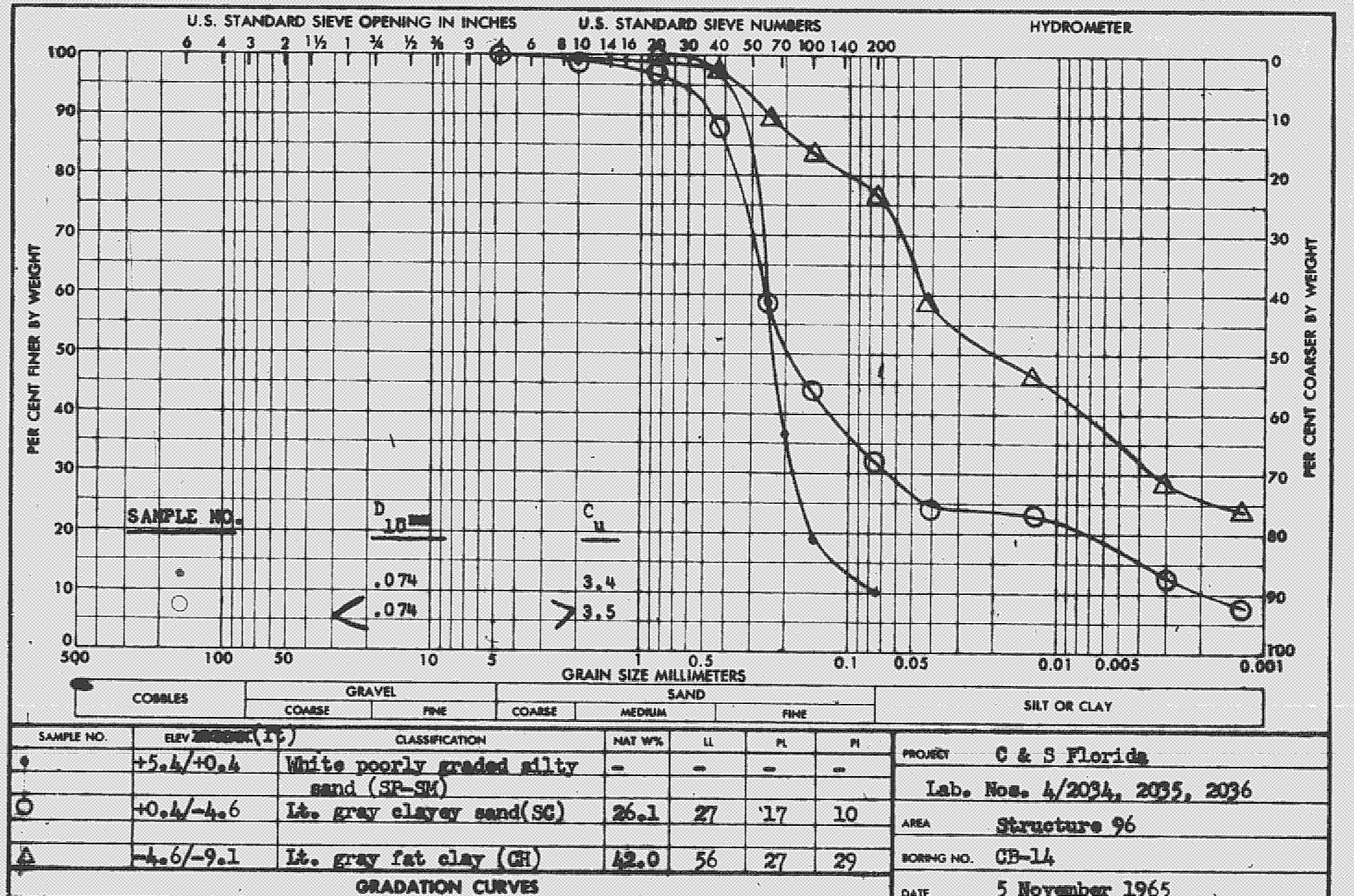
