

CITY OF CHATTANOOGA, TENNESSEE

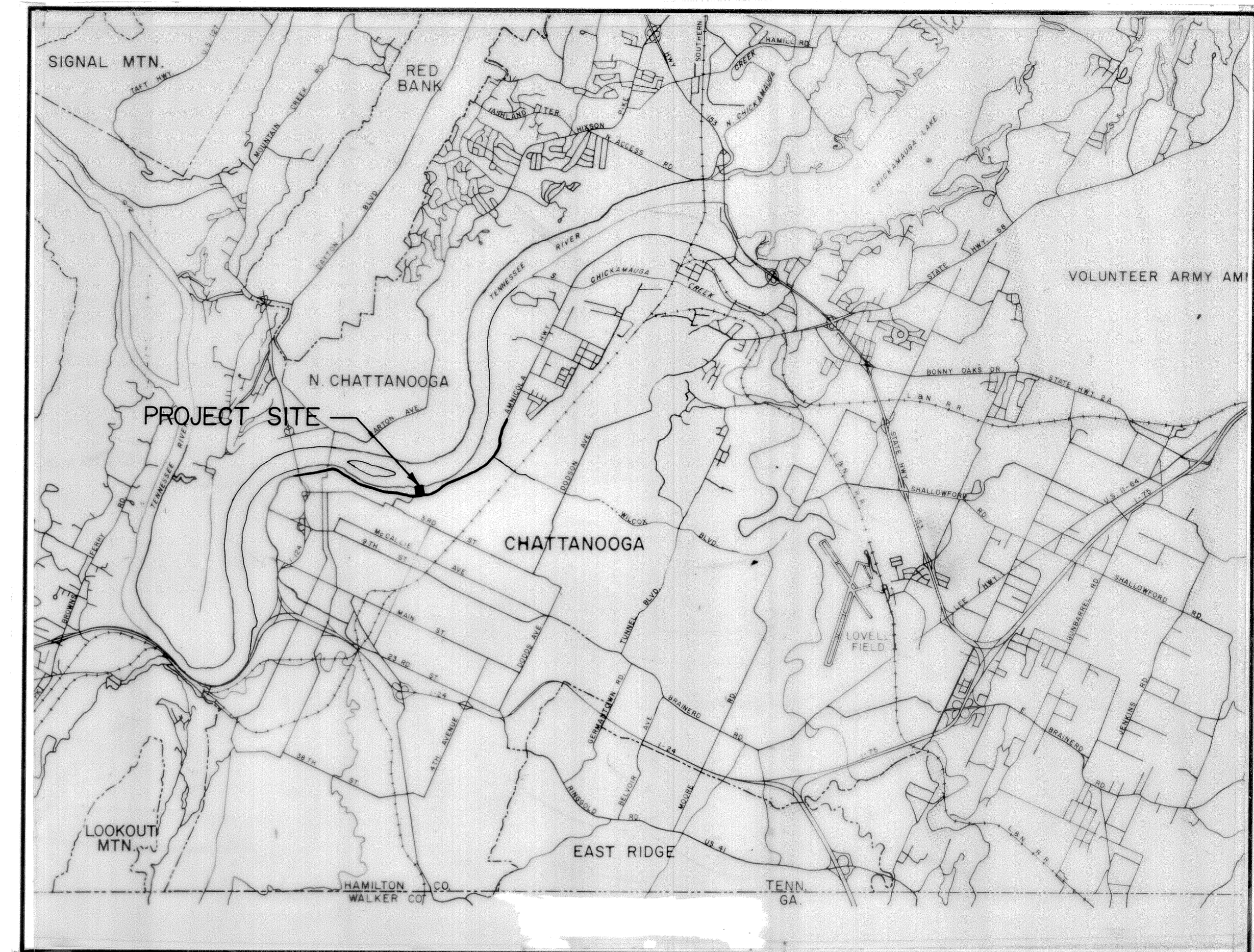
CITICO II PUMPING STATION

CONTRACT NO. 37C

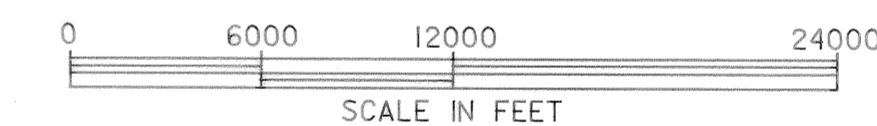
INDEX

<u>Civil</u>	
Site Plan	6685-37C-C-1
Site Plan Details	6685-37C-C-2
Sewer Details (1 of 3)	6685-37C-C-3
Sewer Details (2 of 3)	6685-37C-C-4
Sewer Details (3 of 3)	6685-37C-C-5
Site Plan Piping Details	6685-37C-C-6
<u>Landscape</u>	
Landscape Plan	6685-37C-L-1
<u>Mechanical</u>	
Plan Elevation 665	6685-37C-M-1
Plan Elevation 640	6685-37C-M-2
Plan Elevation 618.75	6685-37C-M-3
Section A	6685-37C-M-4
Section B	6685-37C-M-5
Sections C and D	6685-37C-M-6
Miscellaneous Mechanical Details	6685-37C-M-7
<u>Architectural</u>	
Plan Elevation 665	6685-37C-A-1
Building Elevations	6685-37C-A-2
<u>Structural</u>	
Plan Elevation 665	6685-37C-S-1
Plan Elevation 640	6685-37C-S-2
Plan Elevation 618.75	6685-37C-S-3
Roof Framing Plan	6685-37C-S-4
Partial Plans and Details	6685-37C-S-5
Building Section	6685-37C-S-6
Sections and Details (1 of 2)	6685-37C-S-7
Sections and Details (2 of 2)	6685-37C-S-8
Stair Sections and Details	6685-37C-S-9
Recommended Excavation Method	6685-37C-S-10
<u>Electrical</u>	
Lighting and Receptacle Plan (Elevation 665)	6685-37C-E-1
Lighting and Receptacle Plans (Elevations 618.75 and 640.0)	6685-37C-E-2
Power Distribution Plan (Elevation 665)	6685-37C-E-3
Power Distribution Plans (Elevations 618.75 and 640.0)	6685-37C-E-4
Motor Control Center	6685-37C-E-5
System Control Panel	6685-37C-E-6
Motor Control Center - Single Line Diagram	6685-37C-E-7
Power Distribution Panel and Diagram	6685-37C-E-8
Control Diagrams (1 of 2)	6685-37C-E-9
Control Diagrams (2 of 2)	6685-37C-E-10
Telemetry	6685-37C-E-11
Symbols	6685-37C-E-12

AS BUILTS 3-17-92



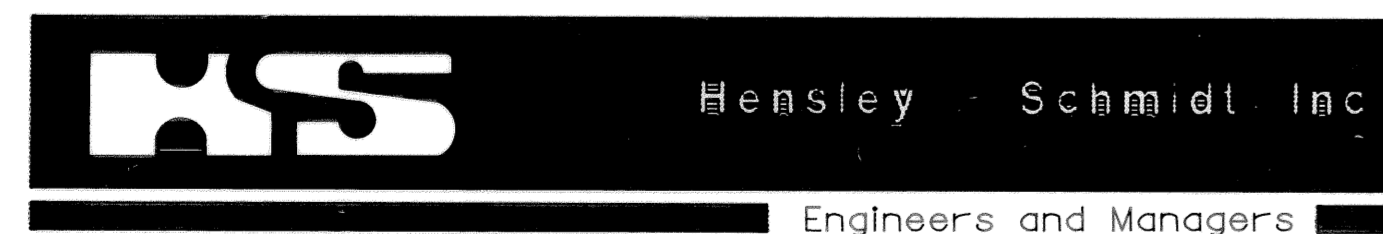
LOCATION MAP



BOARD OF COMMISSIONERS

- GENE ROBERTS
MAYOR
- JOHN P. FRANKLIN
VICE MAYOR
- RON LITTLEFIELD
COMMISSIONER
- CHARLES A. ROSE
COMMISSIONER
- L.T. (TOM) KENNEDY
COMMISSIONER

PREPARED BY :



A member of The SNC Group

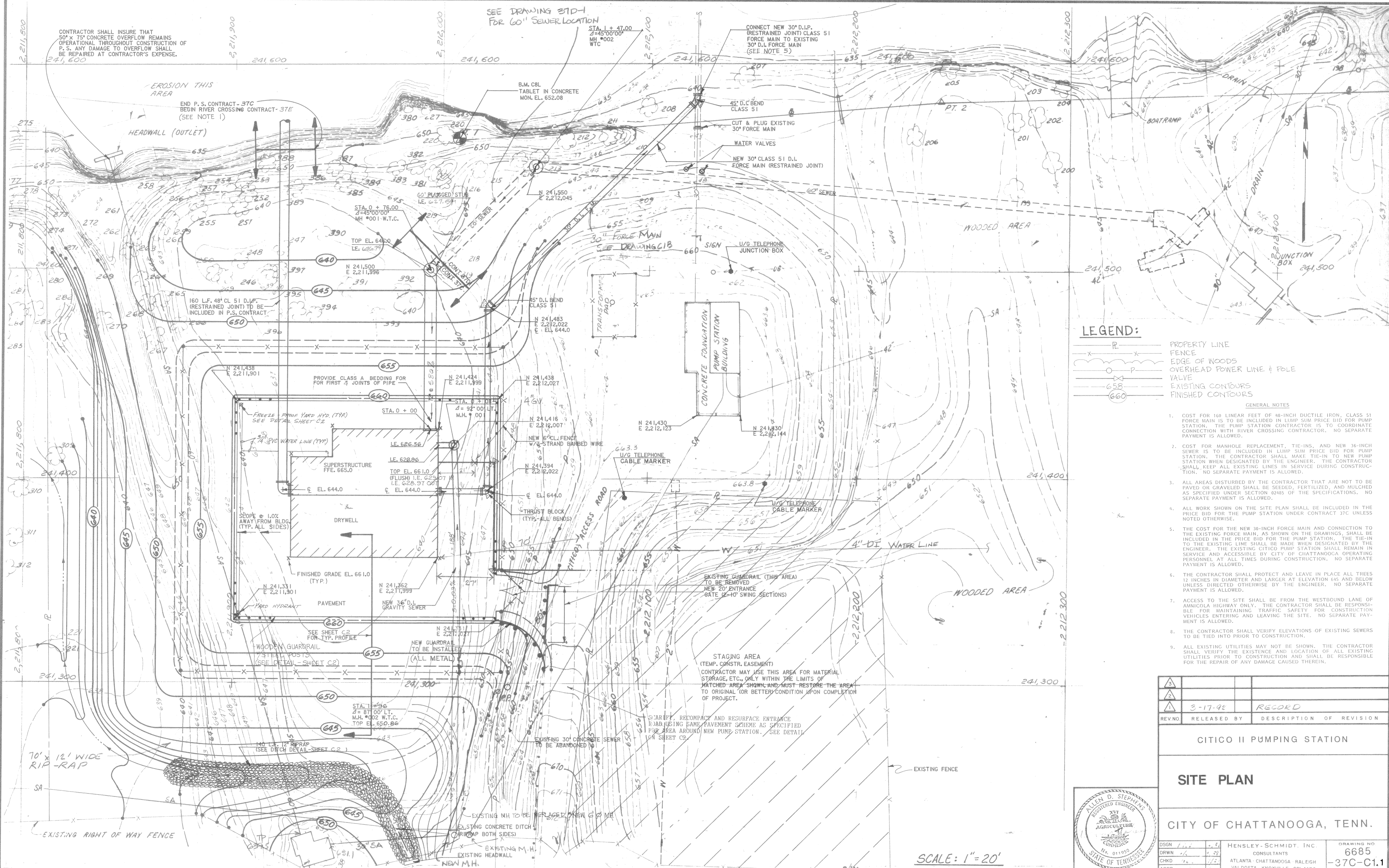
CHATTANOOGA, TENNESSEE

ATLANTA, GEORGIA

Allen D. Stephens
ALLEN D. STEPHENS, P.E.
TENNESSEE LICENSE NO. 11950



8-24-89
DATE



LEGEND:

- PROPERTY LINE
- FENCE
- EDGE OF WOODS
- OVERHEAD POWER LINE & POLE
- VALVE
- EXISTING CONTOURS
- FINISHED CONTOURS

- GENERAL NOTES
- COST FOR 160 LINEAR FEET OF 48-INCH DUCTILE IRON, CLASS 51 FORCE MAIN IS TO BE INCLUDED IN LUMP SUM PRICE BID FOR PUMP STATION. THE PUMP STATION CONTRACTOR IS TO COORDINATE CONNECTION WITH RIVER CROSSING CONTRACTOR. NO SEPARATE PAYMENT IS ALLOWED.
 - COST FOR MANHOLE REPLACEMENT, TIE-INS, AND NEW 36-INCH SEWER IS TO BE INCLUDED IN LUMP SUM PRICE BID FOR PUMP STATION. THE CONTRACTOR SHALL MAKE TIE-IN TO NEW PUMP STATION WHEN DESIGNATED BY THE ENGINEER. THE CONTRACTOR SHALL KEEP ALL EXISTING LINES IN SERVICE DURING CONSTRUCTION. NO SEPARATE PAYMENT IS ALLOWED.
 - ALL AREAS DISTURBED BY THE CONTRACTOR THAT ARE NOT TO BE PAVED OR GRAVELED SHALL BE SEED, FERTILIZED, AND MULCHED AS SPECIFIED UNDER SECTION 02485 OF THE SPECIFICATIONS. NO SEPARATE PAYMENT IS ALLOWED.
 - ALL WORK SHOWN ON THE SITE PLAN SHALL BE INCLUDED IN THE PRICE BID FOR THE PUMP STATION UNDER CONTRACT 37C UNLESS NOTED OTHERWISE.
 - THE COST FOR THE NEW 30-INCH FORCE MAIN AND CONNECTION TO THE EXISTING FORCE MAIN, AS SHOWN ON THE DRAWINGS, SHALL BE INCLUDED IN THE PRICE BID FOR THE PUMP STATION. THE TIE-IN TO THE EXISTING LINE SHALL BE MADE WHEN DESIGNATED BY THE ENGINEER. THE EXISTING CITICO PUMP STATION SHALL REMAIN IN SERVICE AND ACCESSIBLE BY CITY OF CHATTANOOGA OPERATING PERSONNEL AT ALL TIMES DURING CONSTRUCTION. NO SEPARATE PAYMENT IS ALLOWED.
 - THE CONTRACTOR SHALL PROTECT AND LEAVE IN PLACE ALL TREES 12 INCHES IN DIAMETER AND LARGER AT ELEVATION 646 AND BELOW UNLESS DIRECTED OTHERWISE BY THE ENGINEER. NO SEPARATE PAYMENT IS ALLOWED.
 - ACCESS TO THE SITE SHALL BE FROM THE WESTBOUND LANE OF AMNICOLA HIGHWAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SAFETY FOR CONSTRUCTION VEHICLES ENTERING AND LEAVING THE SITE. NO SEPARATE PAYMENT IS ALLOWED.
 - THE CONTRACTOR SHALL VERIFY ELEVATIONS OF EXISTING SEWERS TO BE TIED INTO PRIOR TO CONSTRUCTION.
 - ALL EXISTING UTILITIES MAY NOT BE SHOWN. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE CAUSED THEREIN.

3		
2		
1	3-17-92	RECORD
REV NO	RELEASED BY	DESCRIPTION OF REVISION

CITICO II PUMPING STATION

SITE PLAN

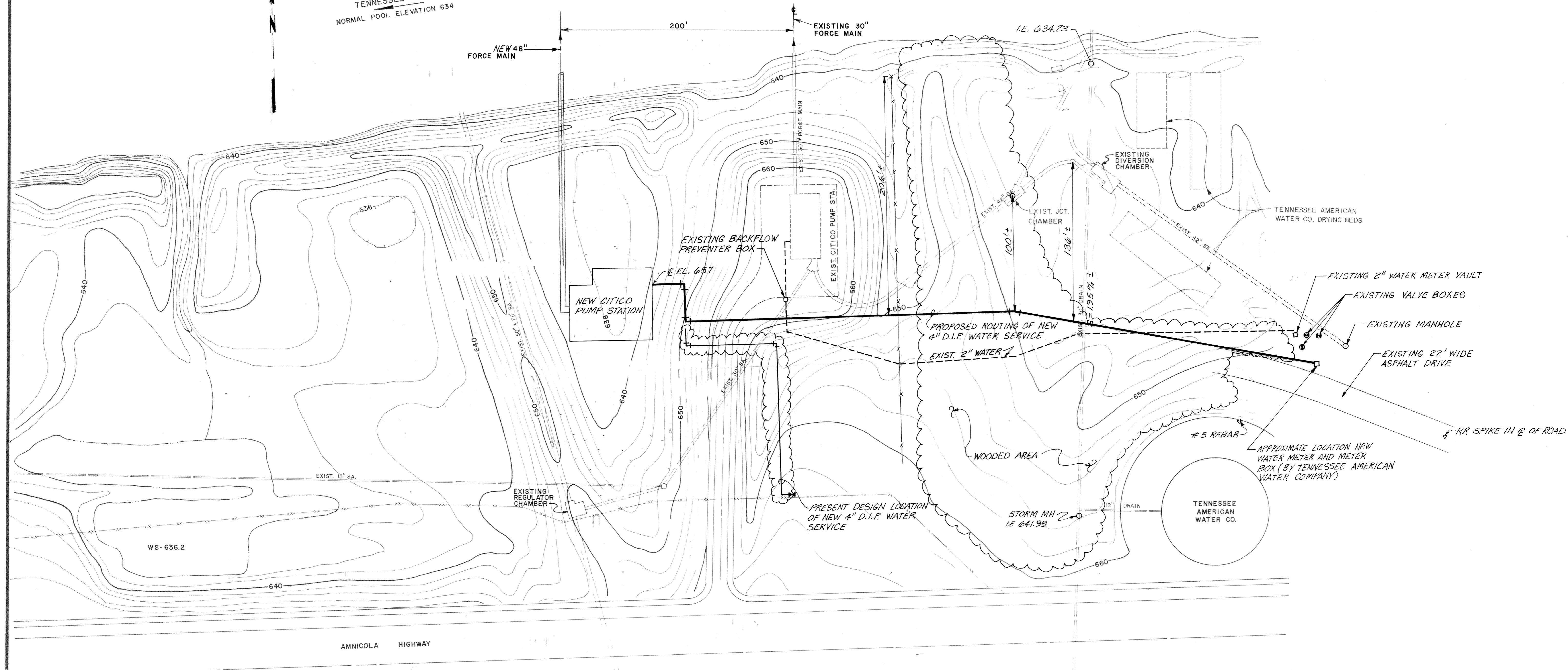
CITY OF CHATTANOOGA, TENN.



DSGN	1/12	03	HENSLEY-SCHMIDT, INC.	DRAWING NO	
DRWN	1/12	03	CONSULTANTS	6685	
CHKD	1/12	03	ATLANTA CHATTANOOGA RALEIGH	-37C-C1.1	
APPR	1/12	03	VALDOSTA KNOXVILLE ORLANDO		

SCALE: 1"=20'

NICKAJACK LAKE
 TENNESSEE RIVER
 NORMAL POOL ELEVATION 634



SITE PLAN
 SCALE: 1" = 40'

NOTES:

1. PRESENT DESIGN REQUIRES APPROXIMATELY 290 FEET OF NEW 4-INCH DUCTILE IRON PIPE, FOUR 90 DEGREE BENDS, ONE 4"X2" REDUCER, A 2"X2" TAPPING SLEEVE, AND 2-INCH GATE VALVE AND BOX.
2. THE PROPOSED REVISED ROUTING WILL REQUIRE APPROXIMATELY 600 FEET OF NEW 4-INCH DUCTILE IRON PIPE AND TWO 90 DEGREE BENDS.
3. TOTAL INCREASE OF APPROXIMATELY 310 FEET OF 4-INCH DUCTILE IRON PIPE WILL BE REQUIRED. TWO 90 DEGREE BENDS, THE 4"X2" REDUCER, THE 2"X2" TAPPING SLEEVE, AND 2-INCH GATE VALVE AND BOX WILL BE DELETED.
4. NEW WATER SHALL HAVE A MINIMUM OF 30 INCHES OF COVER EXCEPT IN ROADWAY WHERE 48 INCHES MINIMUM COVER SHALL BE PROVIDED.

3			
2			
1			
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION	
CITICO II PUMPING STATION			
SITE PLAN PROPOSED WATER SERVICE			
CITY OF CHATTANOOGA, TENNESSEE			
DSGN	A.D.S.	3/91	HENSLEY - SCHMIDT, INC.
DRWN	M.W.D.	3/91	CONSULTANTS
CHKD			ATLANTA - CHATTANOOGA - JACKSON
APPR			KNOXVILLE - NASHVILLE
			DRAWING NO. 6685-37C-CIA

BRUNING-44-132-32756-3

2,211,800
241,600

2,211,900

2,212,000

2,212,100

2,212,200

BEGIN RIVER CROSSING CONTRACT-37E
END P.S. CONTRACT-37C

STA. 0+76.00
Δ = 45°00'00"
MH #001 W.T.C.

TOP EL. 646.0
I.E. 626.79

N 241,394
E 2,212,022

N 241,394
E 2,212,022

N 241,394
E 2,212,022

N 241,394
E 2,212,022

N 241,394
E 2,212,022

N 241,394
E 2,212,022

N 241,362
E 2,211,999

N 241,550
E 2,212,045

45° D.I. BEND
(LOK-RING x MJ)
* @ EL. 639±
(SEE NOTE 4)

EXIST. 20" GATE
VALVE
SEE DETAILS A & B
& NOTES BELOW

EXIST. 30" GATE
VALVE

EXIST. 20" Ø
BY-PASS LINE
(ABANDONED)

45° D.I. BEND
CLASS 51

N 241,483
E 2,212,022
* @ EL. 643.0±

* PIPE JTS. SHALL BE DEFLECTED
AND 45° BENDS ROLLED AS
REQUIRED TO MATCH APPROX.
ELEVATIONS NOTED. CARE
SHALL BE TAKEN NOT TO
OVER DEFLECT LOK-RING JTS.
(MAX. 1° PER JT.)

N 241,430
E 2,212,123

N 241,430
E 2,212,144

N 241,394
E 2,212,022

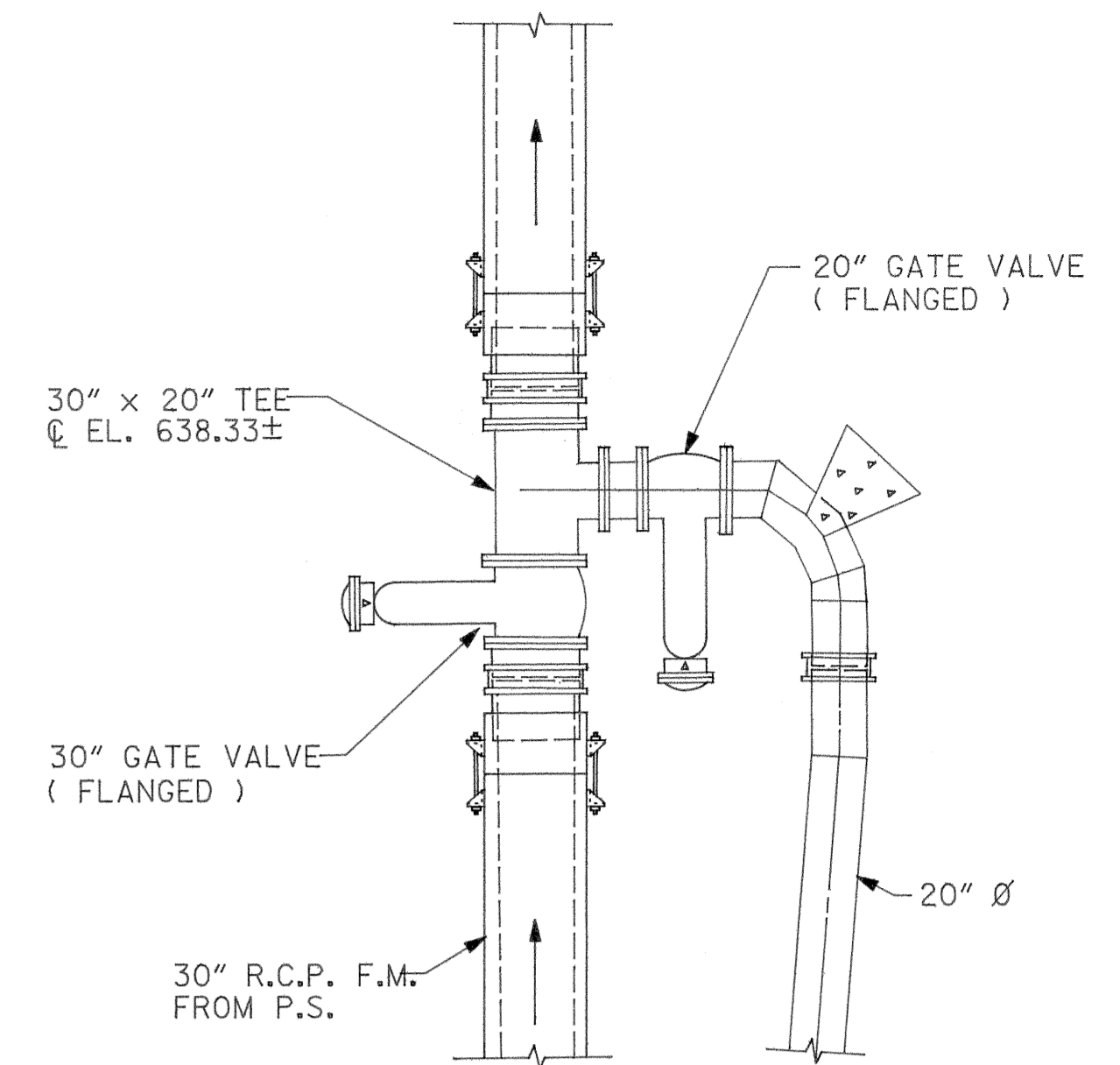
THRUST BLOCK
(TYP. - ALL BENDS)

@ EL. 644.0

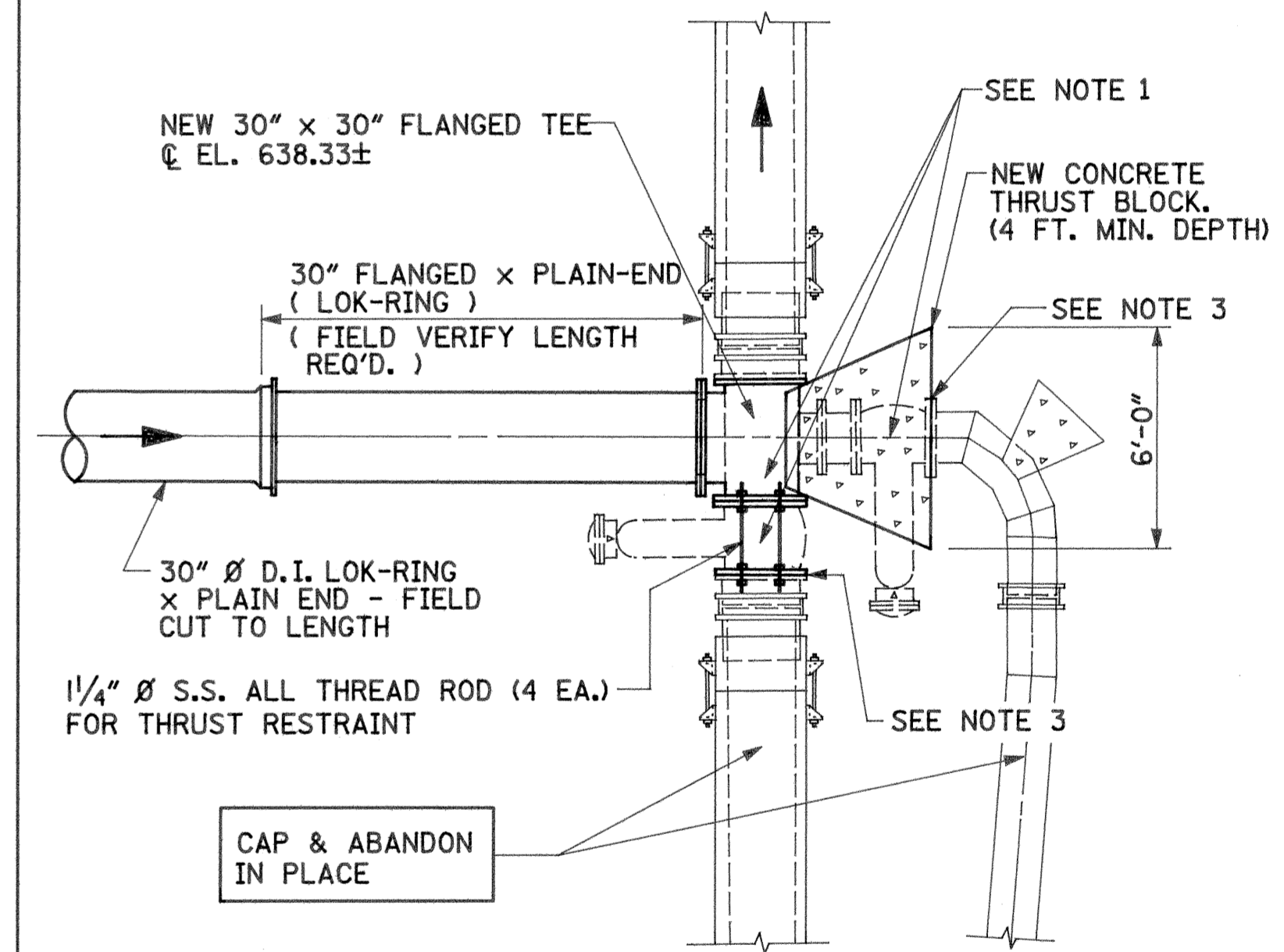
NOTES :

1. AFTER NEW PUMP STATION IS OPERATIONAL, ALL FLOW HAS BEEN DIVERTED TO NEW PUMP STATION, AND WHEN DIRECTED BY ENGINEER CONTRACTOR SHALL REMOVE EXISTING 20 INCH AND 30 INCH GATE VALVES AND 30" x 20" TEE. VALVES AND FITTINGS SHALL BE CLEANED WITH PRESSURE WASHER AND STORED BY CONTRACTOR ON SECOND FLOOR LEVEL OF OLD CITICO PUMP STATION .
2. A NEW 30" x 30" FLANGED TEE SHALL BE INSTALLED IN LOCATION OF 30" x 20" FLANGED TEE WITH BLIND FLANGE ON SOUTH END. INSTALL FOUR STAINLESS STEEL ALL THREAD RODS TO RESTRAIN SOUTH END OF NEW 30" TEE TO EXISTING 30" F.M. FROM OLD CITICO PUMP STATION .
3. INSTALL 1/4" THICK STEEL PLATES (EPOXY COATED) OVER ENDS OF ABANDONED PORTIONS OF 20" & 30" LINES .
4. AFTER CONTRACTOR FOR CONTRACT 37D1 HAS COMPLETED INSTALLATION OF 60" D.I. P. SEWER PAST THE EXISTING 30" Ø F.M. FROM OLD CITICO PUMP STATION , THE NEW 30 INCH D.I. P. F.M. MAY BE CONSTRUCTED UP TO THE 45° BEND (LOK-RING x M.J.) . UPON COMPLETION OF THE NEW 30 INCH F.M. TO THIS POINT THE LINE SHALL BE PLUGGED AND PRESSURE TESTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS .
5. UPON SUCCESSFUL COMPLETION OF PRESSURE TEST, AFTER NEW CITICO PUMP STATION IS OPERATIONAL, AFTER ALL FLOW HAS BEEN DIRECTED TO THE NEW PUMP STATION AND WHEN DIRECTED BY ENGINEER THE TIE-IN TO THE EXISTING 30 INCH FORCE MAIN MAY BE MADE .

SITE PIPING PLAN



DETAIL "A" (EXISTING)
NO SCALE



DETAIL "B" (PROPOSED)
NO SCALE

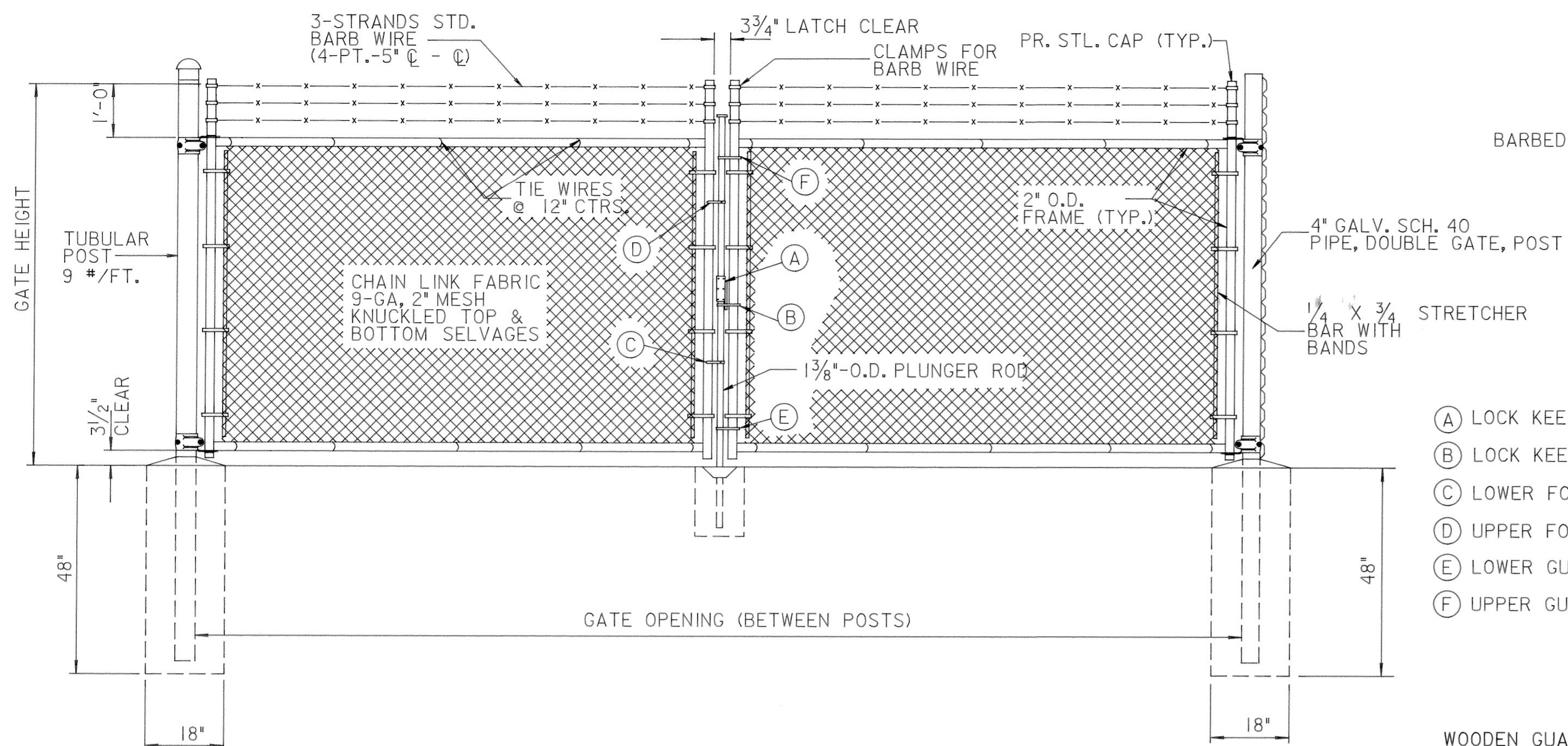
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
8-17-92	RECORD	

CITICO II PUMPING STATION

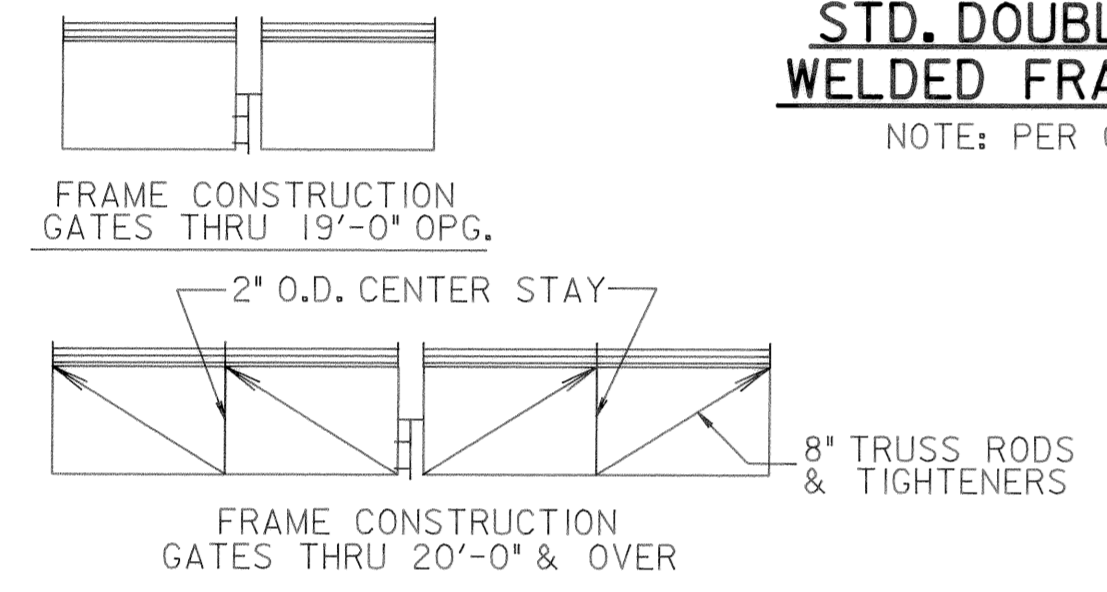
SITE PIPING PLAN

CITY OF CHATTANOOGA, TENN.

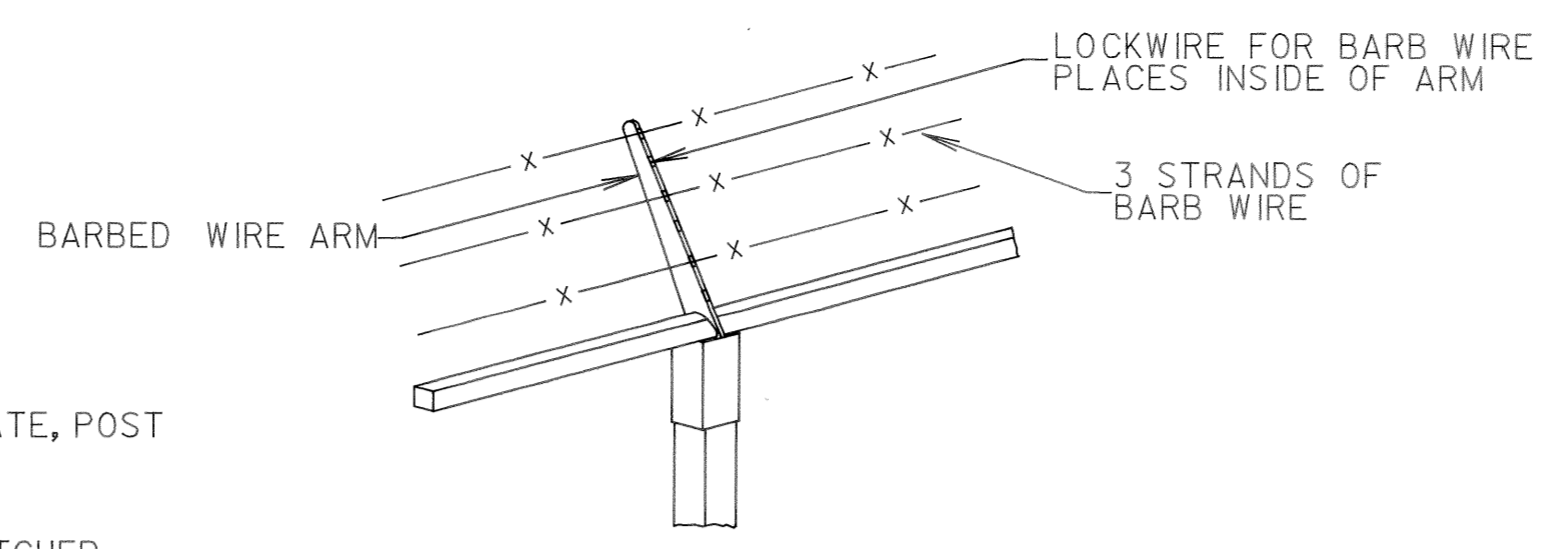
DSGN ADS	4/91	HENSLEY - SCHMIDT, INC. CONSULTANTS ATLANTA • CHATTANOOGA RALEIGH	DRAWING NO. 6685 37C-C1B.1
DRWN CADD/RW	4/91		
CHKD ADS	4/91		
APPR ADS	4/91		



**SITE FENCING DETAIL
STD. DOUBLE SWING GATES WITH
WELDED FRAMES INVINCIBLE STYLE**
NOTE: PER C.E. LUMMUS SPEC. 3116-AH-211

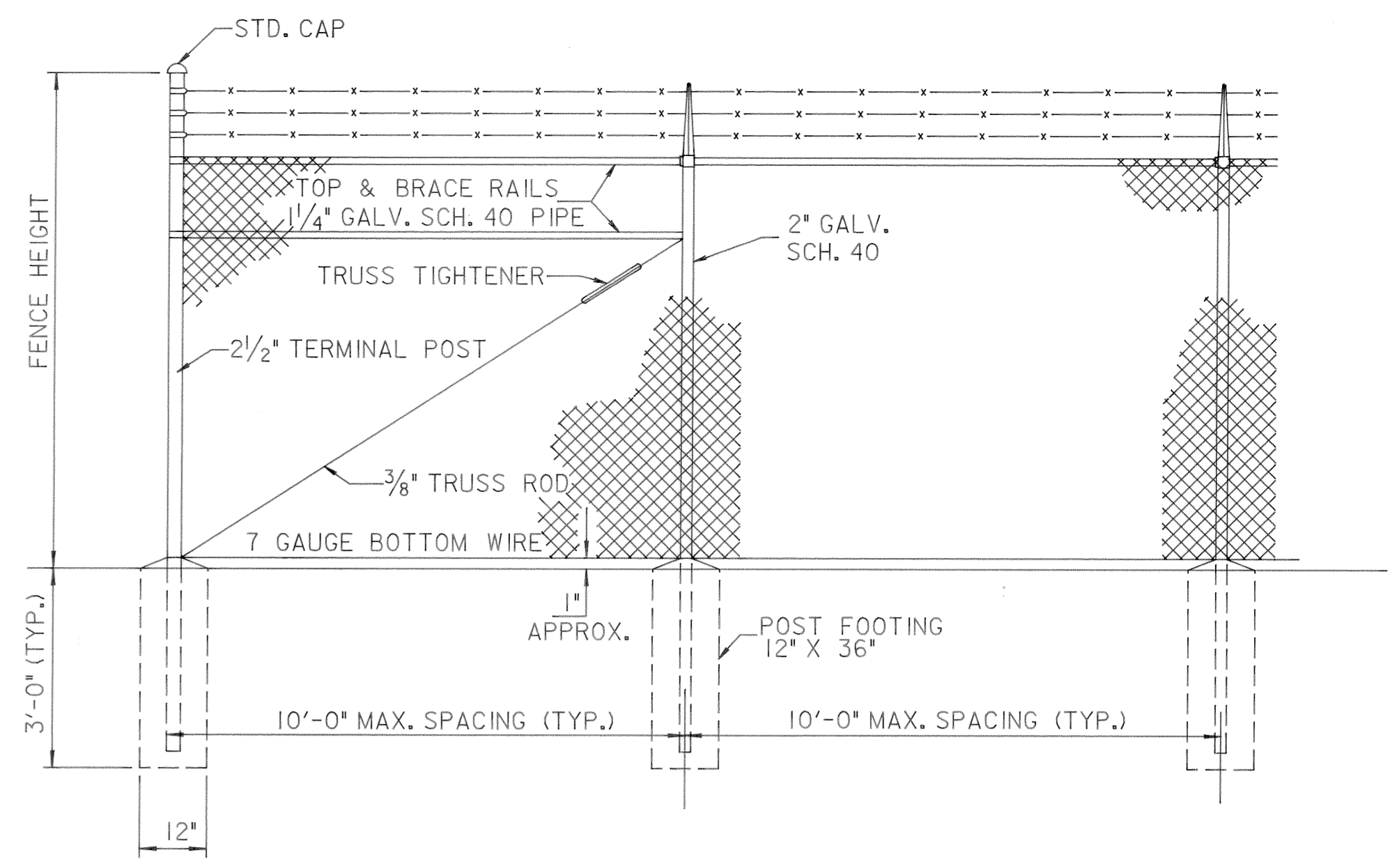


- COATINGS**
FRAMEWORK - GALVANIZED - ASTM-A120
 PVC 10-14 MIL THICKNESS
FABRIC - ALUM. COATED - ASTM-A491
 GALVANIZED - ASTM-A392
 PVC ASTM F668, CLASS 2B
FITTINGS - GALVANIZED - ASTM-A153
 PVC 10-14 MIL THICKNESS

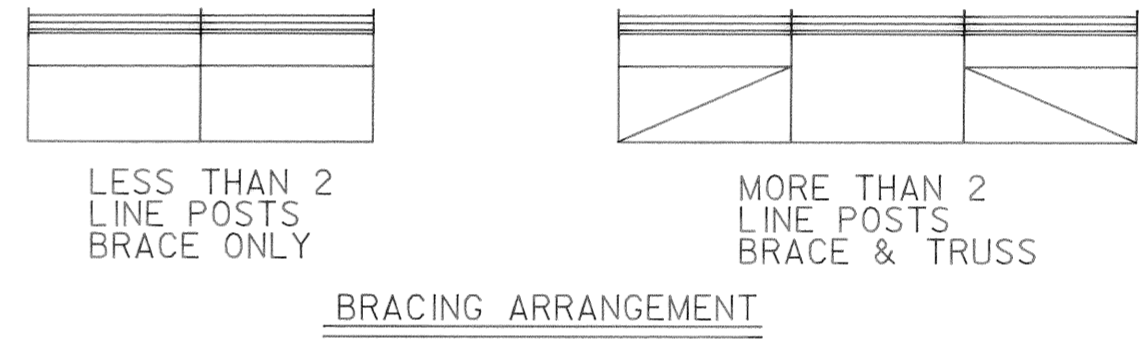


LINE POST TOP
NO SCALE

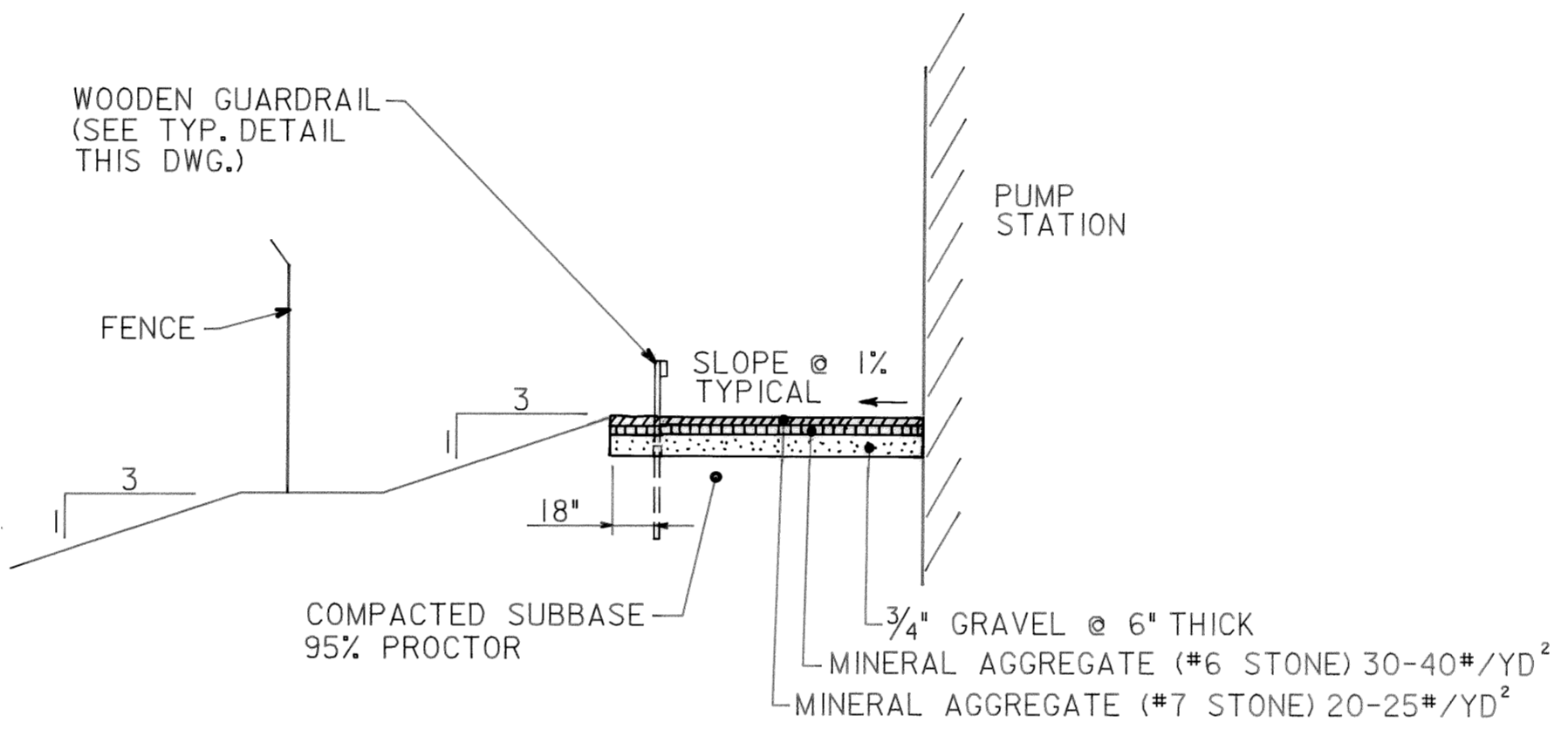
- (A) LOCK KEEPER
- (B) LOCK KEEPER GUIDE
- (C) LOWER FORKS
- (D) UPPER FORKS
- (E) LOWER GUIDE
- (F) UPPER GUIDE



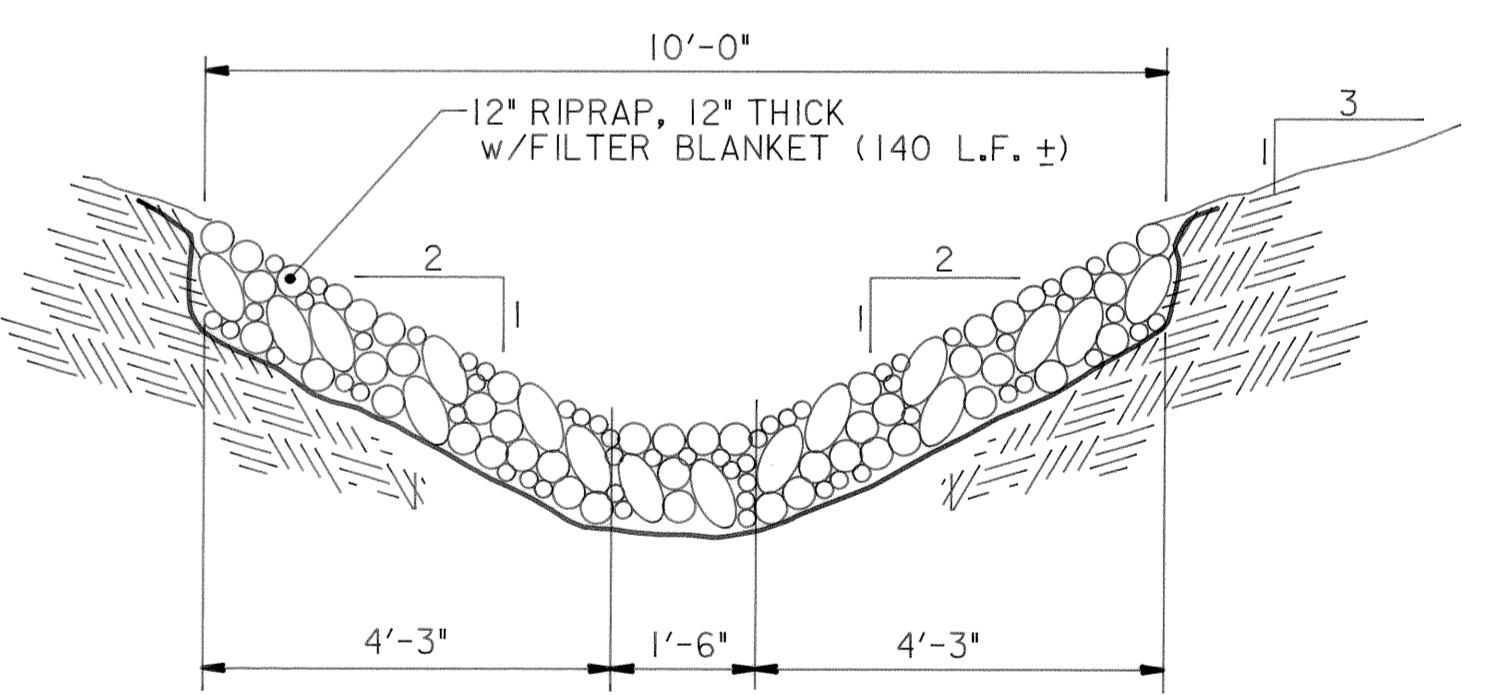
**SITE FENCING DETAIL
TYPICAL TERMINAL & LINE POST INSTALLATION
USING GALV. SCH. 40 PIPE**
NOTE: PER C.E. LUMMUS SPEC. 3116-AH-211



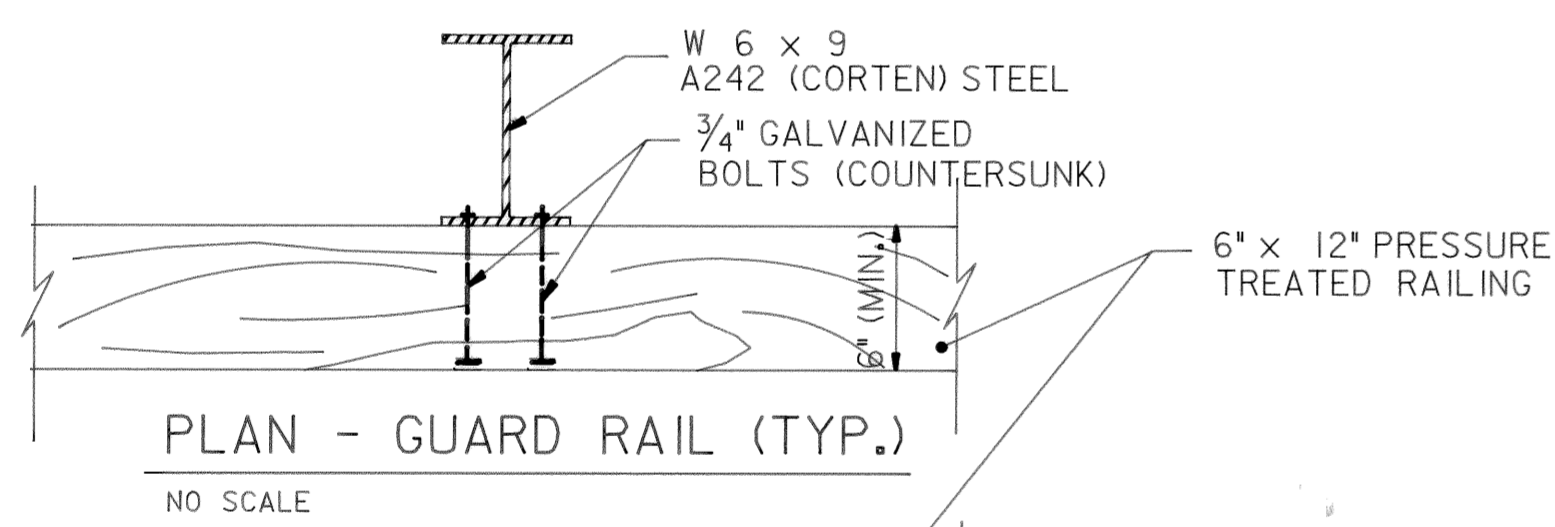
BRACING ARRANGEMENT



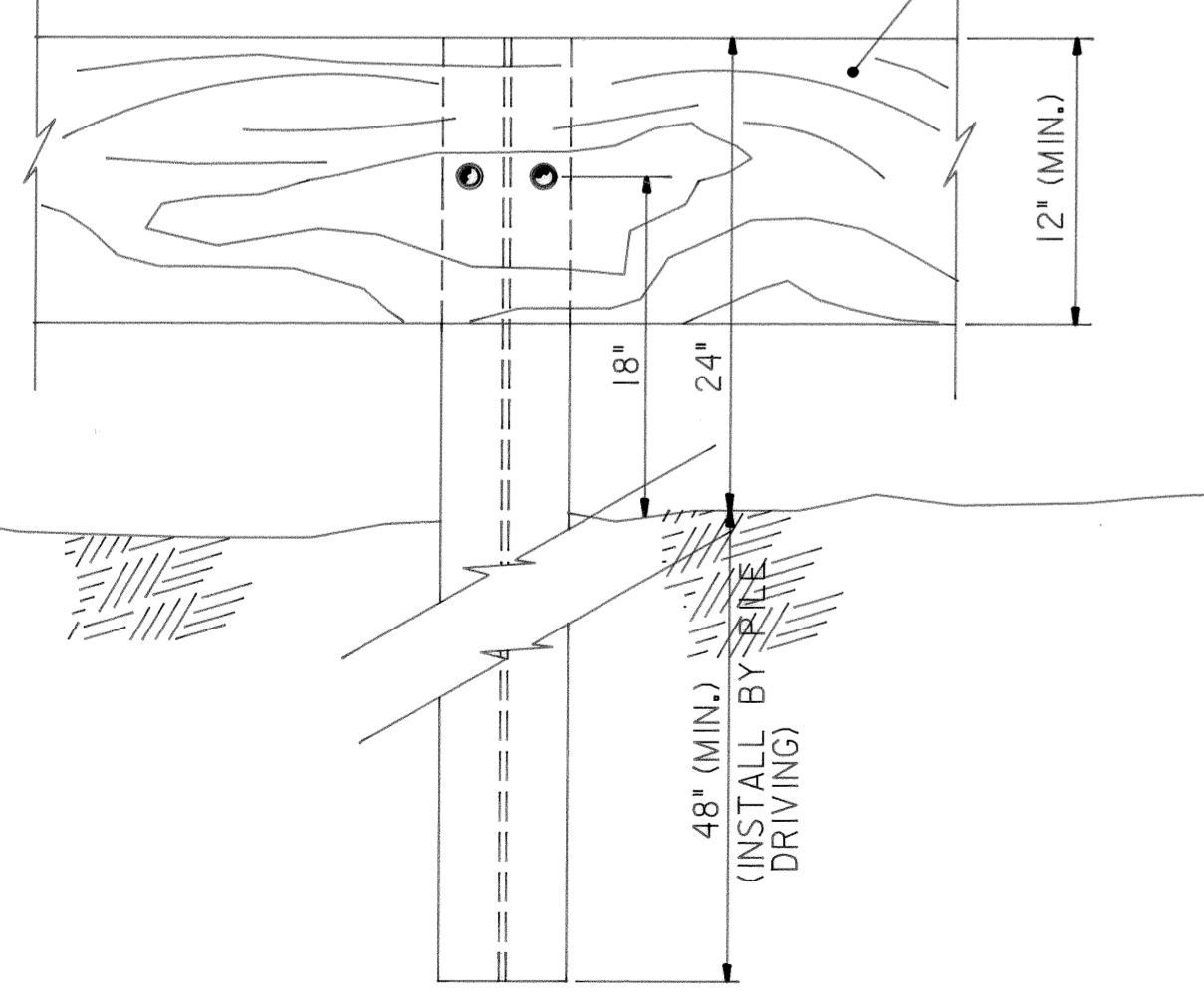
PROFILE OF SITE PLAN (TYP.)
NO SCALE



RIPRAPED DITCH DETAIL
NO SCALE

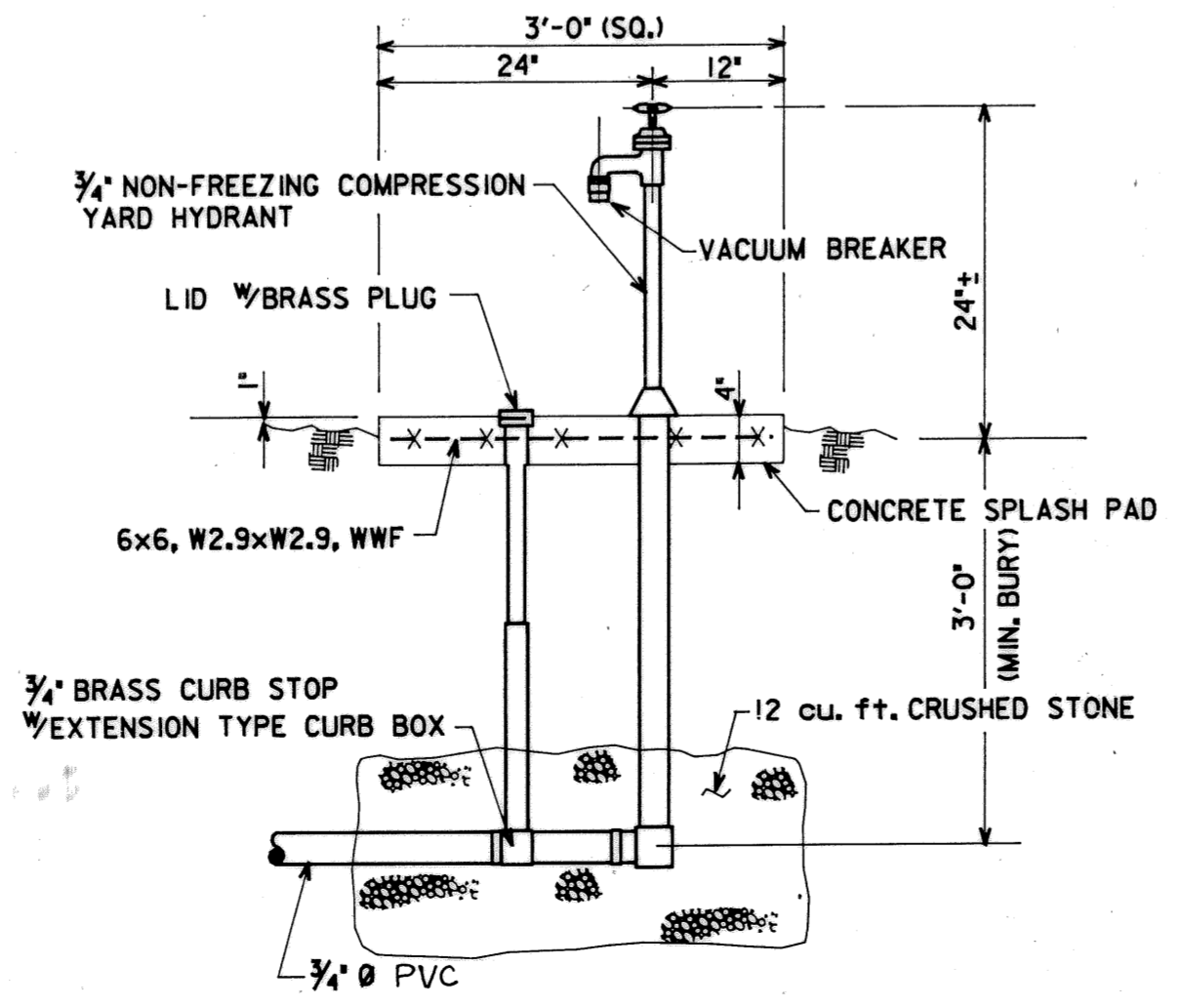


PLAN - GUARD RAIL (TYP.)
NO SCALE

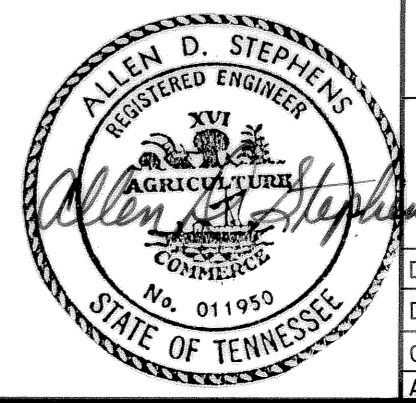


PROFILE - GUARD RAIL (TYP.)*
NO SCALE

* INSIDE FENCED AREA. OUTSIDE FENCED AREA,
MATCH EXISTING METAL GUARDRAIL



YARD HYDRANT DETAIL
N.T.S.



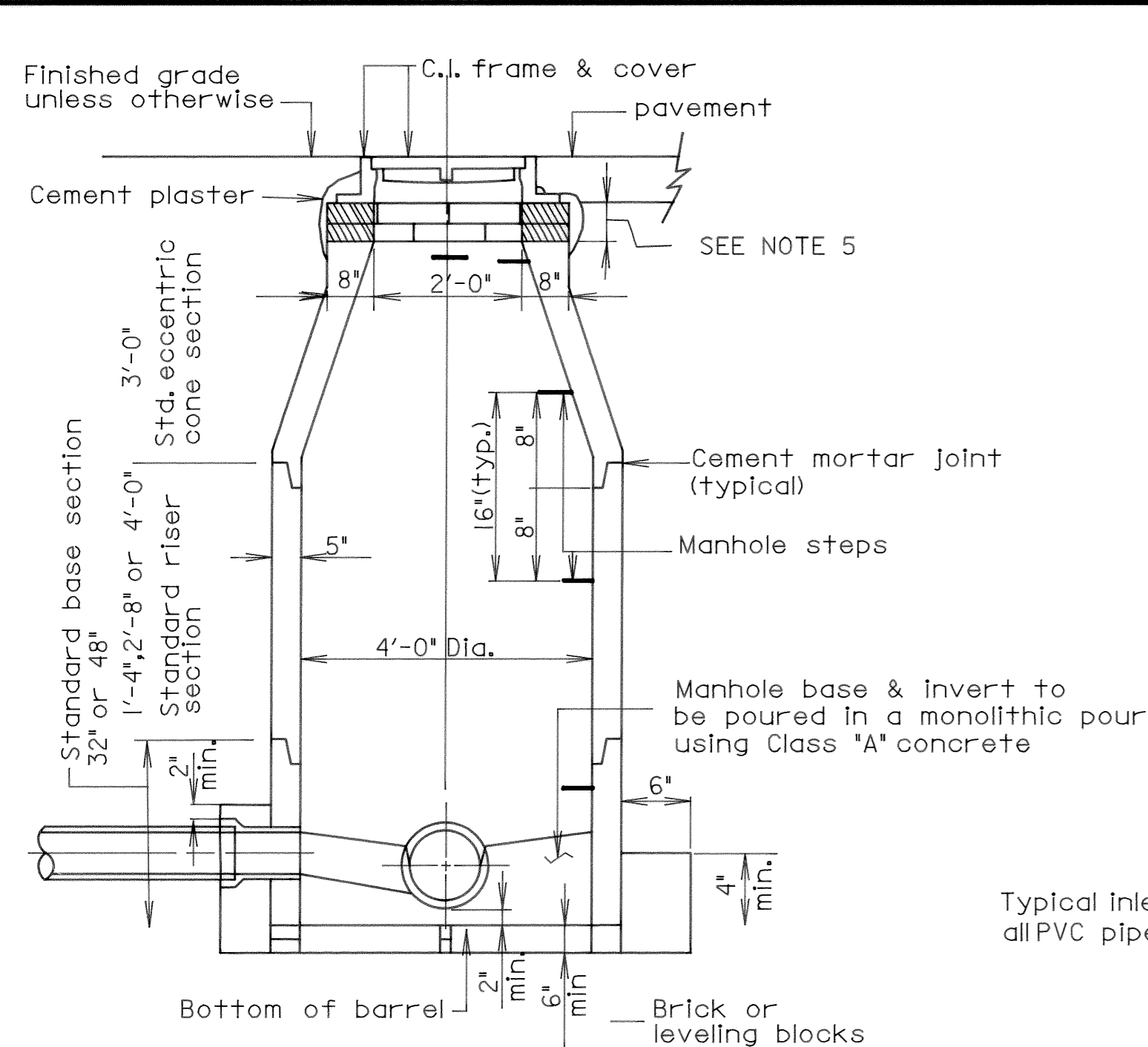
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
3-17-92		RECORD

CITICO II PUMPING STATION

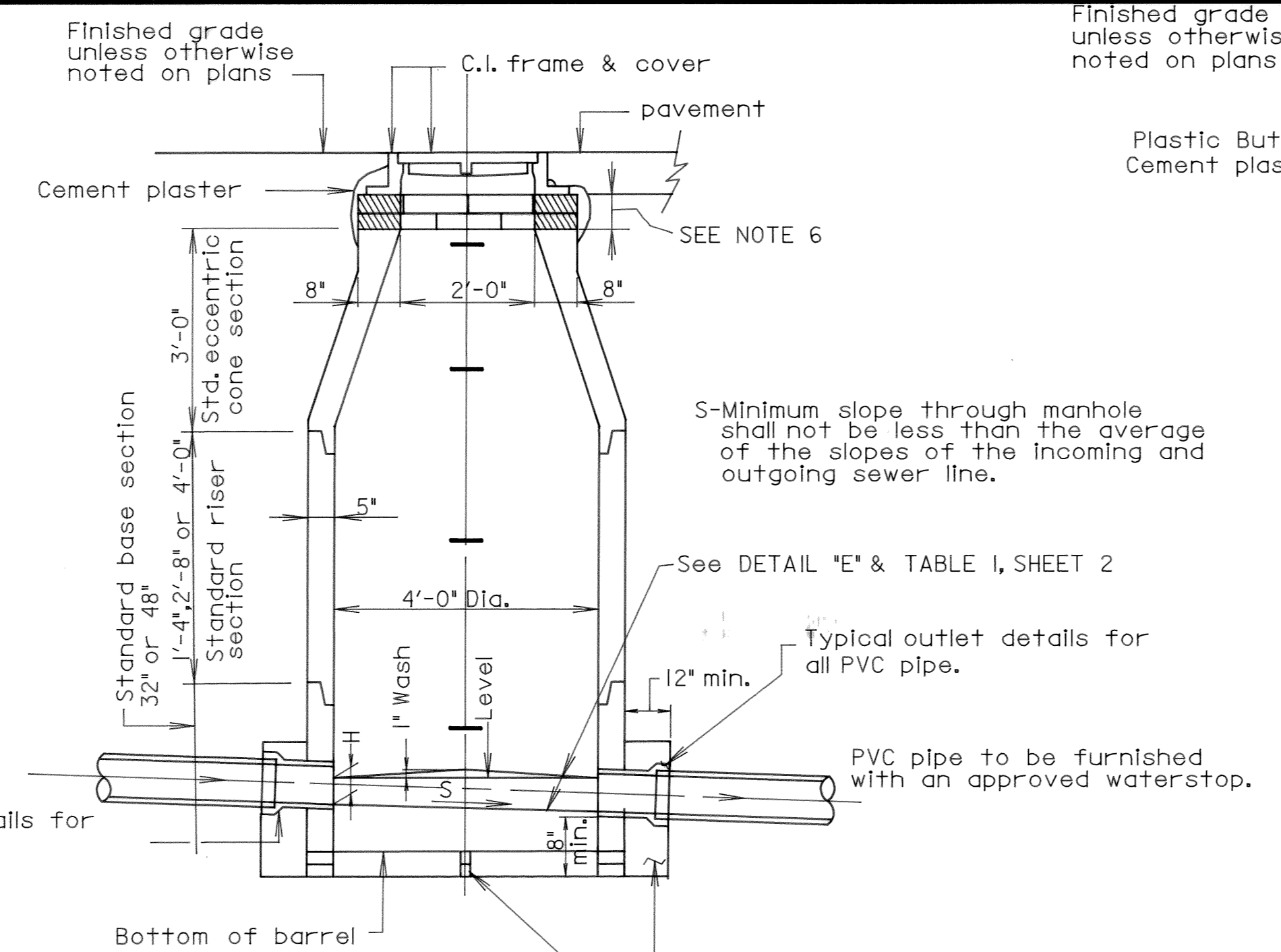
**SITE PLAN
DETAILS**

CITY OF CHATTANOOGA, TENNESSEE

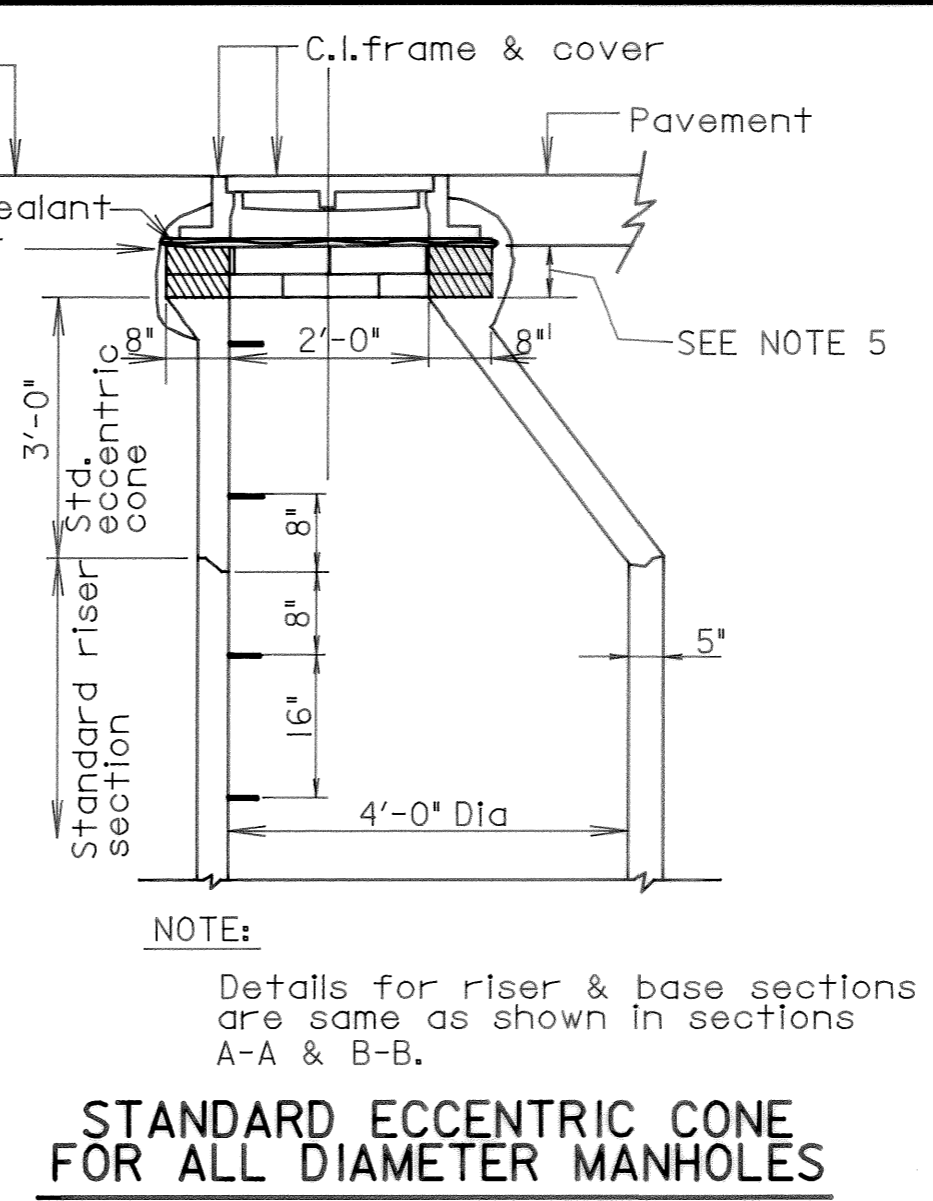
DSGN	P.R.D.	8/89	HENSLEY - SCHMIDT, INC.	DRAWING NO.
DRWN	CADD/GR	8/89	ENGINEERS AND SURVEYORS	6685
CHKD	P.R.D.	8/89	ATLANTA - CHATTANOOGA	-37C-C2.1
APPR	A.S.	8/89	RALEIGH - ORLANDO	



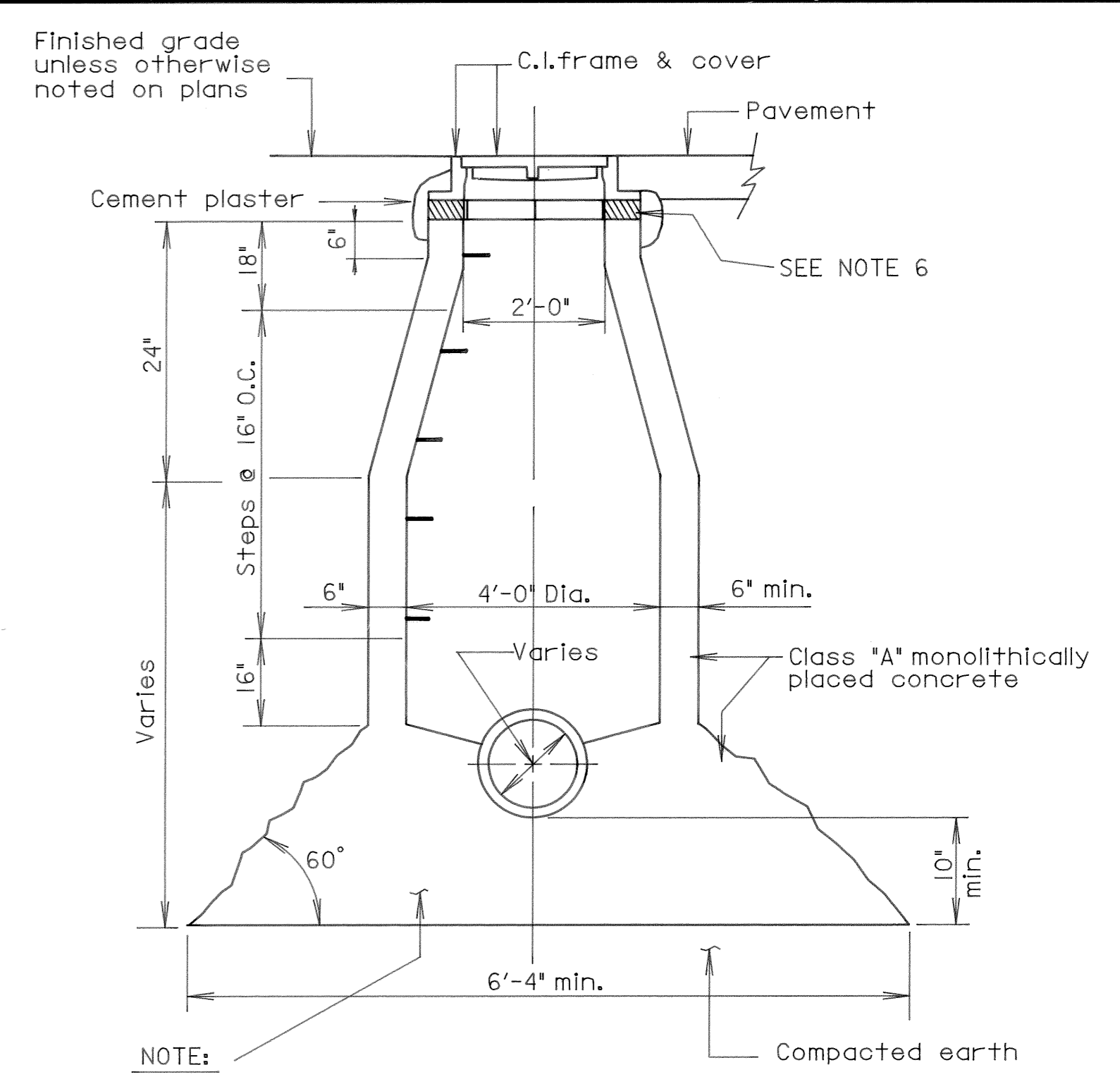
SECTION A-A



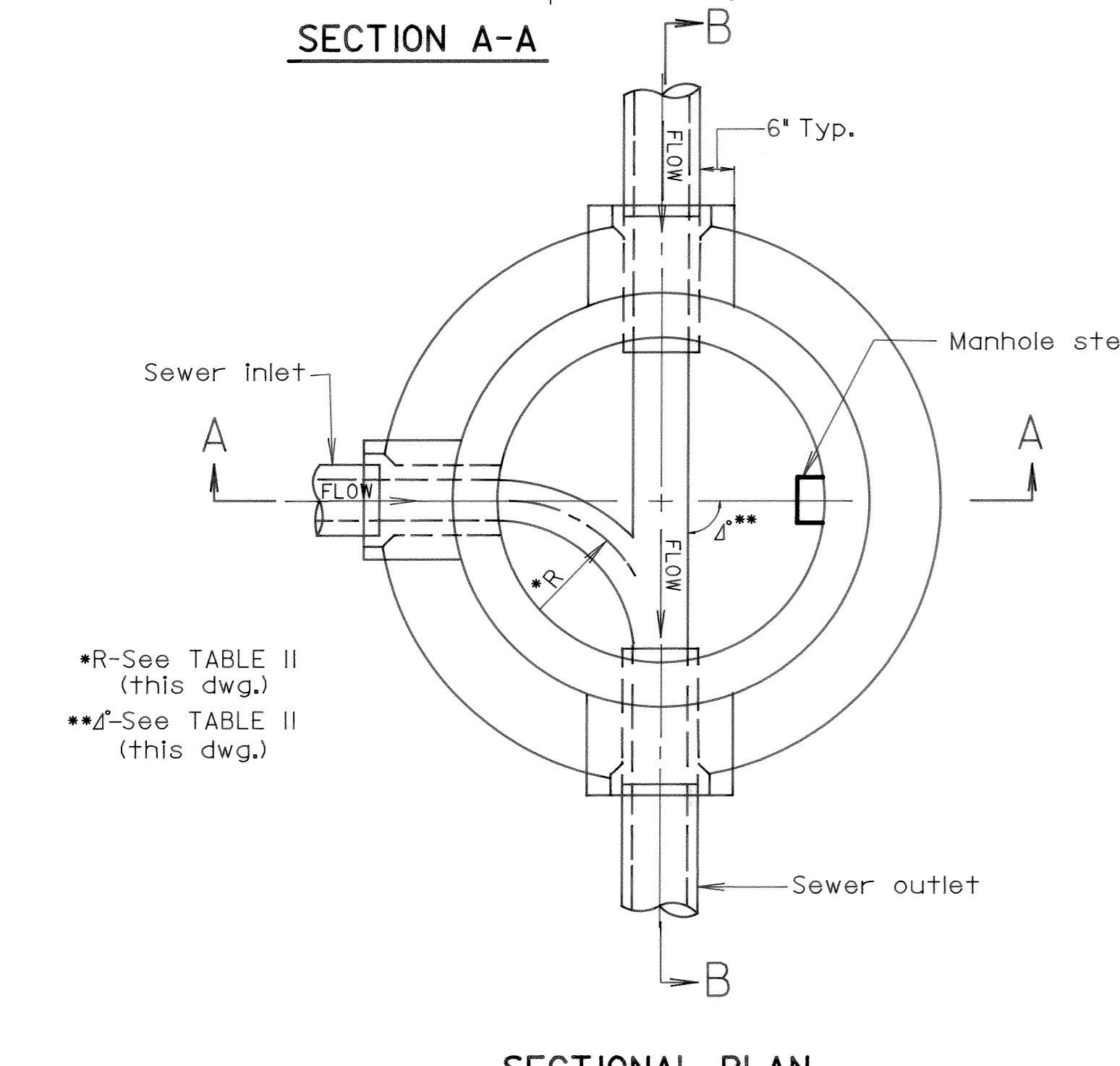
SECTION B-B



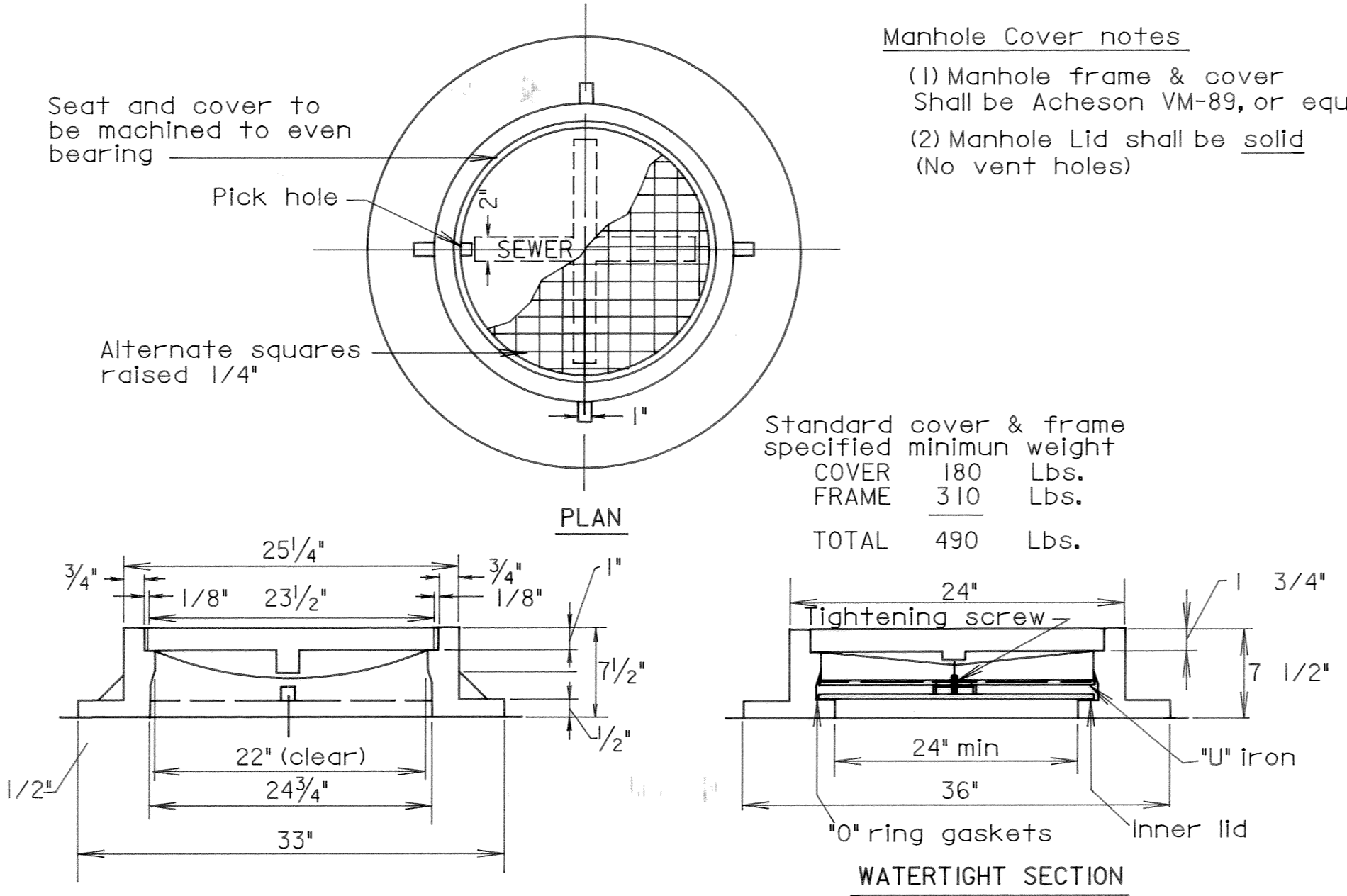
STANDARD ECCENTRIC CONE FOR ALL DIAMETER MANHOLES



STANDARD 'CAST-IN-PLACE' CONCRETE MANHOLES



SECTIONAL PLAN STANDARD PRECAST 4'-0" DIAMETER MANHOLE

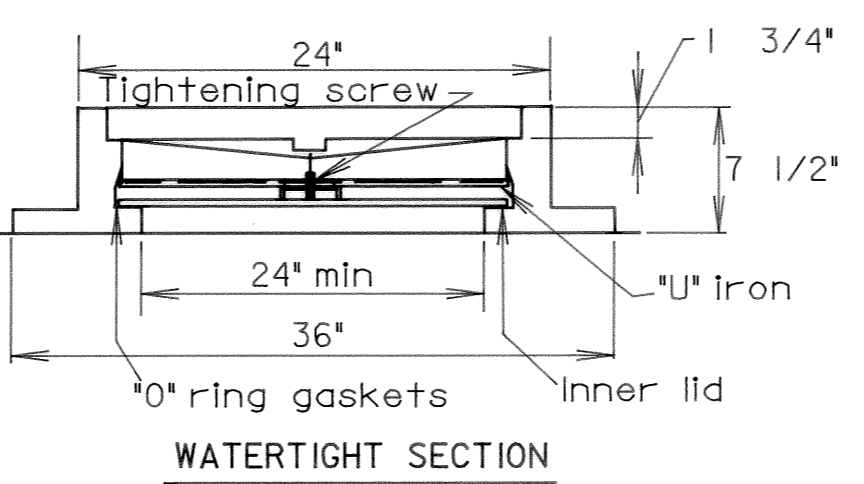


STANDARD MANHOLE FRAME AND COVER

Manhole Cover notes

- (1) Manhole frame & cover shall be Acheson VM-89, or equal.
- (2) Manhole Lid shall be solid (No vent holes)

Standard cover & frame specified minimum weight
 COVER 180 Lbs.
 FRAME 310 Lbs.
 TOTAL 490 Lbs.



