

SD # 3974

CONSTRUCTION PLANS
FOR
CONTRACT NO. 3
INFLUENT PUMPING STATION
 (PHASE I IMPROVEMENTS)
WASTEWATER TREATMENT PLANT
SOUTHWEST SEWER DISTRICT
ORANGE COUNTY,

FLORIDA

EPA PROJECT NO. C120314

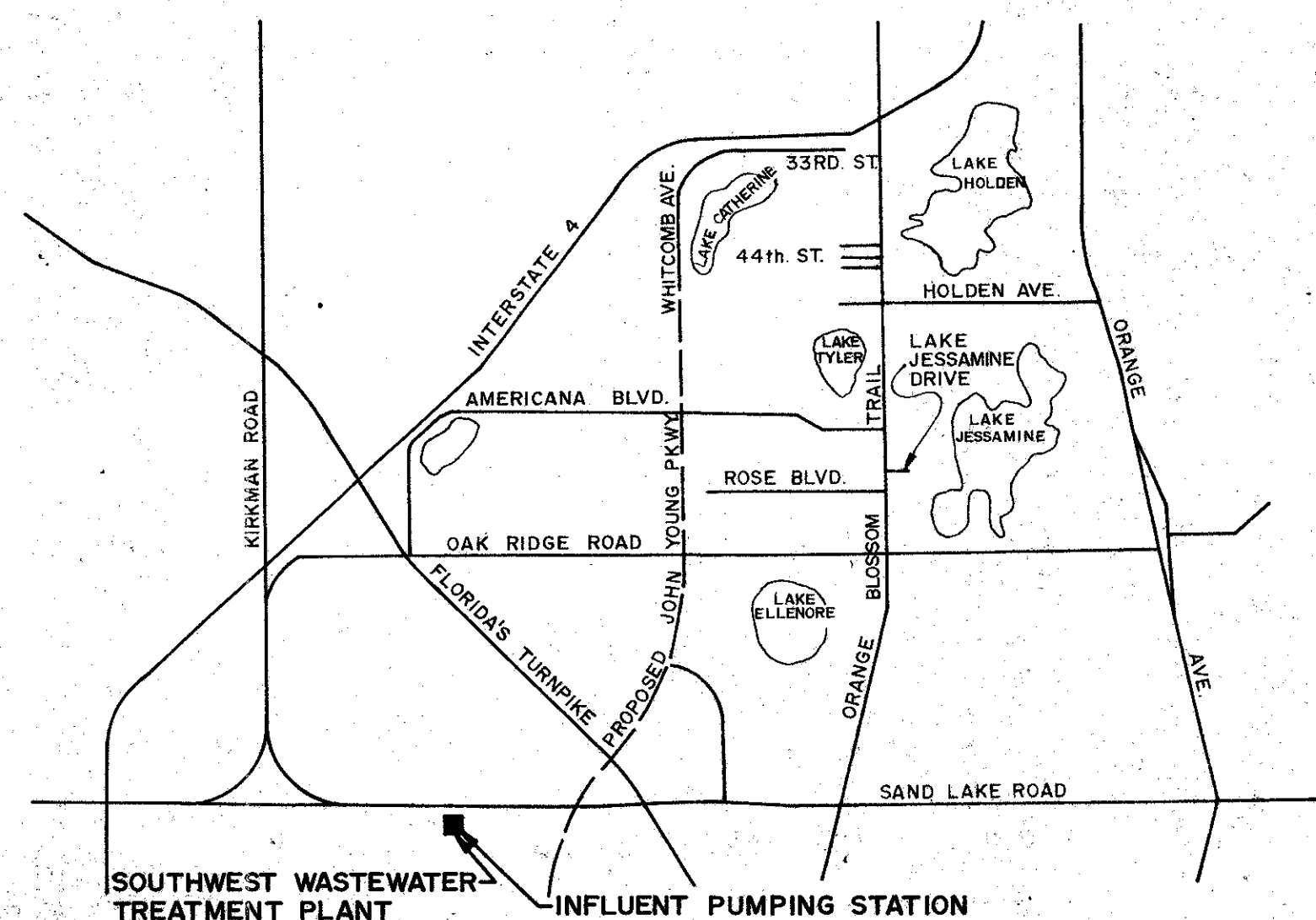
BOARD OF COUNTY COMMISSIONERS

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PAUL PICKETT - *Chairman*
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 KENNETH D. KIETH - *Comptroller*

PUBLIC WORKS ADMINISTRATOR
 CHARLES L. GOODE P.E.
 COUNTY ENGINEER
 THOMAS M. HASTINGS P.E.



LOCATION MAP
SCALE: 1" = 1 MILE

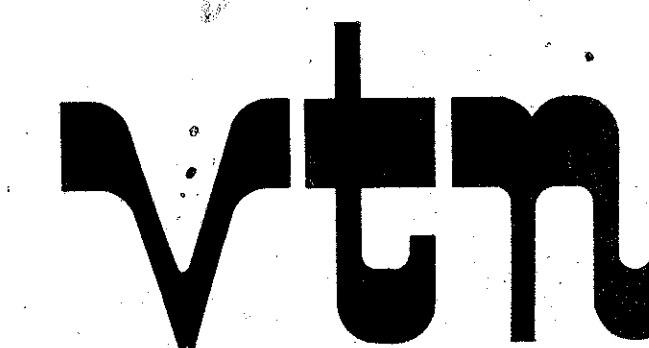
APPROVED FOR ORANGE COUNTY

Charles L. Goode
 CHARLES L. GOODE, P.E.
 PUBLIC WORKS ADMINISTRATOR

"AS BUILT"
 SEPTEMBER 11, 1975

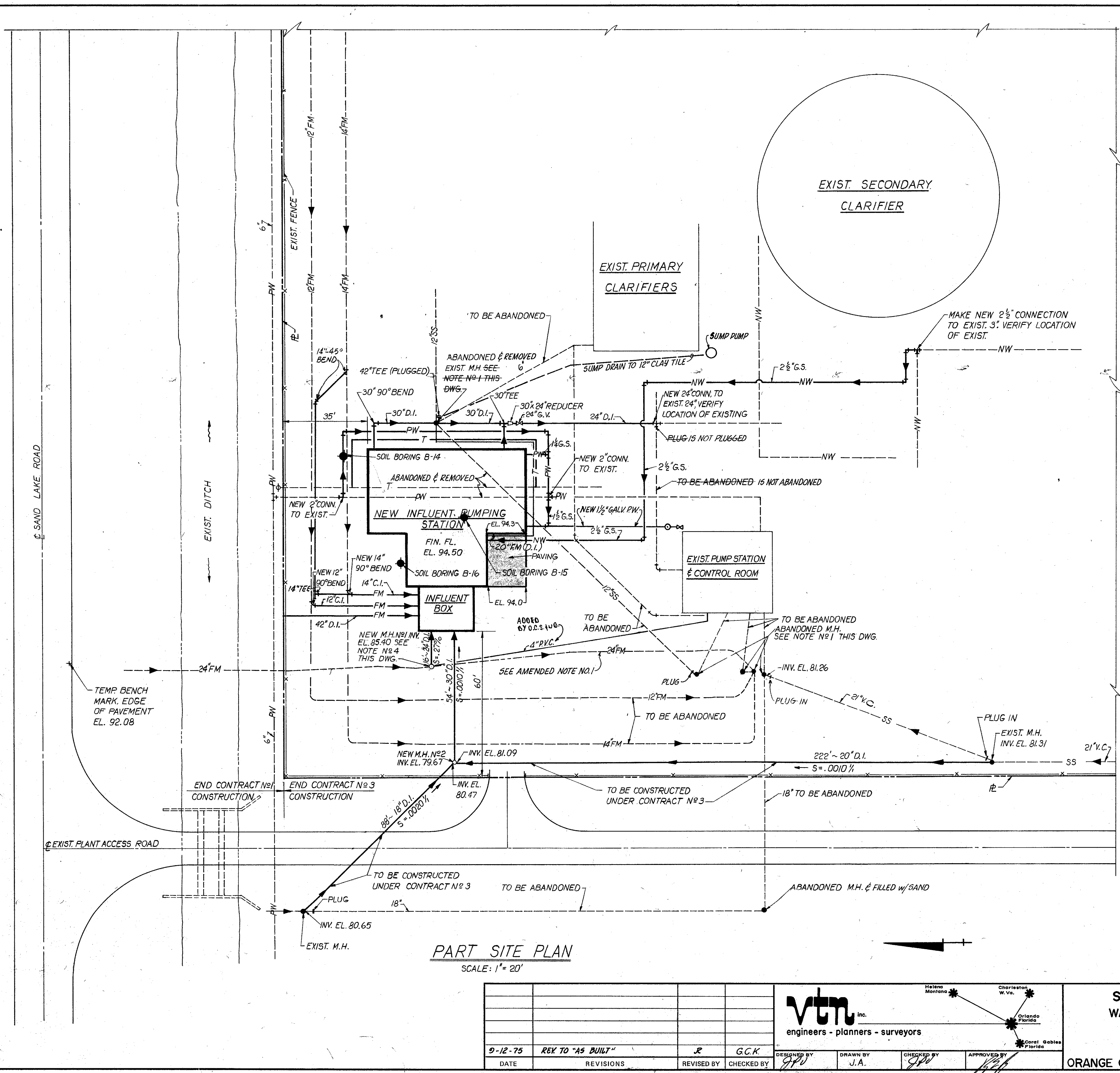
Richard E. Ramsey
 RICHARD E. RAMSEY, P.E.
 FLORIDA REGISTRATION NO. 12593

Prepared By:



engineers · planners · surveyors

File No. F-2521
MAY 1973



LEGEND

- FM — NEW FORCE MAIN
- - - FM - - - EXISTING FORCE MAIN
- PW — NEW POTABLE WATER
- - - PW - - - EXISTING POTABLE WATER
- NW — NEW NON - POTABLE WATER
- - - NW - - - EXISTING NON - POTABLE WATER
- S — NEW SANITARY SEWER WITH MANHOLE
- - - S - - - EXISTING SANITARY SEWER WITH MANHOLE
- T — NEW TELEPHONE
- - - T - - - EXISTING TELEPHONE
- I — INSULATED STORM LINE
- SW — PUMP SEAL WATER
- A — COMPRESSED AIR LINE
- X — EXISTING FENCE
- — — — — PROPERTY LINE
- B-14 SOIL BORING LOCATION & DESIGNATION
- V — GATE VALVE
- C — CHECK VALVE
- U — UNION
- C.I. CAST IRON
- D.I. DUCTILE IRON
- V.C. VITRIFIED CLAY
- G.S. GALVANIZED STEEL
- B.S. BLACK STEEL
- R.D. ROOF DRAIN
- FLG. FLANGE
- M.J. MECHANICAL JOINT
- G.V. GATE VALVE
- EL. ELEVATION
- F.E. DRY CHEMICAL FIRE EXT.

— M-1 — DWG. No ON WHICH DETAIL APPEARS

— A — DETAIL LETTER

DETAIL TARGET

— M-1 — DWG. No ON WHICH SECTION APPEARS

— I — SECTION NUMBER

SECTION TARGET

— M-4 — DWG. No ON WHICH DETAIL OR SECTION APPEARS

— M-1 — SECTION No OR DETAIL LETTER

DETAIL OR SECTION TITLE TARGET

NOTE:

1. (AMENDED) ABANDONED M.H.'s TO BE LEFT FOR FUTURE UTILIZATION.
2. FOR DETAILS OF NEW MANHOLES SEE (M-B/A)
3. FOR BORING LOGS, SEE APPENDIX TO SPECIFICATIONS.
4. THE EXISTING 24" FORCE MAIN SHALL REMAIN IN OPERATION THRU THE COURSE OF CONSTRUCTION. WHEN THE NEW INFLUENT PUMPING STATION IS OPERATIONAL, THE FLOW SHALL BE DIVERTED FROM THE EXISTING PUMPING STATION TO THE NEW.
5. ALL ELEVATIONS REFER TO USC & GS DATUM.

PART SITE PLAN
SCALE: 1" = 20'

DATE	REVISIONS	REVISED BY	CHECKED BY
9-12-75	REV TO "AS BUILT"	J.R.	G.C.K.

V.T.N. inc.
engineers - planners - surveyors

Helena Montana, Charleston W. Va., Orlando Florida, Coral Gables Florida

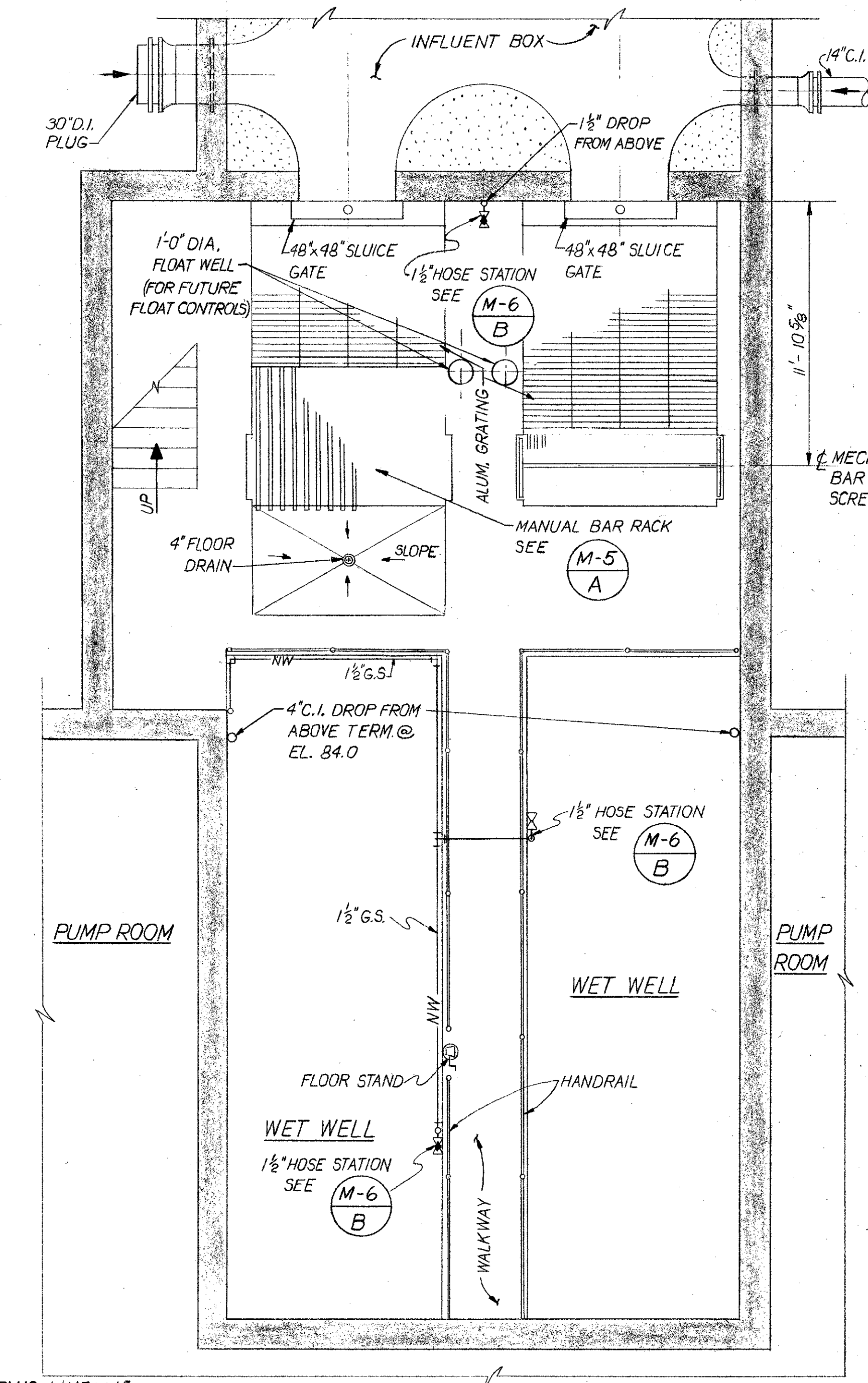
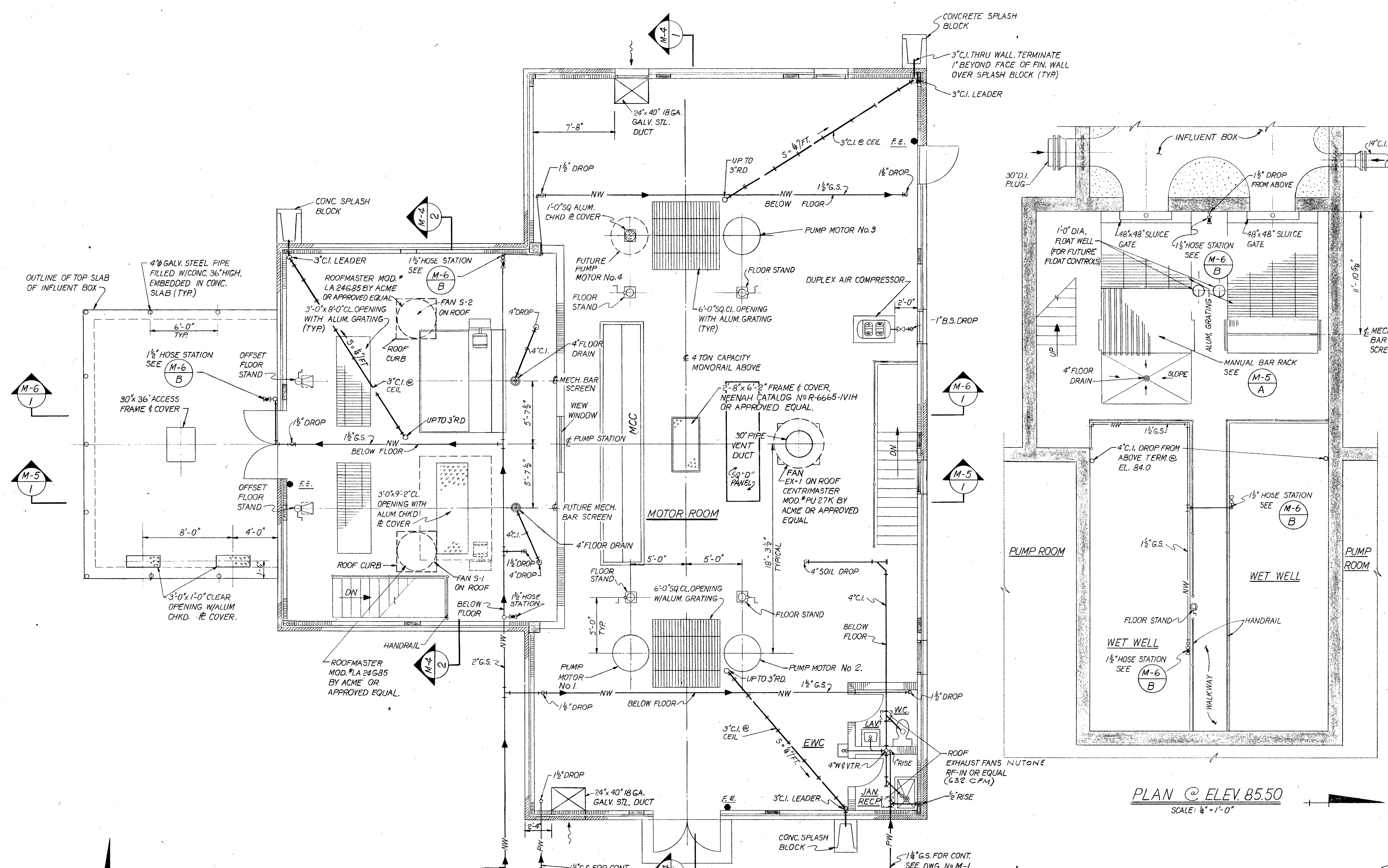
DESIGNED BY: J.A.
DRAWN BY: J.A.
CHECKED BY: J.A.
APPROVED BY: J.A.

SOUTHWEST SEWER DISTRICT
WASTEWATER TREATMENT PLANT
INFLUENT PUMPING STATION
PART SITE PLAN

ORANGE COUNTY FLORIDA

PROJECT NO. F-2521
DATE MAY 1973
SCALE AS-NOTED
SHEET 2 OF 22

(M-1)



PLAN @ ELEV. 94.50
SCALE: 1/4" = 1'-0"

PLAN @ ELEV. 85.50
SCALE: 1/4" = 1'-0"

DATE	REVISIONS	REVISED BY	CHECKED BY	DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
9-12-75	REV TO "AS BUILT"	J	G.C.K.	J.P.V.	J.A.	J.P.V.	[Signature]

vtn inc.
engineers - planners - surveyors

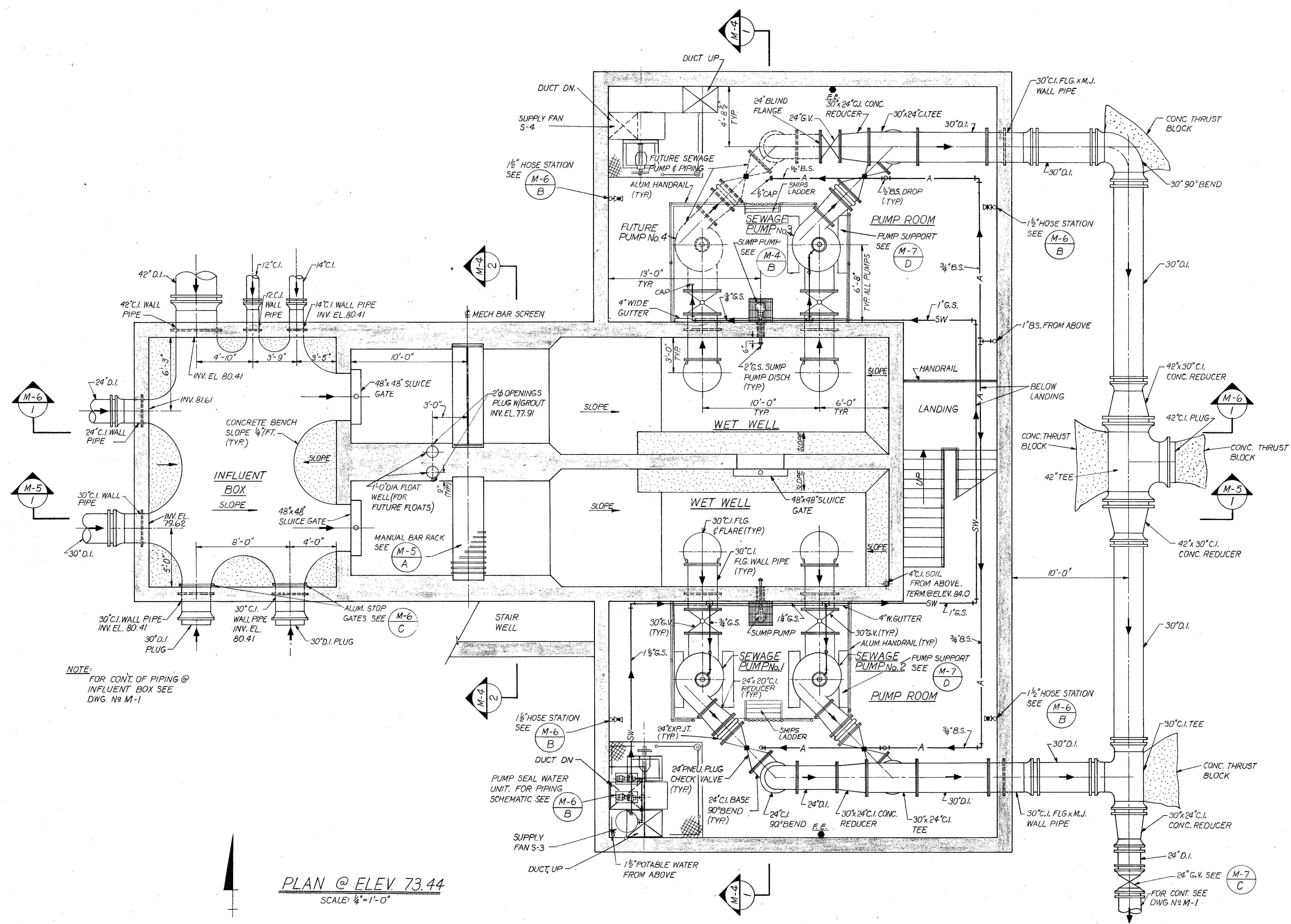
Helena Montana
Charleston W. Va.
Orlando Florida
Coral Gables Florida

SOUTHWEST SEWER DISTRICT
WASTEWATER TREATMENT PLANT
INFLUENT PUMPING STATION
MECHANICAL PLAN @ ELEV. 94.50

ORANGE COUNTY FLORIDA

PROJECT NO.	F-2521
DATE	MAY 1973
SCALE	AS NOTED
SHEET	3 OF 22

VTN DWG. FILE NO.