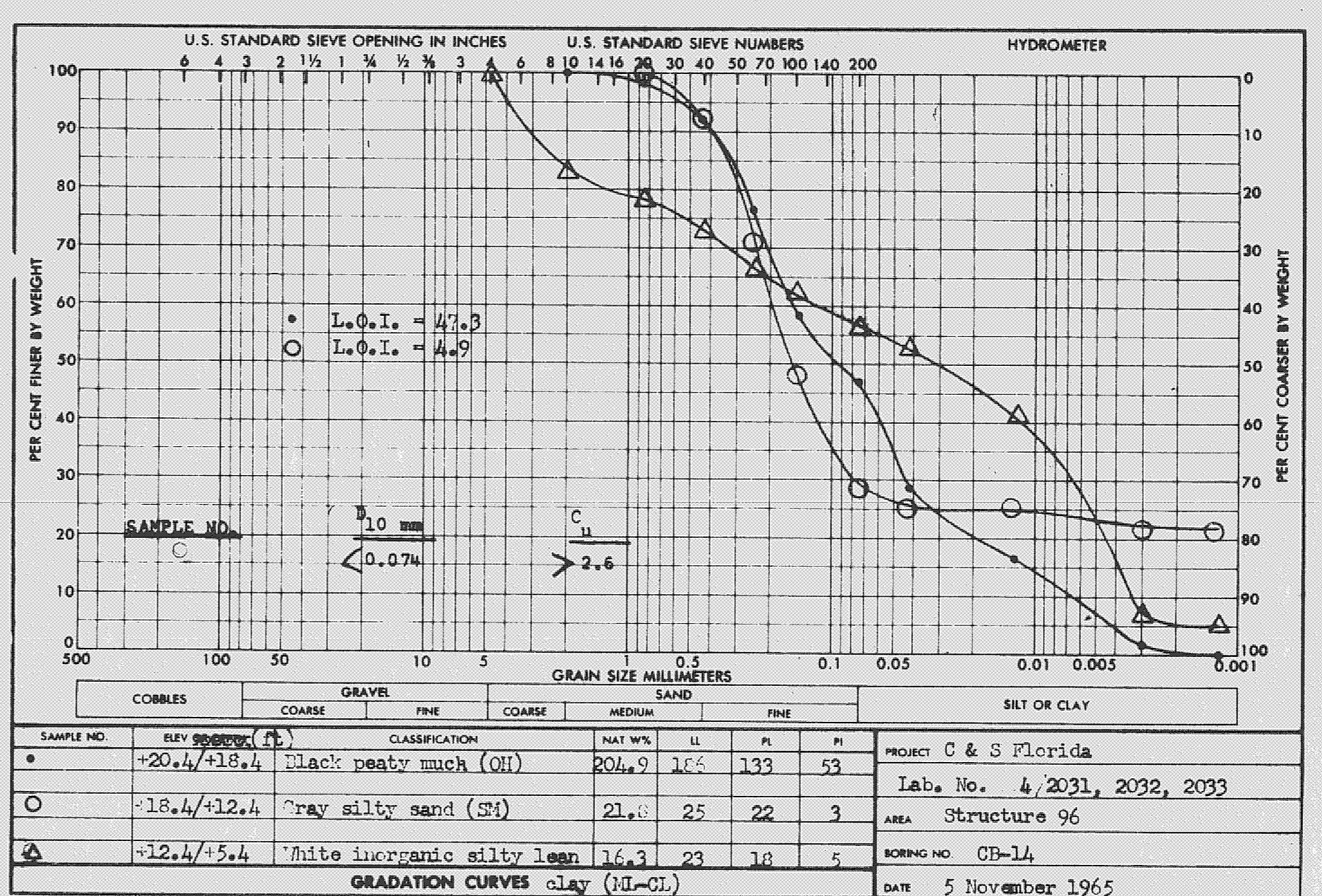


REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED

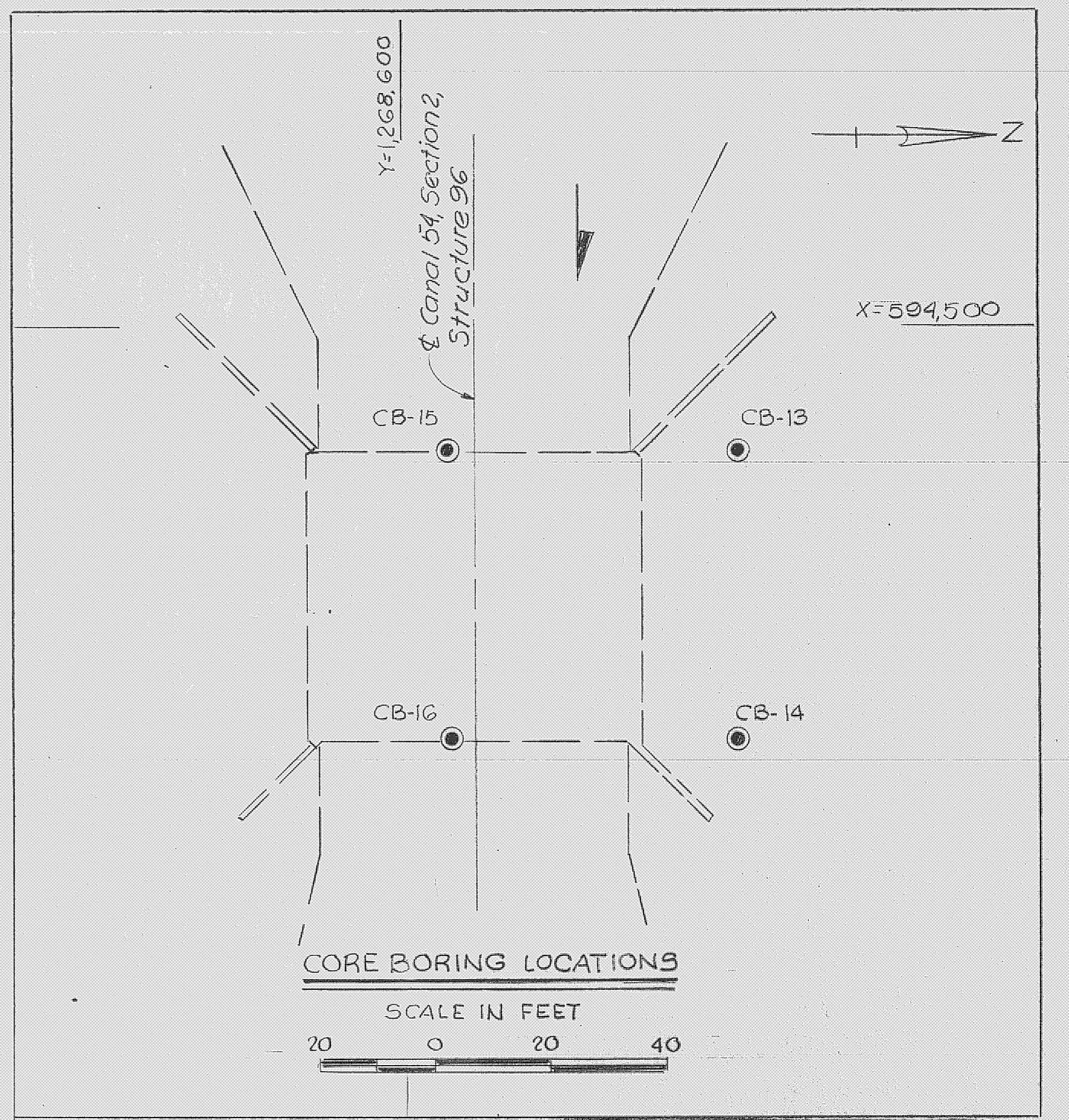
SAFETY ON THIS JOB  
DEPENDS ON YOU

Drilling Log for Hole No. CB-13, South Atlantic Division, Jacksonville District. Project: CASP Structure 96. Log details soil strata from 0.0 to 60.0 feet depth, including PRAT, CLAY, SILT, and SAND layers with associated test results and sample numbers.

Drilling Log for Hole No. CB-14, South Atlantic Division, Jacksonville District. Project: CASP Structure 96. Log details soil strata from 0.0 to 60.0 feet depth, including Peat, Sand, Silt, and Clay layers with associated test results and sample numbers.



- CORE BORING NOTES**
- BORING LOCATIONS ARE SHOWN ON THIS SHEET AND ON SHEET 31.
  - BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" I.D. SOLID SAMPLE SPOON 1 FT. THE SPOON IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT., WHERE POSSIBLE.
  - (SP), (SM) ETC., REFERS TO THE CORPS OF ENGINEERS UNIFIED SOILS CLASSIFICATION SYSTEM. CLASSIFICATION OF MATERIAL IS BASED ON VISUAL EXAMINATION AND LABORATORY TEST.
  - CORE SAMPLES TAKEN DURING THE BORING OPERATIONS ARE AVAILABLE FOR INSPECTION AT THE CORPS OF ENGINEERS DREDGE DEPOT IN JACKSONVILLE, FLA.
  - ORIGINAL BORING NOTES ARE AVAILABLE FOR INSPECTION AT THE JACKSONVILLE DISTRICT OFFICE.
  - GROUND WATER ELEVATIONS WERE OBSERVED ON THE COMPLETION DATES OF THE BORINGS AND ARE SUBJECT TO SEASONAL FLUCTUATIONS.
  - DN IS THE DIAMETER IN MILLIMETERS SUCH THAT THE AGGREGATE WEIGHT OF ALL SMALLER GRAINS IS N PERCENT OF THE TOTAL WEIGHT OF THE SAMPLE.
  - CU IS D60-D10.