WATERTIGHT SECTION

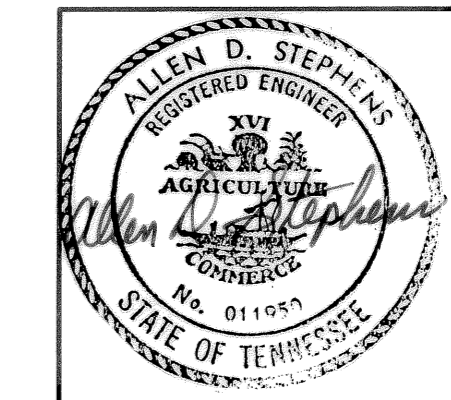
TABLE II GOVERNING DIMENSIONS FOR MANHOLES			
Pipe Size	Δ Angle	Base Diameter	*R*
8" - 12"	0° To 90°	4'	1'-6"
15"	0° To 60°	4'	1'-10"
15"	60° To 90°	4'	1'-10"
18"	0° To 60°	4'	2'-3"
18"	60° To 90°	4'	1'-10"
21"	0° To 60°	4'	2'-7"
21"	60° To 90°	5'	2'-4"
24"	0° To 45°	4'	3'-0"
24"	45° To 90°	5'	2'-3"
30"	0° To 60°	5'	3'-9"
30"	60° To 90°	6'	2'-8"
36"	0° To 30°	6'	4'-6"
36" & Larger	0° To 90°	Cast in place manhole base or pre-bed pipe M.H. base & elbow units. (*)	

NOTE: 5'-0" & 6'-0" diameter manholes may be similar design if approved by the Engineer.

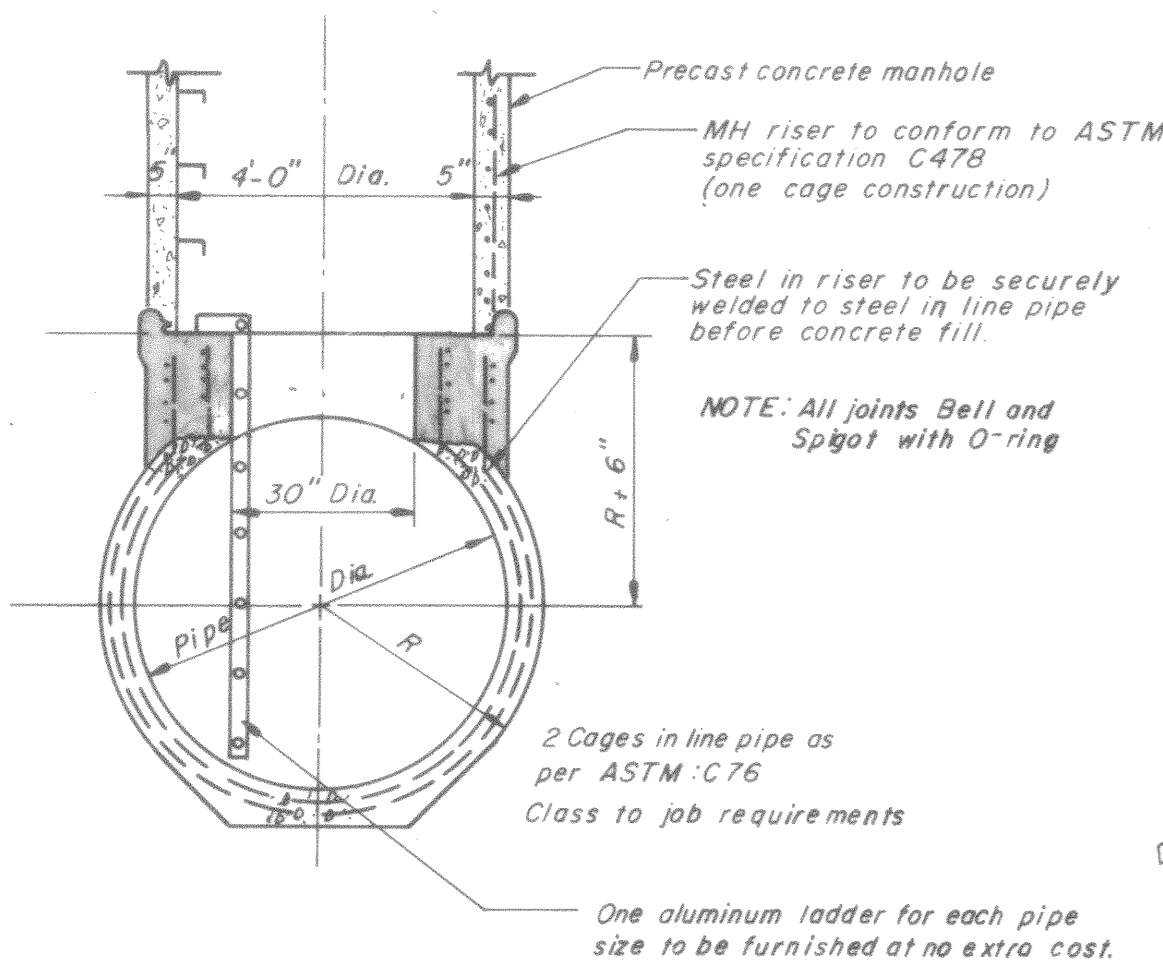
(* UNLESS NOTED OTHERWISE PLAN OR DIRECTED BY THE ENGINEER.

GENERAL NOTES:

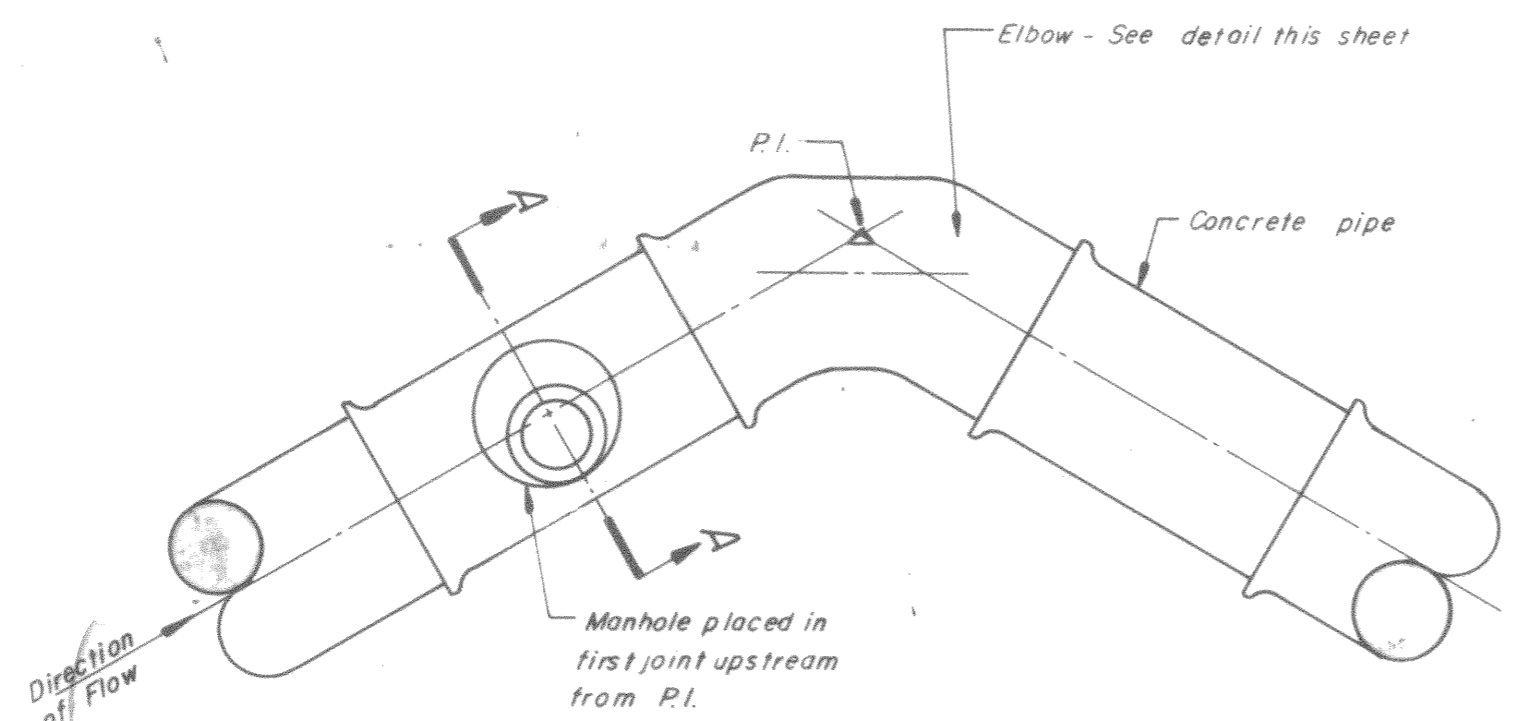
1. For pipes larger than 12", provide a flexible joint as close to the outside face as the shortest length available will permit.
2. Where lateral sewers are shown for future construction, install a plugged stub or drop connection with plugged stub as called for on Plan-Profile Drawings.
3. Manhole steps shall be Russell Foundry Co. No. C-1090, Neenah Foundry Co. No. R-1980-E or equal. (Use Poly coated type) (RG, etc.)
4. All precast manholes shall conform to Precast Manhole Specification ASTM C-478, latest revisions.
5. For bringing manhole frame and cover to grade, use bricks and/or precast concrete rings.
6. All manholes shall use standard eccentric cones.



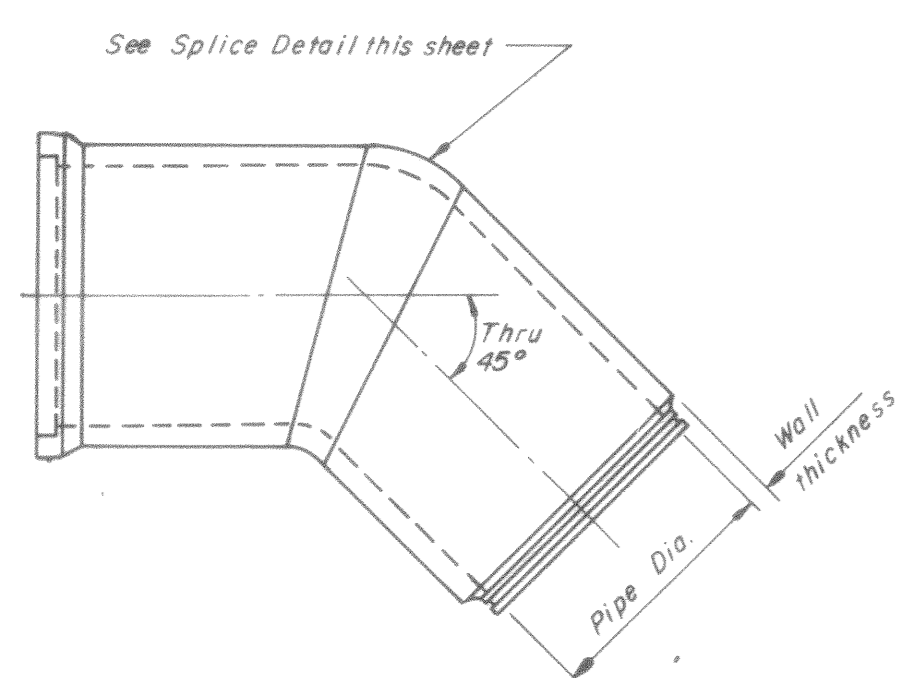
3-17-92	RECORD	
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
CITICO II PUMPING STATION		
SEWER DETAILS SHEET 1 OF 3		
CITY OF CHATTANOOGA, TENNESSEE		
DSGN P.R.D.	7/89	HENSLEY - SCHMIDT, INC. Engineers and Surveyors ATLANTA - CHATTANOOGA ORLANDO - RALEIGH
DRWN CADD/GR	7/89	DRAWING NO. 6685
CHKD P.R.D.	7/89	-37C-C3.1
APPR H.D.S.	8/89	



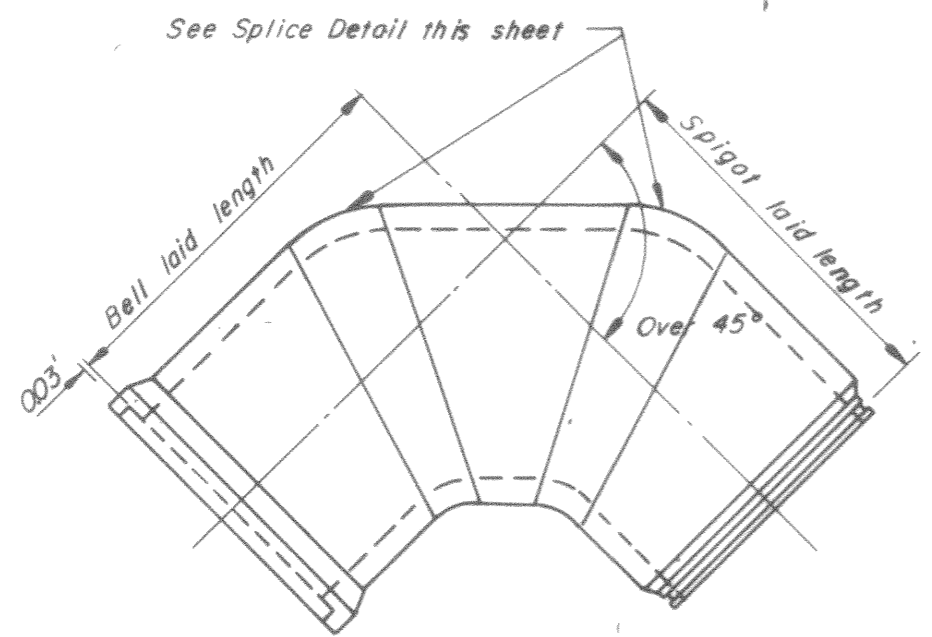
SECTION A-A
(For 36" Sewer and Larger)



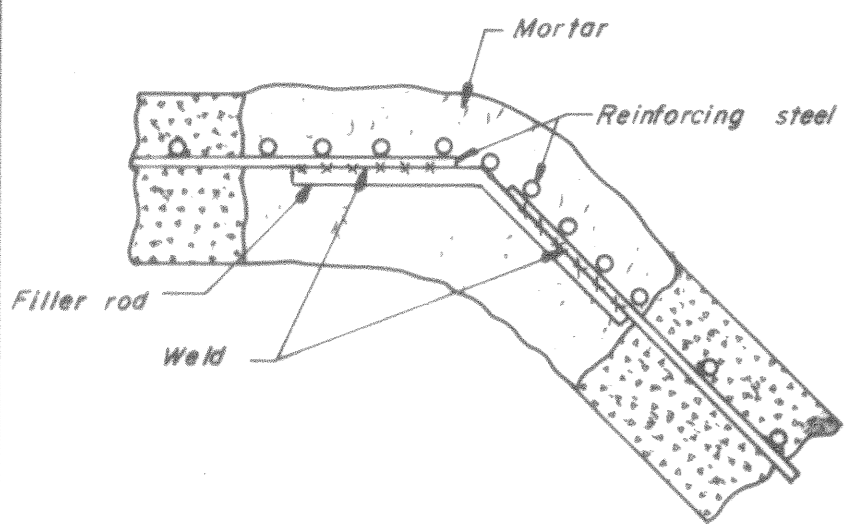
MANHOLE & ELBOW ARRANGEMENT
AT P.I.
(For 36" Sewer and Larger)



PLAN
TWO PIECE ELBOW

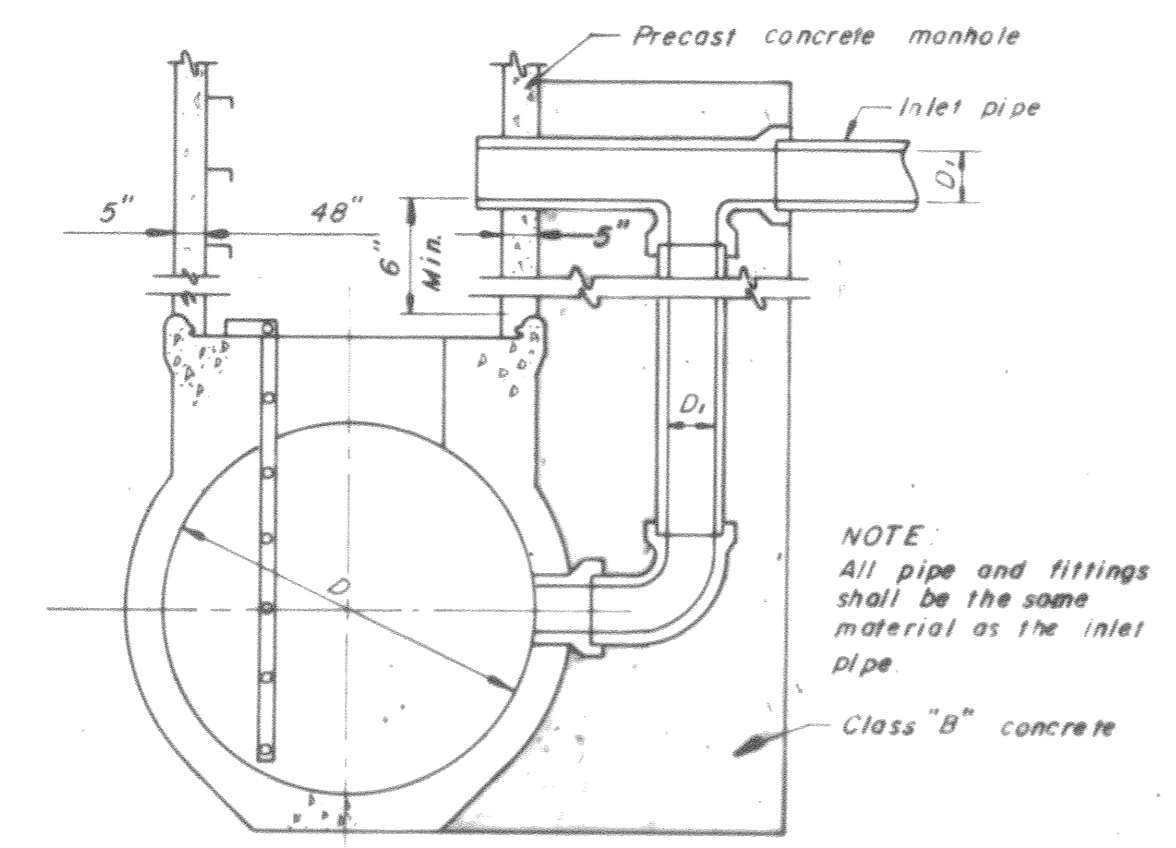


PLAN
THREE PIECE ELBOW

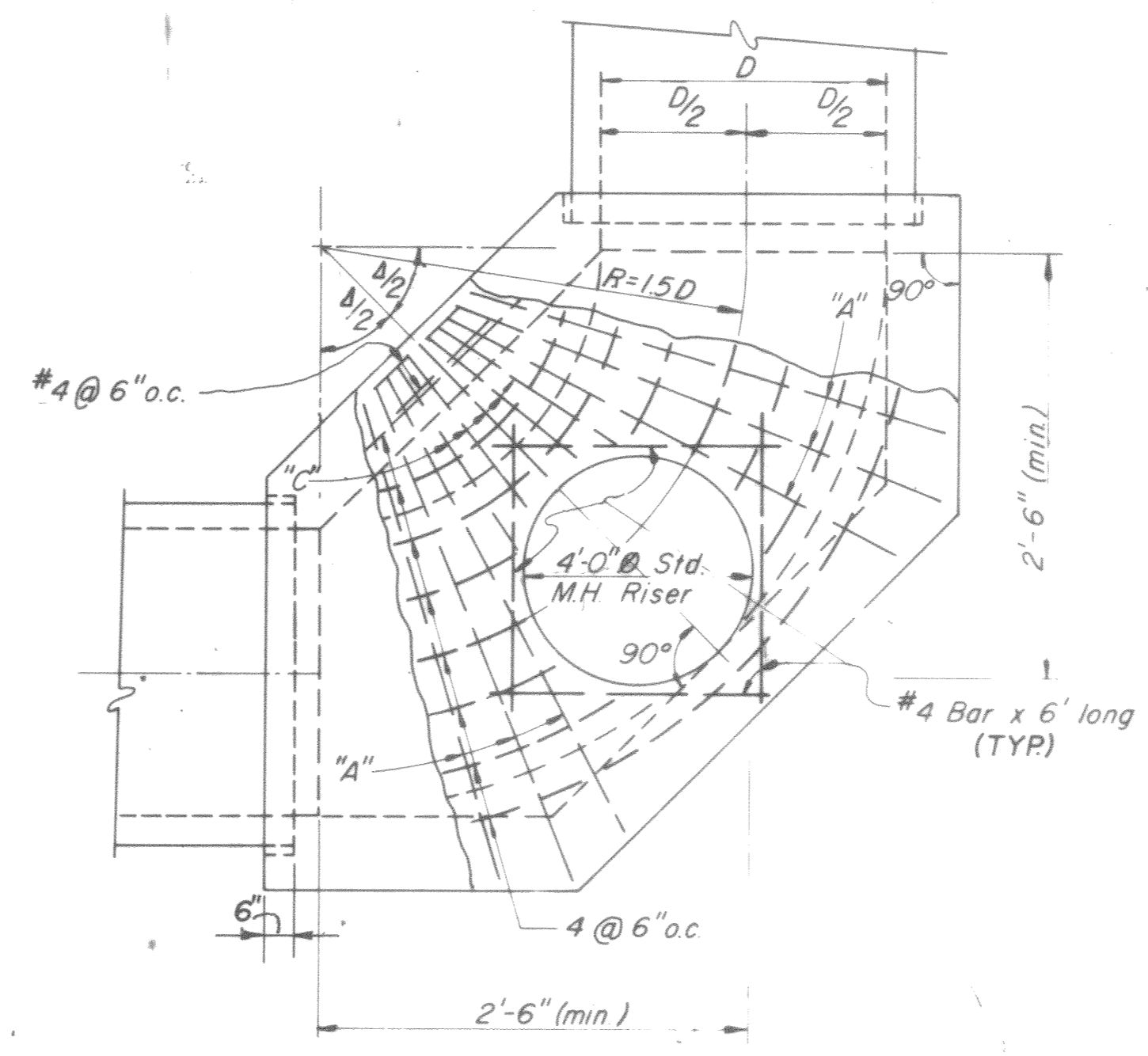


SPICE DETAIL
TYPICAL ALL SPICES

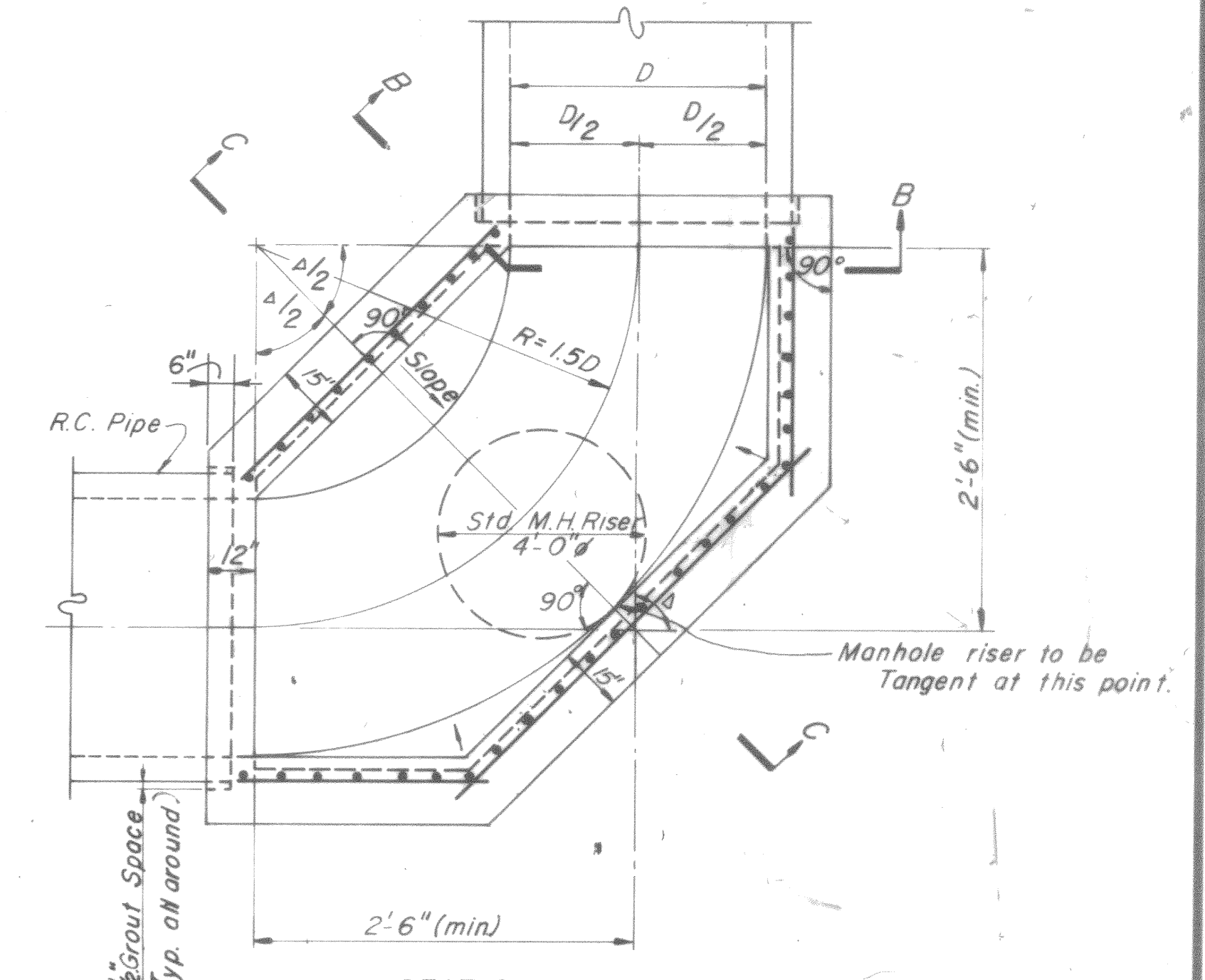
- NOTE
1. Filler rods to be same diameter as longitudinal rods.
 2. Hand apply mortar and smooth over reinforcing steel as shown.
 3. Wrap circumferential rods at 2" O.C.
 4. Elbow steel requirements per standard class in line.



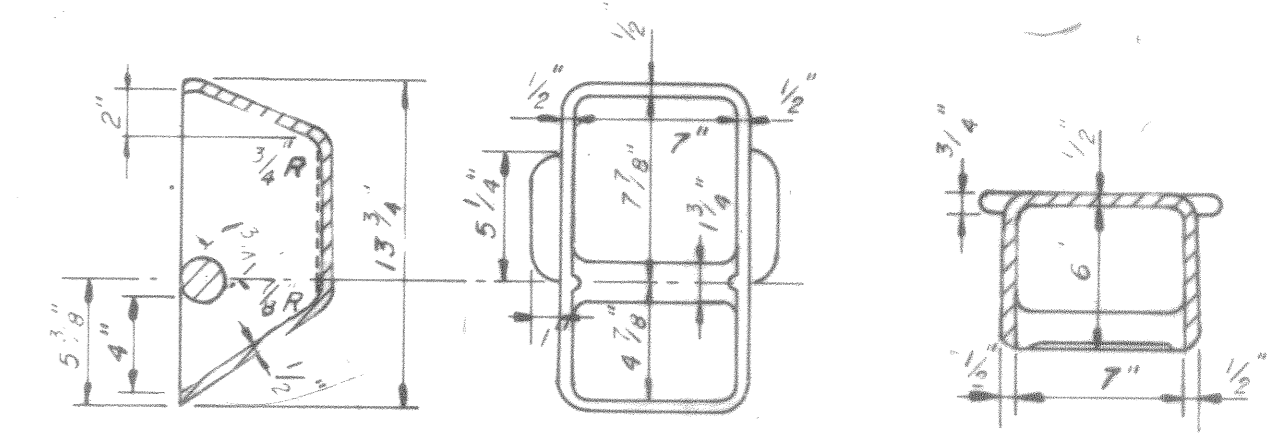
DROP CONNECTION TO MANHOLE



PLAN



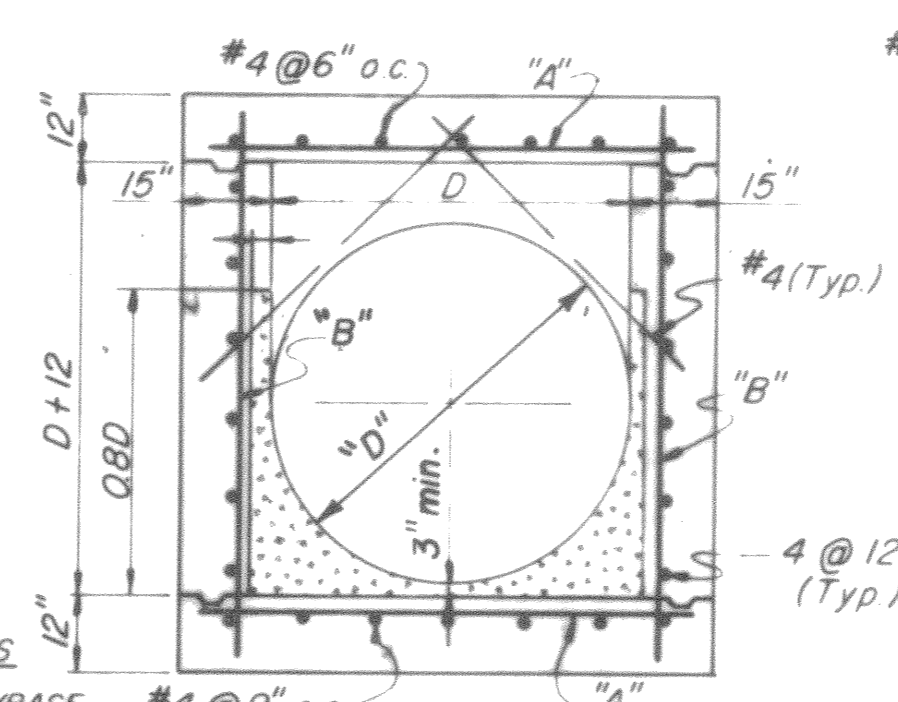
SECTION D-D
CURVED MANHOLE BASE



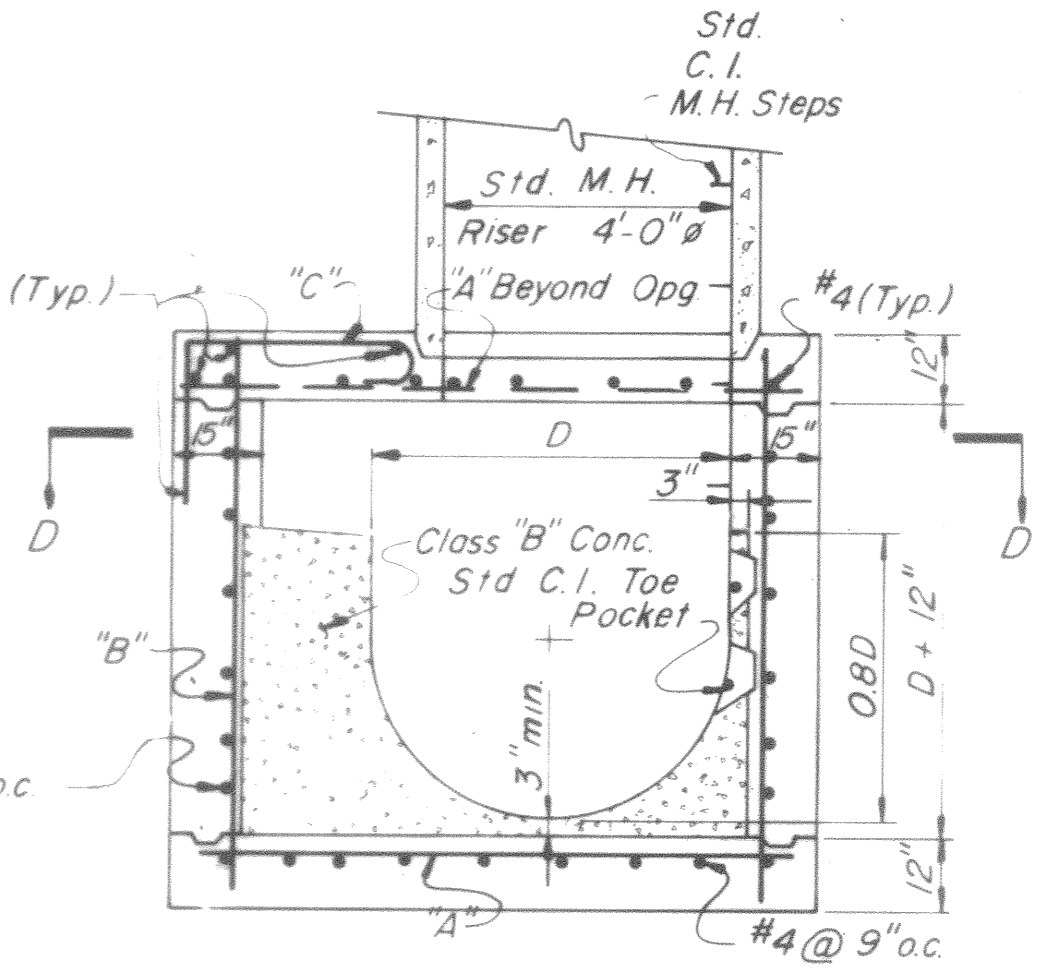
SECTION ELEVATION SECTIONAL PLAN
STANDARD C.I. TOE POCKET

TOE POCKETS

SIZE SEWER	No./BASE	#4 @ 9" o.c.
36"	0	
42"	1	
48"	2	
54"	2	
60"	2	
66"	3	
72"	3	
78"	3	
84"	4	



SECTION B



SECTION C

DIA. OF SEWER	REINF. SCHEDULE		EST. QUANT. FOR STRAIGHT BASES	
	Bars "A","B","C"		CONC.-CU. YDS.	REINF. STEEL - LBS.
36"	No. 6 @ 9"		3.7	270
42"	" " "		4.5	310
48"	No. 6 @ 9"		5.2	340
54"	" " "		6.0	380
60"	" " "		6.7	410
66"	No. 7 @ 9"		7.4	640
72"	" " "		8.2	690
78"	" " "		9.0	740
84"	" " "		9.8	780

PRECAST CONCRETE MANHOLE BASES & ELBOWS

CAST-IN-PLACE CONCRETE BASES



REV	BY	DATE	DESCRIPTION
1			3/1/84 RECORD

CITICO II PUMPING STATION

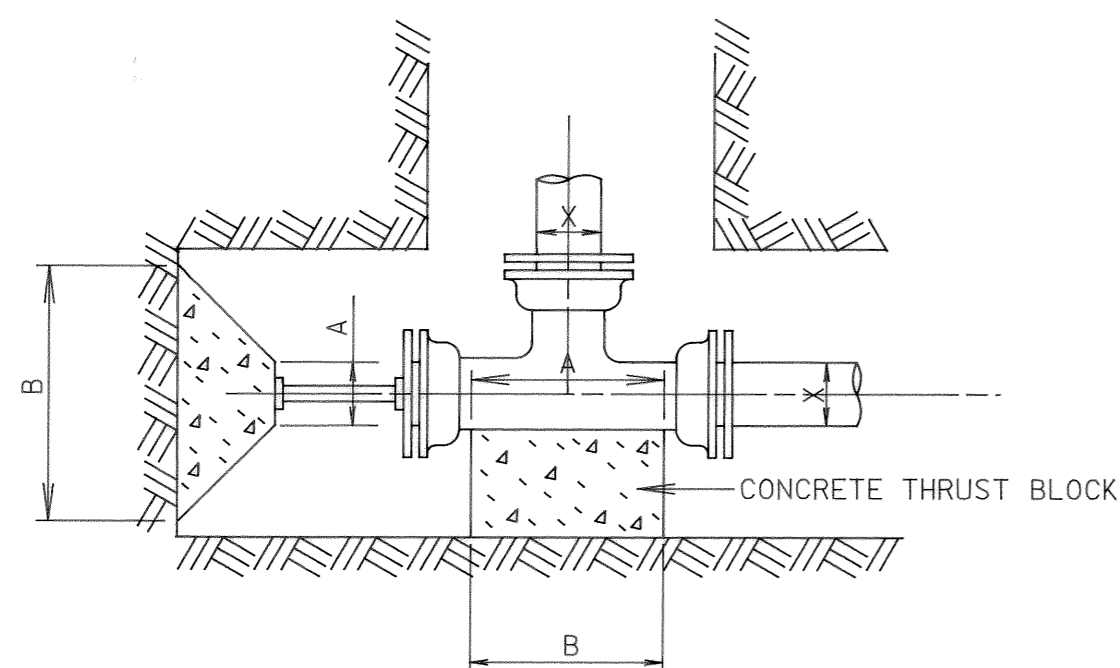
SEWER DETAILS
SHEET 3 OF 3

CITY OF CHATTANOOGA, TENNESSEE

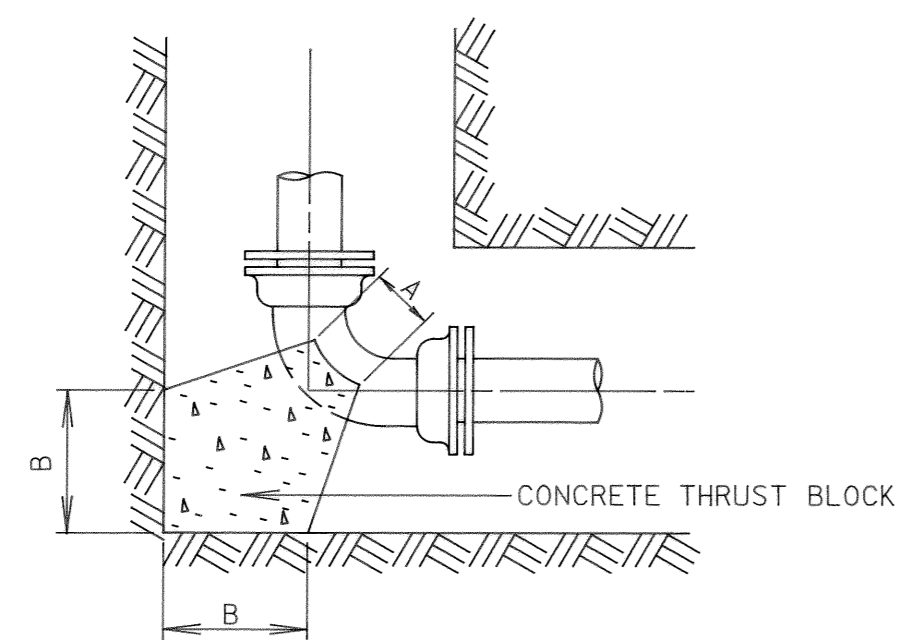
DESIGN P.R.D.	DATE	HENSLEY-SCHMIDT, INC.	DRAWING NO.
DRWN G. Ramsey	8/83	CONSULTANTS	6685
CHKD P.R.D.	8/83	ATLANTA-CHATTANOOGA-JACKSON	-37C-C5.1
APPR JDS	8/83	KNOXVILLE-NASHVILLE	

PIPE SIZE X	A	B	DEPTH C
90° BEND			
24"	2'-4"	4'-6"	5'-0"
20"	2'-4"	4'-0"	4'-6"
18"	2'-0"	3'-6"	4'-0"
16"	1'-9"	3'-4"	3'-6"
14"	1'-9"	2'-6"	3'-0"
12"	1'-6"	2'-0"	3'-0"
10"	1'-4"	2'-0"	2'-6"
8"	1'-0"	1'-6"	2'-0"
6"	1'-0"	1'-0"	2'-0"
4"	0'-9"	1'-0"	1'-0"
45° BEND			
24"	1'-4"	4'-6"	3'-0"
20"	1'-4"	3'-3"	3'-0"
18"	1'-0"	4'-0"	2'-0"
16"	1'-0"	4'-3"	1'-6"
14"	1'-0"	3'-6"	1'-4"
12"	1'-0"	3'-4"	1'-0"
10"	0'-9"	2'-6"	1'-0"
8"	0'-9"	1'-6"	1'-0"
6"	0'-9"	1'-0"	1'-0"
4"	0'-6"	1'-0"	1'-0"
22½° BEND			
24"	1'-4"	3'-0"	2'-0"
20"	1'-4"	2'-6"	2'-0"
18"	1'-0"	2'-9"	1'-6"
16"	1'-0"	2'-4"	1'-4"
14"	1'-0"	2'-0"	1'-2"
12"	1'-0"	1'-9"	1'-0"
10"	0'-9"	1'-6"	0'-10"
8"	0'-9"	1'-0"	0'-8"
6"	0'-9"	1'-0"	0'-6"
4"	0'-6"	1'-0"	0'-4"
1¼° BEND			
24"	1'-4"	1'-6"	2'-0"
20"	1'-4"	1'-3"	2'-0"
18"	1'-0"	1'-4"	1'-6"
16"	1'-0"	1'-2"	1'-4"
14"	1'-0"	1'-0"	1'-2"
12"	1'-0"	1'-0"	1'-0"
10"	0'-9"	1'-0"	0'-10"
8"	0'-9"	1'-0"	0'-8"
6"	0'-9"	1'-0"	0'-6"
4"	0'-6"	1'-0"	0'-4"
UNBALANCED TEE & PLUG			
24"	3'-0"	7'-0"	5'-0"
20"	3'-0"	5'-0"	5'-0"
18"	2'-0"	5'-6"	3'-6"
16"	2'-0"	5'-6"	3'-0"
14"	2'-0"	4'-0"	3'-0"
12"	2'-0"	4'-6"	2'-0"
10"	1'-0"	3'-0"	2'-0"
8"	1'-0"	2'-9"	1'-6"
6"	1'-0"	1'-0"	1'-0"
4"	1'-0"	1'-0"	1'-0"
TEE			
24"	2'-6"	7'-0"	5'-0"
20"	2'-6"	5'-0"	5'-0"
18"	2'-6"	5'-6"	3'-6"
16"	2'-6"	5'-6"	3'-0"
14"	2'-4"	4'-0"	3'-0"
12"	2'-0"	4'-6"	2'-0"
10"	1'-9"	3'-0"	2'-0"
8"	1'-6"	2'-9"	1'-6"
6"	1'-0"	1'-0"	1'-0"
4"	1'-0"	1'-0"	1'-0"

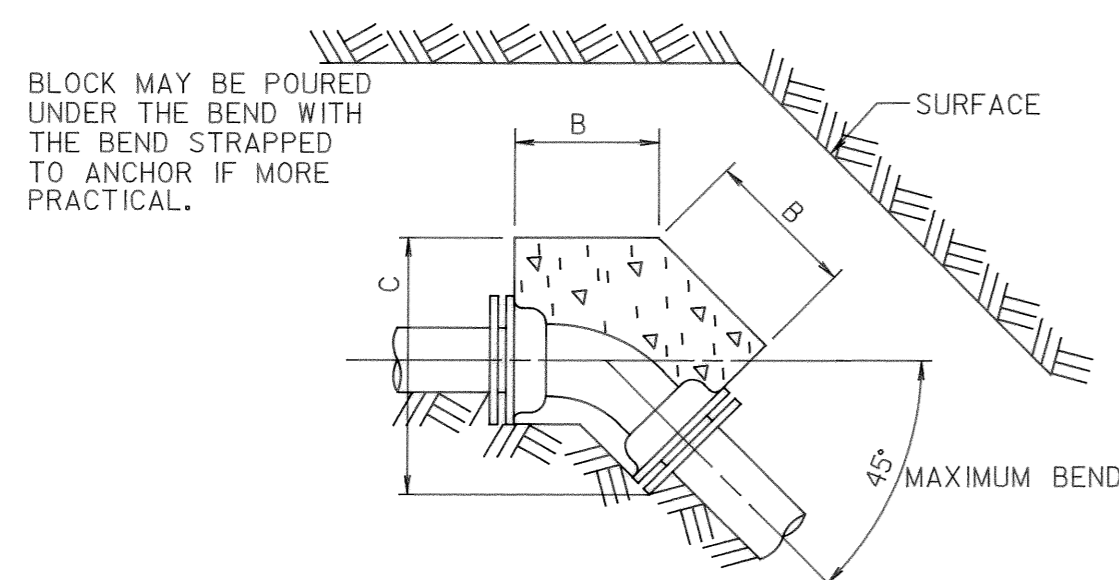
TABLE OF DIMENSIONS FOR HORIZONTAL & VERTICAL SAG BENDS.



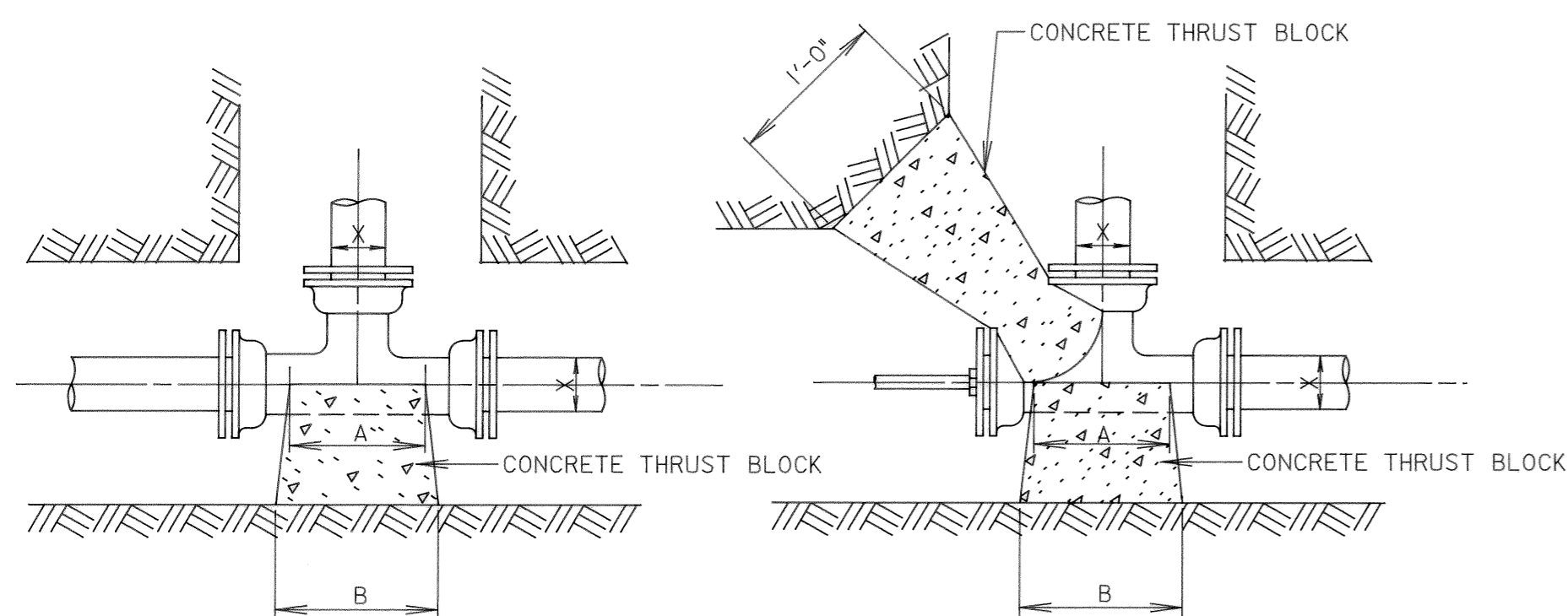
PLAN-TYPICAL PLUG
NO SCALE



PLAN-TYPICAL HORIZONTAL BEND
NO SCALE



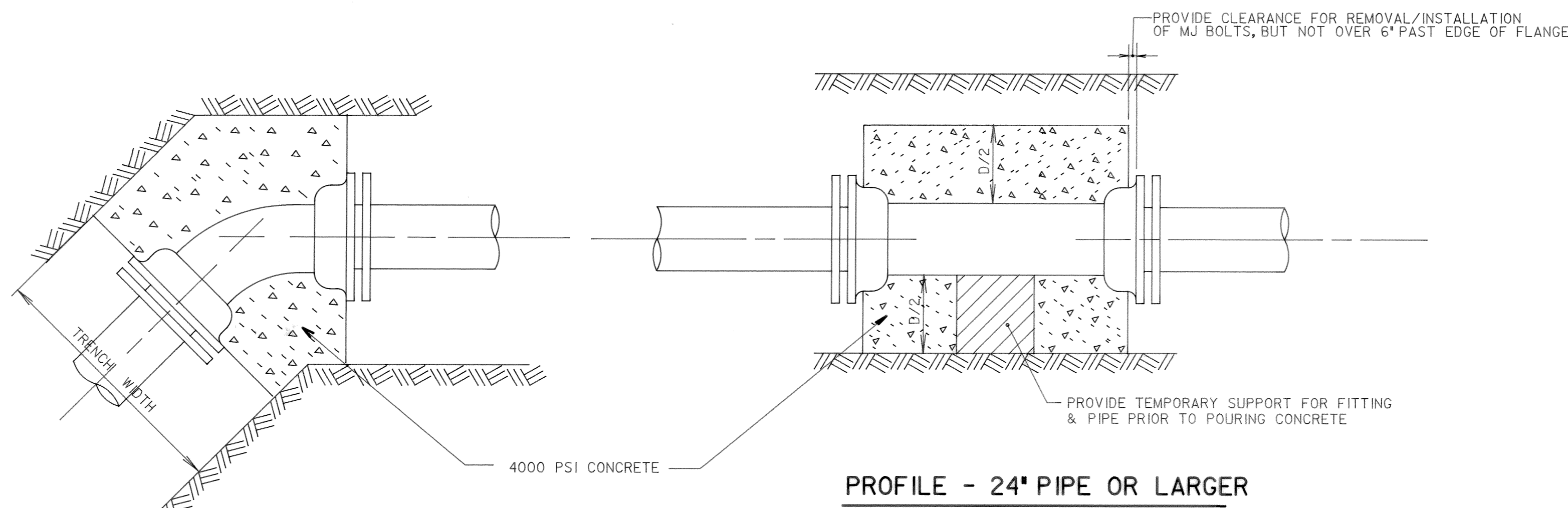
ELEVATION-TYPICAL VERTICAL BEND
NO SCALE



PLAN TYPICAL TEE
NO SCALE

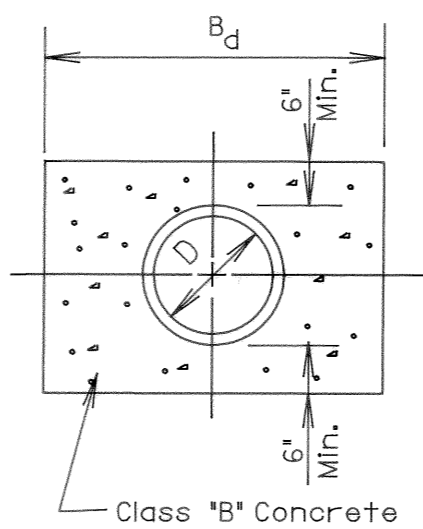
PLAN UNBALANCED TEE
NO SCALE

THRUST BLOCK DETAILS
(REQUIRED ON ALL PRESSURE LINES EXCEPT IN RESTRAINED JOINTS AND ELSEWHERE AS DIRECTED BY THE ENGINEER.)

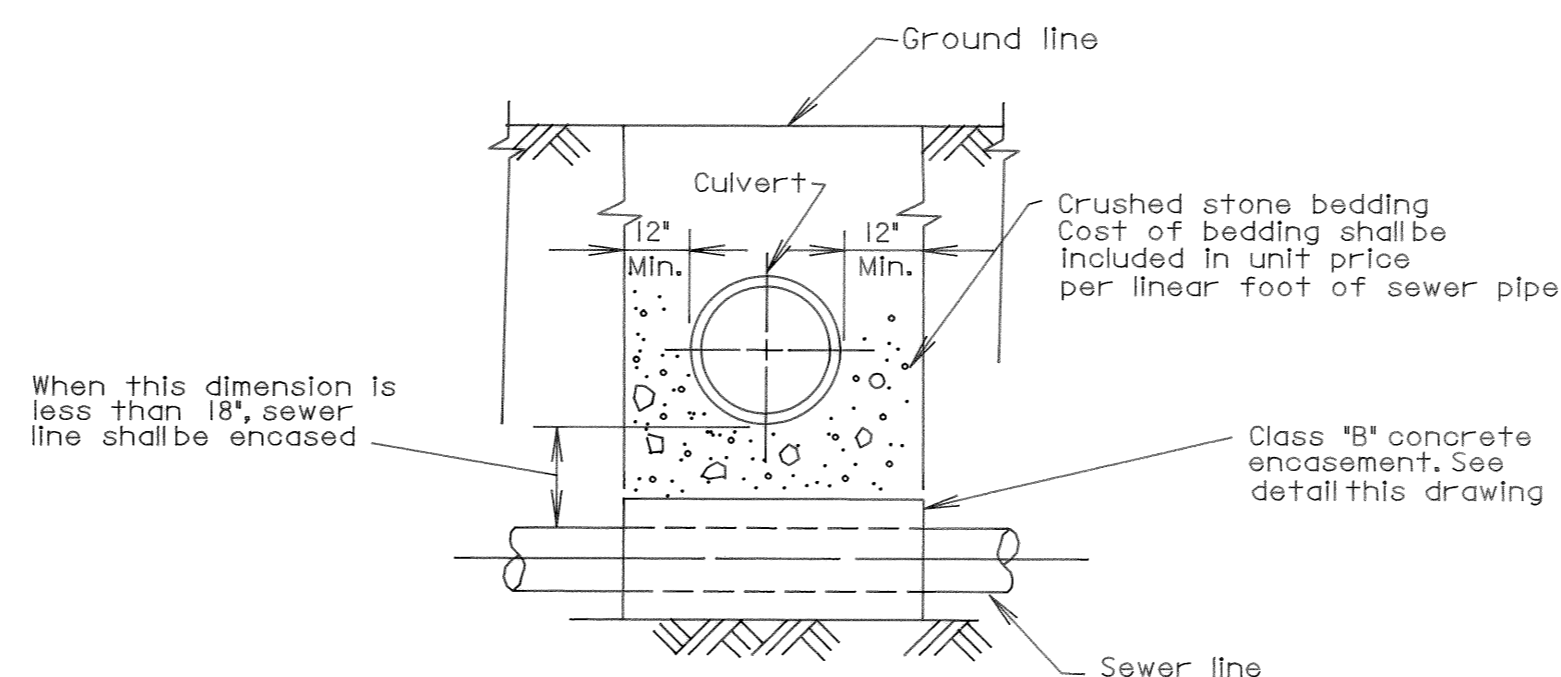


PLAN - 24\"/>

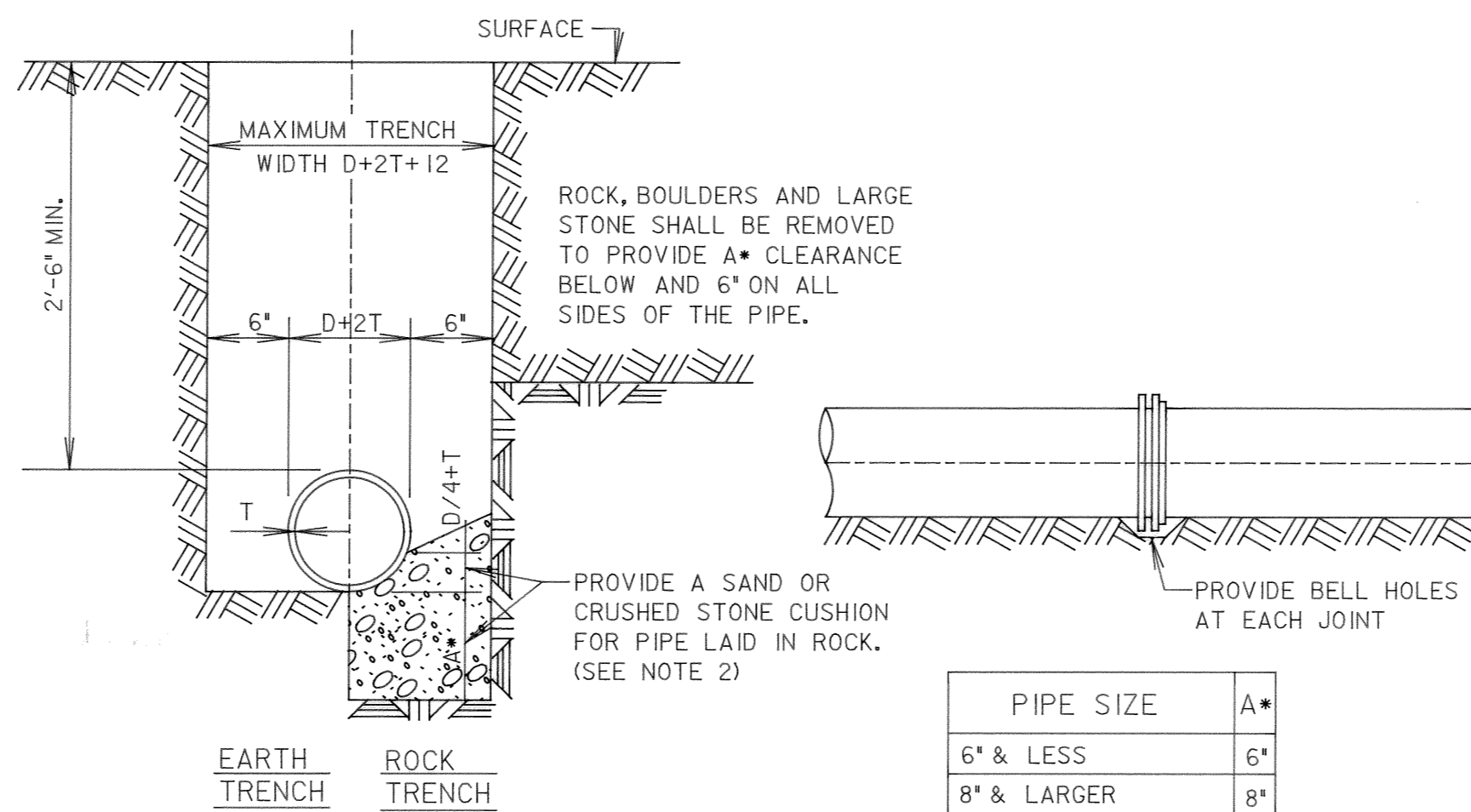
THRUST BLOCK DETAILS FOR PRESSURE LINES 24\"/>



CONCRETE ENCASEMENT DETAIL

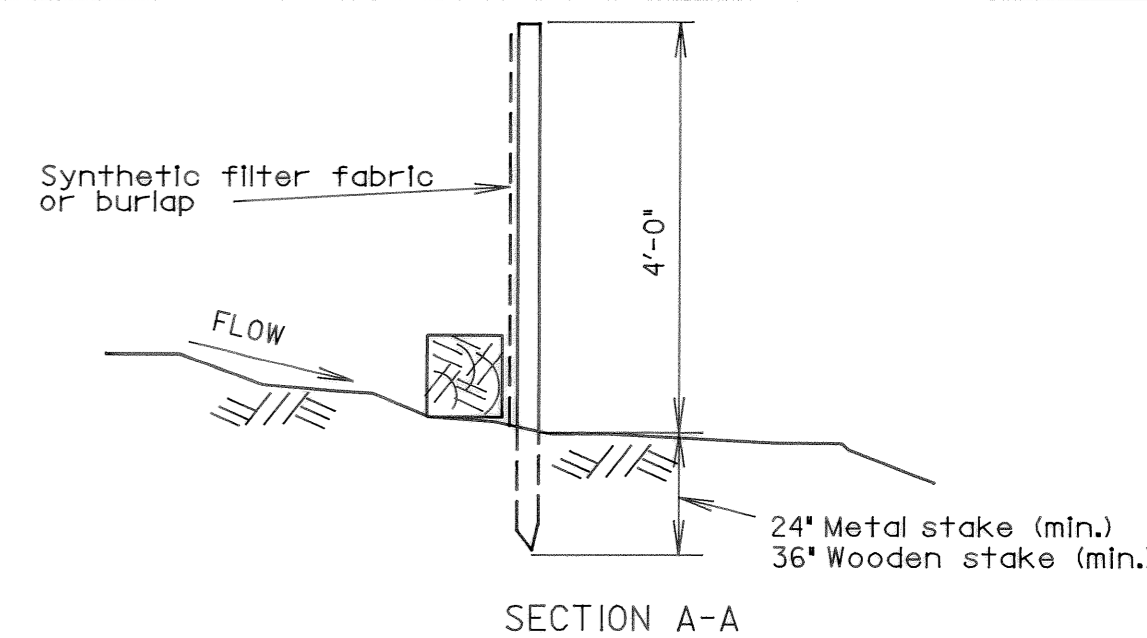


ENCASEMENT DETAIL AT LINE CROSSING

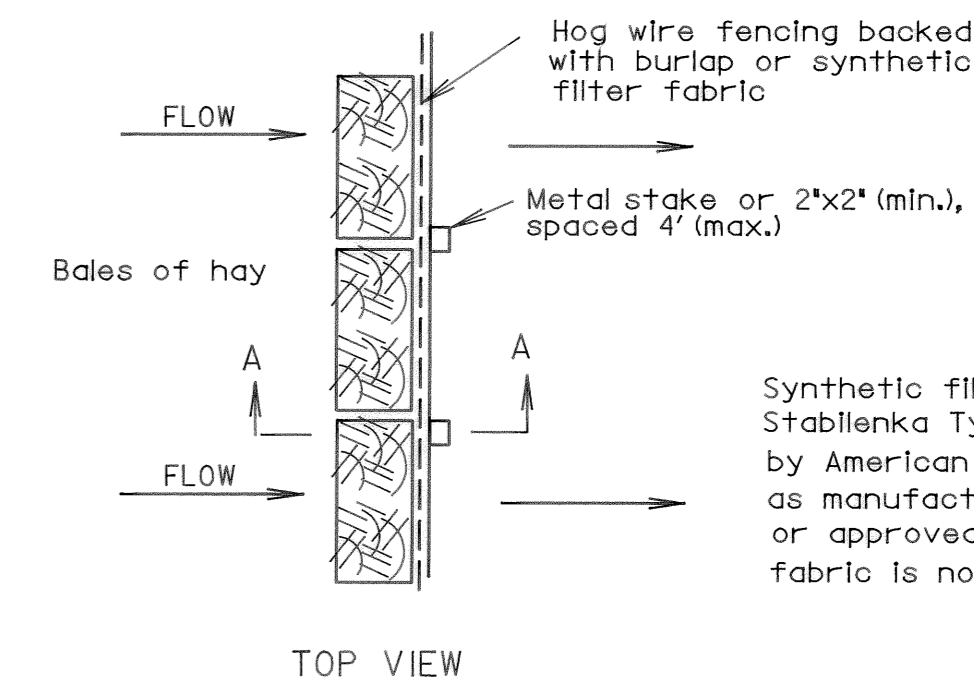


PIPE LAYING DETAILS FOR DUCTILE IRON PIPE
NO SCALE

PIPE SIZE	A*
6" & LESS	6"
8" & LARGER	8"



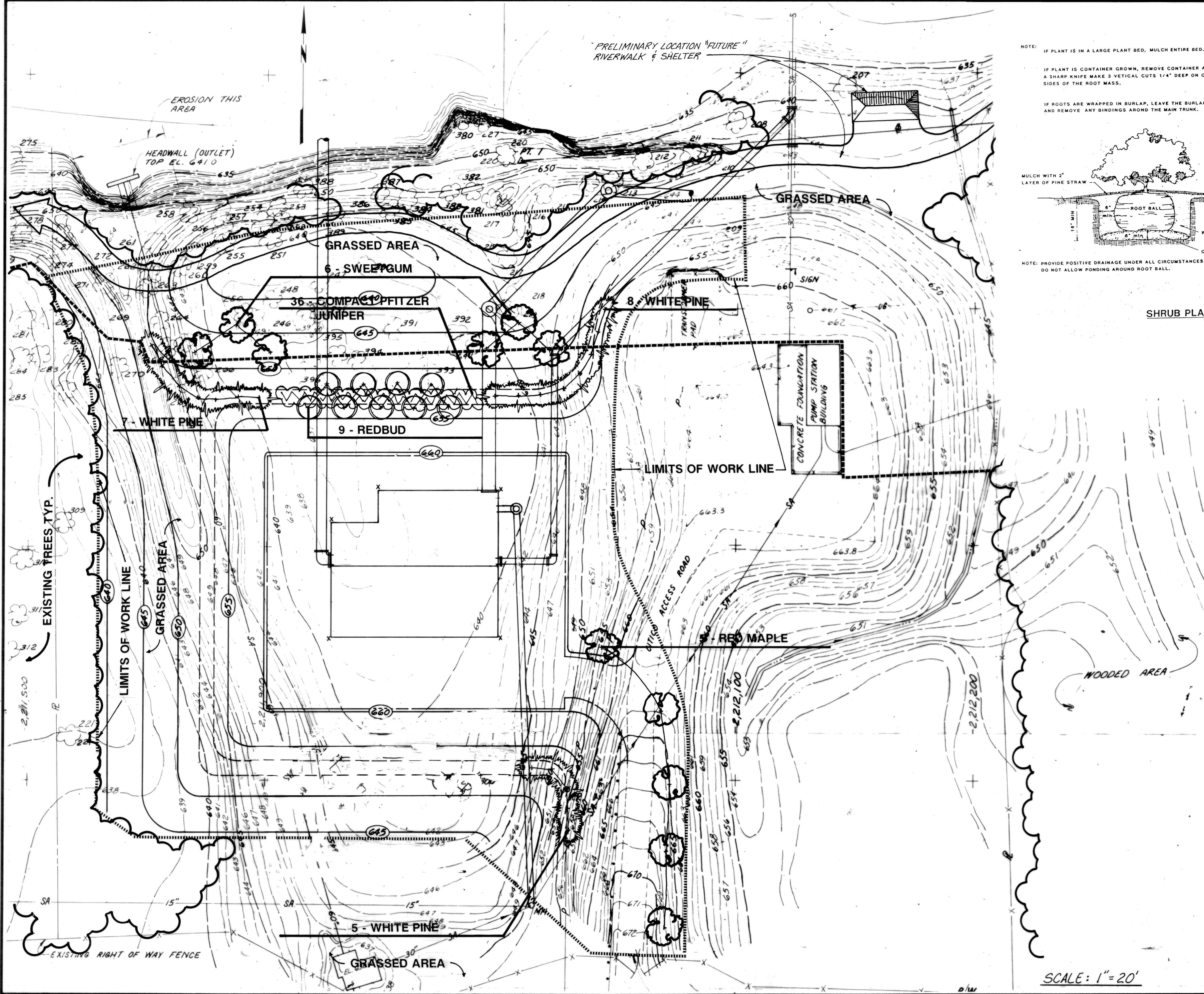
TEMPORARY SILT FENCE DETAIL
NO SCALE
(REQ'D. AS DIRECTED BY THE ENGINEER FOR EROSION & SEDIMENT CONTROL) (NO SEPARATE PAYMENT ALLOWED)



Synthetic filter fabric shall be Stalbenka Type 100 as manufactured by American Enka Co., GEOFAB SILT FENCE as manufactured by Mercantile Development, Inc., or approved equal. Hog wire fence backing or fabric is not required with GEOFAB SILT FENCE.



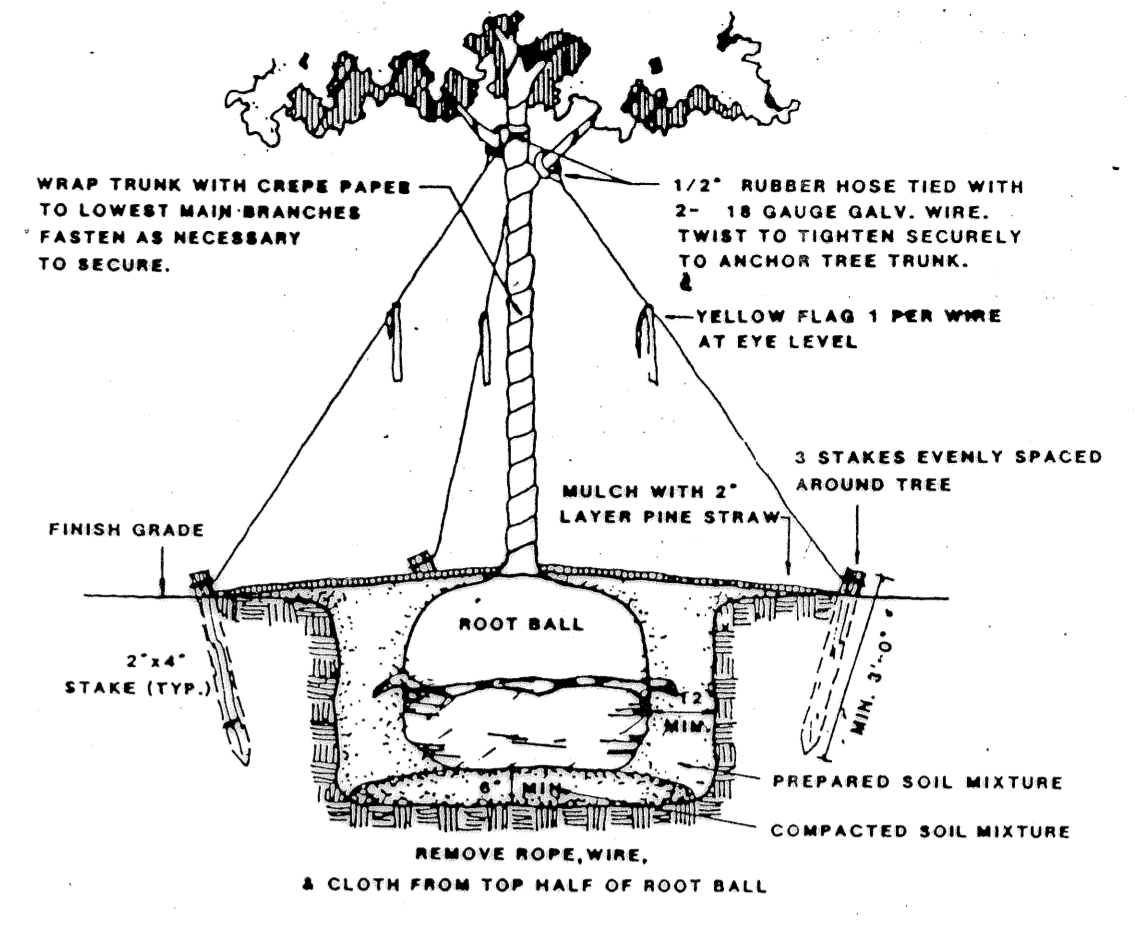
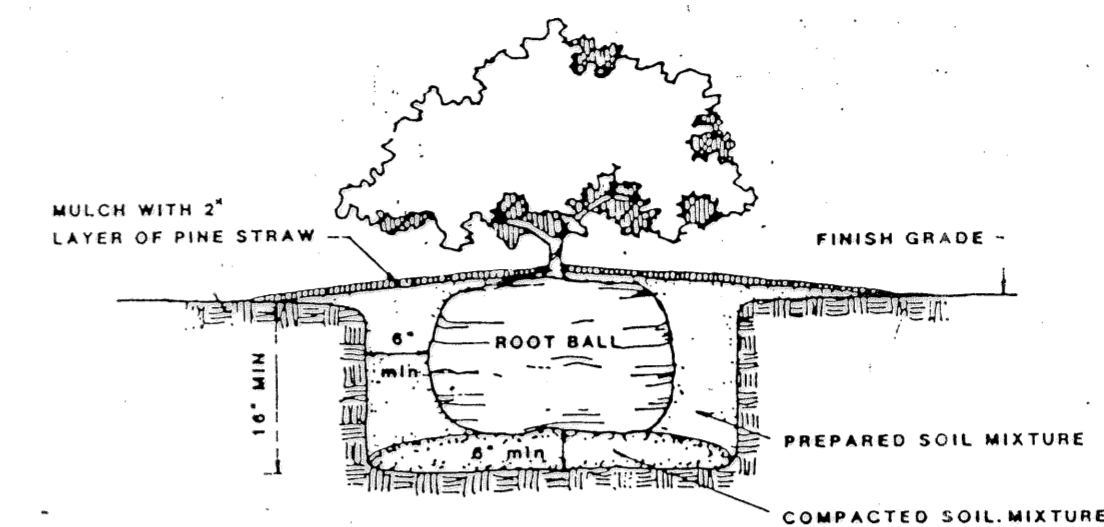
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
3-17-92		RECORD
CITICO II PUMPING STATION		
SITE PLAN PIPING DETAILS		
CITY OF CHATTANOOGA, TENNESSEE		
OSGN P.R.D.	8/89	HENSLEY - SCHMIDT, INC.
DRWN CADD/GR	8/89	ENGINEERS AND SURVEYORS
CHKD P.R.D.	8/89	ATLANTA - CHATTANOOGA
APPR A.D.S.	8/89	RALEIGH - ORLANDO
DRAWING NO.		6685
		-37C-C6.1



NOTE: IF PLANT IS IN A LARGE PLANT BED, MULCH ENTIRE BED.

IF PLANT IS CONTAINER GROWN, REMOVE CONTAINER AND USING A SHARP KNIFE MAKE 3 VERTICAL CUTS 1/4" DEEP ON OPPOSITE SIDES OF THE ROOT MASS.

IF ROOTS ARE WRAPPED IN BURLAP, LEAVE THE BURLAP IN PLACE AND REMOVE ANY BINDINGS AROUND THE MAIN TRUNK.



PLANT LIST

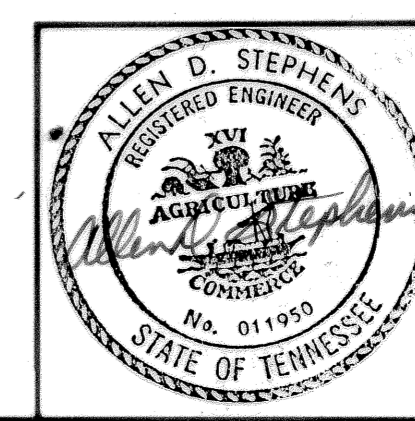
QTY.	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
5	ACER RUBRUM	RED MAPLE	1"-1 1/2" CAL.	B&B, 30' O.C.
6	LIQUIDAMBAR STYRACIFULA	SWEETGUM	2"-2 1/2" CAL.	B&B, 20' O.C.
20	PINUS STROBUS	WHITE PINE	7'-8' HGT.	B&B, 10' O.C. BRANCHED TO GROUND, FULL
36	JUNIPERUS CH. PFITZERANA 'COMPACTA'	COMPACT PFITZER JUN.	3 GAL. 18"-24" HGT.	3' O.C.
9	CERCIS CANADENSIS	REDBUD	2"-2 1/2" CAL.	B&B 20' O.C.

3		
2		
1	3-17-92	RECORD
REVNO	RELEASED BY	DESCRIPTION OF REVISION

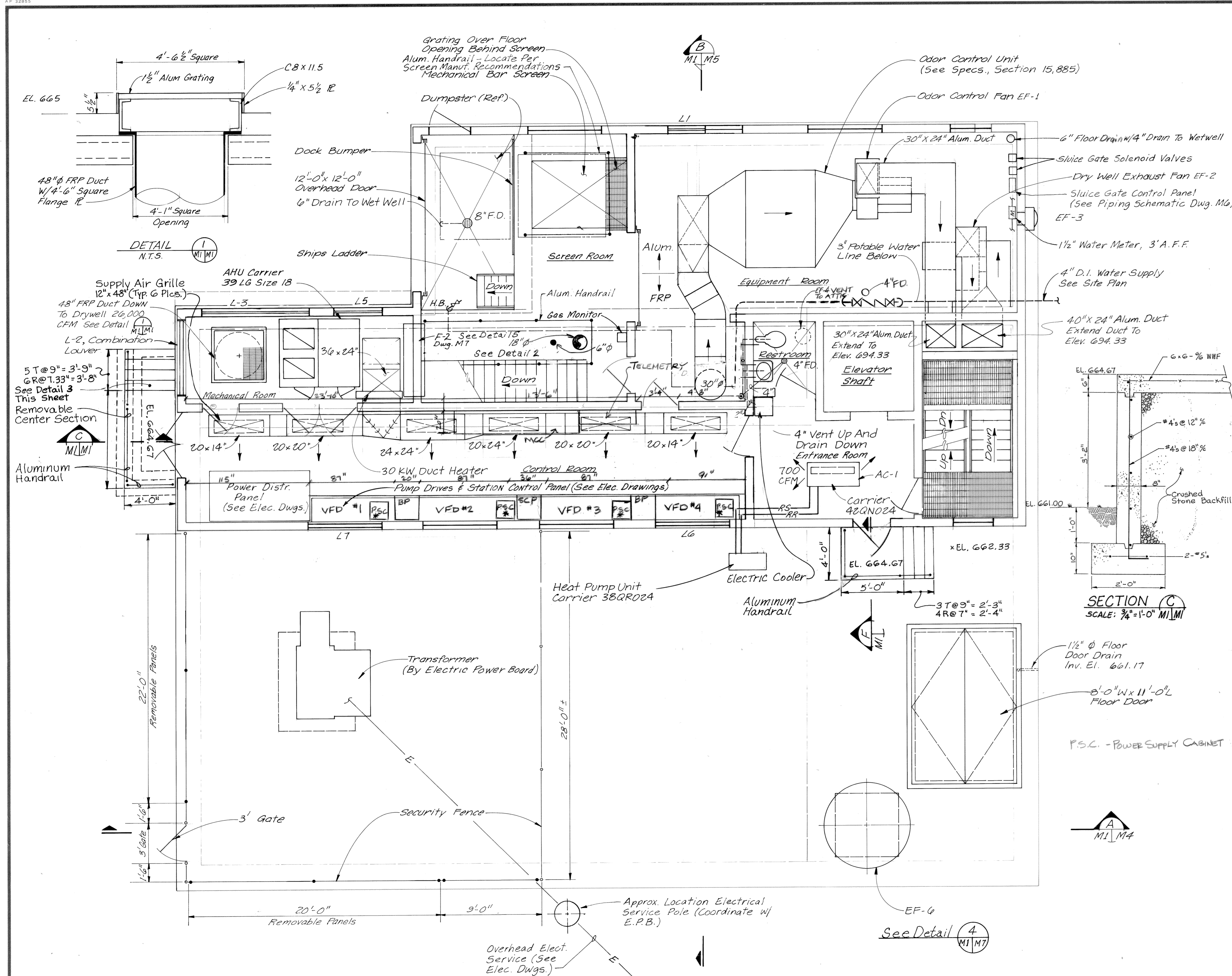
CITICO II PUMPING STATION

LANDSCAPE ARCHITECTURAL PLANTING PLAN

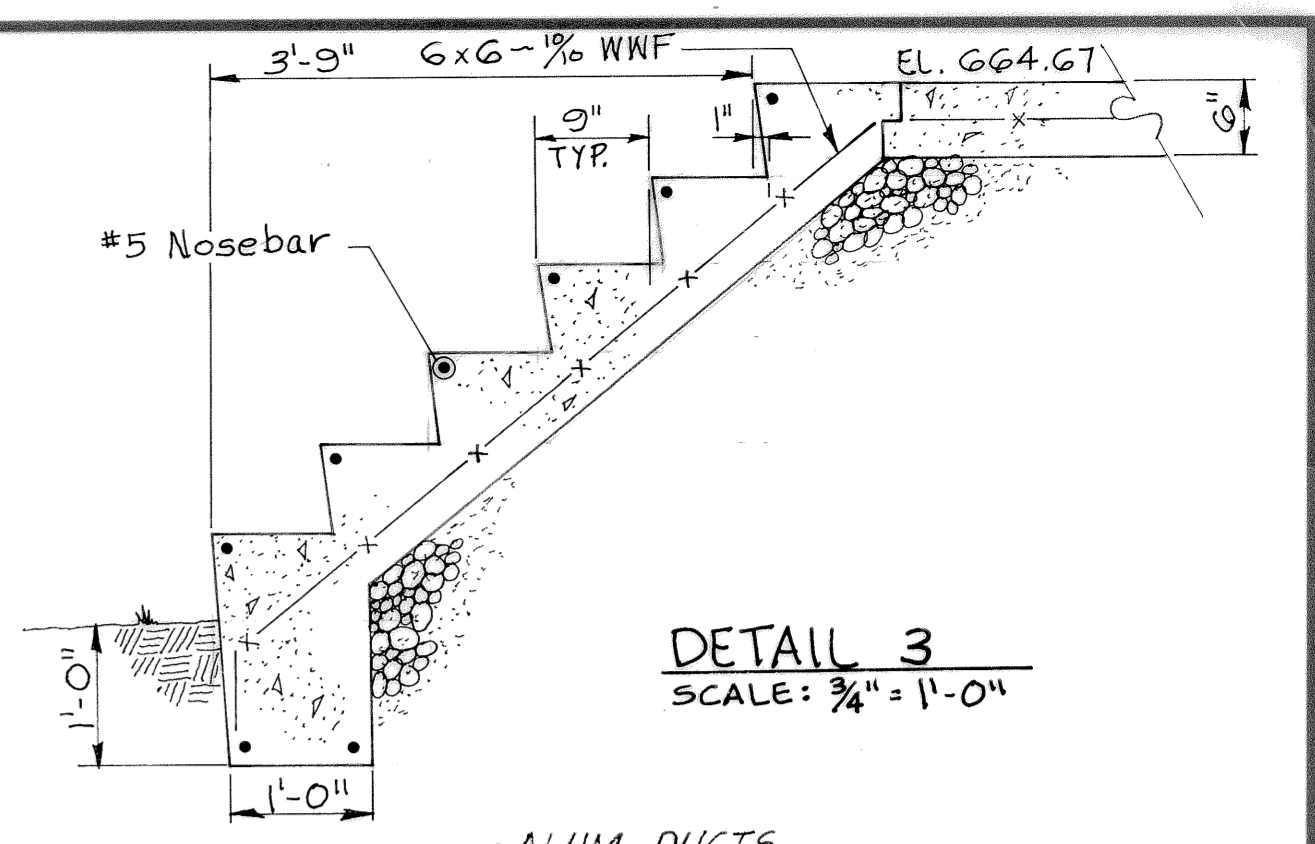
CITY OF CHATTANOOGA, TENN.