NOTE:
FOR CONT. OF PIPING @
INFLUENT BOX SEE
DWG. No M-1

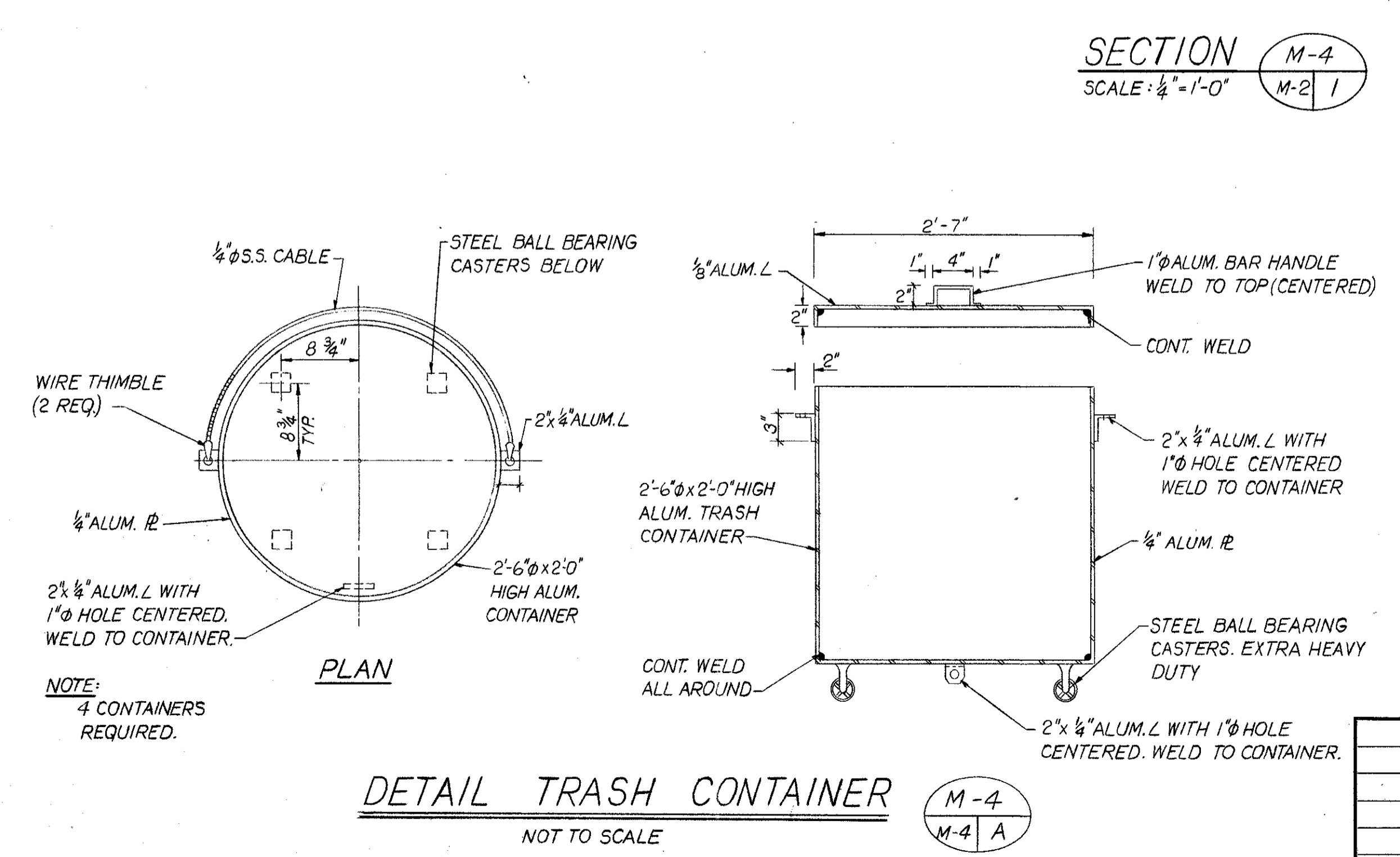
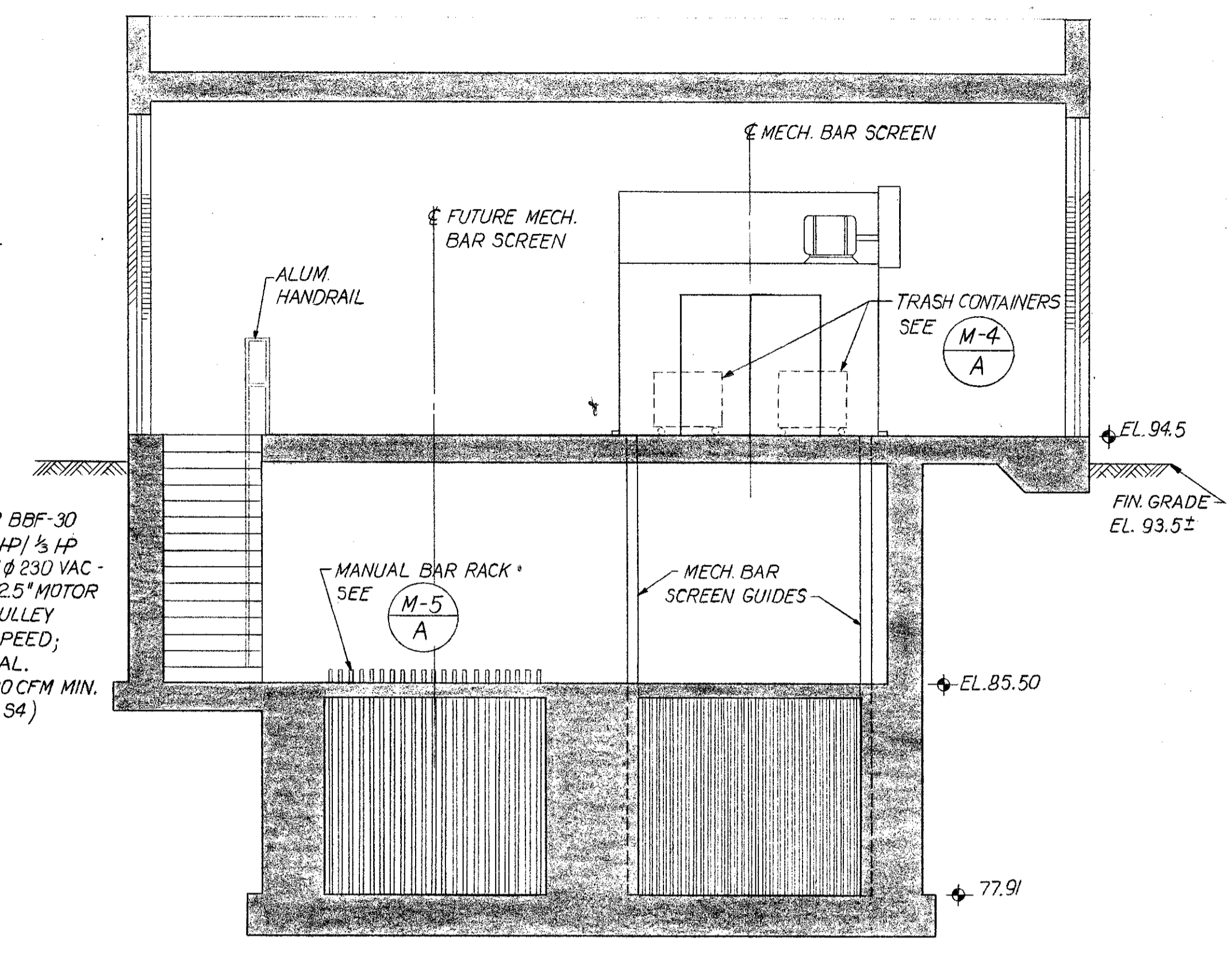
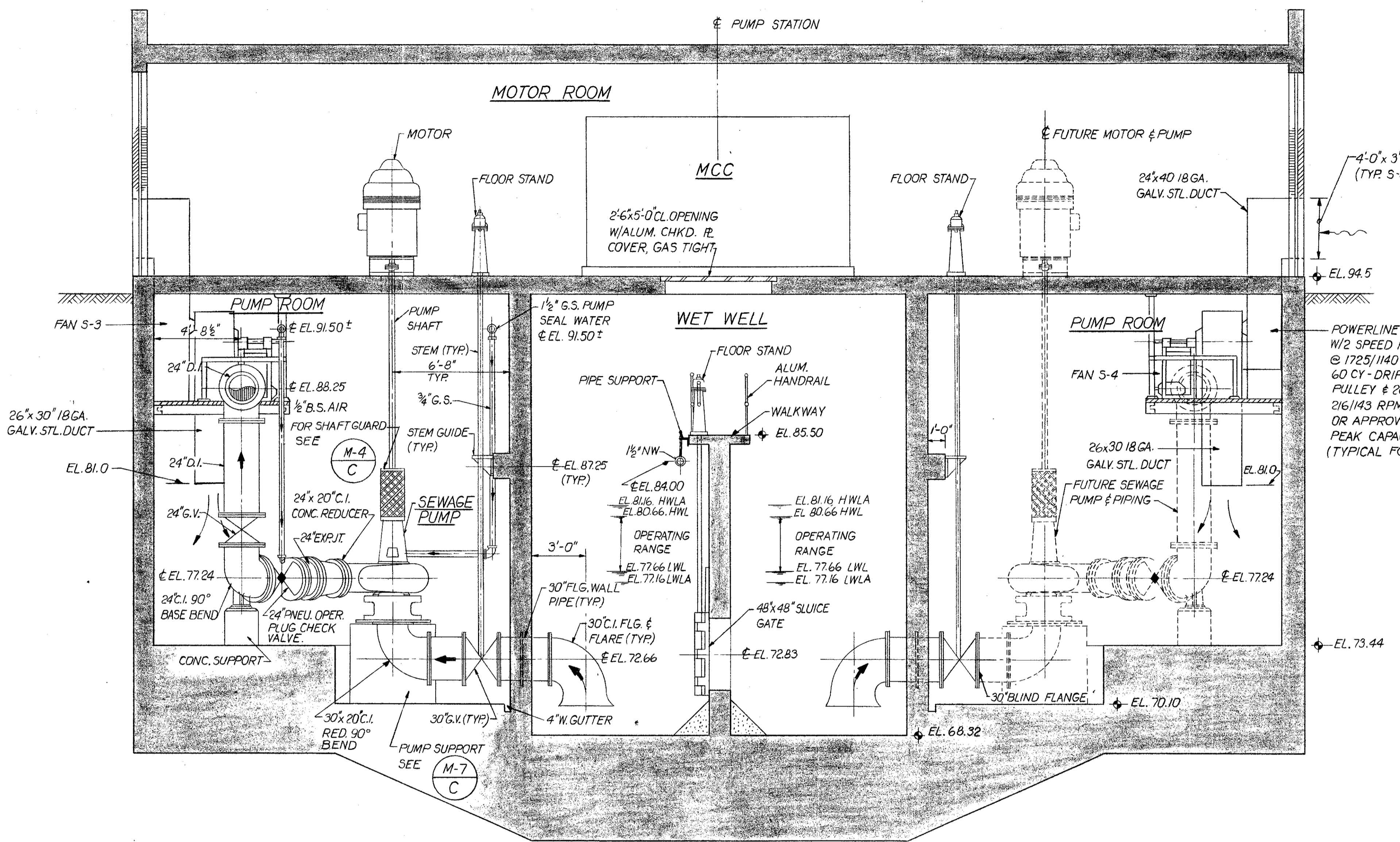
PLAN @ ELEV. 73.44
SCALE: 1/4" = 1'-0"

 engineers - planners - surveyors		Helena Montana Charleston W. Va. Orlando Florida Coral Gables Florida	
DESIGNED BY G.P.V.	DRAWN BY J.A.	CHECKED BY G.P.V.	APPROVED BY [Signature]
DATE 9-12-75	REVISIONS REV TO "AS BUILT"	REVISED BY R	CHECKED BY G.C.K.

**SOUTHWEST SEWER DISTRICT
WASTEWATER TREATMENT PLANT
INFLUENT PUMPING STATION
MECHANICAL PLAN @ ELEV. 73.44**

ORANGE COUNTY FLORIDA

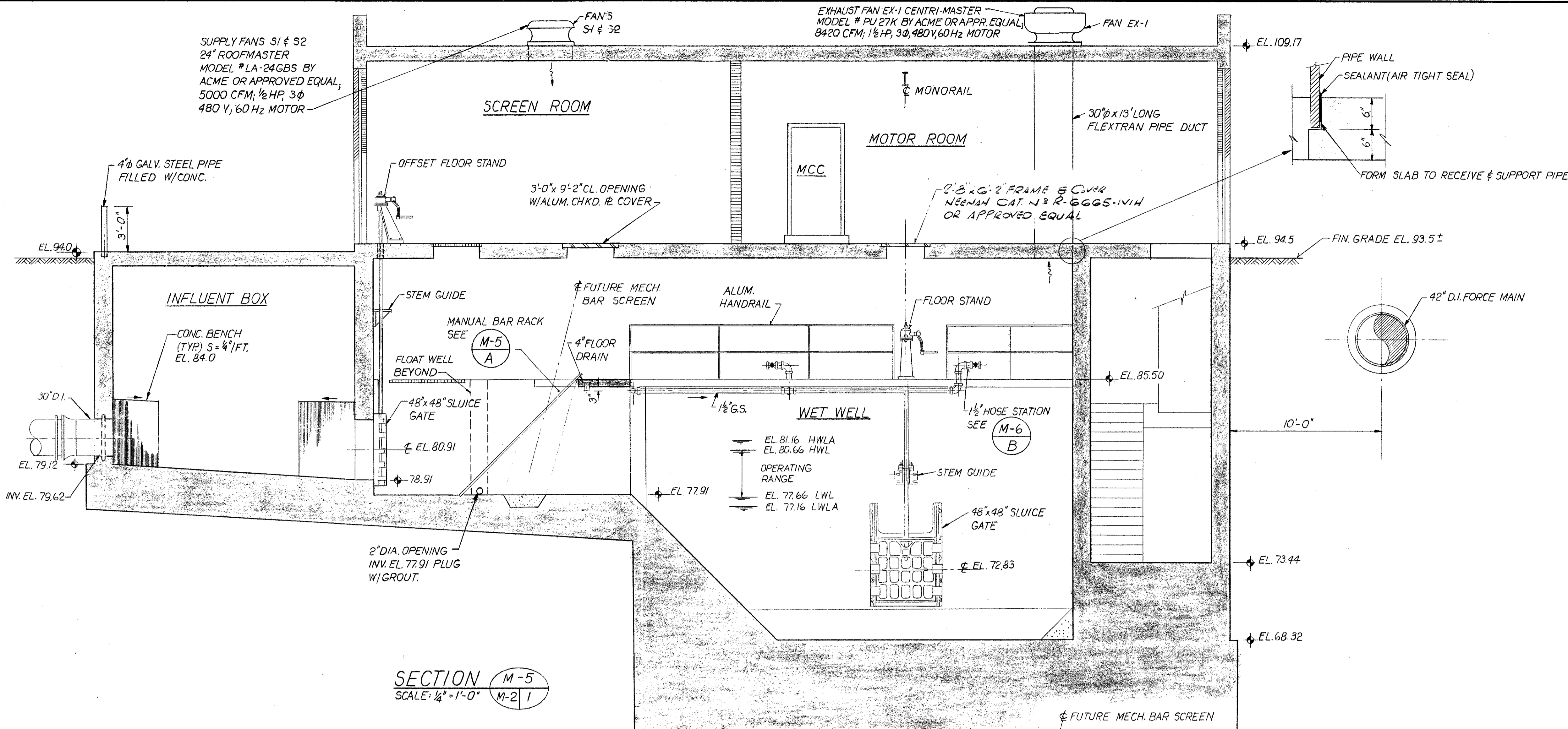
PROJECT NO. F-2521
DATE MAY 1973
SCALE AS NOTED
SHEET 4 OF 22



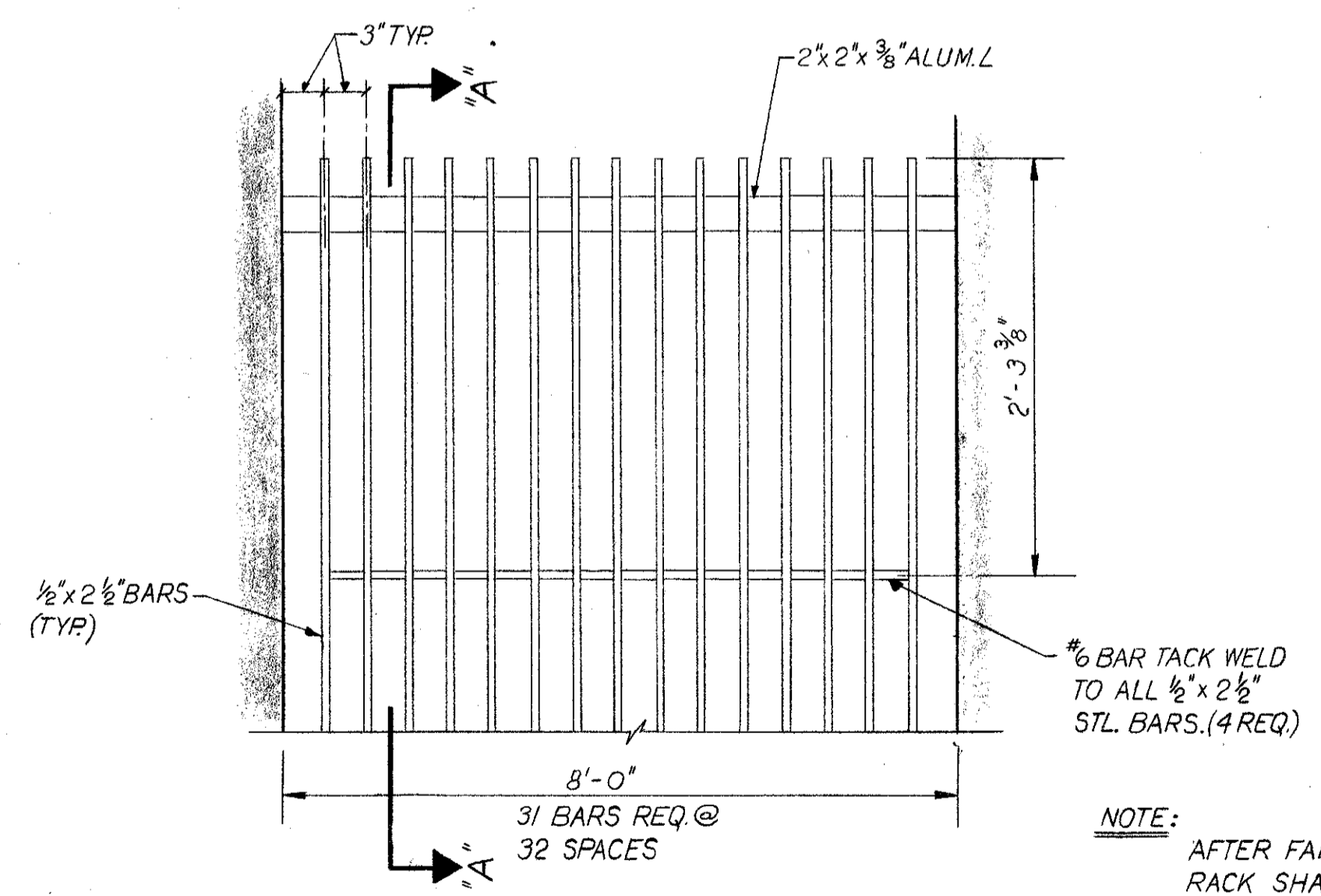
<p>VTN Inc. engineers - planners - surveyors</p>				<p>Helena Montana</p> <p>Charleston W. Va.</p> <p>Orlando Florida</p> <p>Coral Gables Florida</p>	
<p>9-12-75</p>		<p>REV. TO "AS BUILT"</p>		<p>DATE REVISIONS REVISED BY CHECKED BY</p>	
<p>DESIGNED BY</p>		<p>DRAWN BY J.A.</p>		<p>CHECKED BY</p>	
<p>APPROVED BY</p>		<p>ORANGE COUNTY</p>		<p>FLORIDA</p>	