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

**AS BUILT**  
U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE  
CORPS OF ENGINEERS  
JACKSONVILLE, FLORIDA

CENTRAL AND SOUTHERN FLORIDA PROJECT  
FOR FLOOD CONTROL AND OTHER PURPOSES  
CANAL 54, SECTION 2  
STRUCTURE 96  
LOG OF BORINGS

LOG NO. CIV. ENG. 08-123-66-66  
DATED: 28 APRIL 1966  
SCALE: AS SHOWN  
DATE: APRIL 1966  
SHEET 51 OF 72

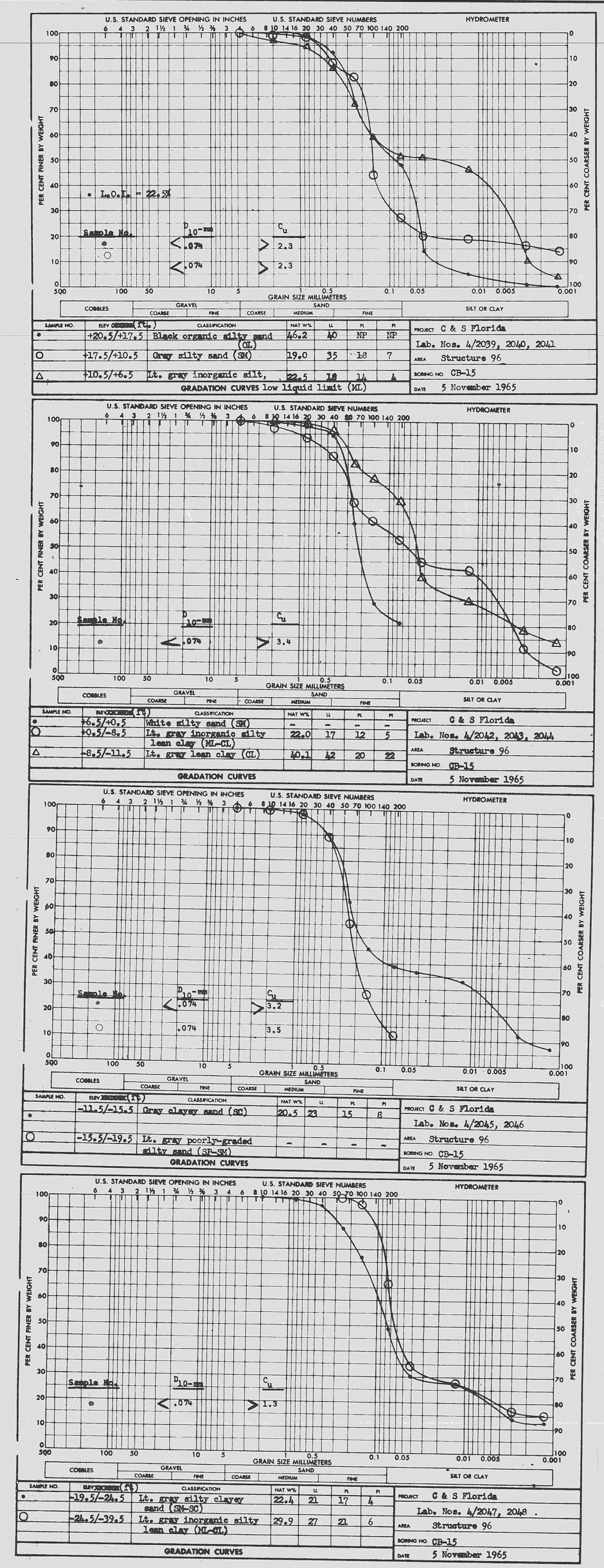
D. O. FILE NO. 496-22-270 496-30,952 82 103



REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED

SAFETY ON THIS JOB  
DEPENDS ON YOU

DRILLING LOG		Hole No. CB-15				
1. PROJECT C&S Structure 96		2. LOCATION (Coordinates or Station) South Atlantic				
3. DRILLING AGENCY Corps of Engineers		4. HOLE NO. (As shown on drawing and file number) CB-15				
5. NAME OF DRILLER B. Starling		6. DIRECTION OF HOLE VERTICAL				
7. THICKNESS OF OVERBURDEN		8. DEPTH DRILLED INTO ROCK				
9. TOTAL DEPTH OF HOLE 60.0'		10. SIZE AND TYPE OF BIT Falling 3 1/2"				
11. DATE FOR ELEVATION SHOWN (F.S.M. or N.E.L.) 3 Sep 65		12. MANUFACTURER'S DESIGNATION OF DRILL NSI				
13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		14. TOTAL NUMBER CORE BORES				
15. ELEVATION GROUND WATER +15.9		16. DATE HOLE STARTED 3 Sep 65				
17. ELEVATION TOP OF HOLE +20.5		18. TOTAL CORE RECOVERY FOR BORING 82%				
19. GEOLOGIST G. J. Kravak		20. DATE LOG MADE 3 Sep 65				
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	RECOVERY (%)	SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc. if applicable)
+20.5	0.0		SAND, medium to fine, quartz, black, organic, silty, (OL)	35	1	2" I.D. Spoon Settled
+17.5	3.0		SAND, medium to fine, quartz, gray silty, (SM)	40	2	" " " "
+10.5	10.0		SILT, sandy, shelly, light, green and white, calcareous (ML) low liquid limit, inorganic	80	3	" " " "
+6.5	14.0		SAND, fine, silty, white calcite (SM)	100	4	" " " "
+0.5	20.0		SILT, sandy, slightly shelly, greenish-gray, inorganic, clayey, (ML-CL)	90	5	" " " "
-8.5	28.0		CLAY, slightly silty, green-gray (CL)	80	6	" " " "
-11.5	32.0		SAND, medium to fine, quartz, clayey, gray, (SC)	95	7	" " " "
-15.5	36.0		SAND, silty, gray medium to fine, (SP-SM)	85	8	" " " "
-19.5	40.0		SAND, fine, calcareous, gray, silty, clayey, shelly (SM-SC)	90	9	2" I.D. Spoon
-24.5	45.0		CLAY, silty, inorganic (ML-CL)	100	10	" " " "
-30.5	60.0		CLAY, silty, inorganic (ML-CL)	90	11	" " " "
				100	12	300# hammer with 18" drop used on 2" I.D. spoon.



DRILLING LOG		Hole No. CB-16				
1. PROJECT C&S Structure 96		2. LOCATION (Coordinates or Station) South Atlantic				
3. DRILLING AGENCY Corps of Engineers		4. HOLE NO. (As shown on drawing and file number) CB-16				
5. NAME OF DRILLER Dun Starling		6. DIRECTION OF HOLE VERTICAL				
7. THICKNESS OF OVERBURDEN		8. DEPTH DRILLED INTO ROCK				
9. TOTAL DEPTH OF HOLE 60.0'		10. SIZE AND TYPE OF BIT Falling 3 1/2"				
11. DATE FOR ELEVATION SHOWN (F.S.M. or N.E.L.) 9/2/65		12. MANUFACTURER'S DESIGNATION OF DRILL NSI				
13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		14. TOTAL NUMBER CORE BORES				
15. ELEVATION GROUND WATER +16.0		16. DATE HOLE STARTED 9/2/65				
17. ELEVATION TOP OF HOLE +20.0		18. TOTAL CORE RECOVERY FOR BORING 85%				
19. GEOLOGIST G. J. Kravak		20. DATE LOG MADE 9/2/65				
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	RECOVERY (%)	SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc. if applicable)
+20.0	0.0		PEAT & Other highly organic soils, black (PT)	50	1	2" I.D. Spoon
+16.5	3.5		CLAY, sandy, high plasticity gray to green, (CH)	68	2	Settled
+10.0	10.0		SILT, sandy, shelly, light green and white (ML)	90	3	Settled
+5.0	15.0		SAND, fine, slightly silty white, calcareous (SM)	72	4	Settled
0.0	20.0		SAND, silty, fine to medium, light green, calcareous (SM)	100	5	" " " "
-5.0	25.0		CLAY, high plasticity, green (CH)	100	6	" " " "
-10.0	30.0		SAND, shelly, slightly silty, fine to medium, greenish gray calcareous (SP)	80	7	" " " "
-15.0	35.0		SAND, silty, slightly clayey gray (SM)	90	8	" " " "
-25.0	45.0		CLAY, silty, dark gray, slight plasticity (CL)	75	9	2" I.D. Spoon
-30.0	50.0		CLAY, silty, high plasticity dark gray (CH)	100	11	" " " "
-40.0	60.0			100	12	300# hammer with 18" drop used on 2" I.D. Spoon.

NOTE:  
CORE BORING NOTES SHOWN ON SHEET 51.

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

**AS BUILT**

U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE  
CORPS OF ENGINEERS  
JACKSONVILLE, FLORIDA  
CENTRAL AND SOUTHERN FLORIDA PROJECT  
FOR FLOOD CONTROL AND OTHER PURPOSES  
CANAL 54, SECTION 2  
STRUCTURE 96  
LOG OF BORINGS

DWN. BY: E.A.P.  
CHK. BY: A.S.P.  
DATE: 28 APR 1968  
SCALE AS SHOWN  
DATED: APR 1968  
SHEET 52 OF 72