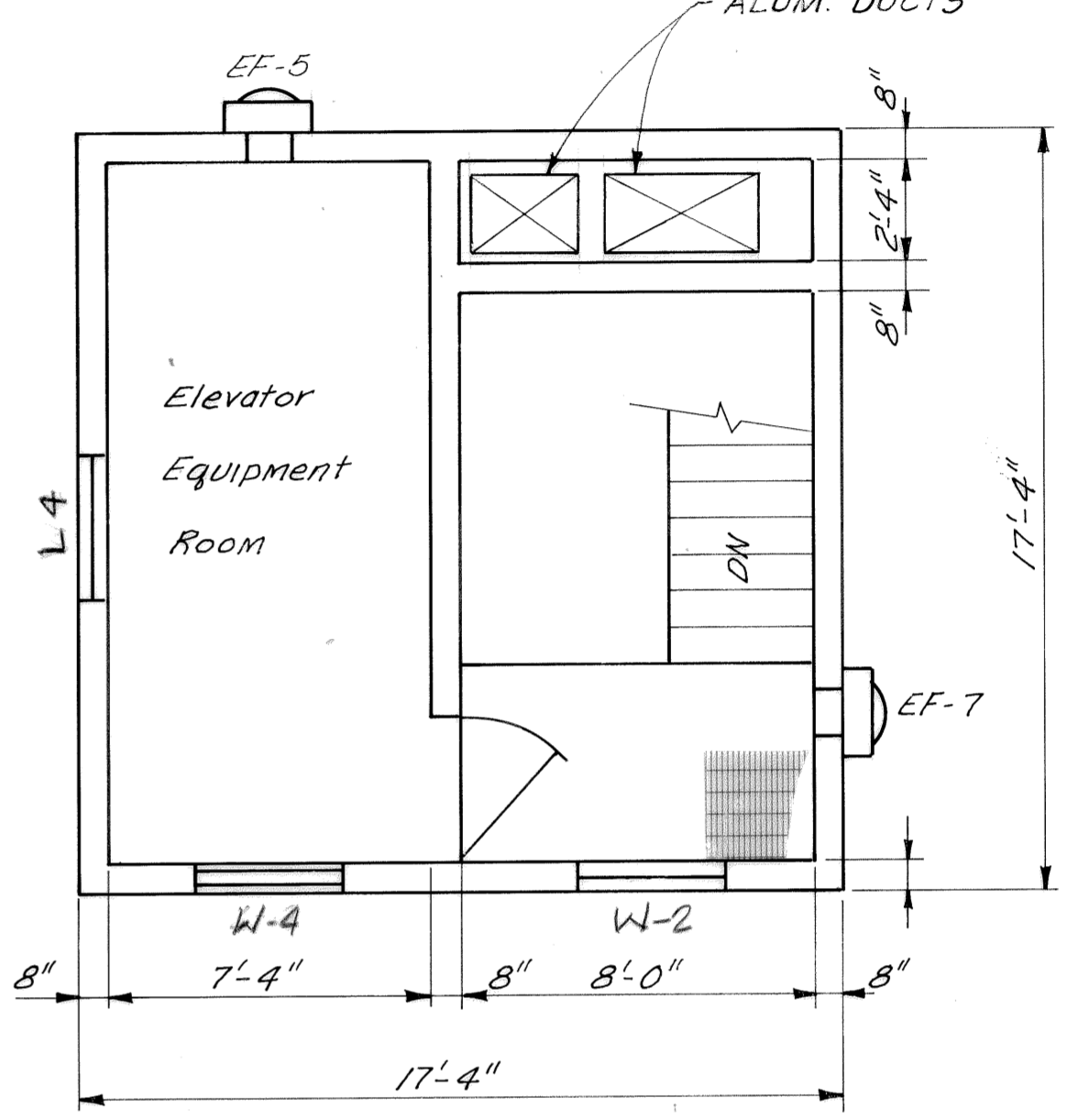
DSGN	D.S.	7/89	HENSLEY-SCHMIDT, INC.	DRAWING NO.
DRWN	G. Ramsey	7/89	CONSULTANTS	6685-
CHKD	B.G.	7/89	ATLANTA - CHATTANOOGA - RALEIGH	37C-LI.1
APPR	A.D.S.	7/89	VALDOSTA - KNOXVILLE - ORLANDO	



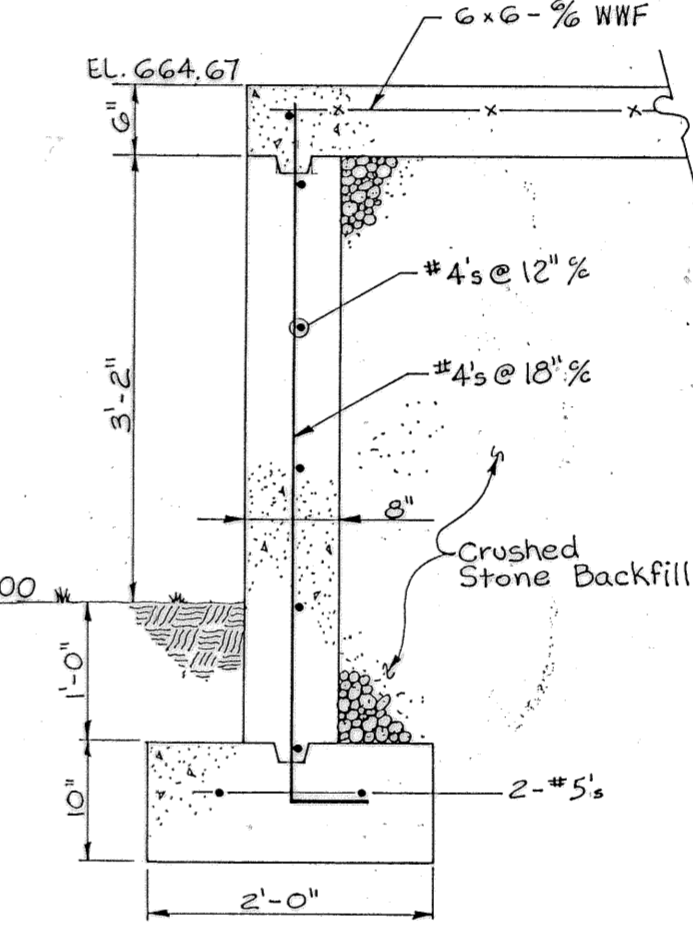
PLAN - ELEV. 665.0
SCALE: 1/4" = 1'-0"



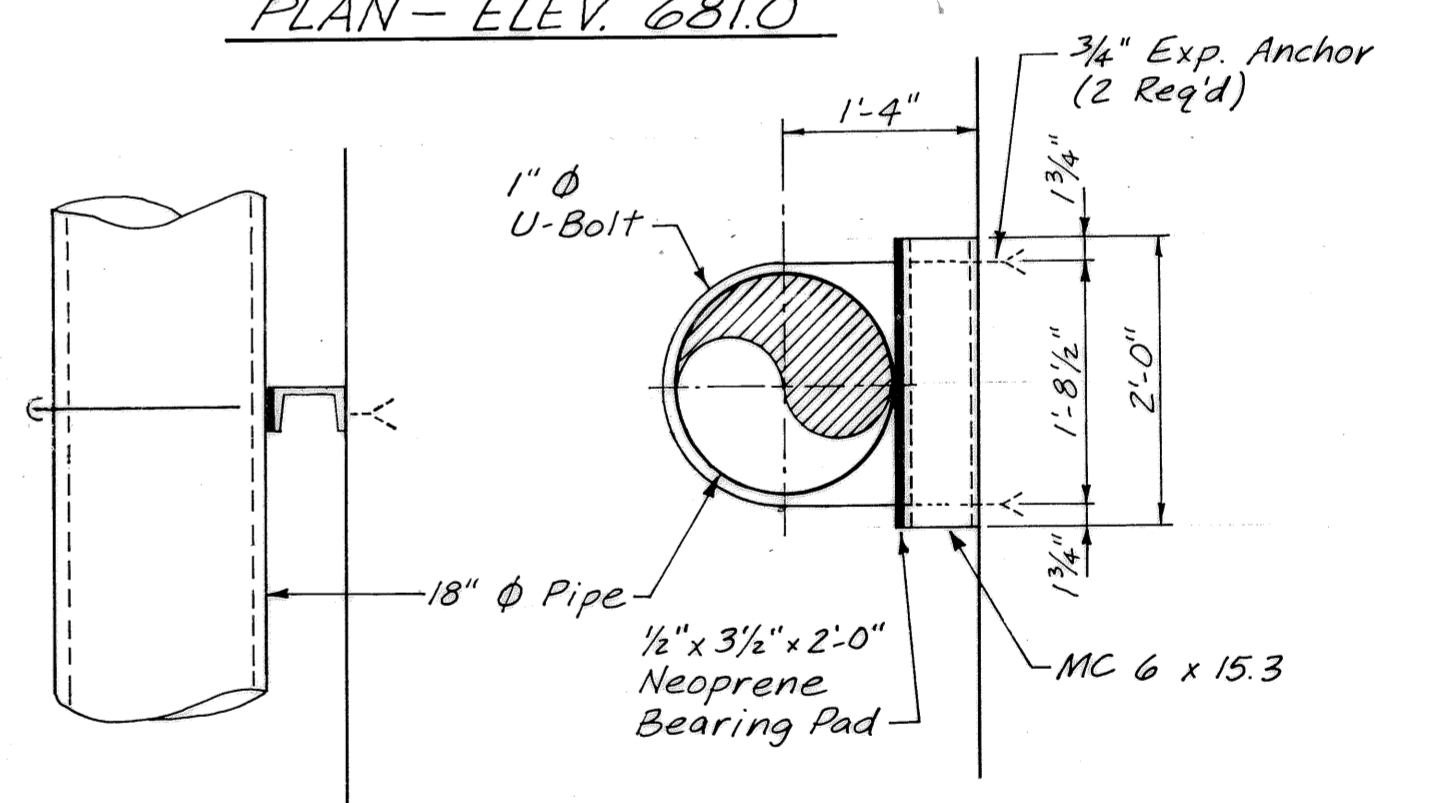
DETAIL 3
SCALE: 3/4" = 1'-0"



PLAN - ELEV. 681.0

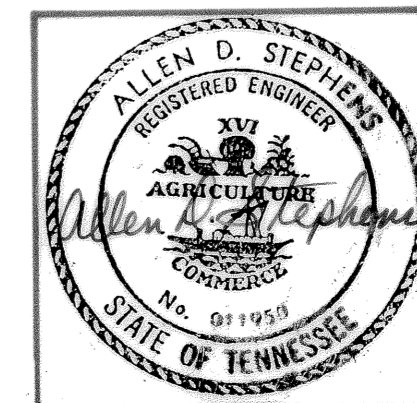


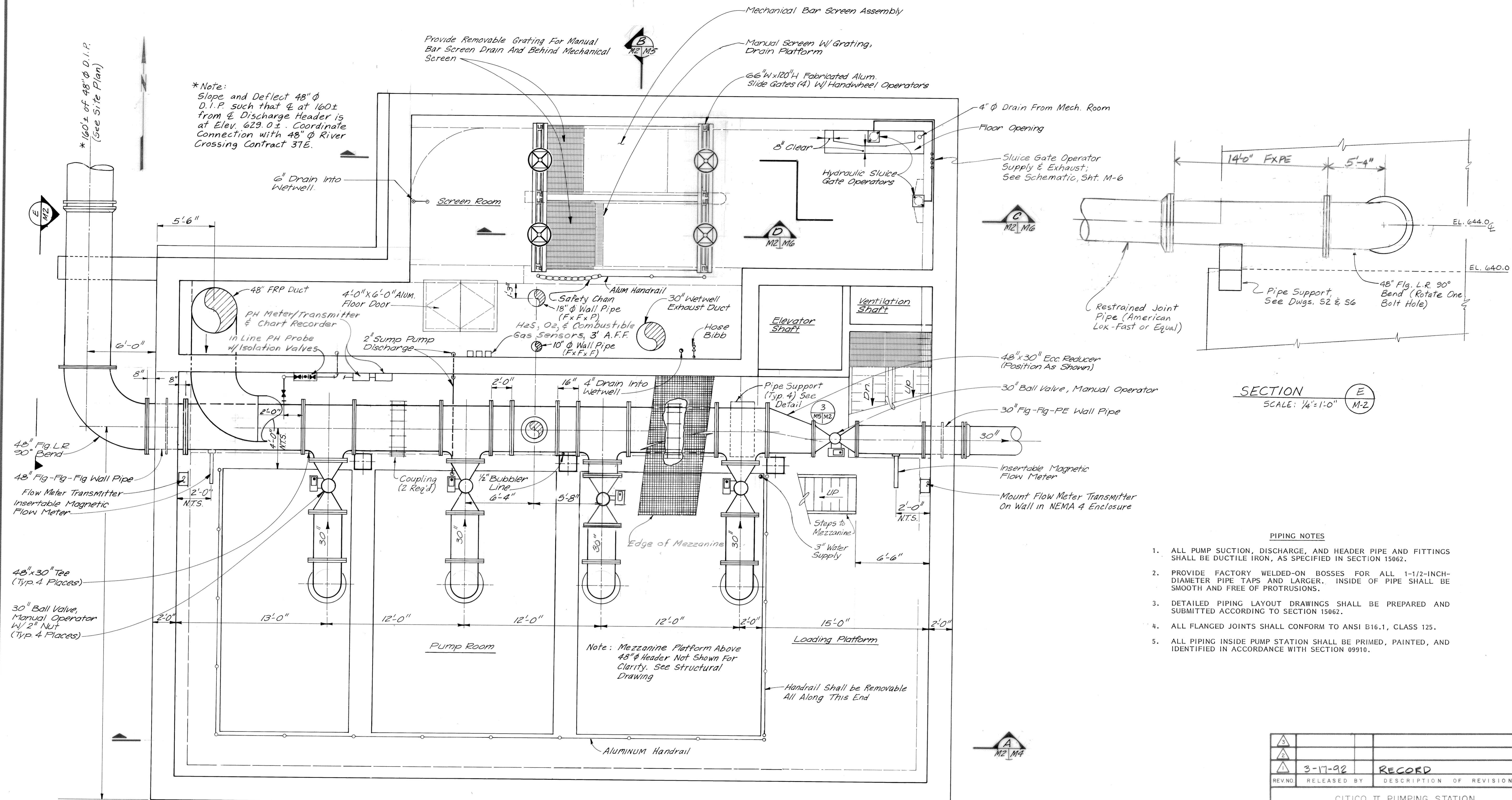
SECTION C
SCALE: 3/4" = 1'-0" M/M



SURGE PIPE SUPPORT - DETAIL 2
NO SCALE

3			
2			
1	3-17-92	RECORD	
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION	
CITICO II PUMPING STATION			
PLAN ELEVATION 665.00			
MECHANICAL			
CITY OF CHATTANOOGA, TENNESSEE			
DSGN	TDR	4/87	HENSLEY-SCHMIDT, INC. CONSULTANTS ATLANTA · CHATTANOOGA · RALEIGH VALDOSTA · KNOXVILLE · ORLANDO
DRWN	ELW	6/87	
CHKD	ADS	7/87	
APPR	ADS	7/87	
DRAWING NO.			6685-37C-MI





* Note:
Slope and Deflect 48" ϕ
D.I.P. such that ϕ at 160 \pm
from ϕ Discharge Header is
at Elev. 629.0 \pm . Coordinate
Connection with 48" ϕ River
Crossing Contract 37E.

SECTION E
SCALE: 1/4"=1'-0"
M-2

PIPING NOTES

1. ALL PUMP SUCTION, DISCHARGE, AND HEADER PIPE AND FITTINGS SHALL BE DUCTILE IRON, AS SPECIFIED IN SECTION 15062.
2. PROVIDE FACTORY WELDED-ON BOSSES FOR ALL 1-1/2-INCH-DIAMETER PIPE TAPS AND LARGER. INSIDE OF PIPE SHALL BE SMOOTH AND FREE OF PROTRUSIONS.
3. DETAILED PIPING LAYOUT DRAWINGS SHALL BE PREPARED AND SUBMITTED ACCORDING TO SECTION 15062.
4. ALL FLANGED JOINTS SHALL CONFORM TO ANSI B16.1, CLASS 125.
5. ALL PIPING INSIDE PUMP STATION SHALL BE PRIMED, PAINTED, AND IDENTIFIED IN ACCORDANCE WITH SECTION 09910.

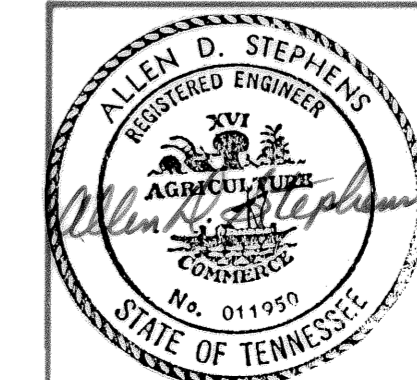
PLAN
1/4"=1'-0"

3		
2		
1	3-17-92	RECORD
REVISION	RELEASED BY	DESCRIPTION OF REVISION

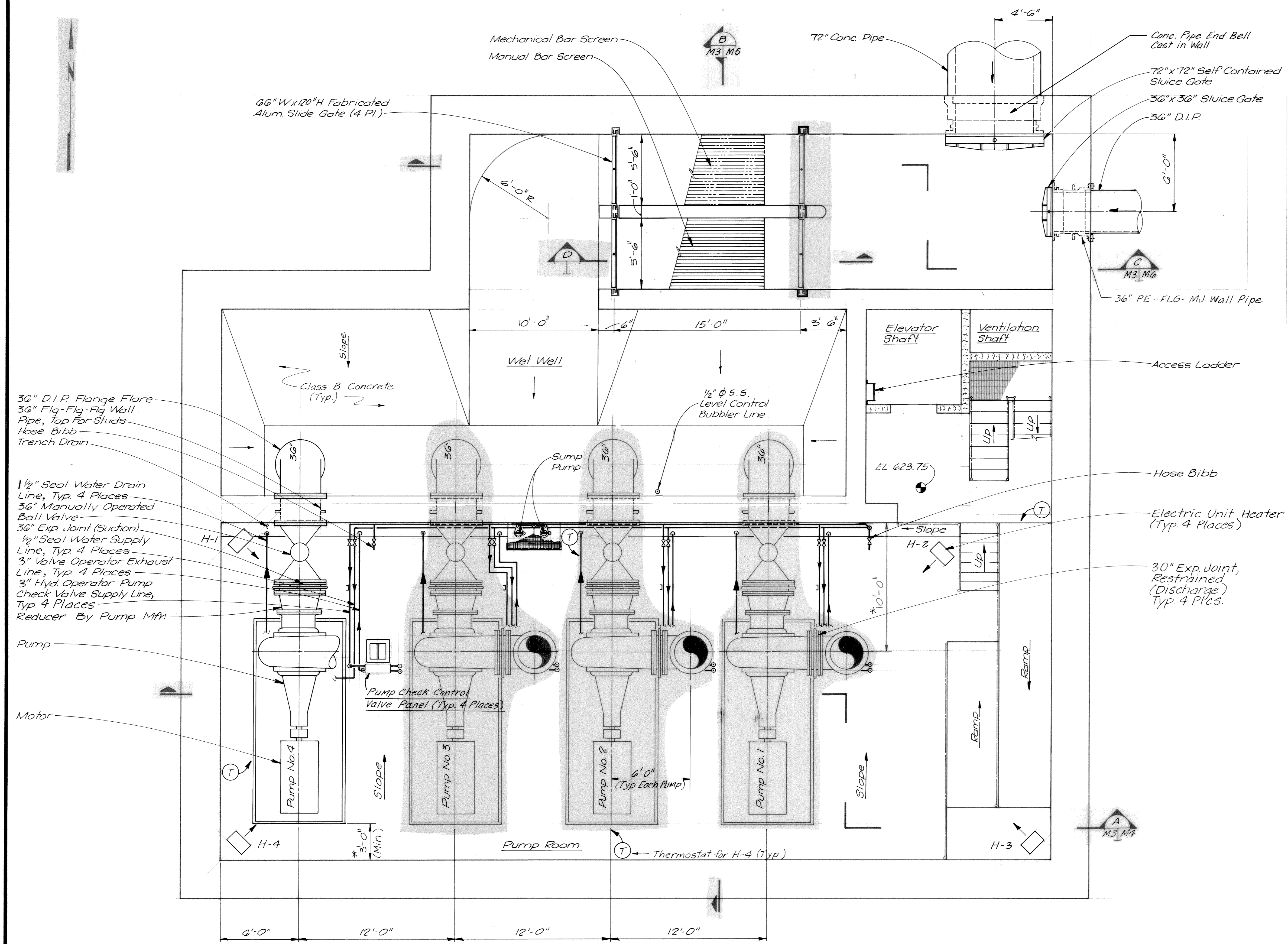
CITICO II PUMPING STATION

PLAN ELEVATION 640.00
MECHANICAL

CITY OF CHATTANOOGA, TENNESSEE



DSGN	TDR	6-89	HENSLEY-SCHMIDT, INC.	DRAWING NO.
DRWN	ELW	6-89	CONSULTANTS	
CHKD	TEB	6-89	ATLANTA - CHATTANOOGA - RALEIGH	6685-37C-M2.1
APPR	ADs	7-89	VALDOSTA - KNOXVILLE - ORLANDO	



- 36" D.I.P. Flange Flare
- 36" Flg-Flg Wall Pipe, Tap for Studs
- Hose Bibb
- Trench Drain
- 1/2" Seal Water Drain Line, Typ 4 Places
- 36" Manually Operated Ball Valve
- 36" Exp Joint (Suction)
- 1/2" Seal Water Supply Line, Typ 4 Places
- 3" Valve Operator Exhaust Line, Typ 4 Places
- 3" Hyd. Operator Pump Check Valve Supply Line, Typ 4 Places
- Reducer By Pump Mfr.
- Pump
- Motor

66" W x 120" H Fabricated Alum Slide Gate (4 Pl.)

Mechanical Bar Screen
Manual Bar Screen

72" Conc. Pipe

Conc. Pipe End Bell Cast in Wall

72" x 72" Self Contained Sluice Gate

36" x 36" Sluice Gate

36" D.I.P.

36" PE-FLG-MJ Wall Pipe

Elevator Shaft

Ventilation Shaft

Access Ladder

Hose Bibb

Electric Unit Heater (Typ 4 Places)

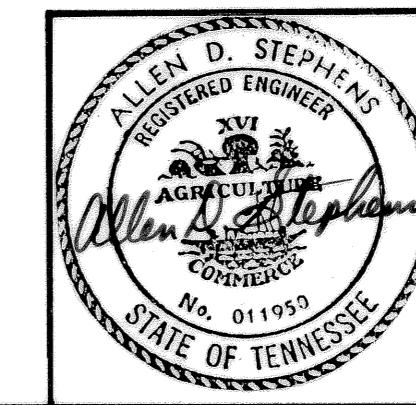
30" Exp Joint, Restrained (Discharge) Typ 4 Places

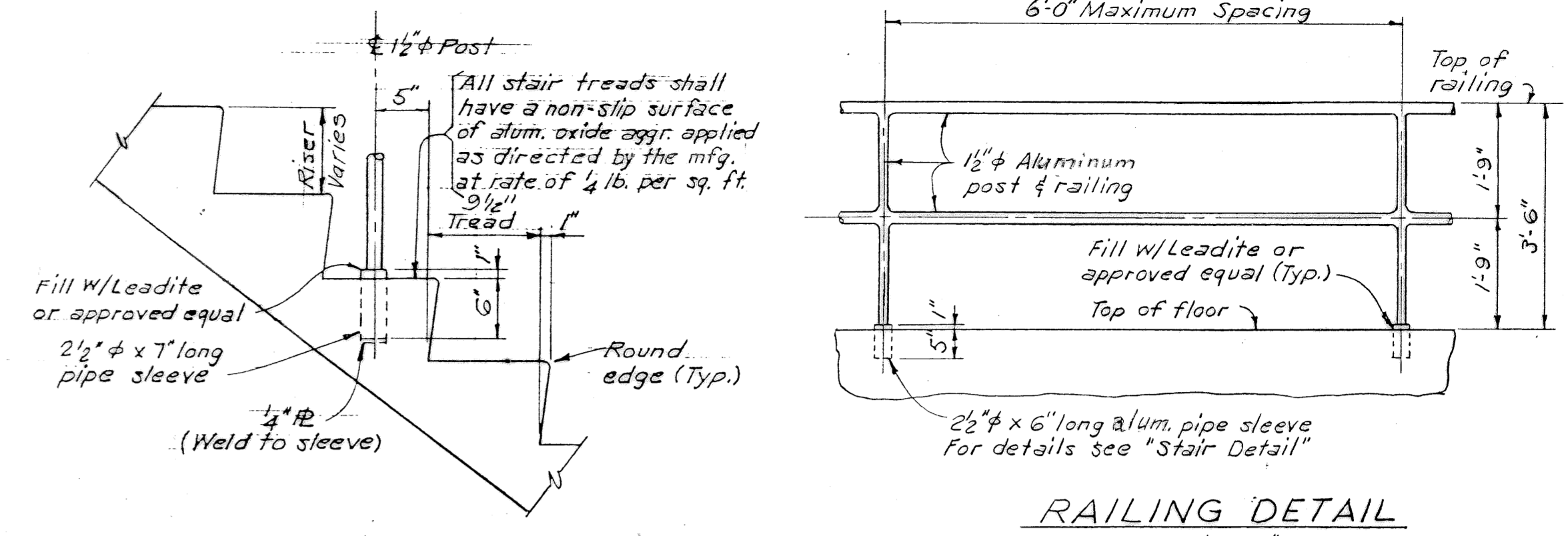
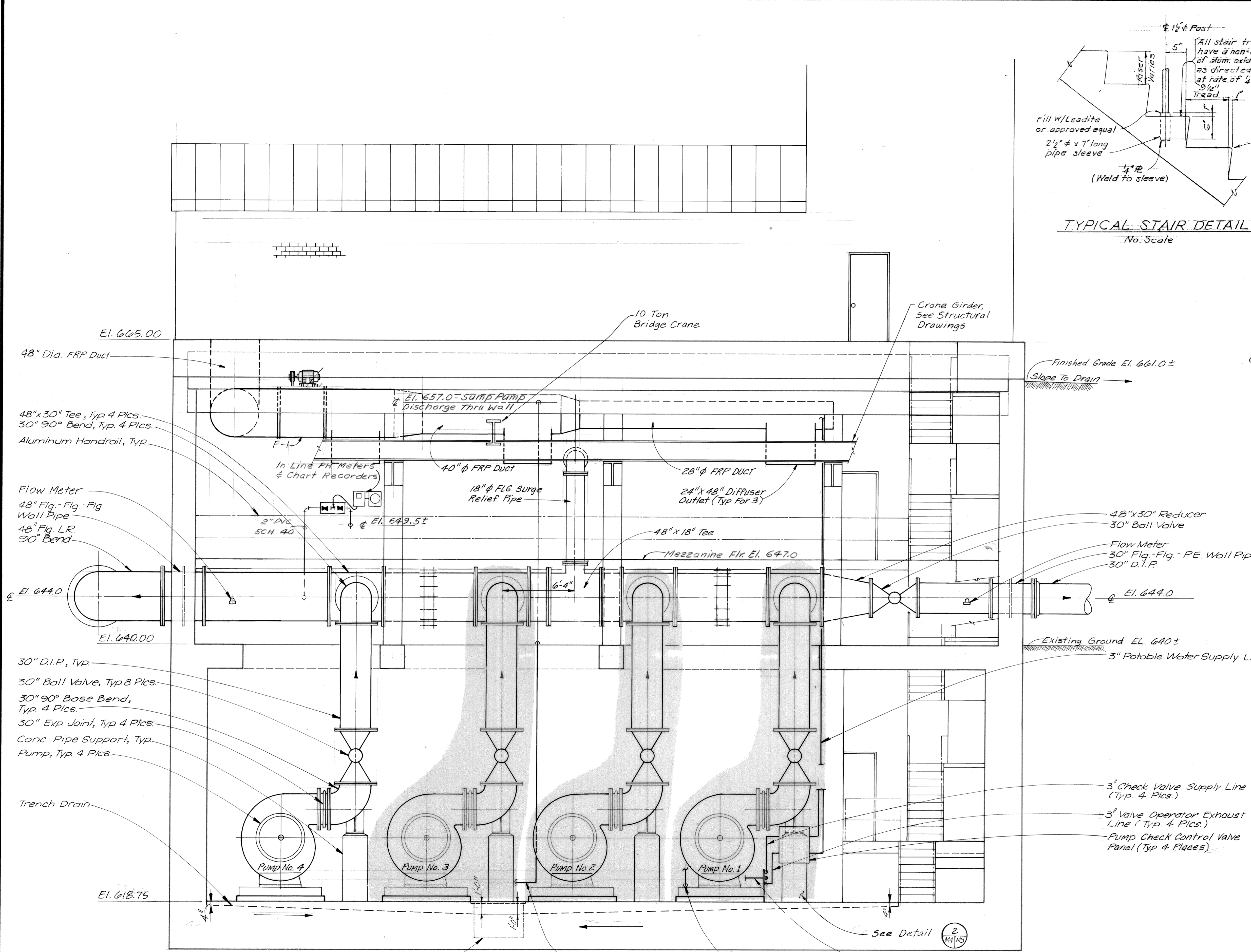
Thermostat for H-4 (Typ.)

PLAN
1/4" = 1'-0"

*Dimensions shall be determined in accordance with approved shop drawings. A minimum 3-ft clearance shall be provided between end of pump base/motor and drywell wall.

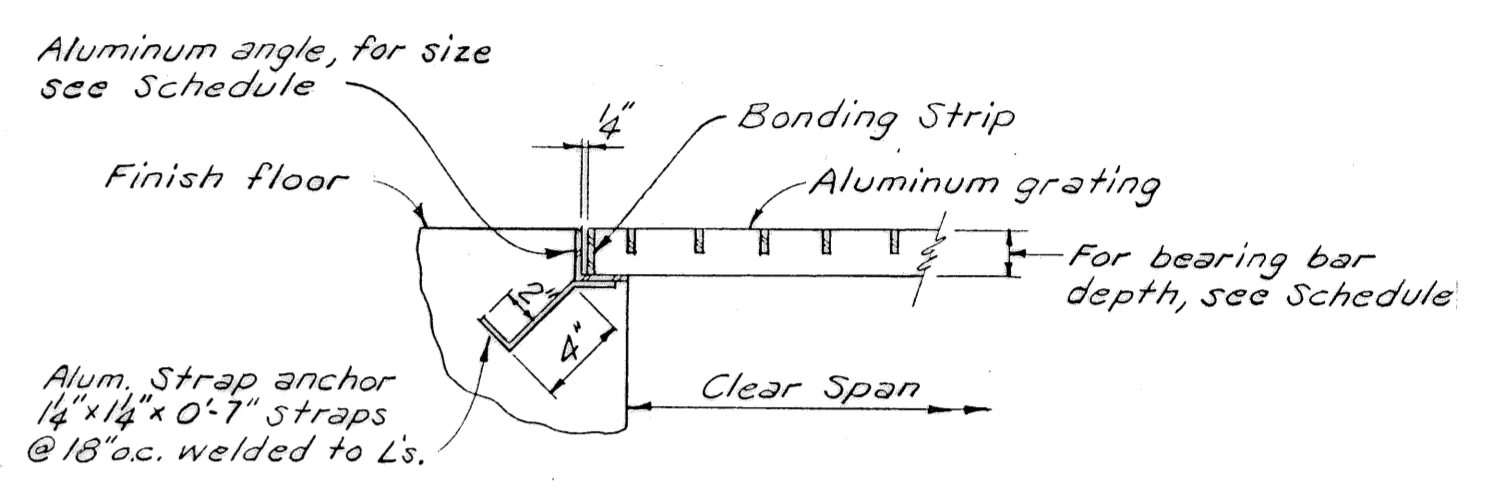
REVISION	NO.	RELEASED BY	DESCRIPTION OF REVISION
3-17-92			RECORD
CITICO II PUMPING STATION			
PLAN ELEVATION 618.75			
MECHANICAL			
CITY OF CHATTANOOGA, TENNESSEE			
DSGN	TDR	6-89	HENSLEY-SCHMIDT, INC. CONSULTANTS ATLANTA · CHATTANOOGA · RALEIGH VALDOSTA · KNOXVILLE · ORLANDO
DRWN	DEG	6-89	
CHKD	TEB	6-89	
APPR	ADS	6-89	
DRAWING NO.			6685-37C-M31





TYPICAL STAIR DETAIL
No. Scale

RAILING DETAIL
Scale: 1/2" = 1'-0"



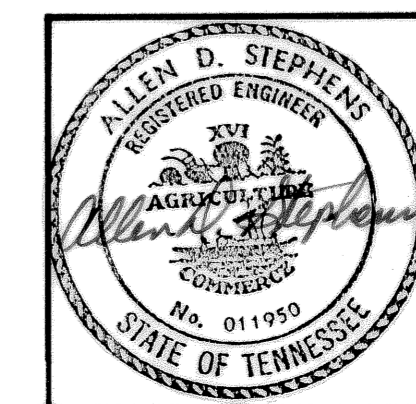
Bituminous coating req'd. on all aluminum surfaces in contact with concrete.

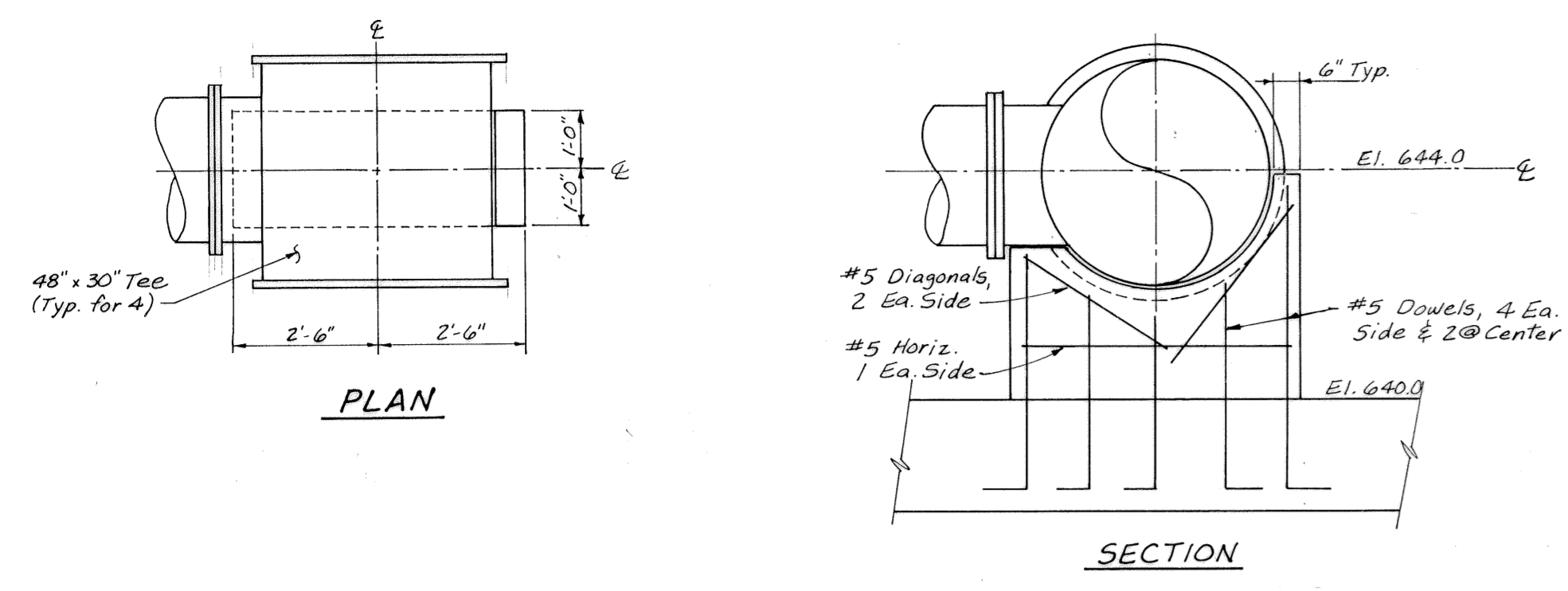
CLEAR SPAN	BEARING BAR DEPTH	ANGLE SIZE
Less than 3'-0"	1 1/4"	L 1 1/2 x 1 1/2 x 1/4
3'-0" to 4'-0"	1 1/2"	L 1 3/4 x 1 3/4 x 1/4
4'-1" to 5'-0"	1 3/4"	L 2 x 2 x 1/4
5'-1" to 6'-0"	2"	L 2 1/4 x 2 1/4 x 1/4
6'-1" to 7'-0"	2 1/4"	L 2 1/2 x 2 1/2 x 1/4
7'-1" to 8'-0"	2 1/2"	L 2 3/4 x 2 3/4 x 1/4
8'-1" to 9'-0"	2 3/4"	L 3 x 3 x 1/4

Note: Seal Slab Not Shown Sump Pump Pit, See Sump Pump Detail

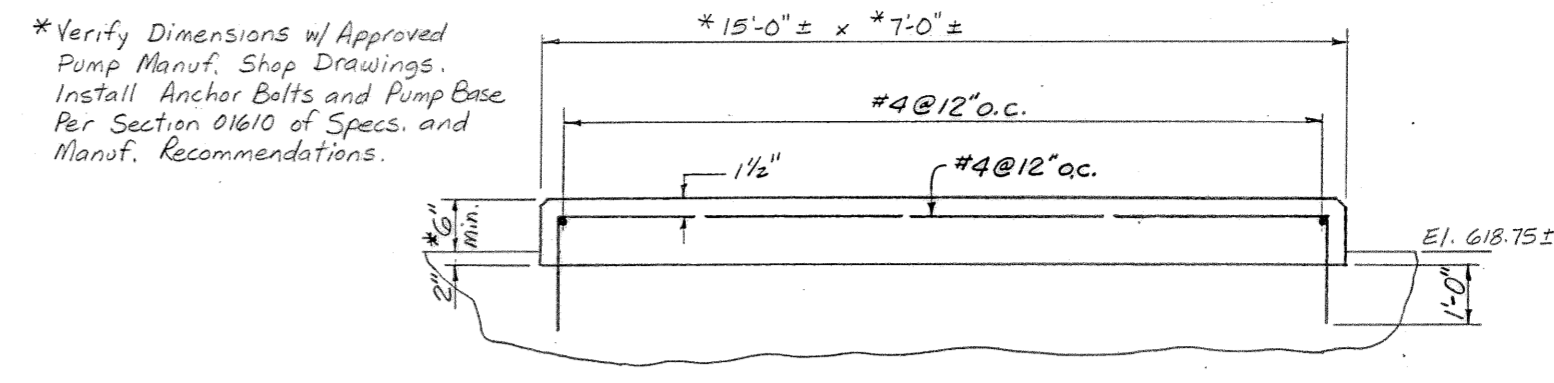
SECTION A
1/4" = 1'-0" M 133 M 4

3			
2			
1			
REV. NO.	3-17-92	RELEASED BY	RECORD
		DESCRIPTION OF REVISION	
CITICO II PUMPING STATION			
SECTION-A MECHANICAL			
CITY OF CHATTANOOGA, TENNESSEE			
DSGN TDR	6-89	HENSLEY-SCHMIDT, INC.	DRAWING NO.
DRWN ELW	6-89	CONSULTANTS	6685-37C-M41
CHKD TEB	6-89	ATLANTA · CHATTANOOGA · RALEIGH	
APPR ADS	7-89	VALDOSTA · KNOXVILLE · ORLANDO	

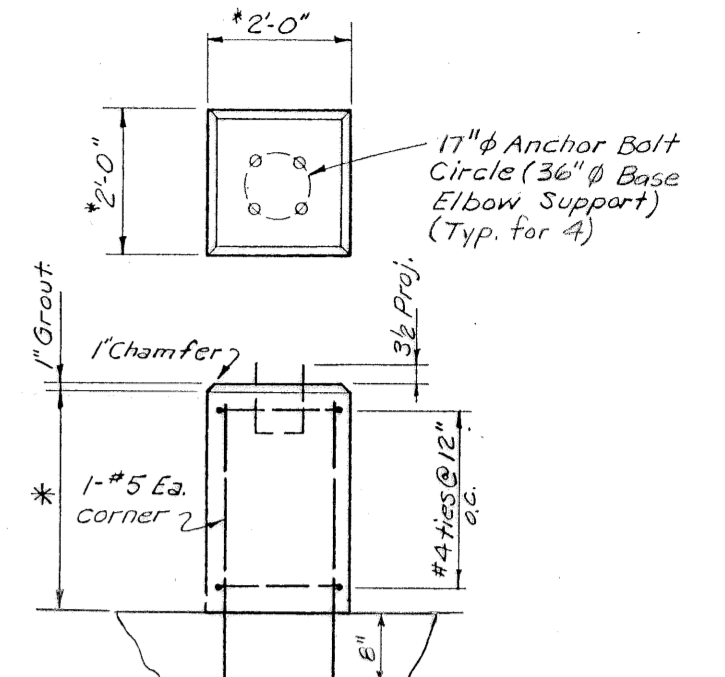




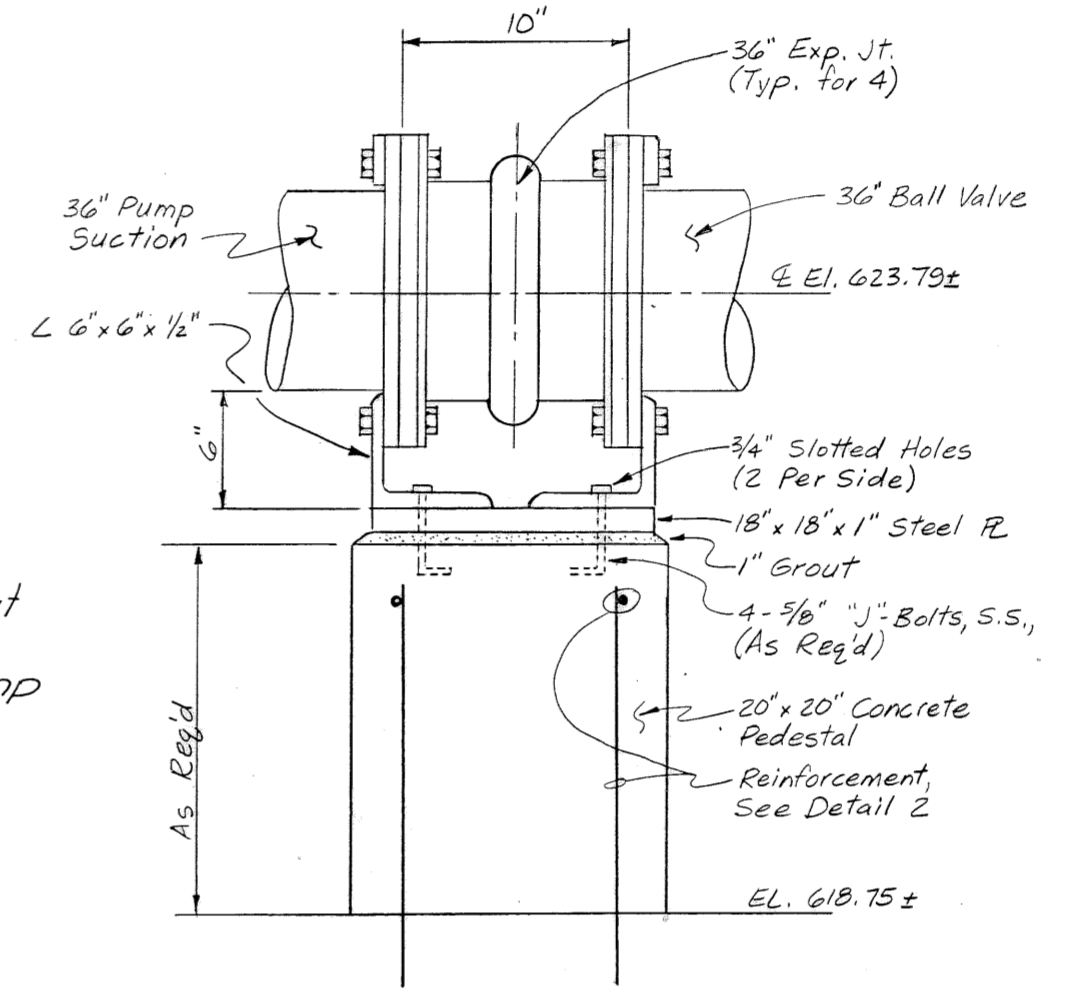
HEADER SUPPORT DETAIL 3
NOT TO SCALE M5



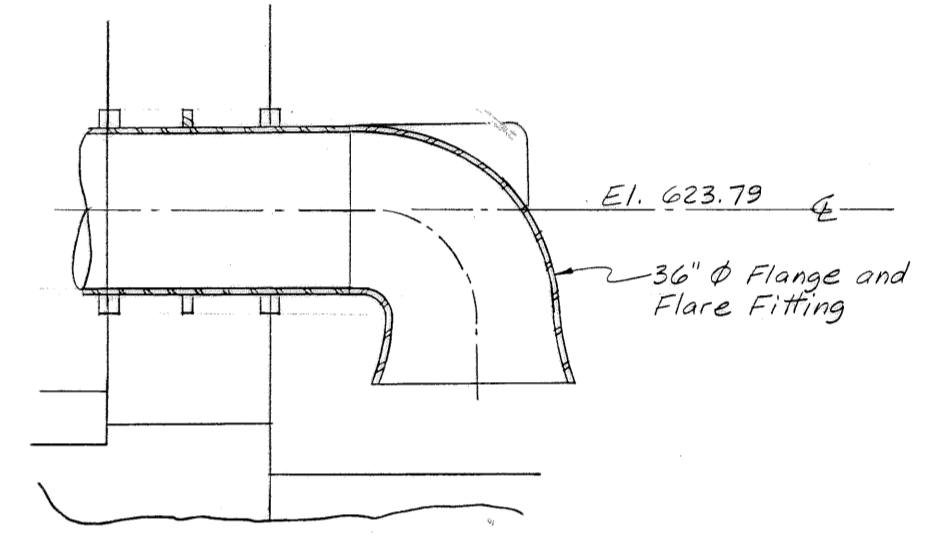
PUMP SUPPORT DETAIL 1
No Scale M5



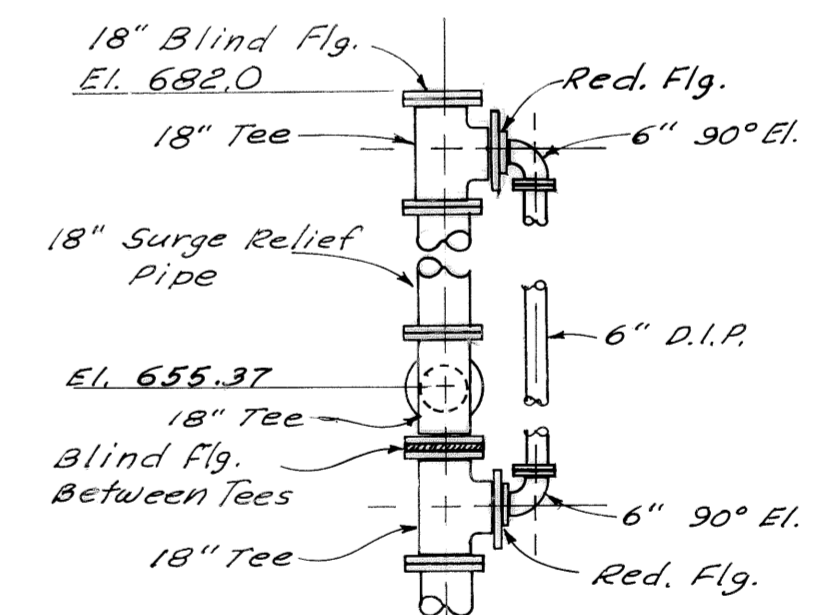
DETAIL 2
No Scale M5



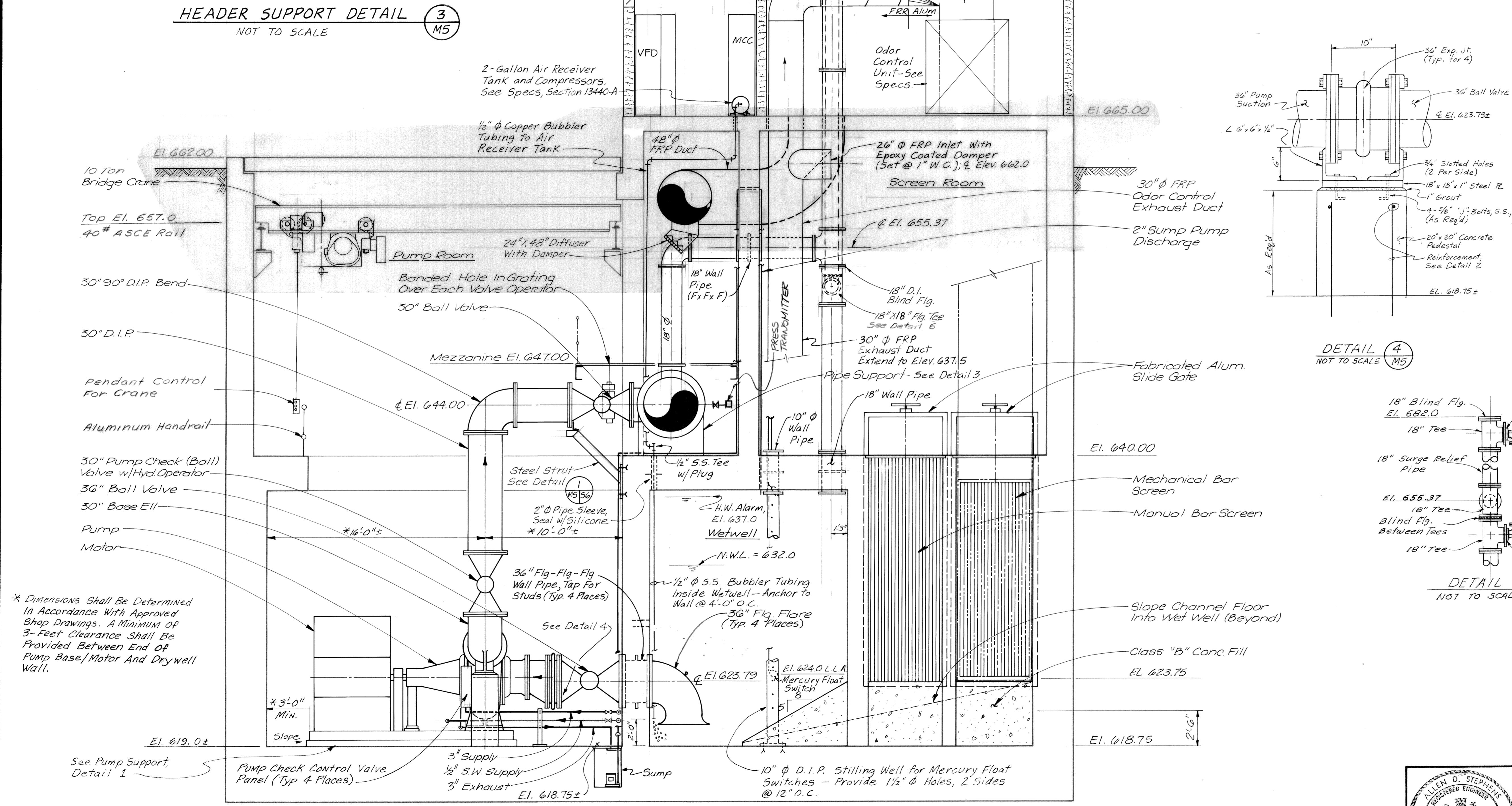
DETAIL 4
NOT TO SCALE M5



SUPPORT FLANGE SUPPORT DETAIL 5
NOT TO SCALE M5



DETAIL 6
NOT TO SCALE M5



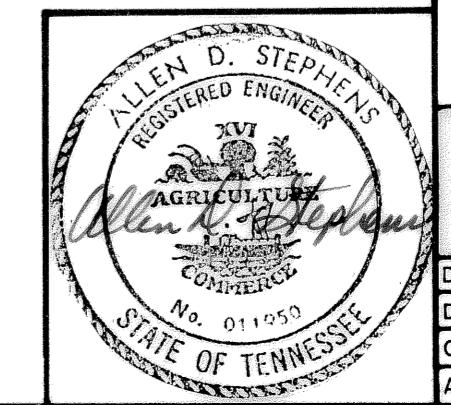
SECTION B
1/4" = 1'-0" M1,2,3,M5

* Dimensions Shall Be Determined In Accordance With Approved Shop Drawings. A Minimum Of 3-Foot Clearance Shall Be Provided Between End Of Pump Base/Motor And Drywell Wall.

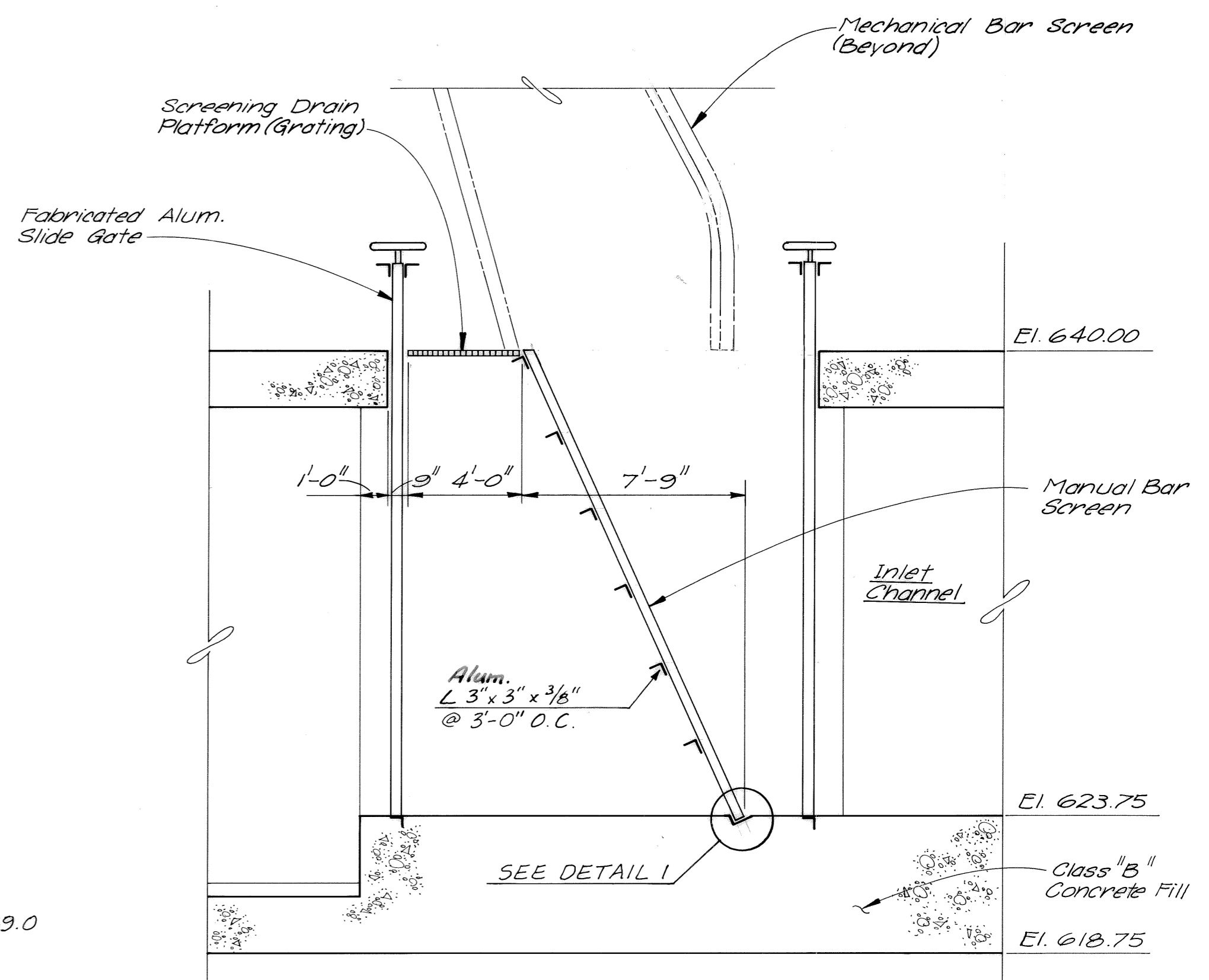
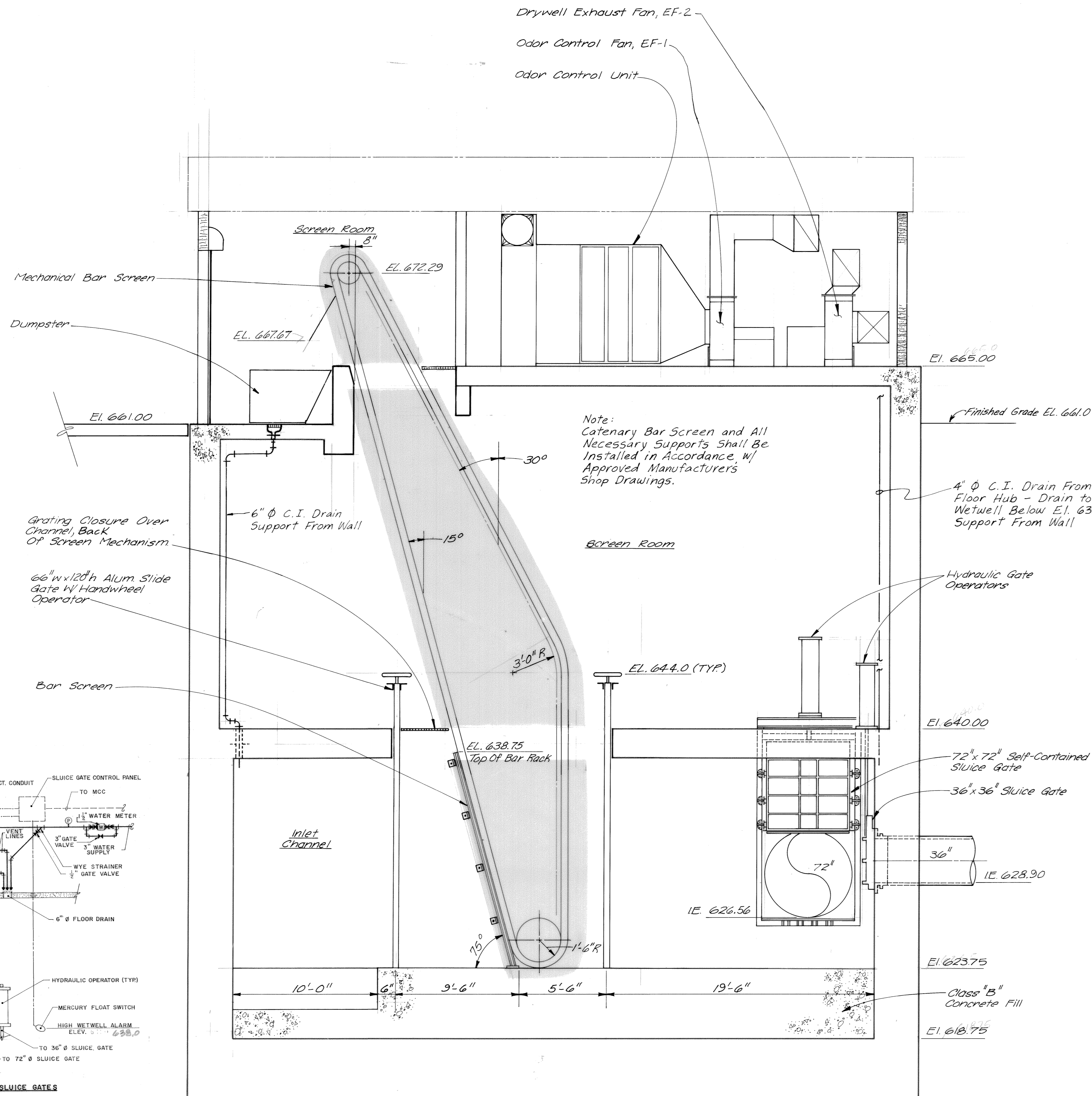
* Verify Dimensions w/ Approved Pump Manuf. Shop Drawings. Install Anchor Bolts and Pump Base Per Section 01610 of Specs. and Manuf. Recommendations.

REVISION	RELEASED BY	DESCRIPTION OF REVISION
3-17-92	RECORD	

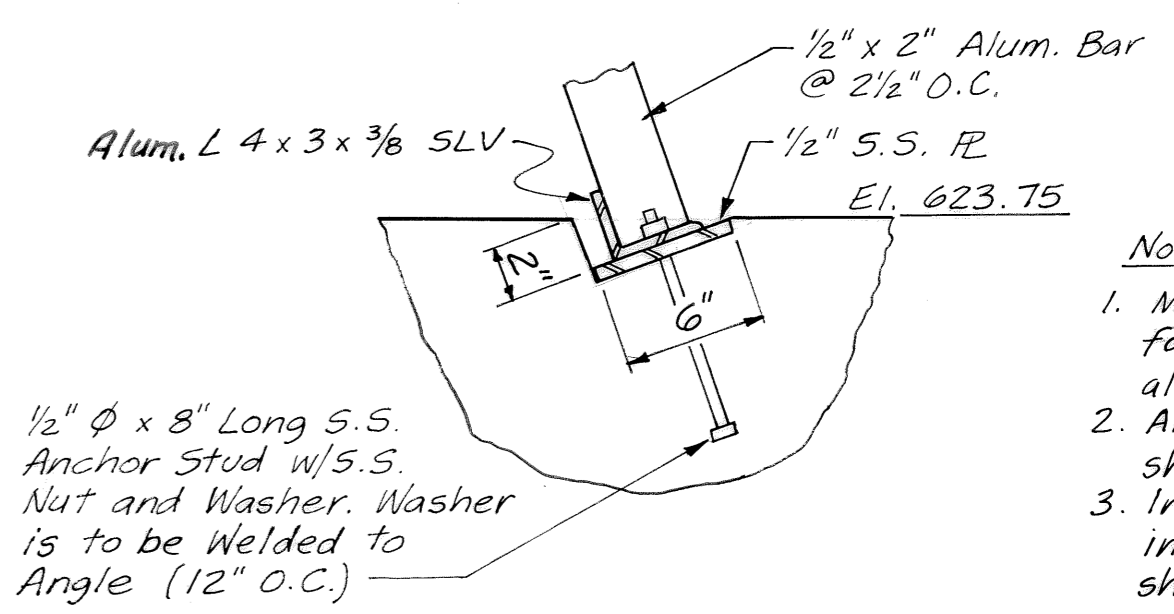
CITICO II PUMPING STATION
**SECTION - B
MECHANICAL**
CITY OF CHATTANOOGA, TENNESSEE



DSGN TDR	689	HENSLEY - SCHMIDT, INC.	DRAWING NO.
DRWN KDL	689	CONSULTANTS	
CHKD TEB	689	ATLANTA - CHATTANOOGA - RALEIGH	6685-37C-M5.1
APPR ADS	789	VALDOSTA - KNOXVILLE - ORLANDO	

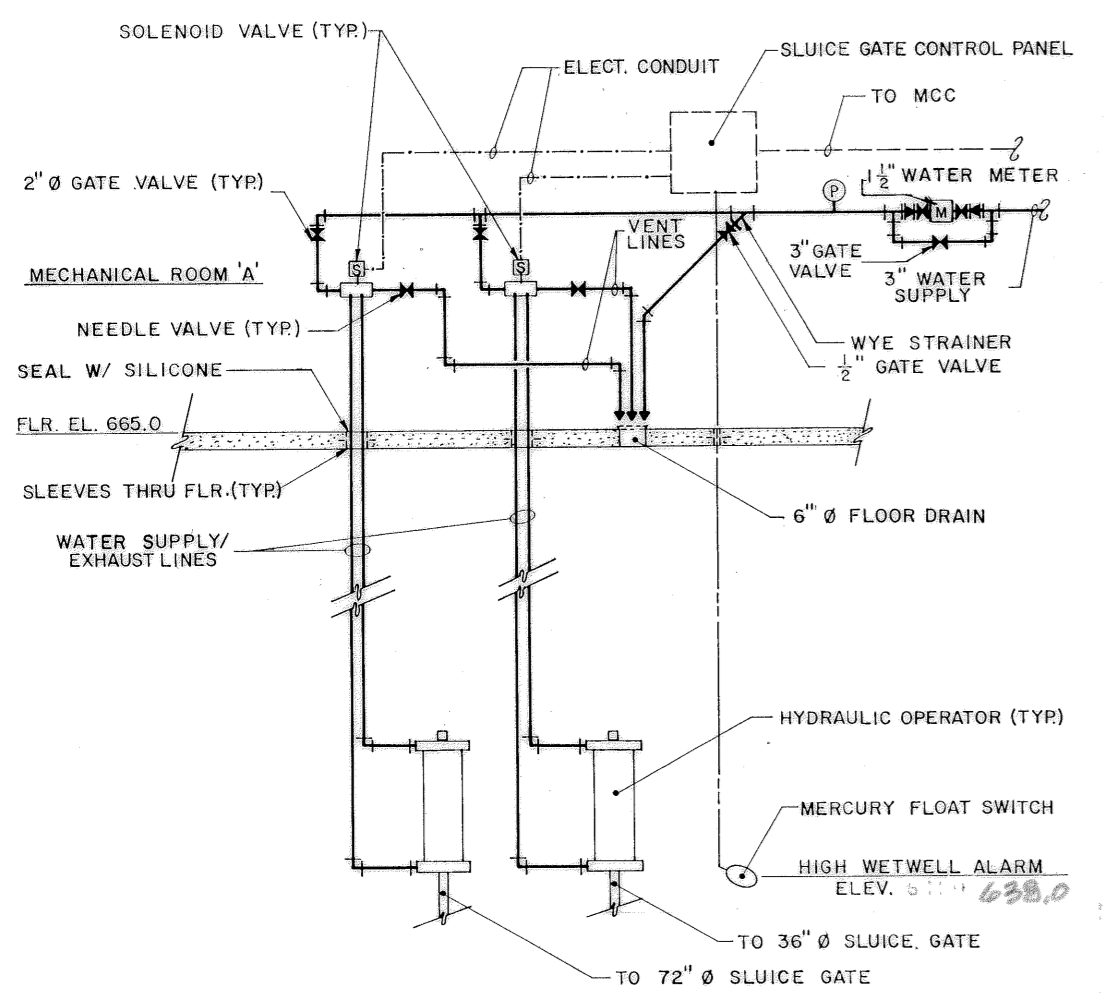


SECTION D
 1/4" = 1'-0" M2 M6



- Notes:
1. Manual bar screen shall be fabricated from aluminum alloy 6063-T6.
 2. All anchor bolts and fasteners shall be stainless steel.
 3. Install and anchor to walls in accordance with approved shop drawings.

DETAIL I
 NO SCALE M6

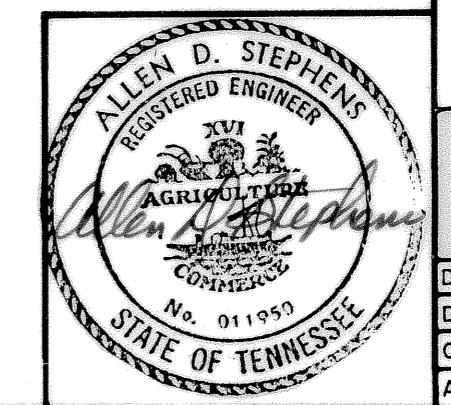


HYDRAULIC OPERATED SLUICE GATES
 PIPING SCHEMATIC

NOTE: WATER SUPPLY / EXHAUST AND VENT LINES, SOLENOID VALVES AND NEEDLE VALVES SIZED PER SLUICE GATE / CYLINDER MANUFACTURERS RECOMMENDATIONS (SEE SPECIFICATIONS SECTION 15135).

SECTION C
 1/4" = 1'-0" M2,3 M6

3-17-92	RECORD	
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
CITICO II PUMPING STATION		
SECTIONS C AND D MECHANICAL		
CITY OF CHATTANOOGA, TENNESSEE		
DSGN TOR 1/89	HENSLEY-SCHMIDT, INC.	DRAWING NO.
DRWN KDL 4/89	CONSULTANTS	6685-37C-M6.1
CHKD ADS 7/89	ATLANTA · CHATTANOOGA · RALEIGH	
APPR ADS 7/89	VALDOSTA · KNOXVILLE · ORLANDO	



FAN SCHEDULE														
MARK NO.	LOCATION BUILDING	SERVES	TYPE	CFM	STATIC PRESS	FAN RPM	NOM DIA	MAX SONES	MOTOR HP	DRIVE	ELECT	INTERLOCKS	MFR AND MODEL NO.	NOTES
EF-1	EQUIP ROOM	WET WELL	CENTRIFUGAL	9600	3.75"	1560	27"	16	10	BELT	480/3/60	F-2	HARTZELL 041-27	1,7,10
EF-2	EQUIP ROOM	DRY WELL	CENTRIFUGAL	13000	1"	1195	27"	14	7 1/2	BELT	480/3/60	F-1	HARTZELL 061-27	1,5
EF-3	EQUIP ROOM	EQUIP ROOM	WALL CENTR	1000	.25"	1160	13.5"	9.3	1/8	DIR	120/1/60	L-1	ACME PW135C6	3,4
EF-4	REST ROOM	REST ROOM	CEILING EXH	150	.25"	1550	6"	5	1/20	DIR	120/1/60		ACME V-150	1,4
EF-5	ELEV EQUIP	ELEV EQUIP RM	WALL CENTR	1000	.25"	1160	13.5"	9.3	1/8	DIR	120/1/60	L-4	ACME PW135C6	3,4
EF-6	DRY WELL	DRY WELL	UPELAST	13000	.375"	363	40"	22	3	BELT	480/3/60	F-1	ACME PU-403M	3,4,8
EF-7	STAIRWELL	STAIRWELL	WALL CENTR	1000	.25"	1160	13.5"	9.3	1/8	DIR	120/1/60		ACME PW135C6	3,4
F-1	DRY WELL	DRY WELL	DUCT AXIAL	26000	1"	1750	48"	30	10	BELT	480/3/60	EF-2, EF-6	HARTZELL 46-48-DN3	1,2
F-2	MECH RM	WET WELL SUPPLY	WALL PROF	10100	.5"	752	36"	25	2	BELT	480/3/60	EF-1	ACME DCR-36L	1,5,4
AHU	MECH RM	VAR FRQ DRIVE	CENTRIFUGAL	9800	2"	1800	18"	24	7 1/2	BELT	480/3/60	L6, L7	CARRIER 39LG-18	2,3,9,11

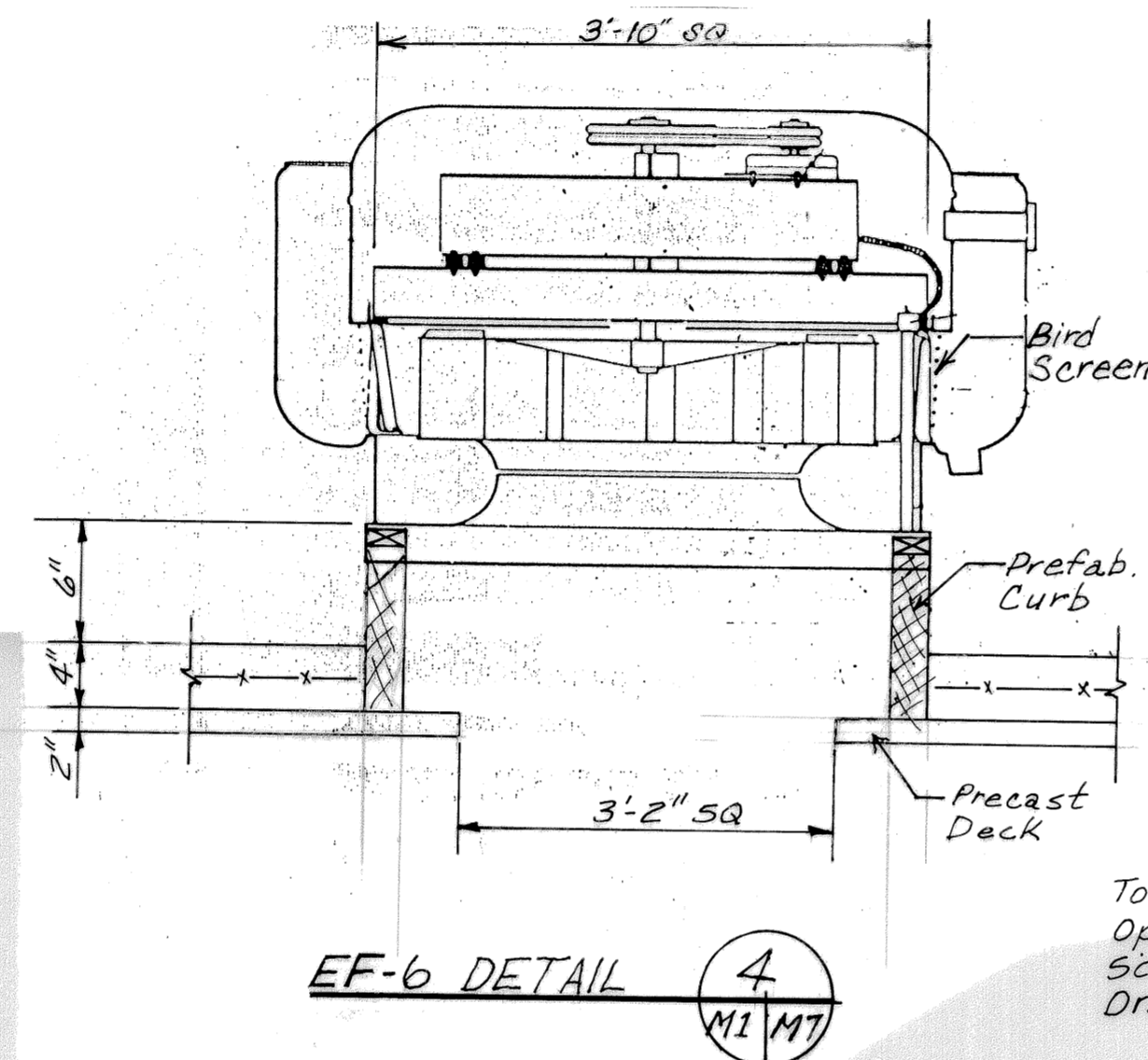
- NOTES:
- CONTROLLED BY ON-OFF SWITCH.
 - PROVIDE TWO SPEED MOTOR CAPABLE OF 50% SPEED REDUCTION.
 - CONTROLLED BY ROOM THERMOSTAT WITH MANUAL OVERRIDE ON-OFF SWITCH.
 - FURNISH BACKDRAFT DAMPER.
 - FAN TO BE EPOXY PAINTED FOR CORROSION PROTECTION.
 - EQUIPMENT MANUFACTURER AND MODEL NUMBER ARE GIVEN AS AN EXAMPLE ONLY. SEE SPECIFICATIONS FOR OTHER ACCEPTABLE MANUFACTURERS.
 - CONSTRUCTION: FIBERGLASS WITH STAINLESS STEEL SHAFT.
 - CONSTRUCTION: ALUMINUM WITH STAINLESS STEEL SHAFT.
 - UNIT TO INCLUDE INLET DAMPER AND 25.7 SQUARE FEET OF FILTER AREA IN AN ANGLED CONFIGURATION. THE CAPACITY REQUIRED SHALL BE COORDINATED WITH THE VARIABLE FREQUENCY DRIVE SUPPLIER.
 - FAN SUPPLIED WITH ODOR CONTROL SCRUBBER PACKAGE.
 - L6 INTERLOCKED AT LOW SPEED & L7 INTERLOCKED AT HIGH SPEED.

LOUVER SCHEDULE								
MARK NO.	LOCATION	SERVES	SIZE WD X HI INCHES	MIN FREE AREA	OPERATOR	INTERLOCKS	SILL HEIGHT AFF	NOTES
L-1	EQUIPMENT ROOM	EQUIPMENT ROOM	30 X 24	1.9	MOTOR	EF-3	8'-0"	1,2
L-2	MECH ROOM	VFD COOLING	64 X 72	12.1	FIXED		2'-0"	1,2
L-3	MECH ROOM	DRY WELL	112 X 96	28.9	FIXED		2'-0"	1,2
L-4	ELEV ROOM	ELEV EQUIP	30 X 24	1.9	MOTOR	EF-5	7'-4"	1,2
L-5	MECH. ROOM	WET WELL	48 X 96	12.1	FIXED		2'-0"	1,2
L-6/7	MCC ROOM	VFD COOLING	72 X 74	4.6	MOTOR	AHU	8'-0"	2

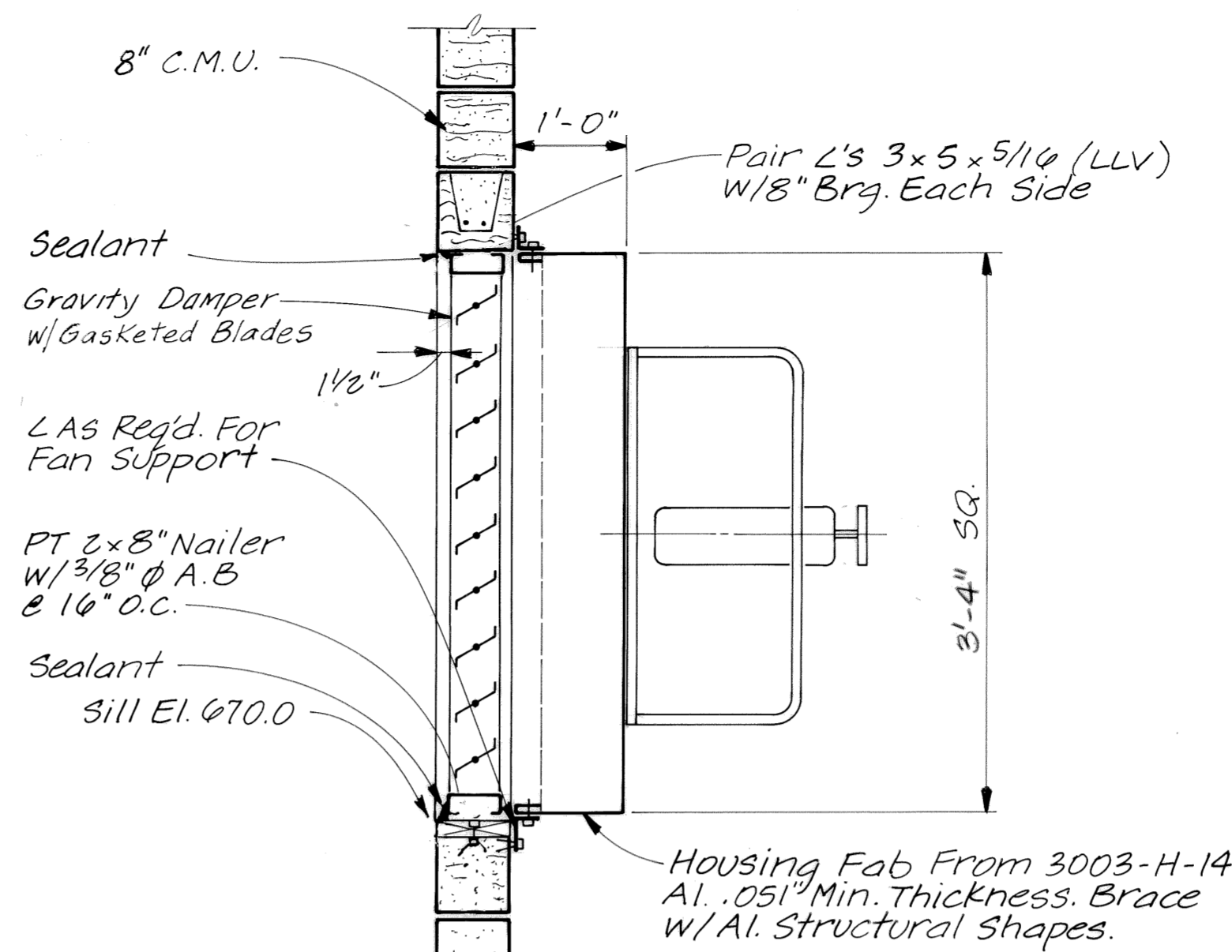
- NOTES:
- AMERICAN WARNING AND VENTILATING COMBINATION DUAL FUNCTION LOUVER MODEL LE-66C OR EQUAL.
 - OPERATOR BARBER COLMAN MA-418 OR EQUAL.

ELECTRIC HEATER SCHEDULE								
MARK NO.	LOCATION	SERVES	TYPE	CAP KW	ELECTRICAL	APPROX MAX MTG HEIGHT	MANUFACTURER MODEL NO EMERSON	NOTES
H-1	DRY WELL	DRY WELL	HORIZONTAL U-H	15	480/3/60	10'	MUH-15-4	1,2
H-2	DRY WELL	DRY WELL	HORIZONTAL U-H	15	480/3/60	10'	MUH-15-4	1,2
H-3	DRY WELL	DRY WELL	HORIZONTAL U-H	15	480/3/60	10'	MUH-07	1,2
H-4	DRY WELL	DRY WELL	HORIZONTAL U-H	15	480/3/60	10'	MUH-15-4	1,2
H-5	REST ROOM	REST ROOM	WALL	1.25	110/1/60	2'	H5022	1,2
H-6	ELEV EQUIP ROOM	ELEVATOR EQUIPMENT	WALL	1.25	110/1/60	2'	H5022	1,2

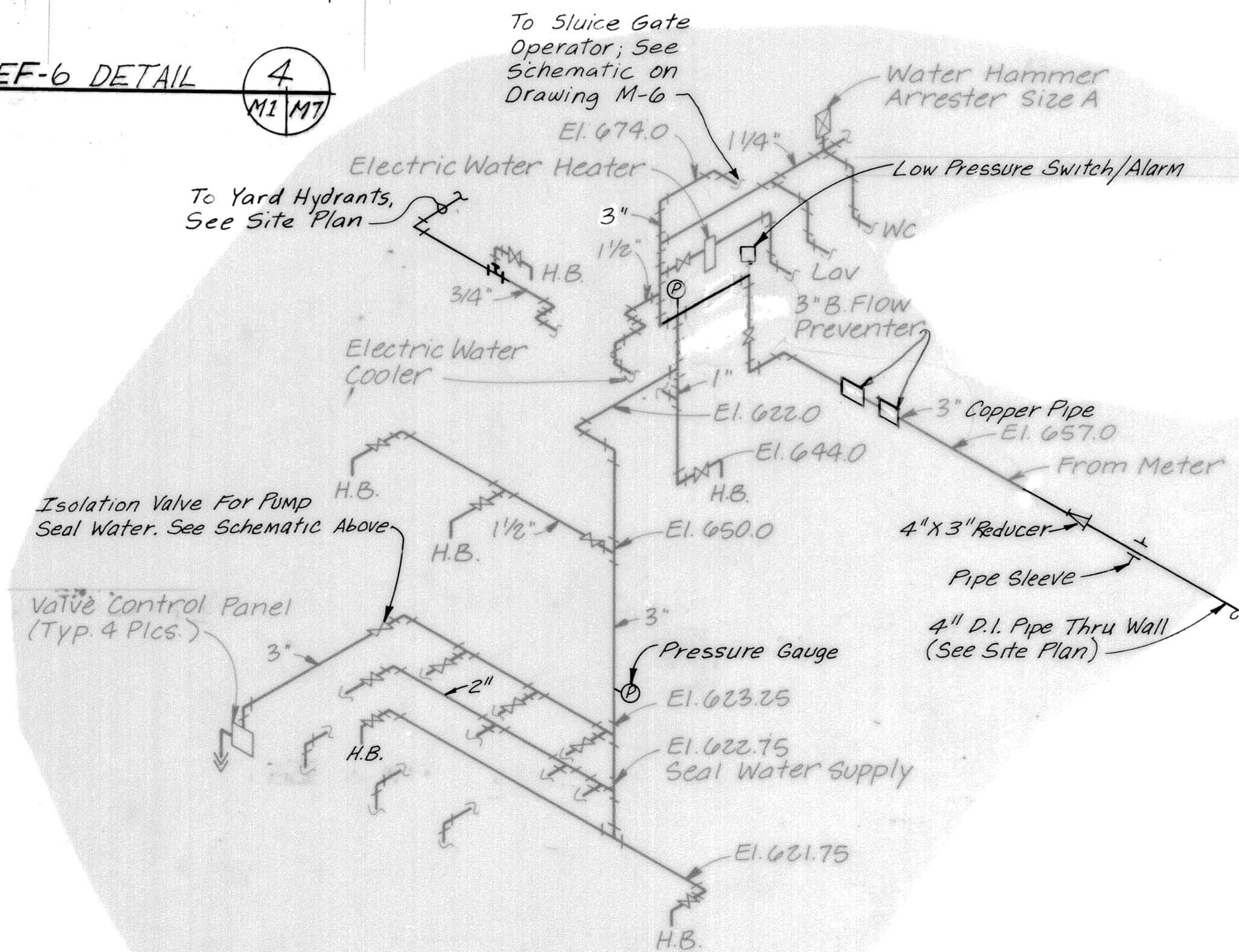
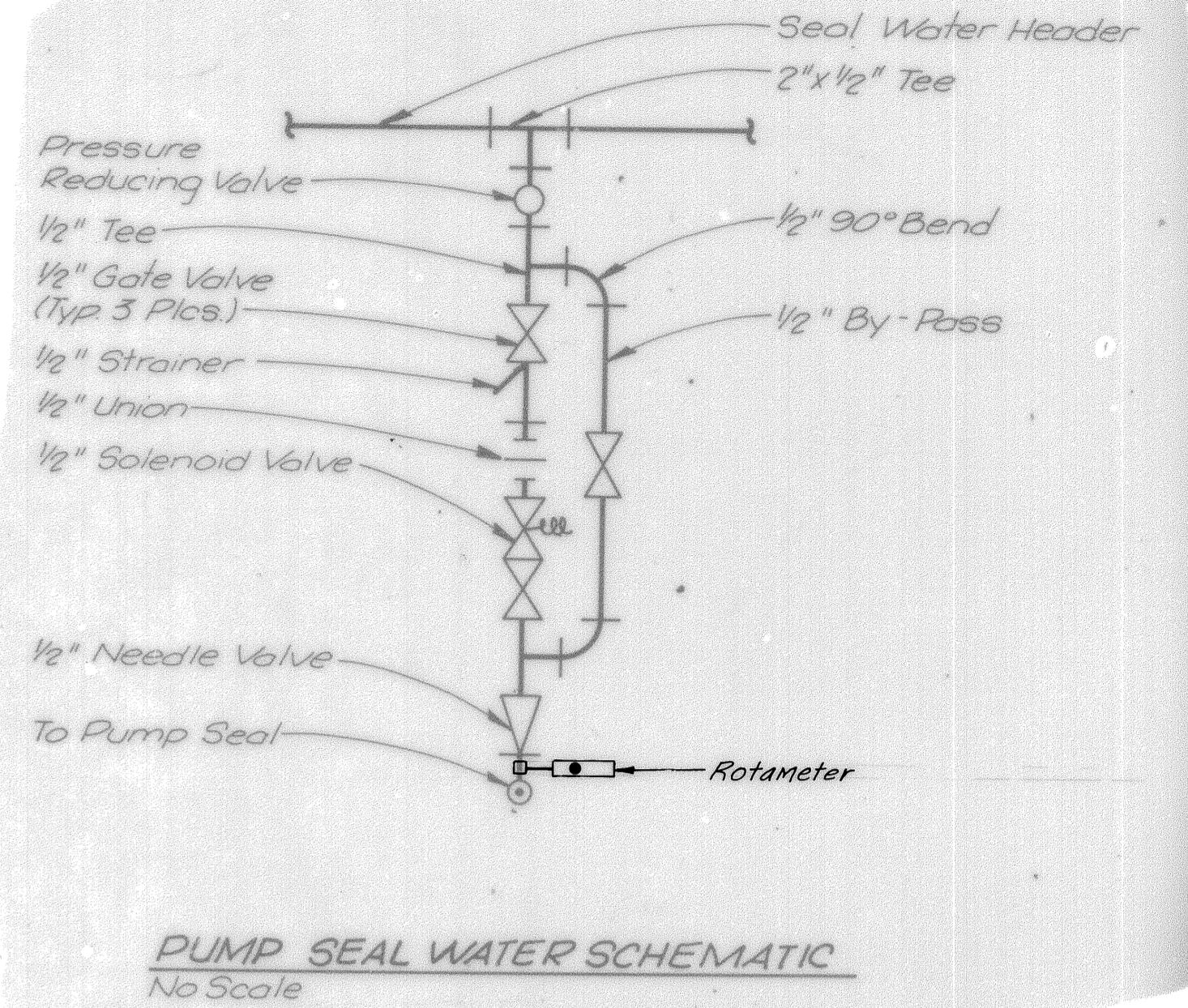
- NOTES:
- CONTROLLED BY ROOM THERMOSTAT
 - MODEL NUMBERS GIVEN ARE MARLEY ELECTRIC HEATING AND ARE GIVEN AS EXAMPLES. SEE SPECIFICATIONS FOR OTHER ACCEPTABLE MANUFACTURERS.