SOUTHWEST SEWER DISTRICT
WASTEWATER TREATMENT PLANT
INFLUENT PUMPING STATION
MECHANICAL SECTIONS & DETAILS

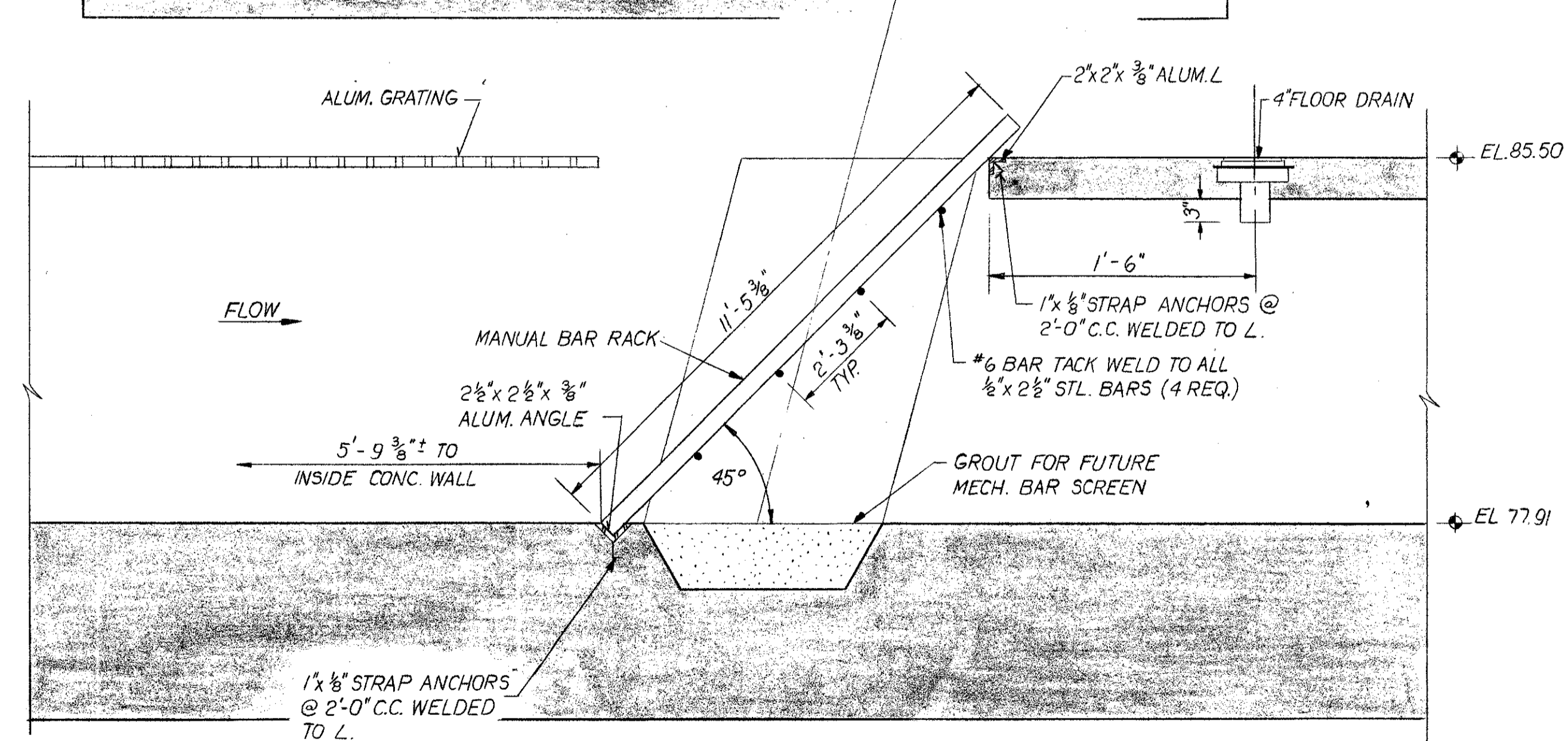
PROJECT NO. F-2521
DATE MAY 1973
SCALE AS NOTED
SHEET 5 OF 22



SECTION M-5
SCALE: 1/4" = 1'-0"

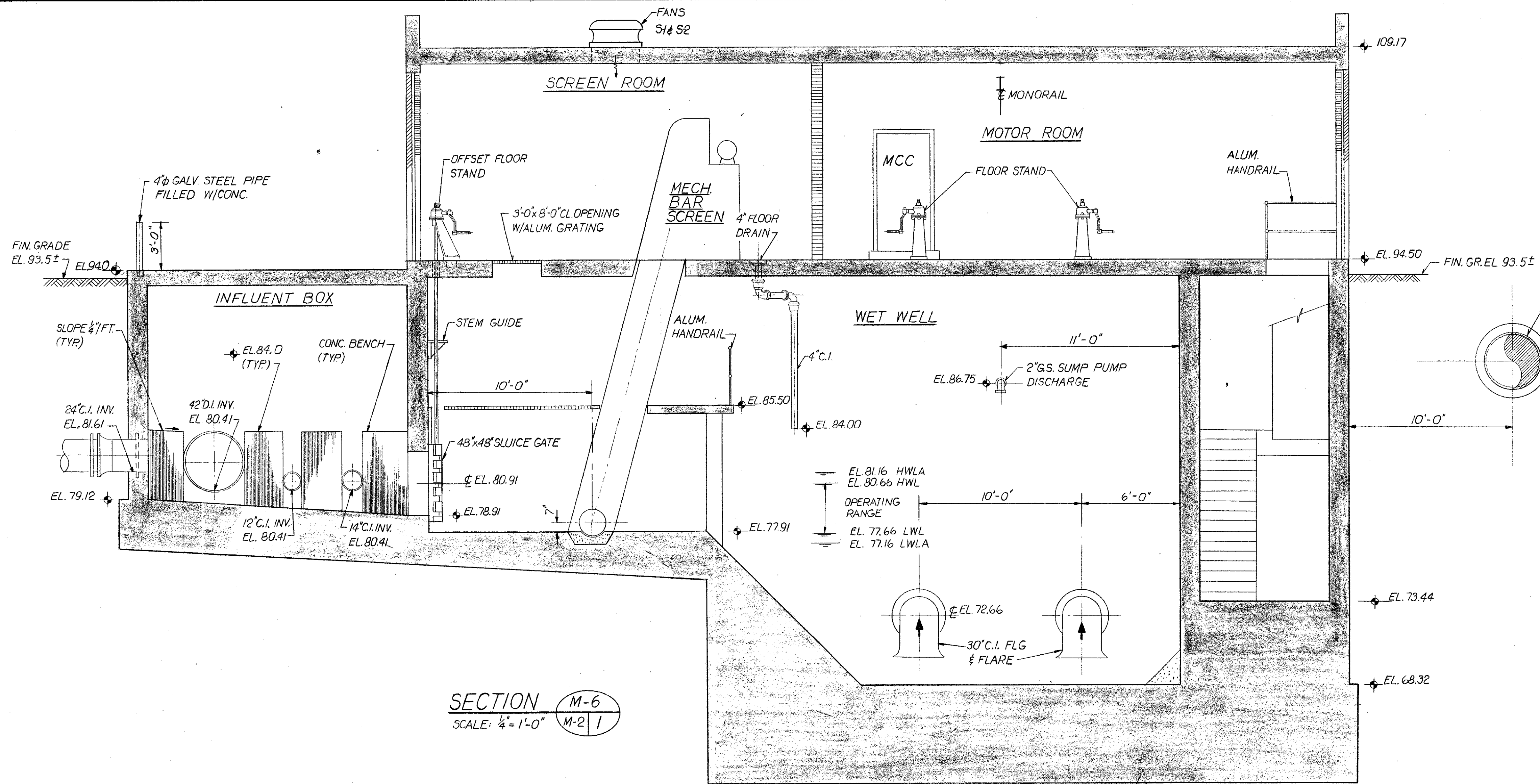


PART PLAN MANUAL BAR RACK M-5
NOT TO SCALE

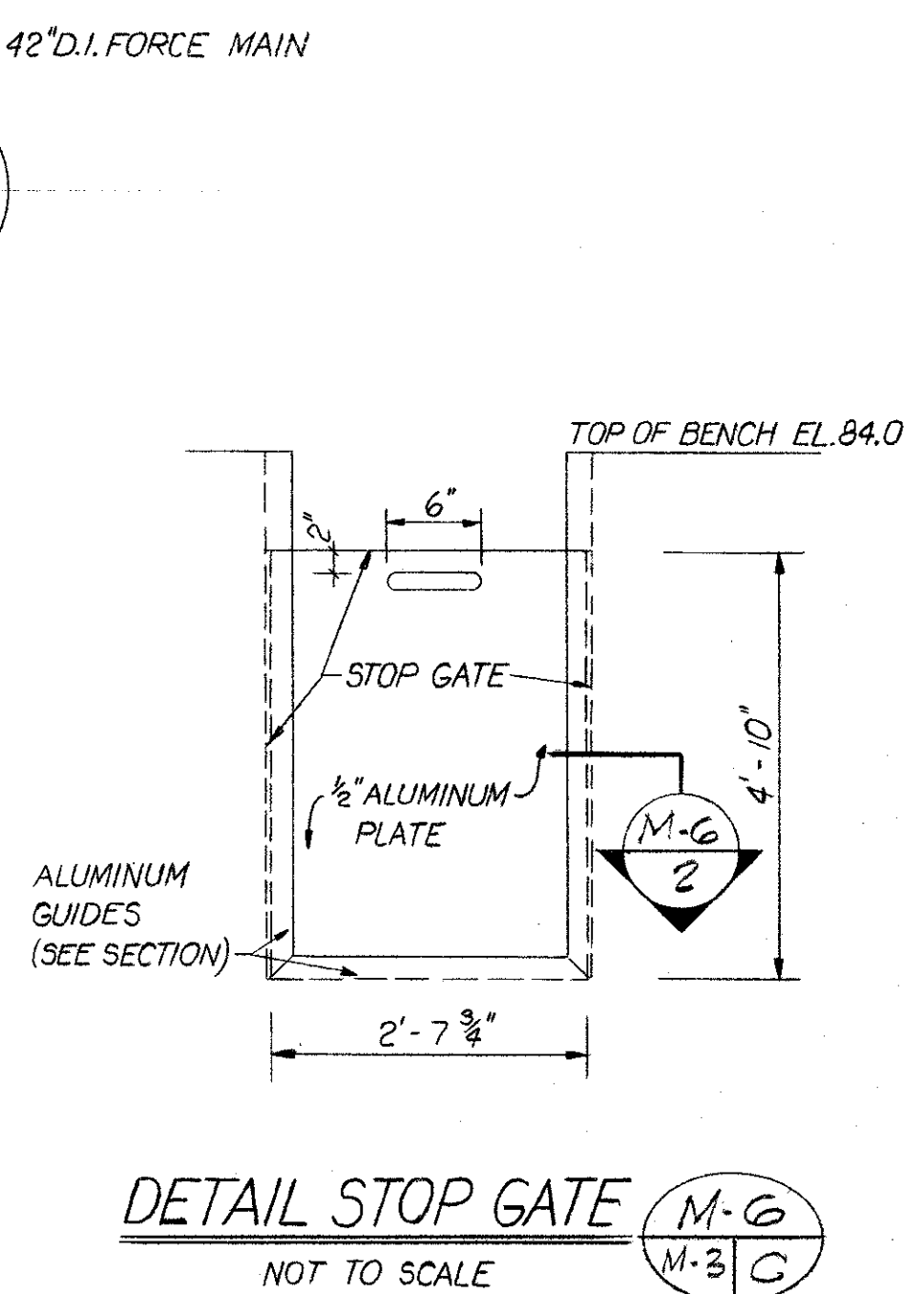


SECTION A-A
NOT TO SCALE

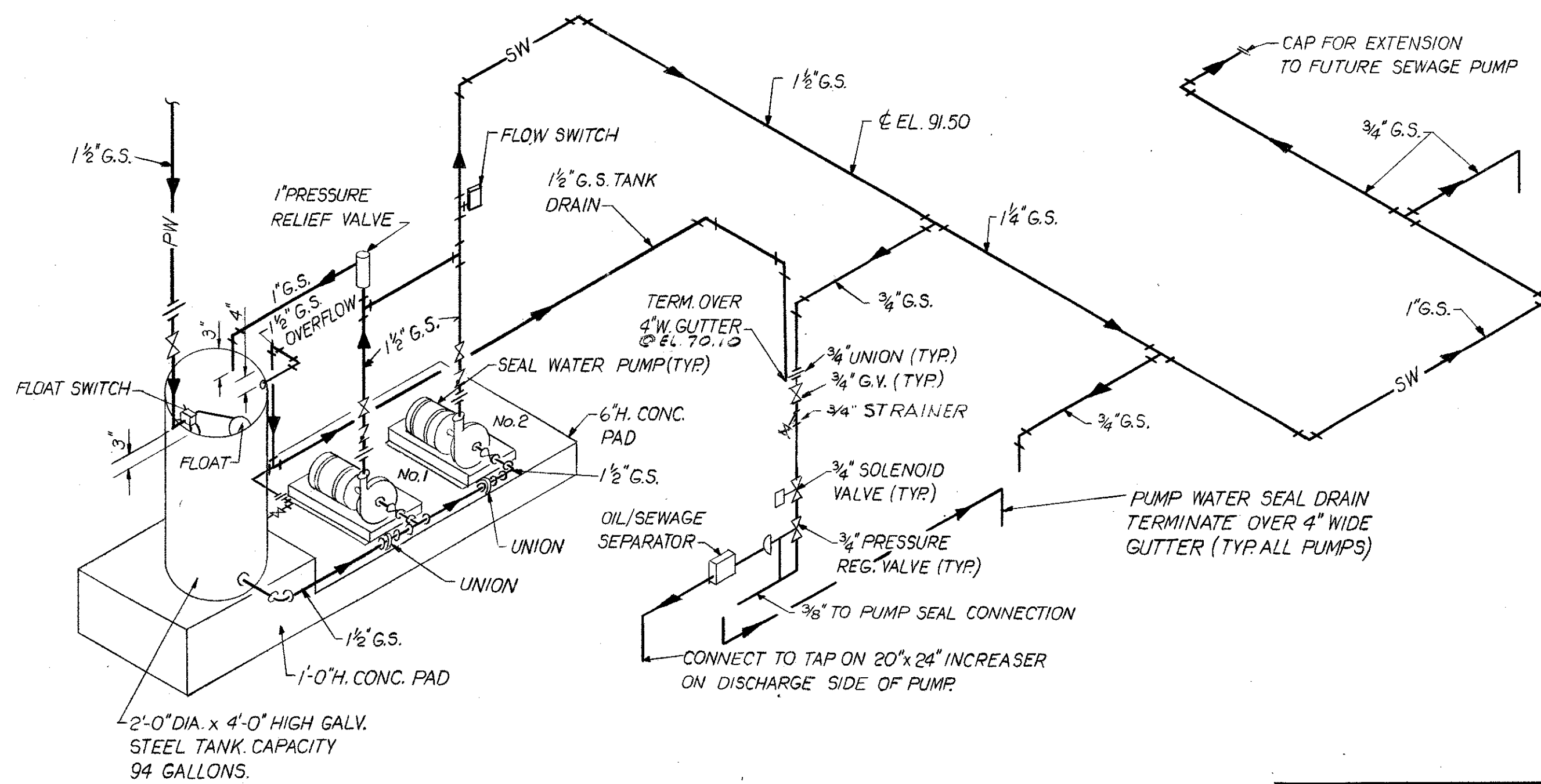
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9-12-75 REK TO "AS BUILT"		R	G.C.K.	DATE MAY 1973
DATE 9-12-75	REVISIONS REK TO "AS BUILT"	REVISED BY R	CHECKED BY G.C.K.	SCALE AS NOTED
DESIGNED BY J.A.			DRAWN BY J.A.	CHECKED BY J.A.
APPROVED BY [Signature]			SOUTHWEST SEWER DISTRICT WASTEWATER TREATMENT PLANT INFLUENT PUMPING STATION MECHANICAL SECTIONS & DETAILS	
ORANGE COUNTY			FLORIDA	
SHEET 6 OF 22				VTN DWG. FILE NO.



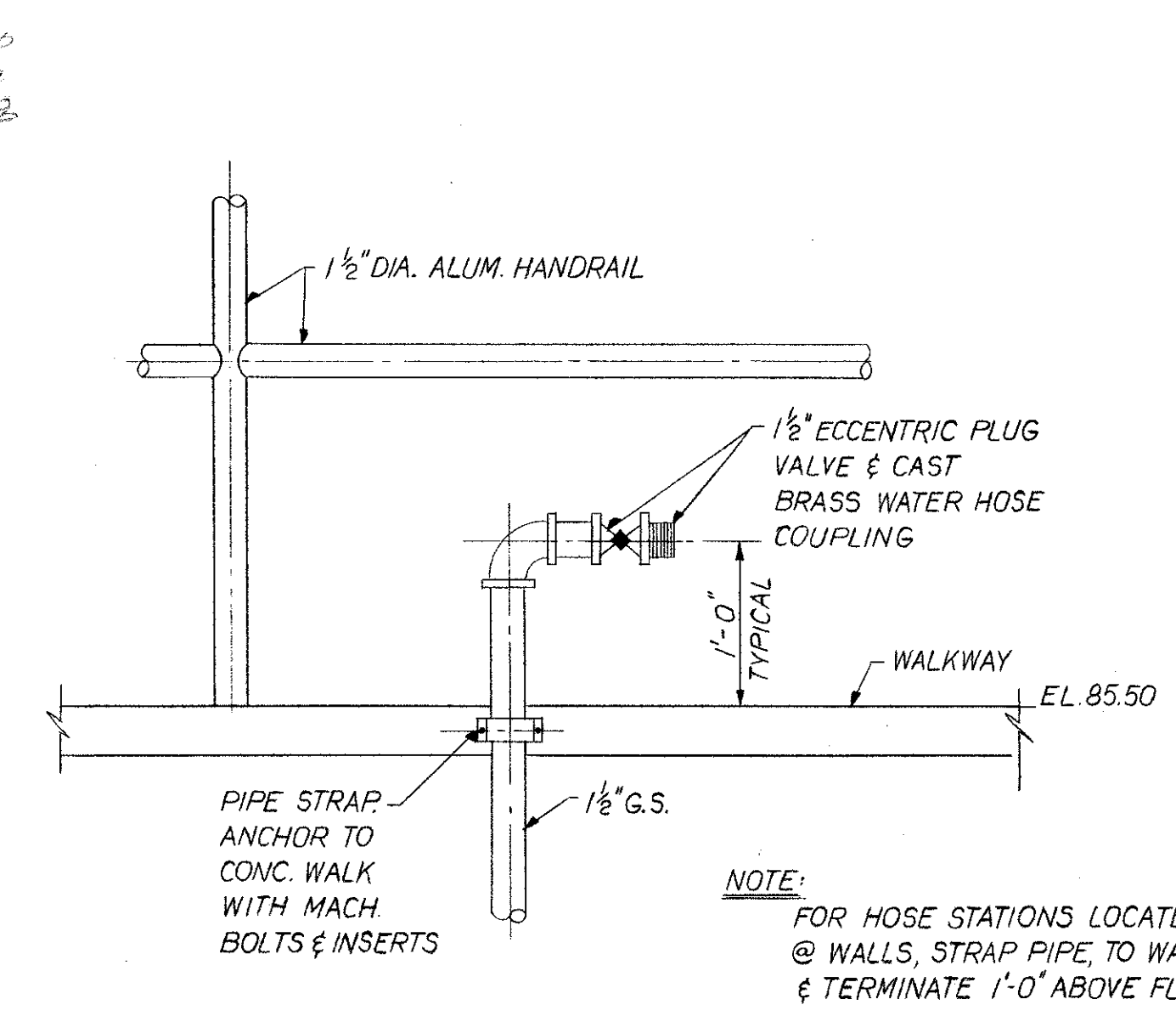
SECTION M-6
SCALE: 1/4" = 1'-0"



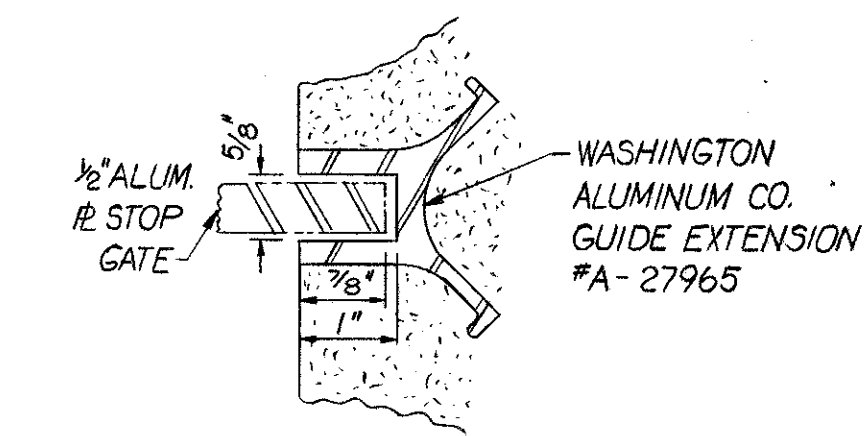
DETAIL STOP GATE M-6
NOT TO SCALE



SCHEMATIC PUMP WATER SEAL PIPING M-6
NOT TO SCALE



DETAIL HOSE STATION M-6
NOT TO SCALE



GUIDE SECTION M-6
NOT TO SCALE

NOTE: PAINT ALL SURFACES OF ALUMINUM GUIDES IN CONTACT WITH CONCRETE WITH UNTHINNED BITUMASTIC PAINT.

DATE	REVISIONS	REVISED BY	CHECKED BY
9-12-75	REV TO "AS BUILT"	JR	G.C.K.