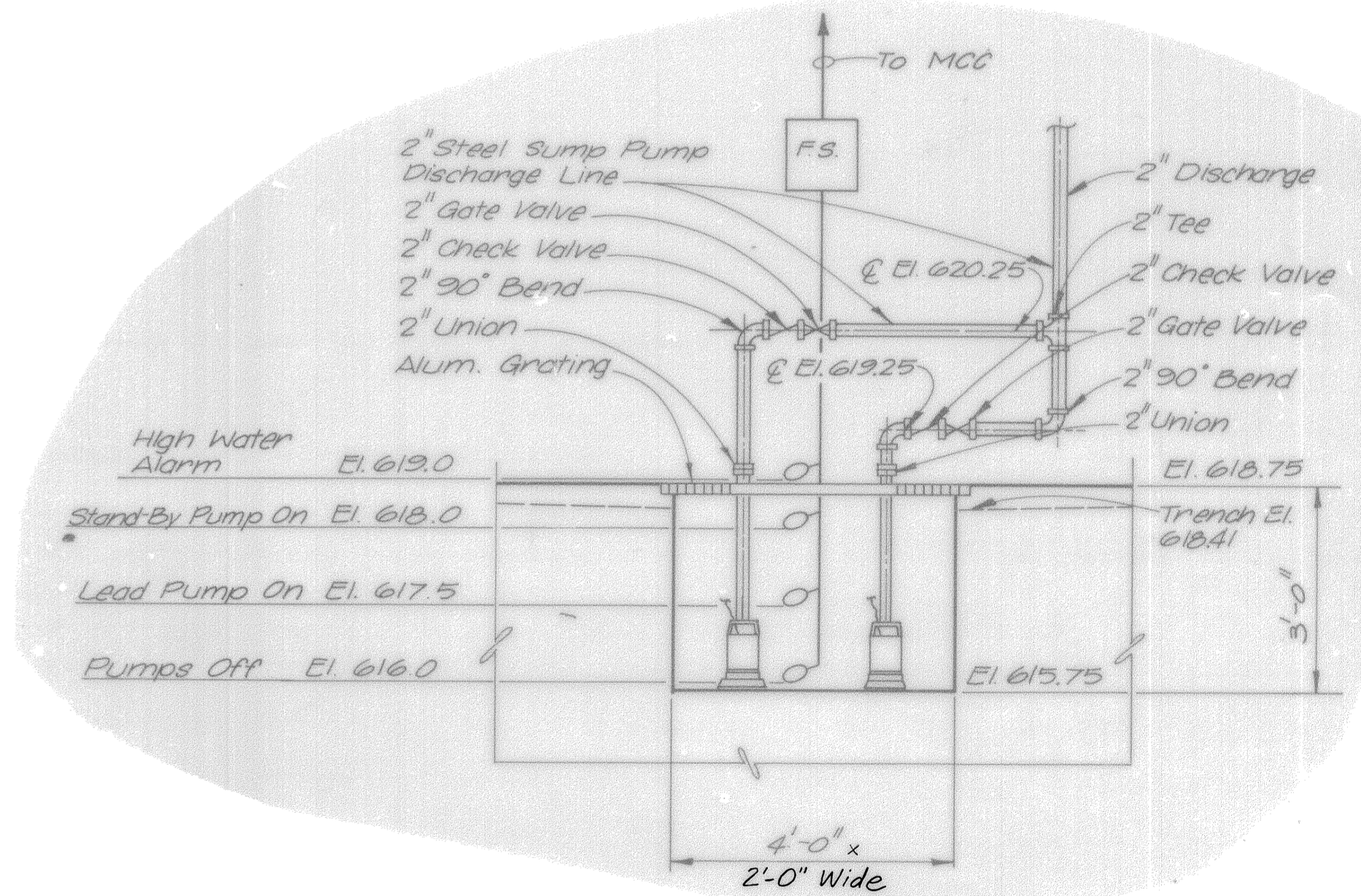
EF-6 DETAIL 4
M1 M7



F-2 FAN DETAIL 5
3/4" = 1'-0" M1 M7

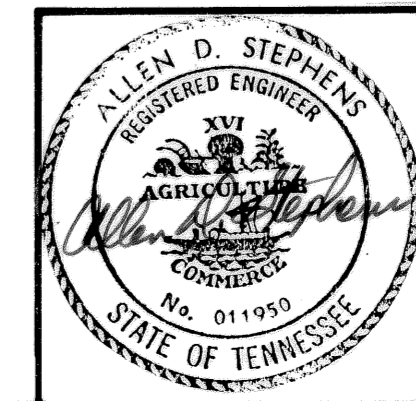


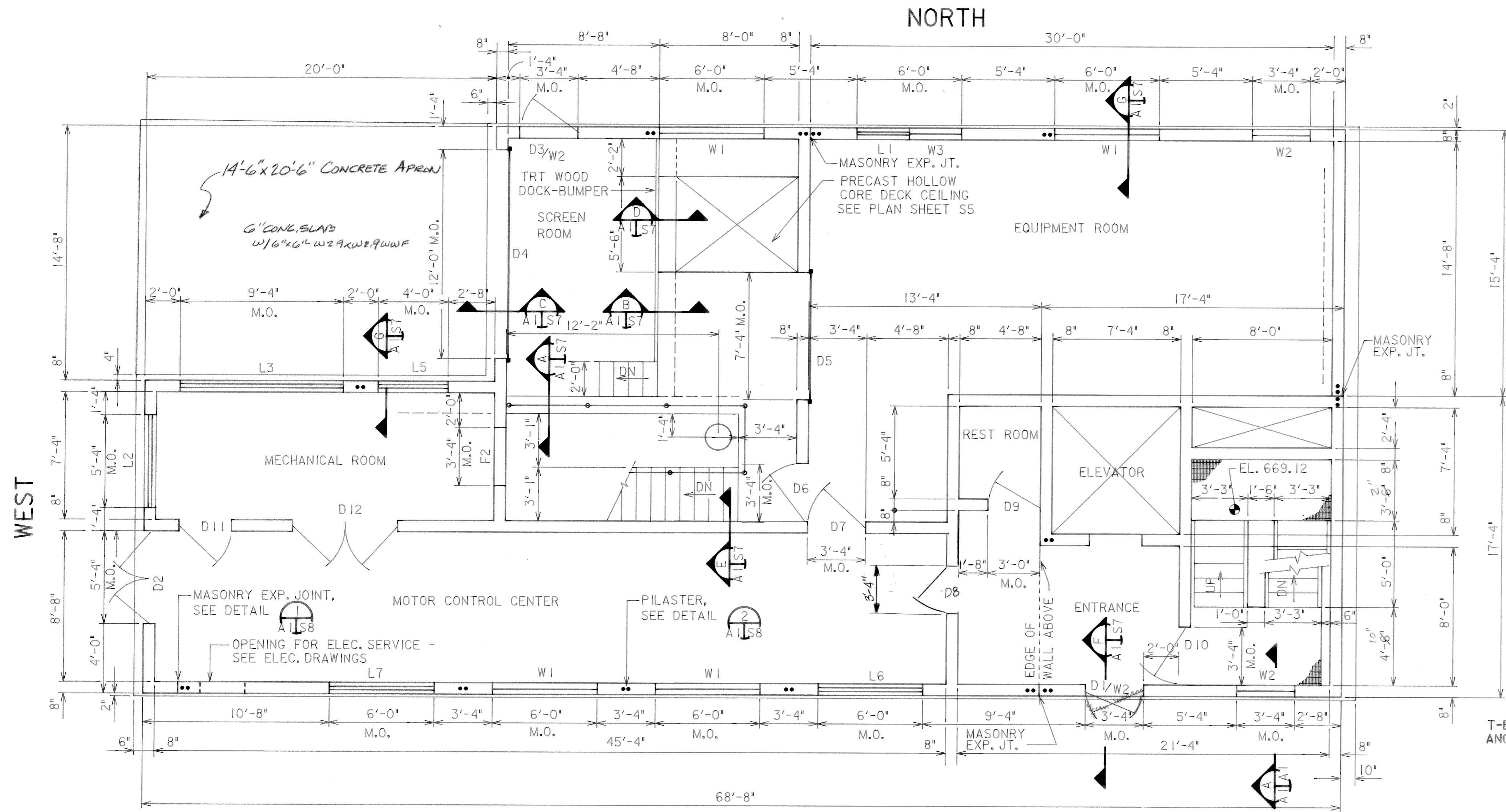
WATER SUPPLY SCHEMATIC N.T.S.



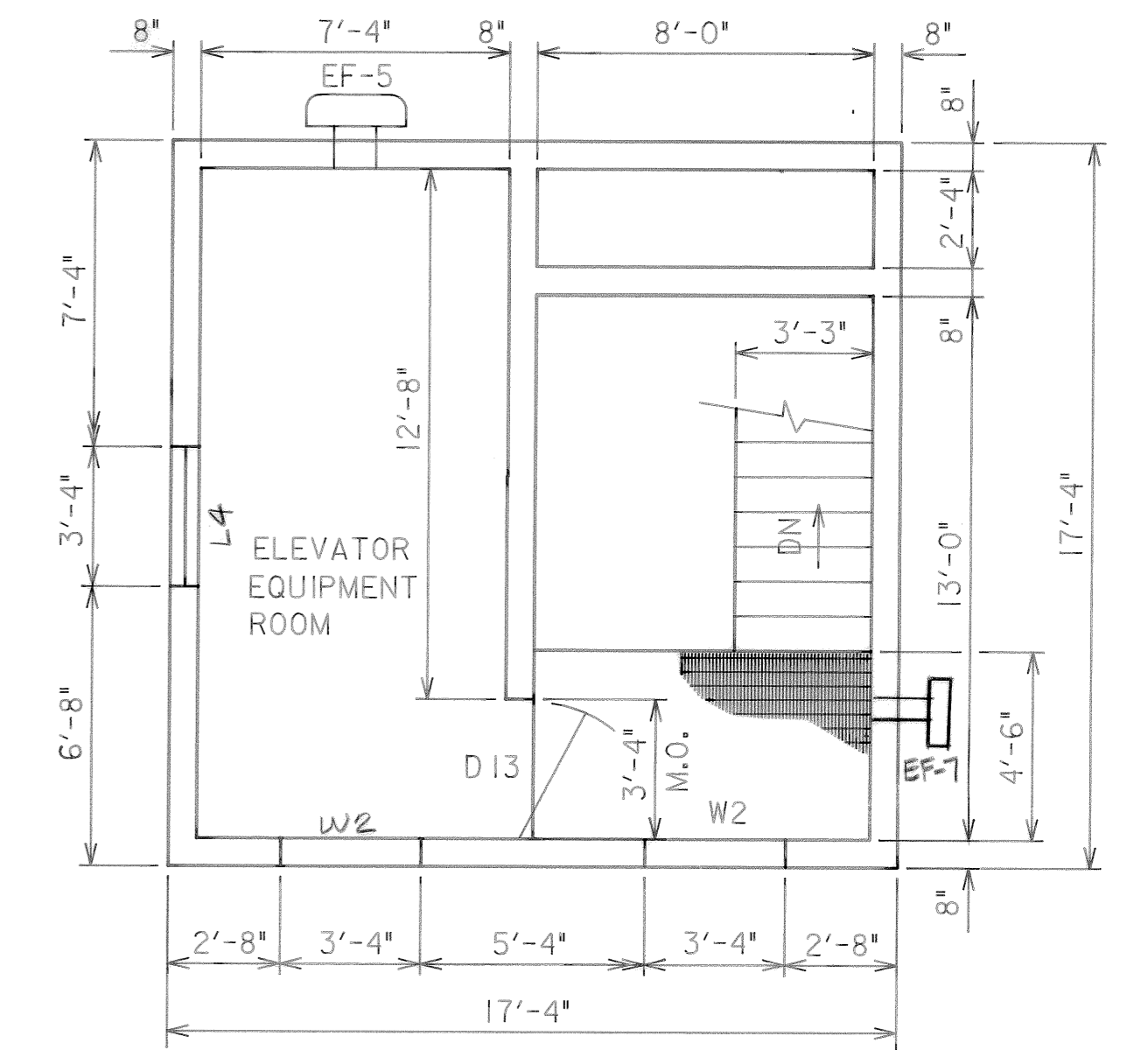
SUMP PUMP DETAIL N.T.S.

3-17-92	RECORD	
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
CITICO II PUMPING STATION		
MISCELLANEOUS MECHANICAL DETAILS		
CITY OF CHATTANOOGA, TENNESSEE		
DSGN TDR/RW 6-84	HENSLEY-SCHMIDT, INC. CONSULTANTS	DRAWING NO. 6685-37C-M71
DRWN FLW 6-84	ATLANTA · CHATTANOOGA · RALEIGH	
CHKD ADS 7-84	VALDOSTA · KNOXVILLE · ORLANDO	
APPR ADS 7-84		

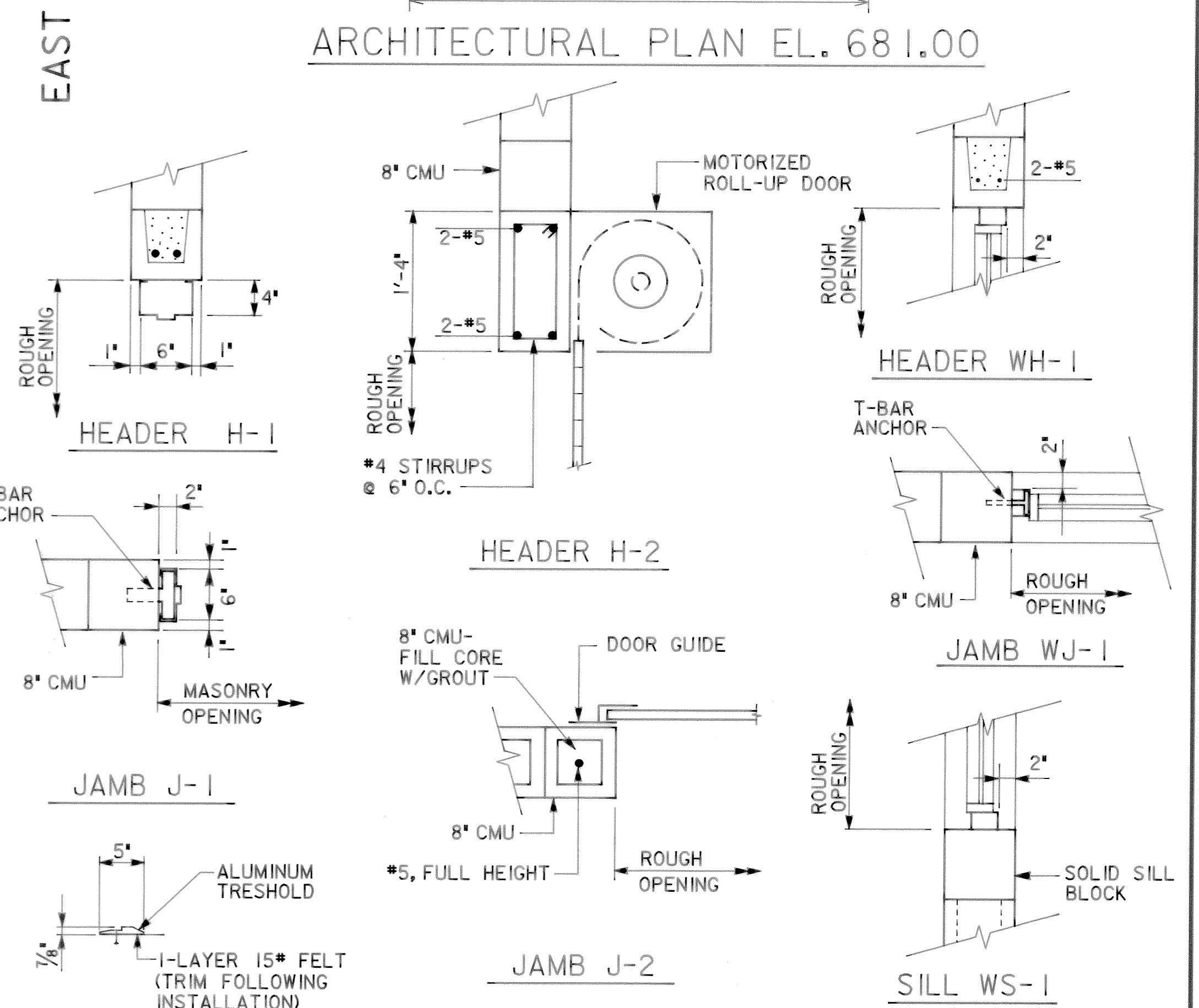




SOUTH
ARCHITECTURAL PLAN EL. 665.00



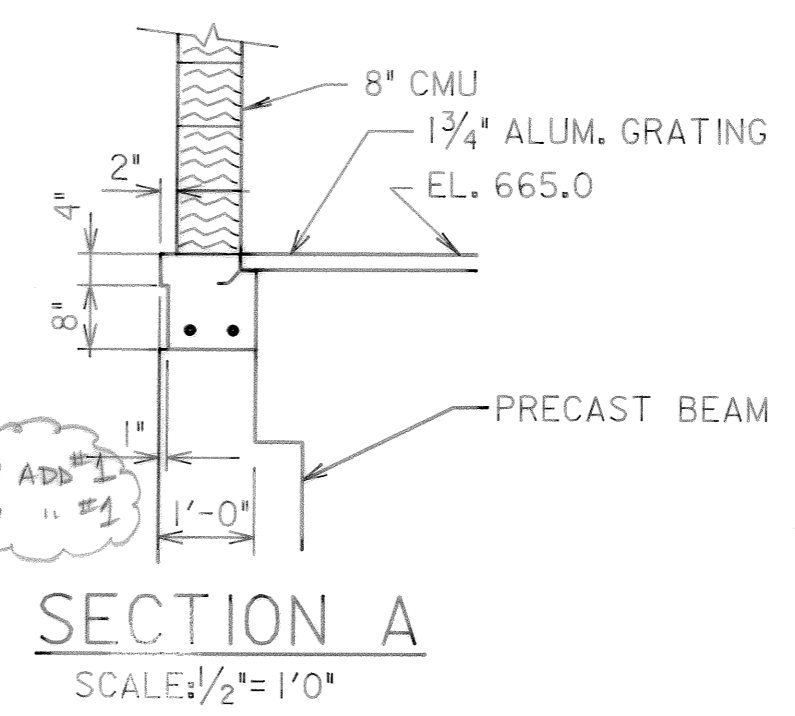
ARCHITECTURAL PLAN EL. 681.00



DOORS AND FRAMES											
DOOR NO.	OPG. SIZE		THK.	MAT'L	LEAVES	FRAME			HARDWARE		NOTES
	W	H				MAT'L	HEAD	JAMB	SILL	SET NO.	
1	3'-4"	7'-4"	1 3/4"		1	H1	J1	S1	5		EXTERIOR
2	5'-4"	8'-0"	1 3/4"		2	"	"	"	1		"
3	3'-4"	7'-4"	1 3/4"		1	"	"	"	5		"
4	12'-0"	12'-0"	7/8"		-	H2	J2	-	-		MOTORIZED/O.H.
5	7'-4"	9'-4"	7/8"		-	"	"	"	-		"
6	3'-4"	7'-4"	1 3/4"		1	H1	J1	S1	5		SCREEN RM
7	3'-4"	7'-4"	1 3/4"		1	"	"	"	5		EQUIP RM
8	3'-4"	7'-4"	1 3/4"		1	"	"	"	5		ENTRANCE
9	3'-0"	7'-4"	1 3/4"		1	"	"	"	7		ENTRANCE
10	3'-4"	7'-4"	1 3/4"		1	"	"	S1	7		ENTRANCE
11	3'-4"	7'-4"	1 3/4"		1	"	"	"	5		MCC
12	6'-0"	7'-4"	1 3/4"		2	"	"	"	1		MCC
13	3'-4"	7'-4"	1 3/4"		1	"	"	"	7		STAIR

WINDOW SCHEDULE								
NO.	QUANT.	W	H	DESCRIPTION	DETAIL			REMARKS
					HEAD	JAMB	SILL	
1	4	6'-0"	2'-0"	PROJECTING W/INT SCREEN	WH-1	WJ-1	WS-1	
2	6	3'-4"	2'-0"	PROJECTING W/INT SCREEN	WH-1	WJ-1	WS-1	
3	1	3'-0"	2'-0"	PROJECTING W/INT SCREEN	WH-1	WJ-1	WS-1	

ROOM FINISH SCHEDULE					
ROOM	FLOOR	WALLS	CEILING	CEILING HGT.	REMARKS
ENTRANCE	CONCRETE	EPOXY ON CMU	SUSPENDED	10'-0"	
RESTROOM	"	"	"	8'-0"	
MOTOR CONTROL CENTER	"	"	"	10'-0"	
MECHANICAL ROOM	"	"	PLYWOOD	11'-5"	
EQUIPMENT ROOM	"	"	CONCRETE	7'-5"	*10'-8" ABOVE EL. 665.0
SCREEN ROOM	"	"	PLYWOOD	7'-5"	*10'-8" ABOVE EL. 665.0
ELEVATOR EQUIPMENT ROOM	"	"	PLYWOOD D	7'-5"	
STAIRWELL	"	"	"	"	*CEILING @ EL. 688.42



3-17-92 RECORD

CITICO II PUMPING STATION

PLAN ELEVATION 665.00
ARCHITECTURAL

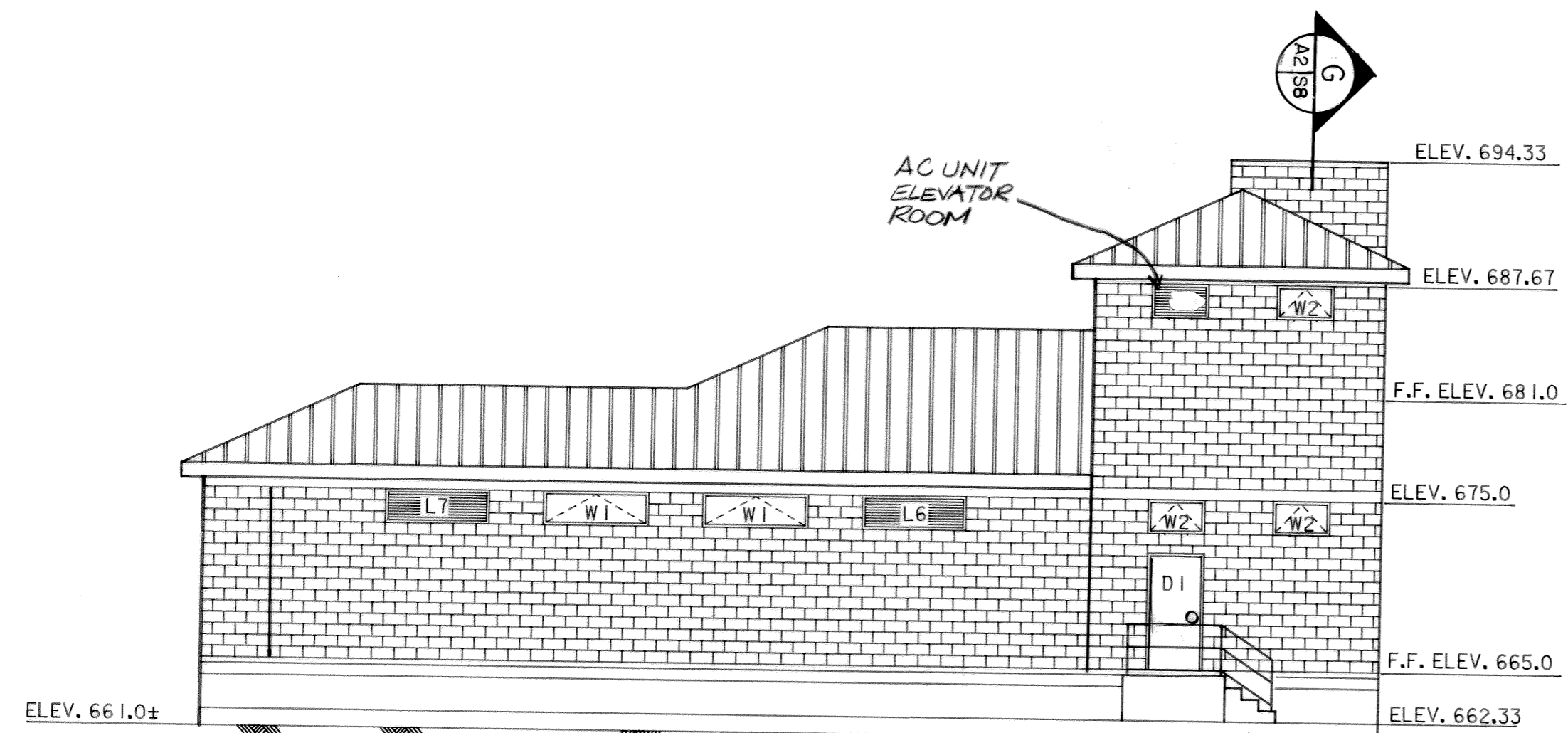
CITY OF CHATTANOOGA, TENNESSEE

PAUL C. GATE
REGISTERED ENGINEER
No. 11660
STATE OF TENNESSEE

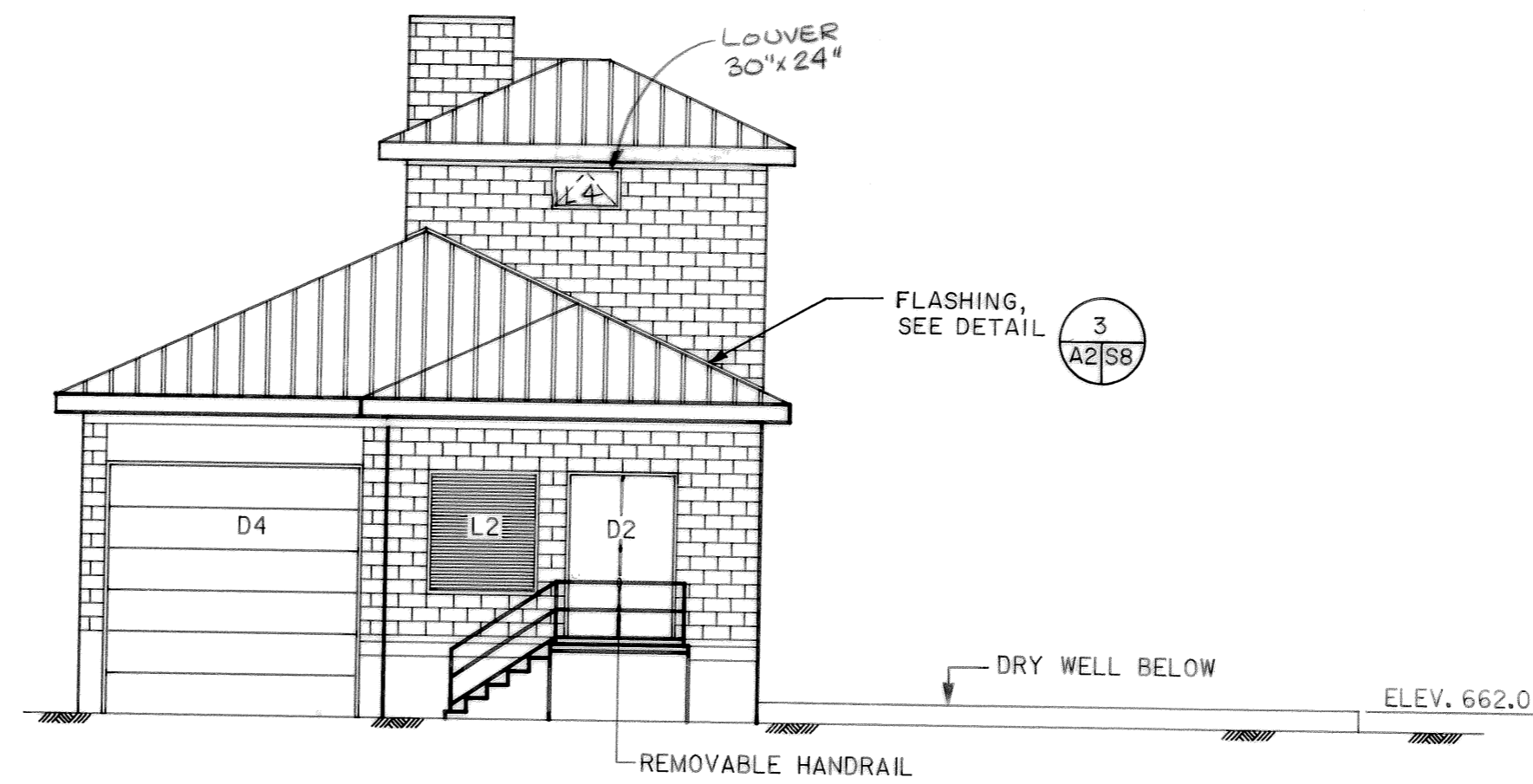
DSGN P.C.C. 7/89
DRWN CADD/MWD 7/89
CHKD P.C.C. 8/89
APPR P.C.C. 8/89

HENSLEY - SCHMIDT, INC.
ENGINEERS AND SURVEYORS
ATLANTA • CHATTANOOGA
RALEIGH • ORLANDO

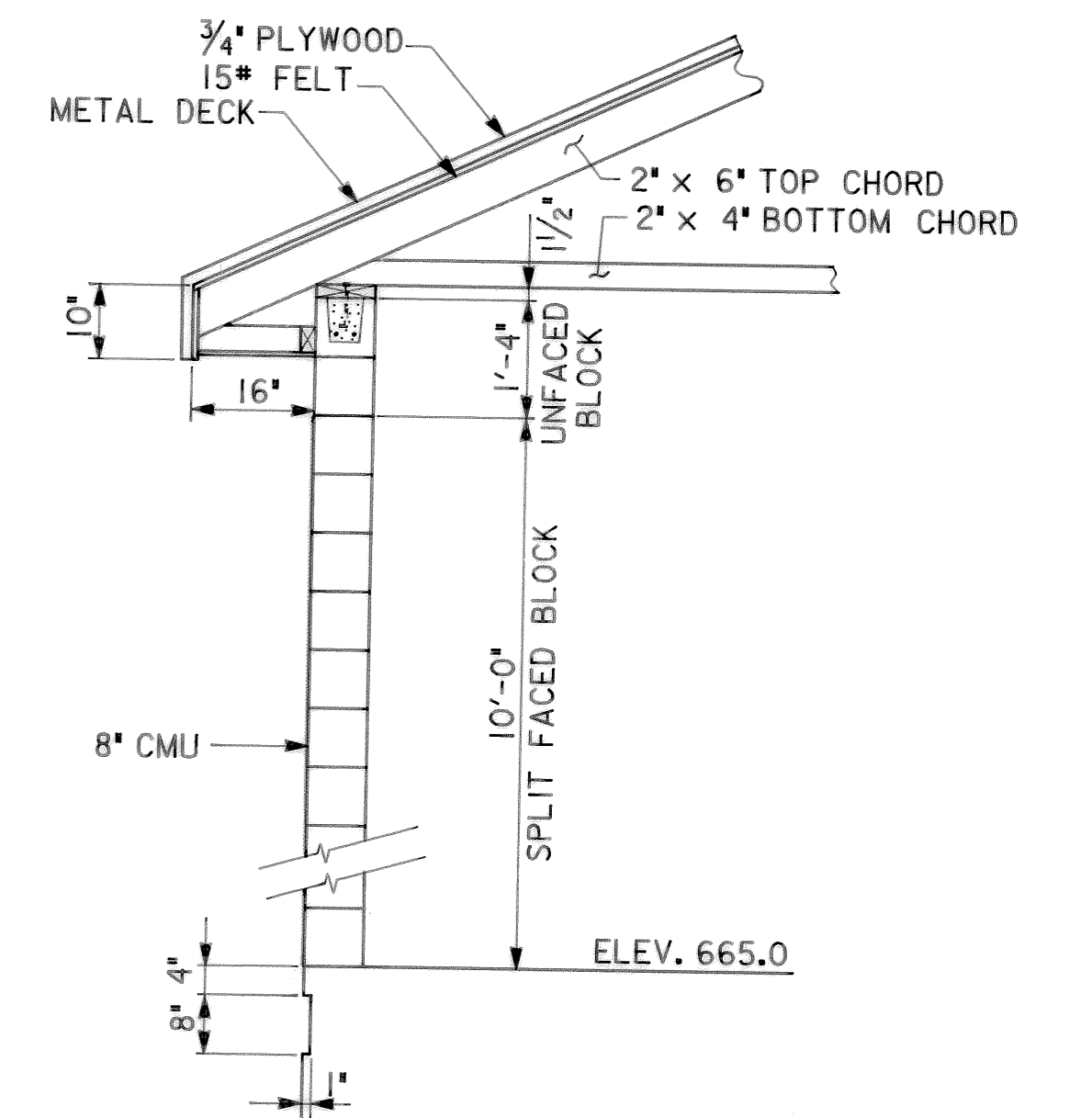
DRAWING NO.
6685-37C-A-1.1



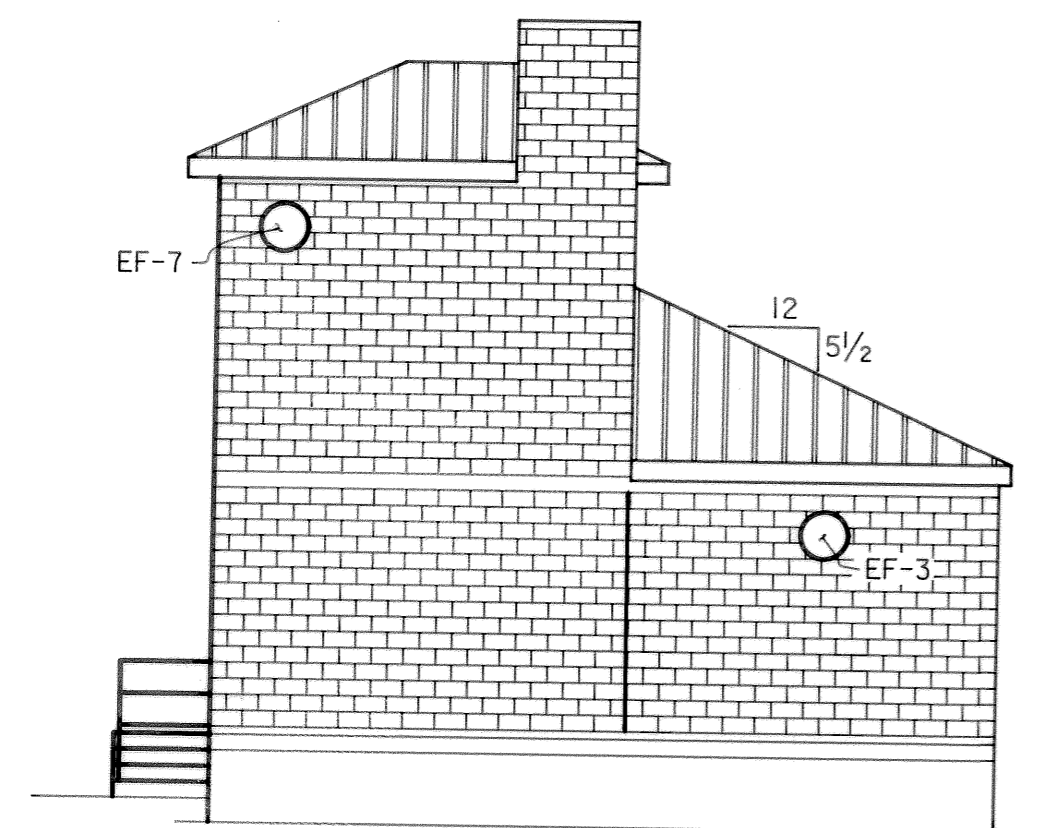
SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



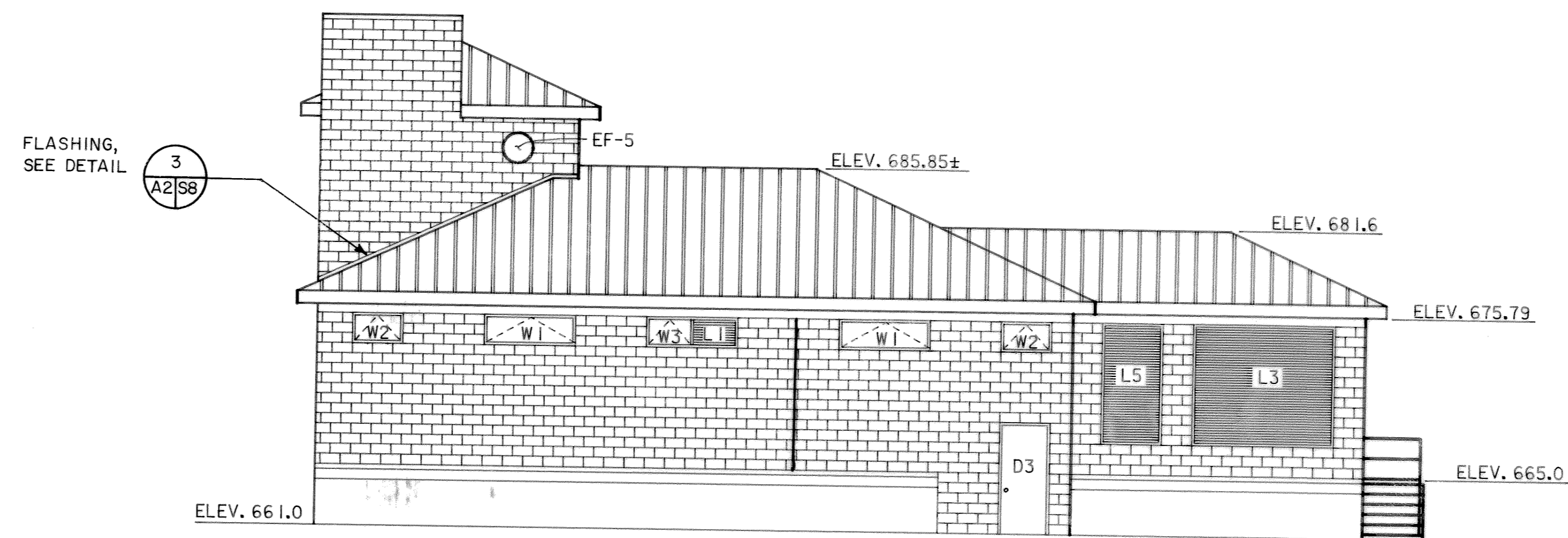
WEST ELEVATION
SCALE: 1/8" = 1'-0"



SUPERSTRUCTURE WALL SECTION
SCALE: 1/2" = 1'-0"

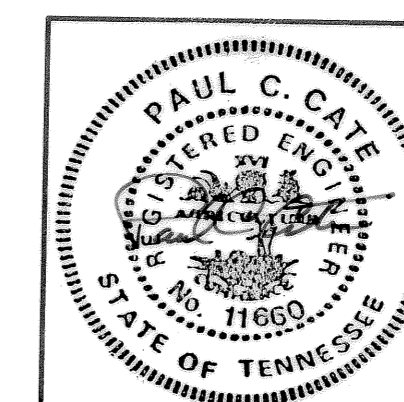


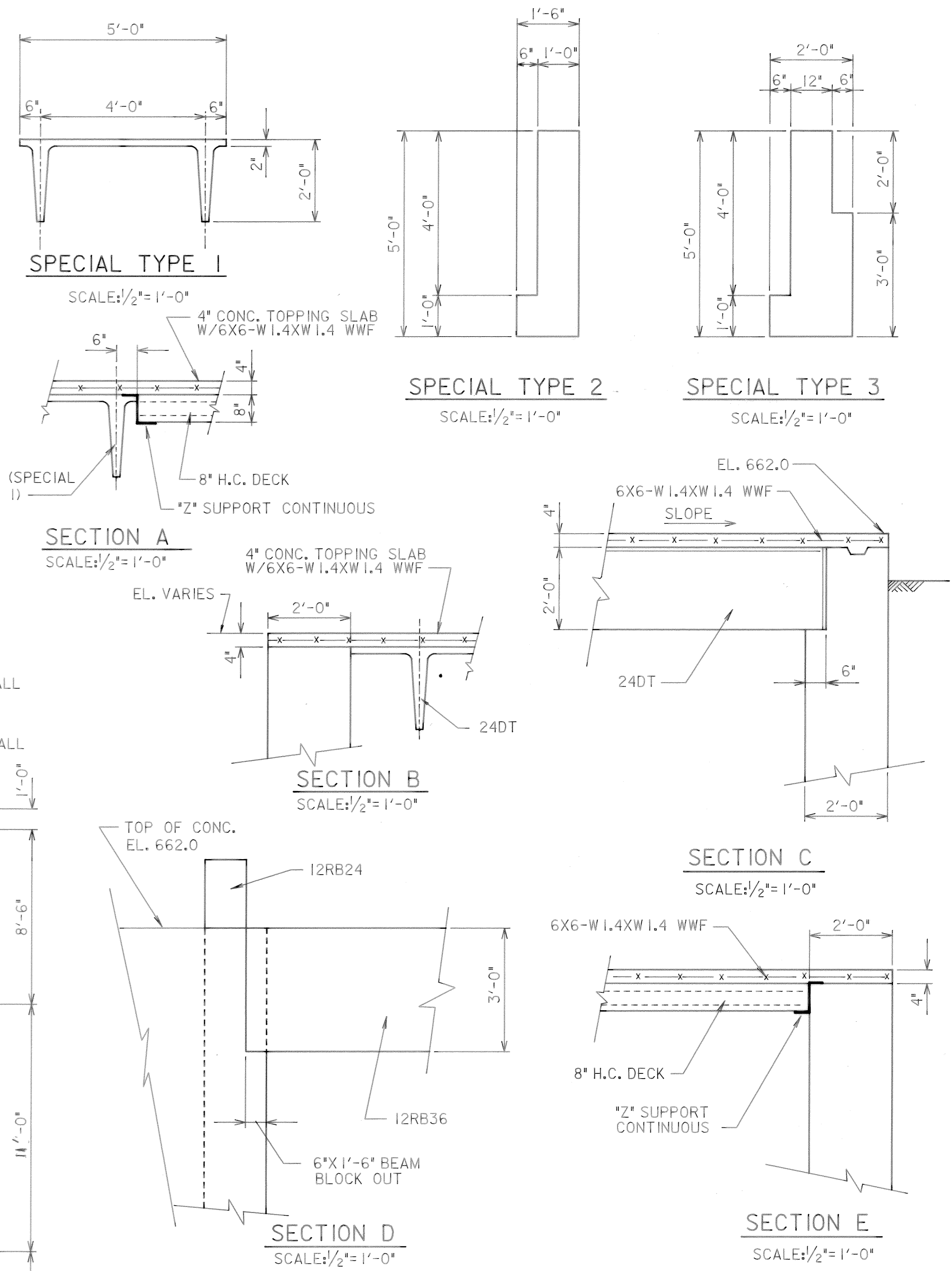
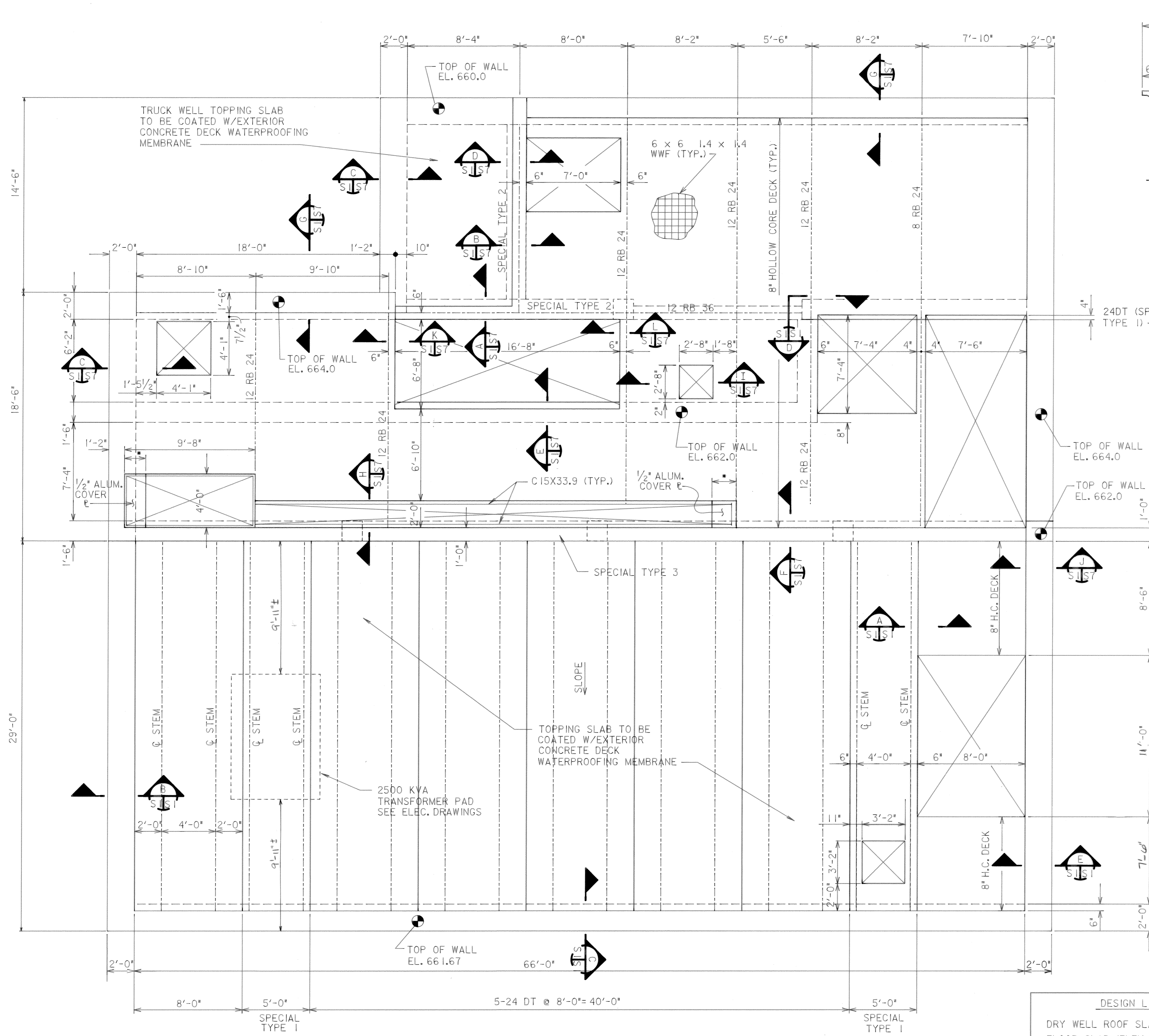
EAST ELEVATION
SCALE: 1/8" = 1'-0"



NORTH ELEVATION
SCALE: 1/8" = 1'-0"

△		
△		
△	3-17-92	RECORD
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
CITICO PUMP STATION		
ELEVATIONS AND SECTIONS		
CHATTANOOGA, TENNESSEE		
DSGN	PCC	8-89
DRWN	CAD/RL	8-89
CHKD	PCL	8-89
APPR	PCC	8-89
HENSLEY - SCHMIDT, INC. ENGINEERS AND SURVEYORS ATLANTA • CHATTANOOGA RALEIGH • ORLANDO		DRAWING NO. 6685-37C-A2 1

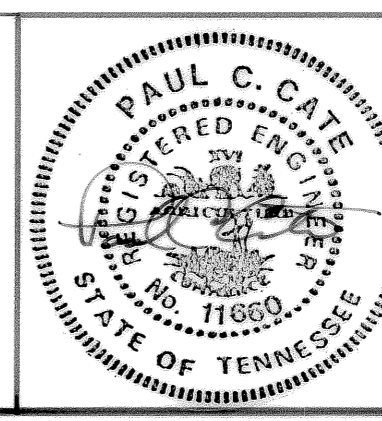




DESIGN LIVE LOADS

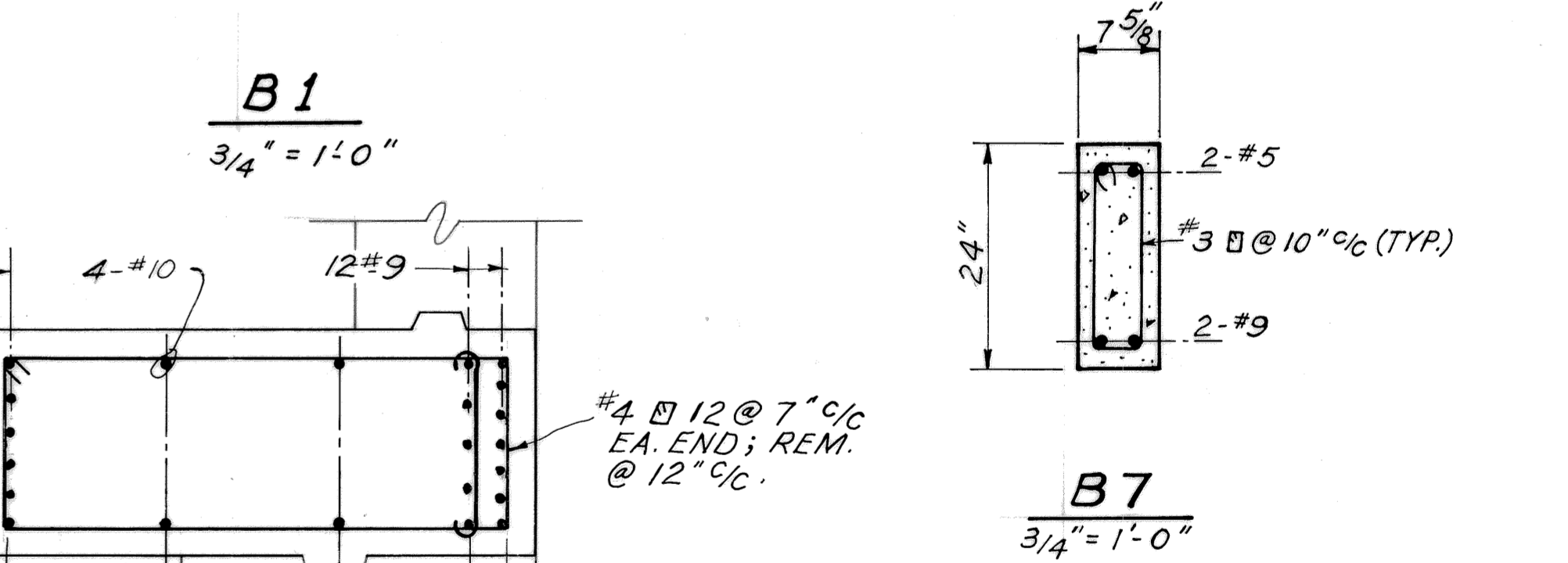
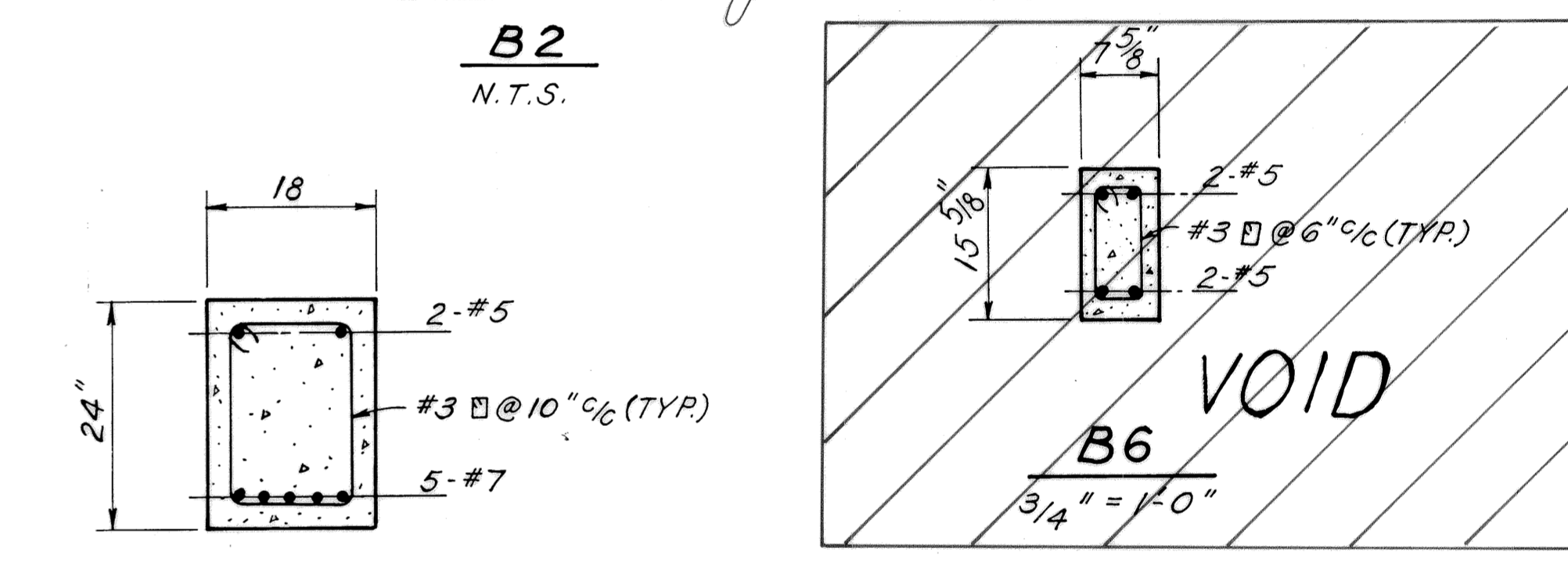
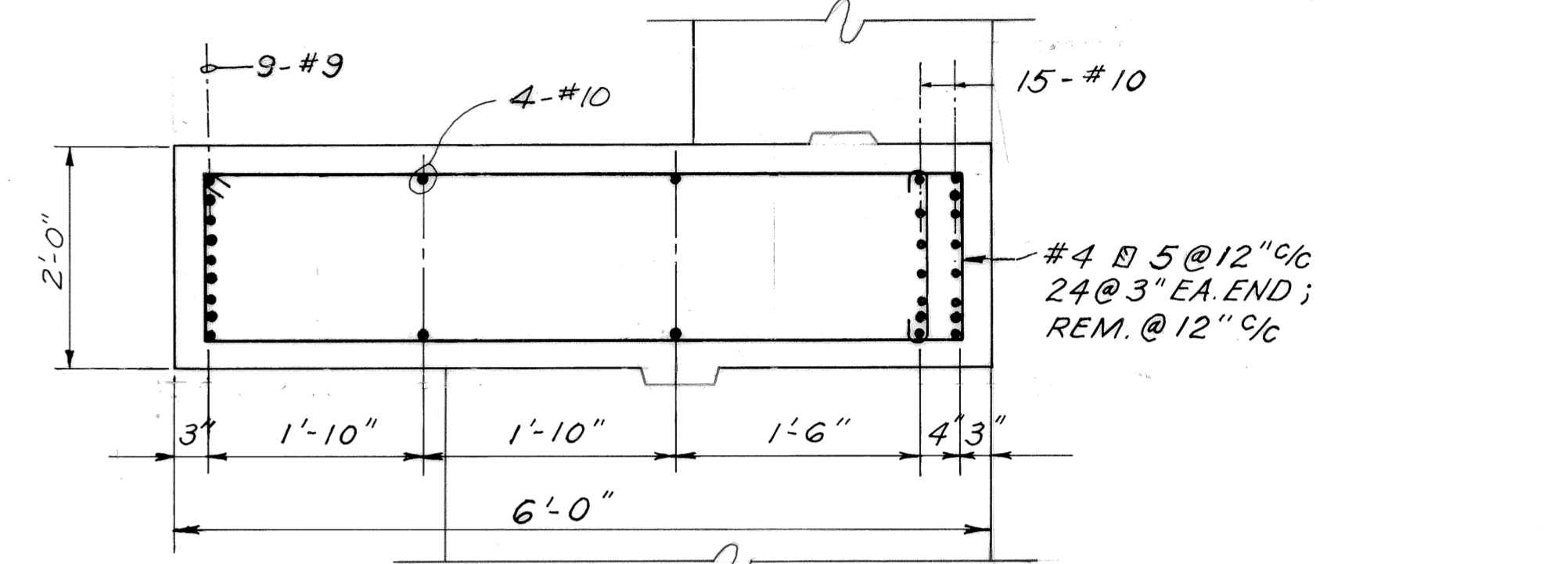
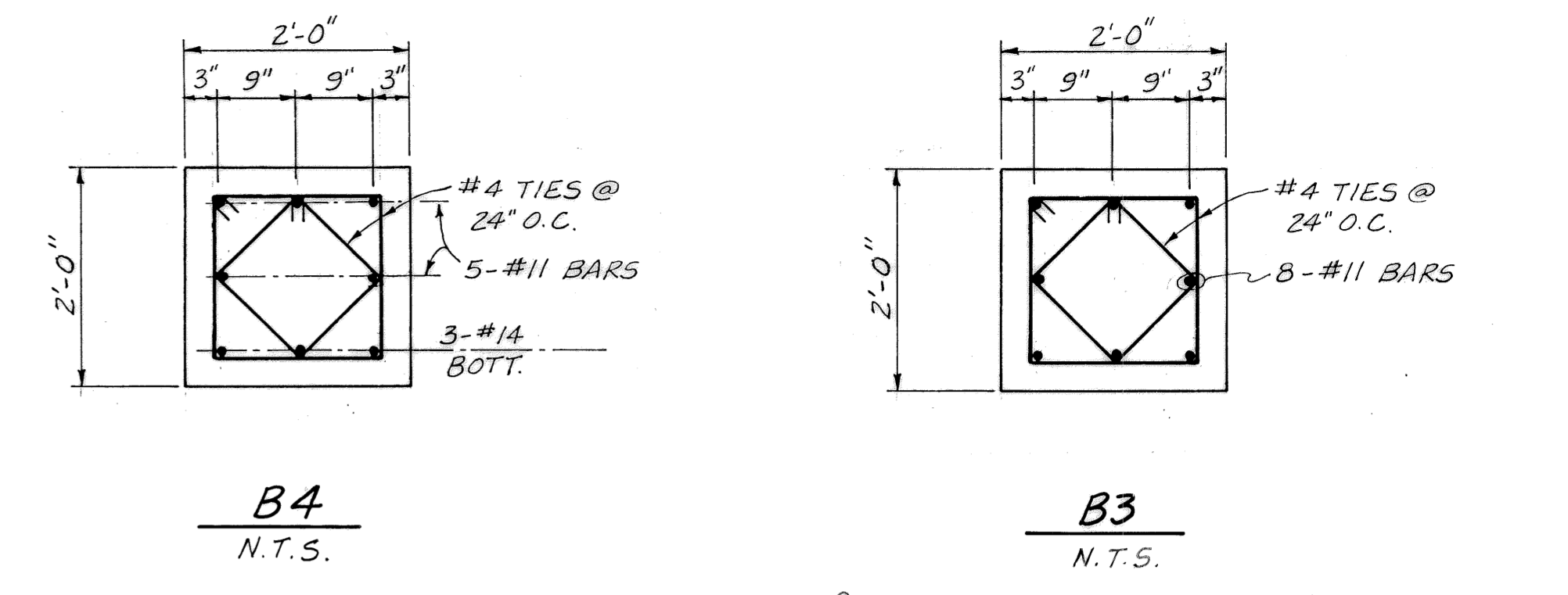
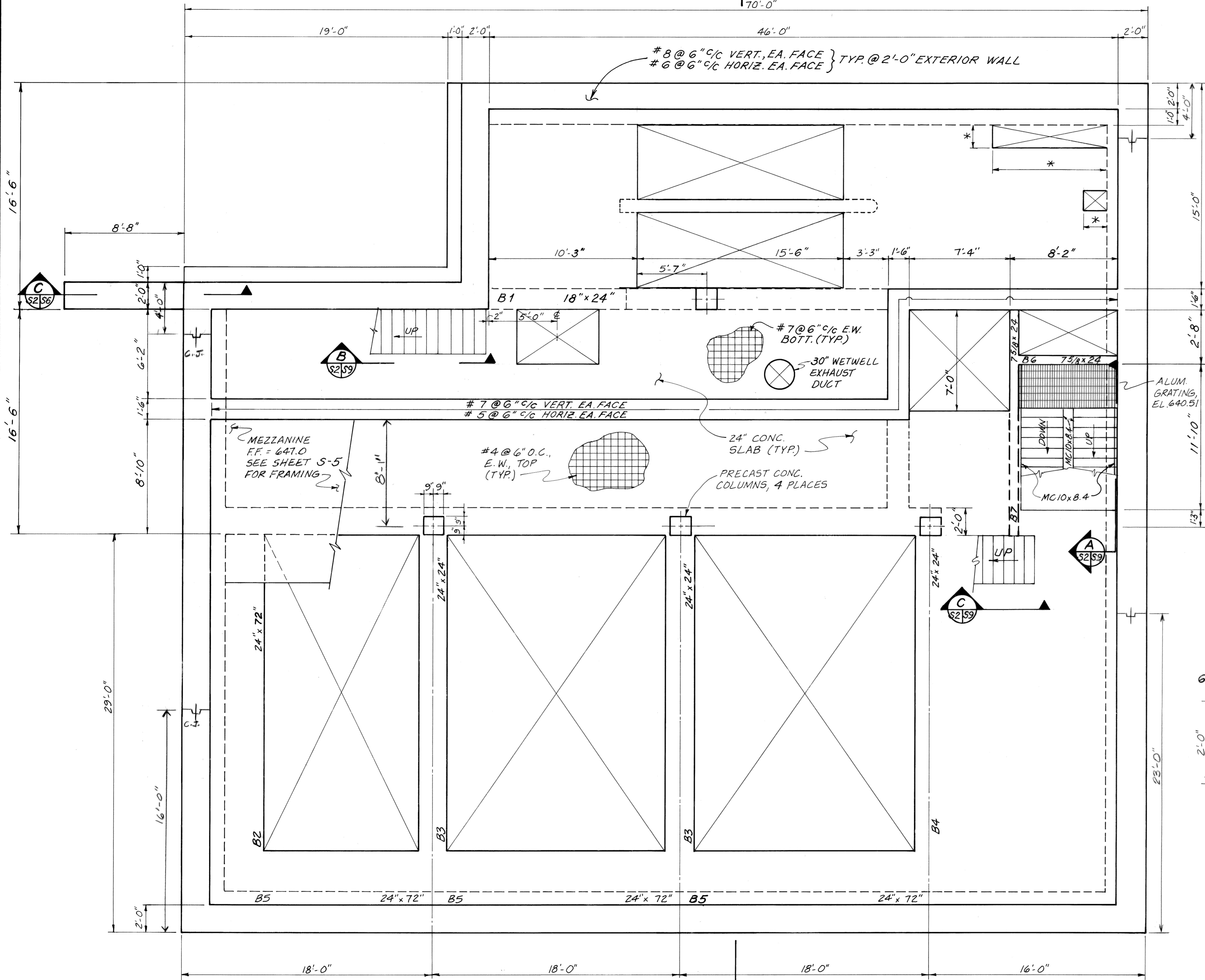
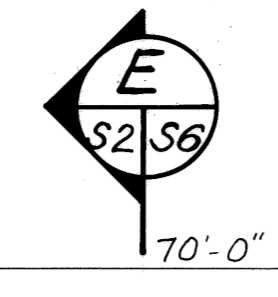
DRY WELL ROOF SLAB*	100 #/S.F.
FLOOR SLAB (ELEV 665)	250 #/S.F.
TRUCK WELL FLOOR SLAB (ELEV 661)	AASHTO HS-20

*ELECTRICAL TRANSFORMER & TRANSFORMER PAD LOADS TO BE INCLUDED IN DEAD LOADS.



REVISION	DATE	DESCRIPTION
3-17-92		RECORD
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
CITICO II PUMPING STATION		
PLAN ELEVATION 665 STRUCTURAL		
CITY OF CHATTANOOGA, TENNESSEE		
DSGN P.C.C.	7/89	HENSLEY - SCHMIDT, INC. ENGINEERS AND SURVEYORS ATLANTA • CHATTANOOGA RALEIGH • ORLANDO
DRWN CADD/MWD	7/89	
CHKD A.D.S.	7/89	
APPR P.C.C.	7/89	
DRAWING NO.		6685
PROJECT NO.		-37C-S.I.1

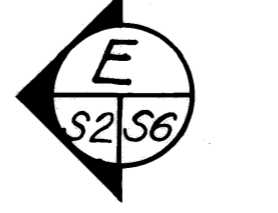
*DIMENSION TO BE DETERMINED BY ELEC. PANEL LENGTH



*NOTE: STIRRUPS START 2" OFF FACE OF SUPPORT. (TYP.)

SCALE: 1/4" = 1'-0"

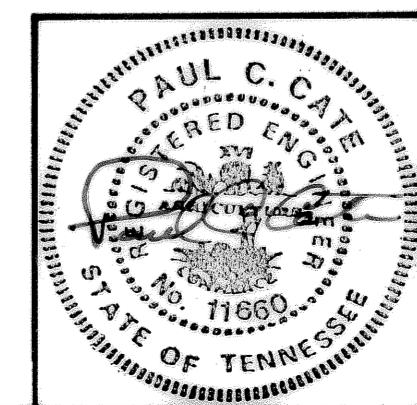
*DIMENSION PER MANUFACTURER'S RECOMMENDATION

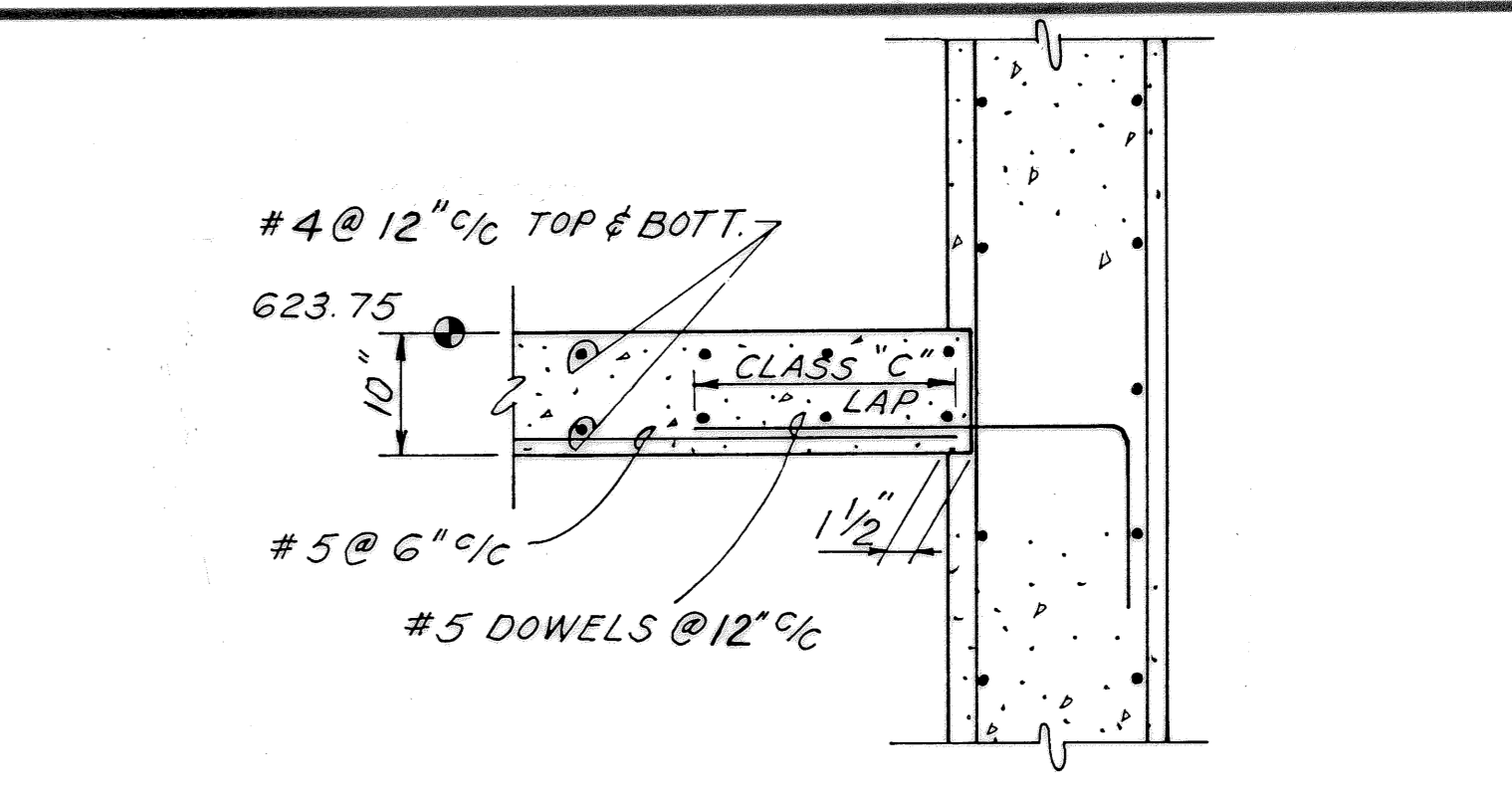
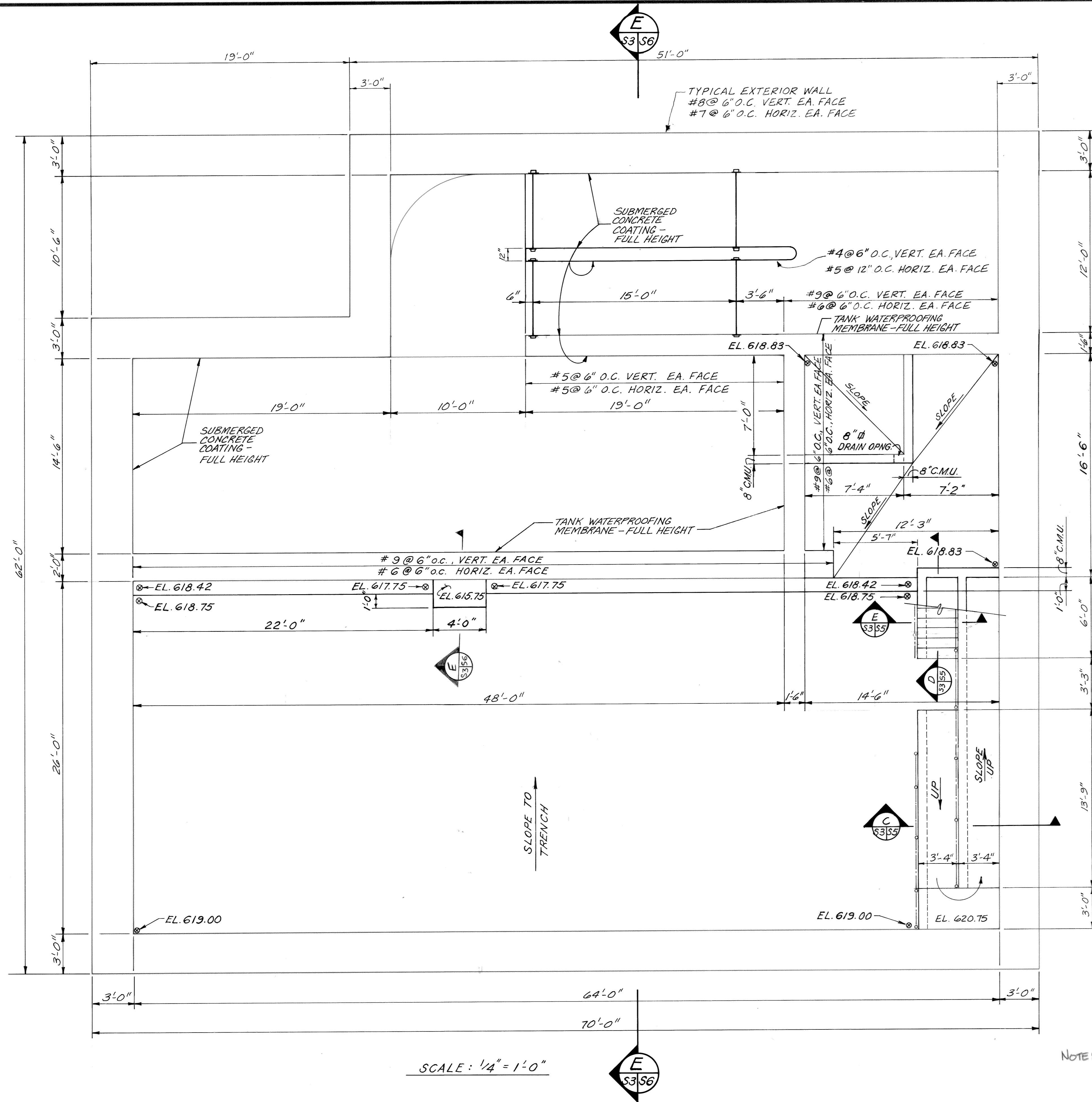


REVISION	DATE	DESCRIPTION
1	3-17-98	RECORD
2		
3		

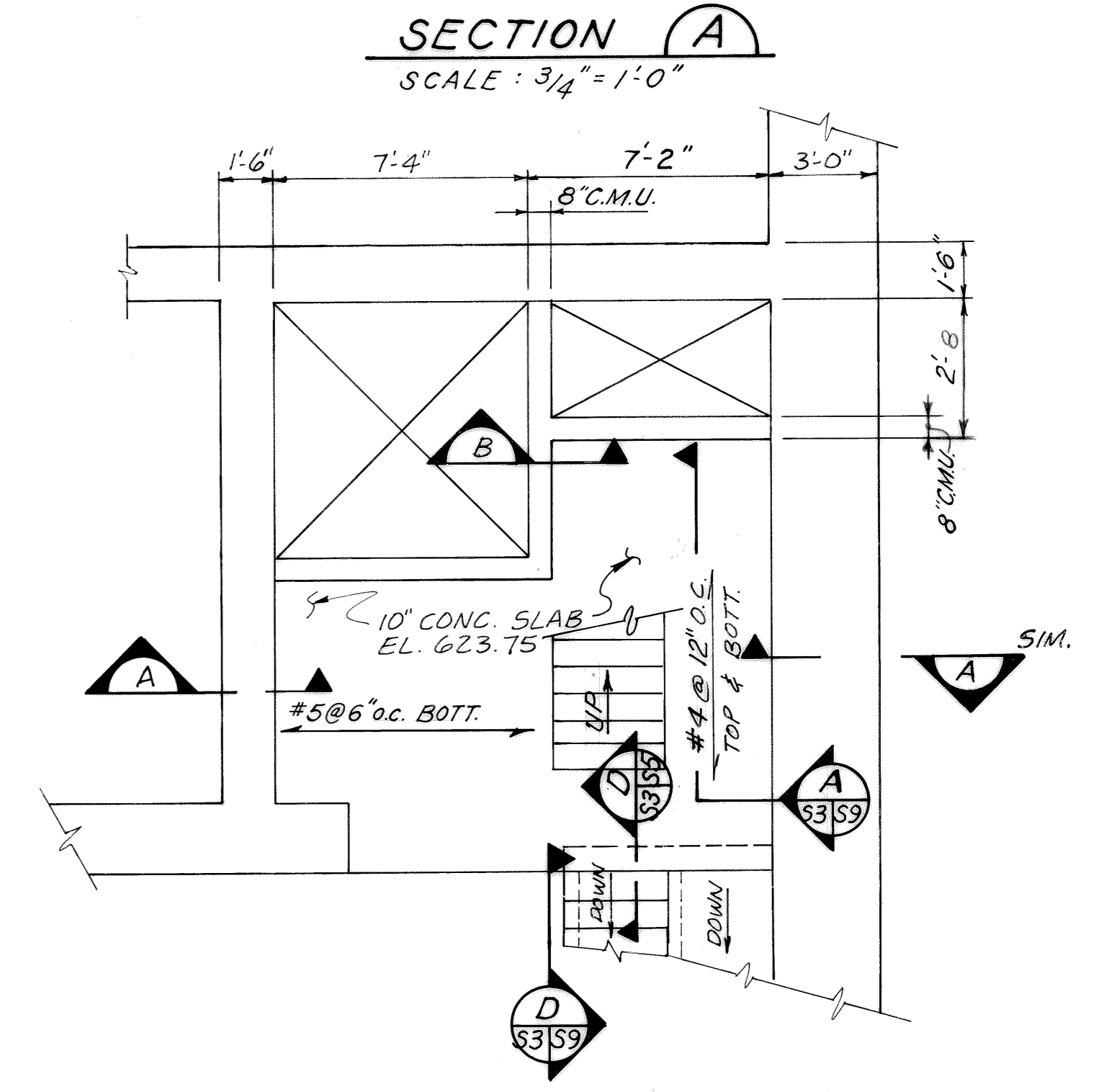
CITICO II PUMPING STATION
PLAN ELEVATION 640.00
STRUCTURAL
 CITY OF CHATTANOOGA, TENNESSEE

DSGN	TFI	3/98	HENSLEY-SCHMIDT, INC.	DRAWING NO.
DRWN	RC/RW	3/98	CONSULTANTS	
CHKD	PCC	3/98	ATLANTA - CHATTANOOGA - RALEIGH	6685-37C-S2.1
APPR	PCC	3/98	VALDOSTA - KNOXVILLE - ORLANDO	

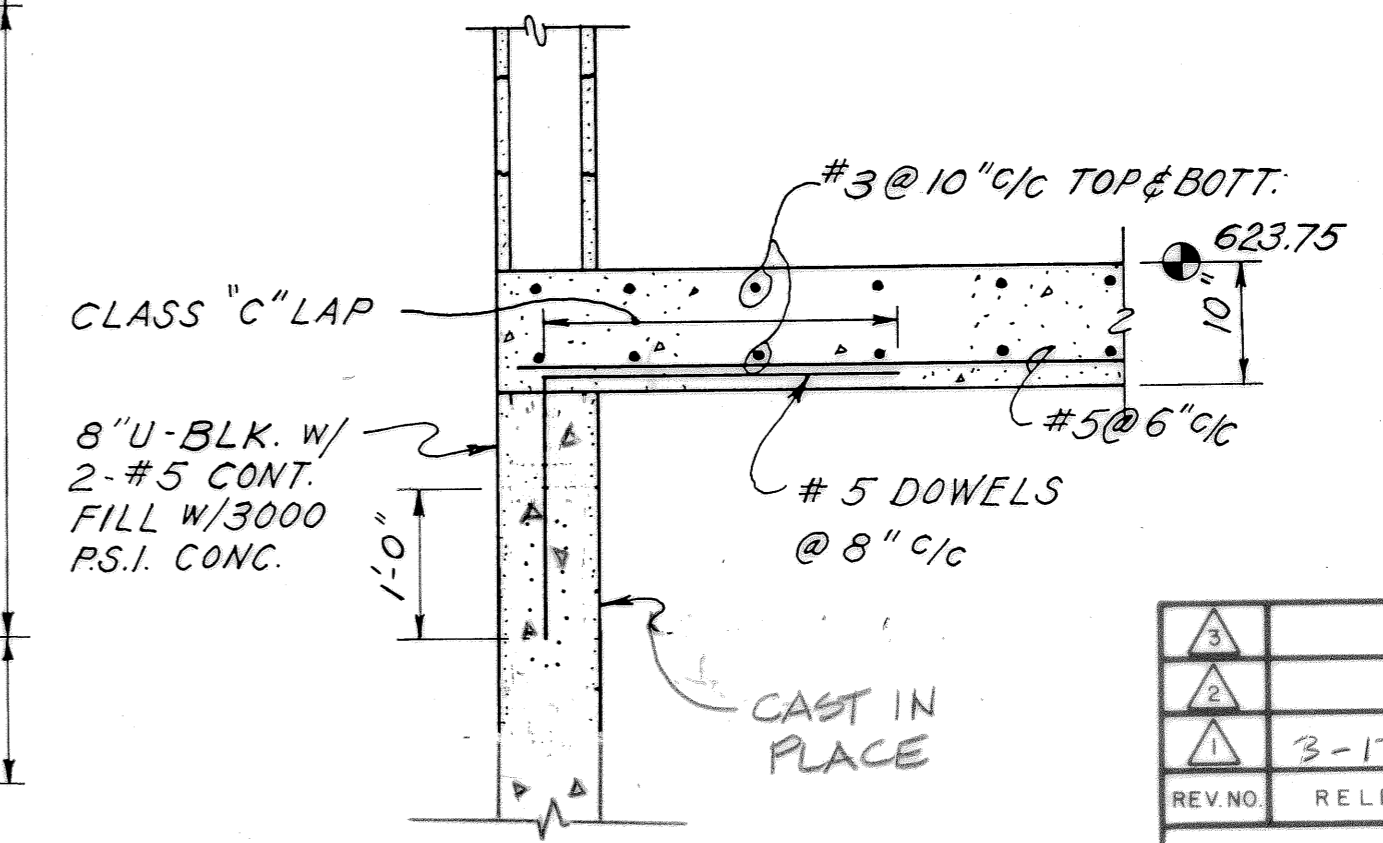




SECTION A
SCALE: 3/4" = 1'-0"



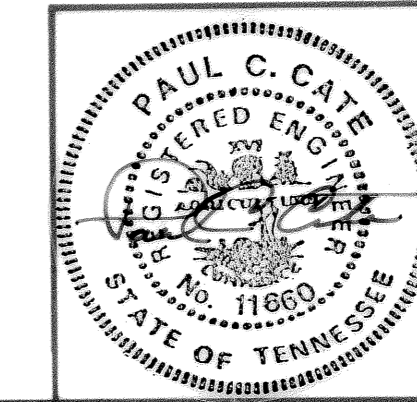
PARTIAL PLAN - ELEV. 623.75
SCALE: 1/4" = 1'-0"

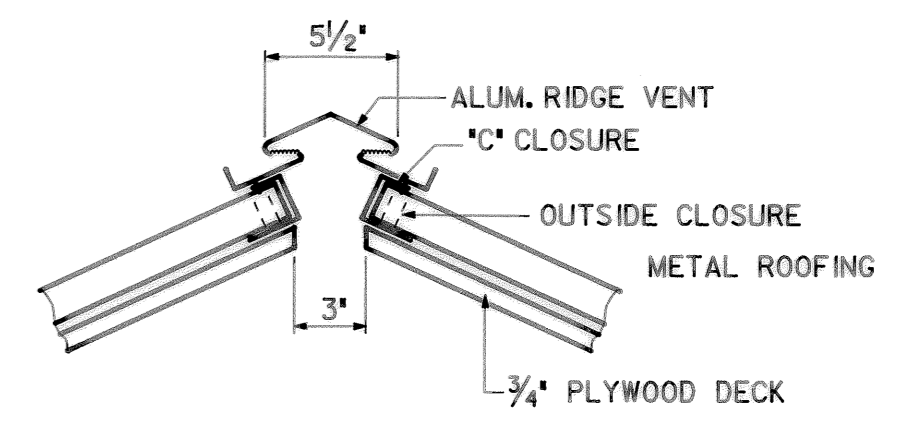
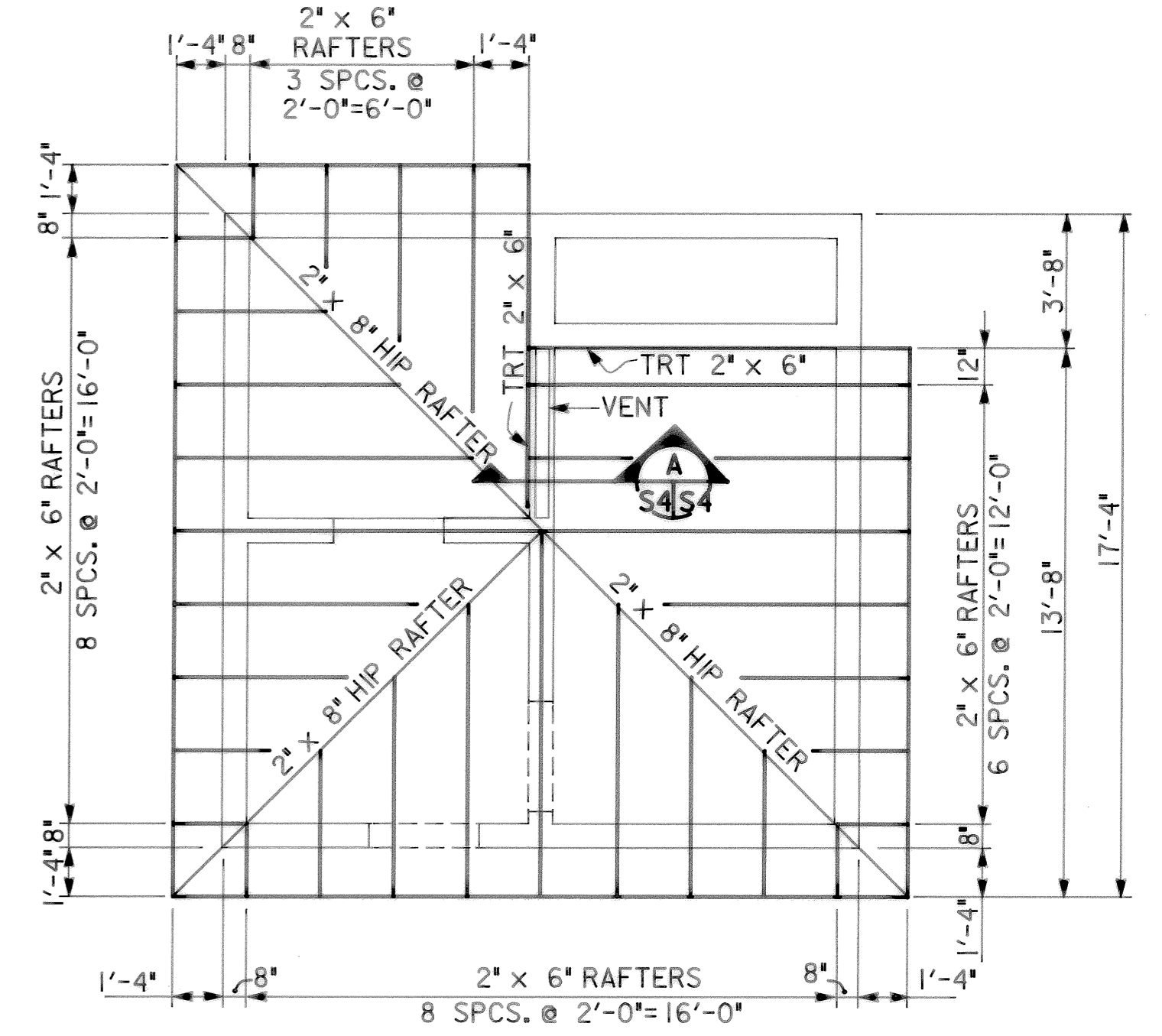
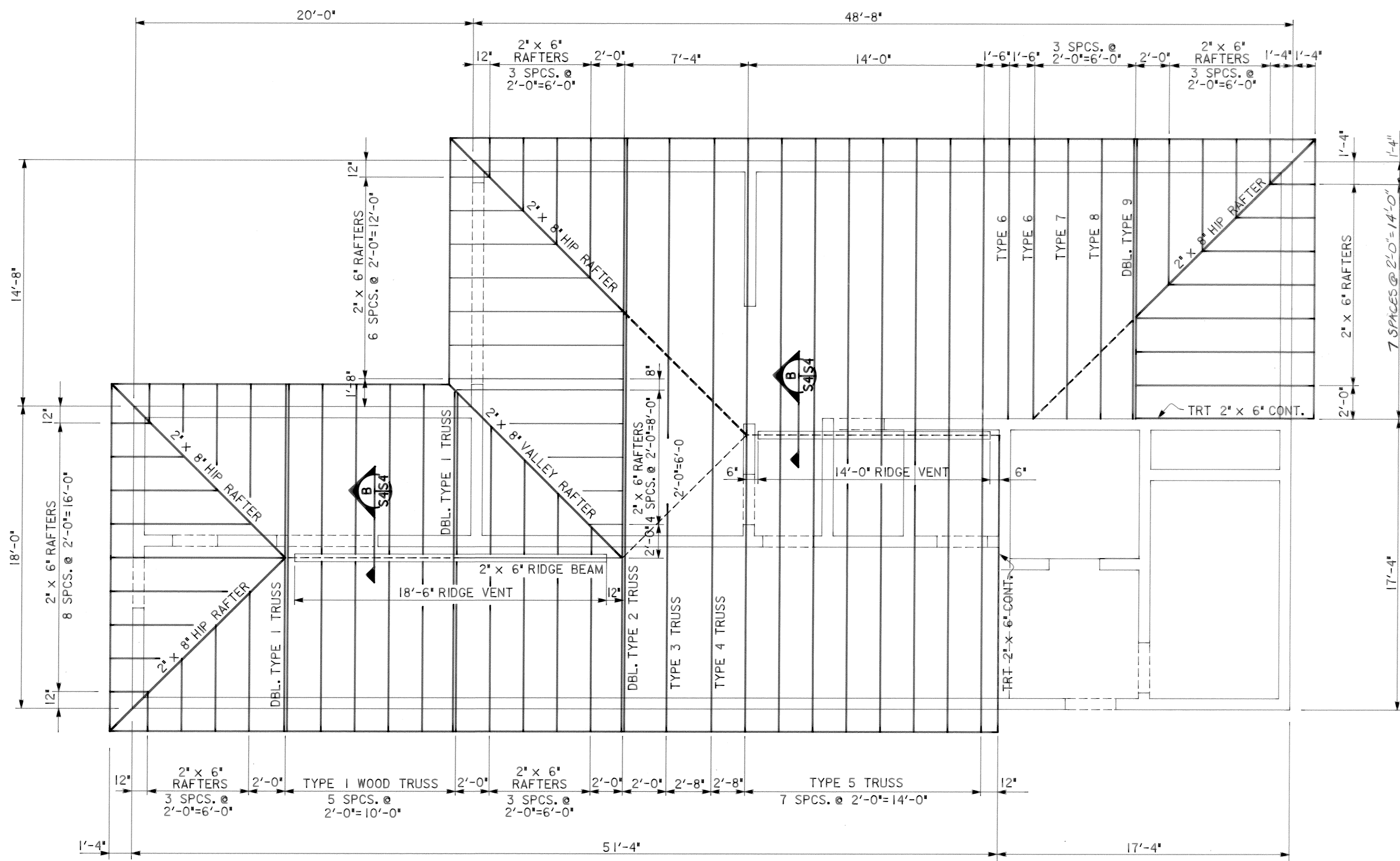


SECTION B
SCALE: 3/4" = 1'-0"

NOTE: FLOOR SLAB EXTENDS BEYOND WALLS 2'-0" (TYP.)