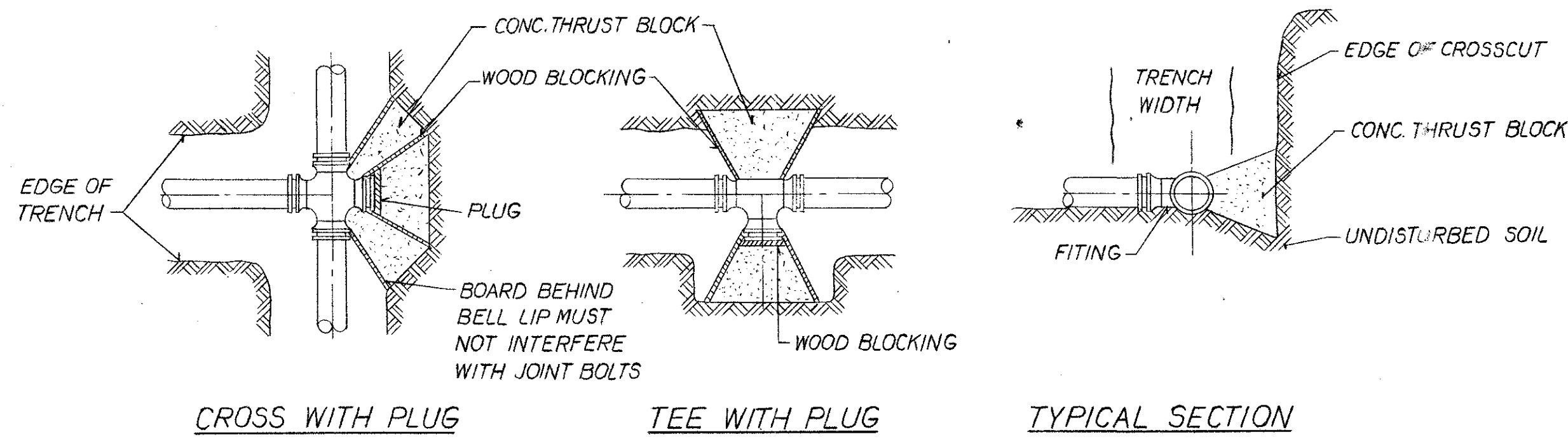
VTN inc.
engineers - planners - surveyors

DESIGNED BY: *[Signature]*
DRAWN BY: J.A.
CHECKED BY: *[Signature]*
APPROVED BY: *[Signature]*

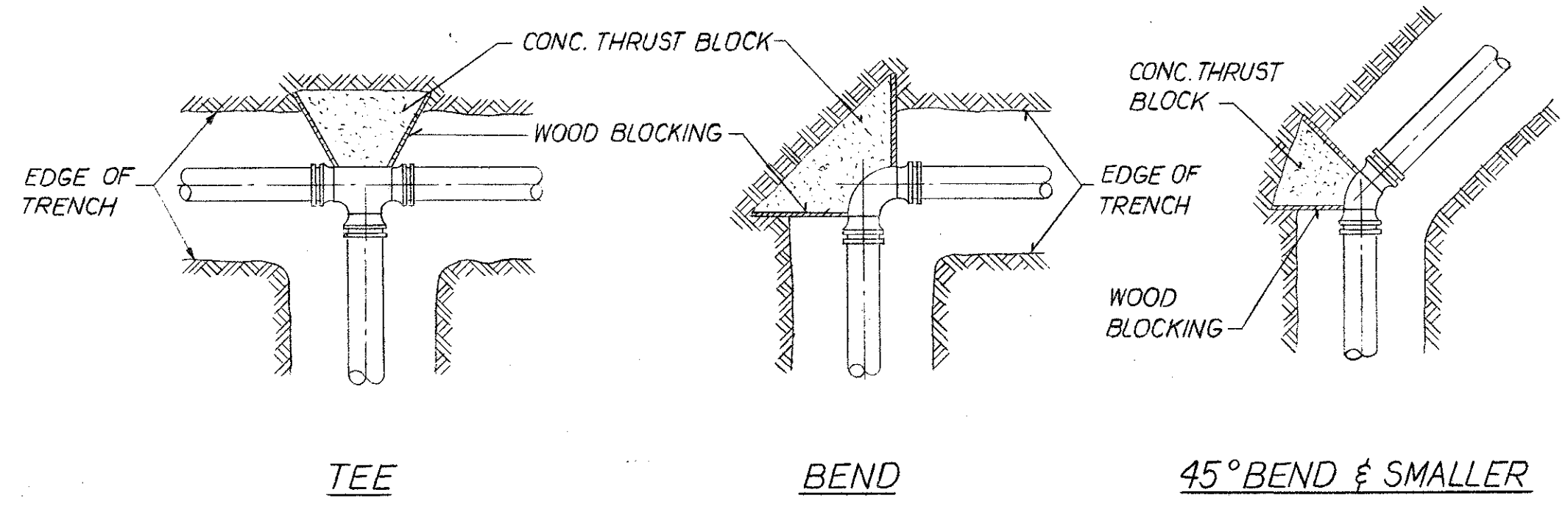
SOUTHWEST SEWER DISTRICT
WASTEWATER TREATMENT PLANT
INFLUENT PUMPING STATION
MECHANICAL SECTIONS & DETAILS

ORANGE COUNTY FLORIDA

PROJECT NO.	F-2521
DATE	MAY 1973
SCALE	AS NOTED
SHEET	7 OF 22



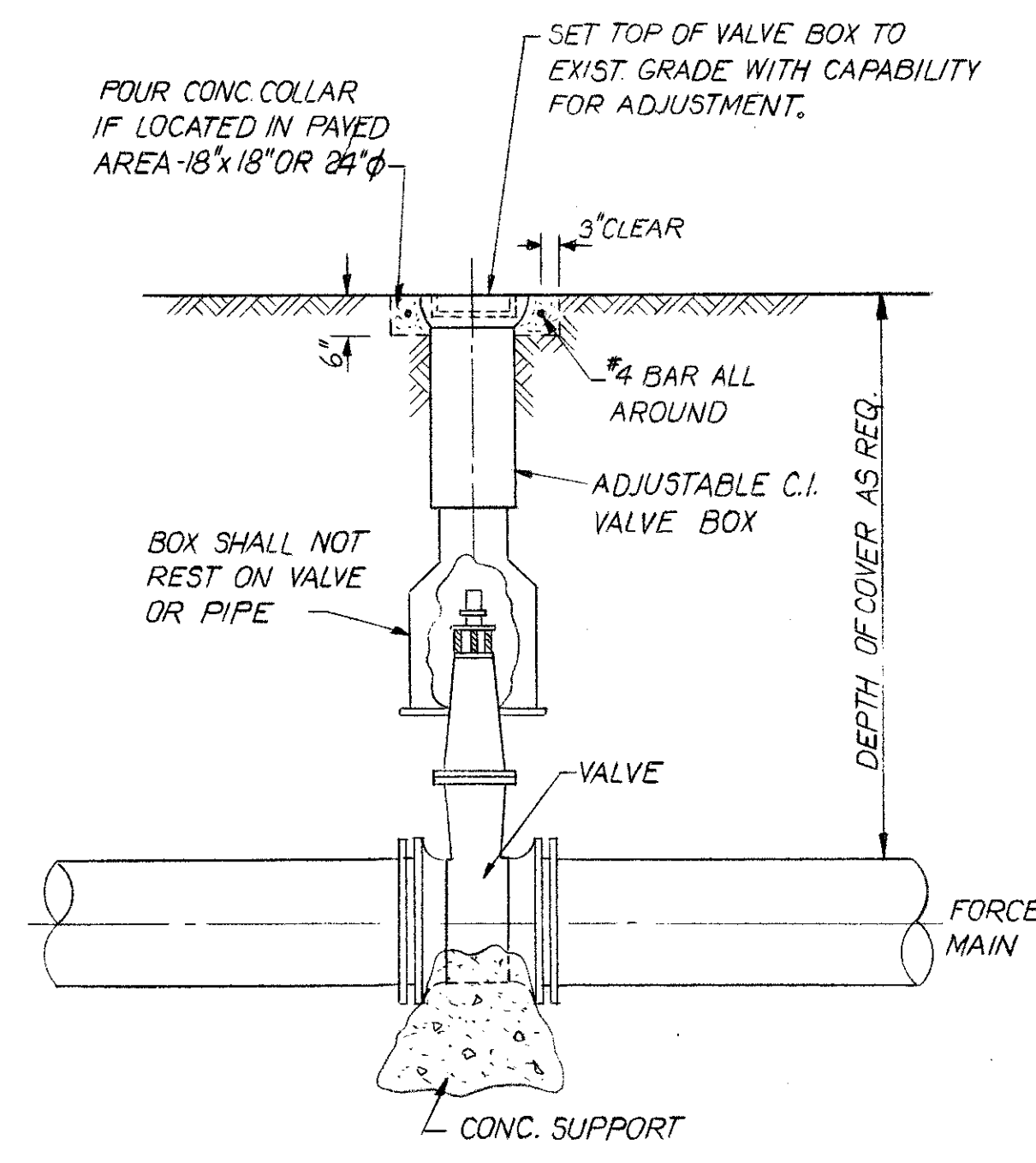
CROSS WITH PLUG TEE WITH PLUG TYPICAL SECTION



TEE BEND 45° BEND & SMALLER

THRUST BLOCK DETAILS
NOT TO SCALE

M-7
M-1 A



DETAIL VALVE & VALVE BOX
NOT TO SCALE

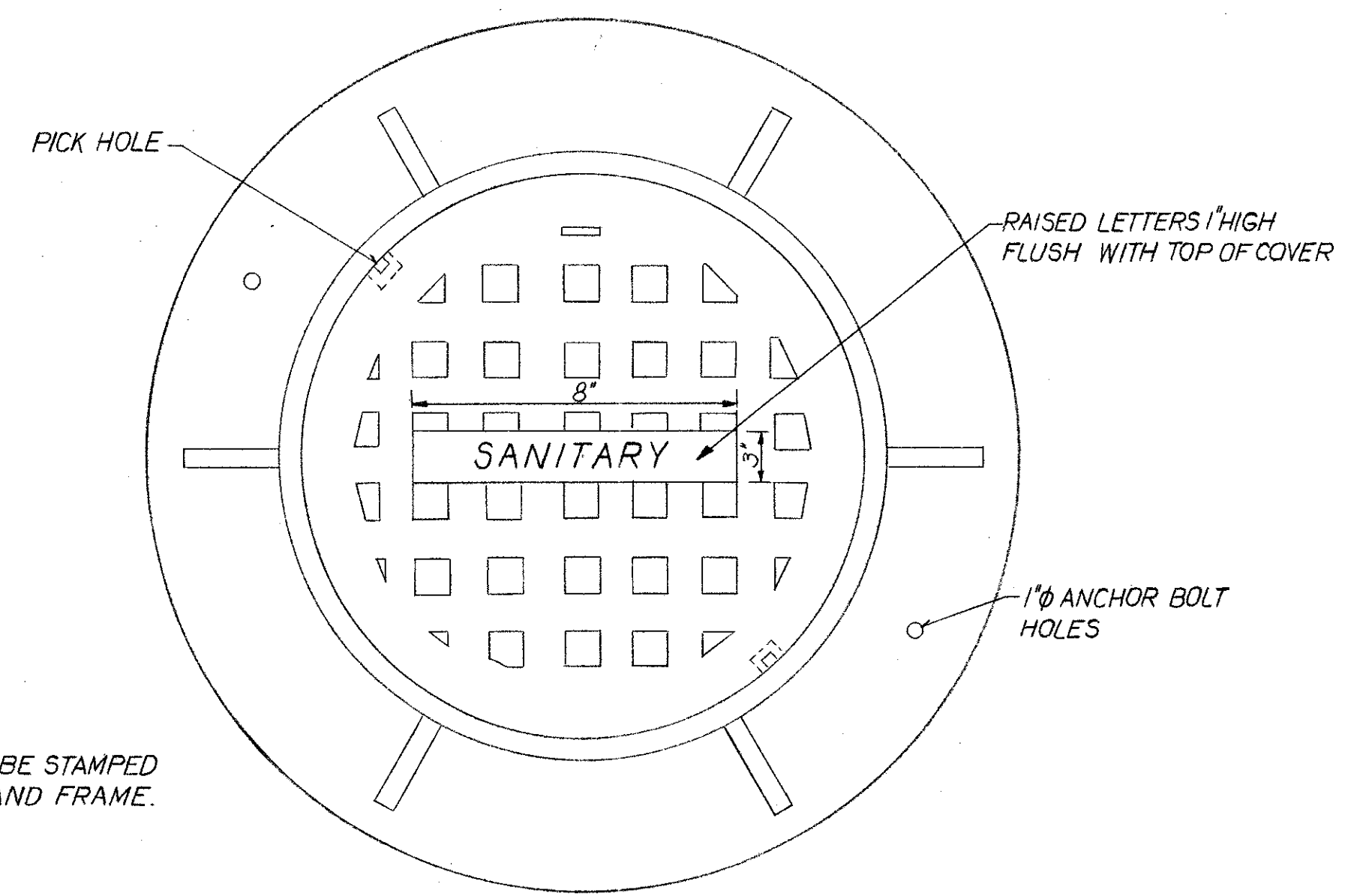
M-7
M-3 C

SCHEDULE FOR THRUST BLOCK AREAS						
PIPE SIZE (INCHES)	90° BEND (SQ. FT.)	45° BEND (SQ. FT.)	22 1/2° BEND (SQ. FT.)	11 1/4° BEND (SQ. FT.)	TEE-WYE PLUG (SQ. FT.)	DESIGN PRESS. (PSI)
24"	12.50	6.75	3.50	1.75	8.75	50
30"	19.00	10.25	5.25	2.75	13.50	50
42"	36.50	20.00	10.00	5.25	26.00	50
12"	5.00	2.75	1.50	.75	3.50	75
14"	6.50	3.50	1.75	1.00	4.75	75

NOTE:
THRUST BLOCK AREAS COMPUTED ON BASIS OF 3000 LBS. SQ. FT. SOIL RESISTANCE BEARING AND MAY BE VARIED BY THE ENGINEER TO SUIT OTHER CONDITIONS ENCOUNTERED.

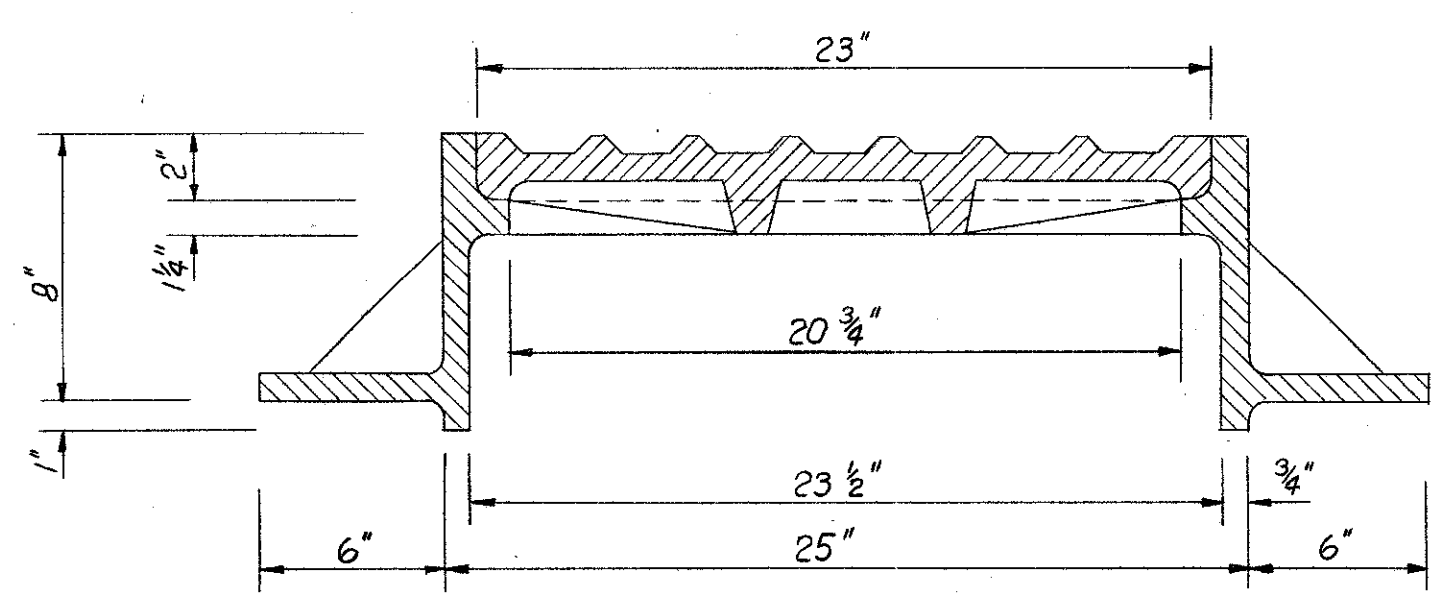
THRUST BLOCK NOTES

- THRUST BLOCKS SHALL BE REQUIRED AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. ON TEES AND BENDS, EXTEND THRUST BLOCK FULL LENGTH. PUT BOARD IN FRONT OF PLUG BEFORE POURING CONCRETE THRUST BLOCK.
- BACKFILL SHALL CONSIST ENTIRELY OF CLEAN SAND. ROCK FRAGMENTS OR MUCK ENCOUNTERED SHALL BE REPLACED WITH ACCEPTABLE BACKFILL.
- ALL WOOD BLOCKING SHALL BE PRESSURE TREATED CONCRETE FOR THRUST BLOCKING TO BE CLASS "C".



PLAN

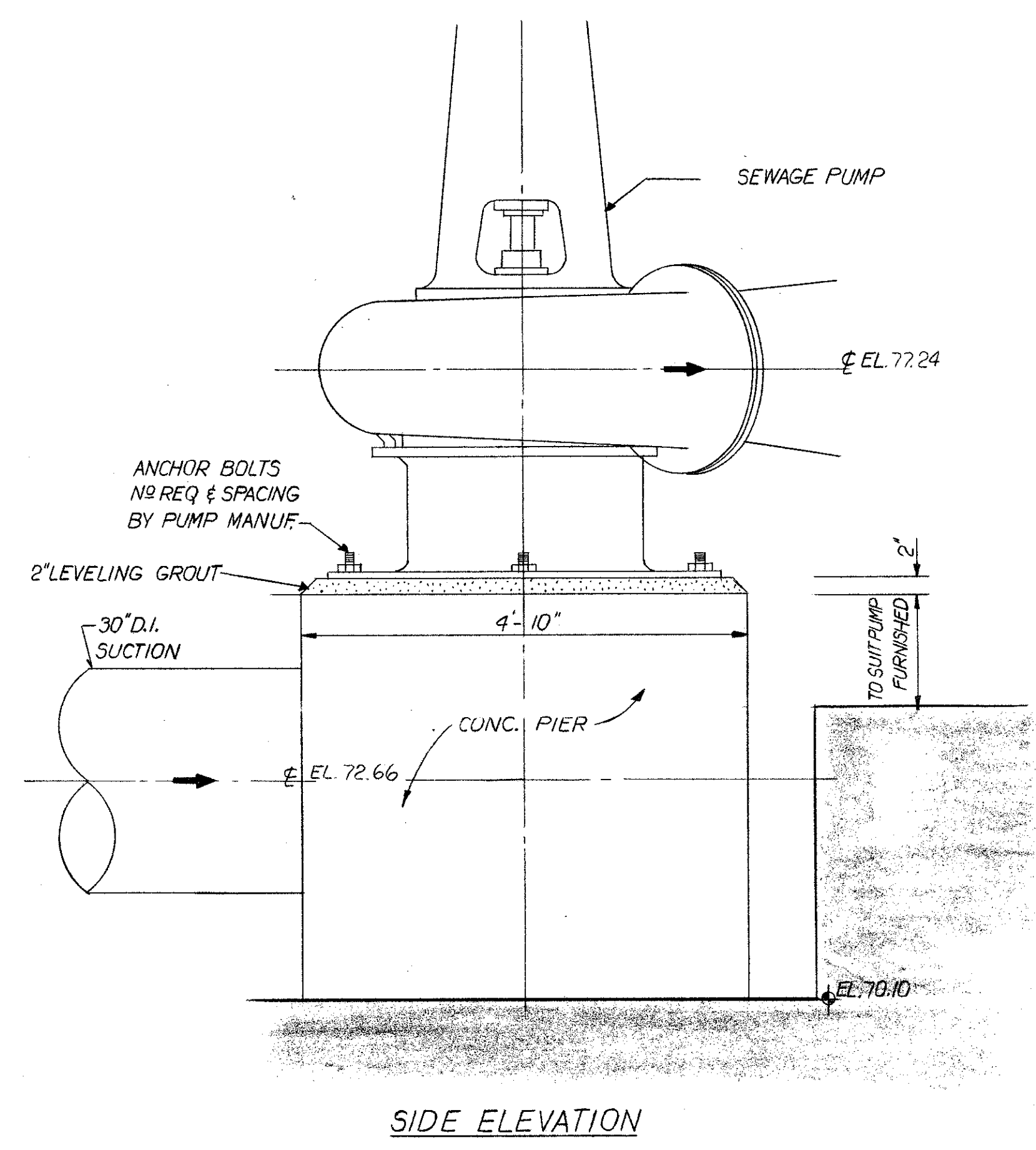
NOTE:
WEIGHTS TO BE STAMPED ON COVER AND FRAME.



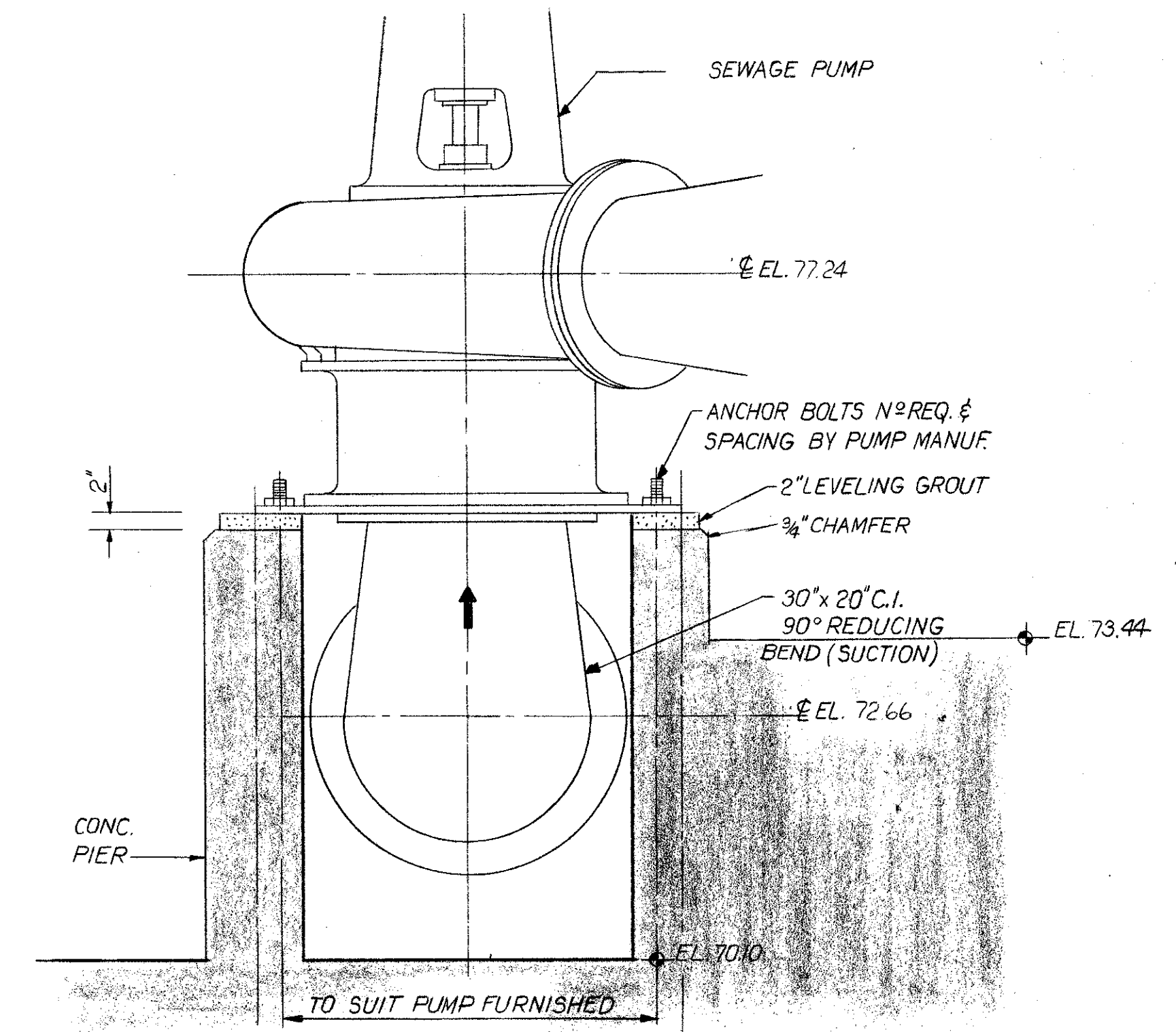
SECTION

STANDARD MANHOLE FRAME & COVER
NOT TO SCALE

M-7
M-1 B



SIDE ELEVATION



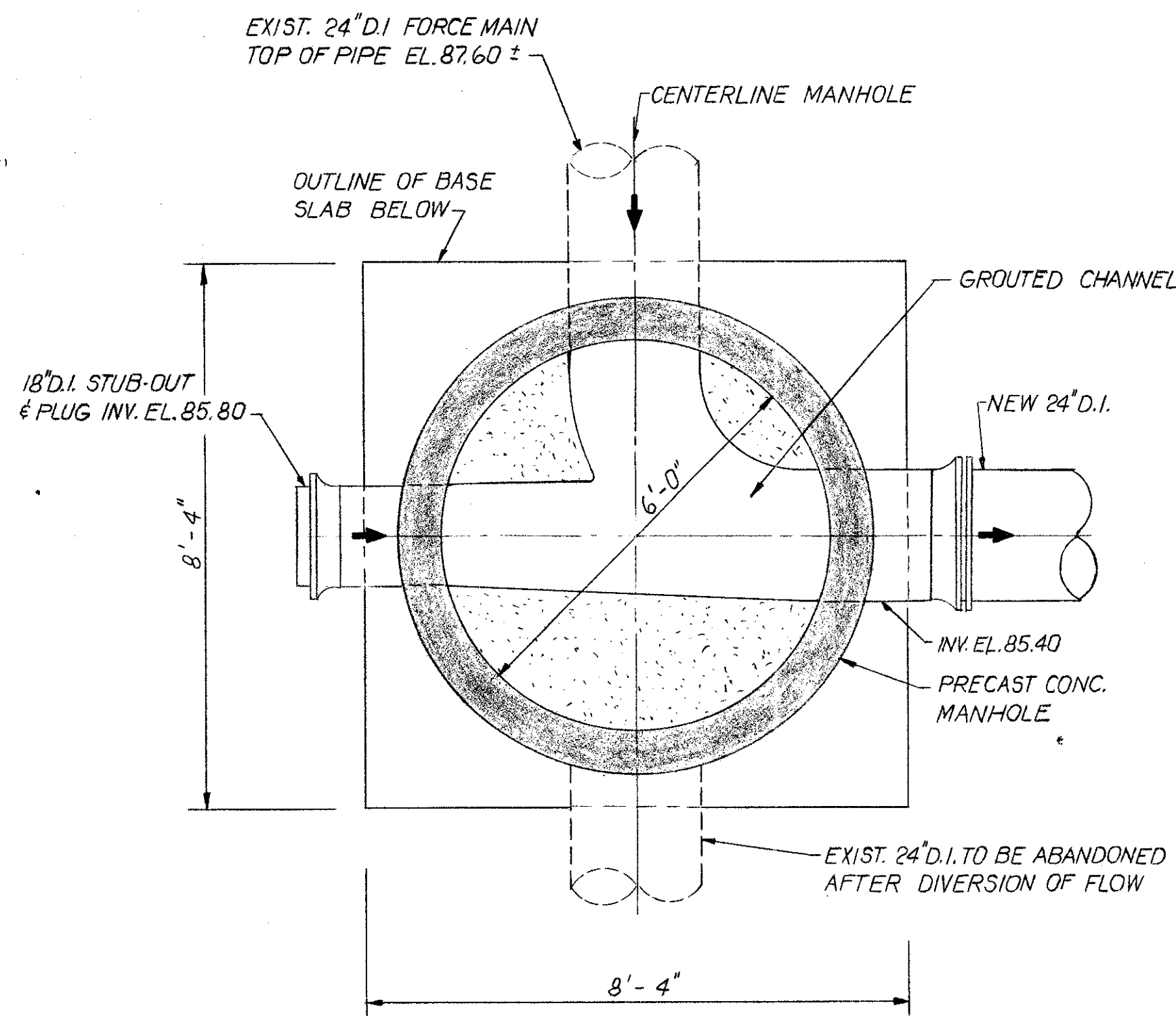
REAR ELEVATION

DETAIL: SEWAGE PUMP BASE SUPPORT
NOT TO SCALE

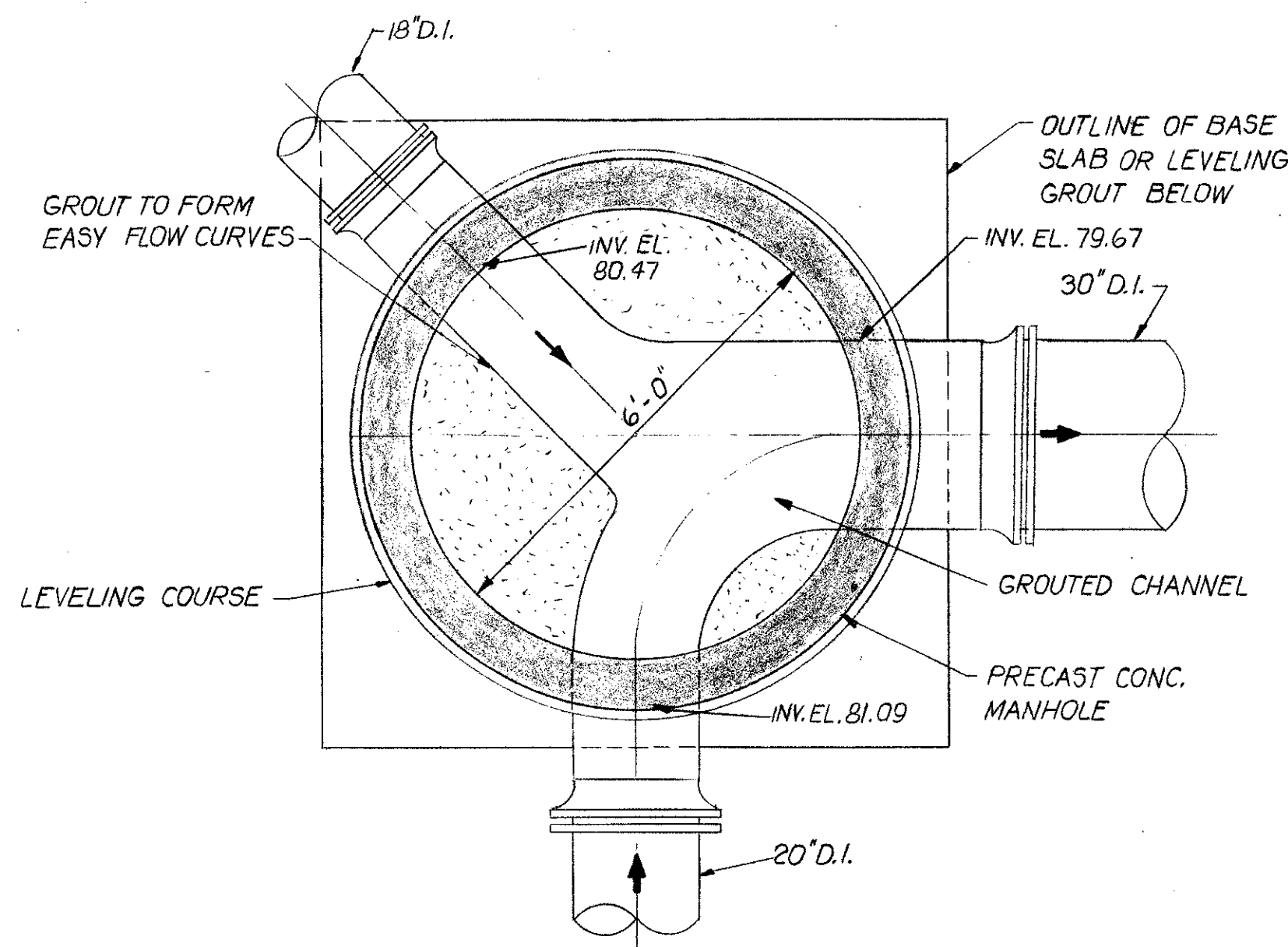
M-7
M-3 D

M-7

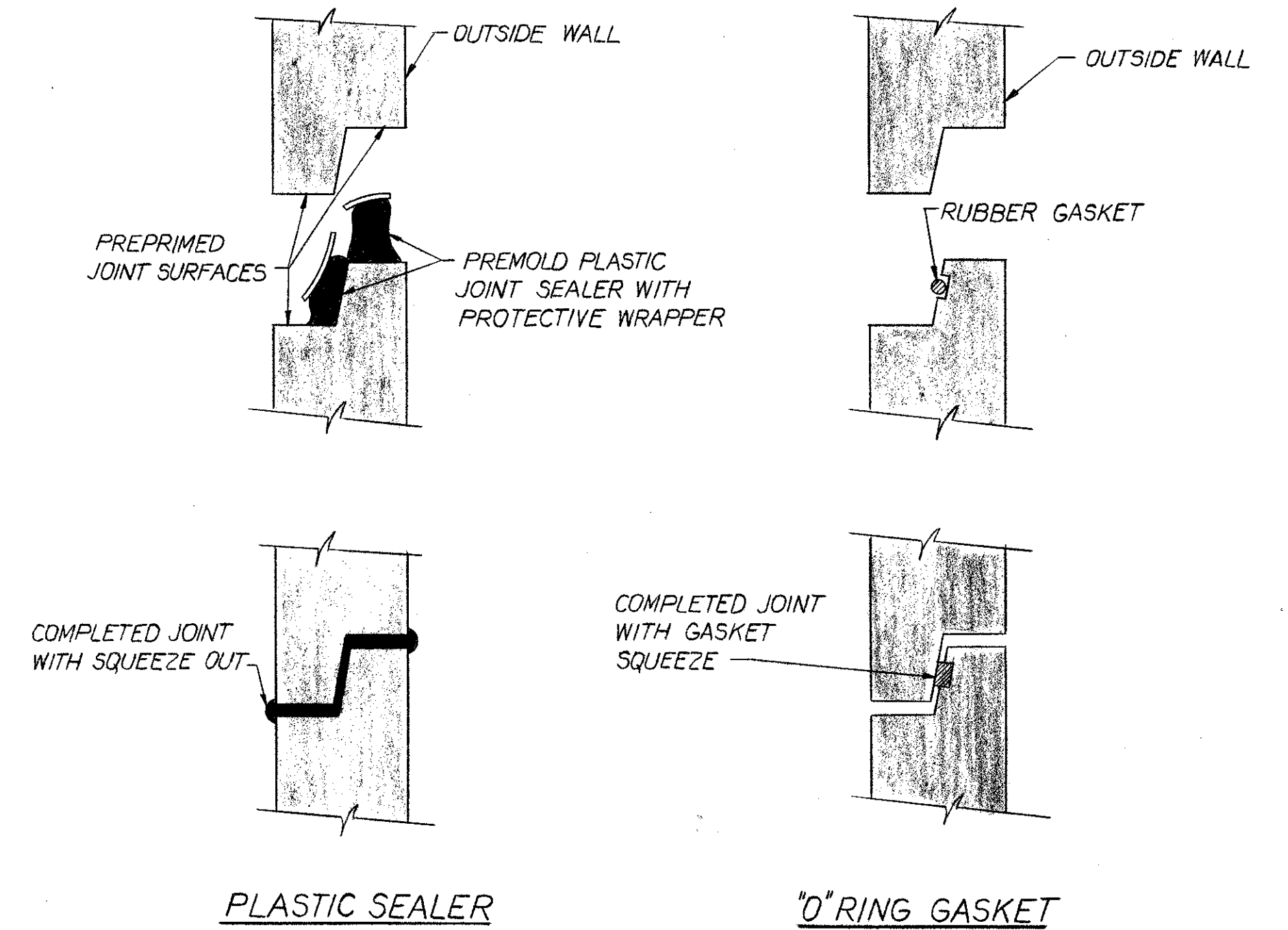
				PROJECT NO. F-2521 DATE MAY 1973 SCALE AS NOTED SHEET 8 OF 22	
9-12-75 DATE	REV TO "AS BUILT" REVISIONS	J.R. REVISED BY	G.C.K. CHECKED BY	DESIGNED BY J.A. DRAWN BY	APPROVED BY [Signature]
SOUTHWEST SEWER DISTRICT WASTEWATER TREATMENT PLANT INFLUENT PUMPING STATION MECHANICAL DETAILS				ORANGE COUNTY FLORIDA	



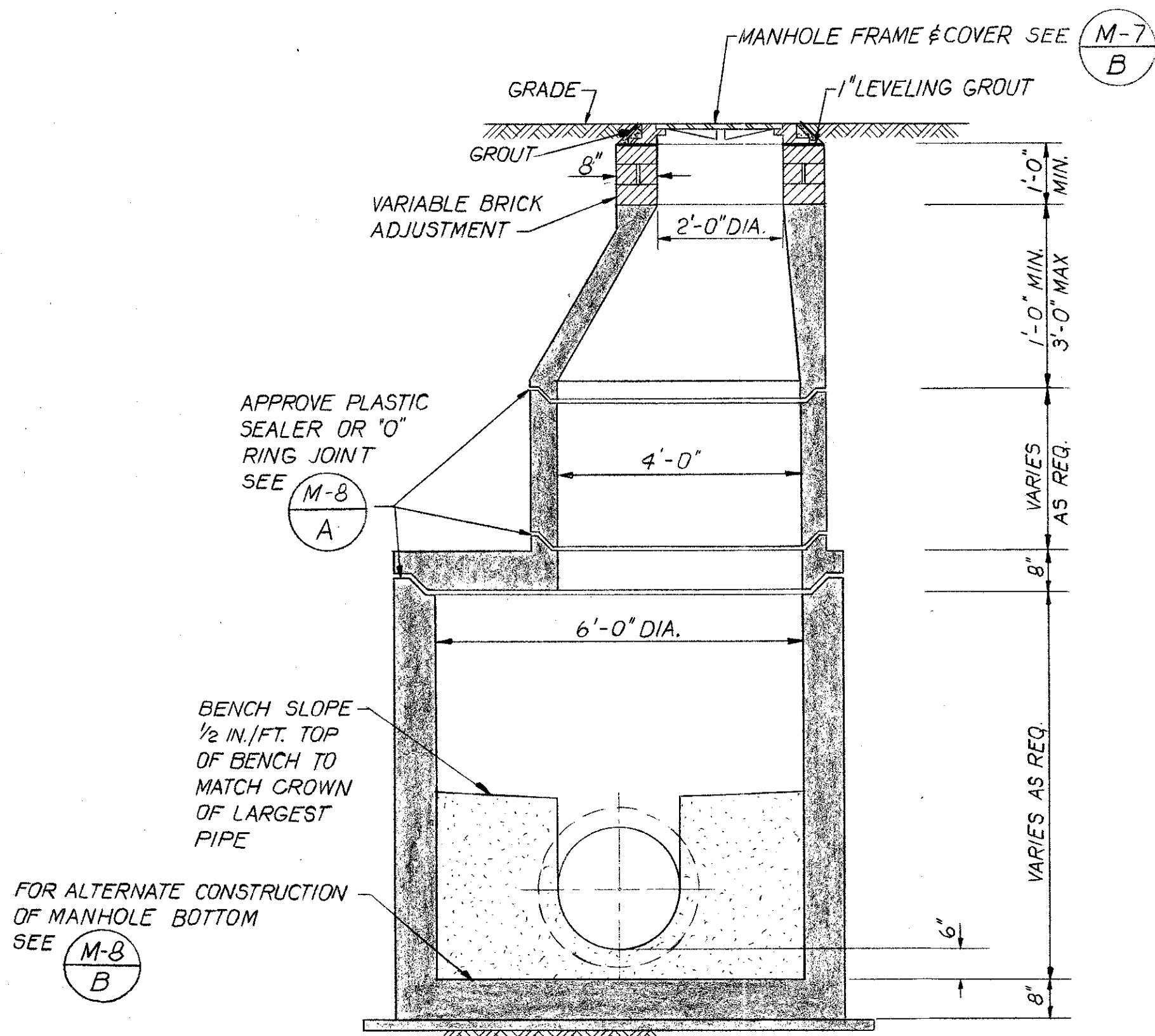
PLAN
(M.H. N#1)



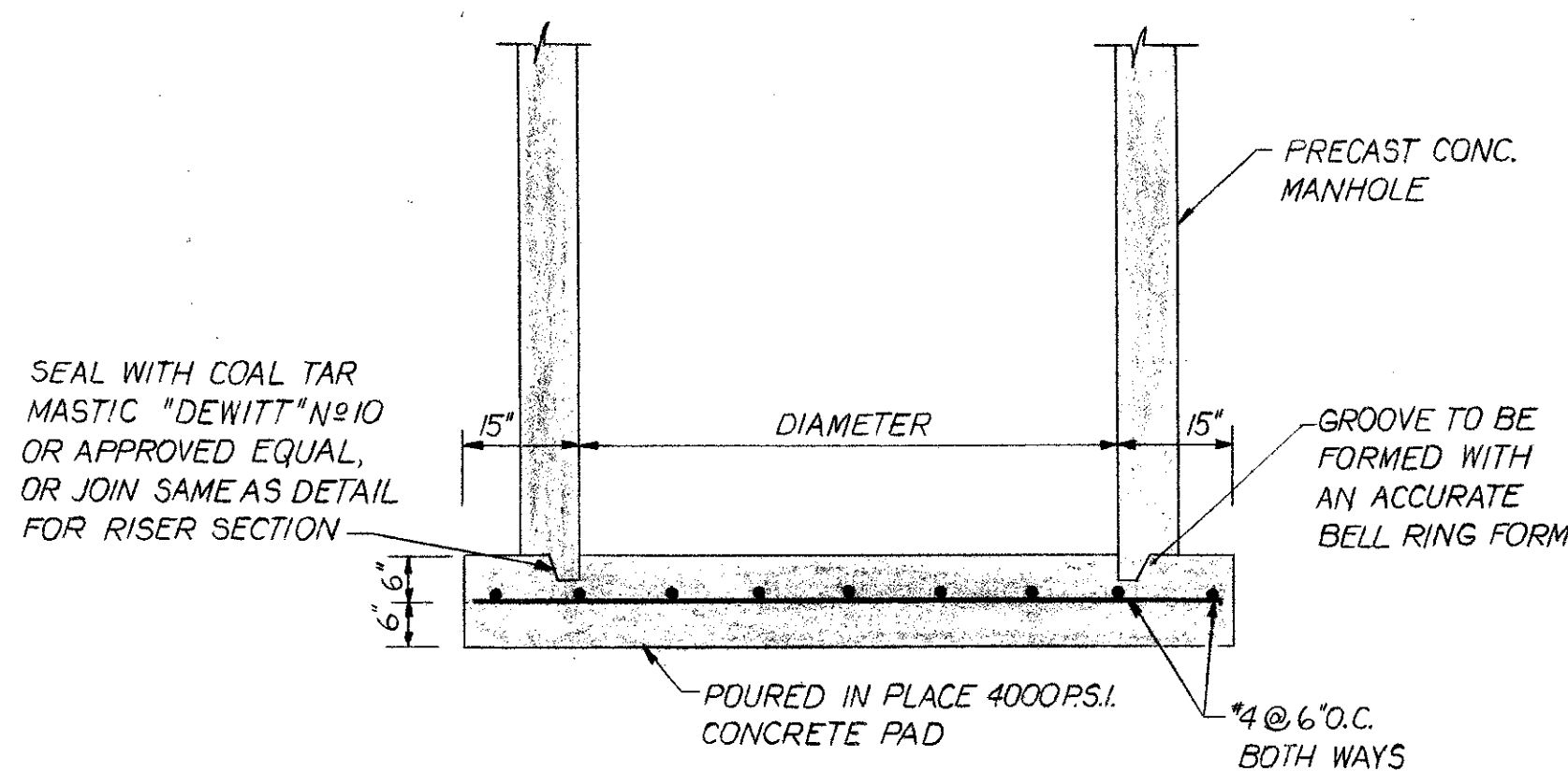
PLAN
(M.H. N#2)



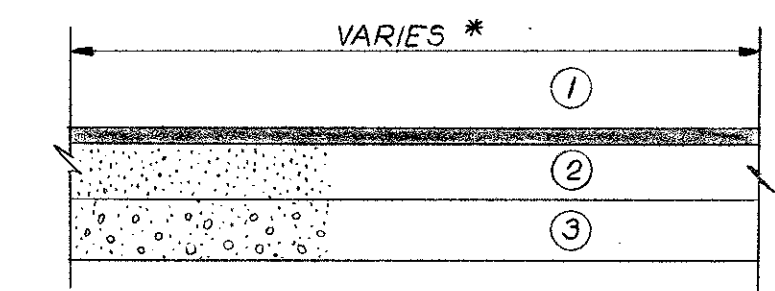
DETAIL MANHOLE JOINT
NOT TO SCALE



TYPICAL SECTION
DETAIL PRECAST CONC. MANHOLE
SCALE: 1/2" = 1'-0"



ALTERNATE CONSTRUCTION
MANHOLE BOTTOM
NOT TO SCALE



- ① 1 1/2" TYPE II ASPHALT
 - ② 8" LIMEROCK BASE OR SOIL CEMENT BASE
 - ③ 12" STABILIZED SUB BASE
- * PAVEMENT TO BE SLOPED 1/8" PER FOOT MINIMUM TO OBTAIN FINISHED GRADE AS SHOWN.