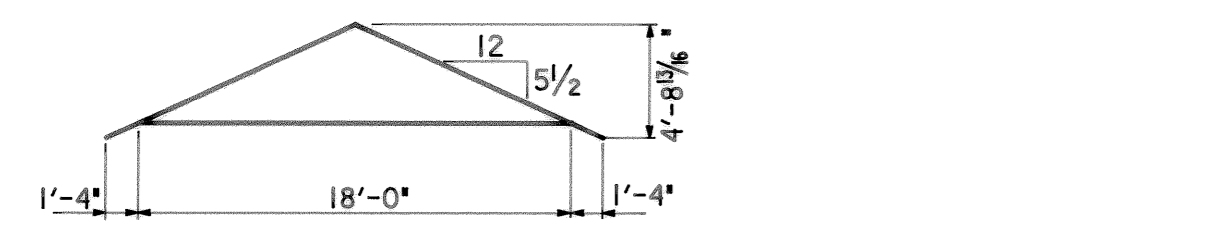
3			
2			
1	3-17-92	RECORD	
REVNO	RELEASED BY	DESCRIPTION OF REVISION	
CITICO II PUMPING STATION			
PLAN ELEVATION 618.75			
STRUCTURAL			
CITY OF CHATTANOOGA, TENNESSEE			
DSGN	TFI	8-89	HENSLEY-SCHMIDT, INC.
DRWN	RC/RW	8-89	CONSULTANTS
CHKD	PCC	8-89	ATLANTA - CHATTANOOGA - RALEIGH
APPR	PCL	8-89	VALDOSTA - KNOXVILLE - ORLANDO
			DRAWING NO. 6685-37C-S3.1



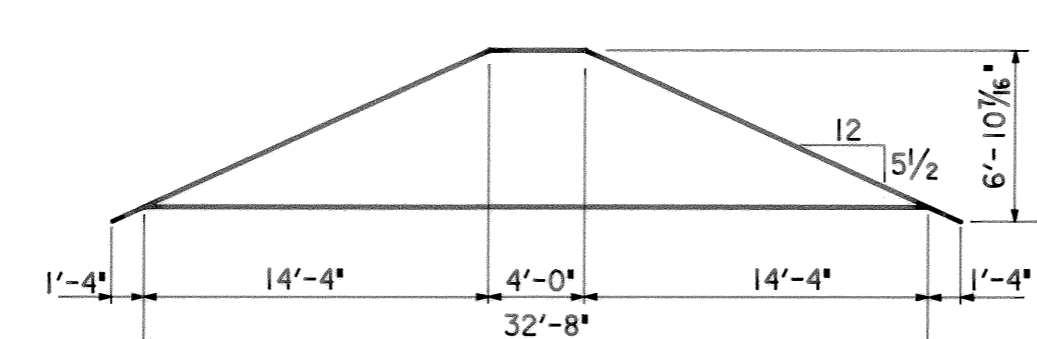


SECTION B
SCALE: 1/2" = 1'-0"
S4/S4

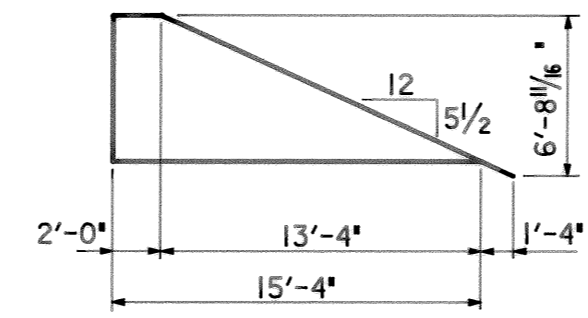
NOTE:
CONTRACTOR MAY SUBMIT AN
ALTERNATIVE FRAMING SCHEME IN
ACCORDANCE WITH APPLICABLE PROVISIONS
OF THE SPECIFICATIONS.



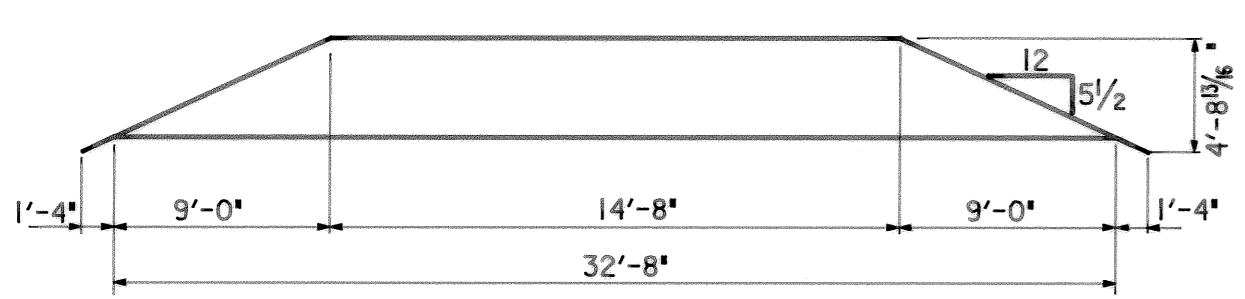
TYPE 1



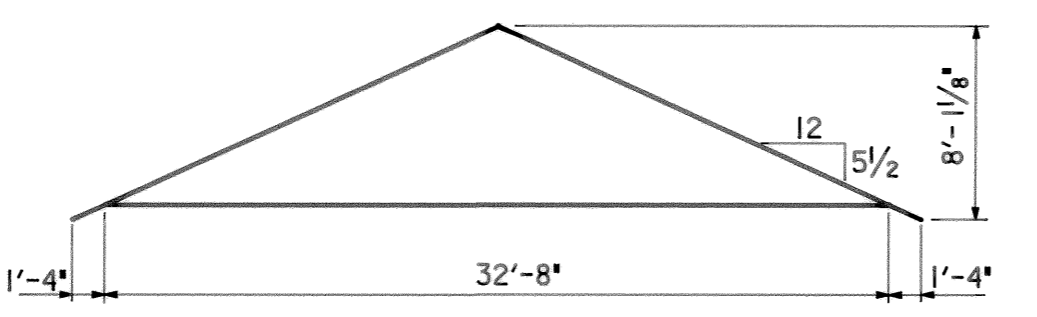
TYPE 4



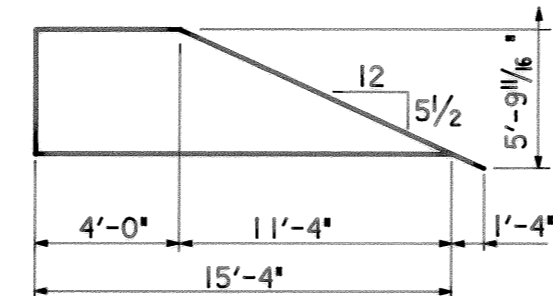
TYPE 7



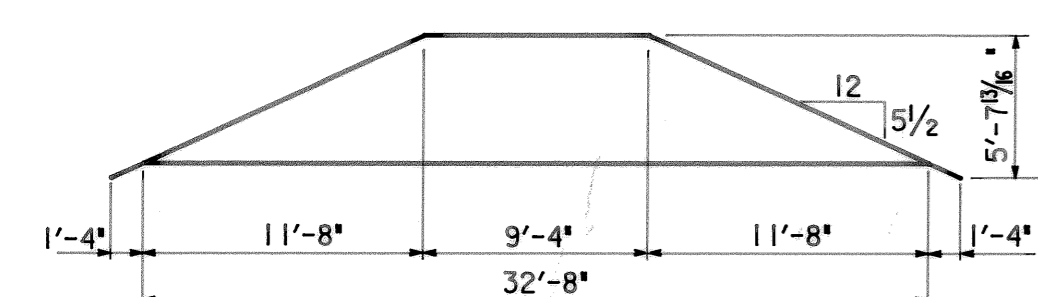
TYPE 2



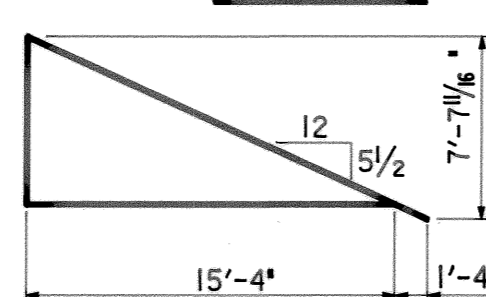
TYPE 5



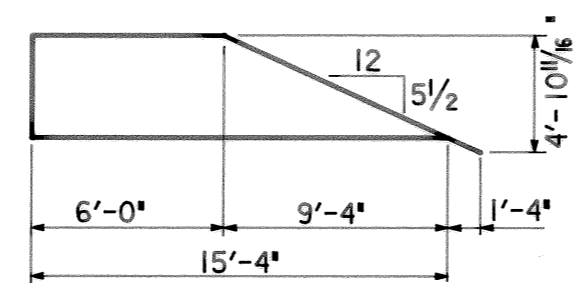
TYPE 8



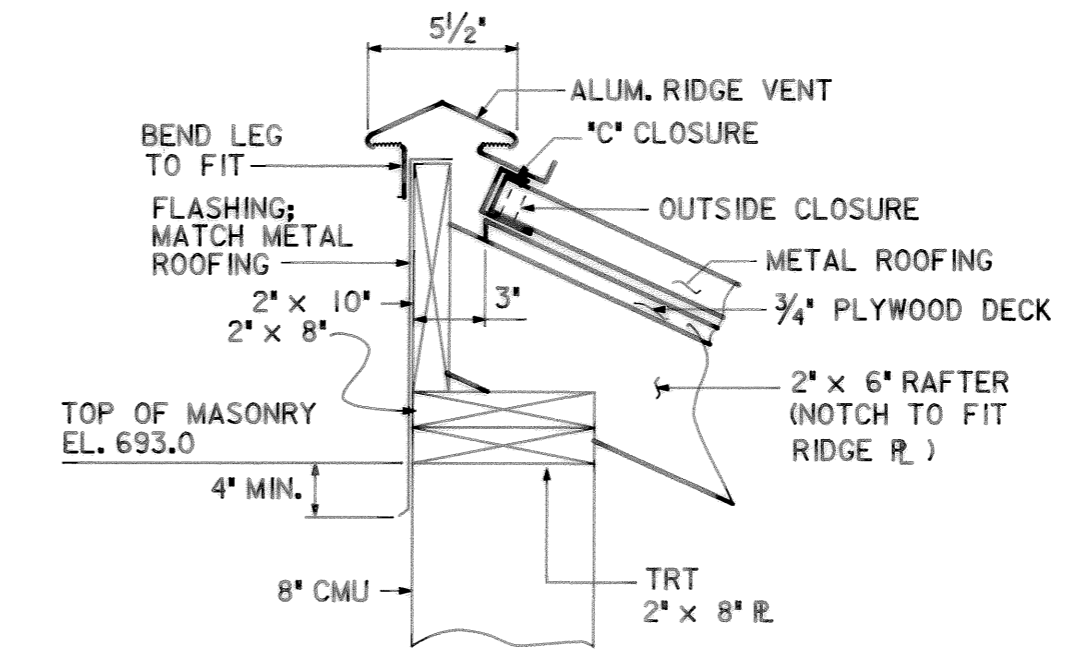
TYPE 3



TYPE 6



TYPE 9



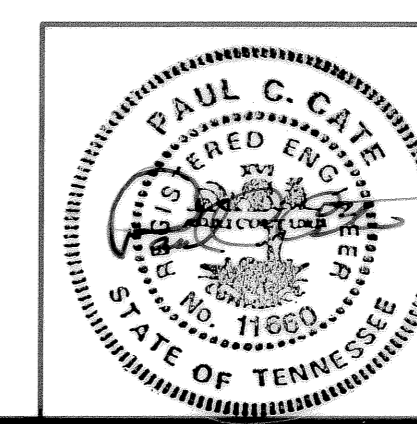
SECTION A
SCALE: 1/2" = 1'-0"
S4/S4

REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
3-17-92	RECORD	

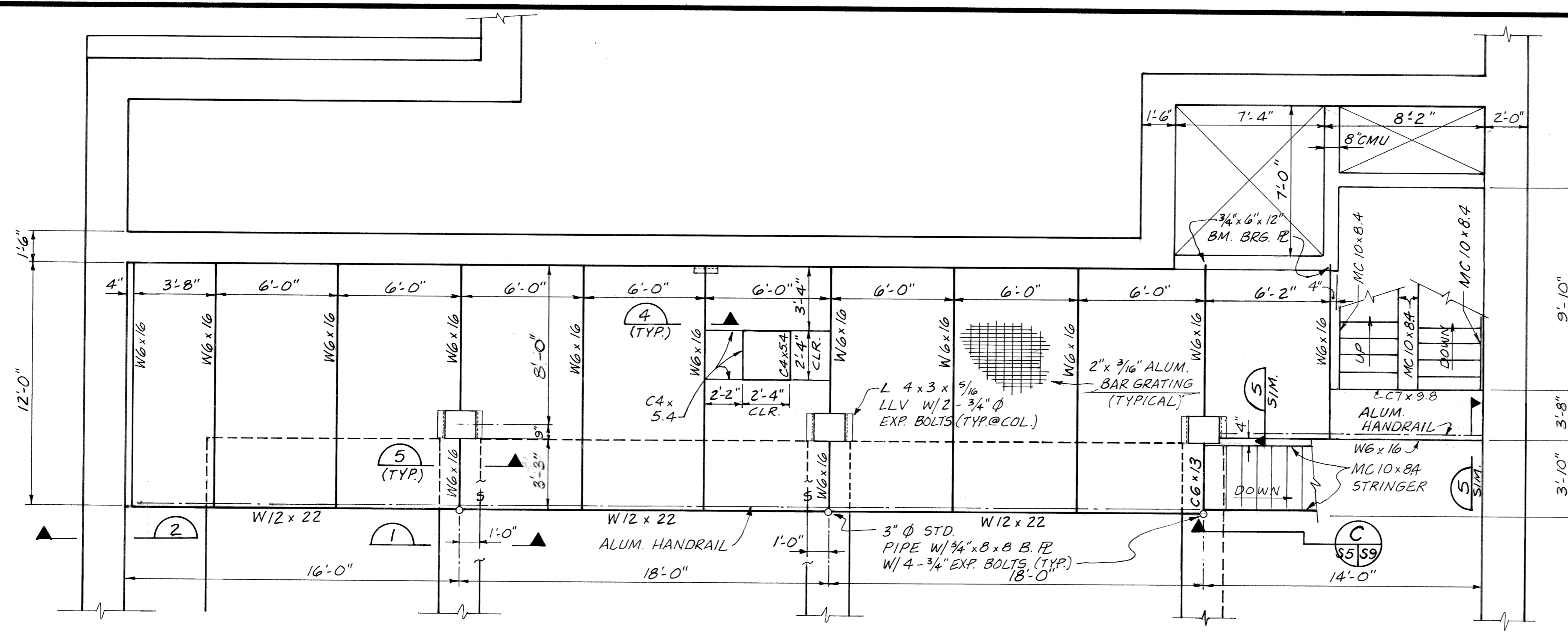
CITICO PUMP STATION

ROOF PLAN AND DETAILS

CHATTANOOGA, TENNESSEE

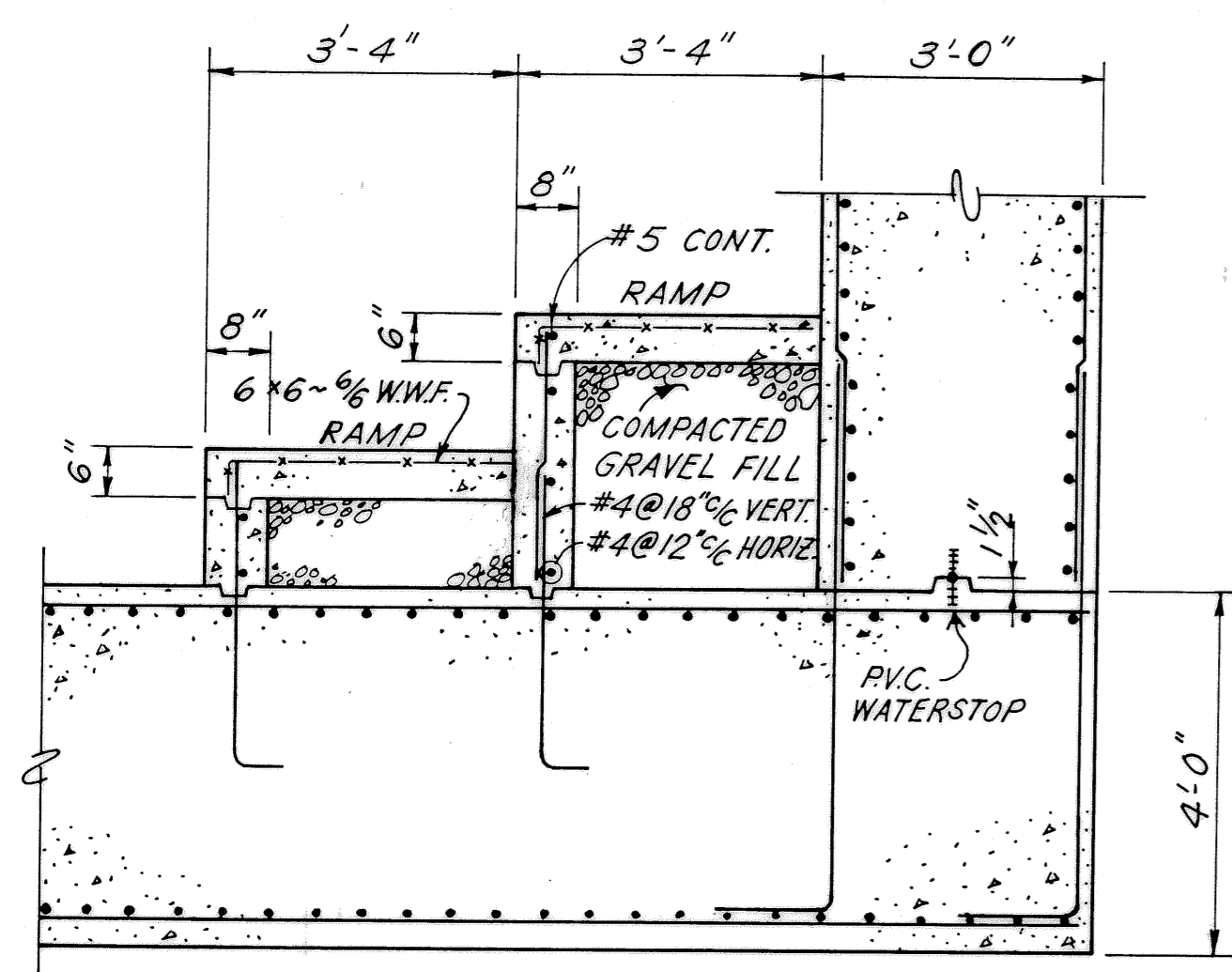


DSGN	PCL	B-89	HENSLEY - SCHMIDT, INC. ENGINEERS AND SURVEYORS ATLANTA - CHATTANOOGA RALEIGH - ORLANDO	DRAWING NO. 6685-37C-S4
DRWN	PC	B-83		
CHKD	PCL	B-87		
APPR	PCL	B-87		

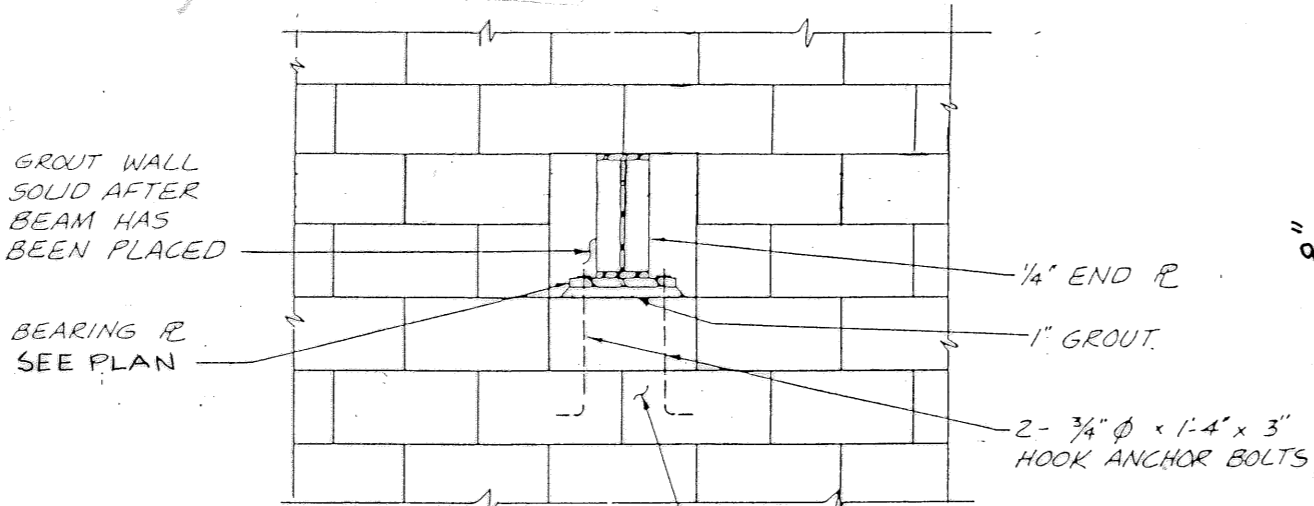


MEZZANINE FRAMING PLAN
FIN. FLOOR ELEV. 647.0 (TYP.)
 SCALE: 1/4" = 1'-0"

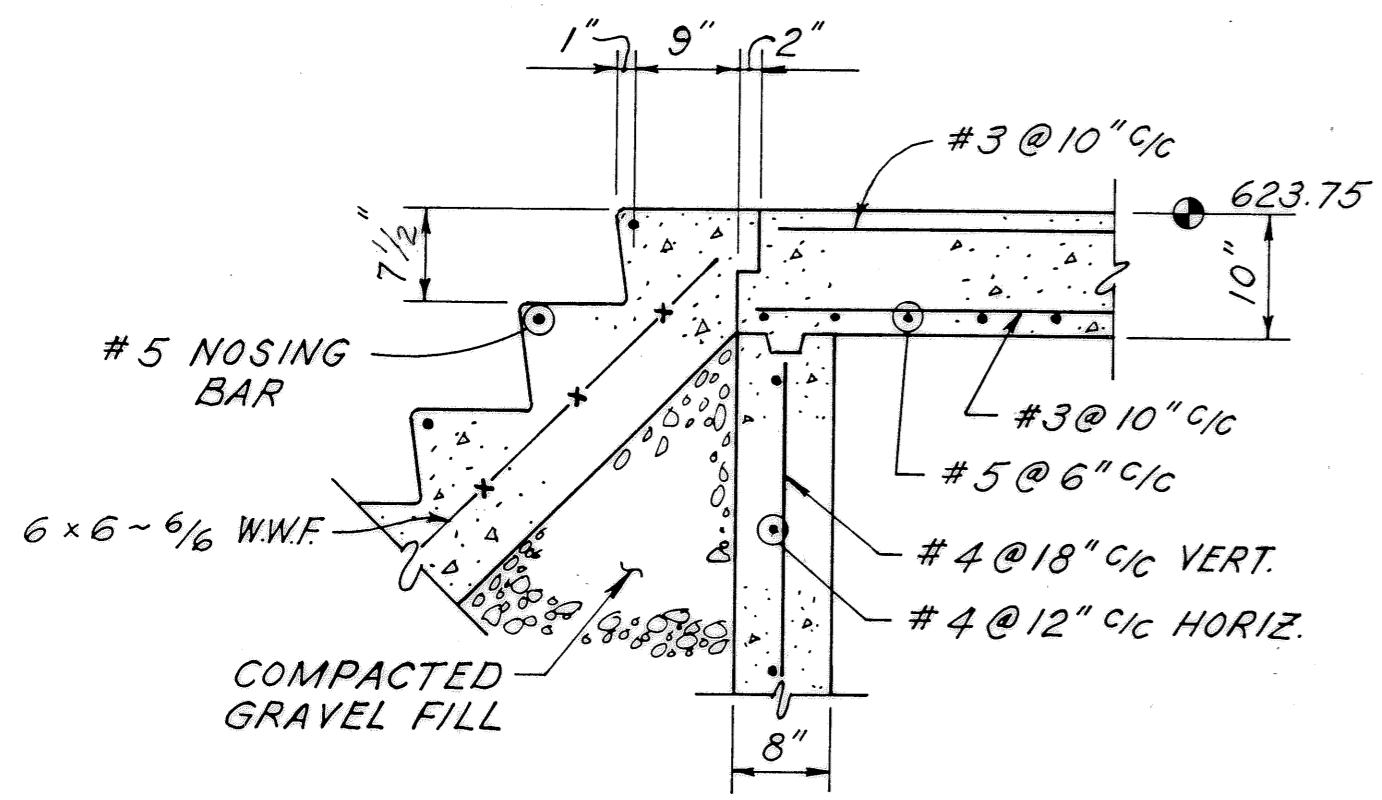
- NOTES:**
1. FLOOR LIVE LOAD = 100 P.S.F.
 2. ——— INDICATES BEAM SPLICE
 3. MEZZANINE GRATING SPAN TO BE 6'-2" MAXIMUM.



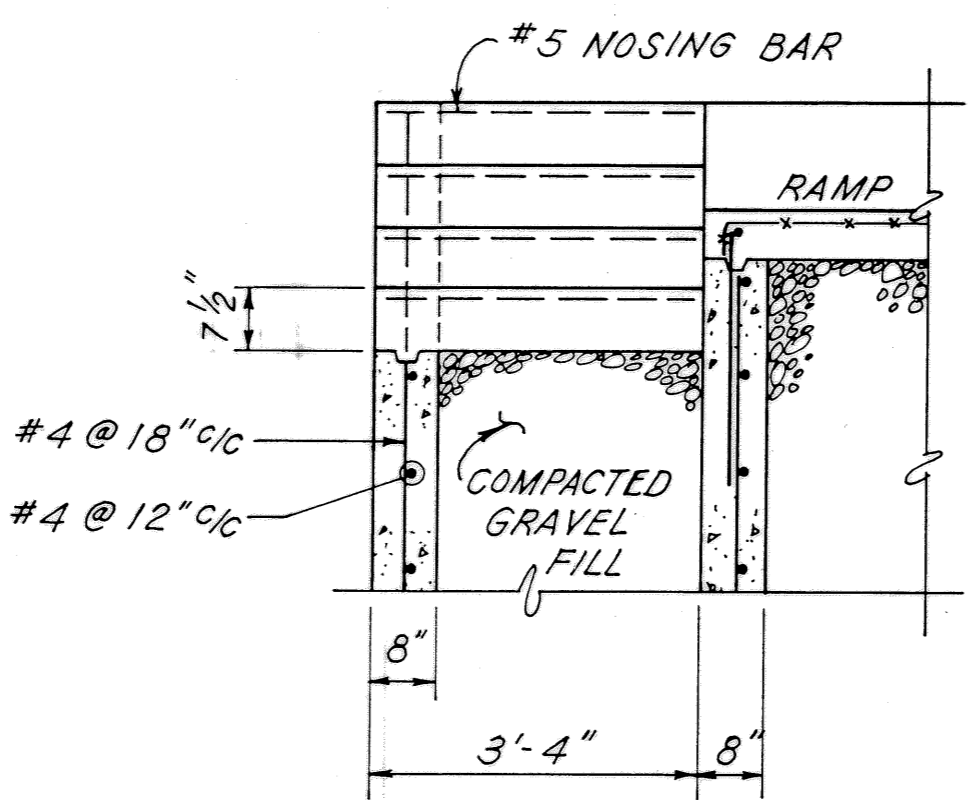
SECTION C
 SCALE: 1/2" = 1'-0"



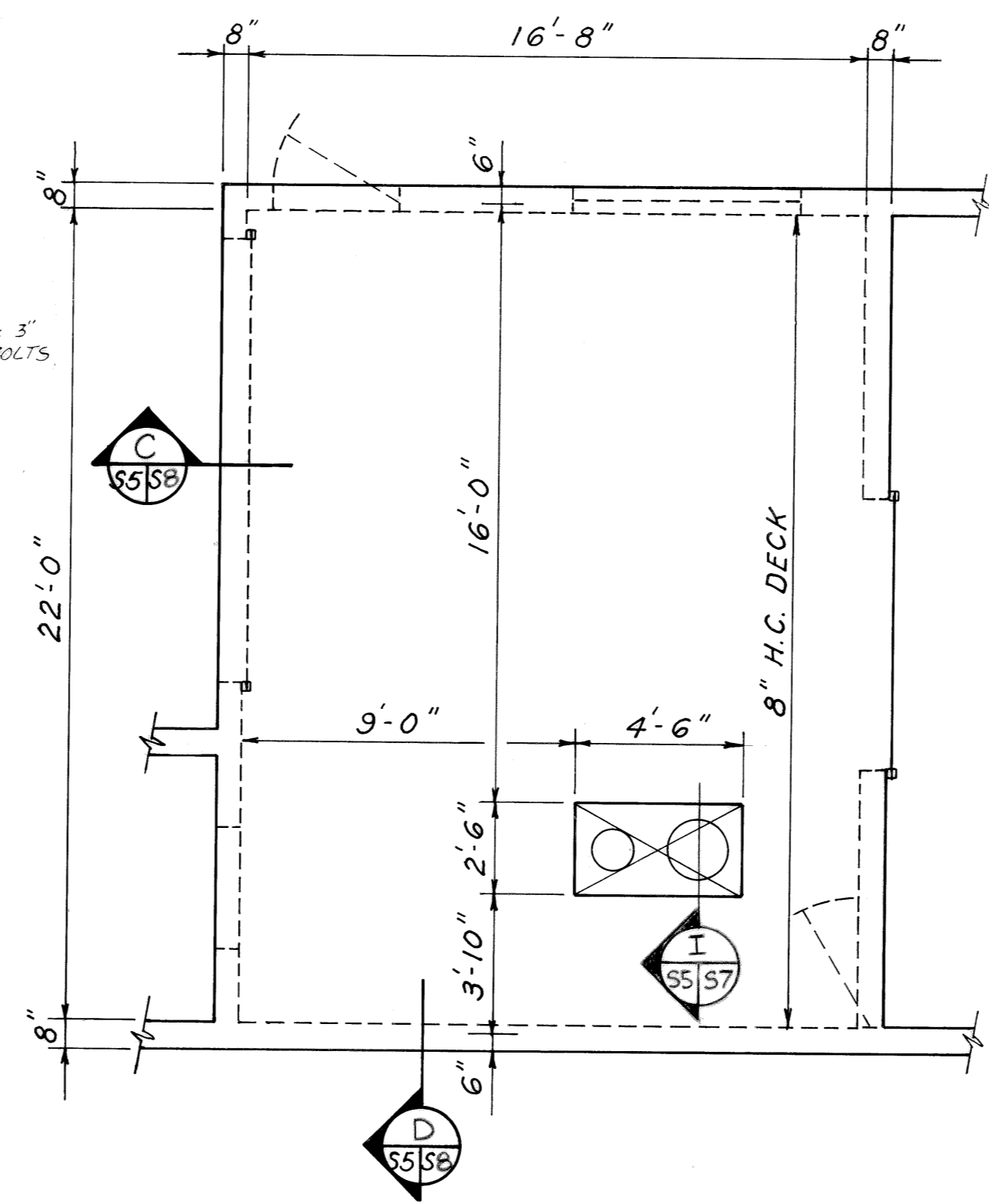
TYPICAL BEAM BEARING DETAIL



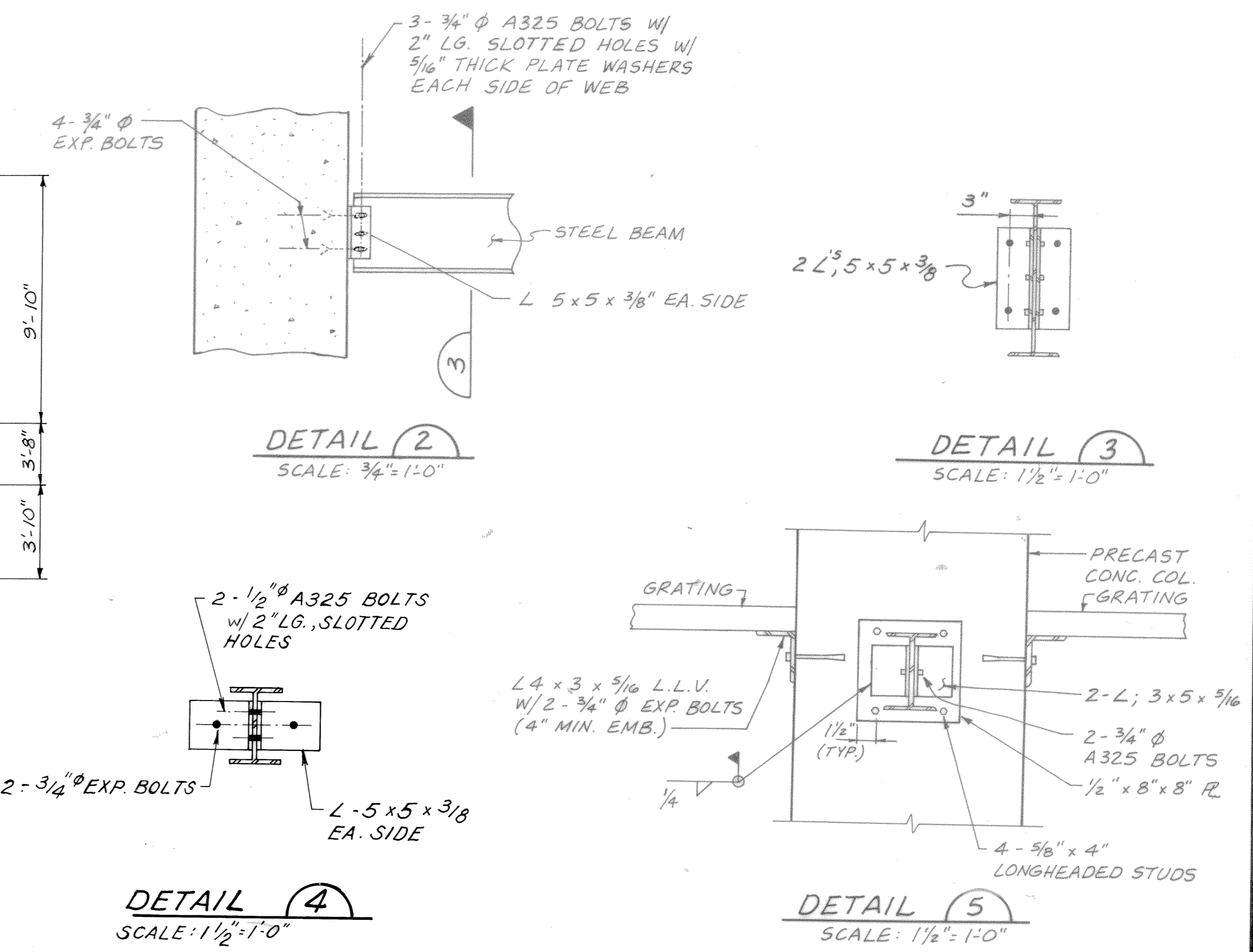
SECTION D
 SCALE: 3/4" = 1'-0"



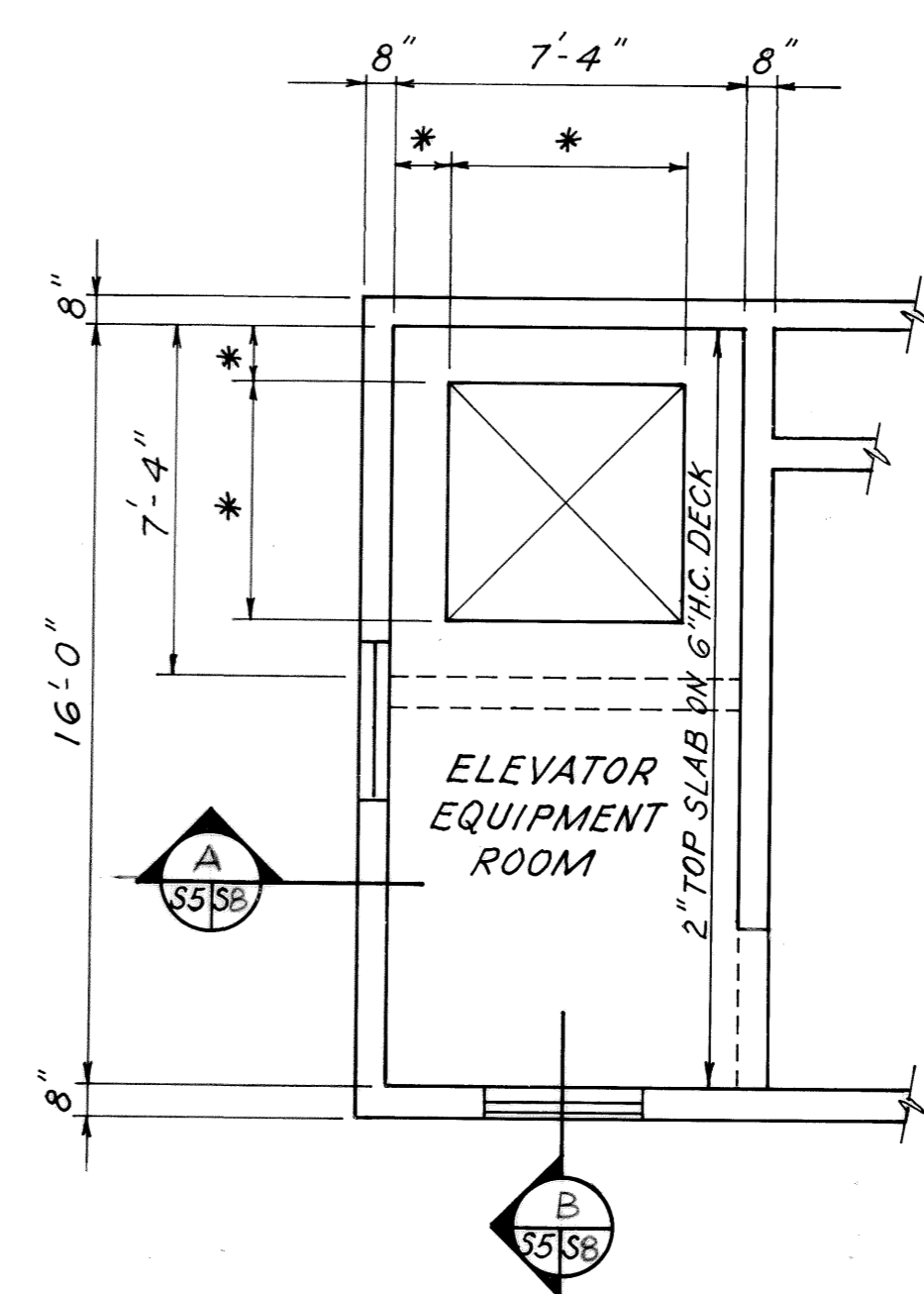
SECTION E
 SCALE: 1/2" = 1'-0"



SCREEN ROOM CEILING
 SCALE: 1/4" = 1'-0"

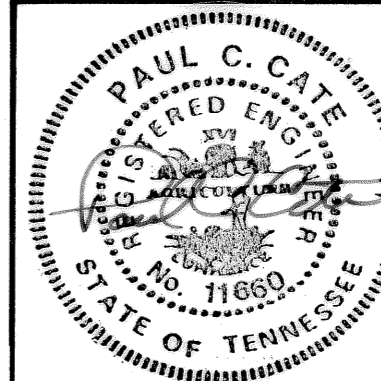


DETAIL 4
 SCALE: 1 1/2" = 1'-0"



ELEVATOR EQUIPMENT ROOM PLAN - ELEV. 681.0
 SCALE: 1/4" = 1'-0"

* SIZE & LOCATION OF ELEVATOR OPENING PER MANUFACTURER'S REQUIREMENTS.

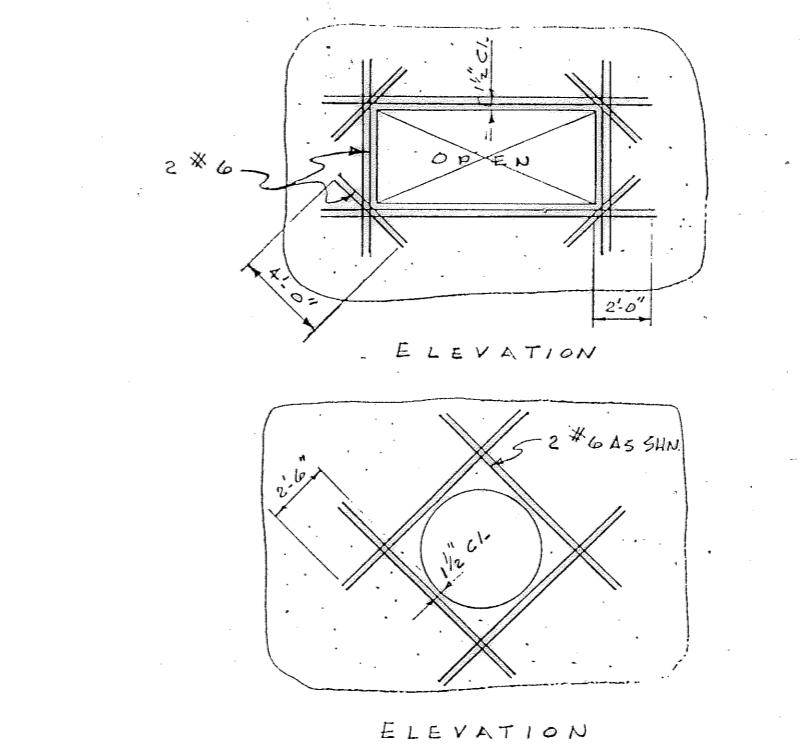
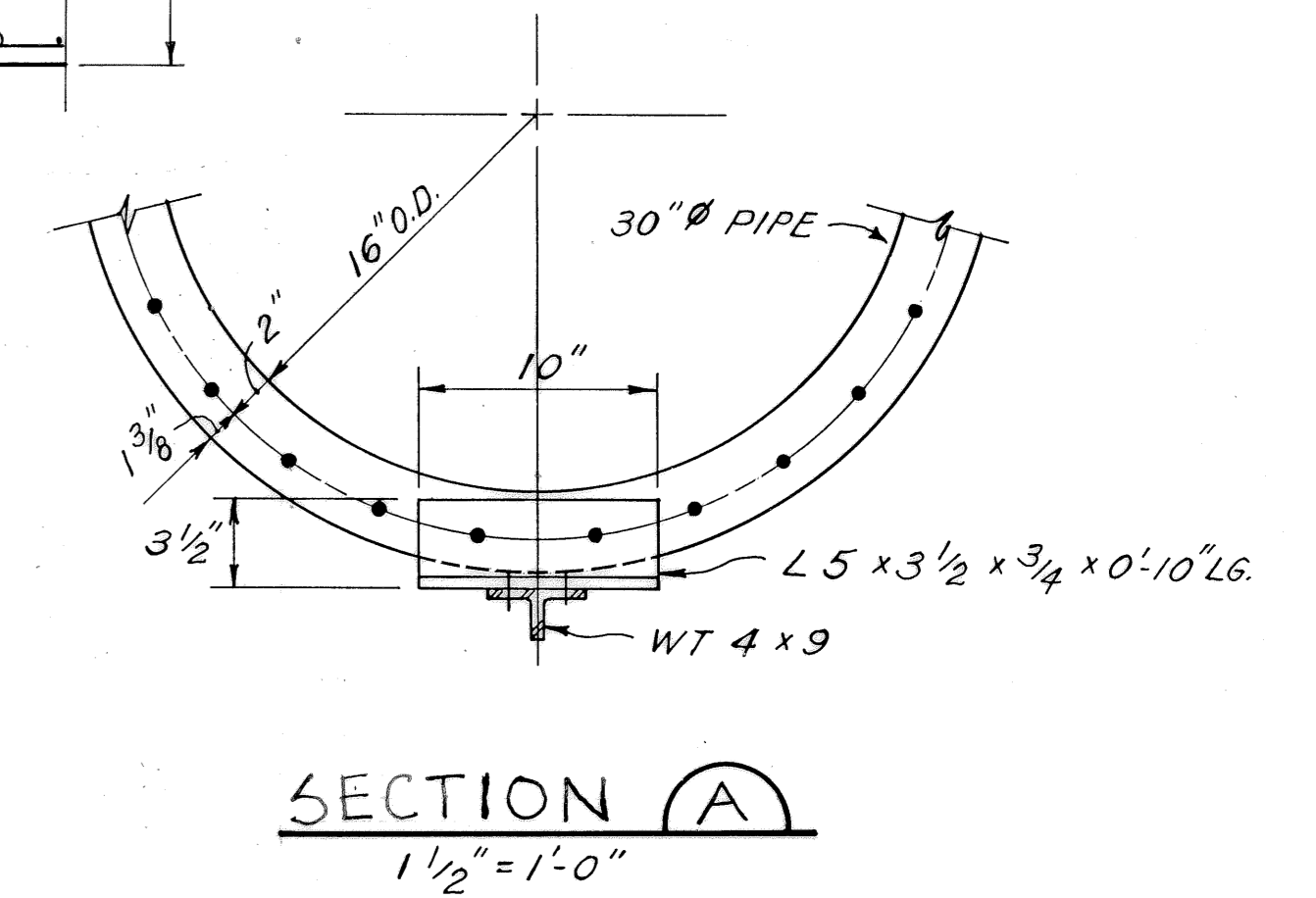
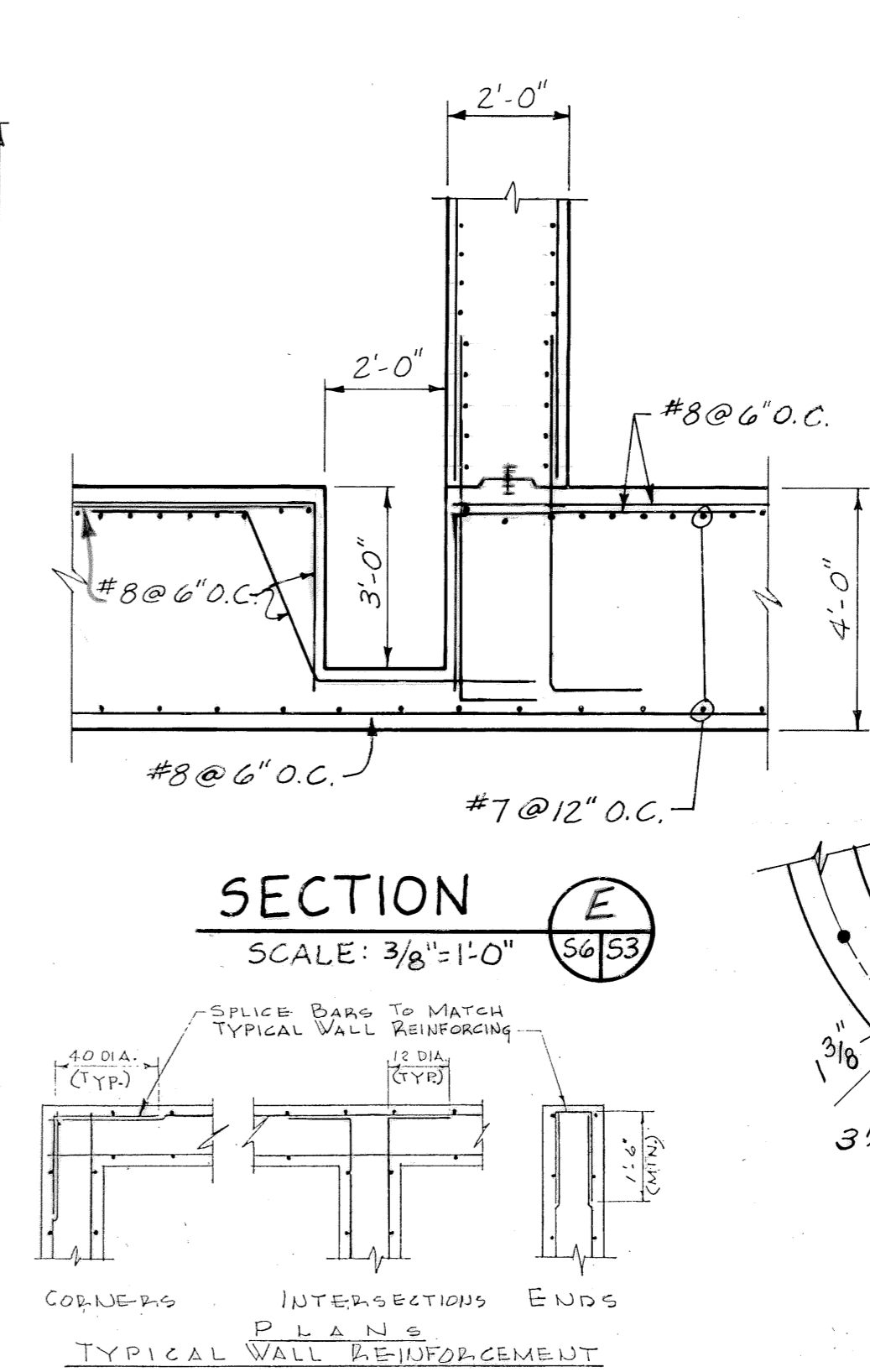
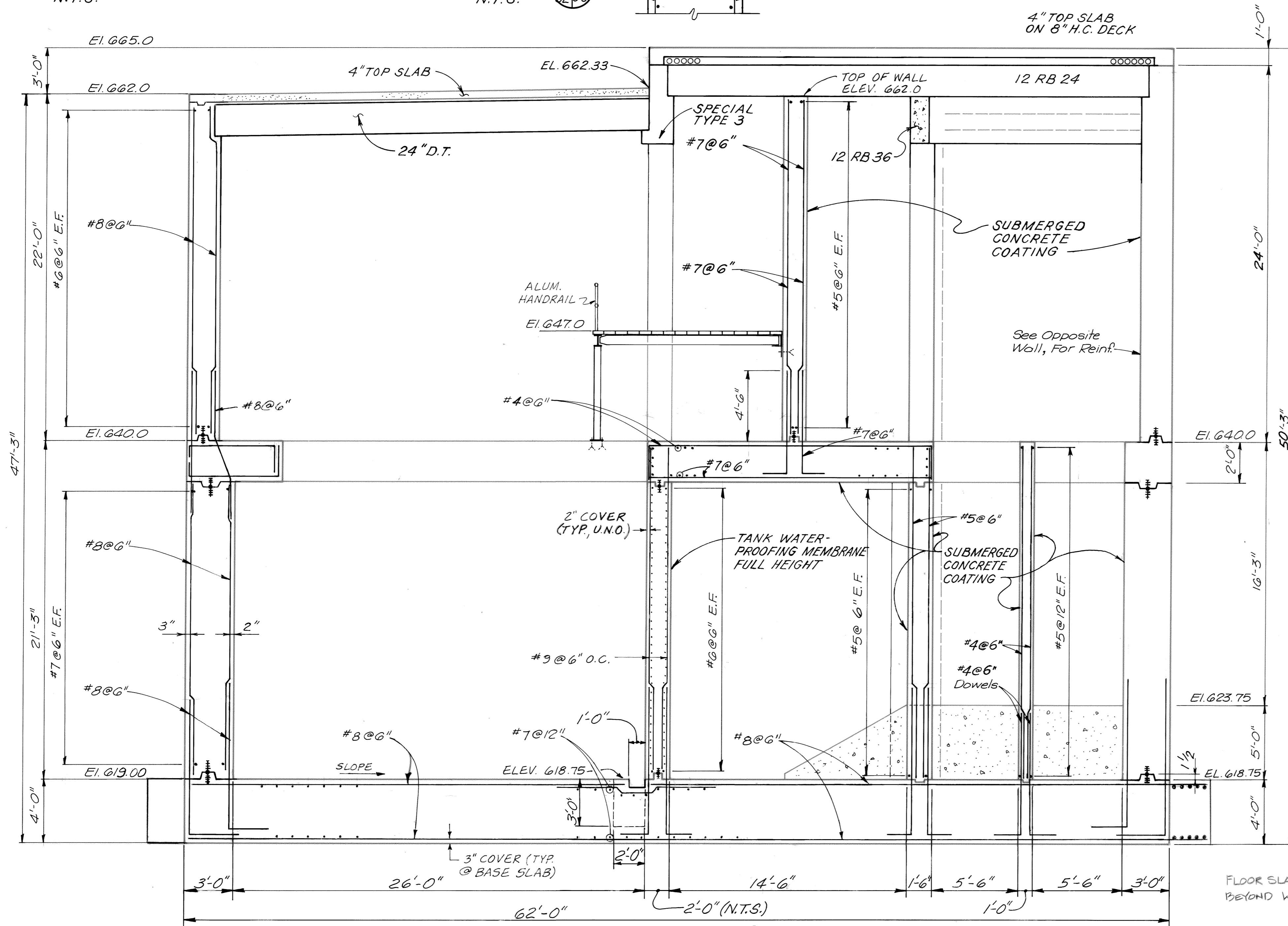
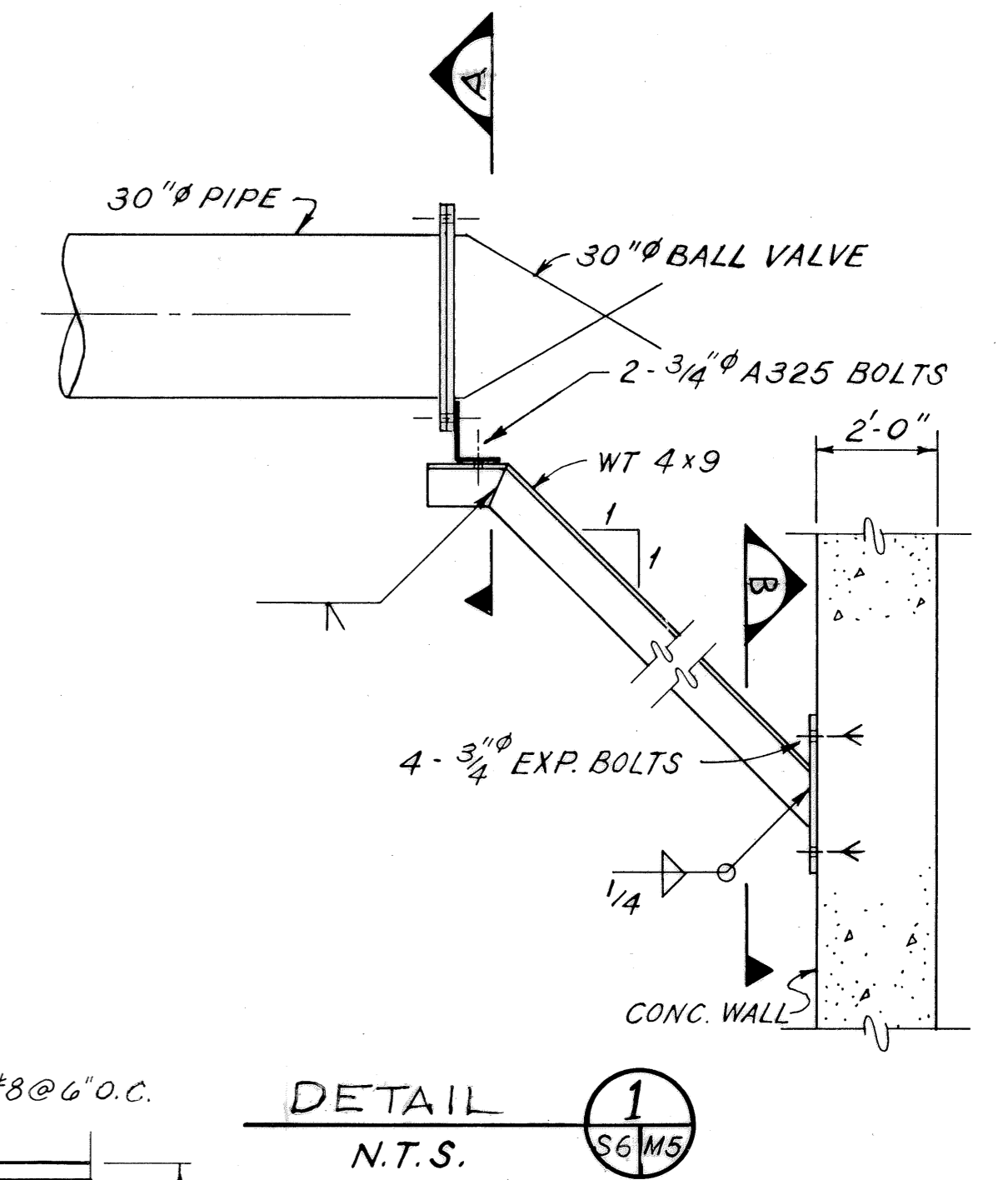
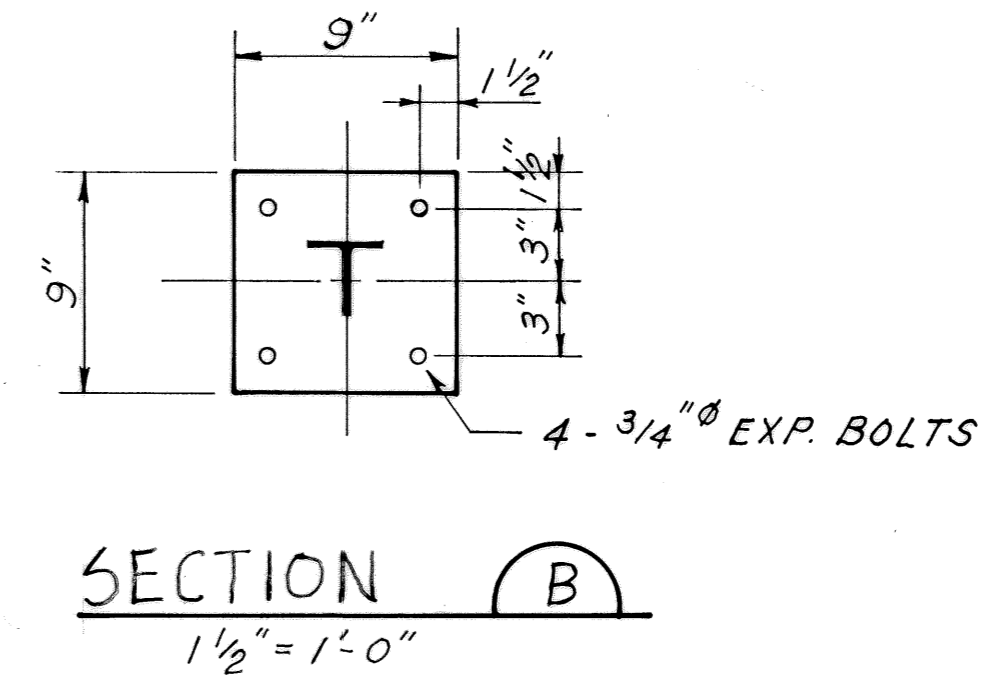
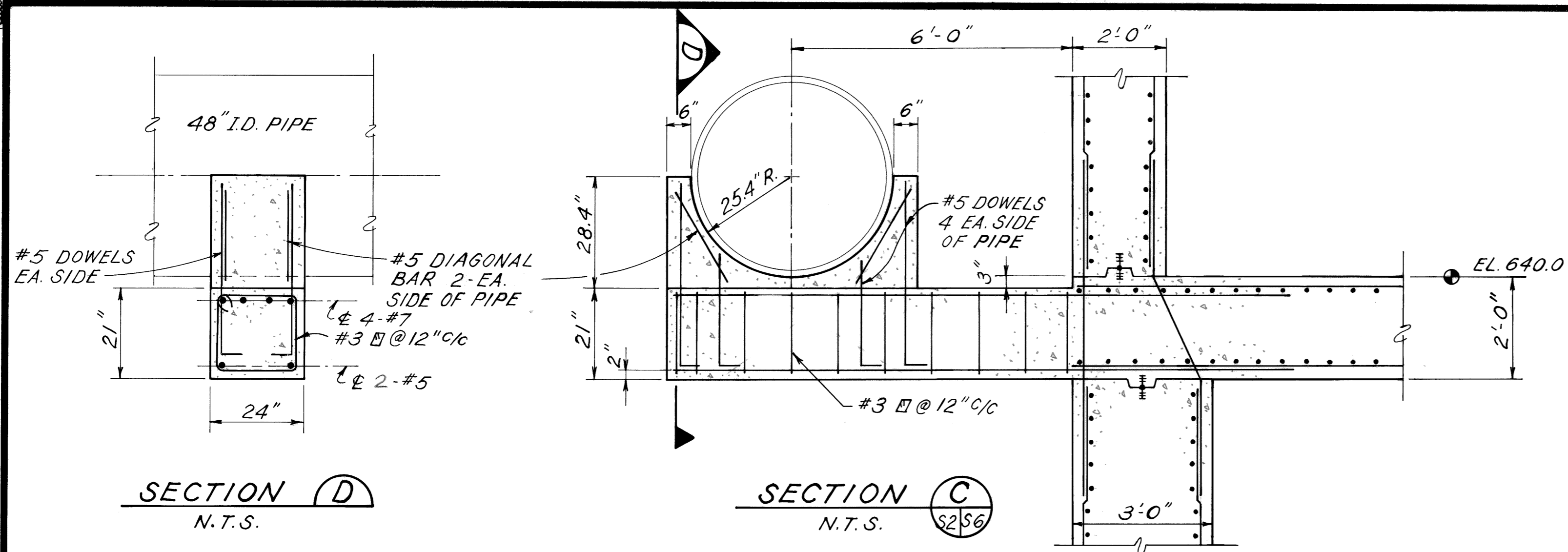


3-17-92	RECORDED
REV. NO.	RELEASED BY
	DESCRIPTION OF REVISION

CITICO II PUMPING STATION
PARTIAL PLAN SECTIONS AND DETAILS
 CITY OF CHATTANOOGA, TENNESSEE

DSGN	TFI	0-97	HENSLEY-SCHMIDT, INC.	DRAWING NO.
DRWN	RC/RW	8/89	ENGINEERS AND SURVEYORS	
CHKD	PCC	8-87	ATLANTA-CHATTANOOGA-KNOXVILLE	6685-37C-S5.1
APPR	PCC	8-87	VALDOSTA	

BRUNING 44.132.591.40-1

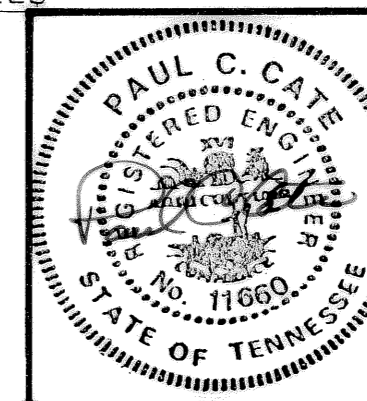


3-17-92	RECORD
REV. NO.	RELEASED BY
	DESCRIPTION OF REVISION

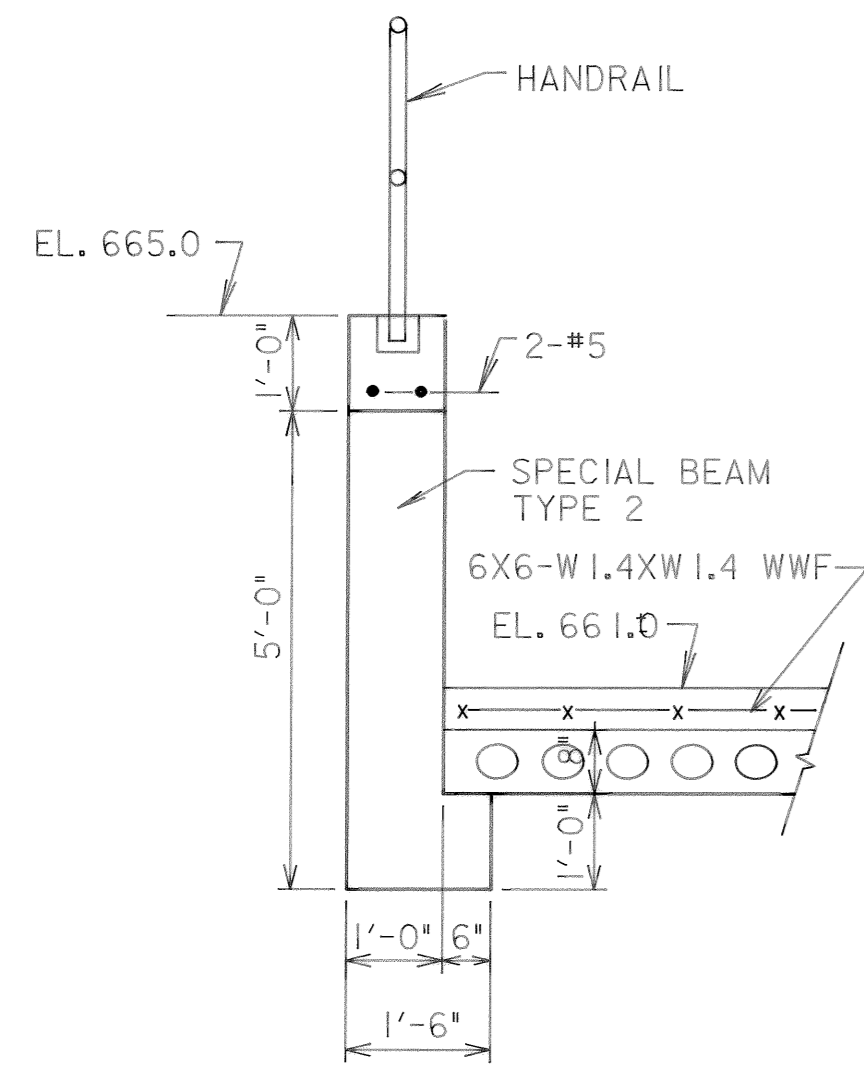
CITICO II PUMPING STATION

BUILDING SECTION

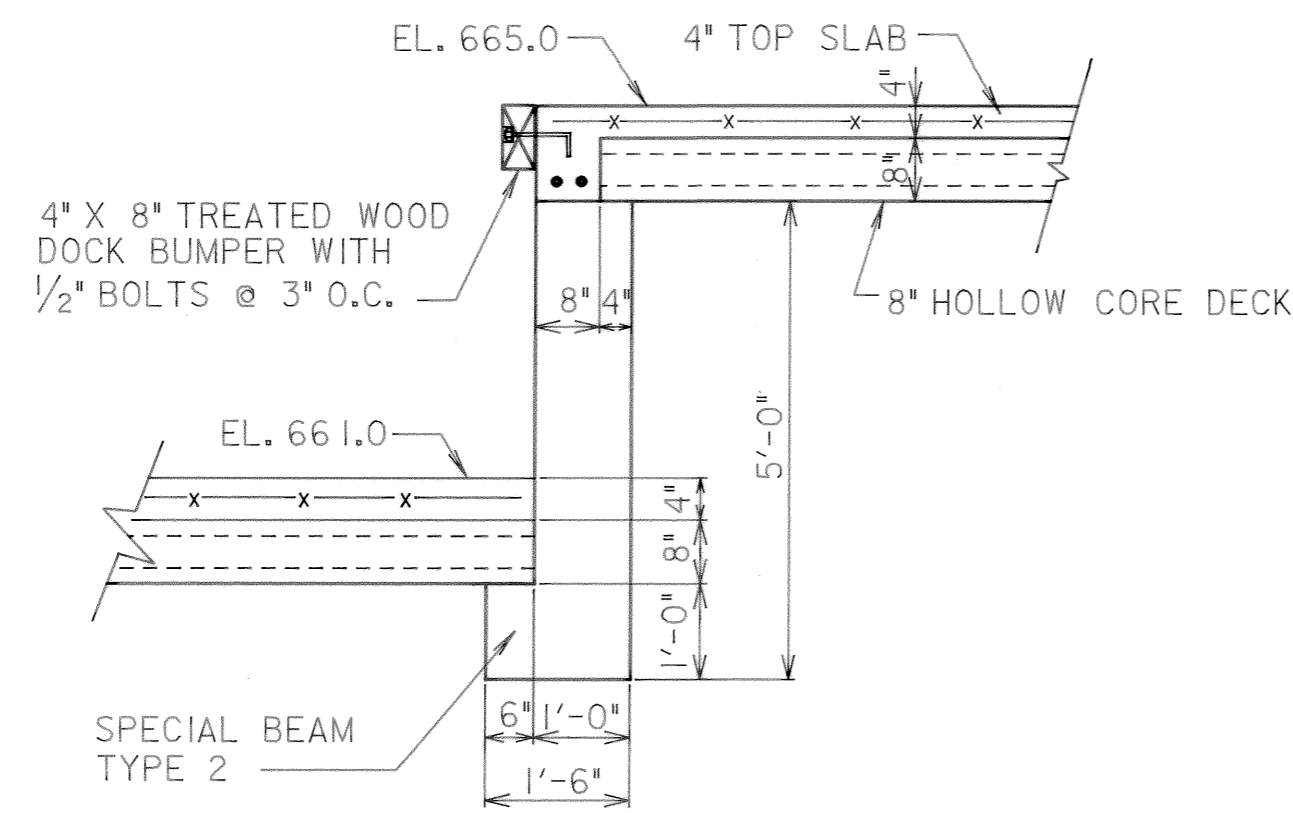
CITY OF CHATTANOOGA, TENNESSEE



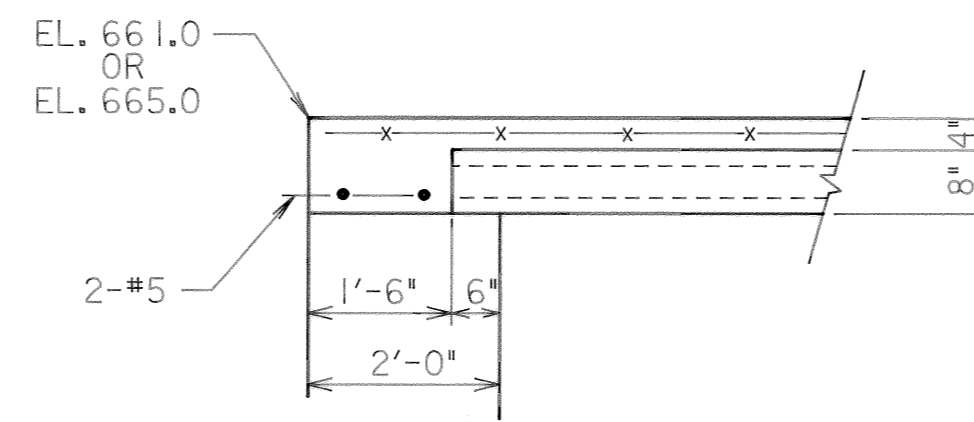
DSGN	TFI	8-89	HENSLEY-SCHMIDT, INC.	DRAWING NO.
DRWN	RC/RW	8-89	CONSULTANTS	
CHKD	PCC	8-89	ATLANTA · CHATTANOOGA · RALEIGH	6685-37C-S6.1
APPR	PCC	8-89	VALDOOSTA · KNOXVILLE · ORLANDO	



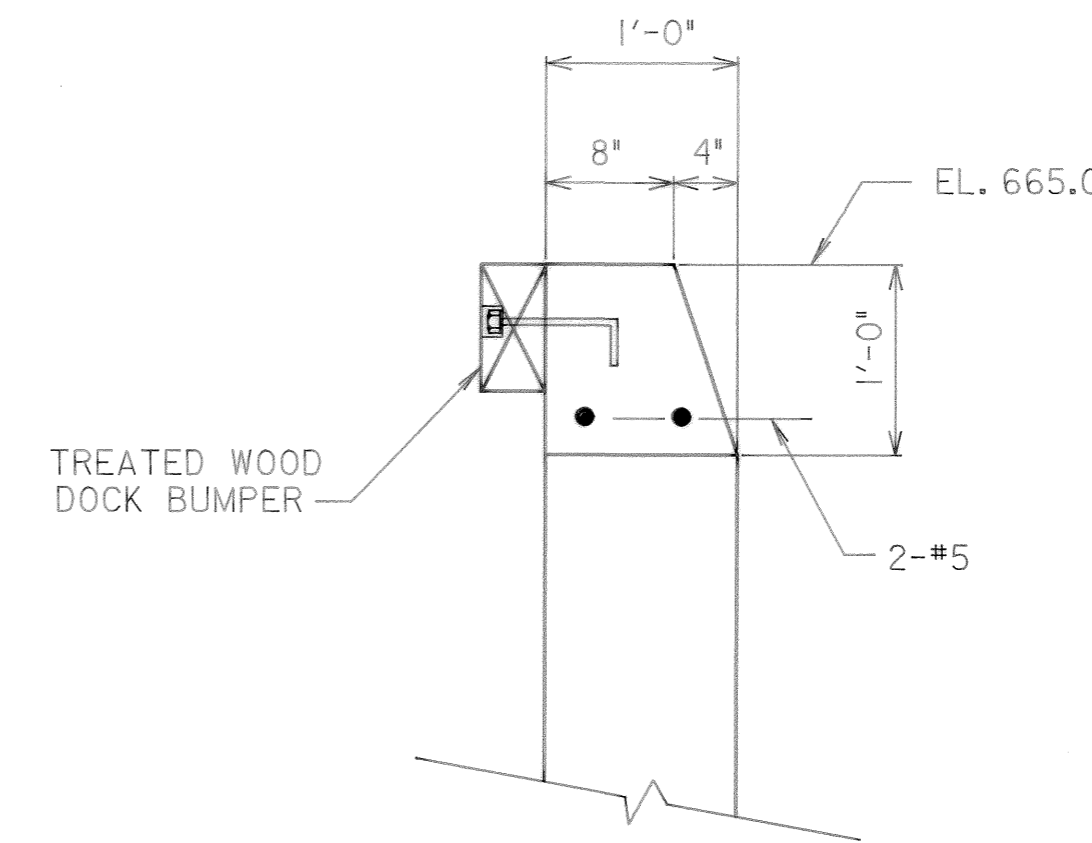
SECTION A
SCALE: 1/2" = 1'-0"



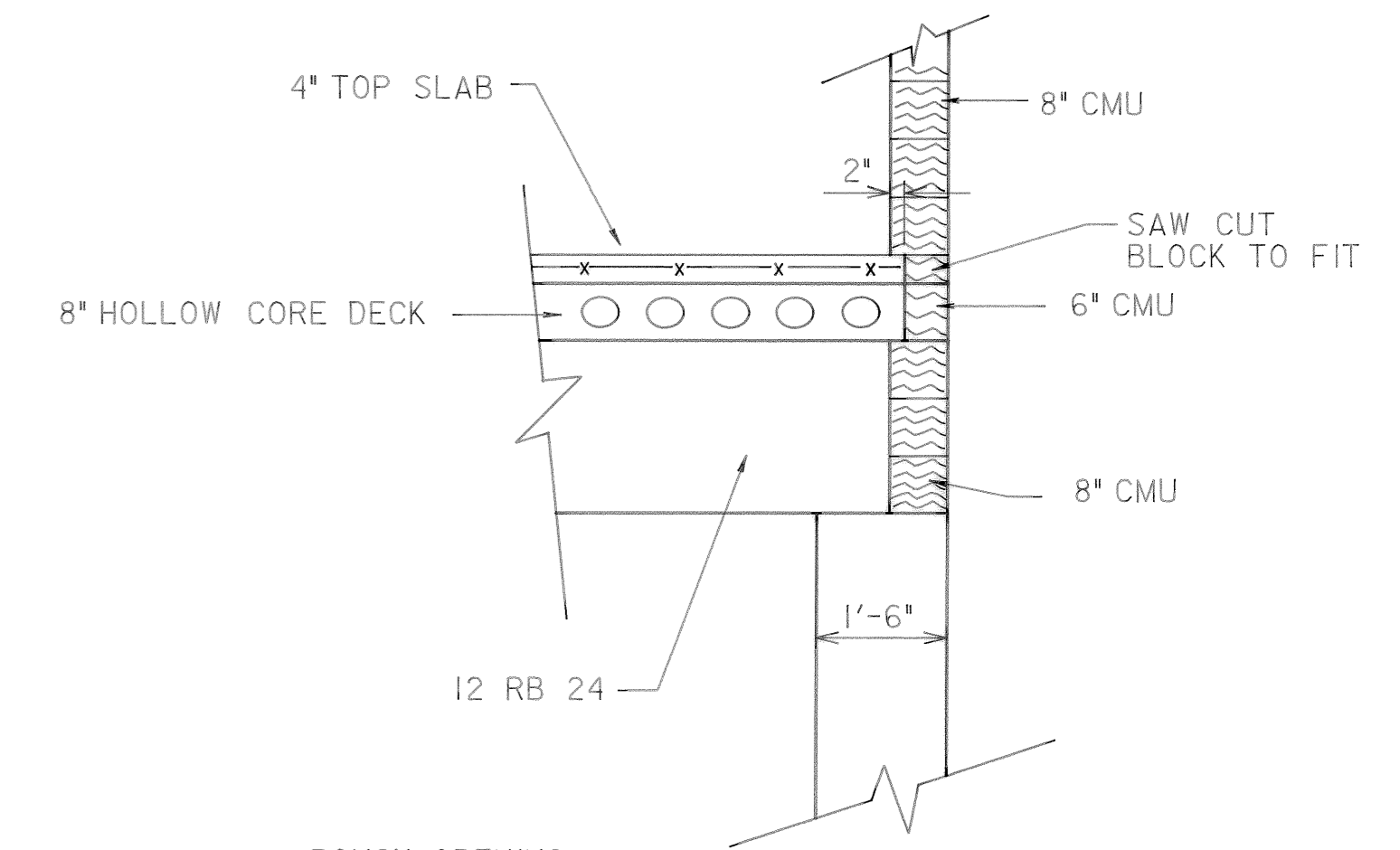
SECTION B
SCALE: 1/2" = 1'-0"



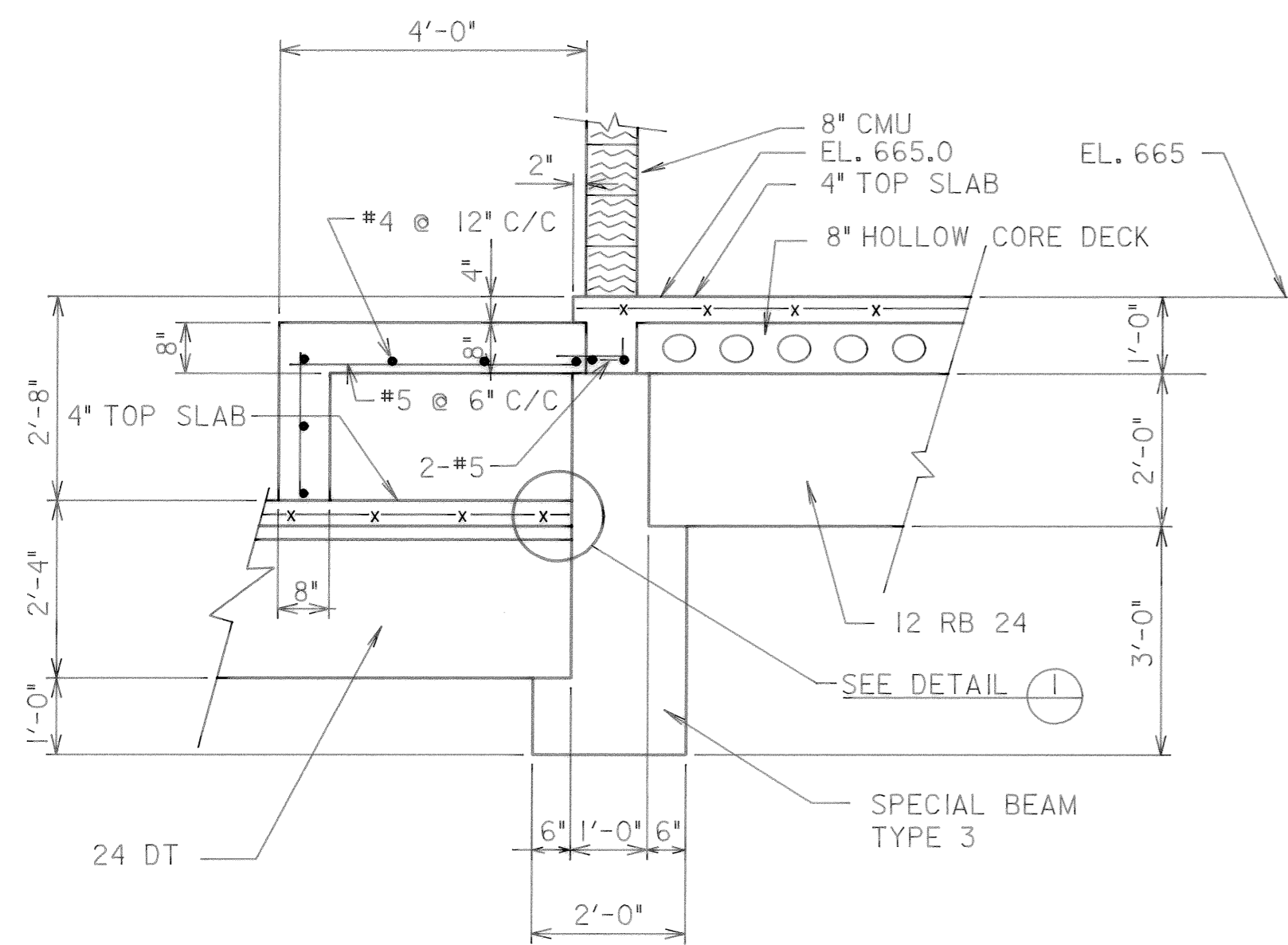
SECTION C
SCALE: 1/2" = 1'-0"



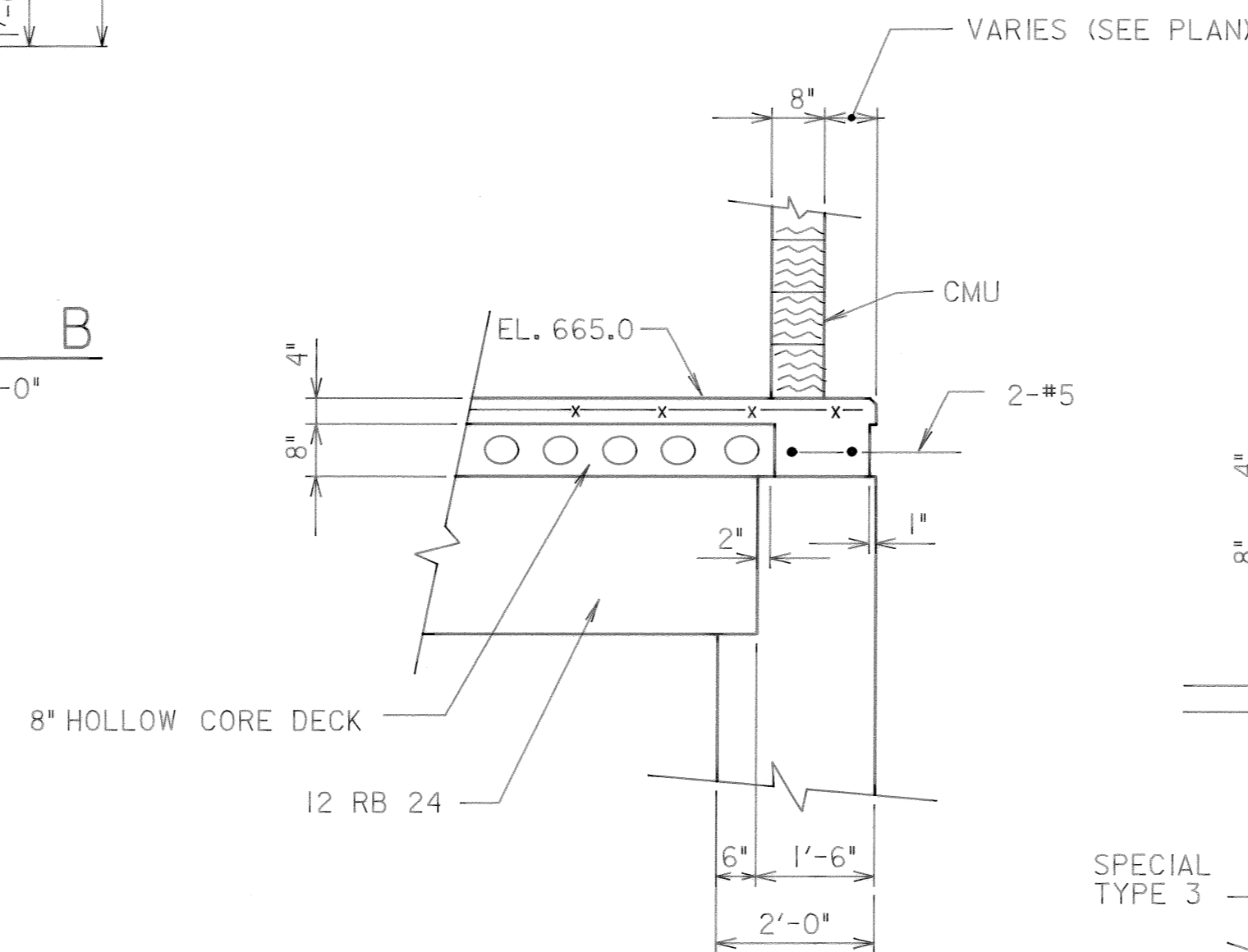
SECTION D
SCALE: 1" = 1'-0"



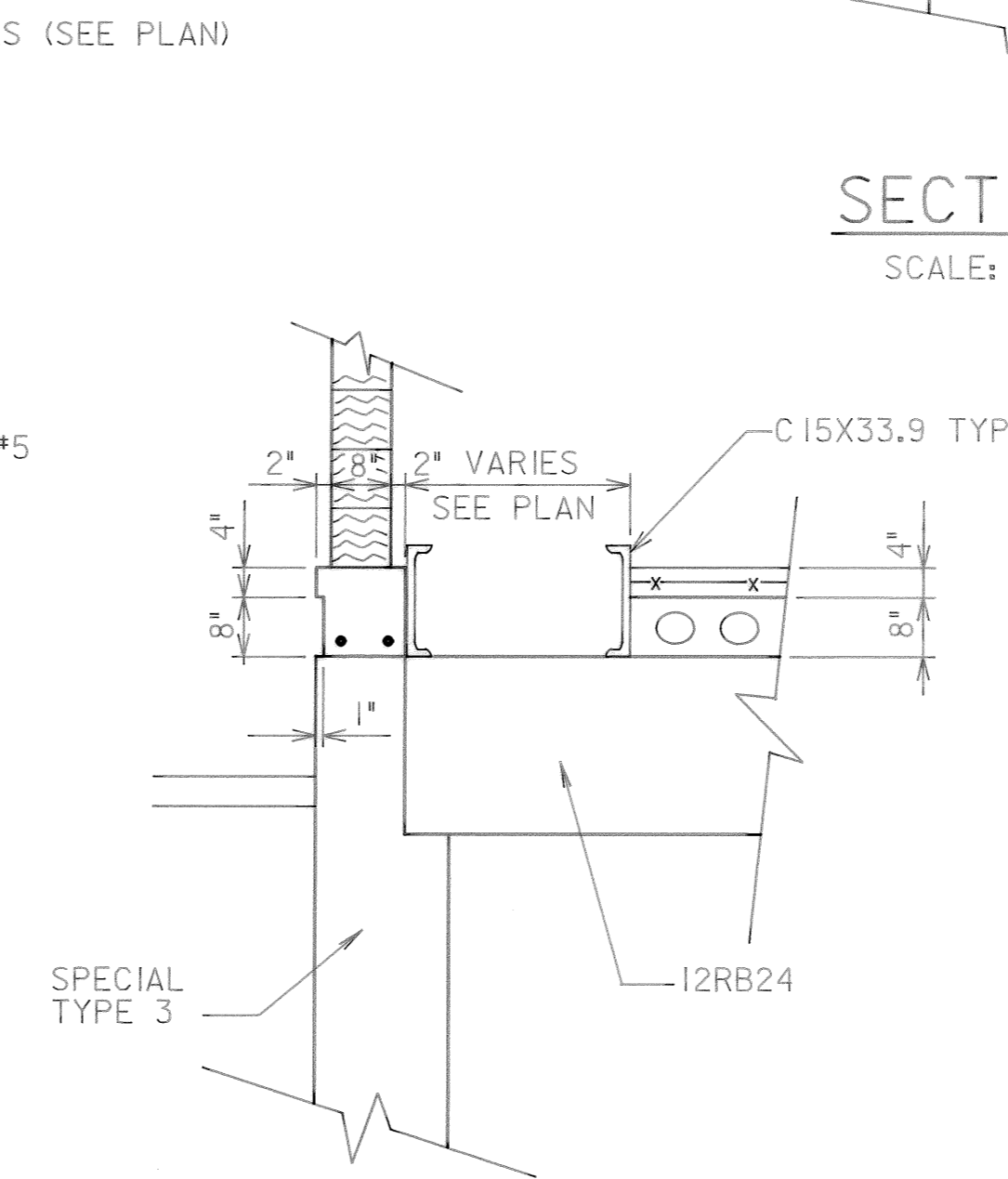
SECTION E
SCALE: 1/2" = 1'-0"



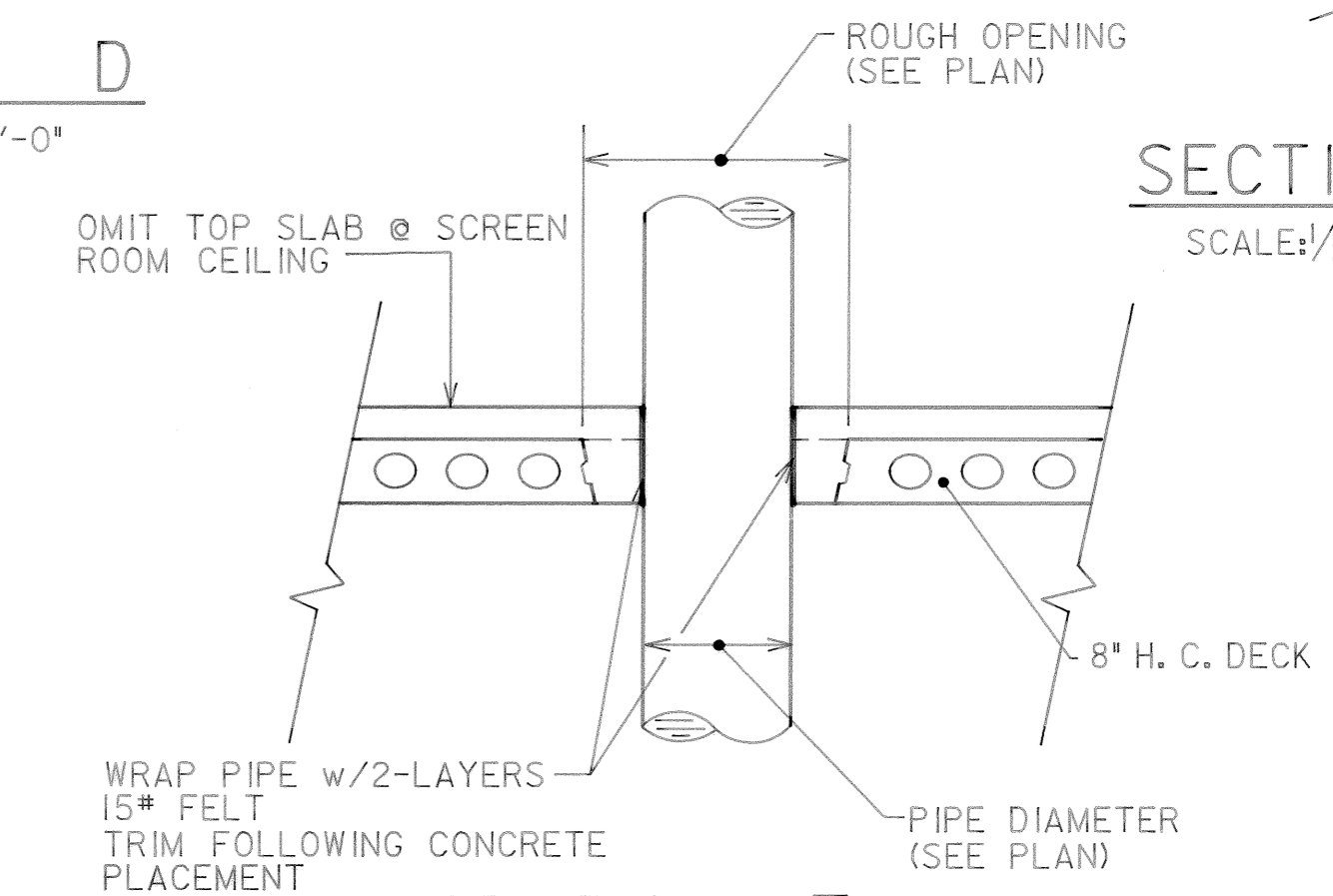
SECTION F
SCALE: 1/2" = 1'-0"



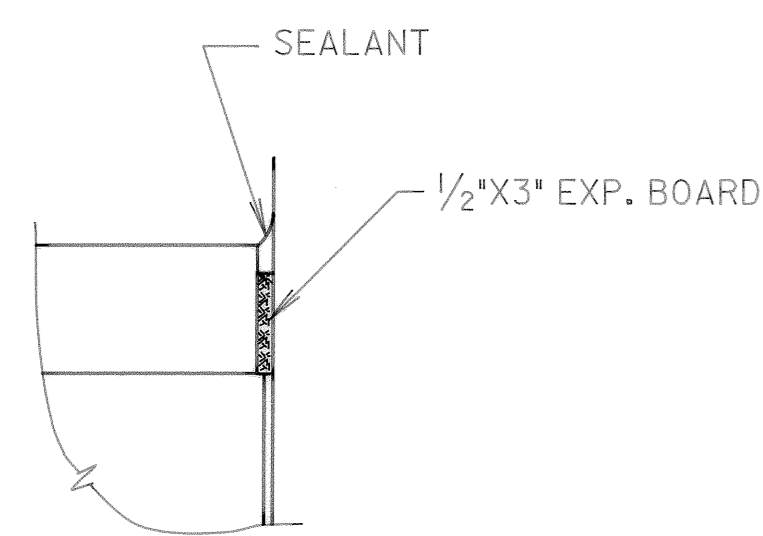
SECTION G
SCALE: 1/2" = 1'-0"



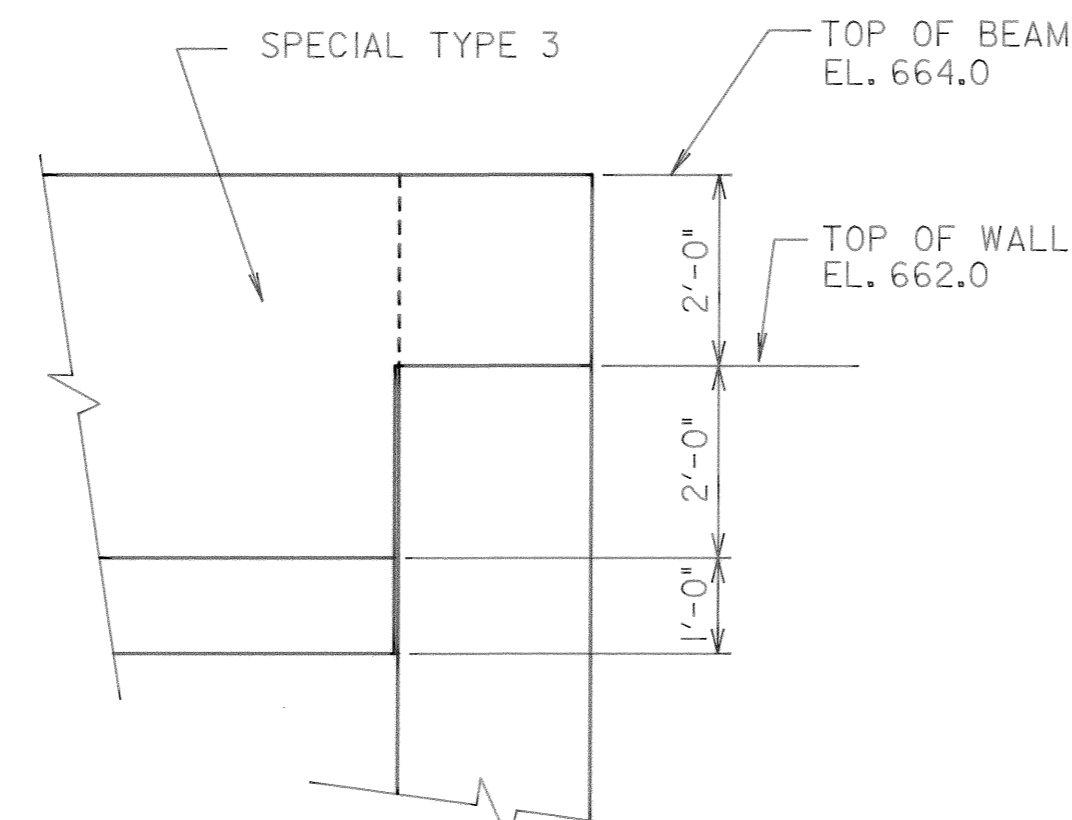
SECTION H
SCALE: 1/2" = 1'-0"



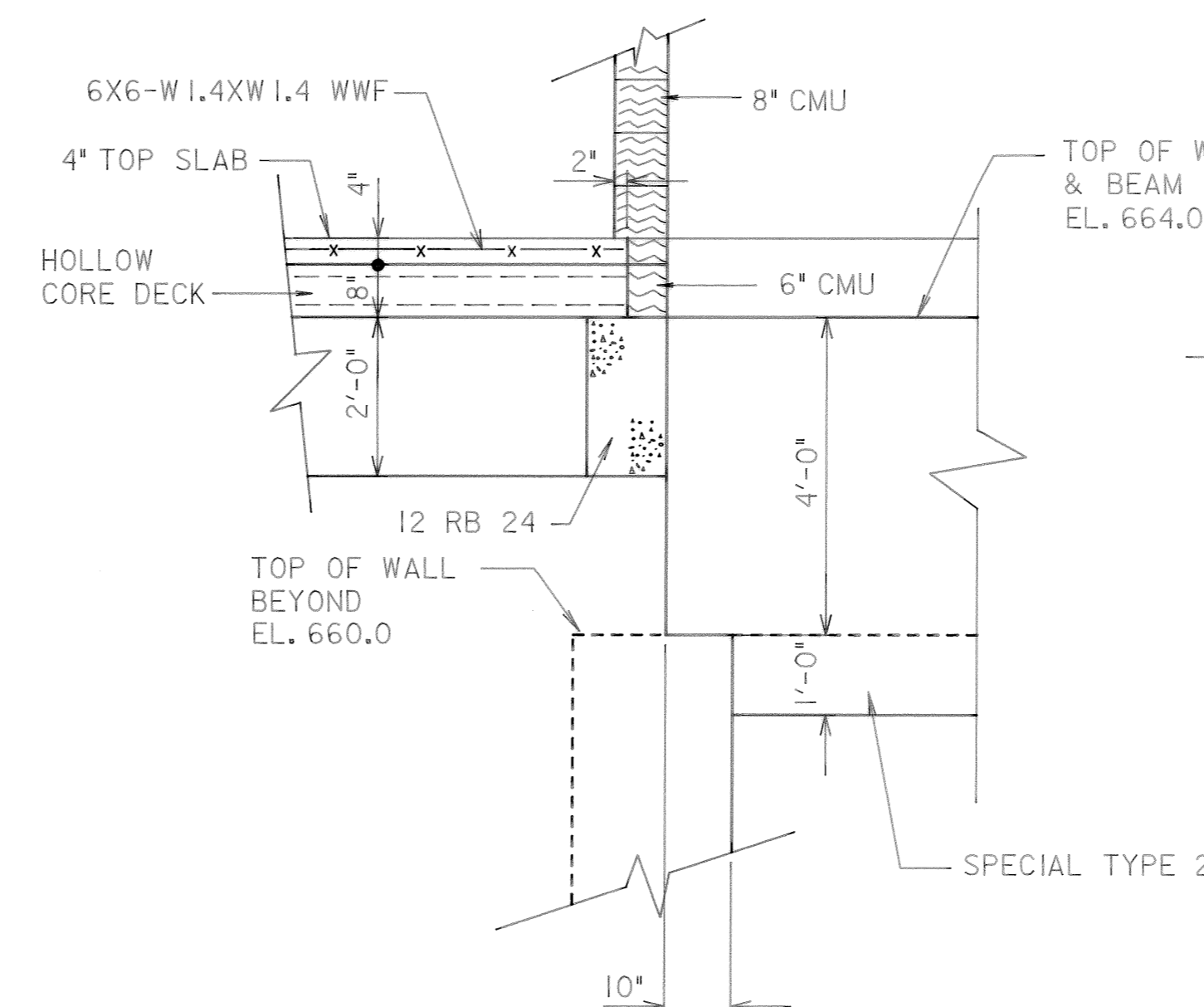
SECTION I
SCALE: 1/2" = 1'-0"



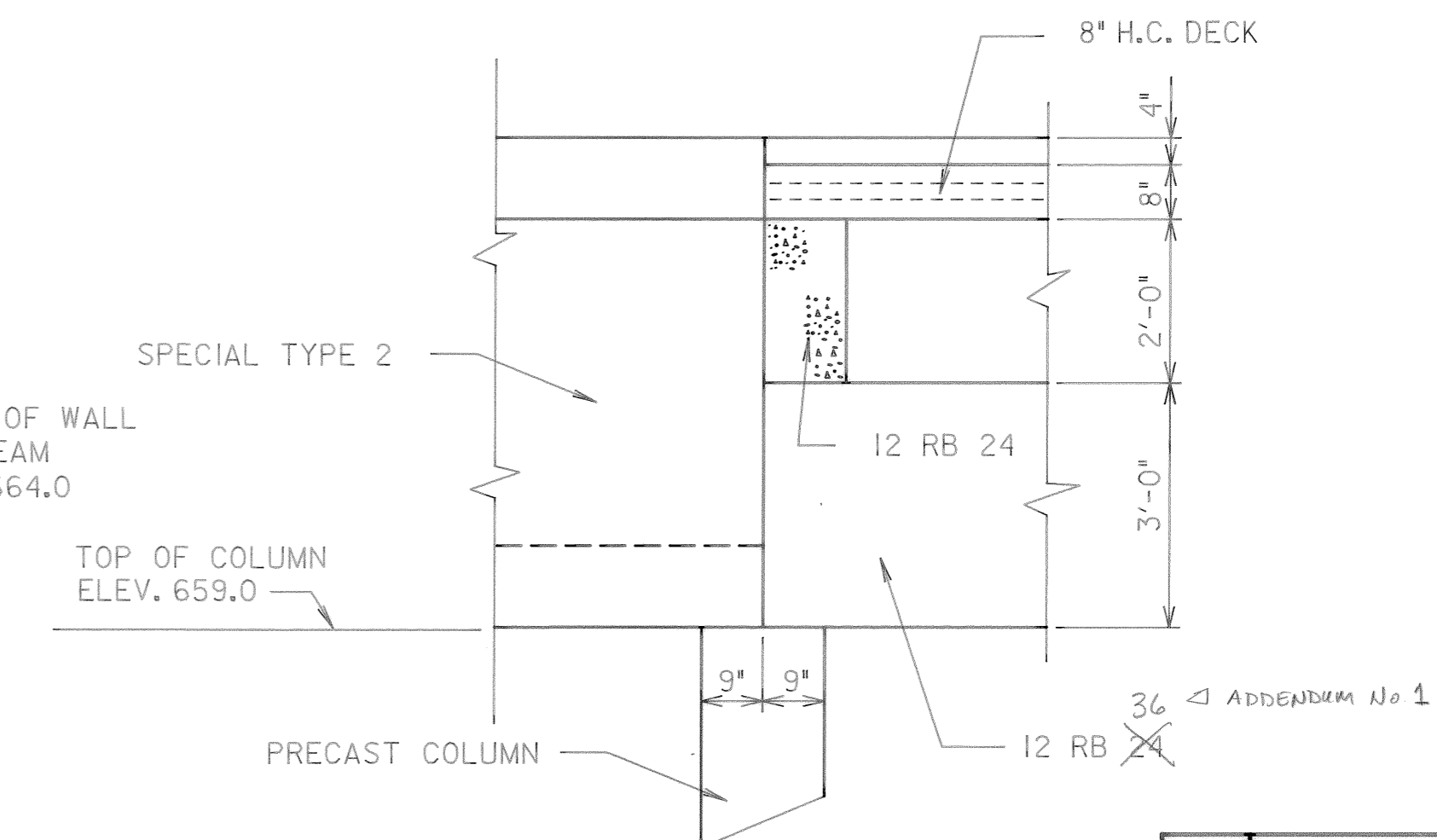
DETAIL I
N.T.S.



SECTION J
SCALE: 1/2" = 1'-0"



SECTION K
SCALE: 1/2" = 1'-0"



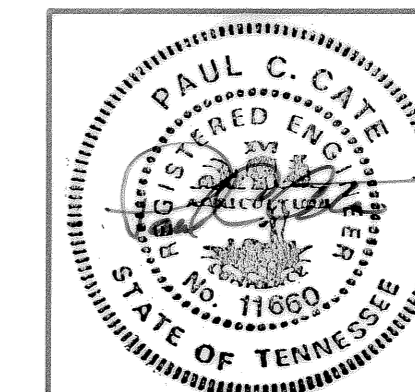
SECTION L
SCALE: 1/2" = 1'-0"

REVISION	DATE	BY	DESCRIPTION
3-17-92			RECORD
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION	

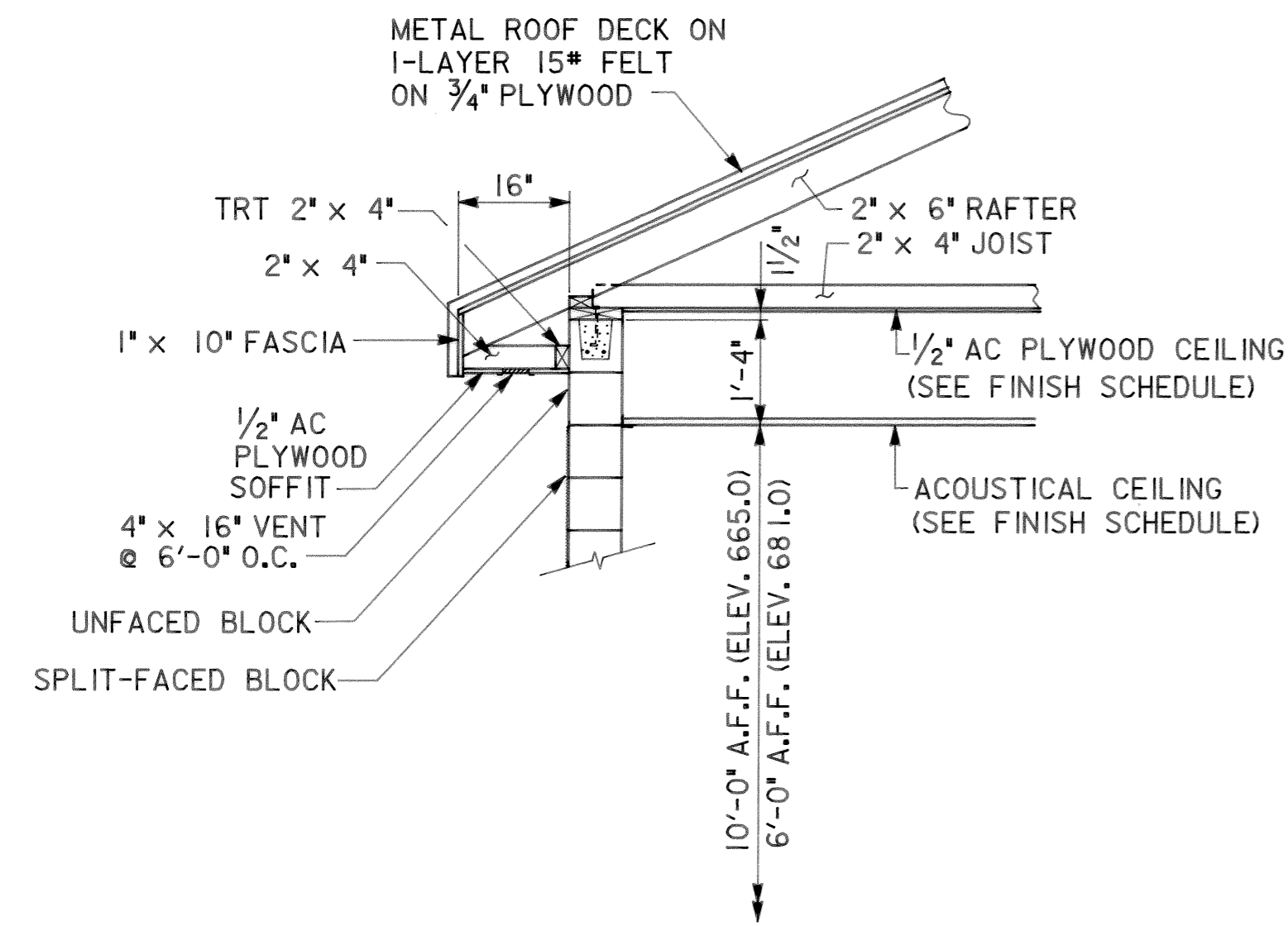
CITICO II PUMPING STATION

SECTIONS & DETAILS
STRUCTURAL
SHEET 1 OF 2

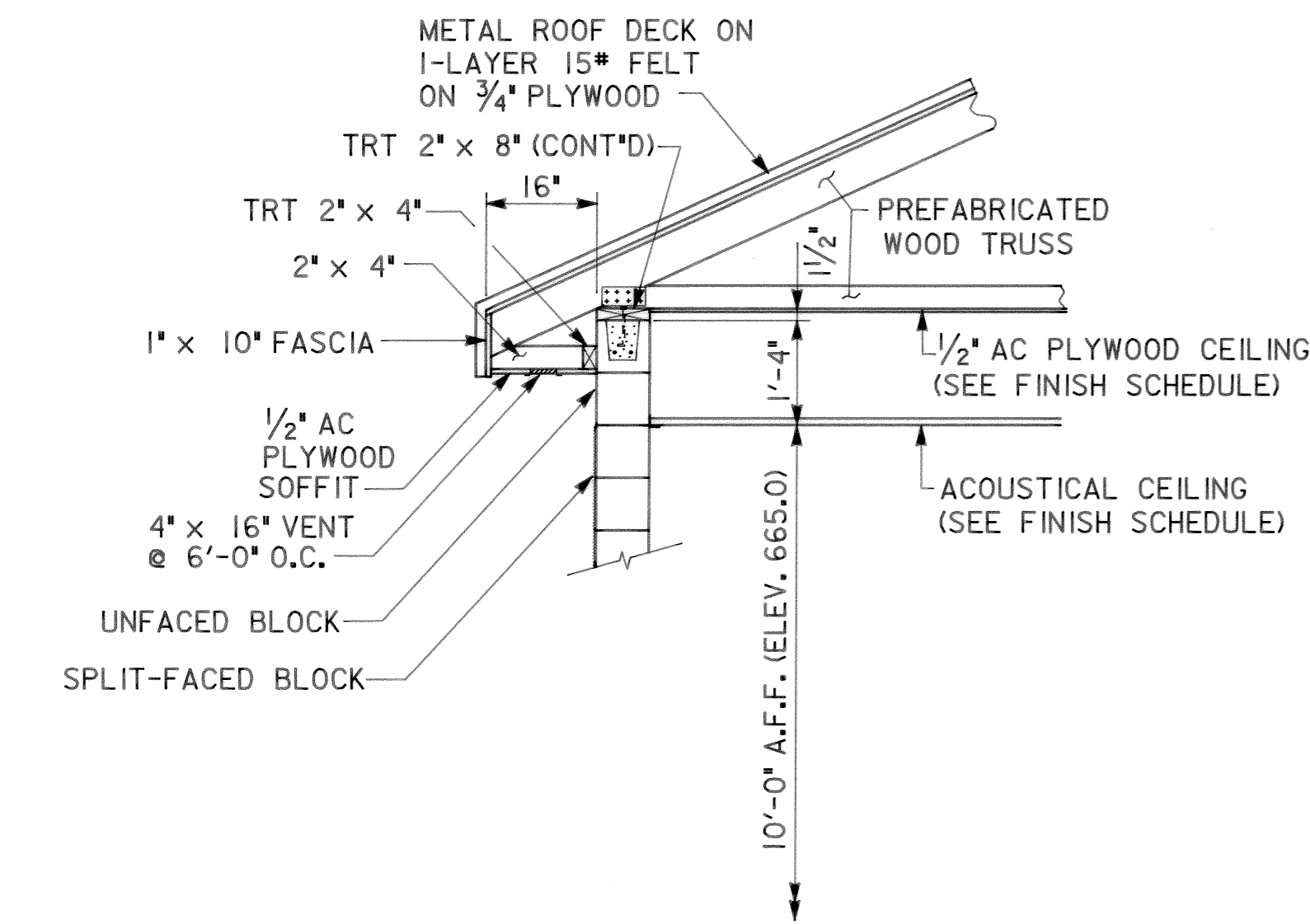
CITY OF CHATTANOOGA, TENNESSEE



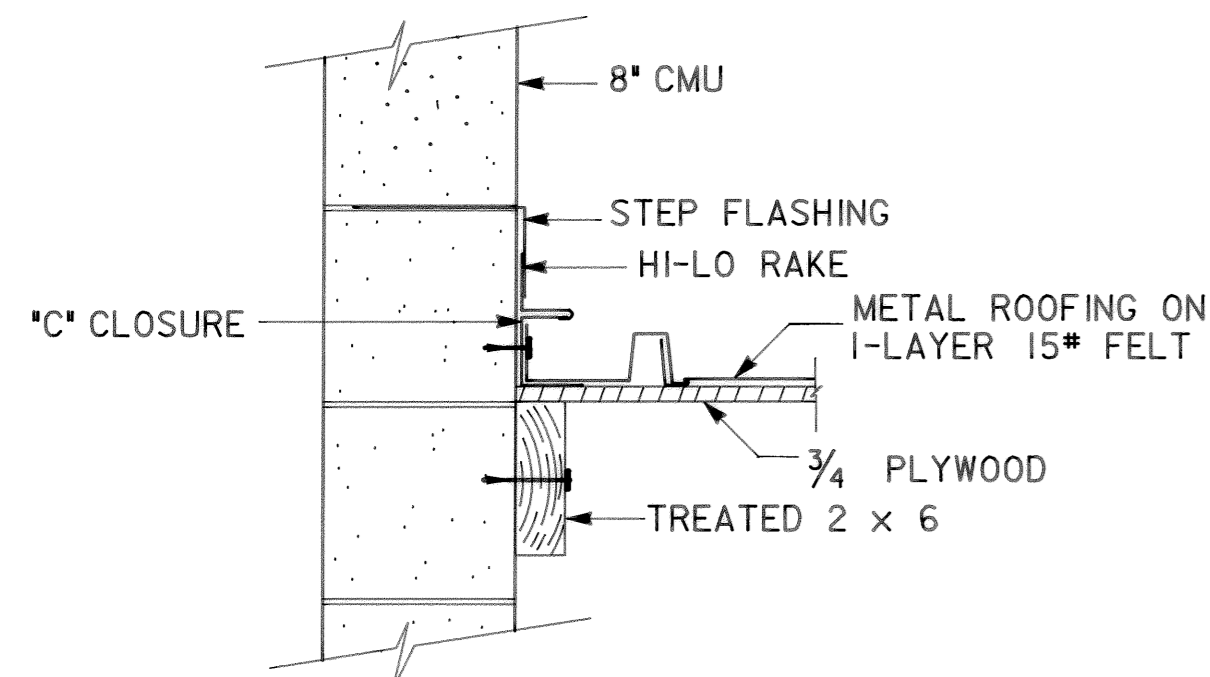
DSGN	P.C.C.	7/89	HENSLEY - SCHMIDT, INC.	DRAWING NO.
DRWN	CADD/MD	7/89	ENGINEERS AND SURVEYORS	6685
CHKD	A.D.S.	7/89	ATLANTA • CHATTANOOGA	-37C-S7.1
APPR	P.C.C.	7/89	RALEIGH • ORLANDO	



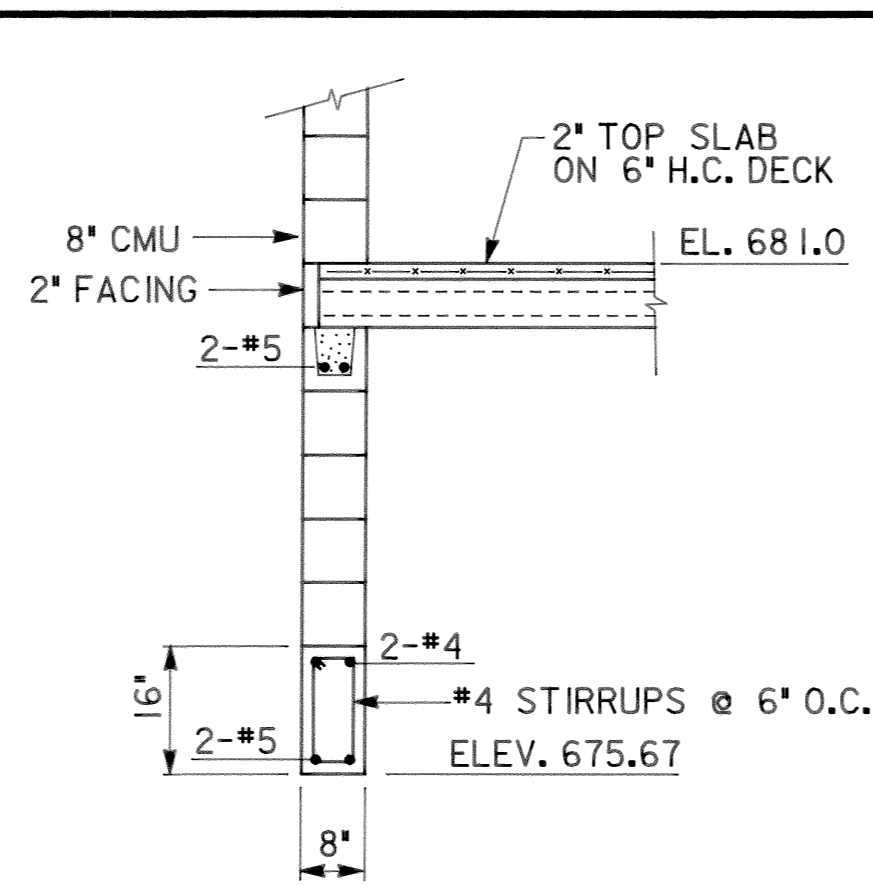
TYPICAL SOFFIT DETAIL @ RAFTERS
SCALE: 1/2" = 1'-0"



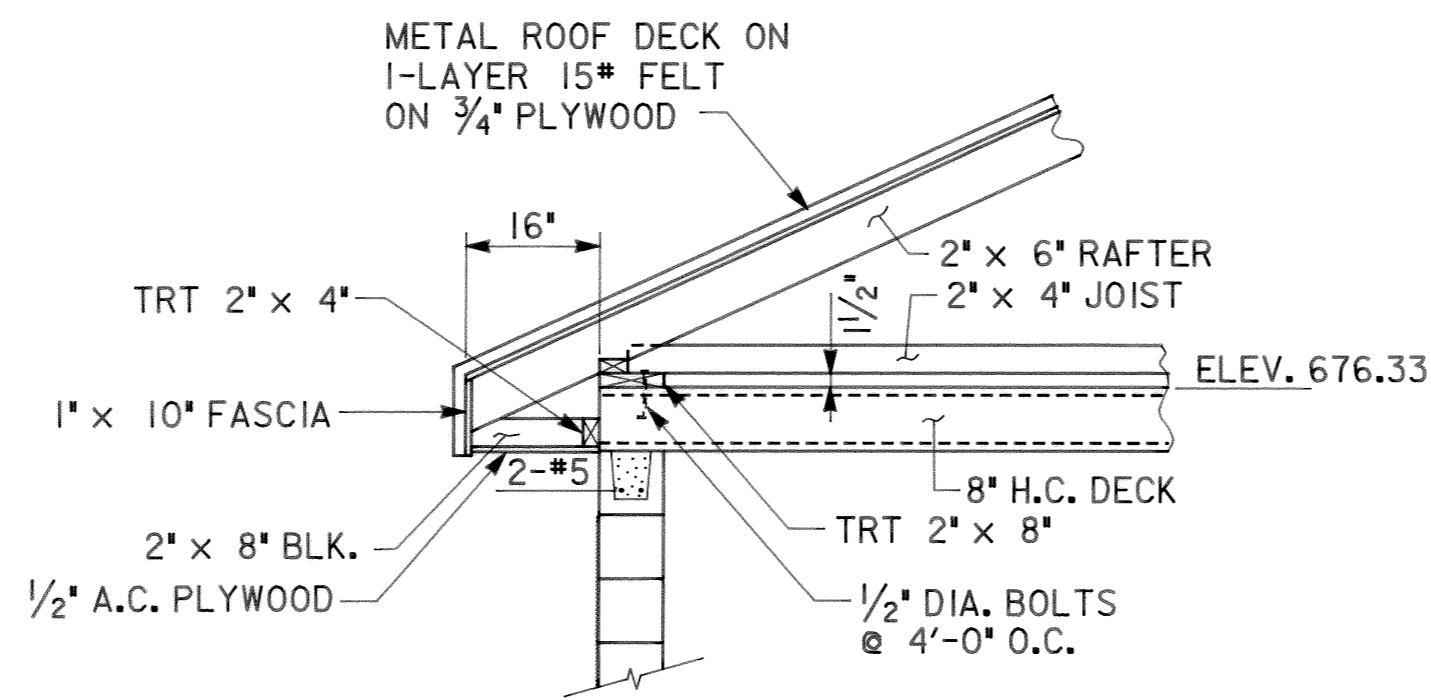
TYPICAL SOFFIT DETAIL @ TRUSS
SCALE: 1/2" = 1'-0"



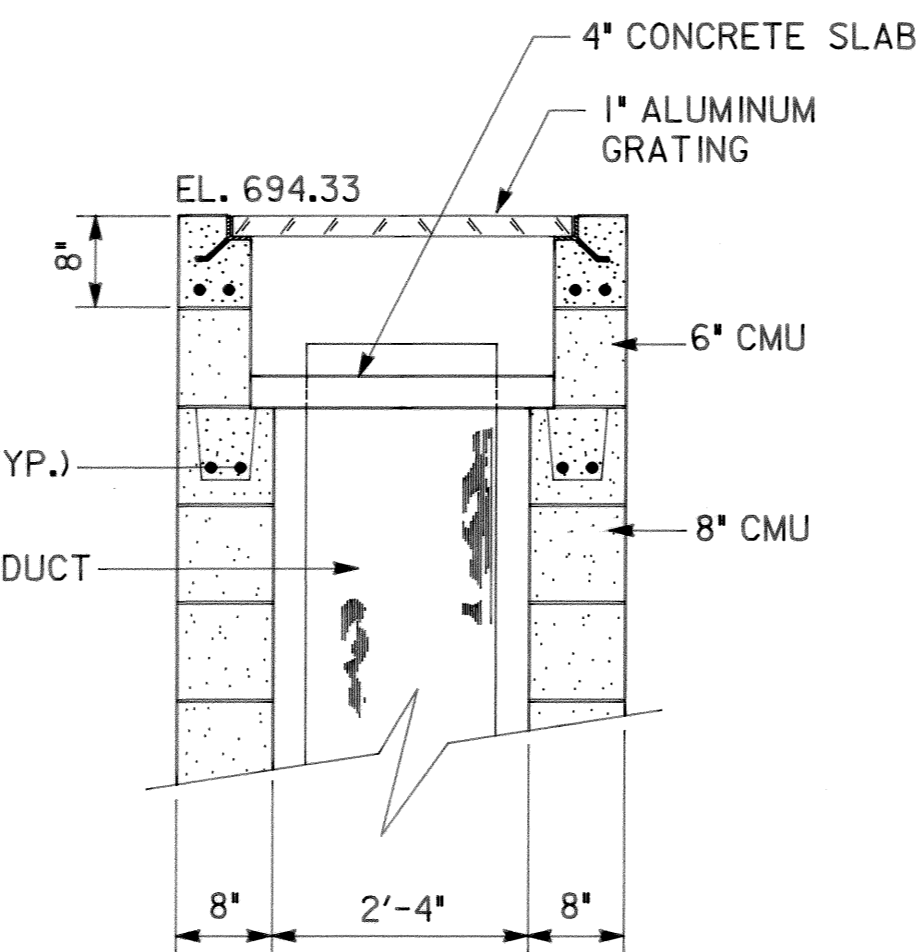
DETAIL 3
NTS



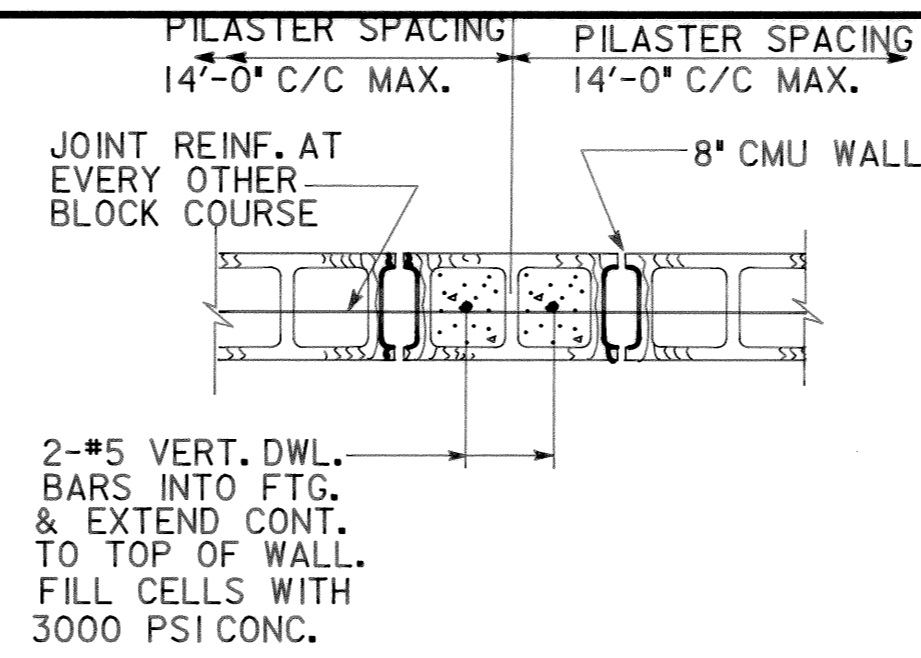
SECTION A
SCALE: 1/2" = 1'-0"



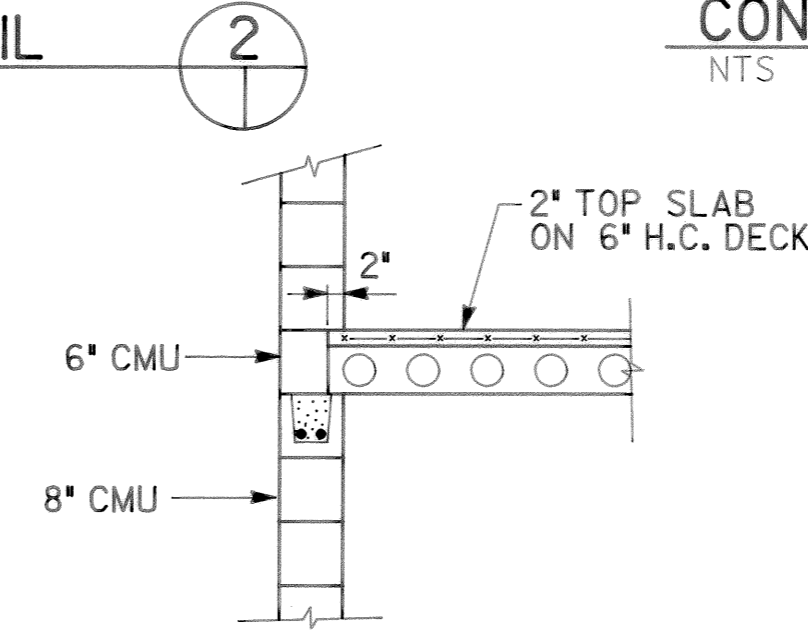
SECTION B
SCALE: 1/2" = 1'-0"



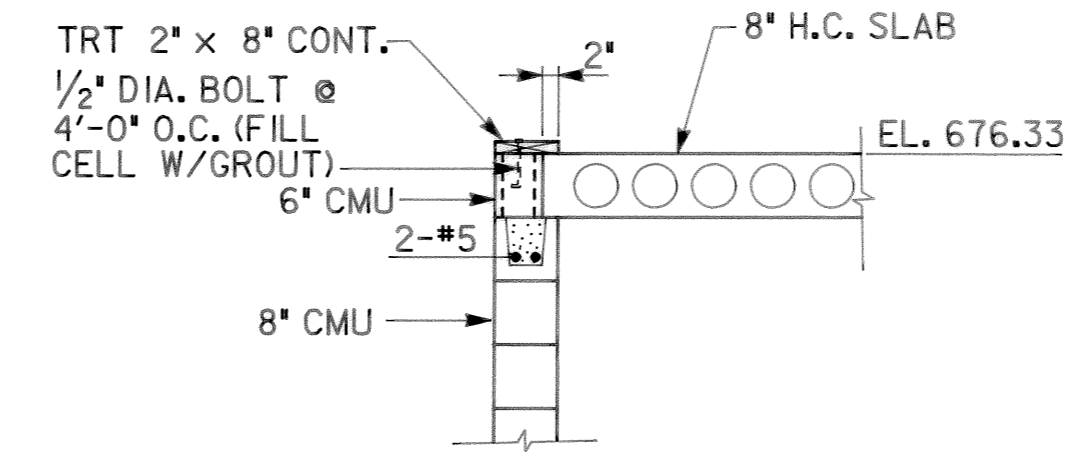
SECTION C
SCALE: 3/4" = 1'-0"



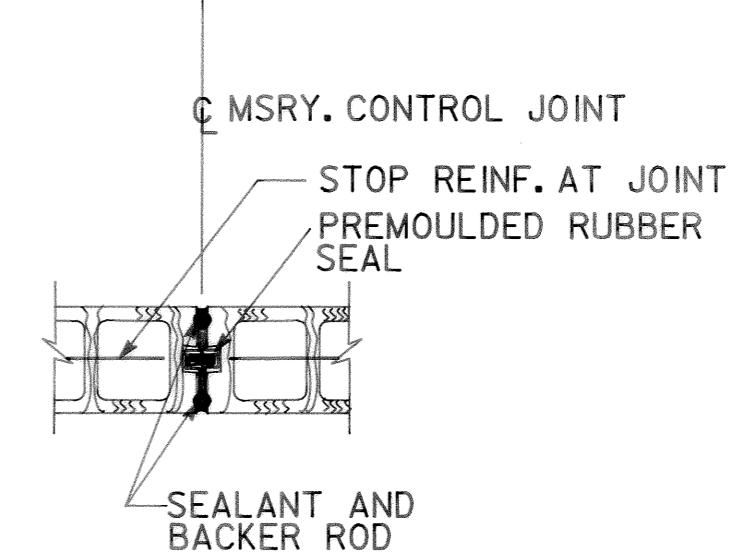
PILASTER DETAIL
NTS



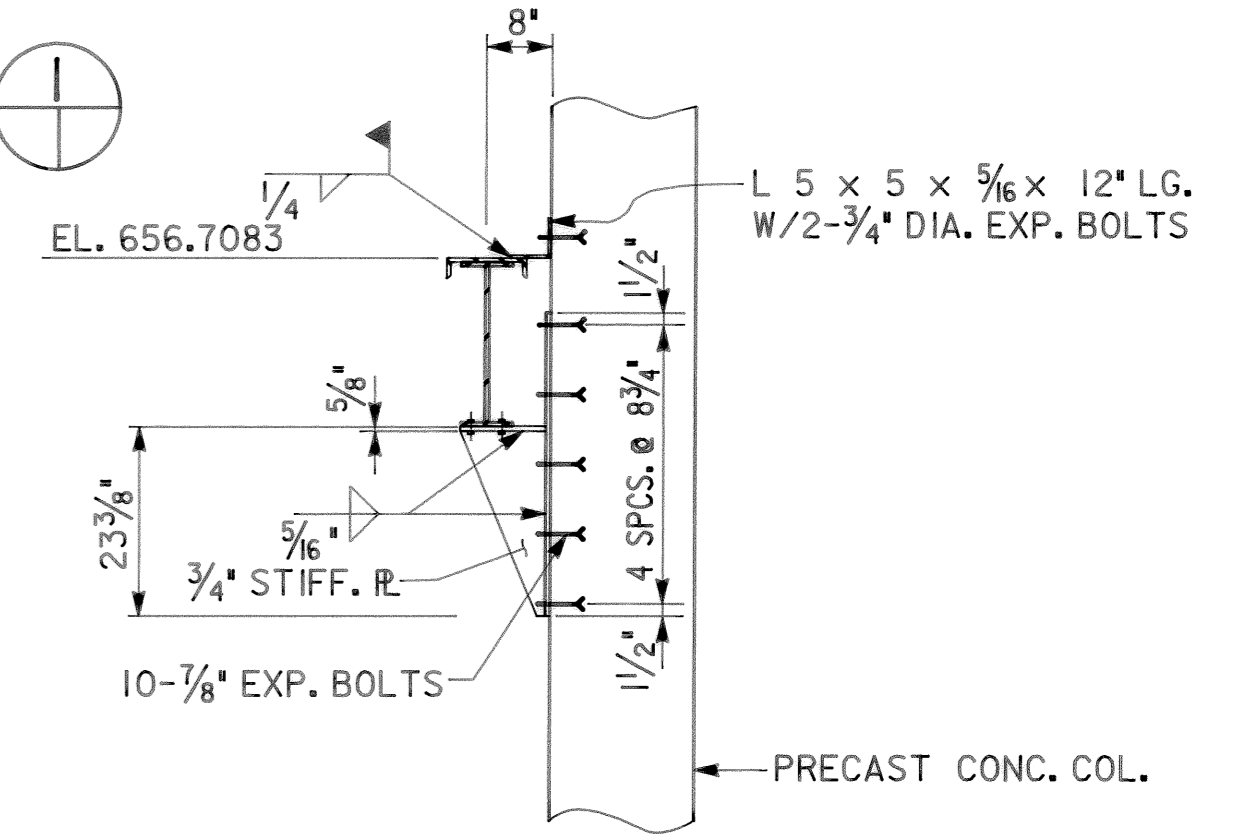
SECTION D
SCALE: 1/2" = 1'-0"



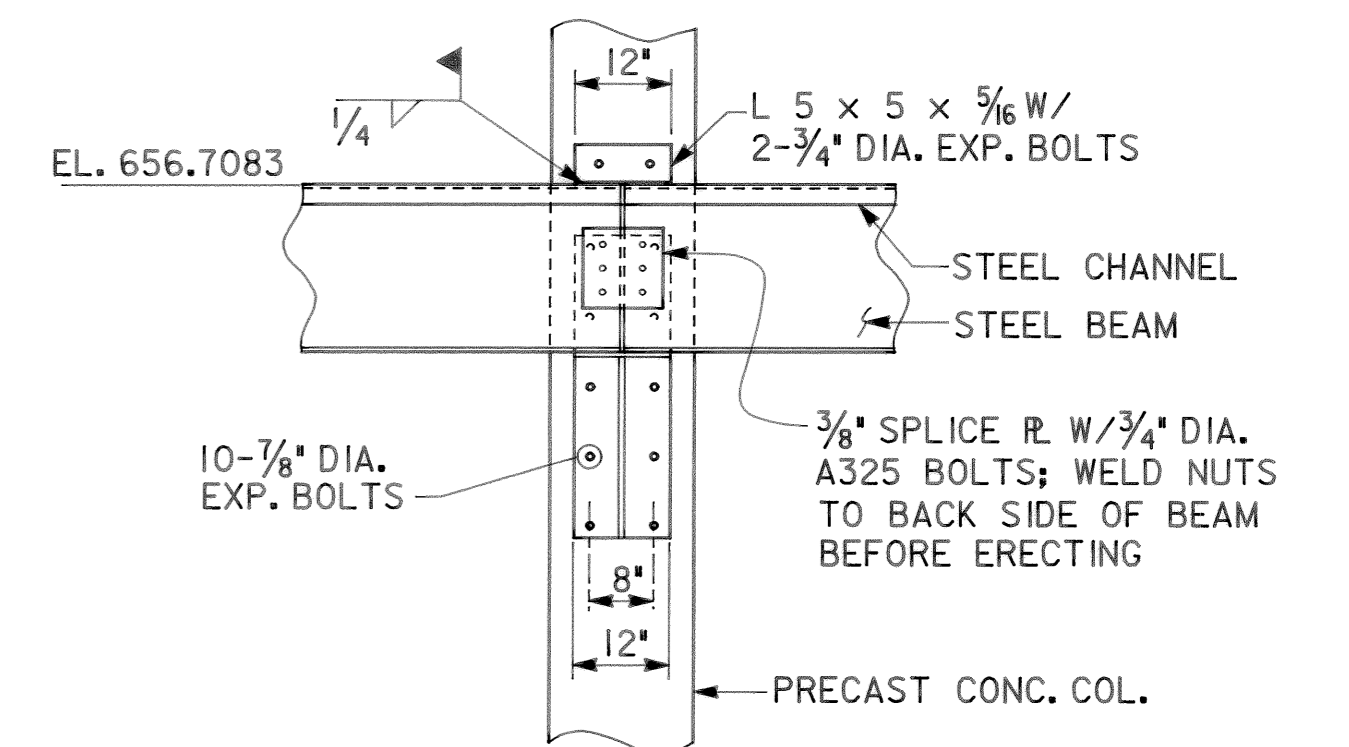
SECTION E
SCALE: 1/2" = 1'-0"



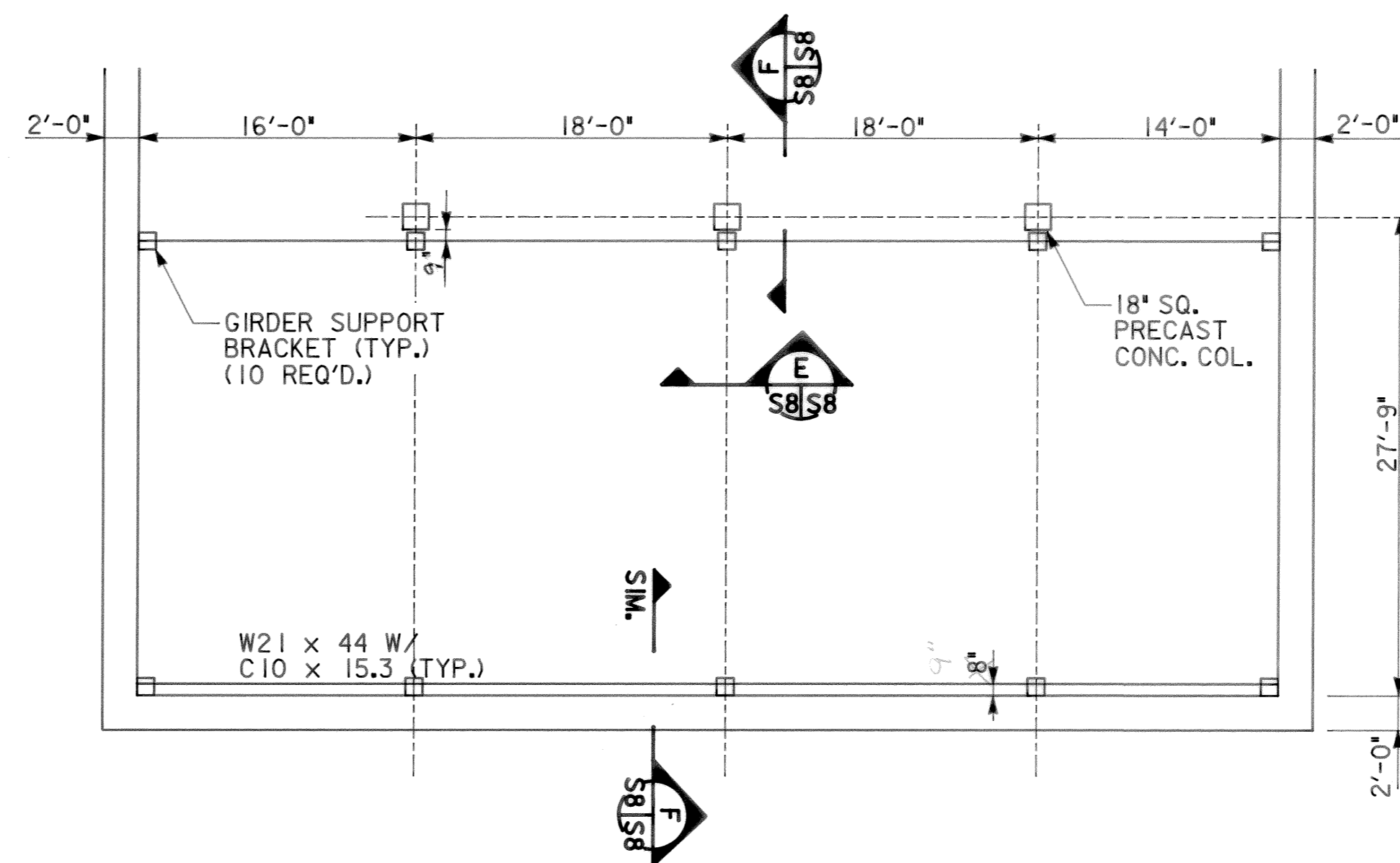
CONTROL JT. DETAIL
NTS



SECTION F
SCALE: 1/2" = 1'-0"



SECTION G
SCALE: 1/2" = 1'-0"



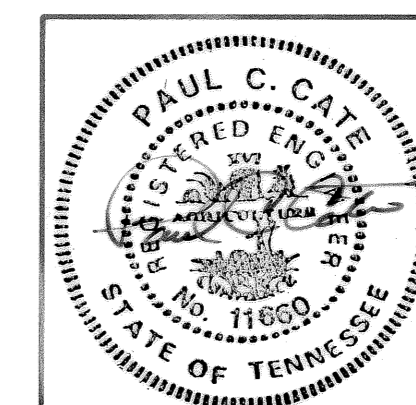
PLAN @ CRANE BEAM
SCALE: 1/4" = 1'-0"

3-17-92	RECORD	
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION

CITICO II PUMPING STATION

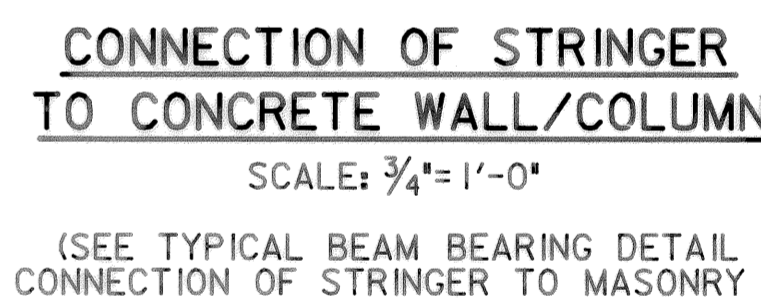
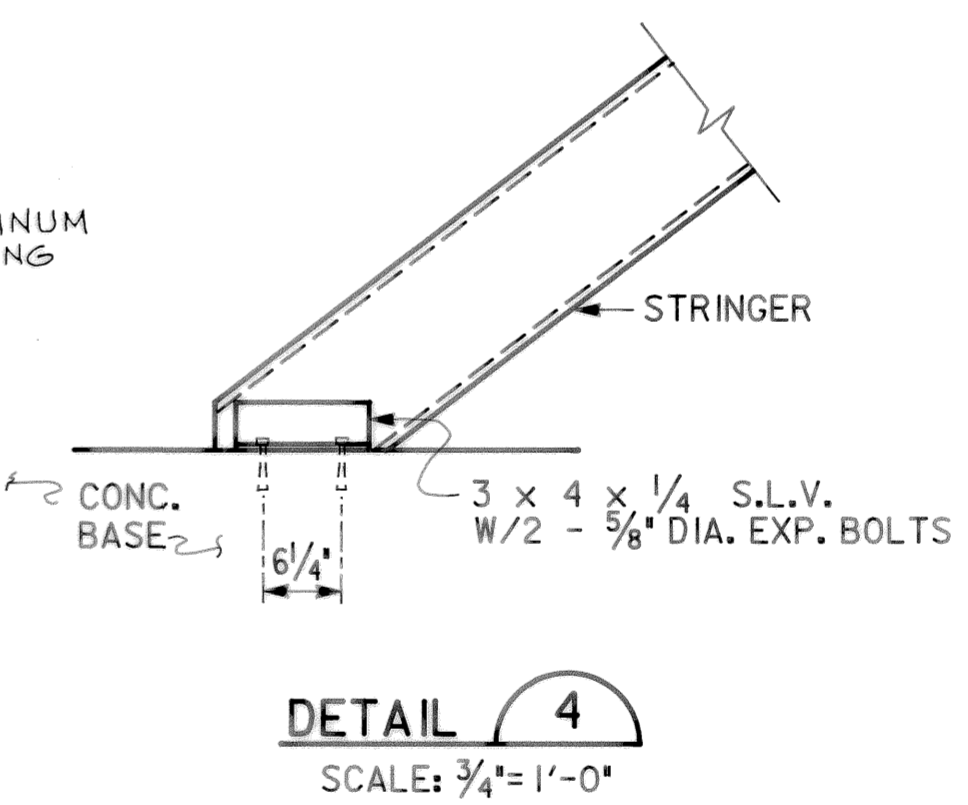
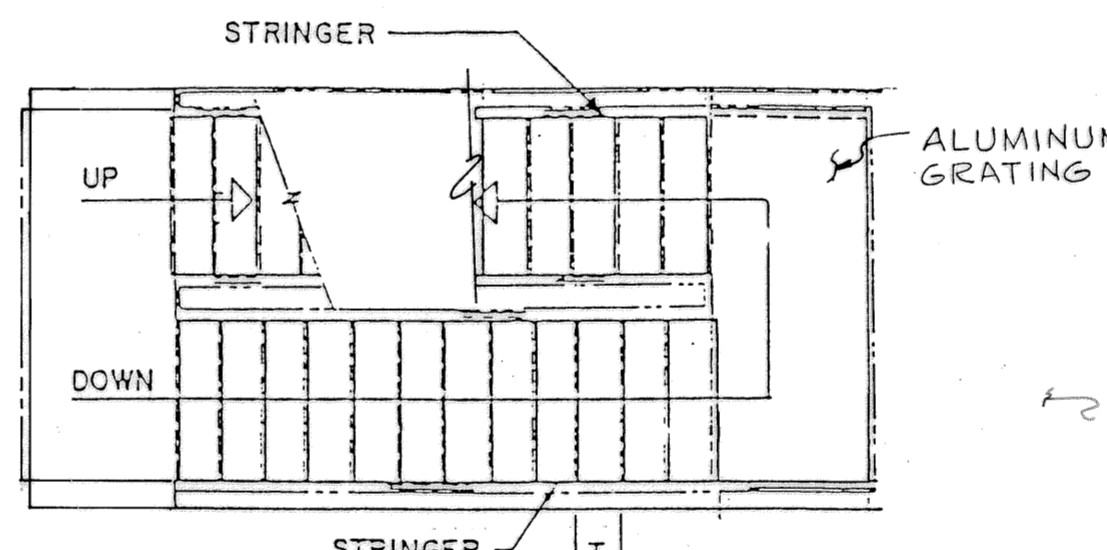
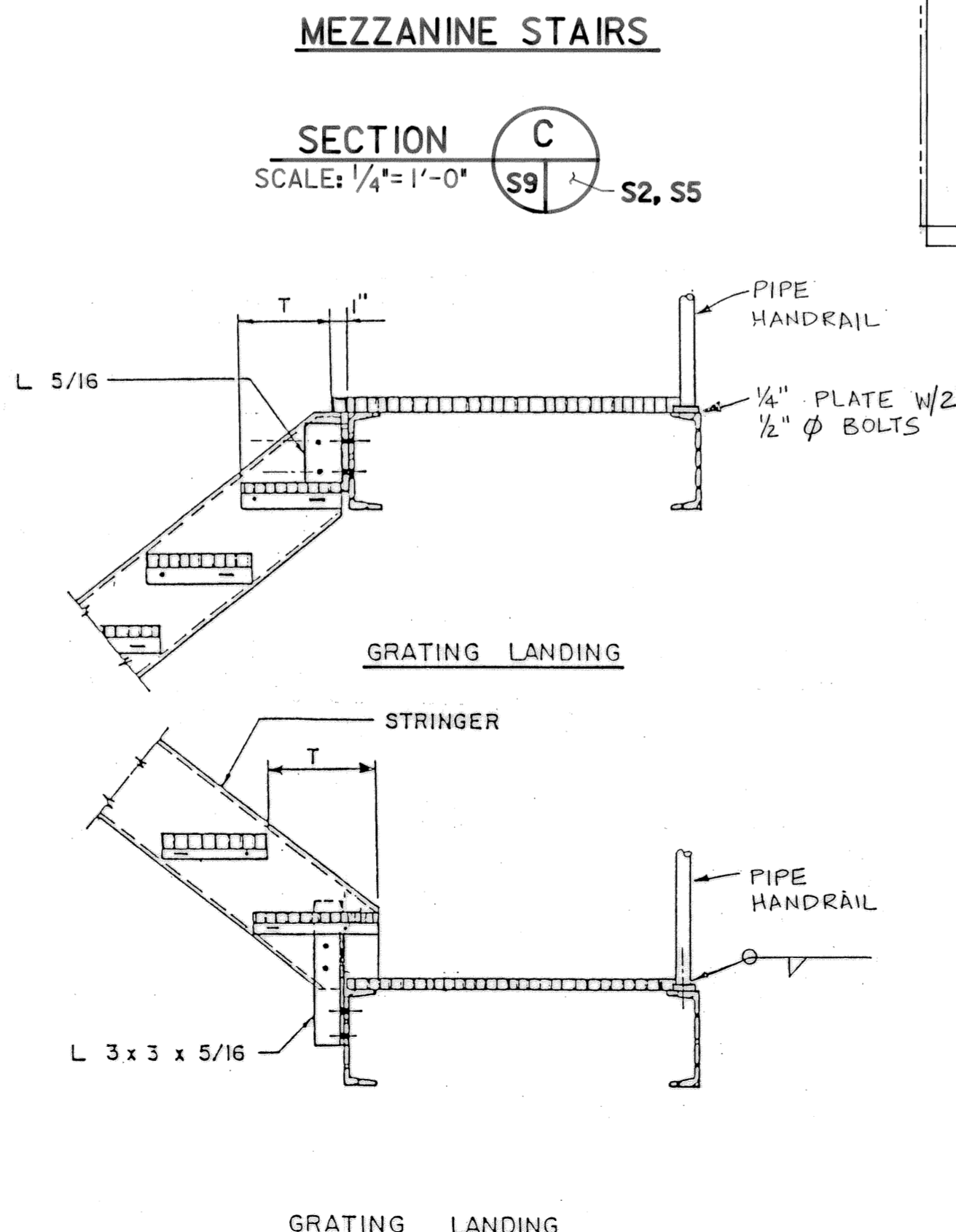
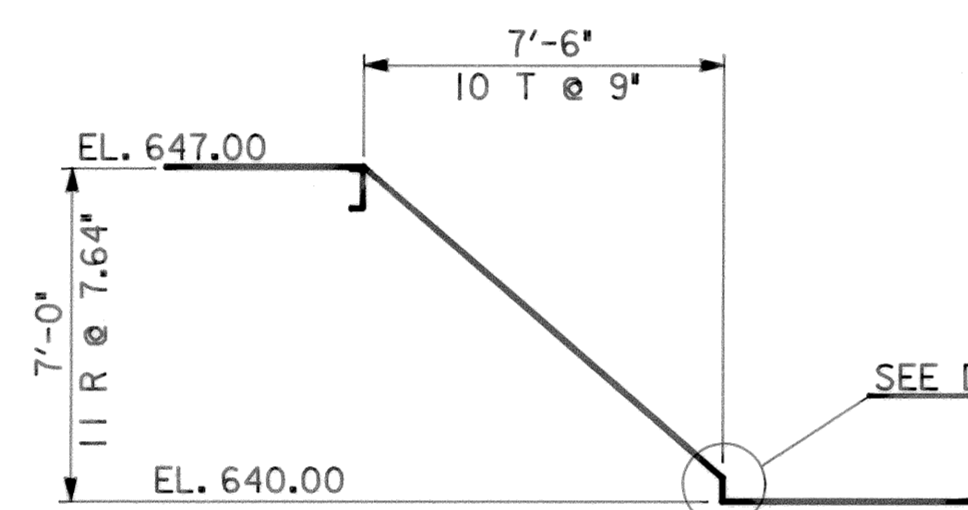
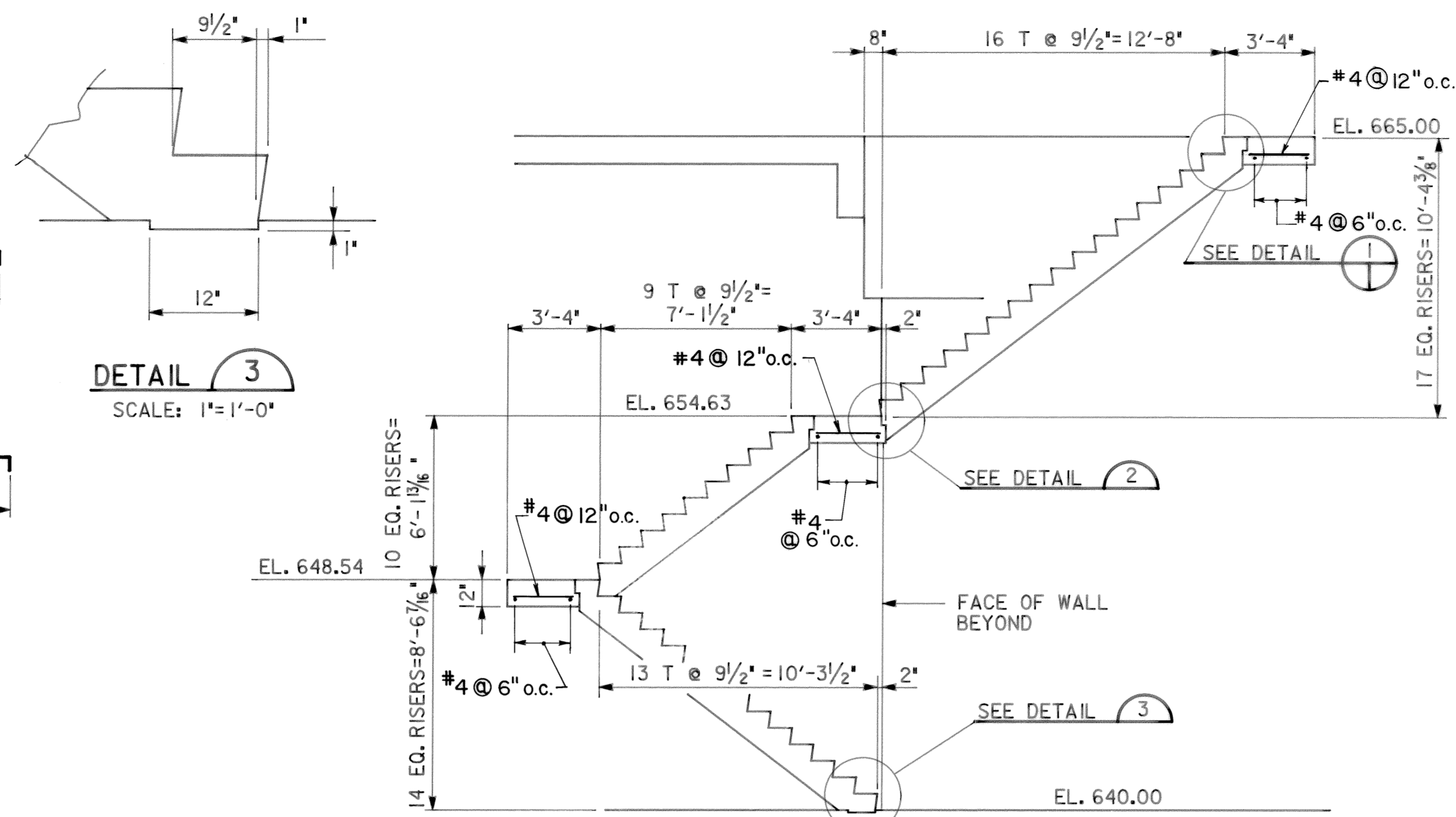
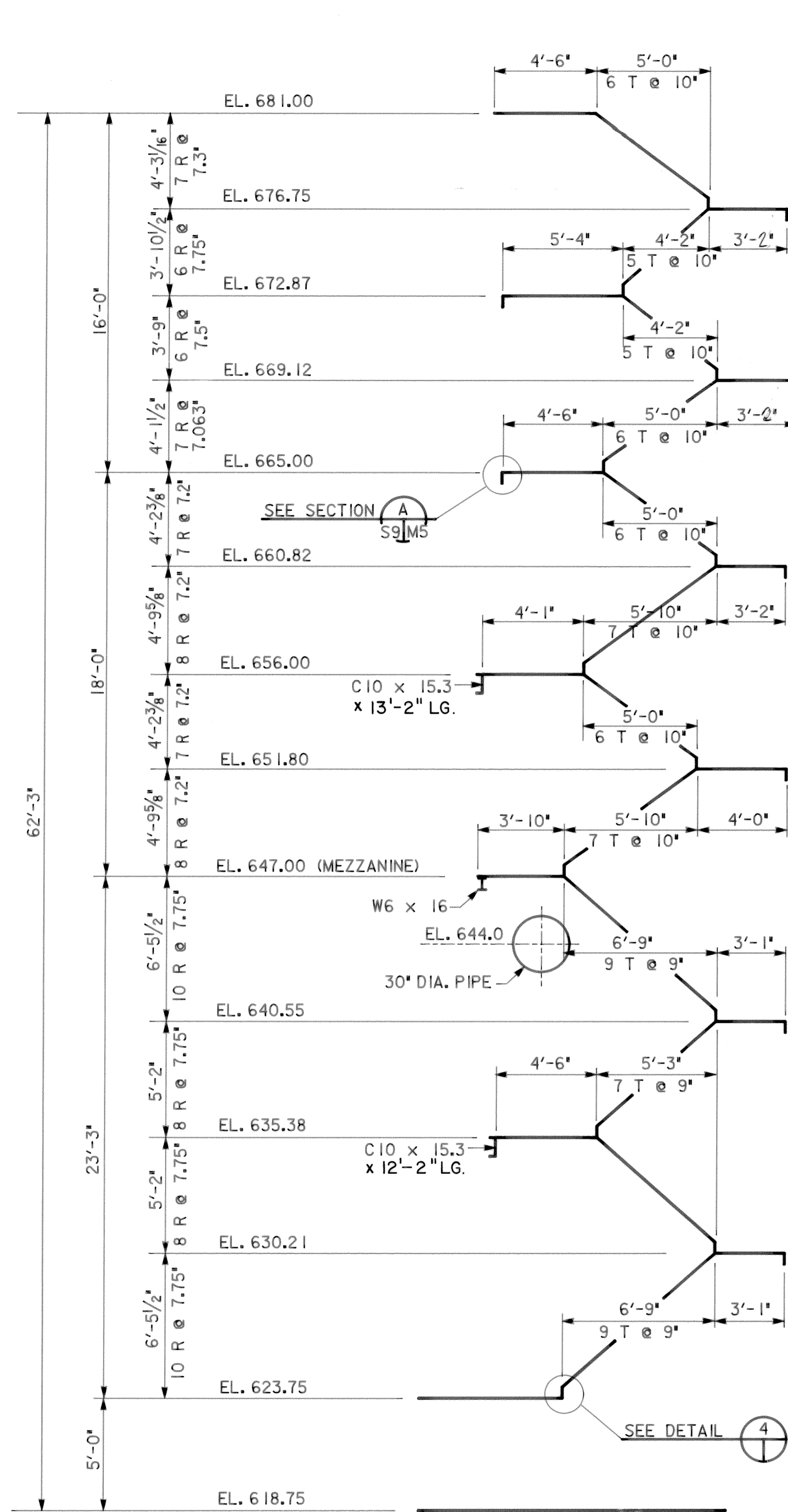
SECTIONS & DETAILS
STRUCTURAL
SHEET 2 OF 2

CITY OF CHATTANOOGA, TENNESSEE

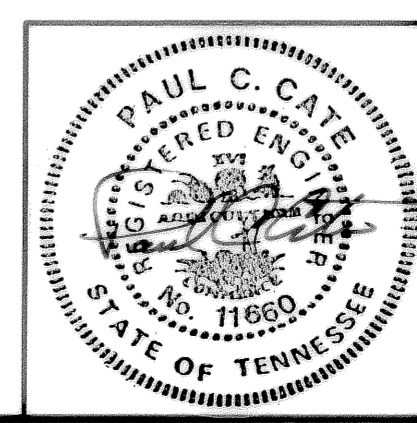


DSGN	P.C.C.	8/89	HENSLEY - SCHMIDT, INC.	DRAWING NO.	6685
DRWN	CADD/JRC	8/89	ENGINEERS AND SURVEYORS		
CHKD	P.C.C.	8/89	ATLANTA - CHATTANOOGA		
APPR	A.D.S.	8/89	RALEIGH - ORLANDO		

-37C-S8.1



- CONNECTION OF STRINGER TO CONCRETE WALL/COLUMN**
- SCALE: 3/4" = 1'-0"
- (SEE TYPICAL BEAM BEARING DETAIL FOR CONNECTION OF STRINGER TO MASONRY WALL.)
- NOTES:
- ALL STAIR STRINGERS SHALL BE MC10 x 8.4 UNLESS OTHERWISE NOTED ON DRAWINGS.
 - GRATING FOR LANDINGS SHALL BE FASTENED TO SUPPORTS WITH CLIPS.
 - GRATING SHALL BE RECTANGULAR BAR TYPE WITH ABRASIVE NOSING OR EQUAL, DESIGNED FOR LIVELOAD OF 100 PSF.
 - ALL CONNECTIONS SHALL BE BOLTED USING ASTM A-325 BOLTS. BOLTS SHALL HAVE MINIMUM 5/8" DIAMETER.