TYPICAL PAVEMENT SECTION

NOTE:
1. SEAL ALL PIPE OPENINGS IN MANHOLES W/EMBECCO GROUT OR APPROVED EQUAL.

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
J.P.	J.A.	J.P.	[Signature]
DATE	REVISIONS	REVISED BY	CHECKED BY
9-12-75	REV. TO "AS BUILT"	J.	G.C.K.

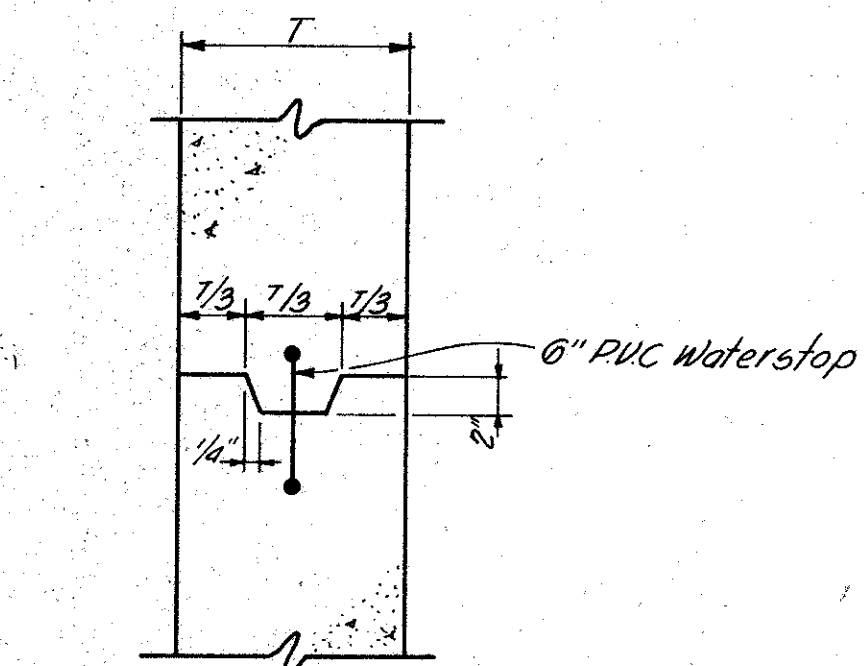
vtm inc.
engineers - planners - surveyors

**SOUTHWEST SEWER DISTRICT
WASTEWATER TREATMENT PLANT
INFLUENT PUMPING STATION
MANHOLE DETAILS**

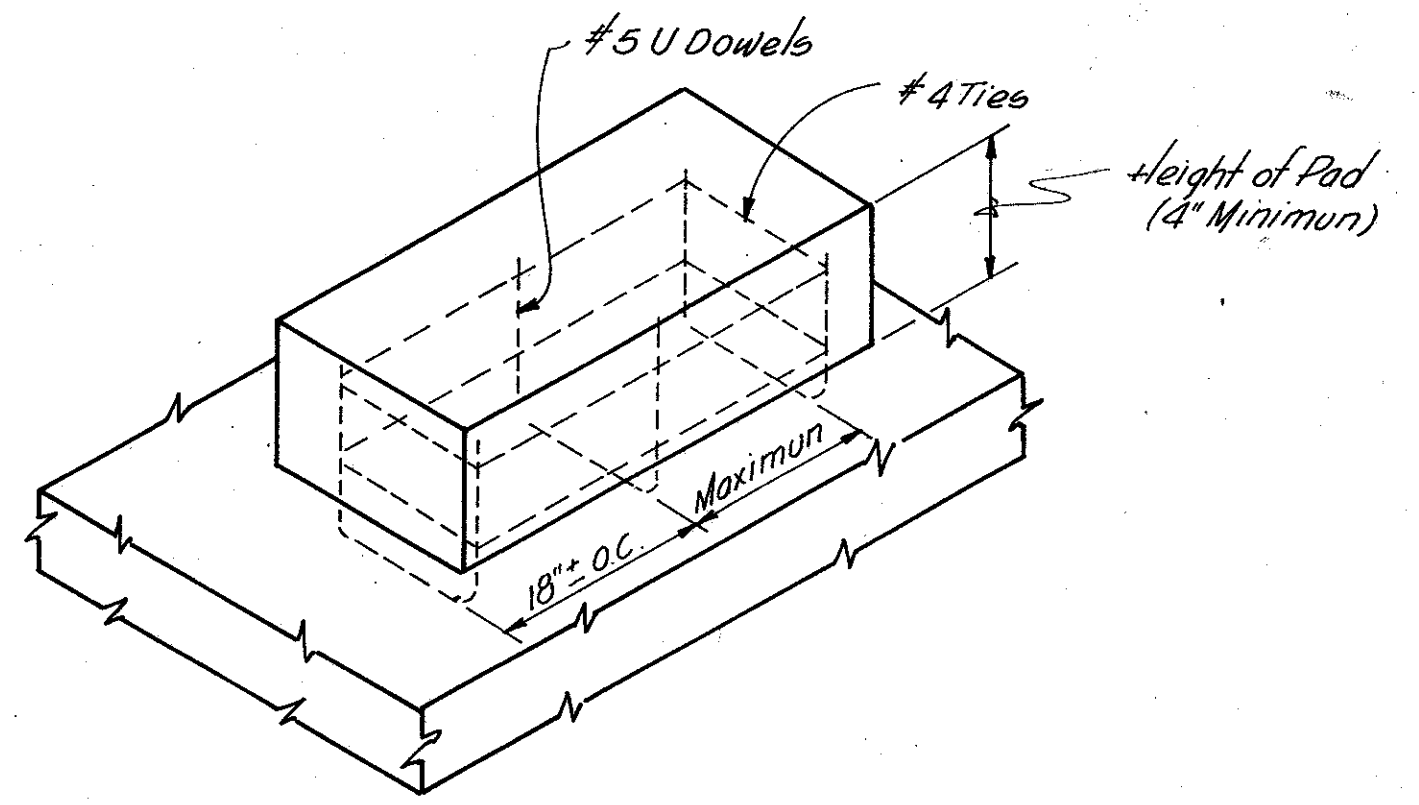
ORANGE COUNTY FLORIDA

PROJECT NO.	F-2521
DATE	MAY 1973
SCALE	AS NOTED
SHEET	9 OF 22

M-8

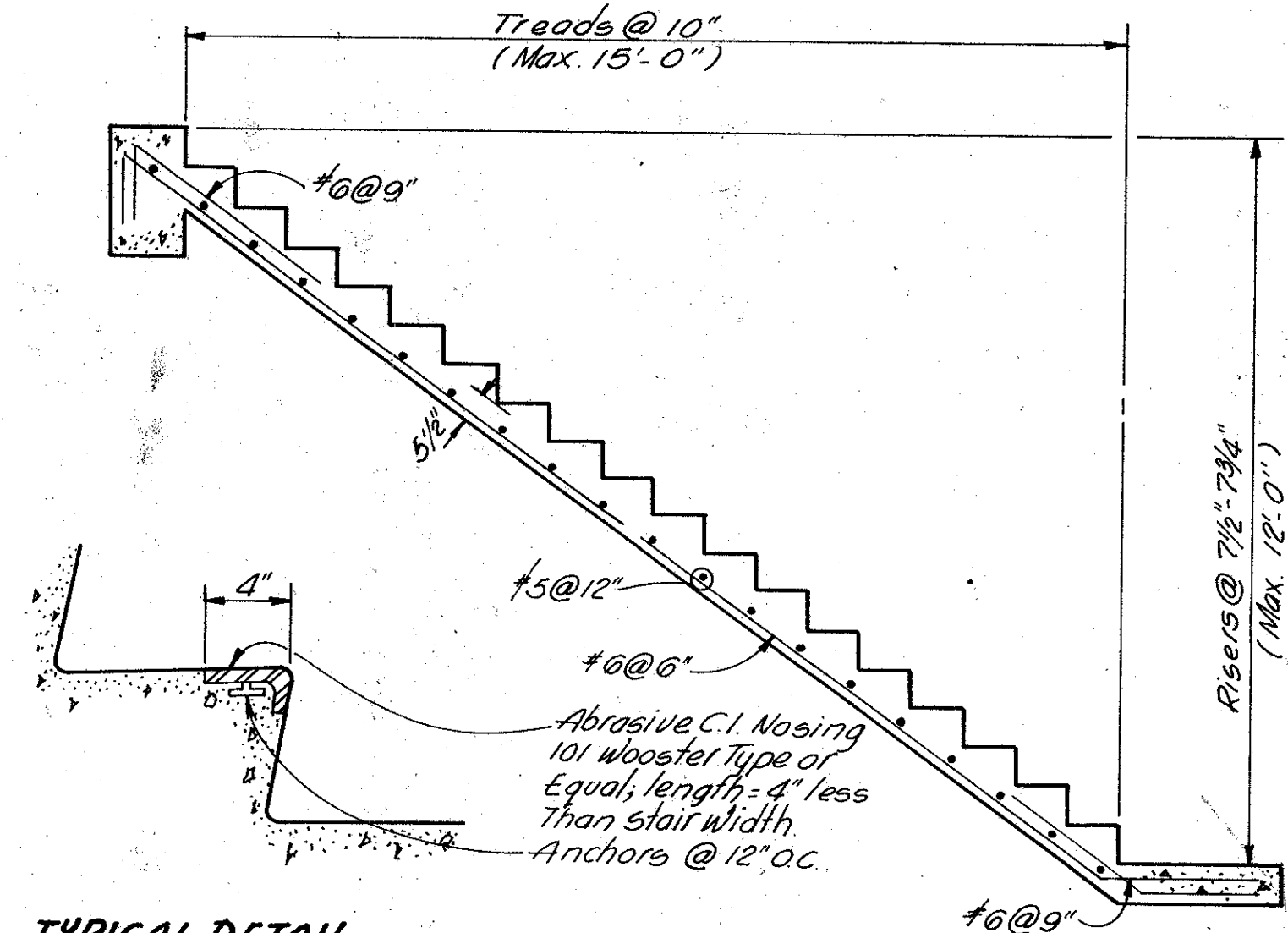


TYPICAL KEY & WATERSTOP
Scale: 1/2" = 1'-0"

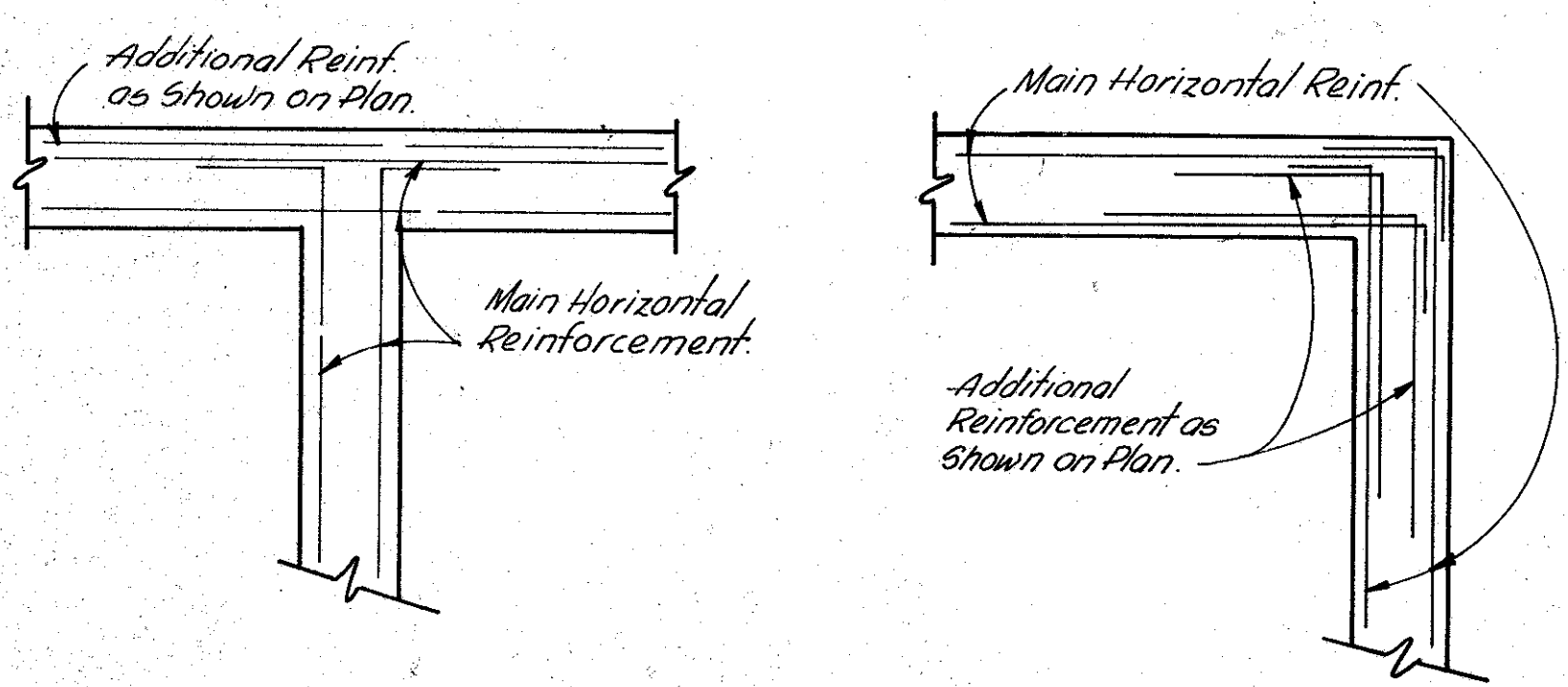


Note: 1. Place #5 U Dowel a minimum of 3" into slab, maximum horizontal spacing 18"
2. Place #4 Ties at 12" maximum vertical spacing with bottom tie 3" maximum above slab.

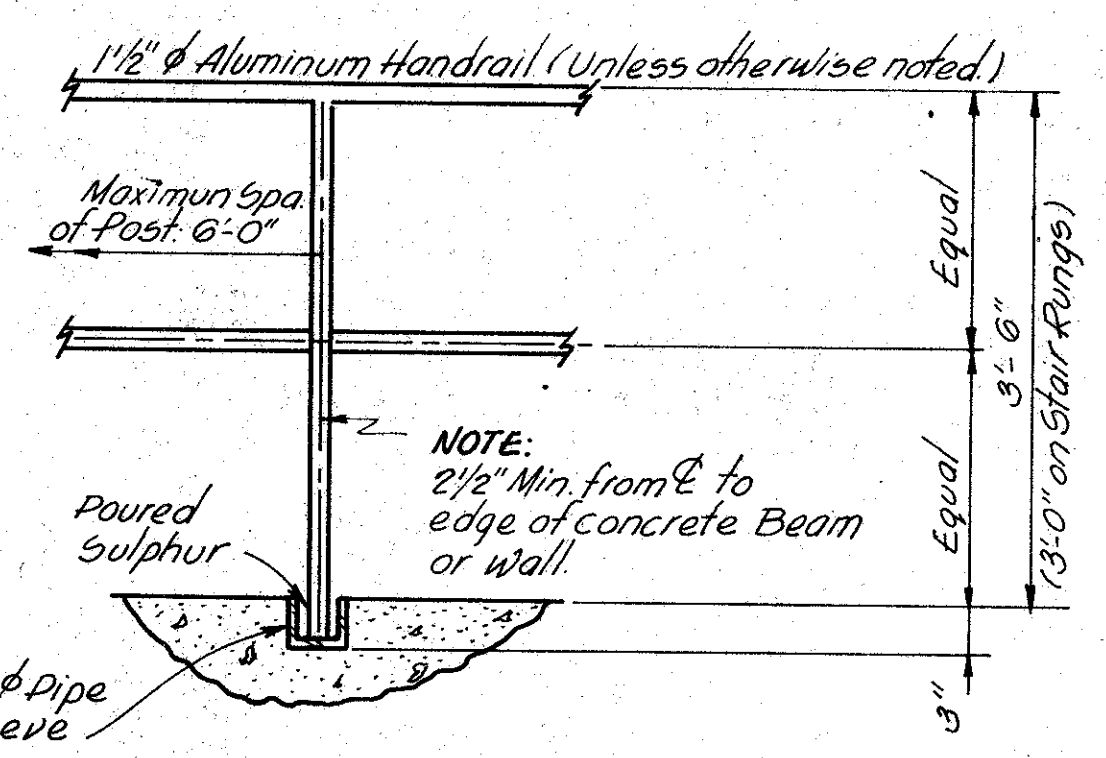
TYPICAL EQUIPMENT PAD DETAIL
(N.T.S)



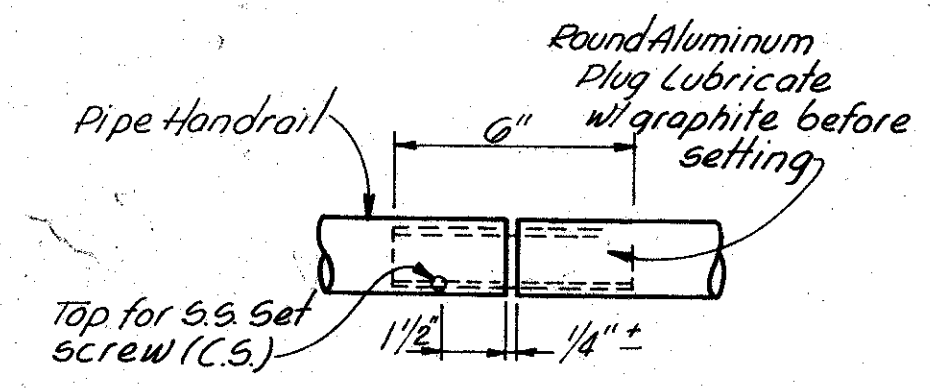
TYPICAL DETAIL
Concrete Stair Nosing (N.T.S.)
TYPICAL STAIR DETAIL
Scale: 3/8" = 1'-0"



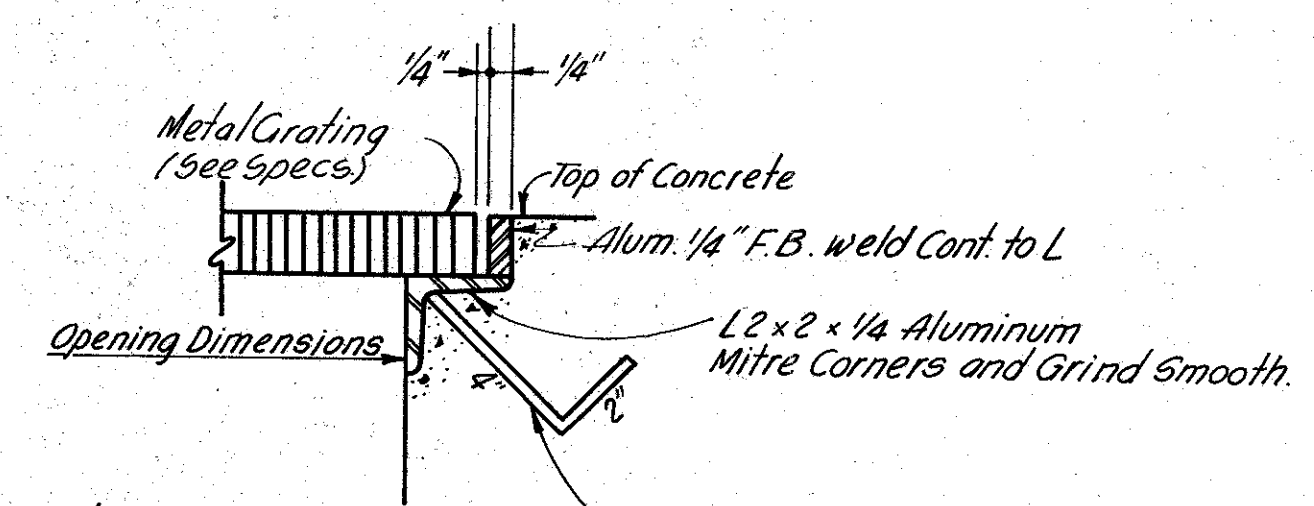
TYPICAL CORNER DETAILS
(N.T.S)



HANDRAIL DETAIL
Scale: 3/4" = 1'-0"