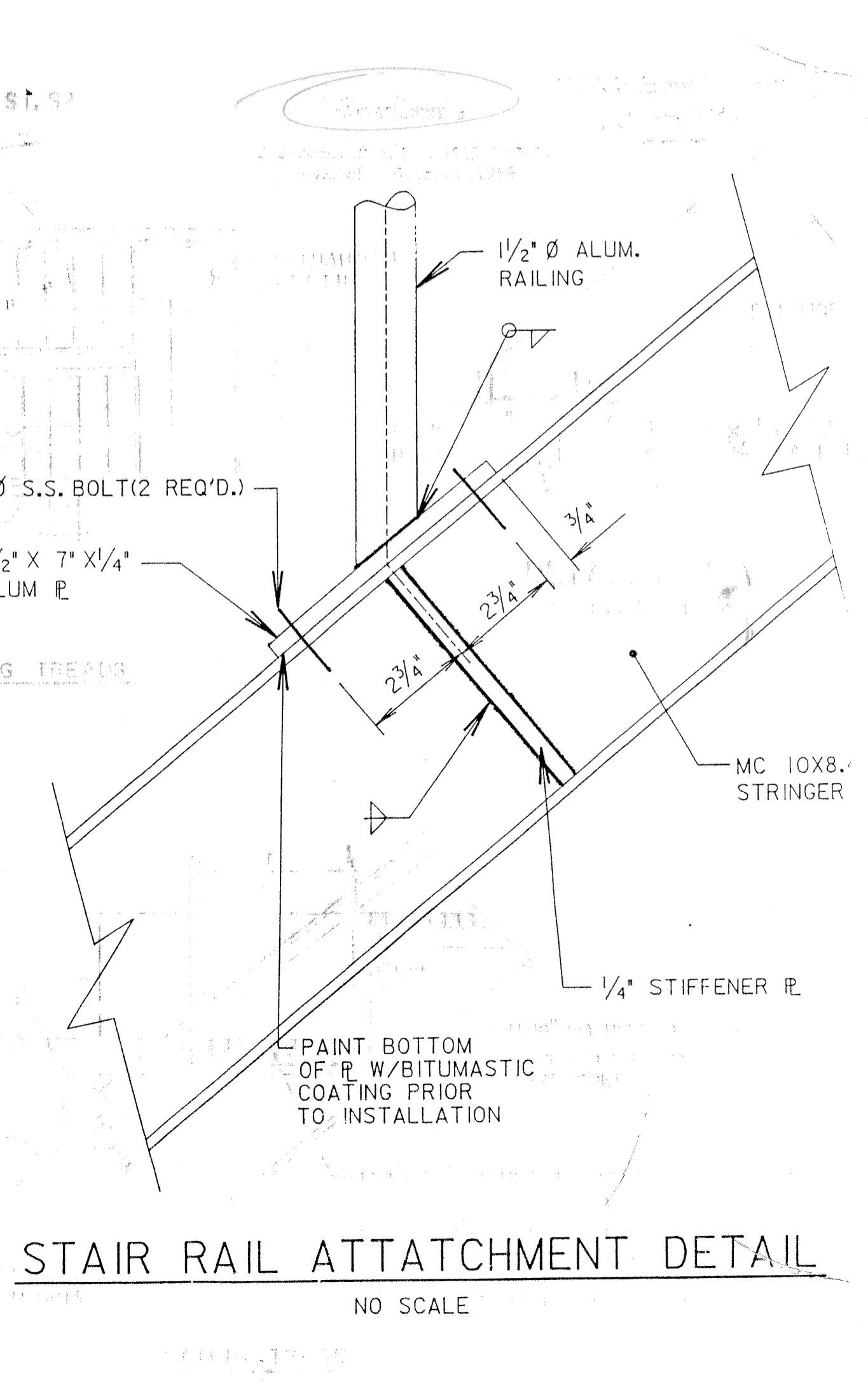
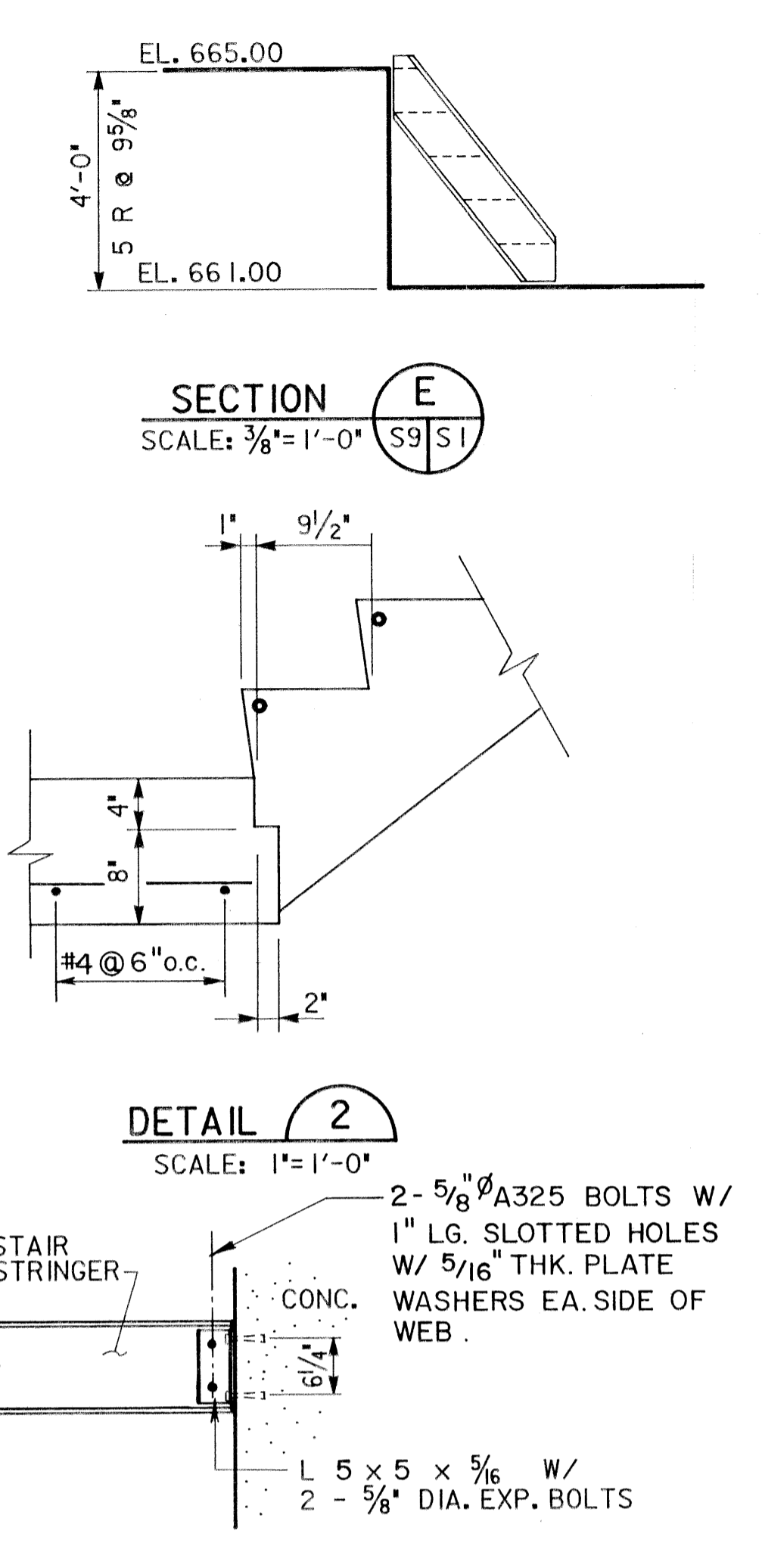
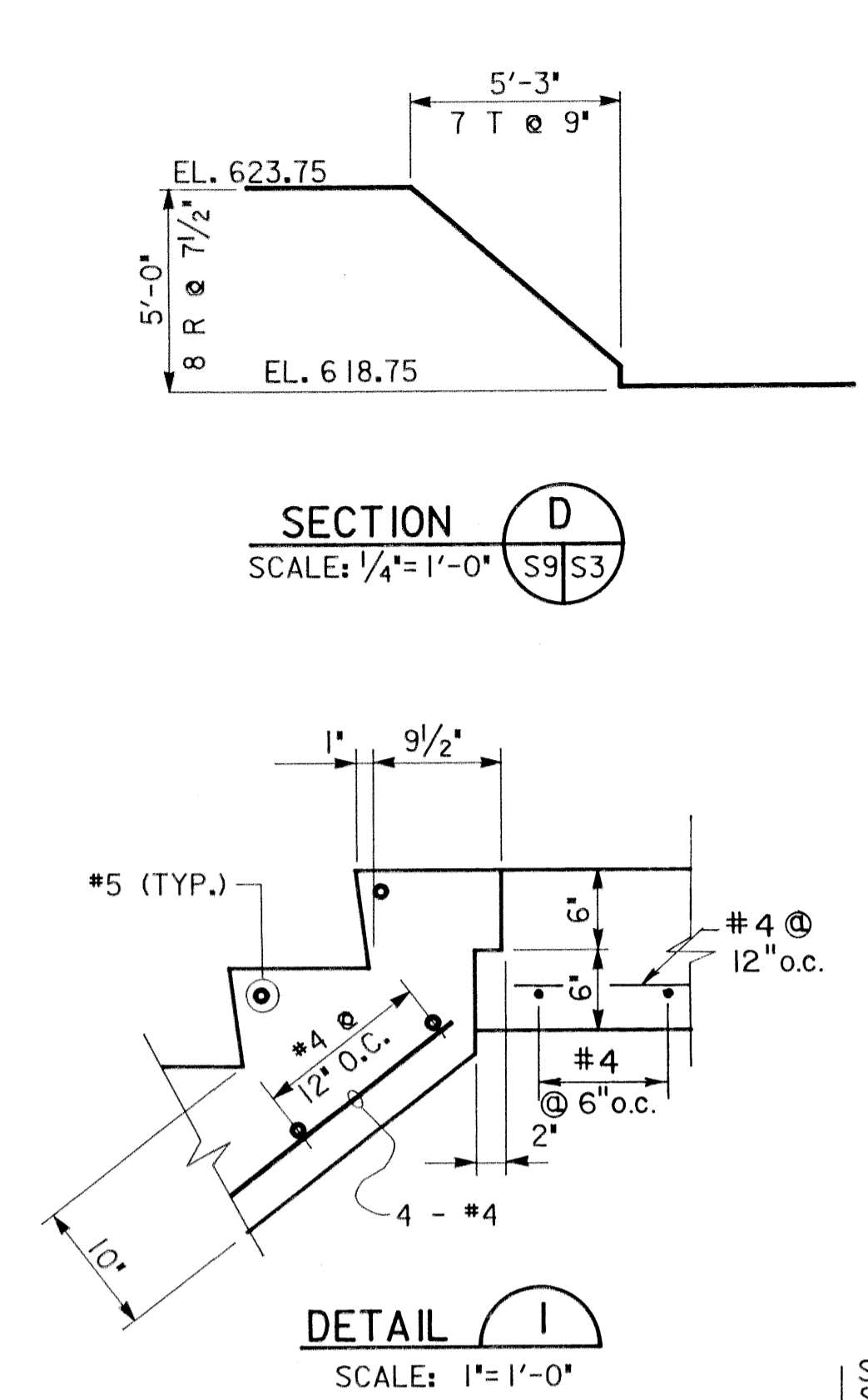
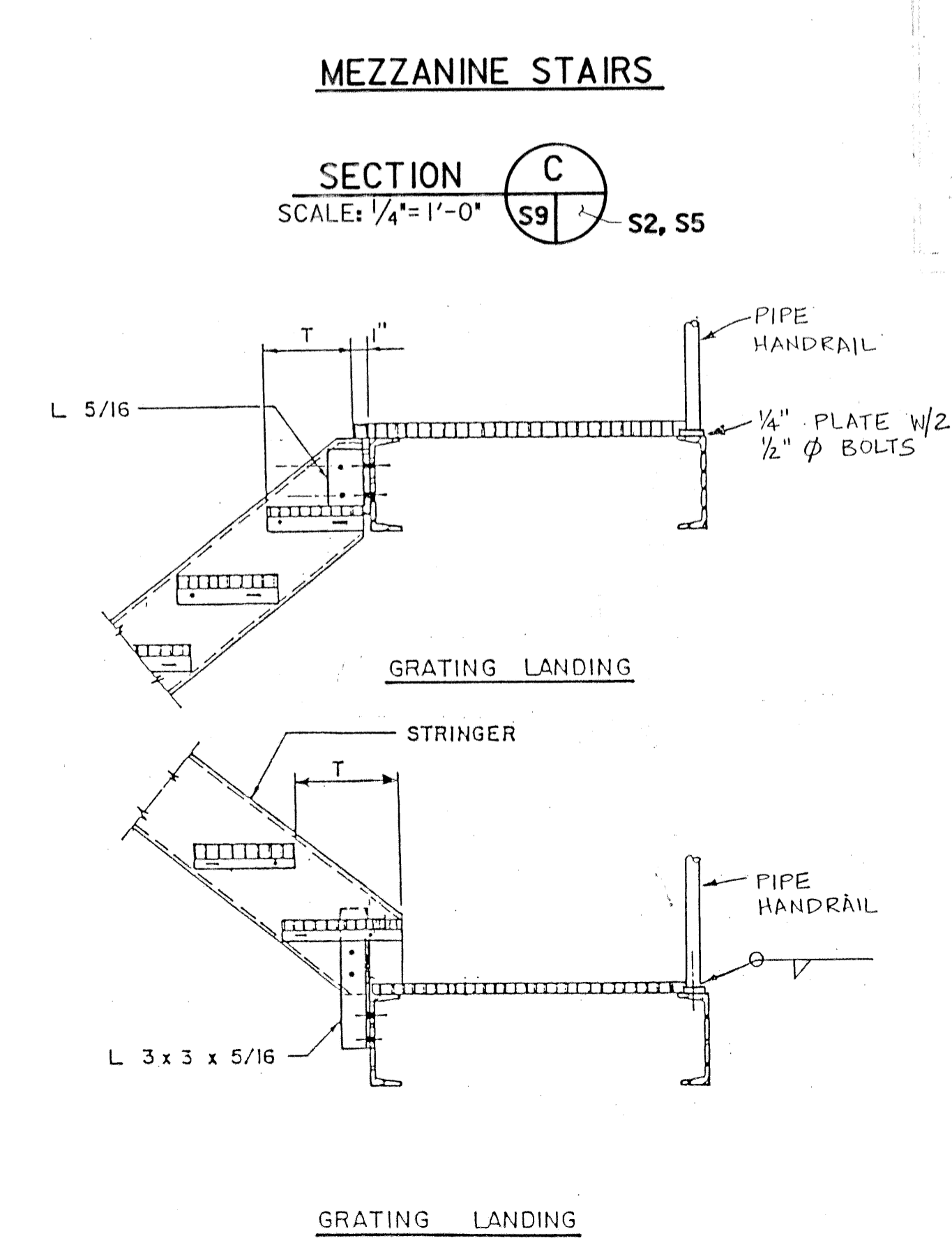
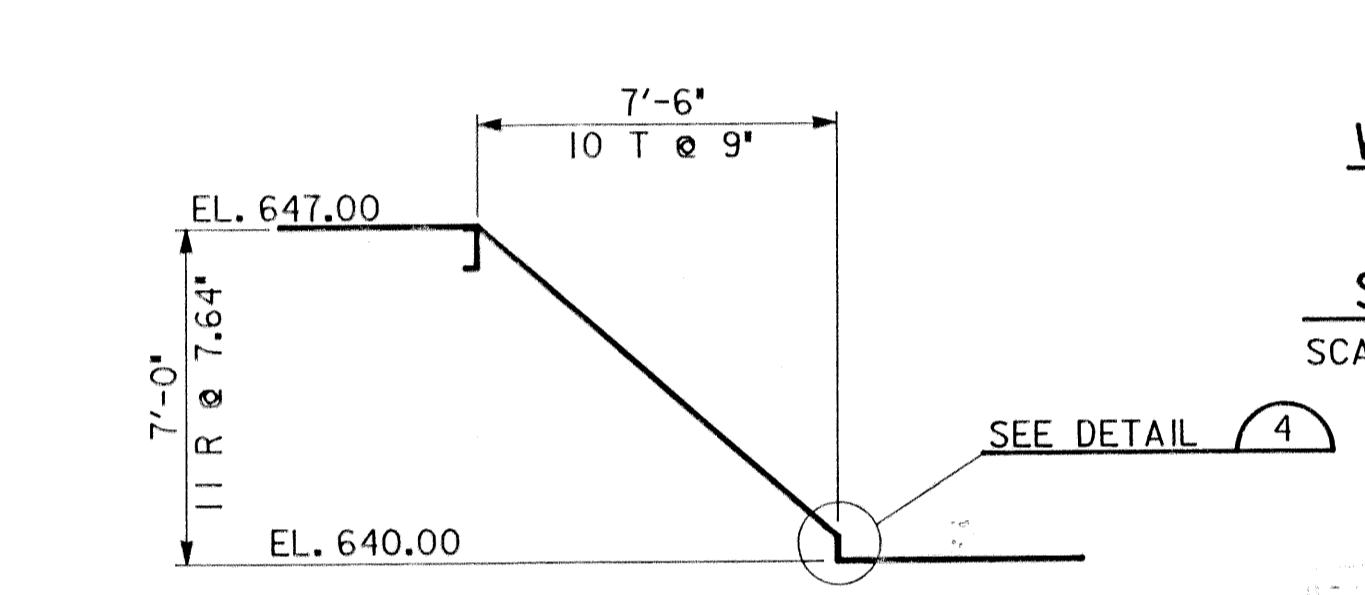
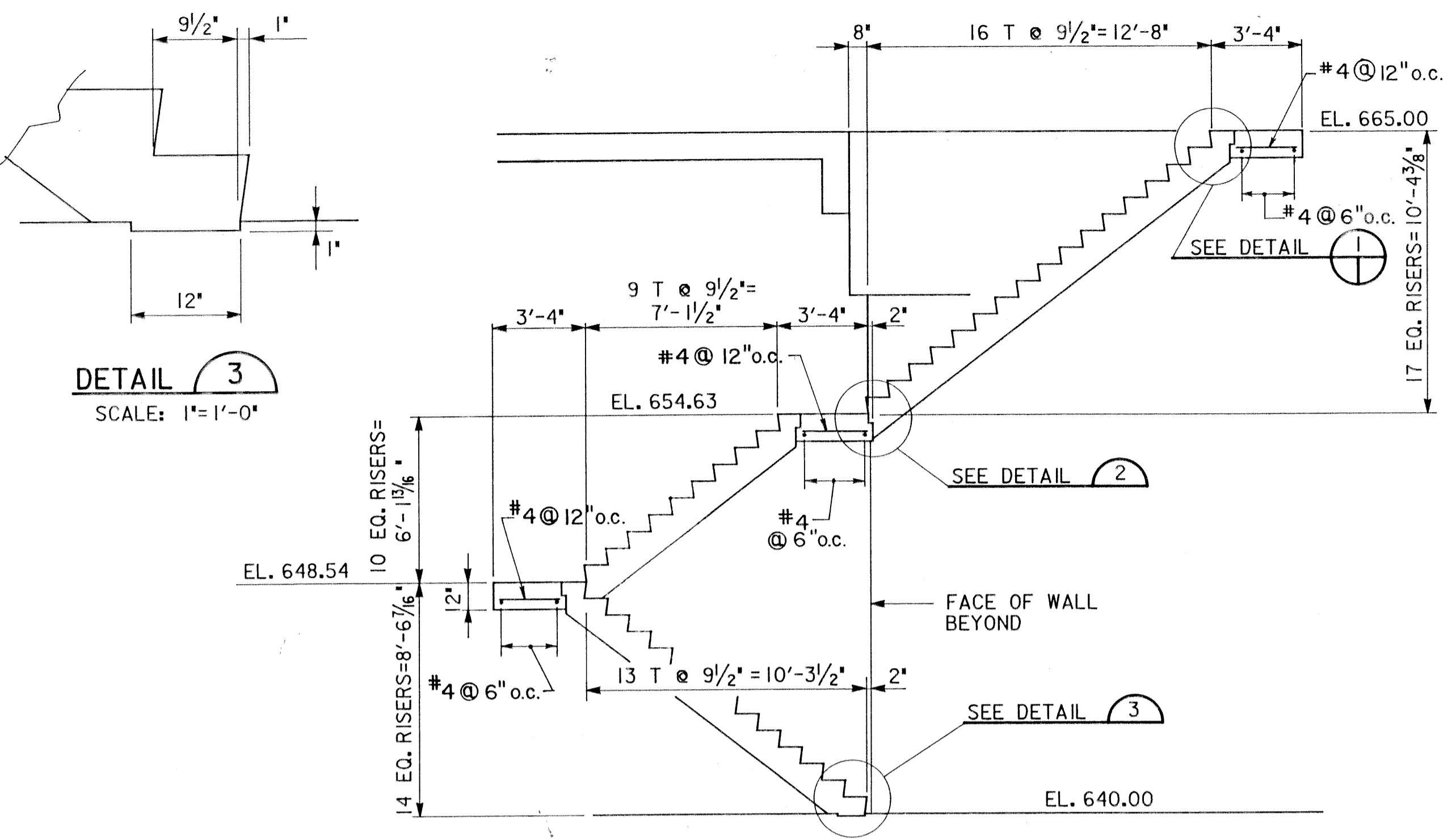
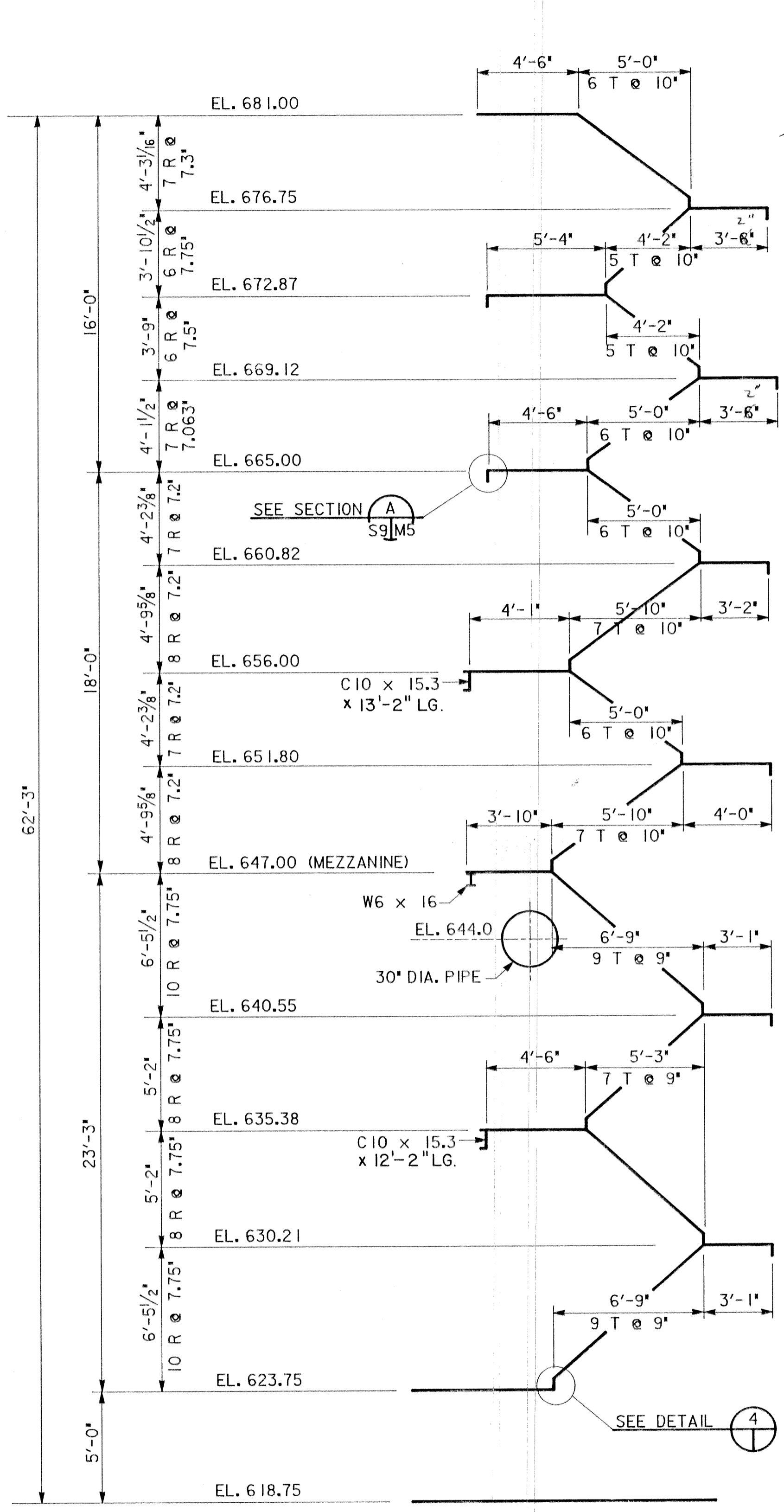
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION

CITICO PUMP STATION

STAIR SECTIONS AND DETAILS

CHATTANOOGA, TENNESSEE

DSGN TFI 8-09	HENSLEY - SCHMIDT, INC.	DRAWING NO.
DRWN Cabb/RC 8-09	ENGINEERS AND SURVEYORS	6685-S9
CHKD PCL 8-09	ATLANTA - CHATTANOOGA	
APPR PCL 8-09	RALEIGH - ORLANDO	



CONNECTION OF STRINGER TO CONCRETE WALL/COLUMN

SCALE: 3/4" = 1'-0"

(SEE TYPICAL BEAM BEARING DETAIL FOR CONNECTION OF STRINGER TO MASONRY WALL.)

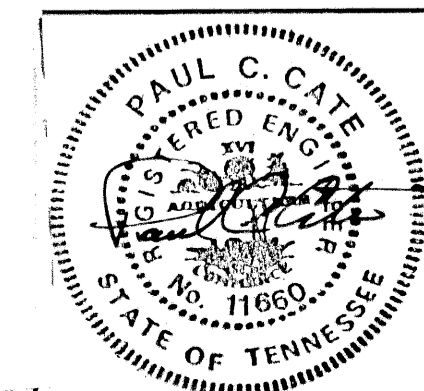
- NOTES:
- ALL STAIR STRINGERS SHALL BE MC10 x 8.4 UNLESS OTHERWISE NOTED ON DRAWINGS.
 - GRATING FOR LANDINGS SHALL BE FASTENED TO SUPPORTS WITH CLIPS.
 - GRATING SHALL BE RECTANGULAR BAR TYPE WITH ABRASIVE NOSING OR EQUAL, DESIGNED FOR LIVELOAD OF 100 PSF.
 - ALL CONNECTIONS SHALL BE BOLTED USING ASTM A-325 BOLTS. BOLTS SHALL HAVE MINIMUM 5/8" DIAMETER.

REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
3-17-92	RECORD	

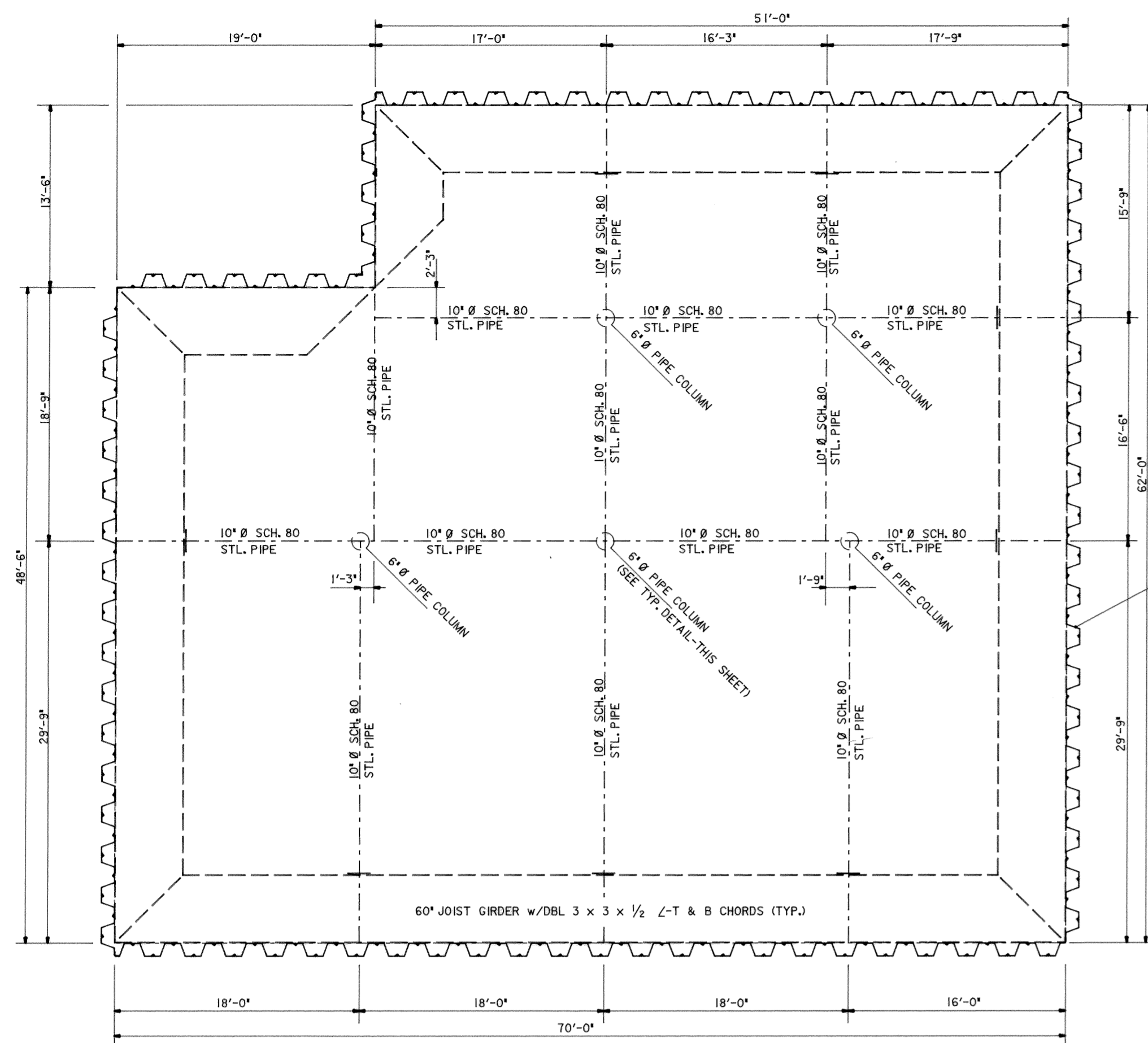
CITICO PUMP STATION

STAIR SECTIONS AND DETAILS

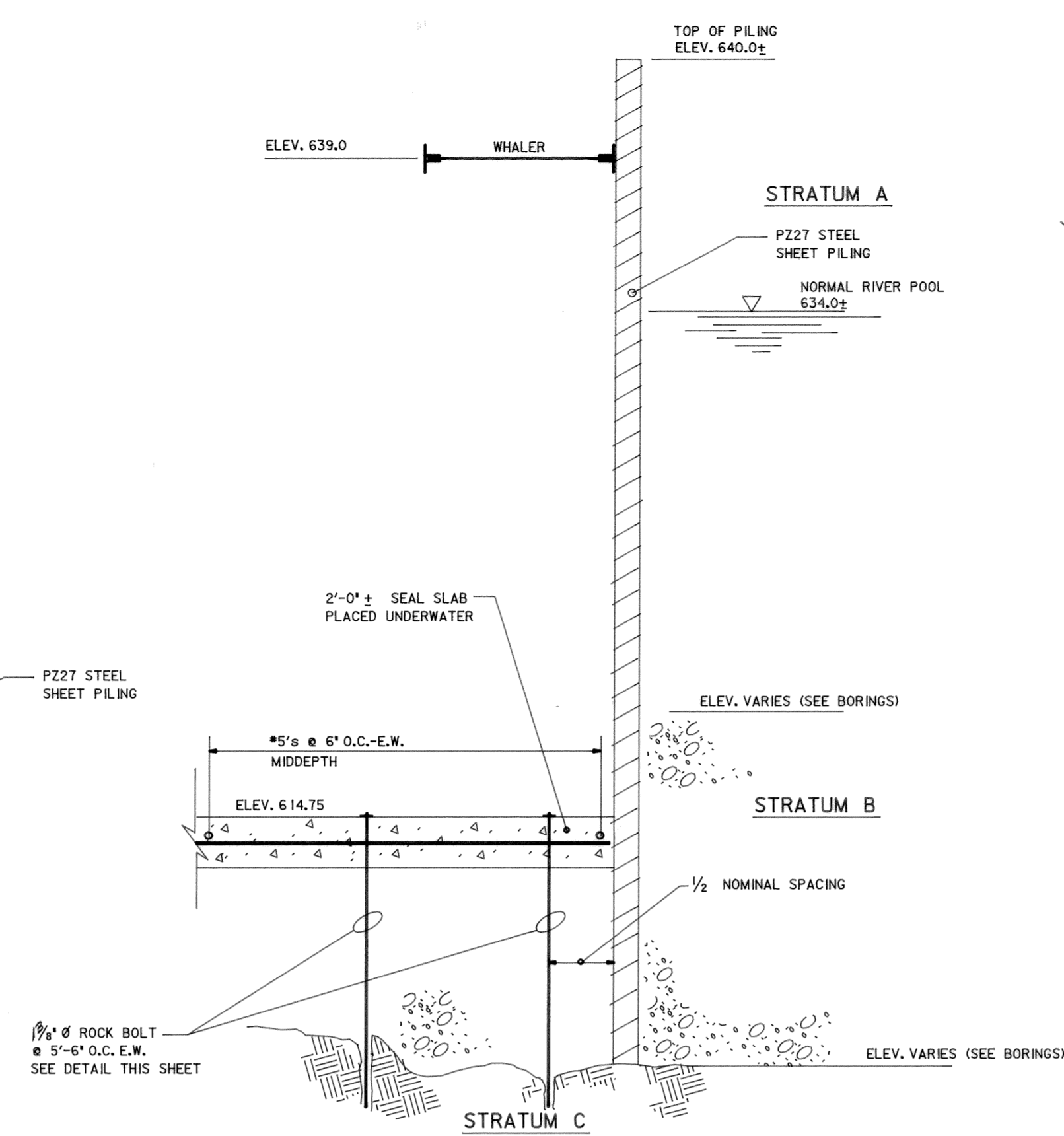
CHATTANOOGA, TENNESSEE



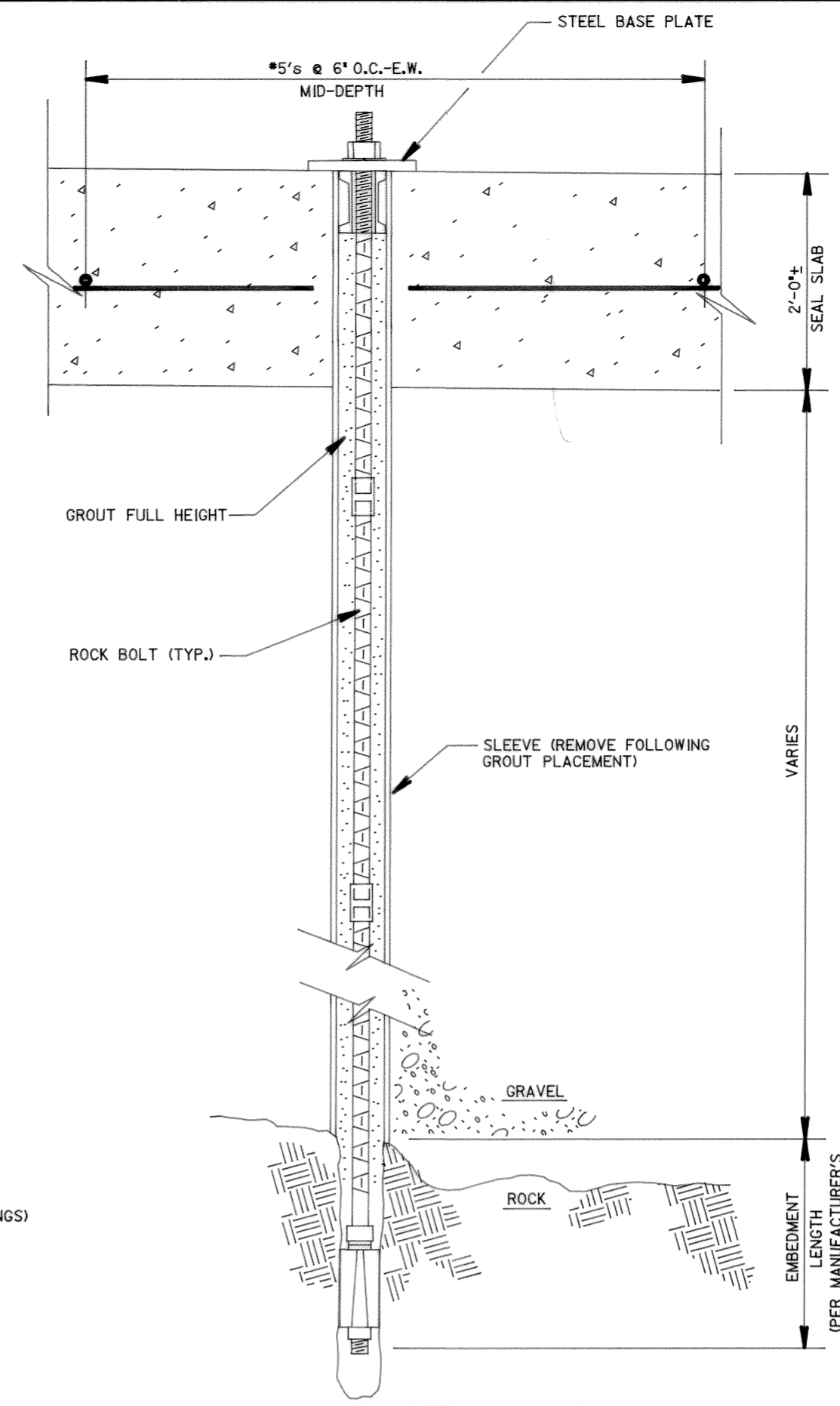
DSGN	TFI	8-89	HENSLEY - SCHMIDT, INC.	DRAWING NO.
DRWN	CABD/RC	8-89	ENGINEERS AND SURVEYORS	6685-S9.1
CHKD	PCC	8-89	ATLANTA - CHATTANOOGA	37C
APPR	PCC	8-89	RALEIGH - ORLANDO	



PLAN - SHEET PILING
SCALE: 1/8" = 1'-0"



SECTION THRU SHEET PILING
NO SCALE



ROCK BOLT DETAIL (TYP.)
NO SCALE

SEQUENCE OF PILING CELL CONSTRUCTION

1. DRIVE SHEET PILING TO REFUSAL.
2. BEGIN EXCAVATION OF CELL.
3. INSTALL WHALER ASSEMBLY AS SOON AS EXCAVATION ACTIVITIES PERMIT
4. COMPLETE EXCAVATION TO ELEVATION 612.75±
5. INSTALL SEAL SLAB
6. INSTALL ROCK BOLTS
7. DEWATER CELL

CAUTION :
DO NOT ATTEMPT TO DEWATER CELL UNTIL SEAL SLAB AND ROCK BOLTS ARE FULLY FUNCTIONAL.

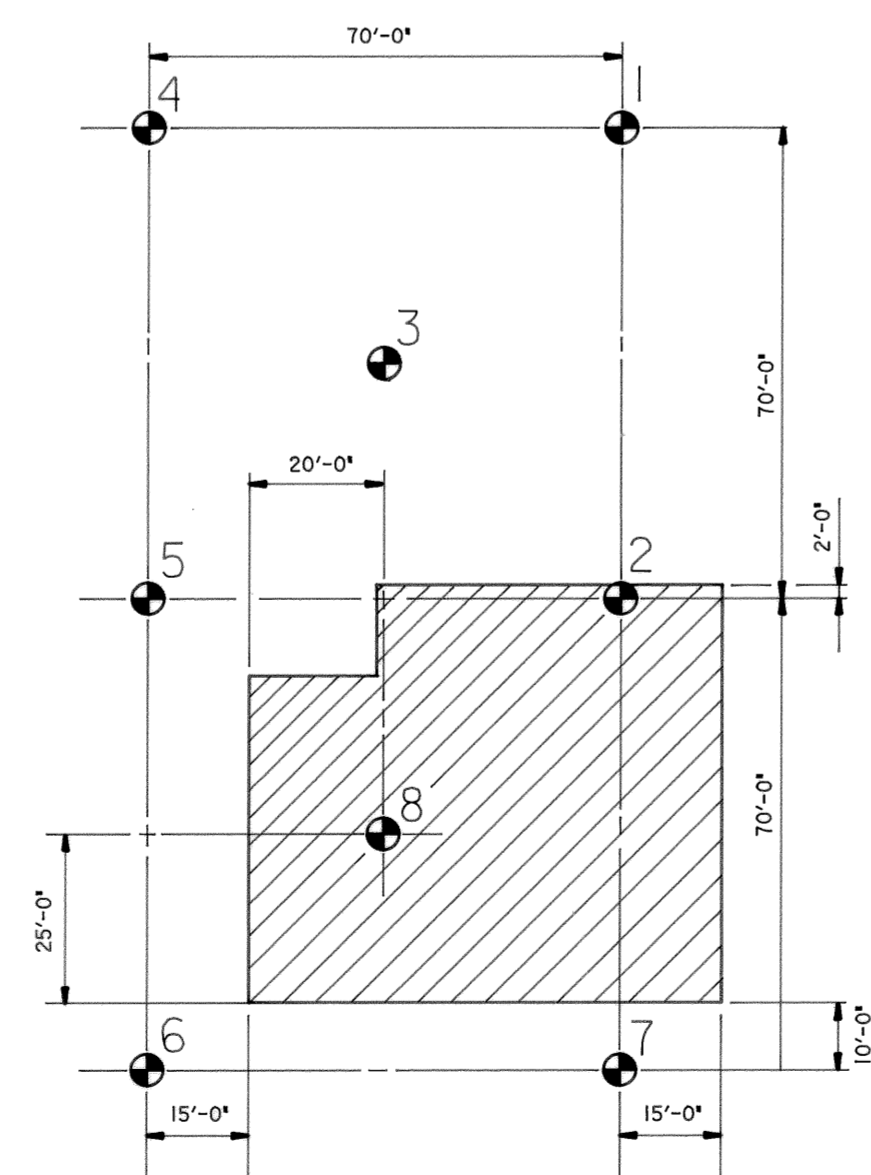
NOTES :

1. THE CONTRACTOR IS ADVISED THAT GROUNDWATER LEVELS, CLOSE PROXIMITY TO THE TENNESSEE RIVER, AND EXISTING SUBSURFACE CHARACTERISTICS WILL REQUIRE SPECIAL CONSTRUCTION PROCEDURES DURING THE EXCAVATION AND CONSTRUCTION PROCESS.
2. THE CONTRACTOR'S BASE BID SHALL INCLUDE ALL COSTS FOR PROVIDING A DRY EXCAVATION AS NEEDED TO CONSTRUCT THE PUMP STATION. NO CHANGE IN THE CONTRACT AMOUNT WILL BE MADE SHOULD GROUNDWATER OR RELATED PROBLEMS ARISE DURING THE CONSTRUCTION PROCESS.
3. THE CONTRACTOR IS NOT REQUIRED TO FOLLOW THE RECOMMENDED APPROACH OUTLINED ON THIS DRAWING FOR THE PUMP STATION EXCAVATION. THE CONTRACTOR SHALL SUBMIT A DETAILED DESCRIPTION OF HIS PROPOSED METHOD, IF IT DIFFERS SIGNIFICANTLY FROM THE RECOMMENDED APPROACH.
4. SOIL BORINGS ARE SUMMARIZED IN THE TABLE INCLUDED ON THIS DRAWING. THE OWNER AND/OR ENGINEER GIVE NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THESE BORINGS REPRESENT A TRUE OR COMPLETE CROSS SECTION OF ALL OF THE MATERIAL TO BE ENCOUNTERED IN PERFORMING THE EXCAVATION AND EARTHWORK ON THIS PROJECT.
5. RAPID CHANGES IN GROUNDWATER/SURFACE WATER ELEVATIONS ARE ANTICIPATED. THE CONTRACTOR SHALL CONTINUOUSLY MONITOR WATER ELEVATIONS AND TAKE ALL NECESSARY ACTIONS TO MAINTAIN THE INTEGRITY OF THE EXCAVATION.
6. WHALER FRAMING ELEMENTS WHICH REMAIN EXPOSED AFTER CONCRETE PLACEMENT SHALL BE REMOVED BY GAS CUTTING TO 1/2' BELOW THE CONCRETE SURFACE AND POCKETS FILLED WITH GROUT.
7. WHALER FRAMING SHALL NOT BE DISTURBED UNTIL CONCRETE HAS ACHIEVED ITS DESIGN STRENGTH.

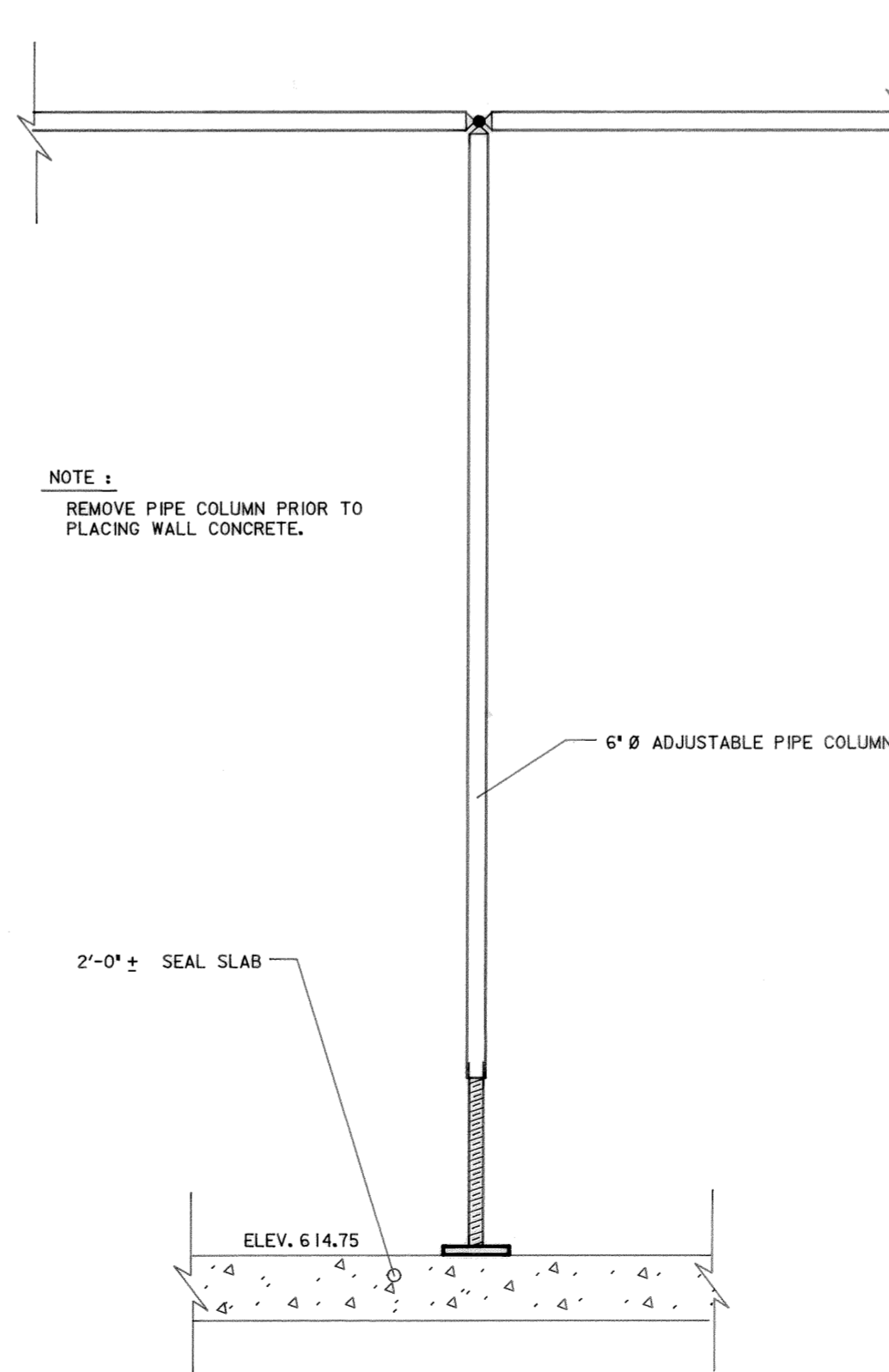
SUMMARY OF SOIL STRATA ELEVATIONS *					
Boring No.	Surface Elevation (feet)	Stratum A (feet)		Stratum B (feet)	
		Thickness	Base Elevation	Thickness	Base Elevation
1	639.60	21.5	618.10	21.0	597.10
2	638.30	18.0	620.30	19.0	601.30
3	638.10	16.5	621.60	16.0	605.60
4	637.90	18.0	619.90	12.5	607.40
5	638.30	21.0	617.30	9.1	608.20
6	640.73	23.5	617.23	6.5	610.73
7	639.68	24.0	615.68	3.9	611.78
8	638.11	19.8	618.31	14.2	604.11

Stratum	Description
A	Generally fine-grained material consisting of brown silty clays and silty sands.
B	Course-grained material consisting of mixed sand and gravel.
C	Weathered Dolomite boulders, overhanging ledges, and isolated pinnacles.

* Stratum B thicknesses do not include the clay layers immediately above refusal elevations in BORINGS No. 6 and 8. Stratum A thicknesses include topsoil layers.



SITE PLAN - BORINGS
NO SCALE



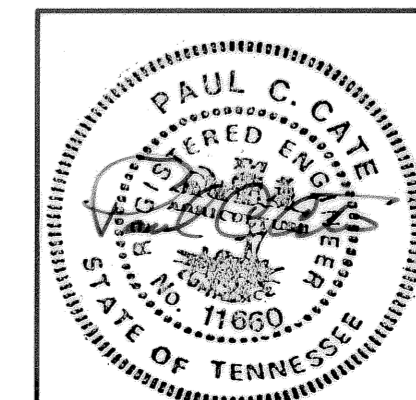
TYPICAL PIPE COLUMN
NO SCALE

REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
3-17-92		RECORD

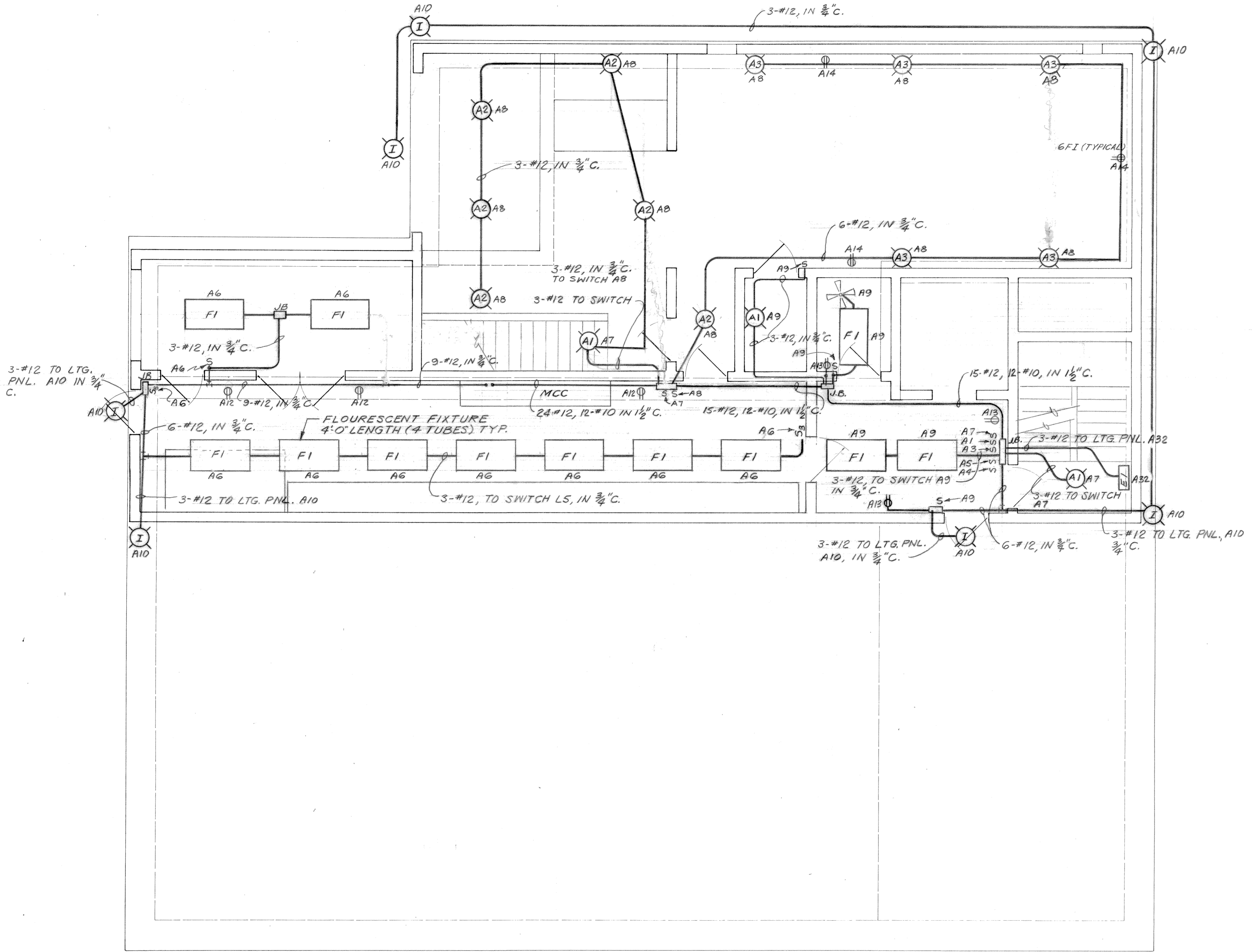
CITICO II PUMPING STATION

RECOMMENDED EXCAVATION METHOD

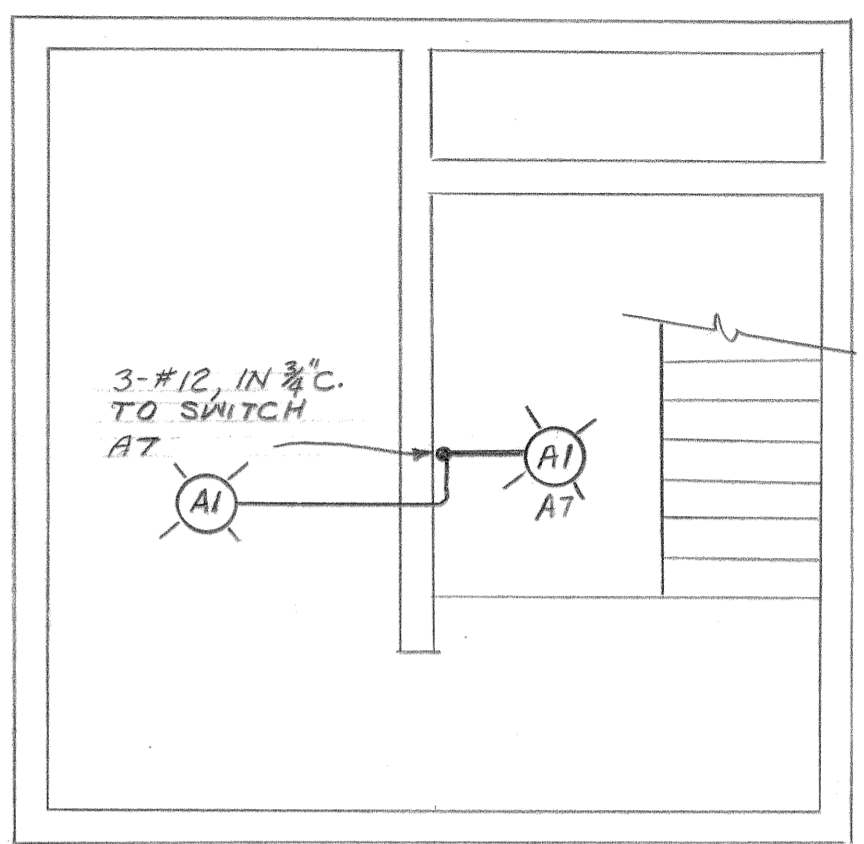
CITY OF CHATTANOOGA, TENNESSEE



DSGN P.C.C.	7/89	HENSLEY - SCHMIDT, INC.	DRAWING NO.
DRWN CADD/GR	7/89	Engineers and Surveyors	6685
CHKD P.C.C.	7/89	ATLANTA - CHATTANOOGA	-37C-SIO.1
APPR P.C.C.	9/89	ORLANDO - RALEIGH	



ELEVATION 665.00



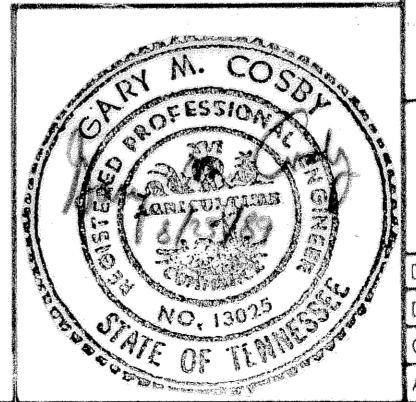
ELEVATION 681.00

REVNO	RELEASED BY	DESCRIPTION OF REVISION
3-17-92		RECORD

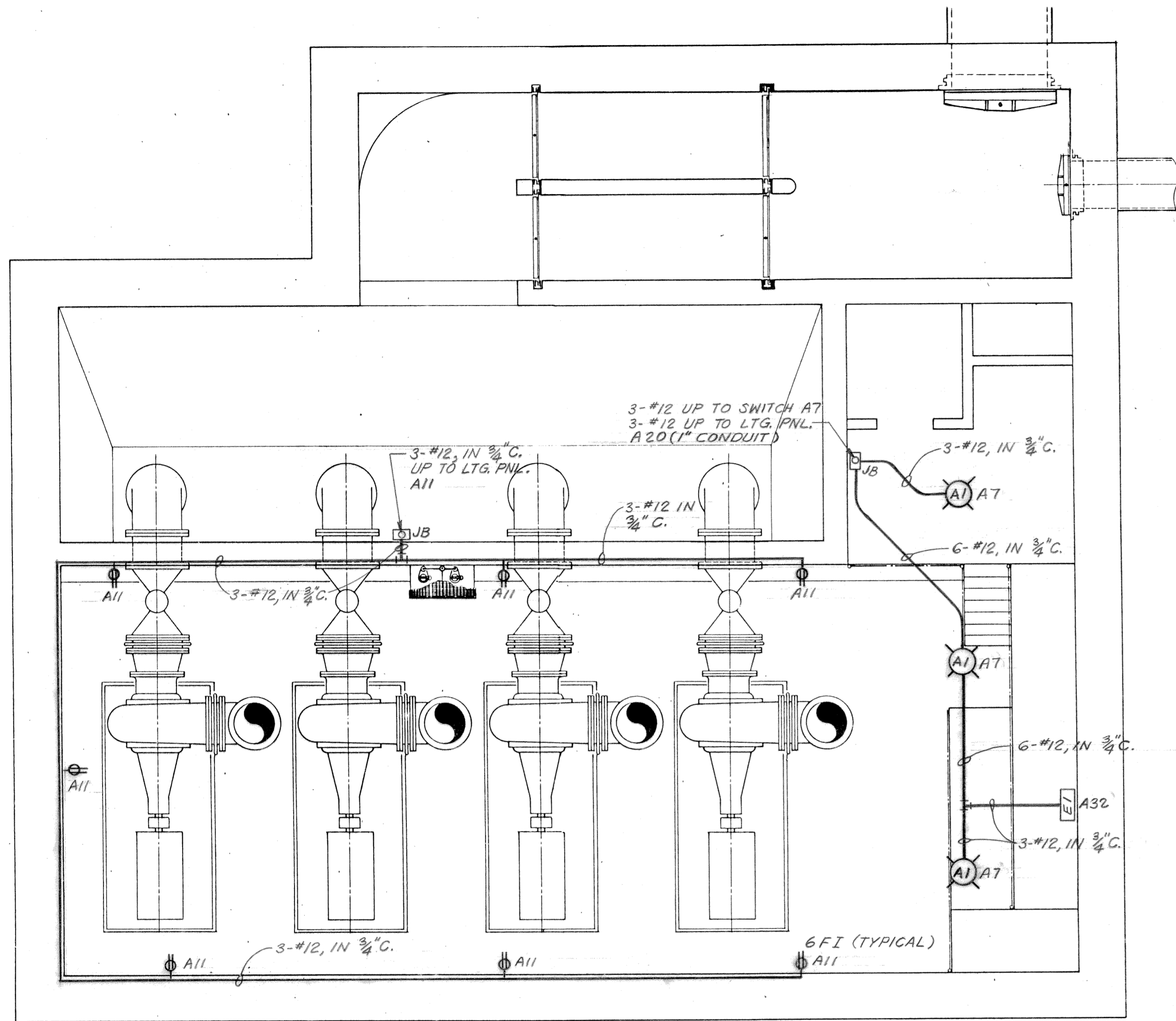
CITICO II PUMPING STATION

LIGHTING & RECEPTACLE PLAN
ELEV. 665.00

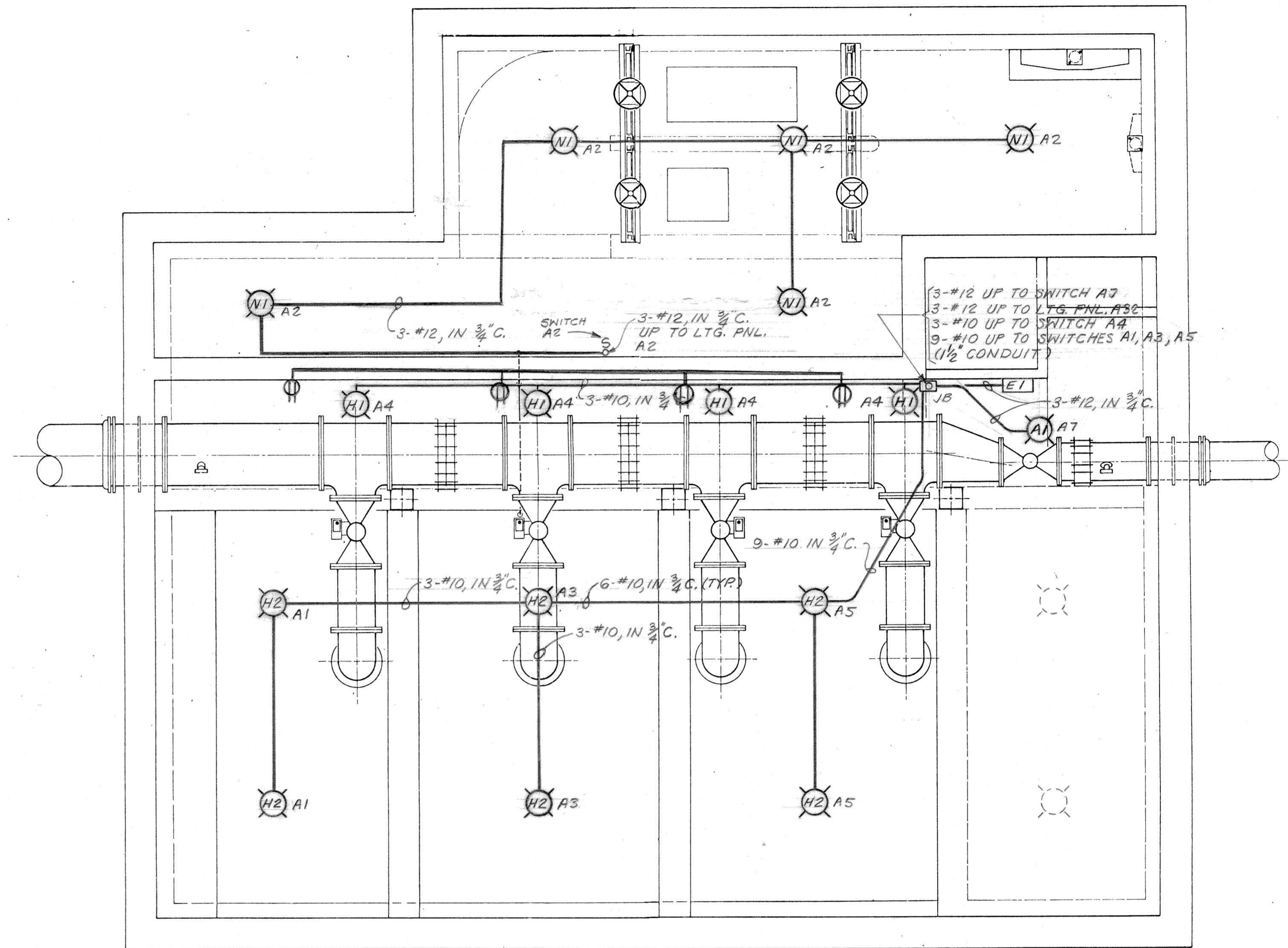
CITY OF CHATTANOOGA, TENNESSEE



DSGN	REM	8/89	HENSLEY-SCHMIDT, INC. CONSULTANTS ATLANTA · CHATTANOOGA · RALEIGH VALDOSTA · KNOXVILLE · ORLANDO	DRAWING NO. 6685-37C-E1
DRWN	RLS	8/89		
CHKD	Gmc	8/89		
APPR	ADS	8/89		



ELEVATION 618.75



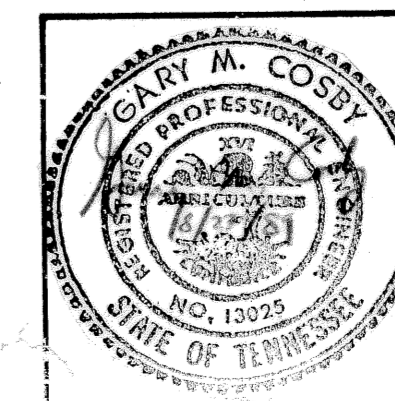
ELEVATION 640.00

3		
2		
1	3-17-92	RECORD
REVNO	RELEASED BY	DESCRIPTION OF REVISION

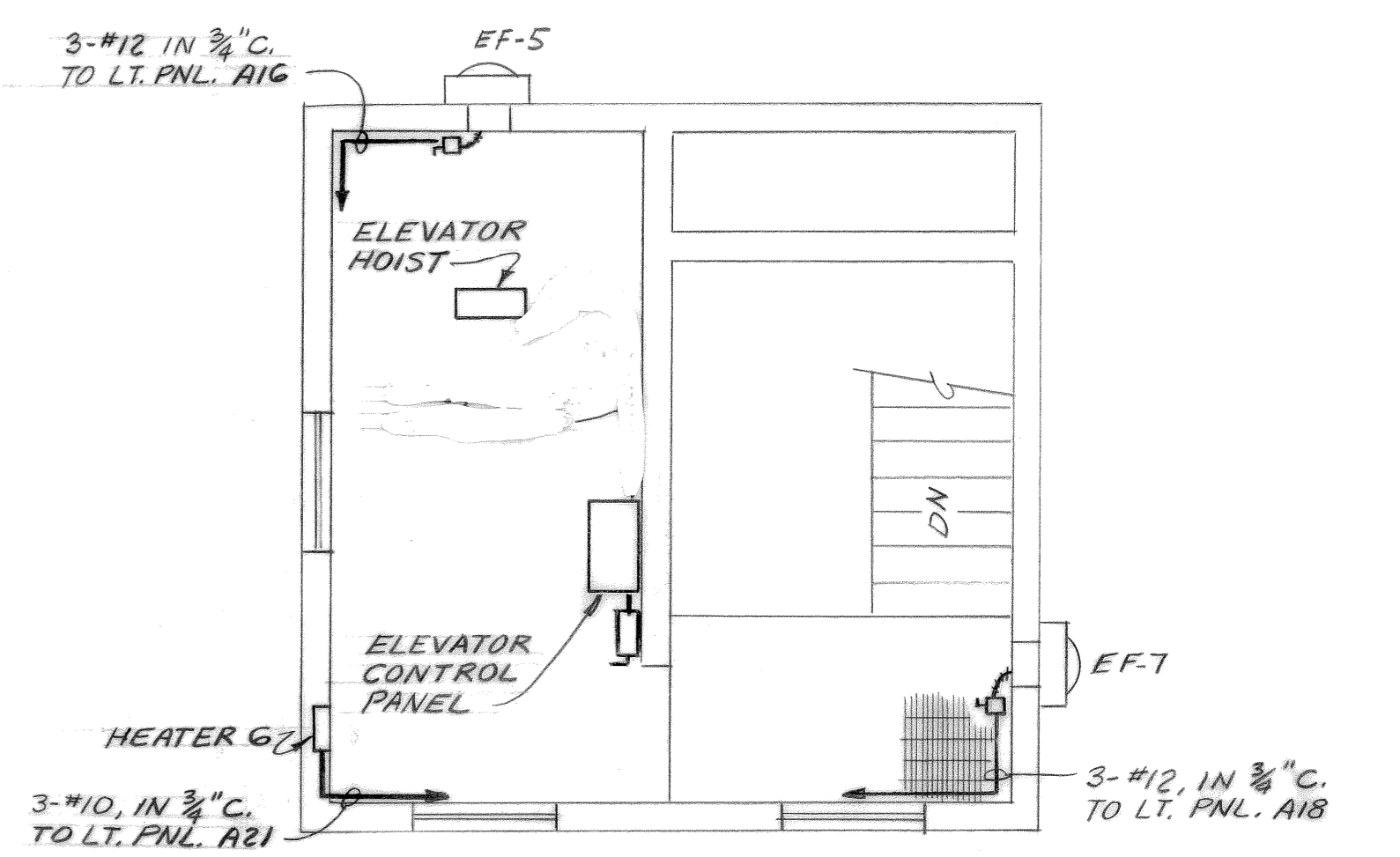
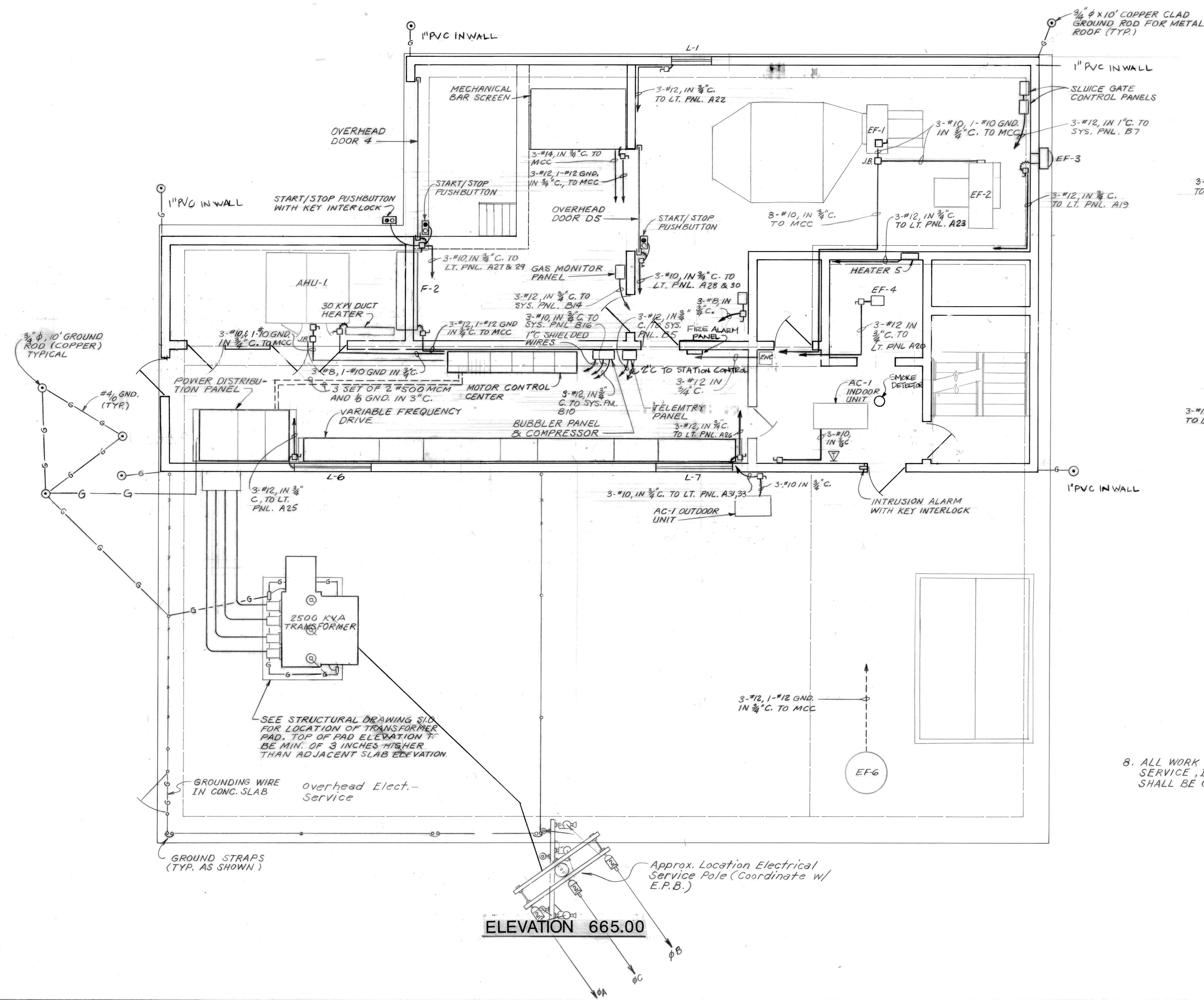
CITICO II PUMPING STATION

LIGHTING & RECEPTACLE PLANS
ELEV. 618.75 & 640.00

CITY OF CHATTANOOGA, TENNESSEE



DSGN	REM	8/81	HENSLEY-SCHMIDT, INC.	DRAWING NO.
DRW	RLS	8/81	CONSULTANTS	
CHKD	GMC	8/81	ATLANTA-CHATTANOOGA-RALEIGH	6685-37C-E2
APPR	AGS	8/81	VALDOSTA-KNOXVILLE-ORLANDO	



ELEVATION 681.00

GENERAL ELECTRICAL NOTES

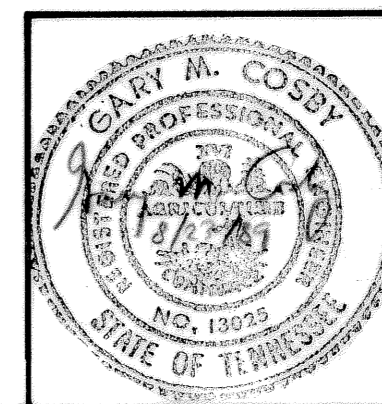
1. ALL CONDUIT RUNS SHALL BE EXPOSED.
2. ALL CONDUIT RUNS FROM THE WETWELL AREA TO ANY PANEL SHALL BE SEALED.
3. THE E.P.B. (ELECTRIC POWER BOARD) SHALL FURNISH AND INSTALL THE POLE, TRANSFORMER, THE HIGH VOLTAGE CABLES TO THE TRANSFORMER AND THE SECONDARY CABLES FROM THE TRANSFORMER WITH THE PT'S AND CT'S ON A STRUCTURE INTO THE BUILDING.
4. THE SECONDARY CABLE INLET DUCT AT THE BUILDING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
5. THE ANCHOR BOLT FOR THE POLE GUY WIRE SHALL BE INSTALLED BY THE CONTRACTOR AT LOCATION APPROVED BY ENGINEER AND E.P.B.
6. THE GROUNDING SYSTEM AT THE TRANSFORMER SHALL BE INSTALLED BY THE CONTRACTOR.
7. THE REMOVABLE FENCE PANELS SHALL BE GROUNDED WITH REMOVABLE GROUND STRAPS.
8. ALL WORK RELATED TO THE ELECTRICAL SERVICE, INCLUDING THE ABOVE MENTIONED, SHALL BE COORDINATED WITH THE E.P.B.

REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
3-17-92	RELOD	
R.E.M.	10/89	GENERAL REVISION

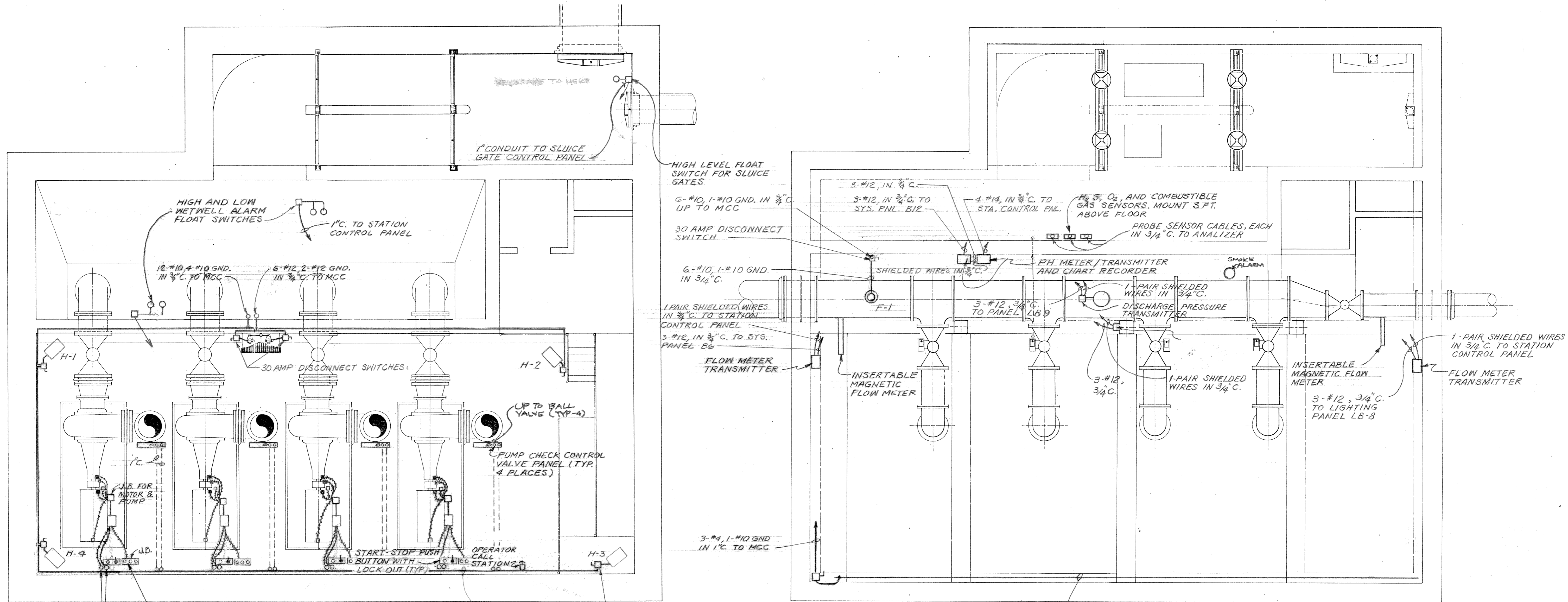
CITICO II PUMPING STATION

POWER DISTRIBUTION PLAN
ELEV. 665.00

CITY OF CHATTANOOGA, TENNESSEE



DSGN	REM	5/85	HENSLEY - SCHMIDT, INC. CONSULTANTS ATLANTA - CHATTANOOGA - RALEIGH VALDOSTA - KNOXVILLE - ORLANDO	DRAWING NO.	6685-37C-E3.2
CHKD	RLS	9/85			
APPR	APP	3/89			

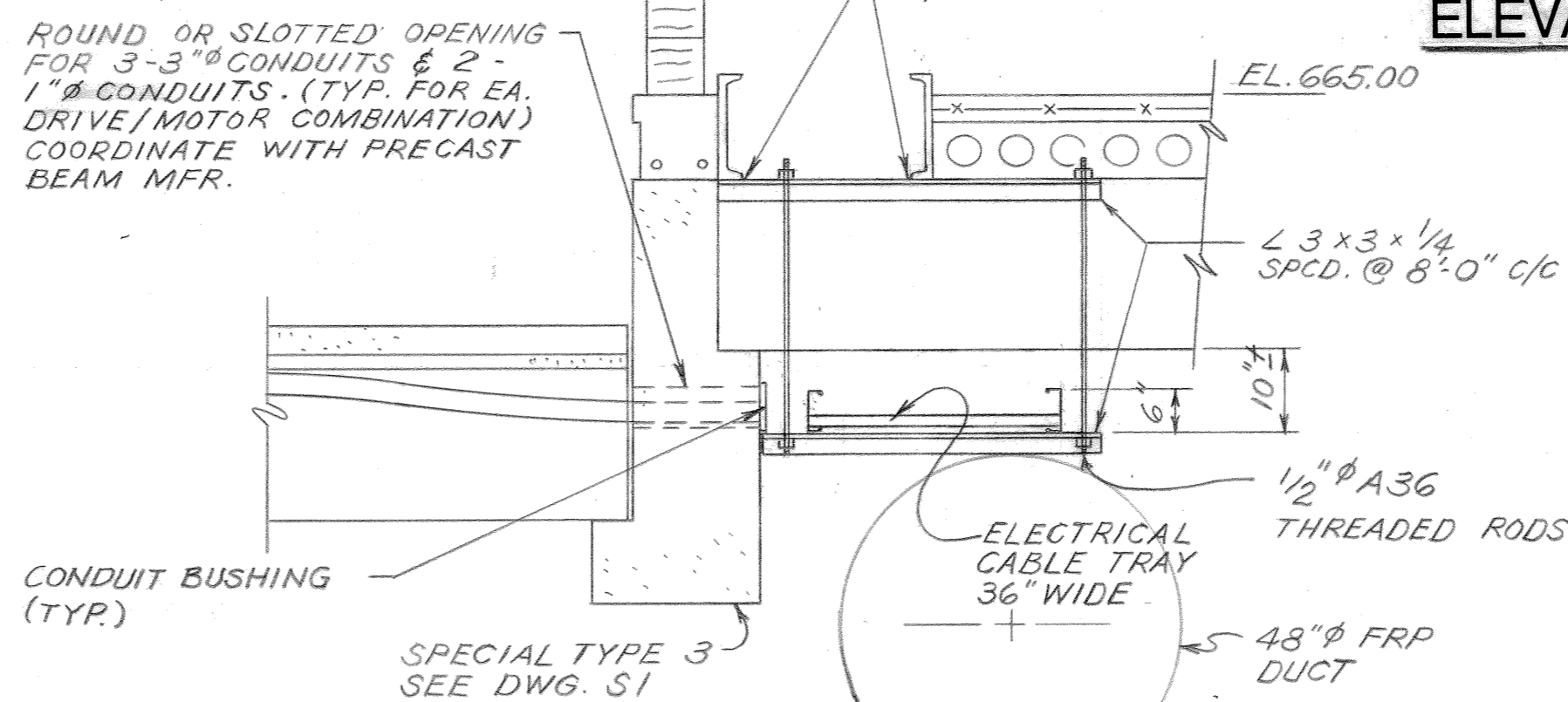


12-#10, 4-#10 GND. IN 3/4" C. TO MCC
 6-#12, 2-#12 GND. IN 3/4" C. TO MCC
 30 AMP DISCONNECT SWITCHES
 UP TO BALL VALVE (TYP-4)
 PUMP CHECK CONTROL VALVE PANEL (TYP. 4 PLACES)
 J.B. FOR MOTOR & PUMP
 J.D.
 START-STOP PUSH BUTTON WITH LOCK OUT (TYP.)
 OPERATOR CALL STATION
 H-1 H-2 H-3 H-4
 2-#500 MCM PER PHASE AND 1-#2/0 IN 3" C. UP TO VARIABLE FREQUENCY DRIVE UNIT (TYP. 4 PUMPS)
 2-1" CONDUIT FOR PUMP AND MOTOR BEARING TEMP. AND PUMP VIBRATION (TYP. 4 PUMPS)
 3-#10, 1-#10 GND IN 3/4" C.
 30 AMP DISCONNECT SWITCH

ELEVATION 618.75

3-#12, IN 3/4" C.
 3-#12, IN 3/4" C. TO SYS. PNL. B12
 4-#14, IN 3/4" C. TO STA. CONTROL PNL.
 H₂, O₂ AND COMBUSTIBLE GAS SENSORS. MOUNT 3 FT. ABOVE FLOOR
 PROBE SENSOR CABLES, EACH IN 3/4" C. TO ANALYZER
 PH METER / TRANSMITTER AND CHART RECORDER
 SMOKE ALARM
 1-PAIR SHIELDED WIRES IN 3/4" C.
 DISCHARGE PRESSURE TRANSMITTER
 1-PAIR SHIELDED WIRES IN 3/4" C. TO STATION CONTROL PANEL
 1-PAIR SHIELDED WIRES IN 3/4" C. TO STATION CONTROL PANEL
 3-#12, 3/4" C. TO PANEL LB-9
 3-#12, 3/4" C.
 1-PAIR SHIELDED WIRES IN 3/4" C.
 INSERTABLE MAGNETIC FLOW METER
 3-#12, 3/4" C. TO LIGHTING PANEL LB-8
 1-PAIR SHIELDED WIRES IN 3/4" C. TO STATION CONTROL PANEL
 FLOW METER TRANSMITTER
 CRANE ELECTRIFICATION SYSTEM
 3-#4, 1-#10 GND IN 1" C. TO MCC

ELEVATION 640.00



SECTION H
 1/2" = 1'-0"
 FOR ELECTRICAL USE ONLY
 SEE DWG. S1 FOR LOCATION

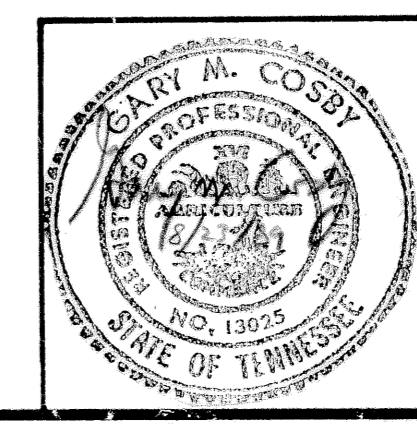
3		
2	3-17-92	RELRD
1	REM	10/89 MISC. ELECTRICAL REVISIONS
REVNO	RELEASED BY	DESCRIPTION OF REVISION

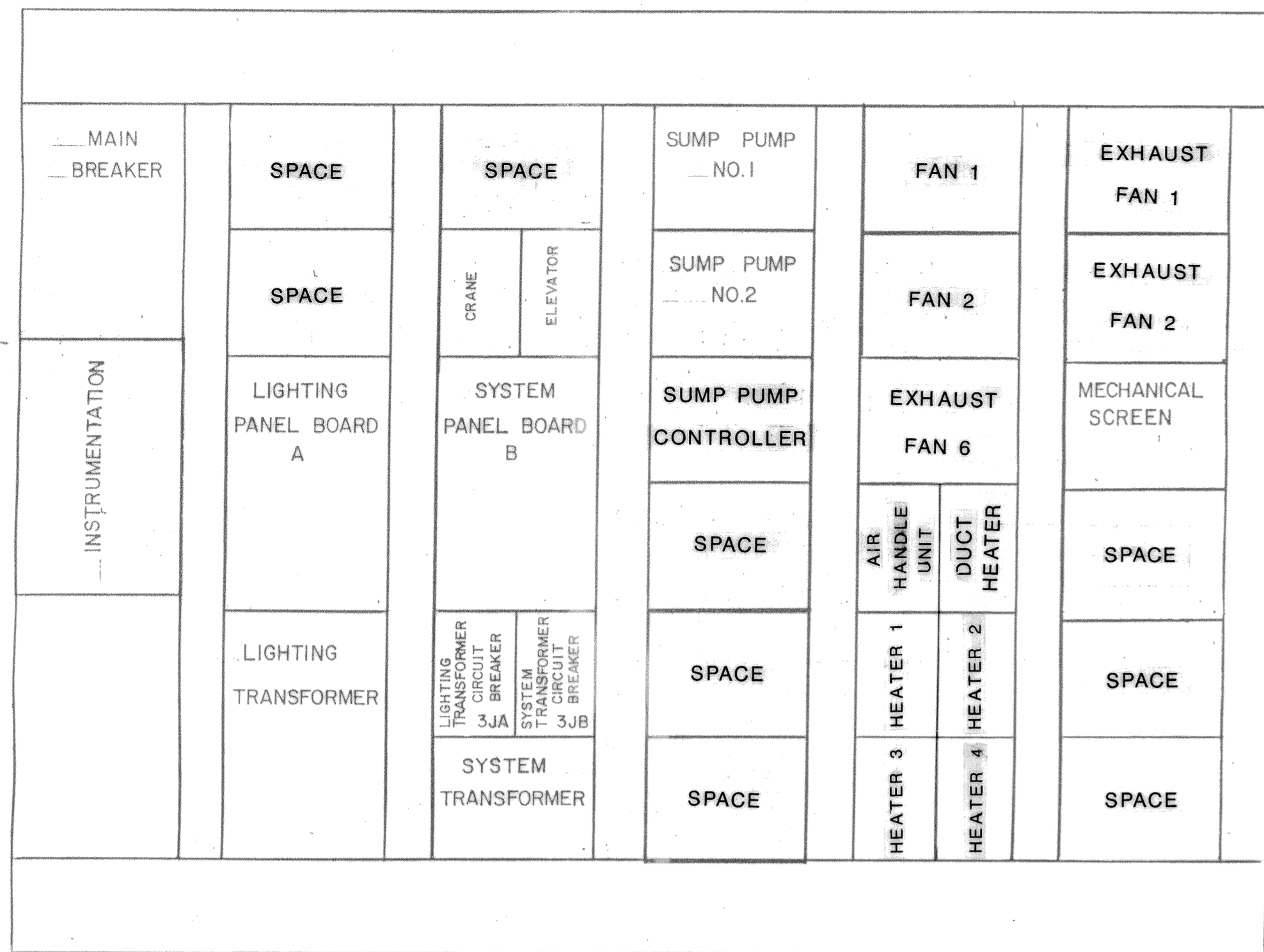
CITICO II PUMPING STATION

POWER DISTRIBUTION PLANS
ELEV. 618.75 & 640.00

CITY OF CHATTANOOGA, TENNESSEE

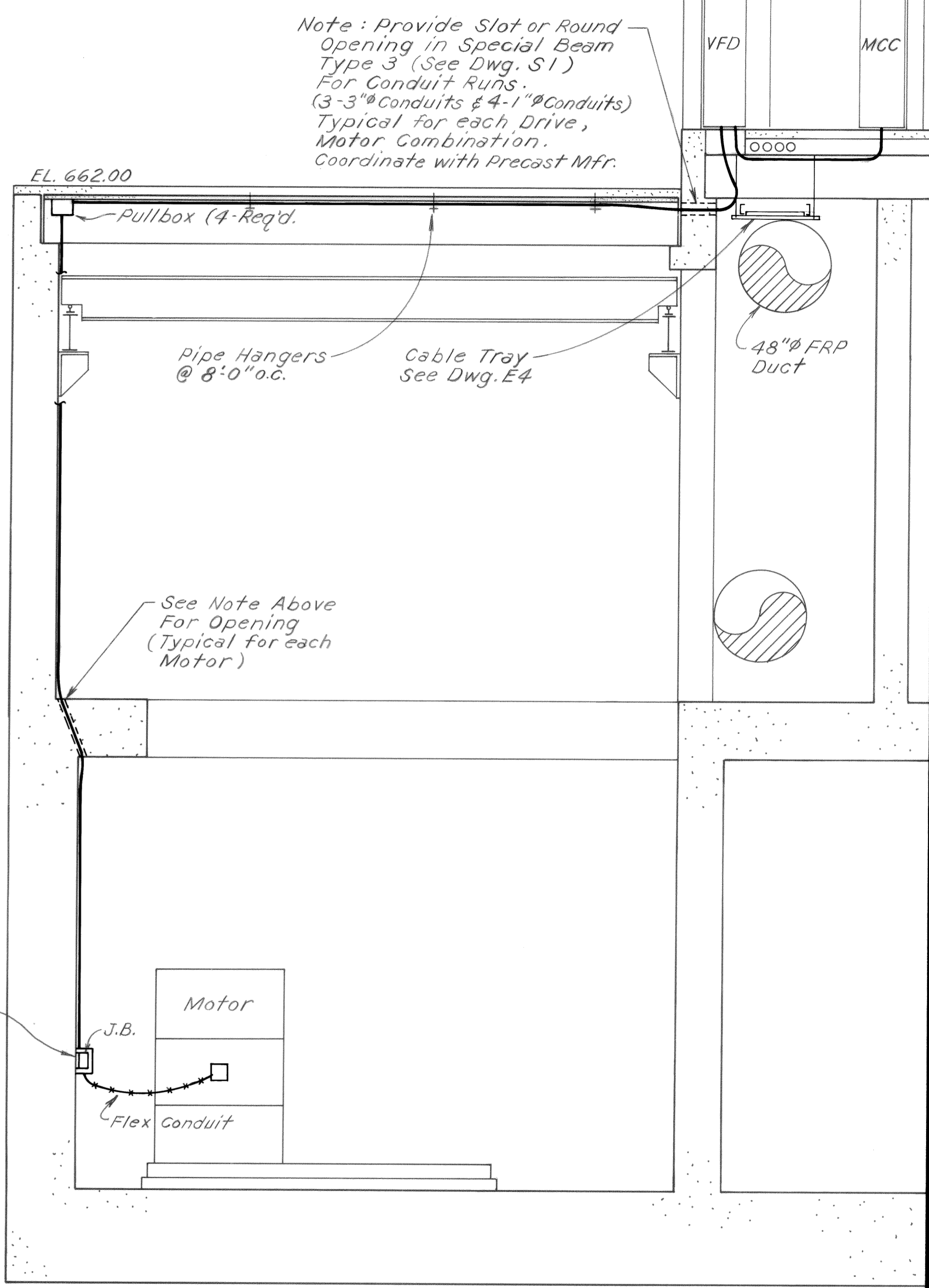
DSGN	REM	8/89	HENSLY-SCHMIDT, INC. CONSULTANTS ATLANTA · CHATTANOOGA · RALEIGH VALDOSTA · KNOXVILLE · ORLANDO	DRAWING NO. 6685-37C-E4.2
DRWN	RCS	8/89		
CHKD	GHC	3/91		
APPR	ADG	8/89		





MOTOR CONTROL CENTER

FIXTURE SCHEDULE				RECESS	SURFACE	SUSPEND	WALL	REMARK
DESIG	LAMPS	CATALOG	NUMBERS					
NO.	TYPE							
F1	4 F40GW	LITHONIA 2GT440A12125120ES						
H2	1 1000 W HPS	LITHONIA TE100S120QRSLCPD						HIGH BAY UNIT WITH QUAR. AUX. LIGHT HOOR & POWER CORD
N1	1 250 WATT HPS	CROUSE HINDS EVMCX42250-120						
H1	1 250 WATT HPS	CROUSE HINDS VMYS2TW250G-120						
E1	1 12 WATT	DUALITE 12EDN-290-2-V-LVD-T1212						12 VOLT NICKEL CADMIUM BATTERY VOLTAGE METER, LOW VOLTAGE DISCONNECT RATING 200 WATT 1.5 HR @ 87% SYSTEM VOLTAGE
A1	1 150 WATT	CROUSE HINDS VDB238-120						
A2	1 150 WATT	CROUSE HINDS VDA25GRD-120						
A3	1 150 WATT	CROUSE HINDS VXH25GP-120						
I	1 150 WATT	CROUSE HINDS VXH25GP-120						CONTROL BY PHOTO CELL
OR APPROVED EQUAL								

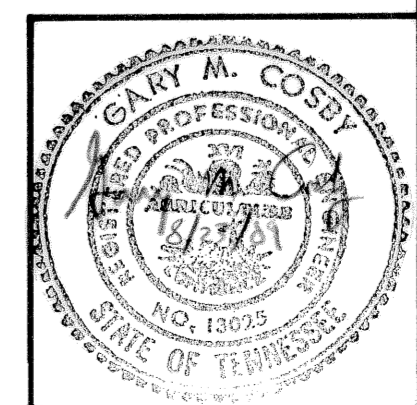


SECTION B-B
1/4" = 1'-0"
FOR ELECTRICAL USE ONLY.
FOR LOCATION AND OTHER
DETAILS, SEE DWG. M5.

LIGHTING PANEL BOARD A											
DIRECTORY	WATTS LOAD			CIRC. #	AMPS	CIRC. #	AMPS	WATTS LOAD			DIRECTORY
	L1	L2	L3					L1	L2	L3	
DRY WELL PUMP ROOM LIGHT	2200			1	25	20	2	1650			WETWELL LIGHTS
DRY WELL PUMP ROOM LIGHT		2200		3	25	20	4	1250			DRYWELL LIGHTS WALL
DRY WELL PUMP ROOM LIGHT			2200	5	25	20	6		1584		LIGHTS-CONTROL & MECH. RMS.
LIGHTS STAIR WELL	450			7	20	20	8	1800			LIGHTS-EQUIP'T. & SCEN. RMS.
LIGHTS OFFICE, REST, ODOR DUCT RMS.		678		9	20	20	10	1050			LIGHTS-OUTDOOR
* RECEPTACLES-DRYWELL			900	11	20	20	12		900		RECEPTACLES-CONTROL RM.
RECEPTACLES-OFFICE	900			13	20	20	14	900			RECEPTACLES-EQUIP'T. RM.
WATER HEATER		2300		15	30	20	16	150			EXHAUST FAN 5 #4 LOUVER
WATER HEATER			2300	17	30	20	18	150			EXHAUST FAN 7
EXHAUST FAN 3	150			19	20	20	20	100			EXHAUST FAN 4
H-6 ELEV. EQUIP'T. RM HEATER	1250			21	20	20	22	100			LOUVER 1
H-5 REST RM. WALL HEATER		1250		23	20	20	24		900		SPARE
LOUVER 6 OVERHEAD DOOR	1250			25	20	20	26	100			LOUVER 7
OVERHEAD DOOR D4		1250		27	30	20	28		600		OVERHEAD DOOR D5
OVERHEAD DOOR D4			1250	29	30	20	30		600		OVERHEAD DOOR D5
HVAC	2400			31	30	20	32	500			OVERHEAD DOOR
HVAC		2400		33	30	20	34	900			WATER COOLER
ELEVATOR CAB LIGHT		150		35	20	40	36		4200		WATER HEATER
ELEVATOR PIT LIGHT	900			37	20	40	38	4200			WATER HEATER
LOUVER #6		900		39		40		900			EMERGENCY LIGHTS
SPACE				41		42					SPACE
SUBTOTAL	8350	10978	8050			9250	5000	7534			
VOLTAGE	240V/120V - 3 Ø, 4 WIRE S/N			TOTAL WATTS L1		17600		PANEL NO.		A	
MAIN BREAKER	MAIN LUGS ONLY 225 AMP BUS			TOTAL WATTS L2		15920		LOCATION		MCC	
MOUNTING				TOTAL WATTS L3		16489					
				TOTAL WATTS		50012					

* GFI

SYSTEM PANEL BOARD B											
DIRECTORY	WATTS LOAD			CIRC. AMPS	AMPS	CIRC. #	WATTS LOAD			DIRECTORY	
	L1	L2	L3				L1	L2	L3		
SPARE	900			1	20	20	2	900			ELEVATOR LIGHT
SPARE		900		3	20	20	4	900			SPARE
TELEMETRY BUBBLER PANEL	900			5	20	20	6	600			48" FLOW TRANSMITTER
SLUICE GATE		900		7	20	15	8	600			30" FLOW TRANSMITTER
SPARE	600			9	15	15	10	600			WETWELL BUBBLER SYSTEM
FIRE ALARM PANEL		600		11	15	15	12	400			PH SYSTEM (ANALYZER)
INTRUSION	600			13	15	15	14	400			GAS DETECTOR SYSTEM
INSTRUMENTATION SPARE		600		15	15	20	16	900			COMPRESSOR BUBBLER SYSTEM
WPS POWER & STATION	900			17	20	20	18	900			ETA CONTROL PANEL #1
SPARE				19	20	20	20	900			" " " #2
SPARE				21		20	22	900			" " " #3
SPARE				23		24	24	900			" " " #4
SUBTOTAL	3000	3000				2500	2800				
VOLTAGE	240V/120V - 1 Ø, 3 WIRE S/N			TOTAL WATTS L1		5500		PANEL NO.		B	
MAIN BREAKER	MAIN LUG ONLY 100 AMP BUS			TOTAL WATTS L2		5800		LOCATION		MCC	
MOUNTING				TOTAL WATTS		11,300					



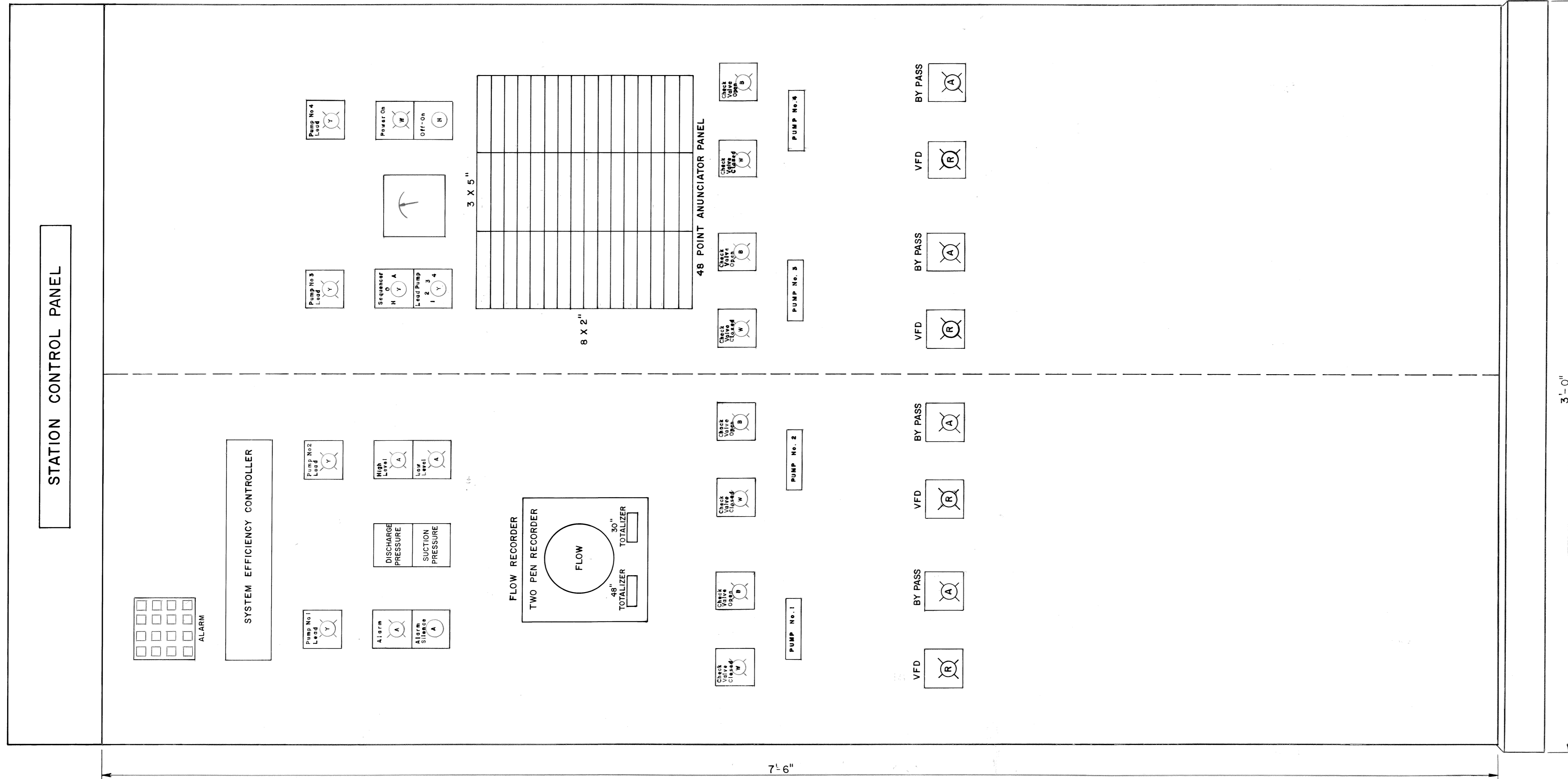
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
3-17-92	R.E.M.	REVISED
10/89	R.E.M.	REV. PANELS A & B ADDED SECT. B-B

CITICO II PUMPING STATION

MOTOR CONTROL CENTER

CITY OF CHATTANOOGA, TENNESSEE

DSGN	REM	8/91	HENSLEY-SCHMIDT, INC.	DRAWING NO.
DRWN	RLS	8/91	CONSULTANTS	6685-37C
CHKD	Gmc	6/11	ATLANTA · CHATTANOOGA · RALEIGH	E5.2
APPR	ADS	9/91	VALDOSTA · KNOXVILLE · ORLANDO	



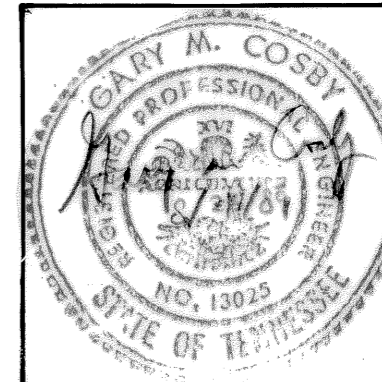
3		
2		
1	3-17-92	RECORD
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION

CITICO II PUMPING STATION

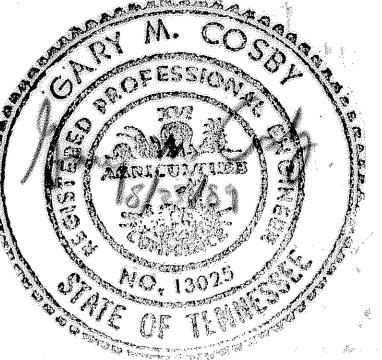
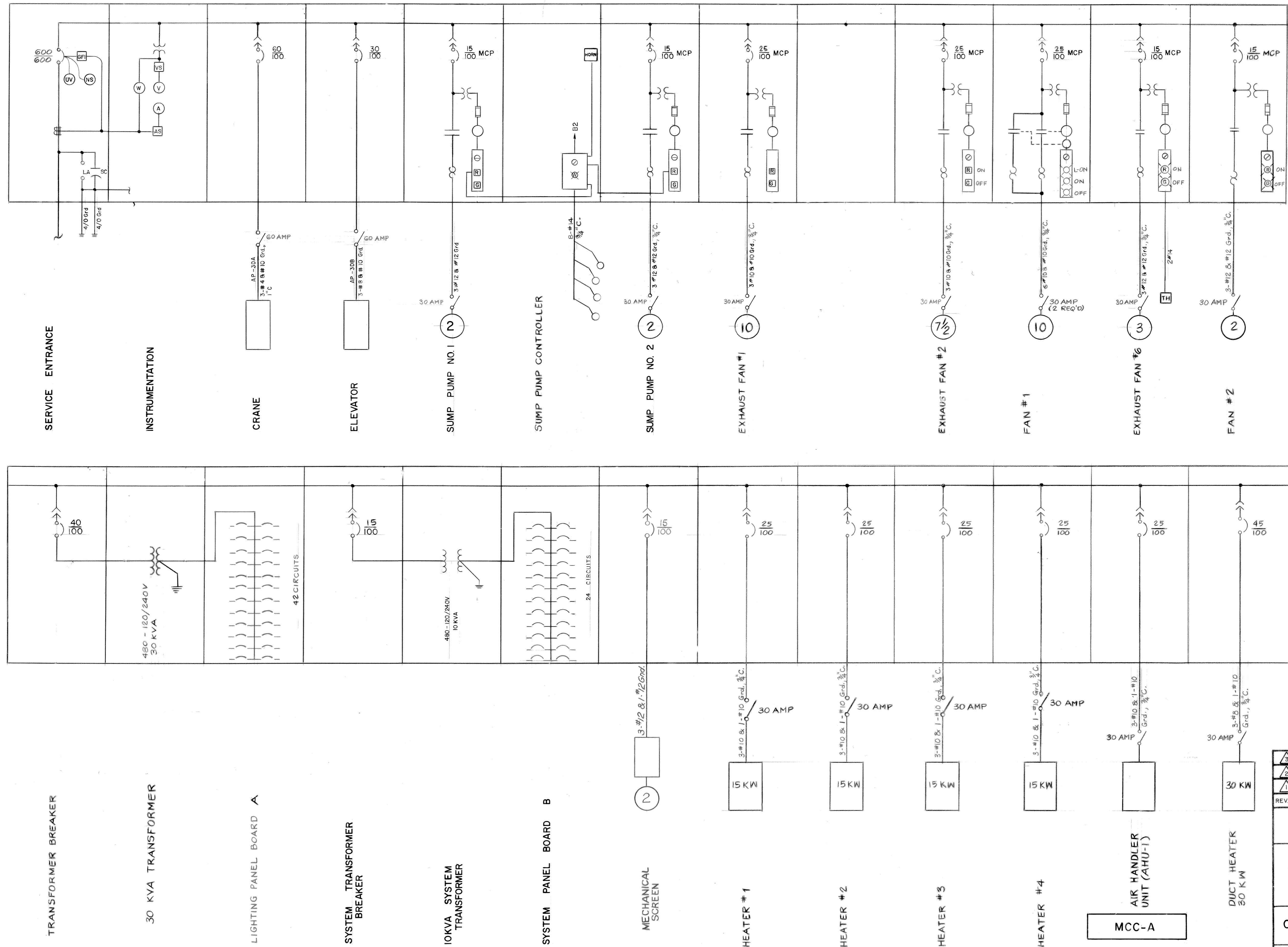
STATION CONTROL PANEL

CITY OF CHATTANOOGA, TENNESSEE

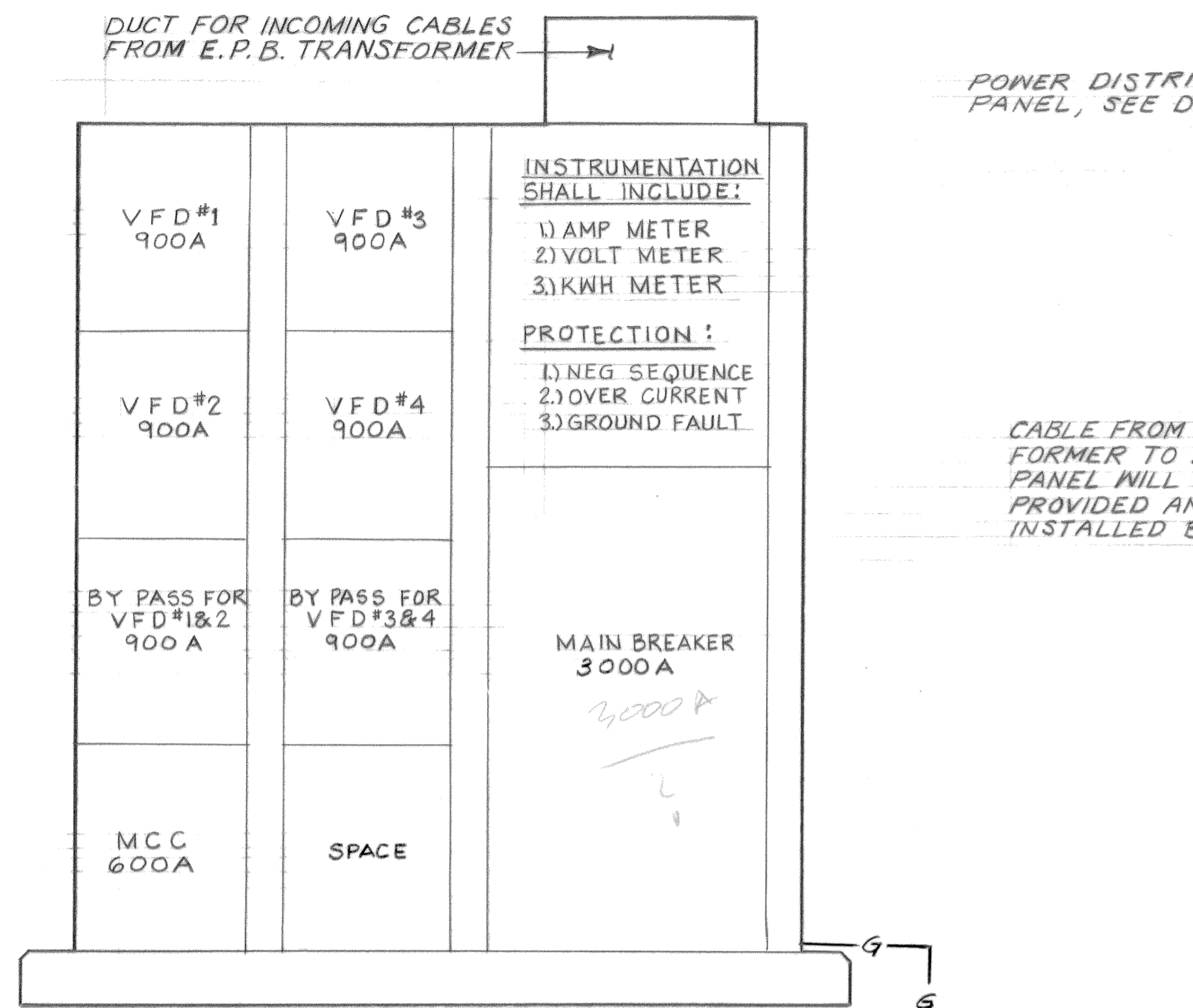
DSGN	R I D	8/80	HENSLEY - SCHMIDT, INC. CONSULTANTS ATLANTA - CHATTANOOGA - JACKSON KNOXVILLE - NASHVILLE	DRAWING NO.	6685-37C
DRWN	R W G	8/80		E6.1	
CHKD	G A C	8/81			
APPR	A D S	8/81			



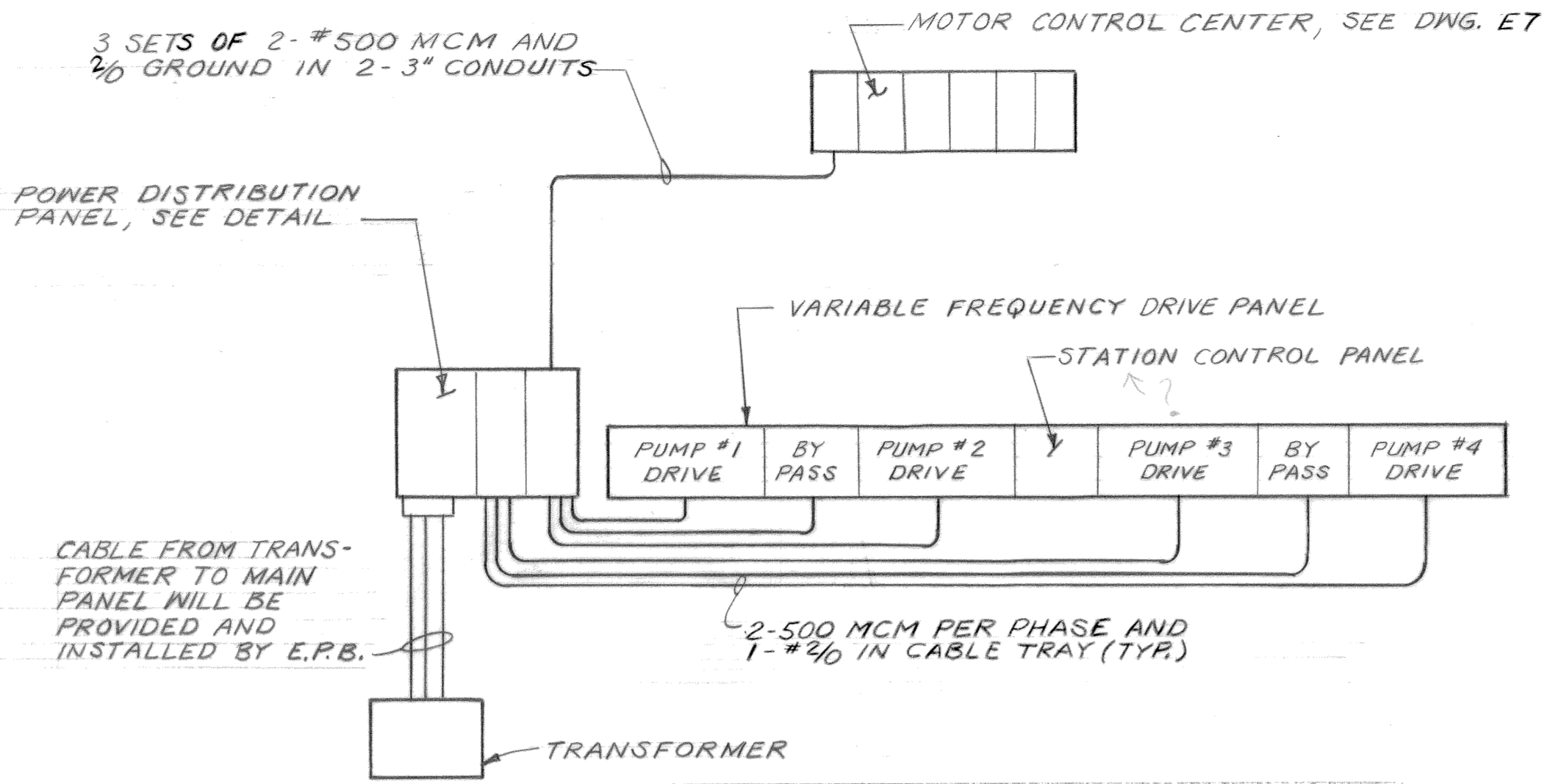
PANEL FRONT



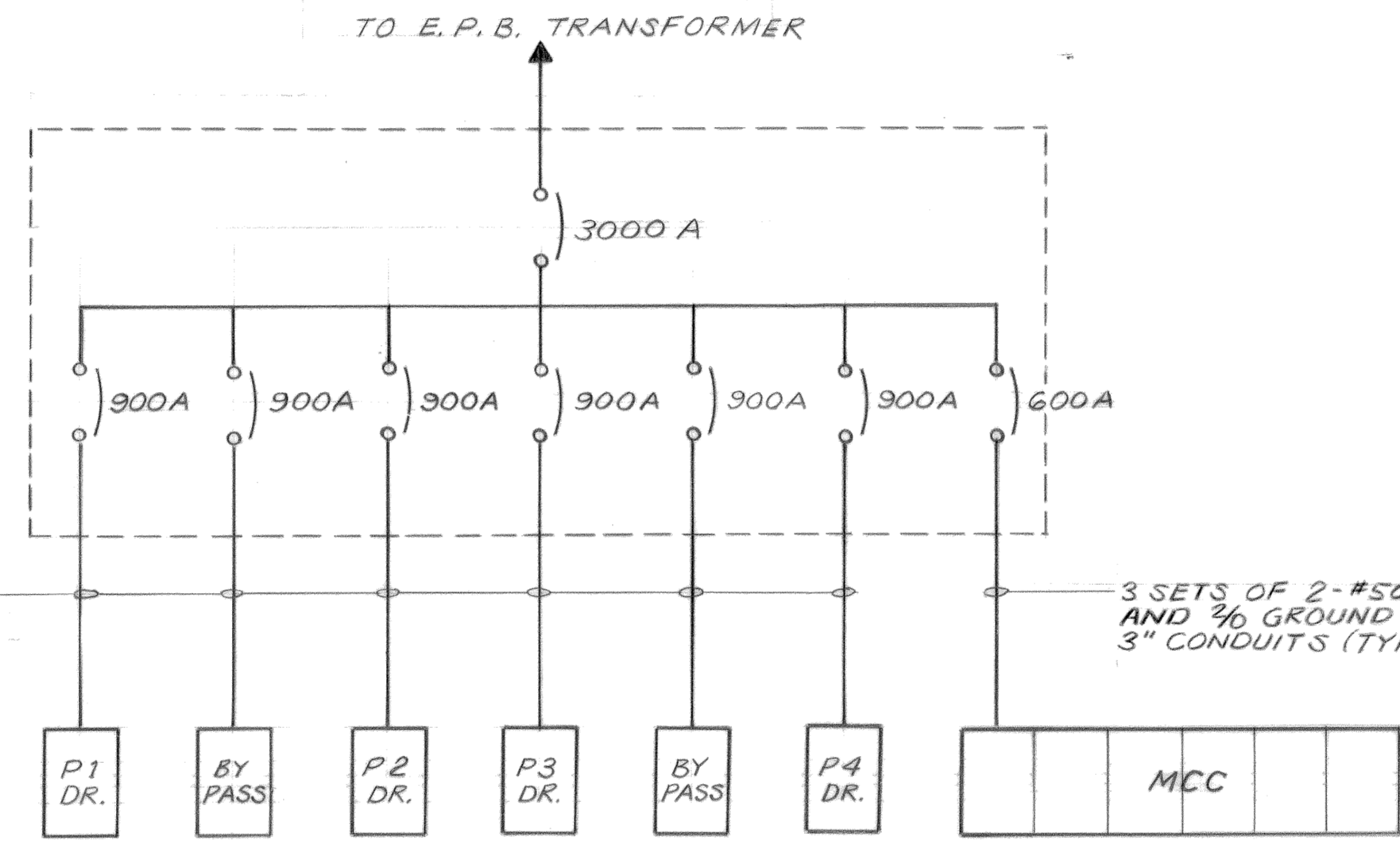
3			
2	3-17-92	RECORD	
1	R.E.M.	REV. GROUNDING FOR HTR. 1-5, AIR HANDLER & DUCT HTR.	
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION	
CITICO II PUMPING STATION			
MCC SINGLE LINE DIAGRAM			
CITY OF CHATTANOOGA, TENNESSEE			
DSGN	R.L.D. 8/80	HENSLEY-SCHMIDT, INC.	DRAWING NO.
DRWN	W.B.H. 8/80	CONSULTANTS	6685-37C
CHKD	G.M.C. 8/81	ATLANTA - CHATTANOOGA - JACKSON	E7.2
APPR	A.D.S. 8/81	KNOXVILLE - NASHVILLE	



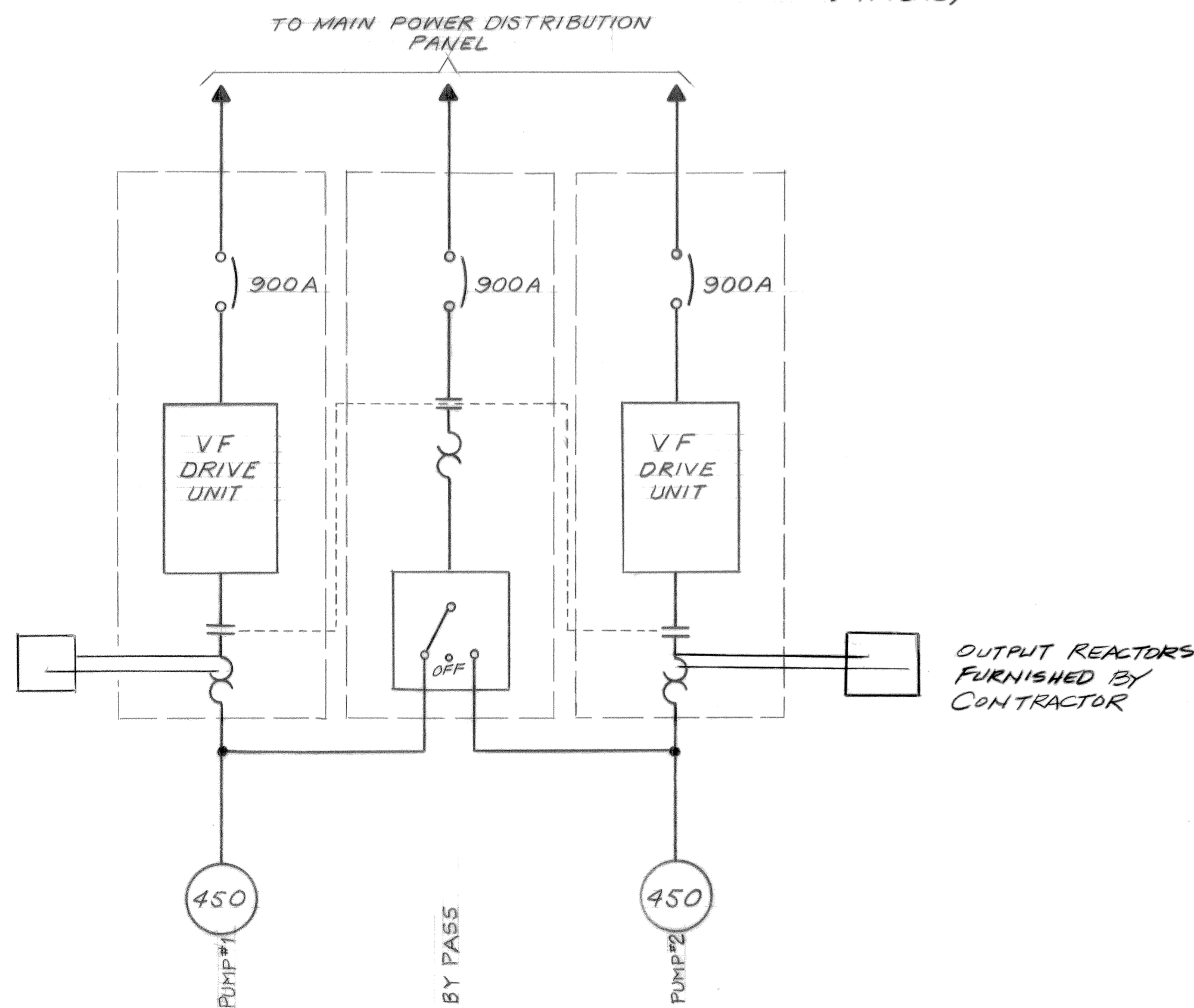
POWER DISTRIBUTION PANEL DETAIL



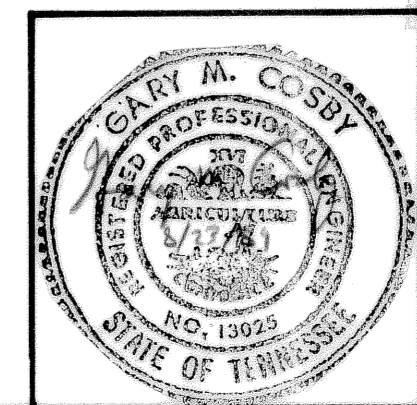
ELECTRICAL PANELS LAYOUT PLAN VIEW



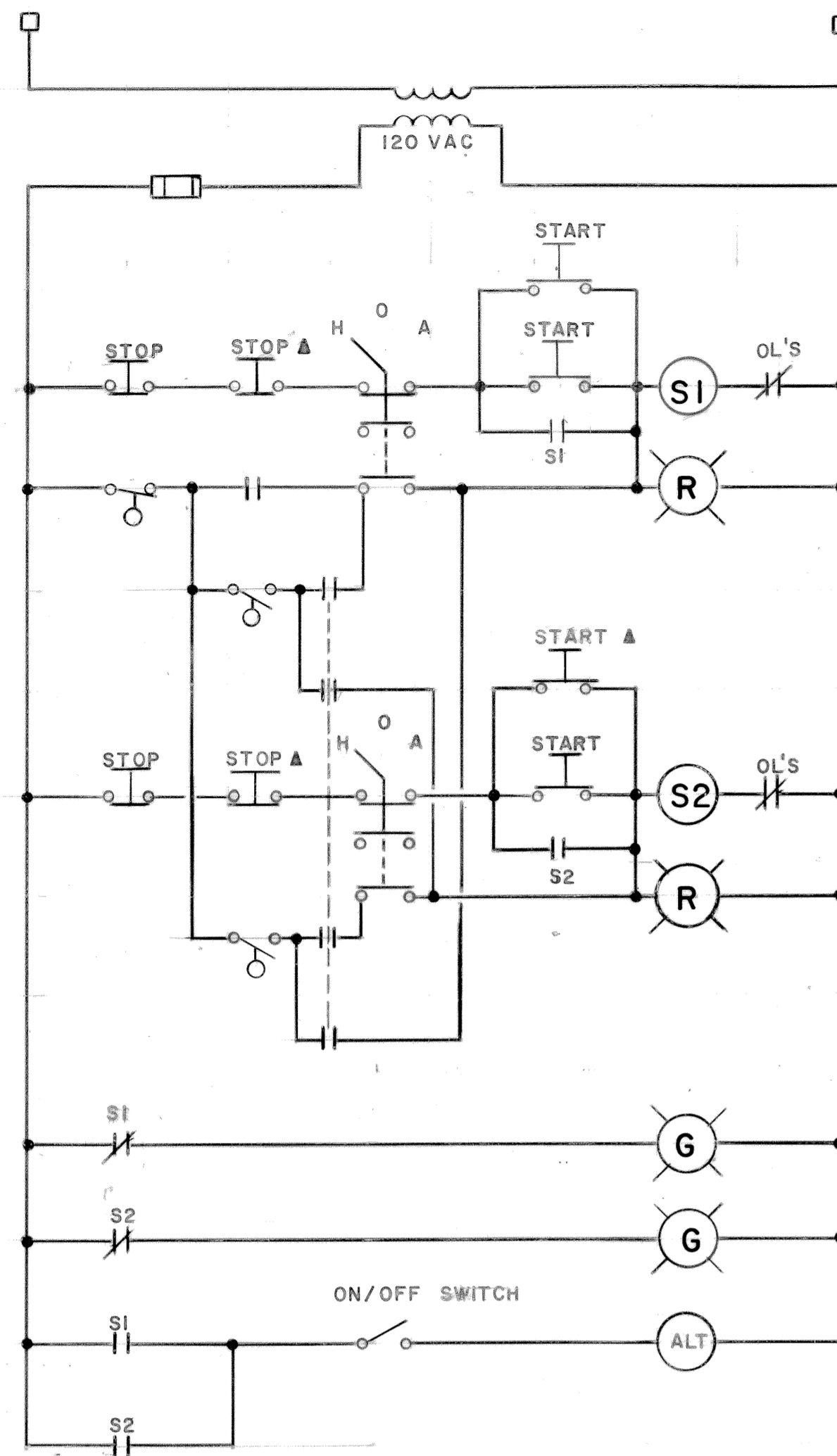
SINGLE LINE DIAGRAM



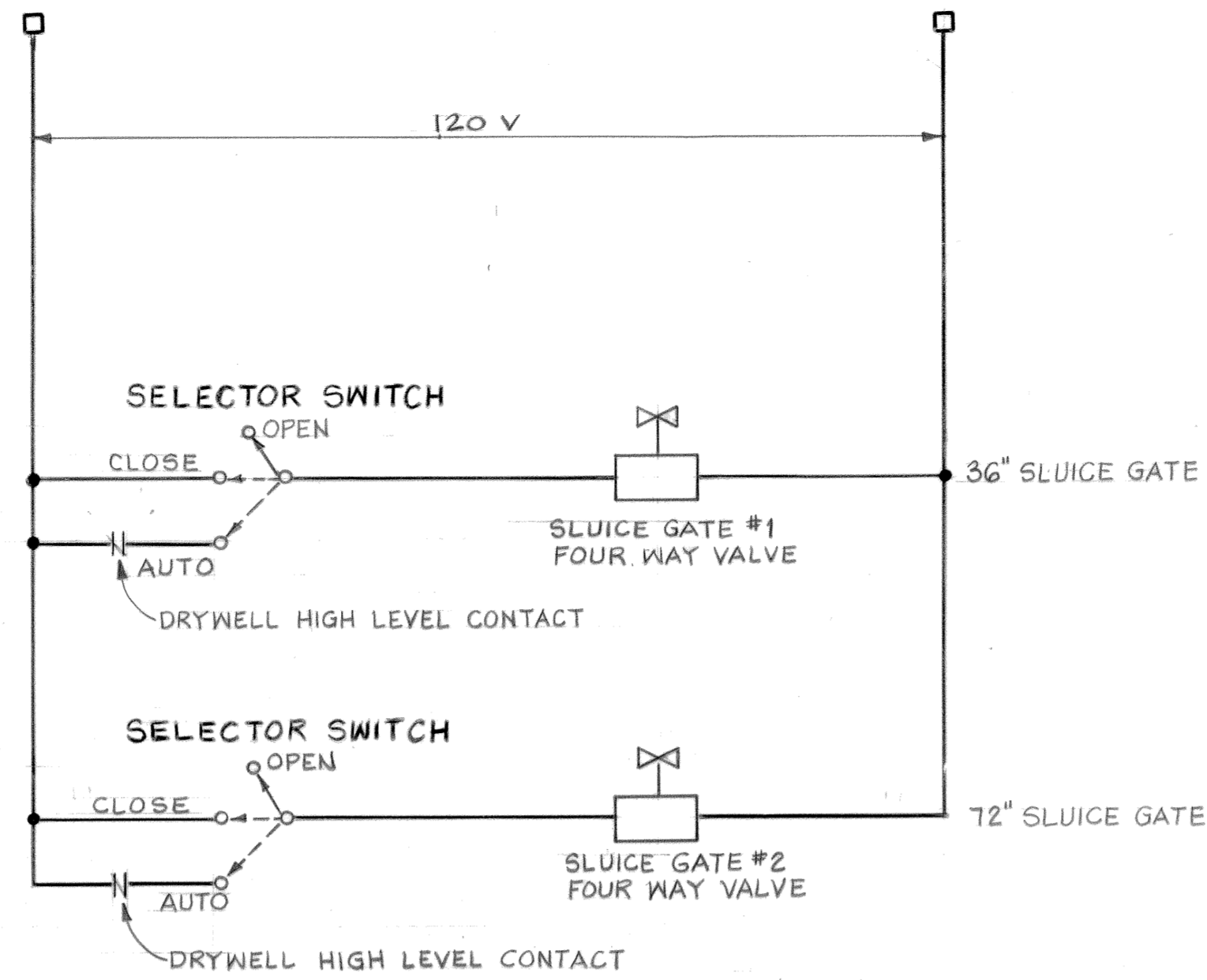
SINGLE LINE DIAGRAM TYPICAL FOR PUMPS 3 & 4



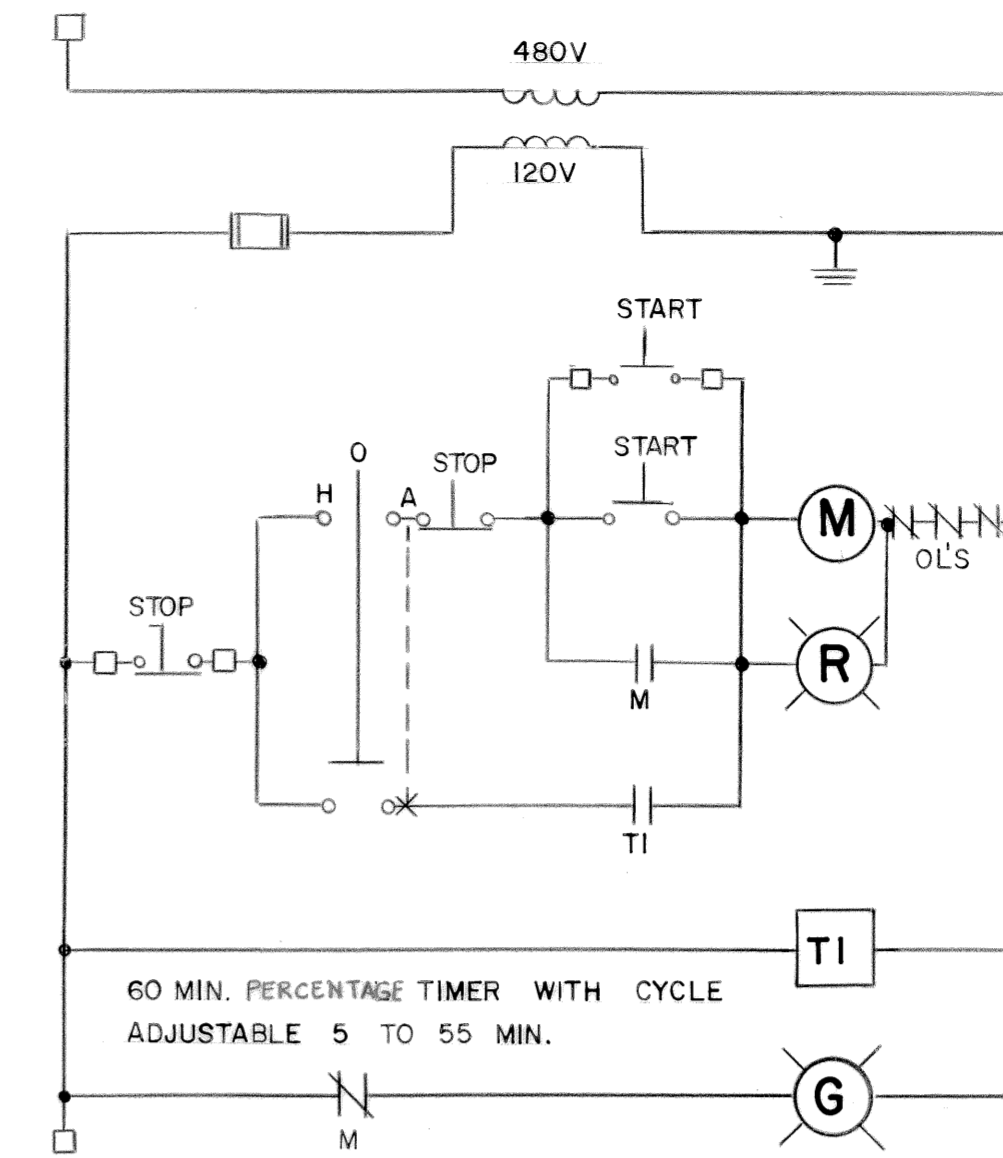
3		
2		
1	3-17-92	RECORD
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
CITICO II PUMPING STATION		
POWER DISTRIBUTION PANEL & DIAGRAMS		
CITY OF CHATTANOOGA, TENNESSEE		
DSGN	REM	8/80
DRWN	PLS	8/80
CHKD	GMC	8/81
APPR	ADS	8/89
HENSLEY-SCHMIDT, INC. CONSULTANTS		DRAWING NO. 6685-37C
ATLANTA - CHATTANOOGA - RALEIGH		E8.1
VALDOSTA - KNOXVILLE - ORLANDO		



SUMP PUMPS

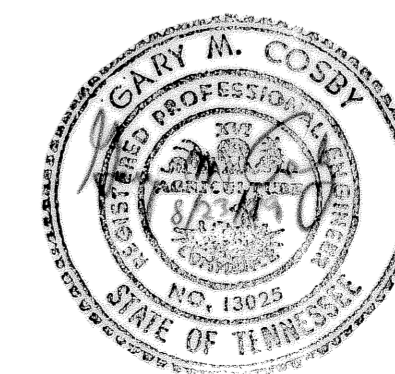


SLUICE GATE SOLENOID VALVE CONTROL
(TYPICAL FOR TWO)

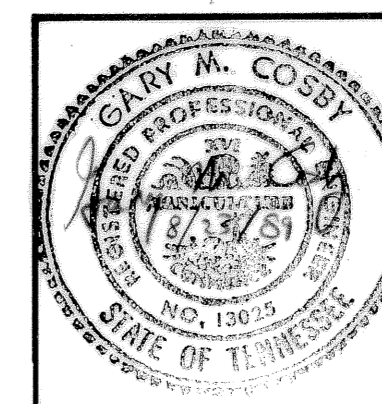
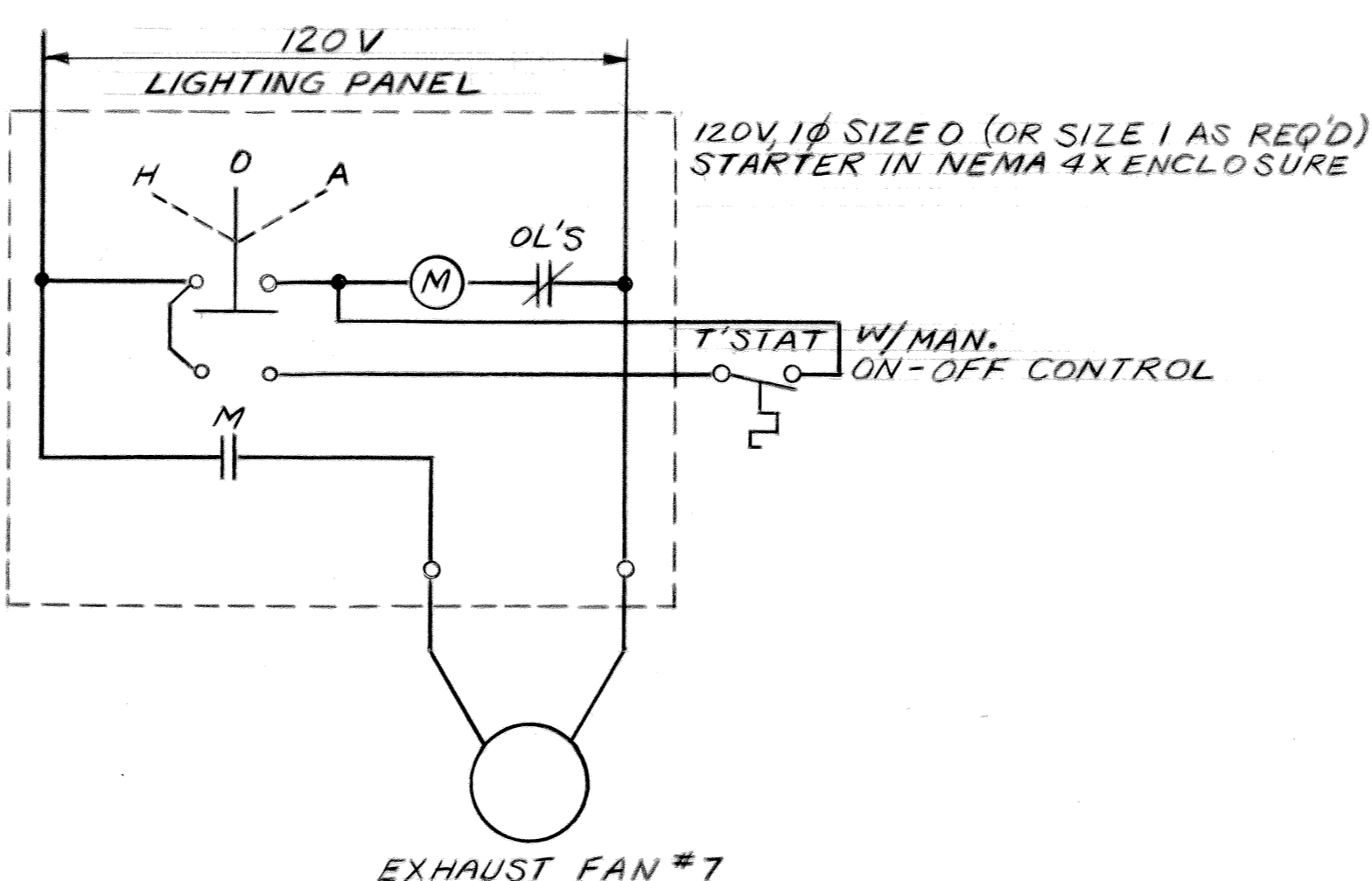
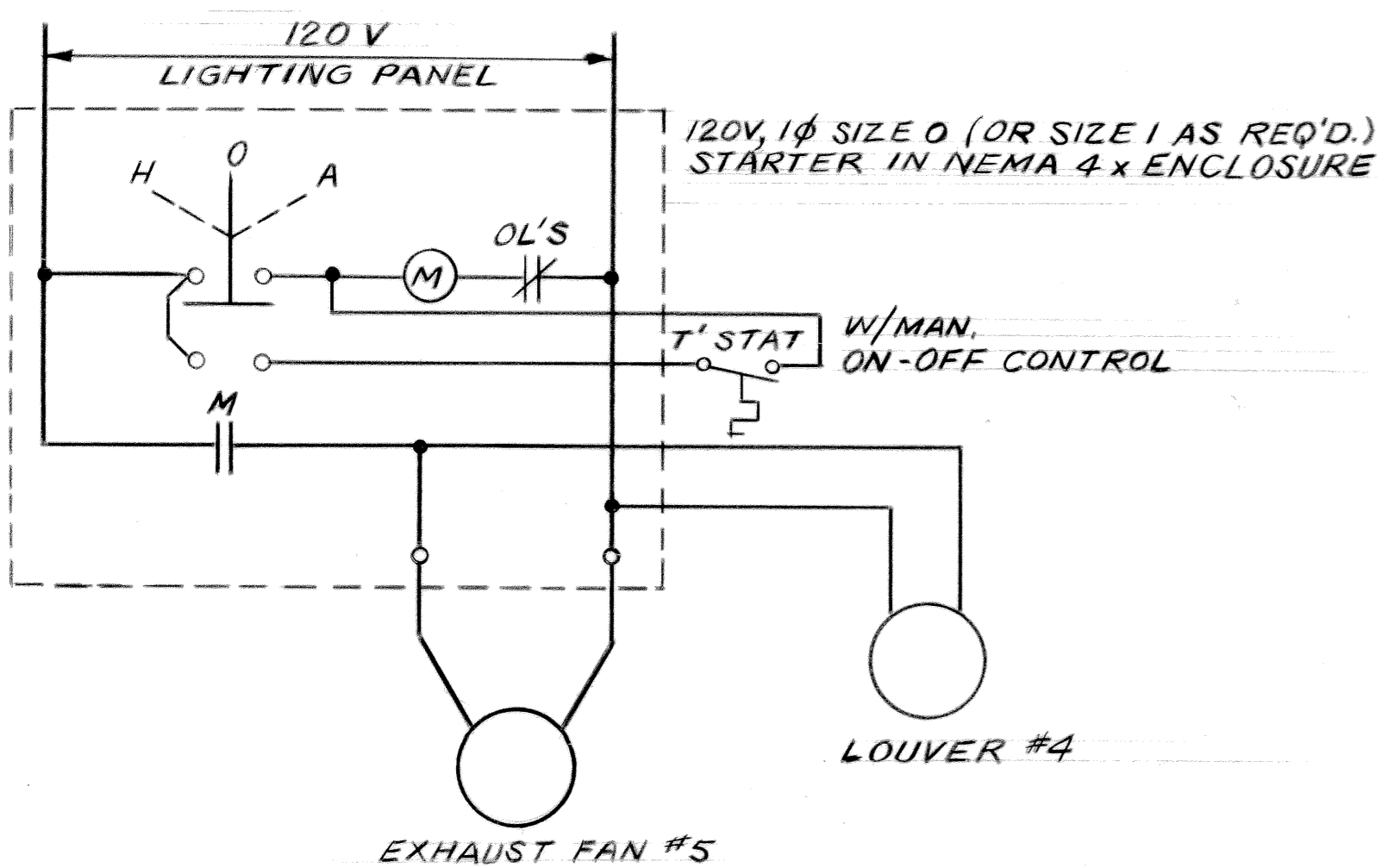
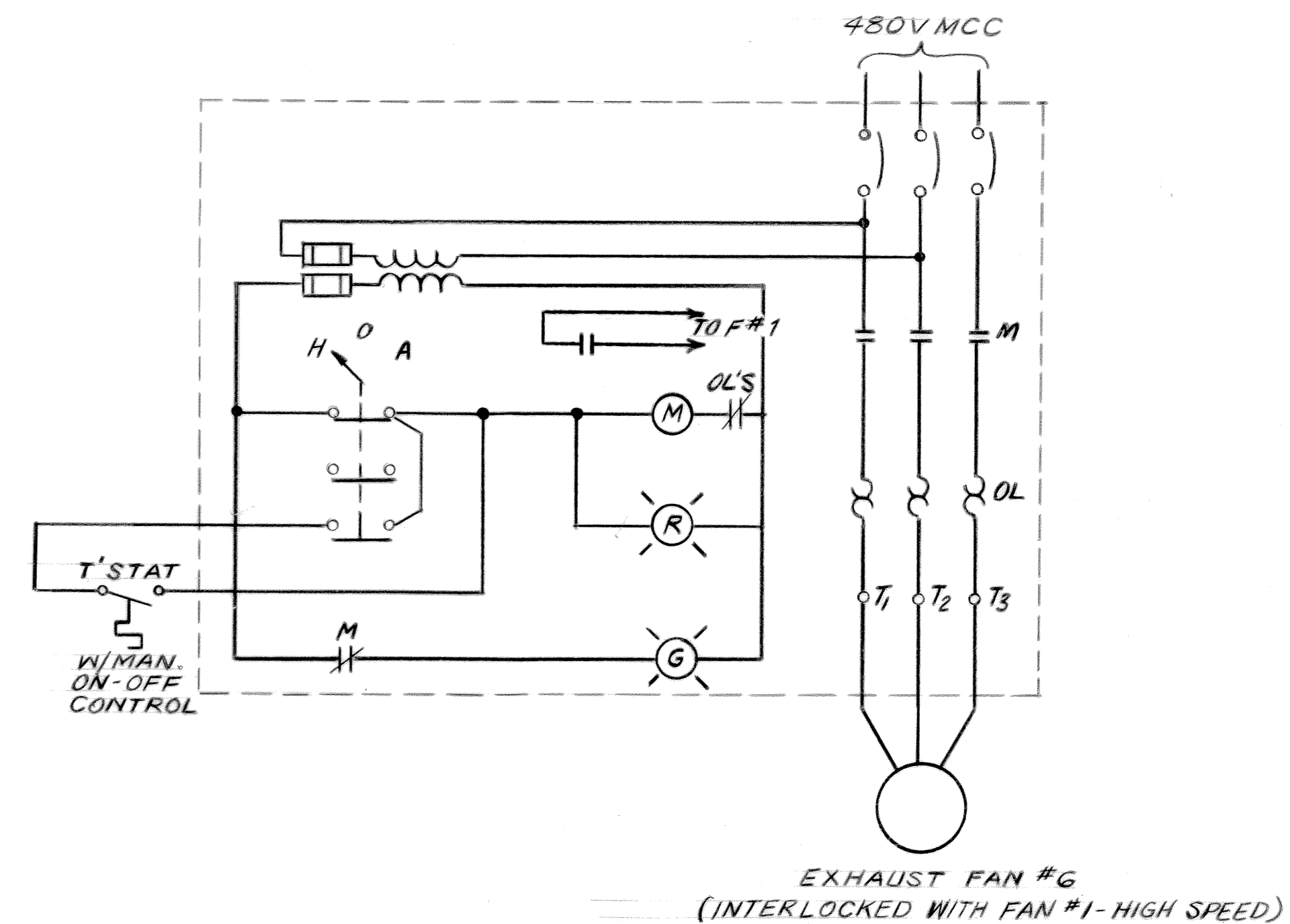
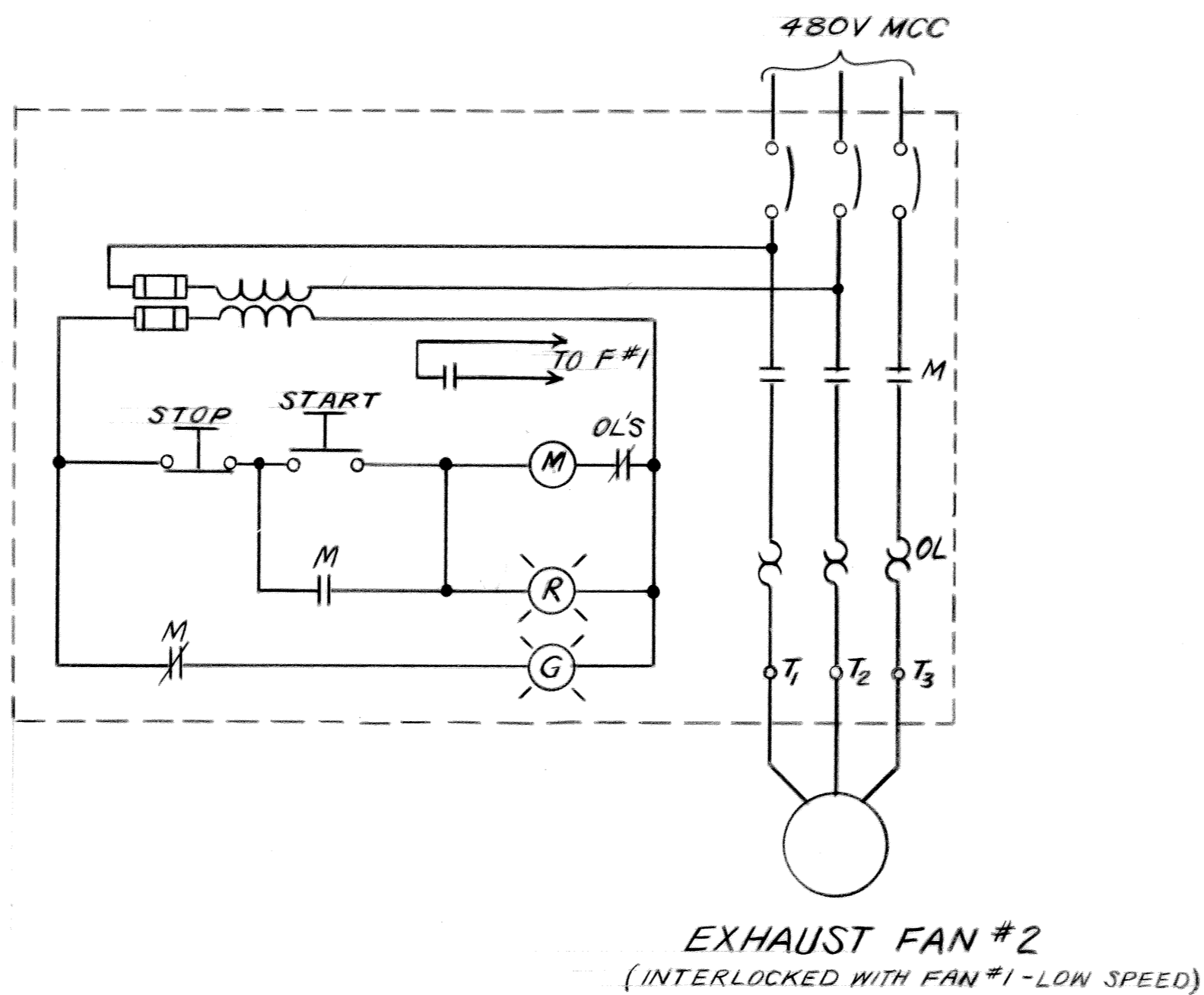
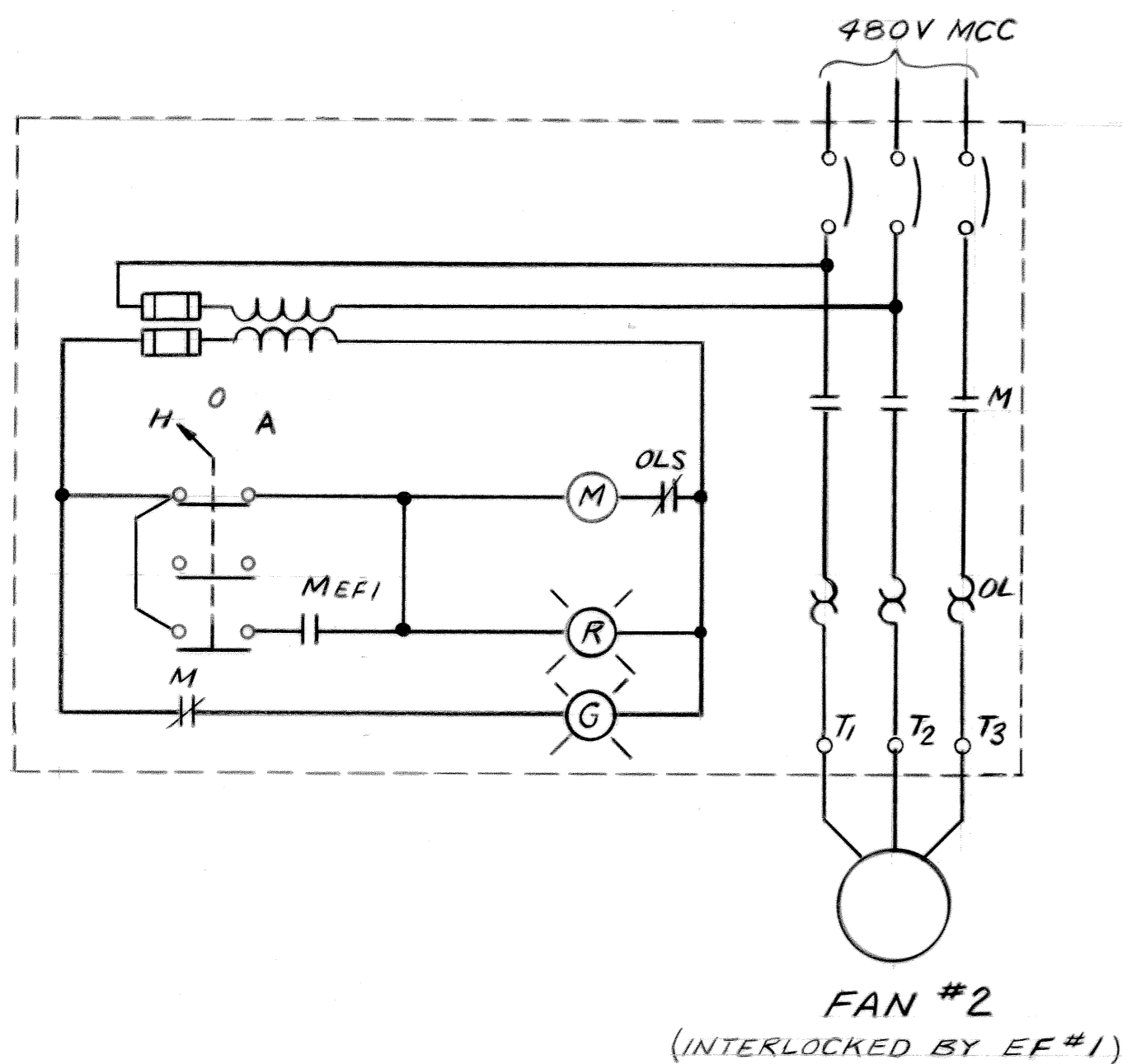
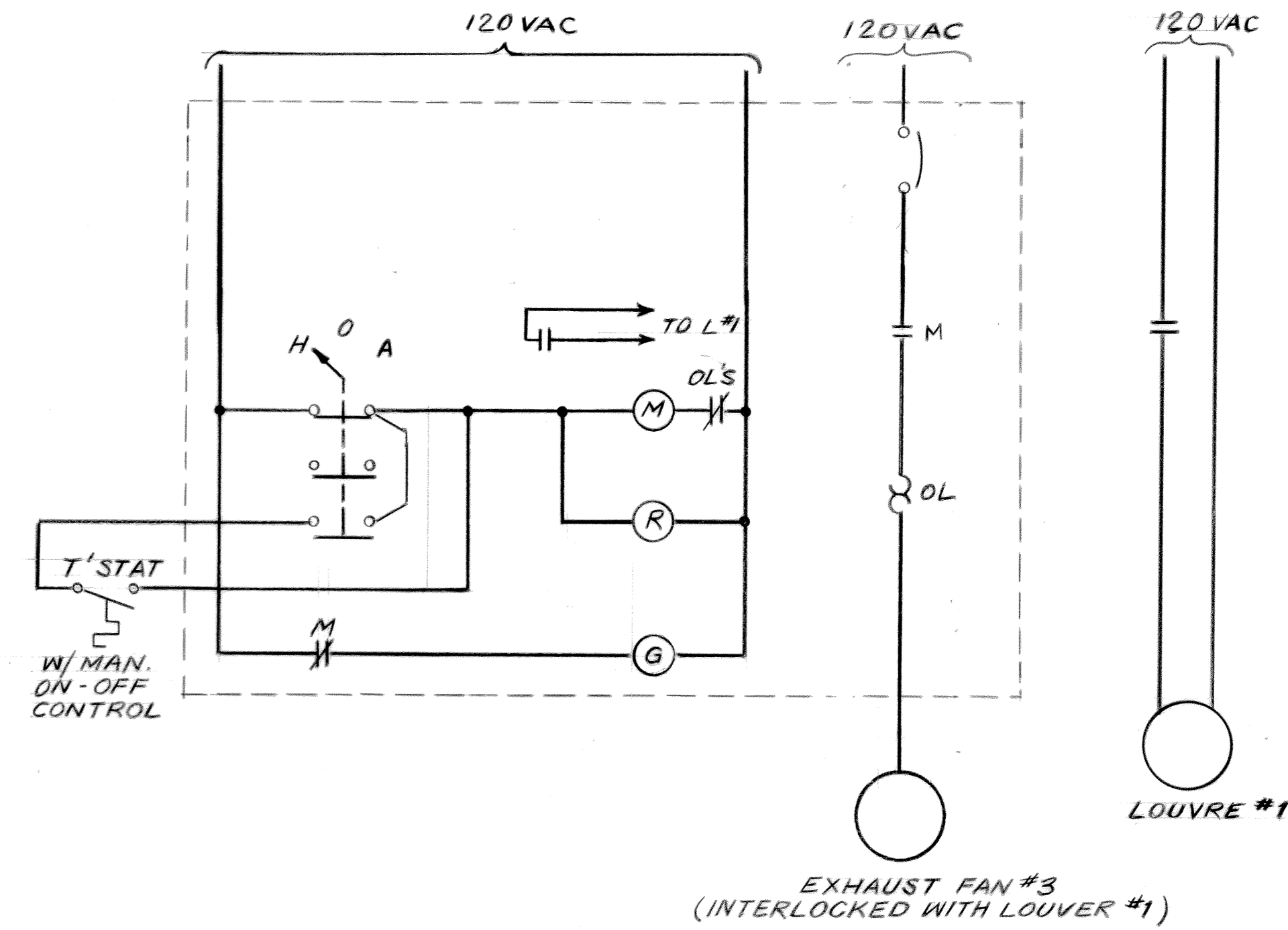
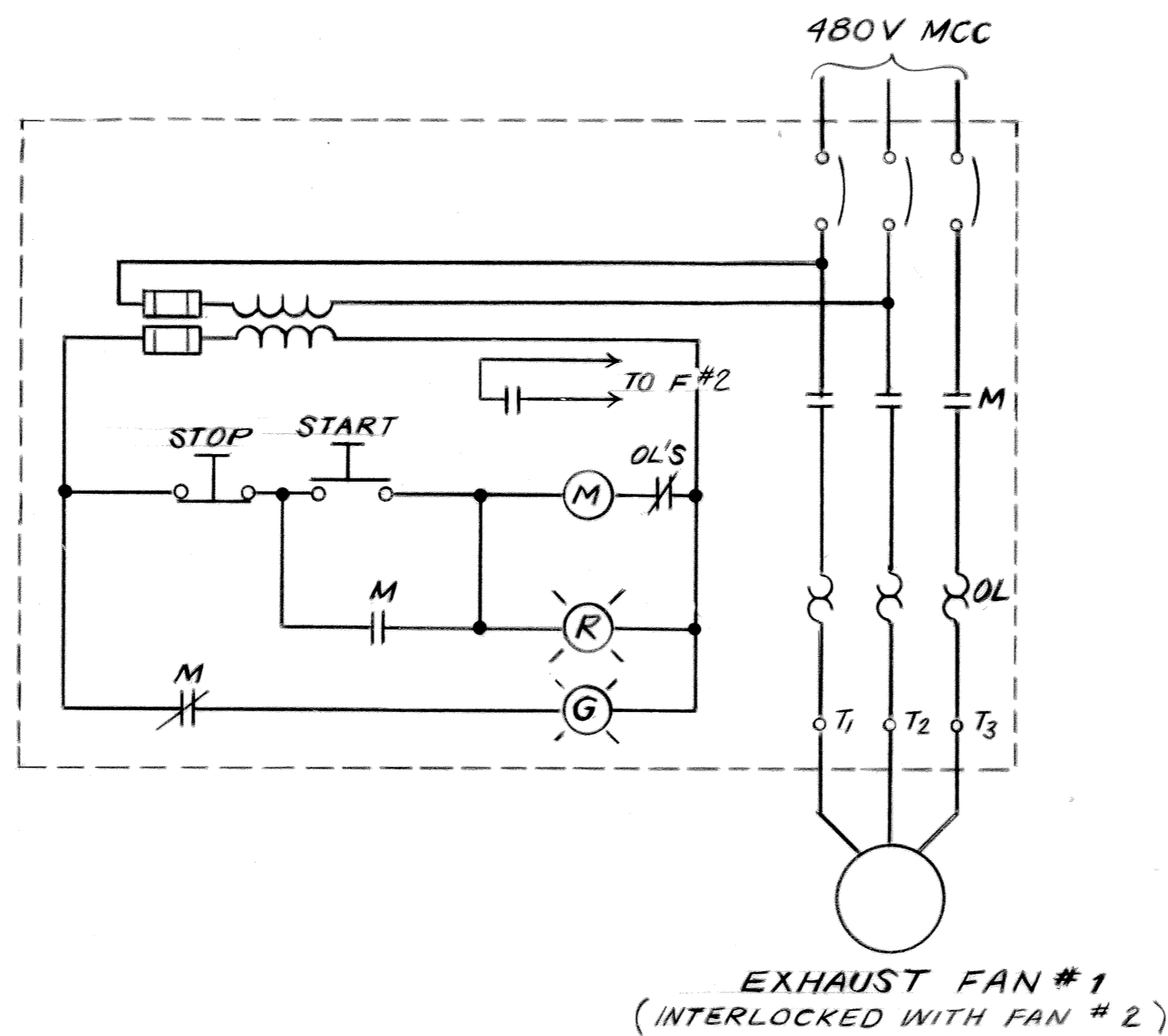
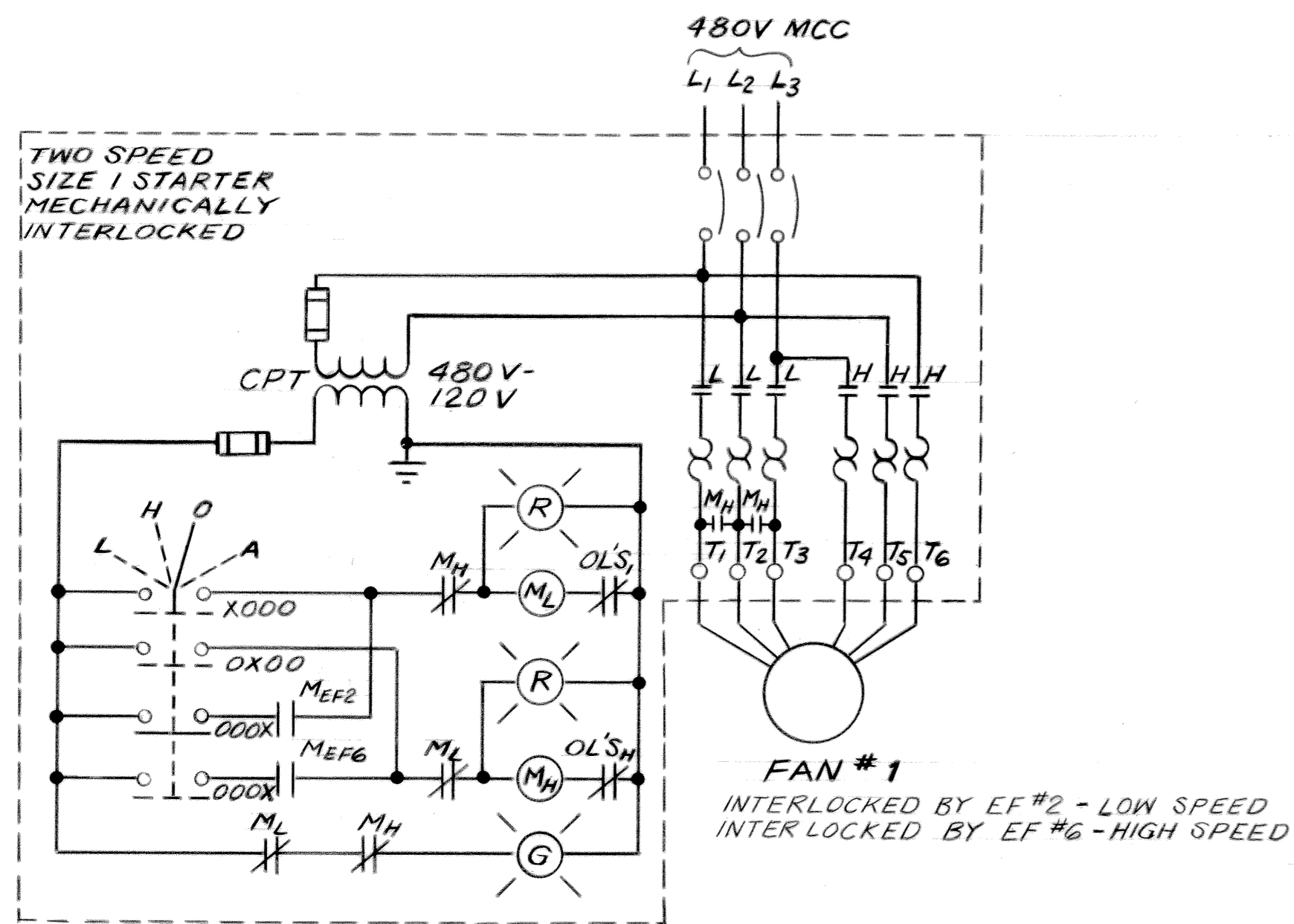


MECHANICAL SCREEN

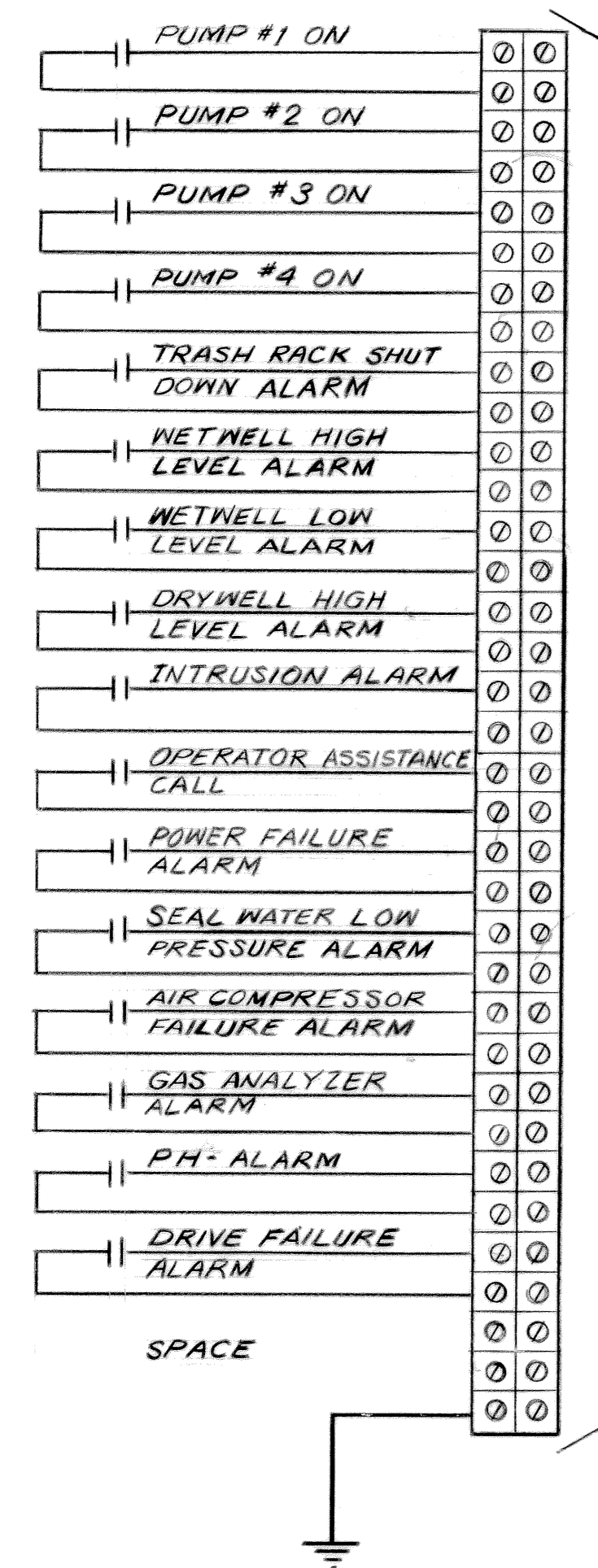
BRUNING 441 132 327563



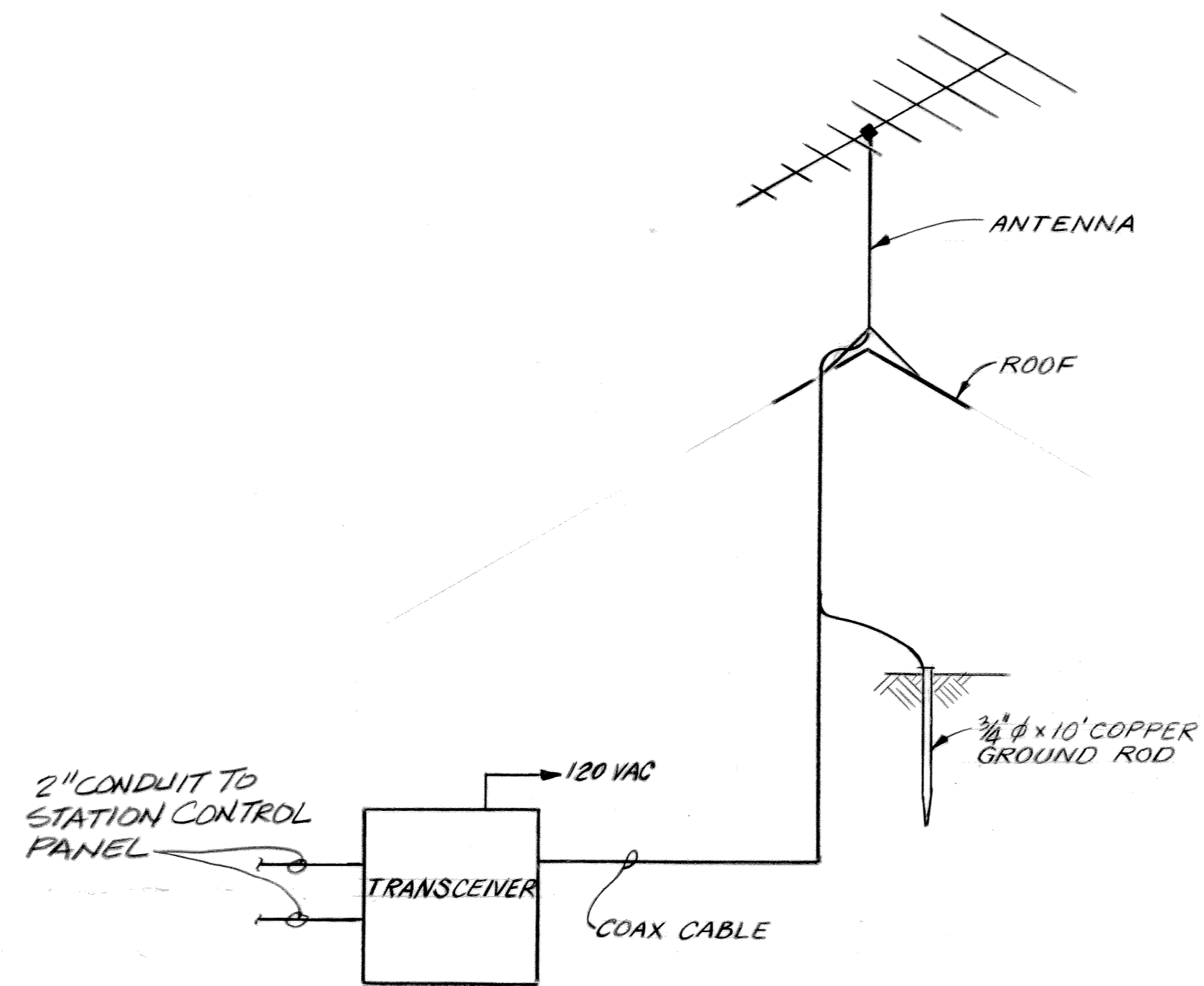
3		
2		
1	3-17-92	RECORD
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION
CITICO II PUMPING STATION		
CONTROL DIAGRAMS (1 OF 2)		
CITY OF CHATTANOOGA, TENNESSEE		
DSGN	RLD 8/80	HENSLEY-SCHMIDT, INC.
DRWN	WRH 8/80	CONSULTANTS
CHKD	Gmc 8/80	ATLANTA - CHATTANOOGA - JACKSON
APPR	Ads 8/80	KNOXVILLE - NASHVILLE
DRAWING NO.		6685-37C
		E9.1



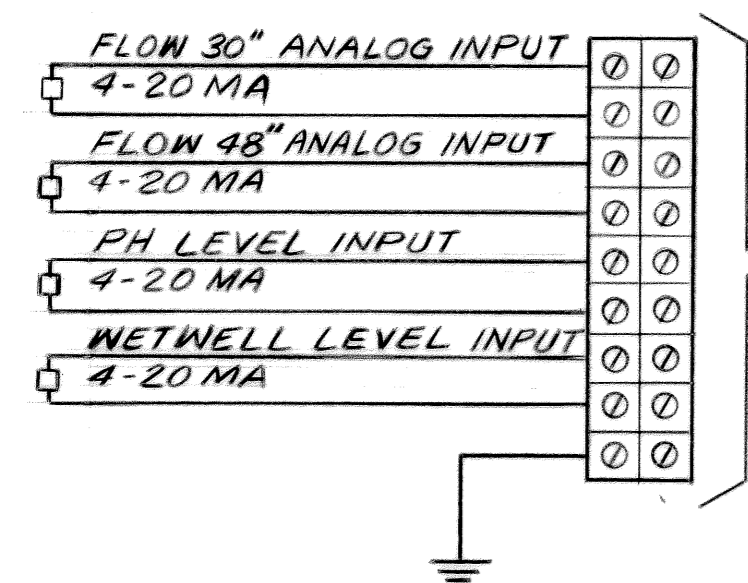
REVNO	RELEASED BY	DESCRIPTION OF REVISION
3-17-92		RECORDED
CITICO II PUMPING STATION		
CONTROL DIAGRAMS		
(2 OF 2)		
CITY OF CHATTANOOGA, TENNESSEE		
DSGN	REM	DATE
DRWN	RLS	8/89
CHKD	CMC	8/89
APPR	ADS	8/89
HENSLEY-SCHMIDT, INC. CONSULTANTS		DRAWING NO. 6685-37C
ATLANTA · CHATTANOOGA · RALEIGH		E10.1
VALDOSTA · KNOXVILLE · ORLANDO		



TERMINAL STRIP (STATUS & ALARM) INSTALLED PER C2I DRAWINGS IN PUMP CONTROL PANEL (SHIELDED CABLES)



TELEMETRY BLOCK DIAGRAM



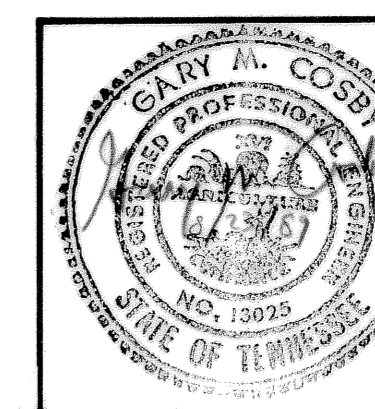
TERMINAL STRIP (ANALOG INPUT) IN PUMP CONTROL PANEL (SHIELDED CABLES)

3		
2		
1	3-17-92	RECORD
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION

CITICO II PUMPING STATION

TELEMETRY

CITY OF CHATTANOOGA, TENNESSEE



DSGN	REP	8/87	HENSLEY-SCHMIDT, INC. CONSULTANTS ATLANTA - CHATTANOOGA - RALEIGH VALDOSTA - KNOXVILLE - ORLANDO	DRAWING NO. 6685-37C E11.1
DRWN	RLS	8/87		
CHKD	GMC	8/87		
APPR	ADS	8/87		

I. POWER SYMBOLS

- Wall, single, 120V receptacle
- Wall, duplex, 120V receptacle
- Wall, special (240V, 1 phase or 480V, 3 phase) receptacle
- Floor, single, 120V receptacle
- Floor, duplex, 120V receptacle
- Floor, special (240V, 1 phase or 480V, 3 phase) receptacle
- Surface mounted panel board
- Flush mounted panel board

II. LIGHTING SYMBOLS

- Incandescent fixture identified by "A" plus a number
- Mercury vapor fixture identified by "M" plus a number
- Metal halide fixture identified by "H" plus a number
- Higher low pressure sodium fixture identified by "N" plus a number
- Fluorescent fixture identified by "F" plus a number
- Flood light aimed as shown by centerline type, identified by standard letters "A", "M", "H", "N"
- Emergency light - with integral power source
- Emergency light - remote from power source
- Single pole, single throw switch
- Single pole, double throw switch
- Double pole, double throw switch

III. CONTROL SYMBOLS

A. Switches:

- Special switch with indicator "L"
- Limit switch
- Torque switch
- Pressure switch
- Float switch
- Ammeter switch
- Voltmeter switch
- Selector switch 2, 3, or 4 position - single or multiple pole (as defined by control circuit diagram)
- Green process stop pushbutton
- Red process start pushbutton
- Amber process slow start pushbutton
- Green illuminated process stop pushbutton
- Red illuminated process start pushbutton
- Amber illuminated process slow pushbutton
- Stop pushbutton station
- Stop/lockout pushbutton station
- Illuminated stop pushbutton station
- Illuminated stop/lockout pushbutton station
- Start-stop pushbutton station
- Start-stop/lockout pushbutton station
- Illuminated start-stop pushbutton station
- Illuminated start-stop/lockout pushbutton station
- Two function start-stop pushbutton station
- Two function start-stop/lockout pushbutton station

- Illuminated two function start-stop pushbutton station
 - Illuminated two function start-stop/lockout pushbutton station
- B. Relays:
- Standard relay with identifier "L"
 - Time delay relay with identifying number "N"
 - Under voltage relay
 - Negative sequence relay
 - Latching relay with identifier "LR" reset position indicated by superscript bar

GFR Ground fault relay panel

C. Indicating Lights:

- Green indicating light
- Red indicating light
- Amber indicating light
- White indicating light
- Blue indicating light

D. Indicating Meters:

- Meter (as defined by control circuit diagram)
- Ammeter
- Voltmeter
- Wattmeter
- Elapse time meter

E. Transformers:

- Current transformer
- Voltage transformer

F. Miscellaneous:

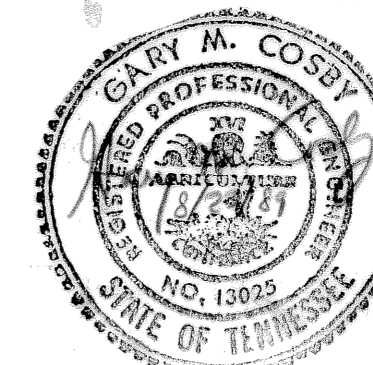
- Fuse size indicated by "N"
- Motor overloads
- Draw out connection
- Diode
- Resistor
- Lightning arrester
- Surge capacitor
- Ground
- Solenoid valve
- Alarm horn
- Bubble tube
- Circuit breaker size indicated by N1 - trip and N2 - frame
- Non-fused disconnect switch size indicated by "N"
- Fused disconnect switch size indicated by N1 - switch and N2 - fuse
- Manual motor starter
- Magnetic motor starter

IV. CONDUIT SYMBOLS

- Ground
- Liquid tight flexible conduit
- Rigid conduit

V. TELEPHONE SYMBOLS

- Wall outlet
- Floor outlet



3			
2			
1	3-17-92	RECORD	
REV. NO.	RELEASED BY	DESCRIPTION OF REVISION	

CITICO II PUMPING STATION

SYMBOLS

CITY OF CHATTANOOGA, TENNESSEE

DSGN R.L.D.	8/80	HENSLEY-SCHMIDT, INC. CONSULTANTS ATLANTA - CHATTANOOGA - JACKSON KNOXVILLE - NASHVILLE	DRAWING NO.
DRWN R.H.	8/80		6685-37C
CHKD GML	8/81		E12.1
APPR			