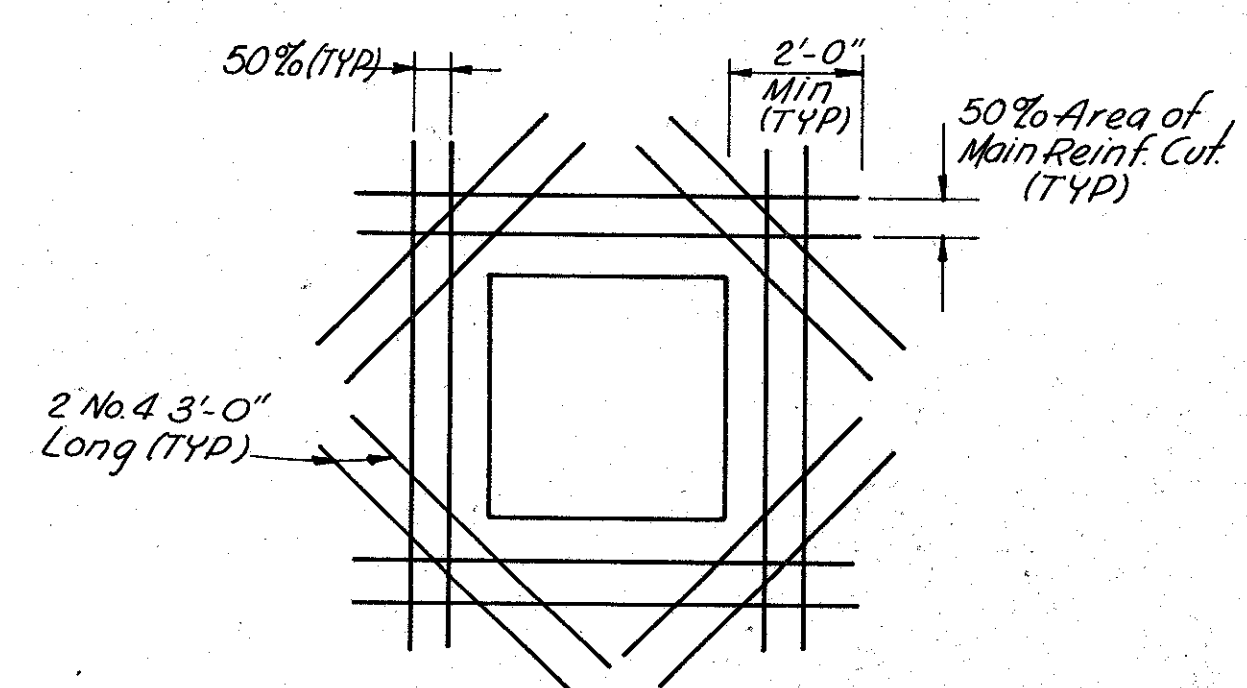


HANDRAIL EXPANSION JOINT DETAIL
Typical @ 25' O.C. Top and Bottom Rail

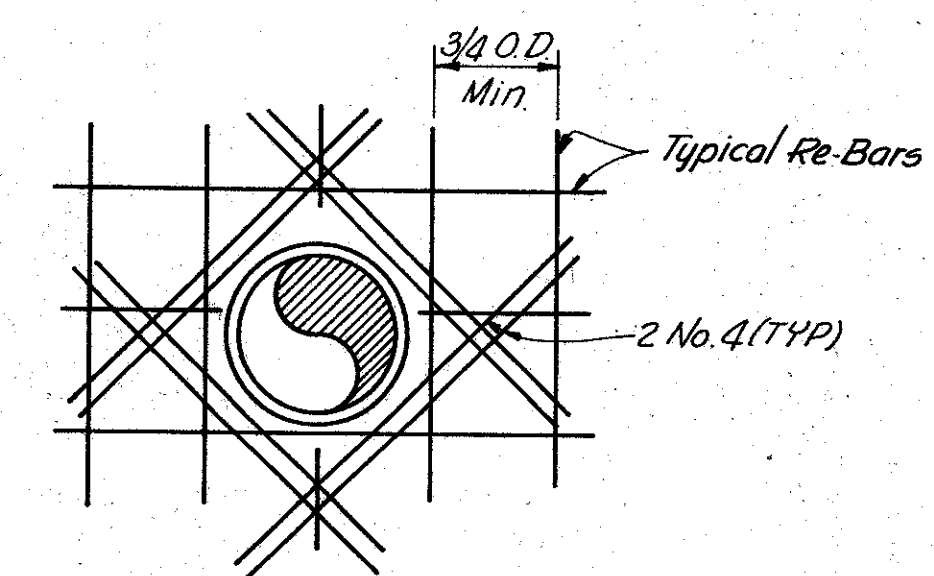


Note: 1. All Grating and Frames are Aluminum unless specifically shown otherwise.
2. Dimensions shown on Drawings are clear openings.

TYPICAL GRATING DETAIL
Scale: 3" = 1'-0"



ADDITIONAL REINF. AROUND OPENING IN SLABS
(TYP)



ADDITIONAL REINF. AROUND PIPE

GENERAL STRUCTURAL NOTES

- Design Criteria:**
(All applicable sections of the "Southern Standard Building Code" apply except as noted)
- Live Loads:**
- 1. Walkways and Platforms ----- 100 #/sq. ft.
 - 2. Floor Slabs ----- 200 #/sq. ft.
 - 3. Roof ----- 30 #/sq. ft.

- Concrete:**
1. All concrete work to conform with applicable sections of the A.C.I. standard 1971, unless otherwise noted.
 2. Concrete shall be of the following minimum ultimate strengths of 28 days.
2,500 psi ----- All concrete.
3,750 psi ----- all other purposes.
 3. Reinforcing bars shall be new billet steel deformed bars conforming to ASTM spec. A615, grade 60, except stirrups and ties and as noted to be A615, grade 40.
 4. All reinforcement to be continuous unless otherwise noted. Lap all continuous reinforcement 36 bar diameters at splices and bend 12 inches around corners, unless otherwise noted.
 5. Terminate all discontinuous top bars with a standard 90° hook.
 6. Splice bars at point of minimum bending stress; for example in beams and slabs, splice top bars at midspan and bottom bars at support.
 7. In two-way slabs place short span bars in outer layer, unless otherwise noted.
 8. All reinforcement to be adequately supported by galvanized steel chairs to withstand construction loads without displacement.
 9. All piping, sleeve, anchor bolts, inserts, etc., required by all trades to be in place before placing concrete.
 10. Dowels from slabs to walls shall match wall reinforcement. Lap 36 bar diameter, unless otherwise noted.
 11. It is the requirement and intent of the plans and specifications that all tanks be constructed watertight to prevent either exfiltration of tank contents or infiltration of ground water; to this end, effect, waterstops shall be used in all exterior construction joints of tanks, pits, and walls, whether or not specifically noted.
 12. Unless otherwise noted, provide 3/4" chamfer on all exposed corners of beams, columns, walls, equipment foundations, etc.
 13. All precast lintels shall be reinforced with 2 #4 top and bottom as a minimum and shall have a minimum masonry end bearing of 8".
 14. Provide 1/4" pre-moulded expansion joint material where slab on grade is poured around columns and against grade beams or walls unless otherwise shown.
 15. Contractor shall verify all existing dimensions before proceeding with construction.
 16. Membrane waterproofing underlayment to be polyethylene sheets. (Refer to Specifications)
 17. Unless otherwise shown on drawings, minimum cover for reinforcing shall be as follows:

Footings -----	3"
Grade Beams -----	2"
Columns and Pedestals (over vert. reinf.) -----	2"
Walls -----	2"
Slabs -----	3/4"
Beams (over Main Reinf.) -----	1 1/2"
All Concrete Poured Directly on Ground -----	3"
Surfaces Containing Liquid -----	2"
 18. Concrete shall be placed in the dry. No lateral load, including hydrostatic load due to ground water, shall be permitted on the structure until all floor slabs have been poured.

DATE	REVISIONS	REVISED BY	CHECKED BY	DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY
9-12-75	REV. TO "AS BUILT"	JR.	G.C.K.	L.J.C.	RDP	J.P.C.	J.R.D.

vtm inc.
engineers - planners - surveyors

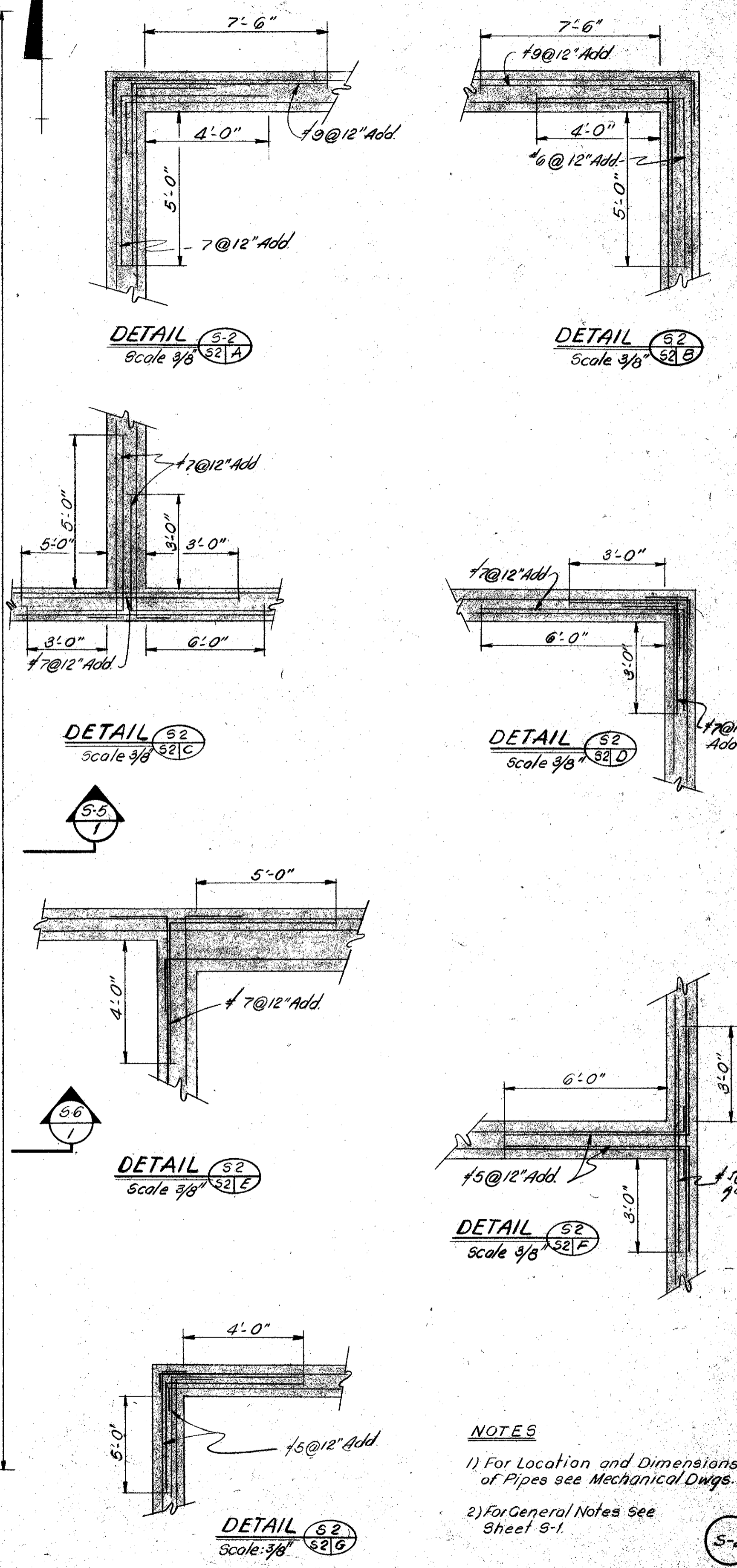
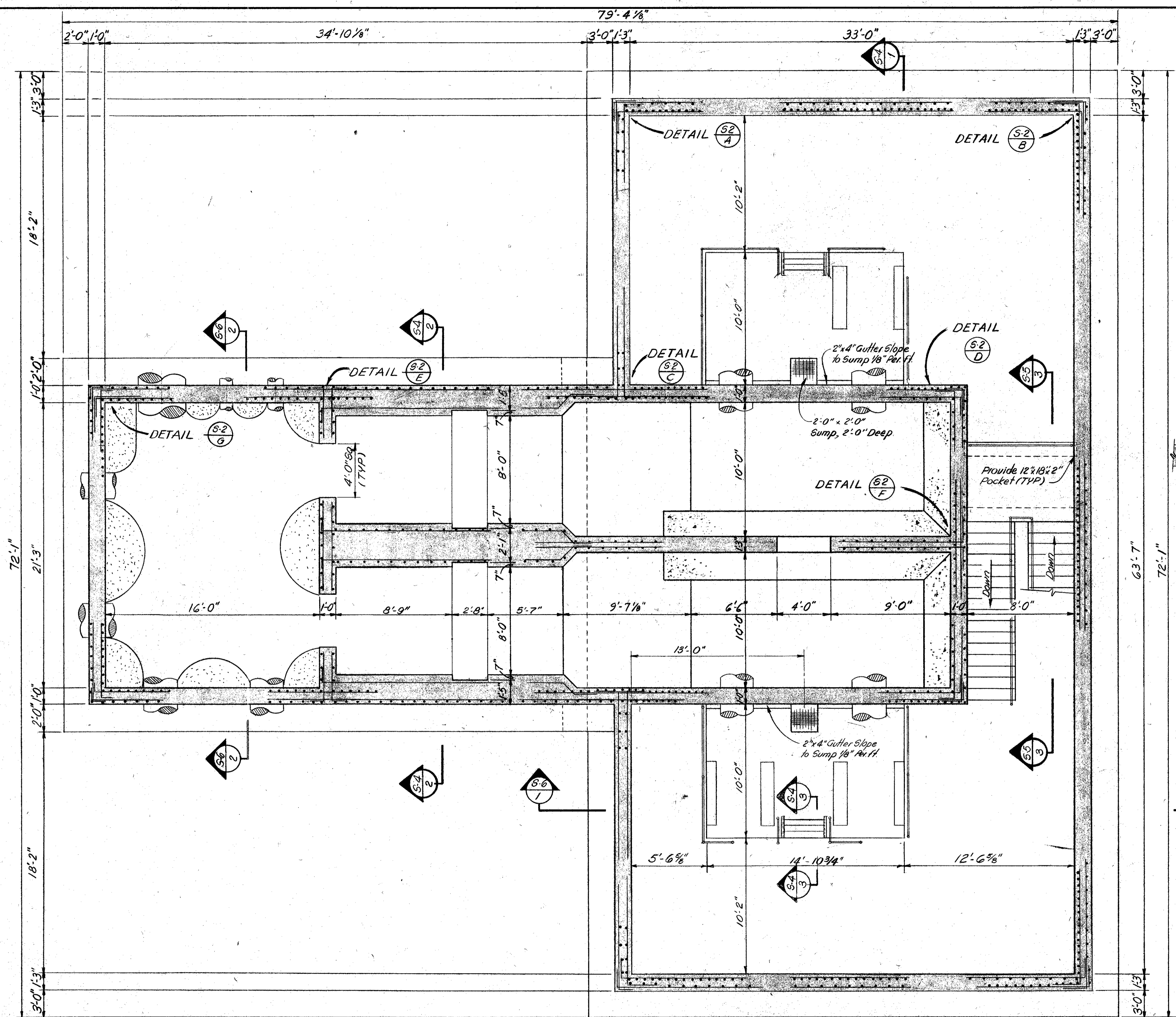
Helena, Montana
Charleston, W. Va.
Orlando, Florida
Coral Gables, Florida

FLA. P.E. NO. 12163

SOUTHWEST SEWER DISTRICT
WASTEWATER TREATMENT PLANT
INFLUENT PUMPING STATION
STRUCTURAL NOTES & TYPICAL
DETAILS

ORANGE COUNTY FLORIDA

PROJECT NO.	F-2521
DATE	MAY, 1973
SCALE	AS NOTED
SHEET	10 OF 22



NOTES
 1) For Location and Dimensions of Pipes see Mechanical Dwg.
 2) For General Notes see Sheet S-1.

FOUNDATION PLAN @ ELEV. 83.50'
 SCALE: 1/4" = 1'-0"

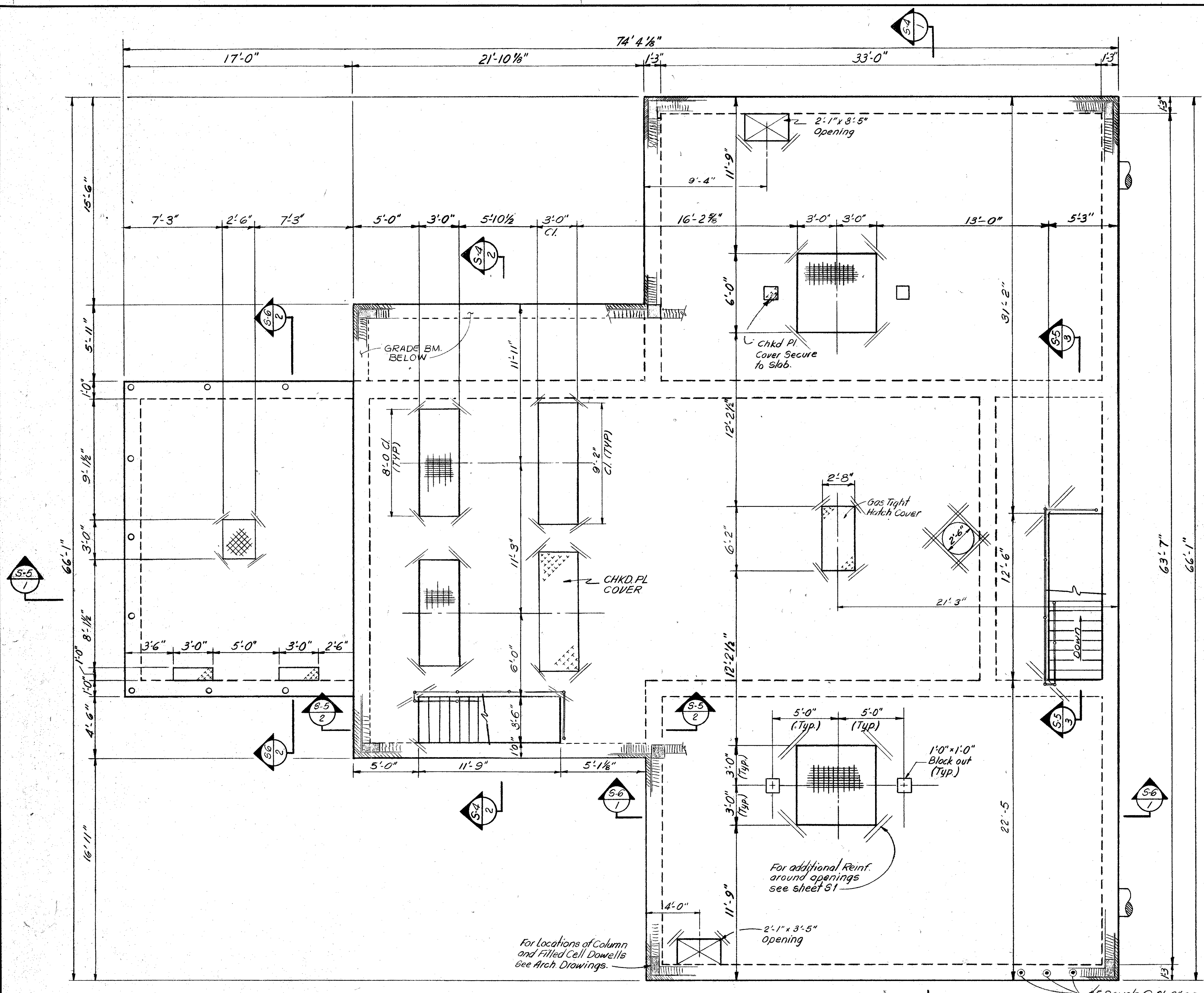
9-12-75	REV TO "AS BUILT"	JR	G.C.K.	DESIGNED BY	LJC	DRAWN BY	EE	CHECKED BY	APPROVED BY
DATE	REVISIONS	REVISED BY	CHECKED BY						

VTN Inc.
 engineers - planners - surveyors
 Helena, Montana; Charleston, W. Va.; Orlando, Florida; Coral Gables, Florida

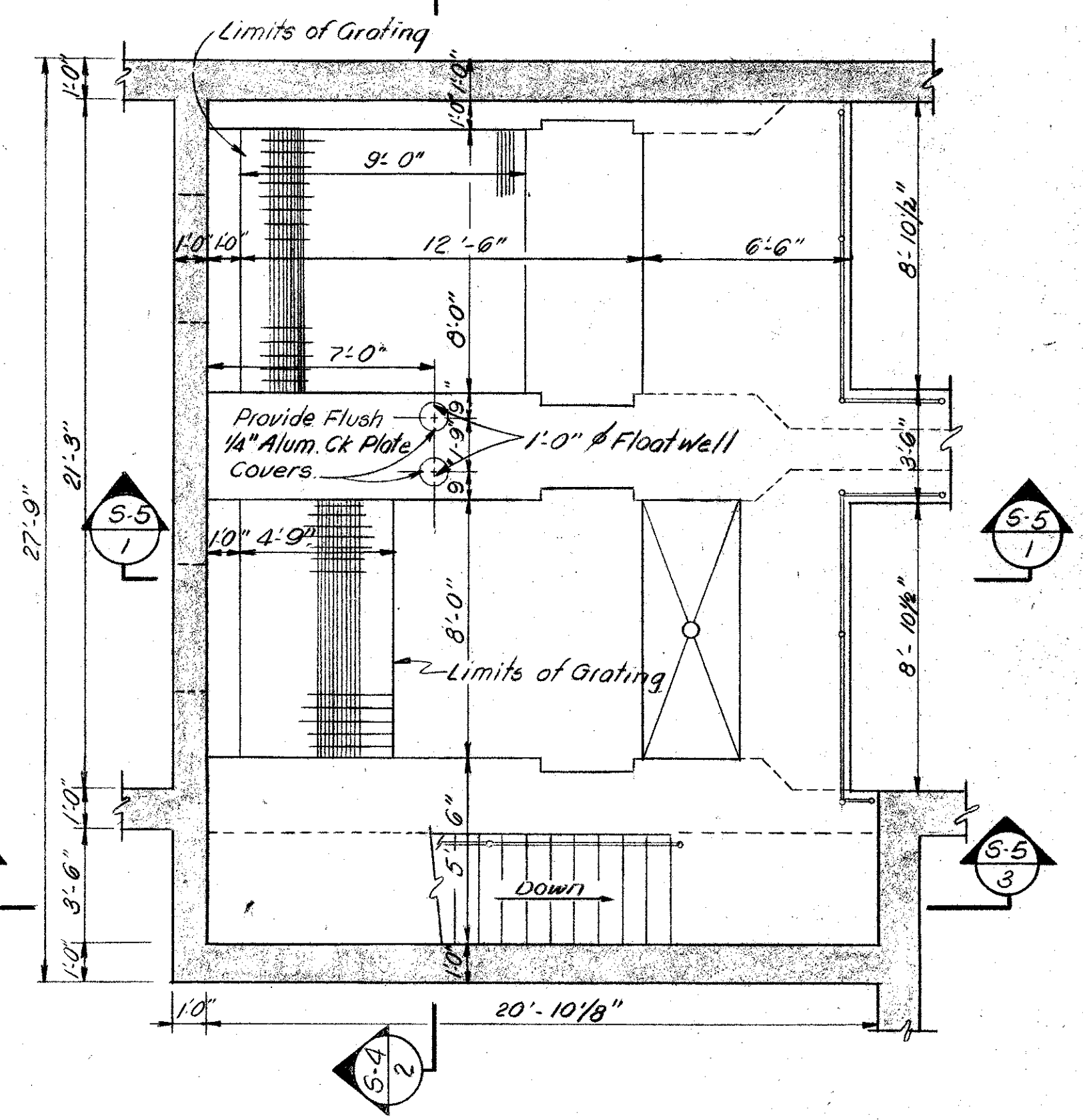
**SOUTHWEST SEWER DISTRICT
 WASTEWATER TREATMENT PLANT
 INFLUENT PUMPING STATION
 STRUCTURAL PLAN & SECTIONS**

ORANGE COUNTY, FLORIDA

PROJECT NO. F-2521
 DATE MAY, 1973
 SCALE AS NOTED
 SHEET 11 OF 22



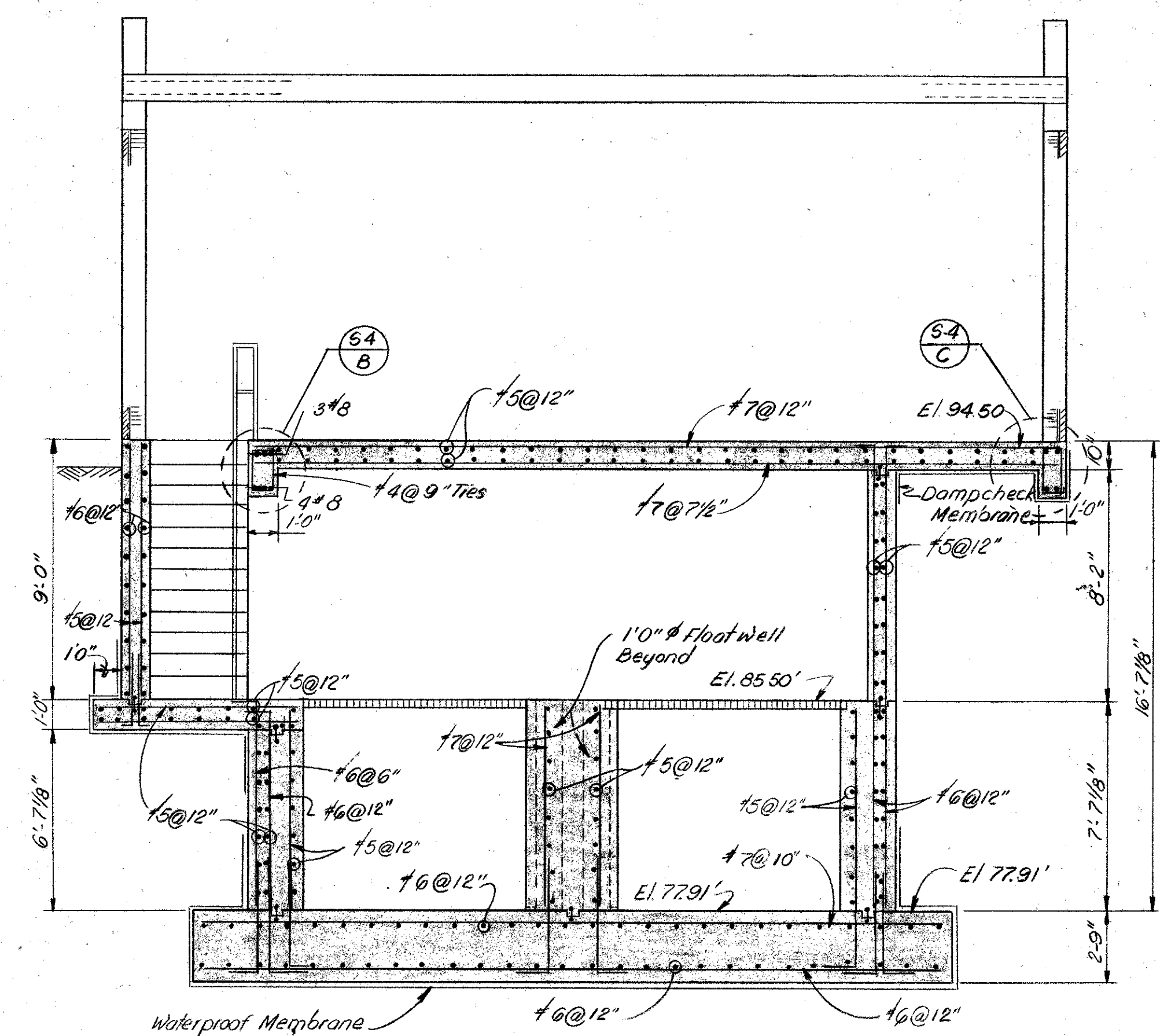
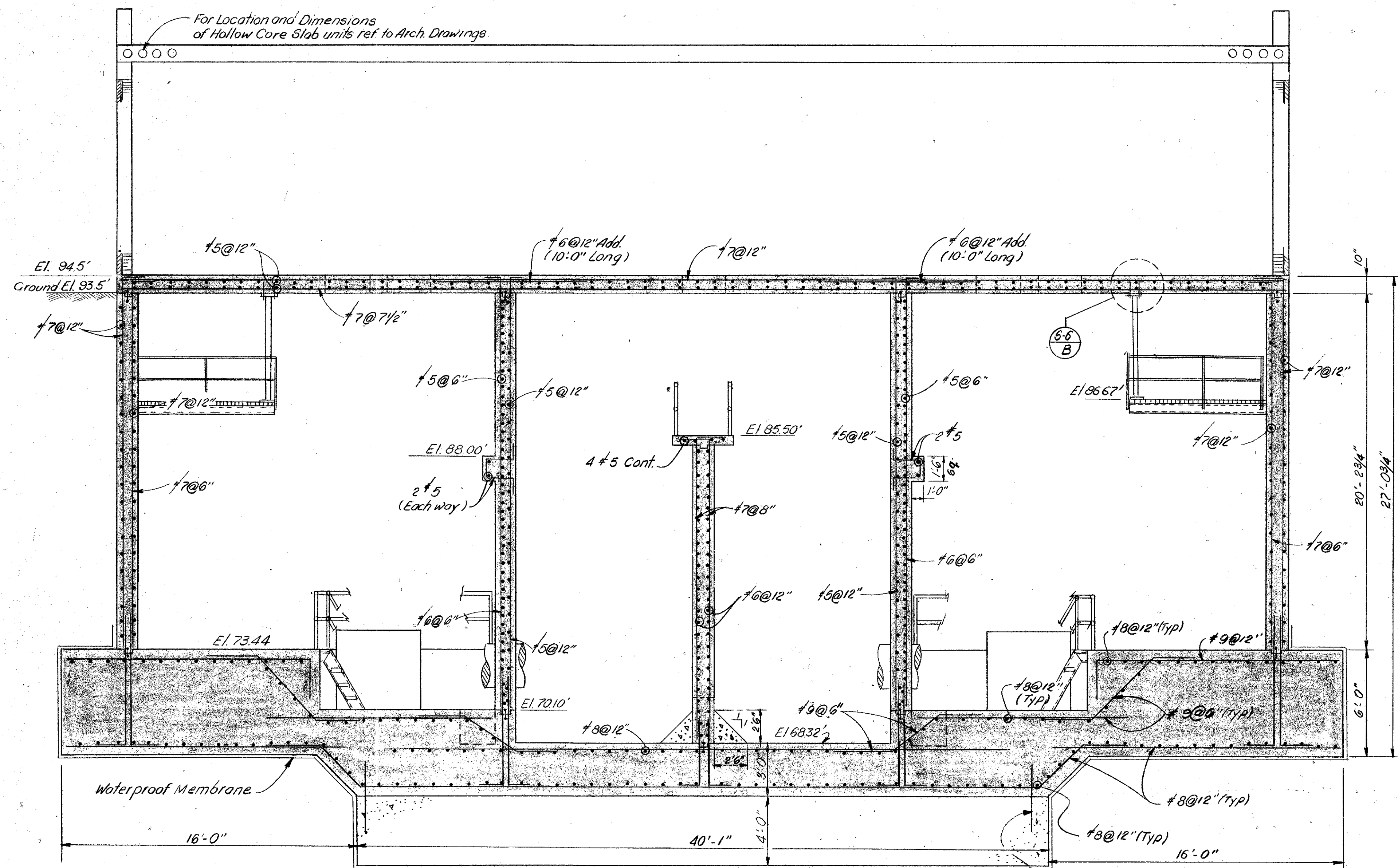
SLAB PLAN @ ELEV. 94.50'
SCALE: 1/4" = 1'-0"



PARTIAL PLAN @ ELEVATION 87.00
Scale: 1/4" = 1'-0"

- NOTES:
- 1) For Location and Dimensions of Pipes see Mechanical Drawings
 - 2) For General Notes see Sheet S-1

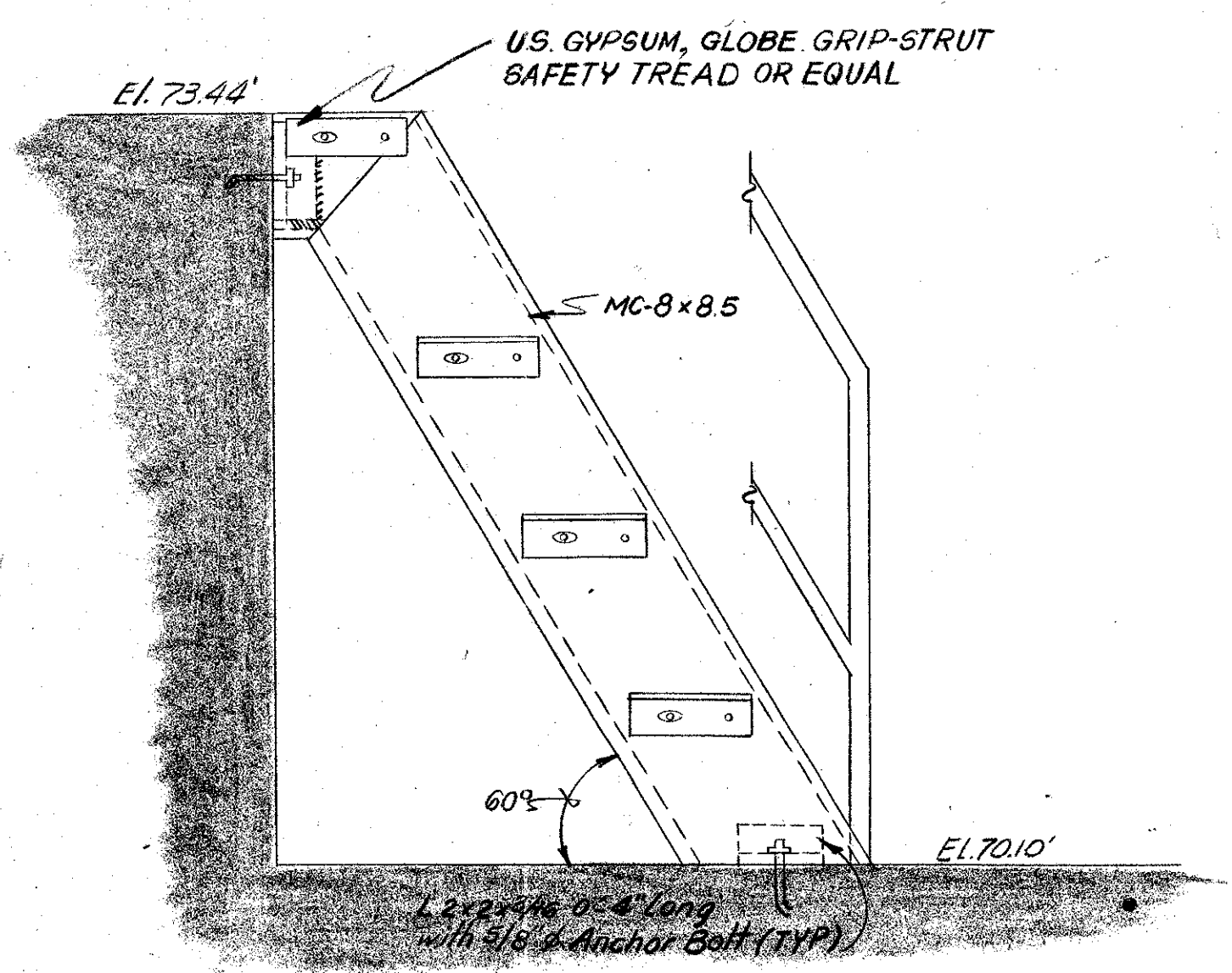
<p>9-12-75 REV TO 'AS BUILT'</p>		<p>REVISOR: J.R.</p>	<p>CHECKED BY: G.C.K.</p>	<p>DESIGNED BY: LUC</p>	<p>DRAWN BY: EE</p>	<p>CHECKED BY: [Signature]</p>	<p>APPROVED BY: [Signature]</p>	<p>vtm inc. engineers - planners - surveyors FLA. RE. NO. 12163</p>	<p>SOUTHWEST SEWER DISTRICT WASTEWATER TREATMENT PLANT INFLUENT PUMPING STATION STRUCTURAL PLANS</p>	<p>PROJECT NO. F-2521</p>
								<p>Helena Montana Charleston W. Va. Orlando Florida Coral Gables Florida</p>	<p>ORANGE COUNTY, FLORIDA</p>	<p>DATE MAY 1973</p>
										<p>SCALE AS NOTED</p>
										<p>SHEET 12 OF 22</p>



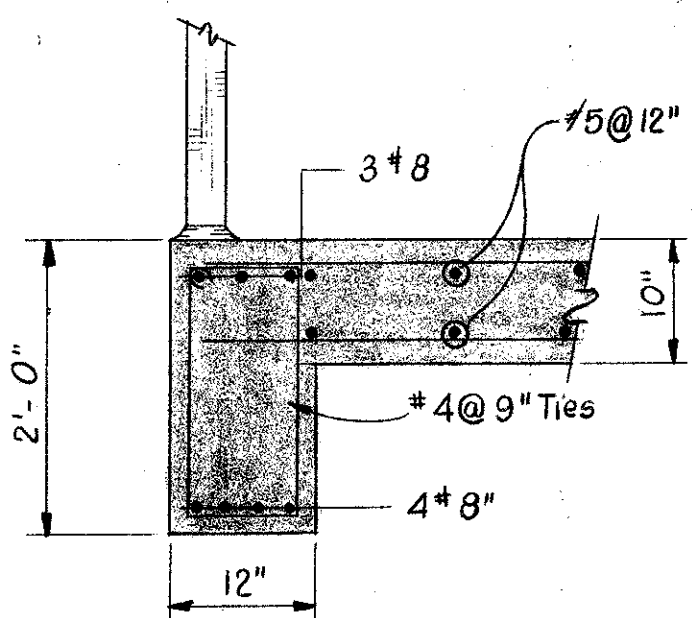
SECTION 5-4
Scale: 1/4"=1'
5.23 1

#7 Dowels @ 2'-0" x 4'-0" long on periphery of lower footing.

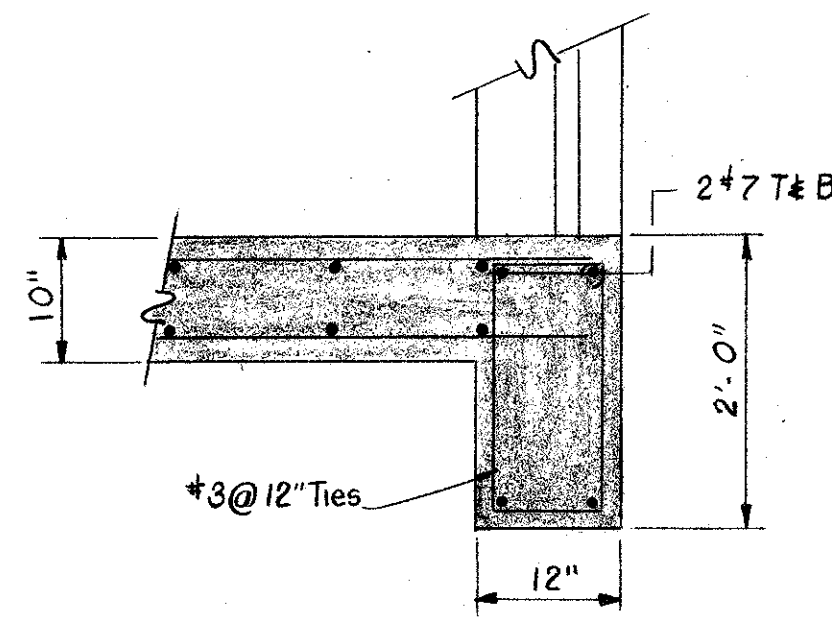
SECTION 5-4
Scale: 1/4"=1'
5.23 2



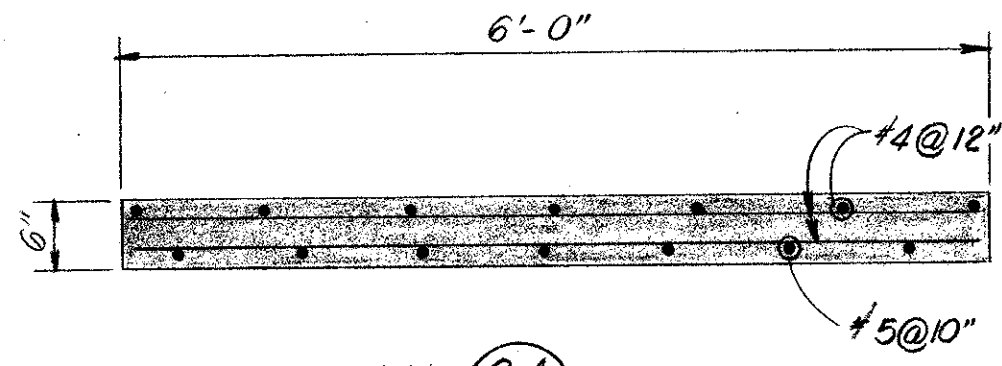
SECTION 5-4
Scale: 1/2"=1'
5.21 3



DETAIL 5-4
Scale: 3/4"=1'
5.4 B



DETAIL 5-4
Scale: 3/4"=1'
5.4 C

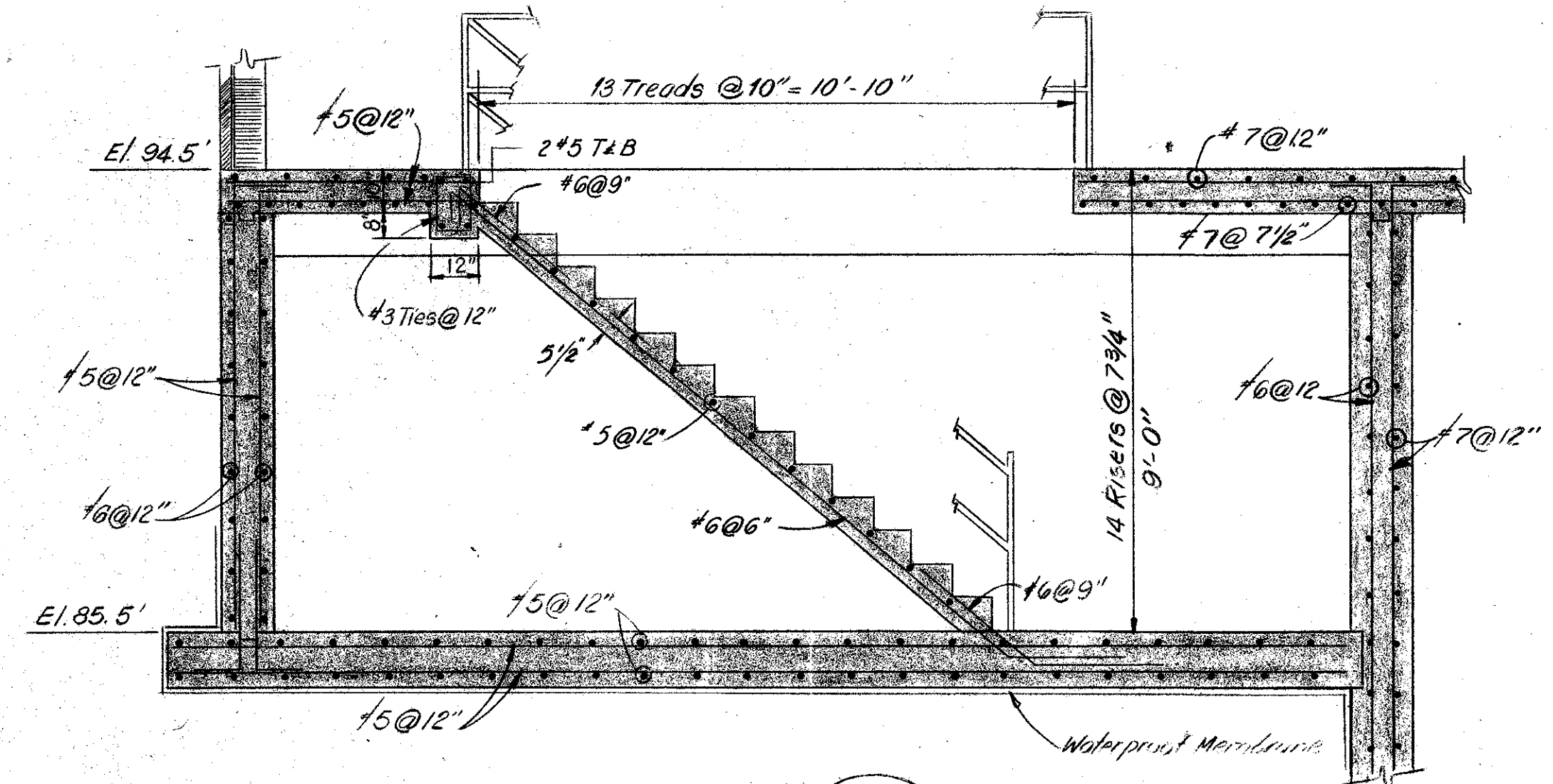
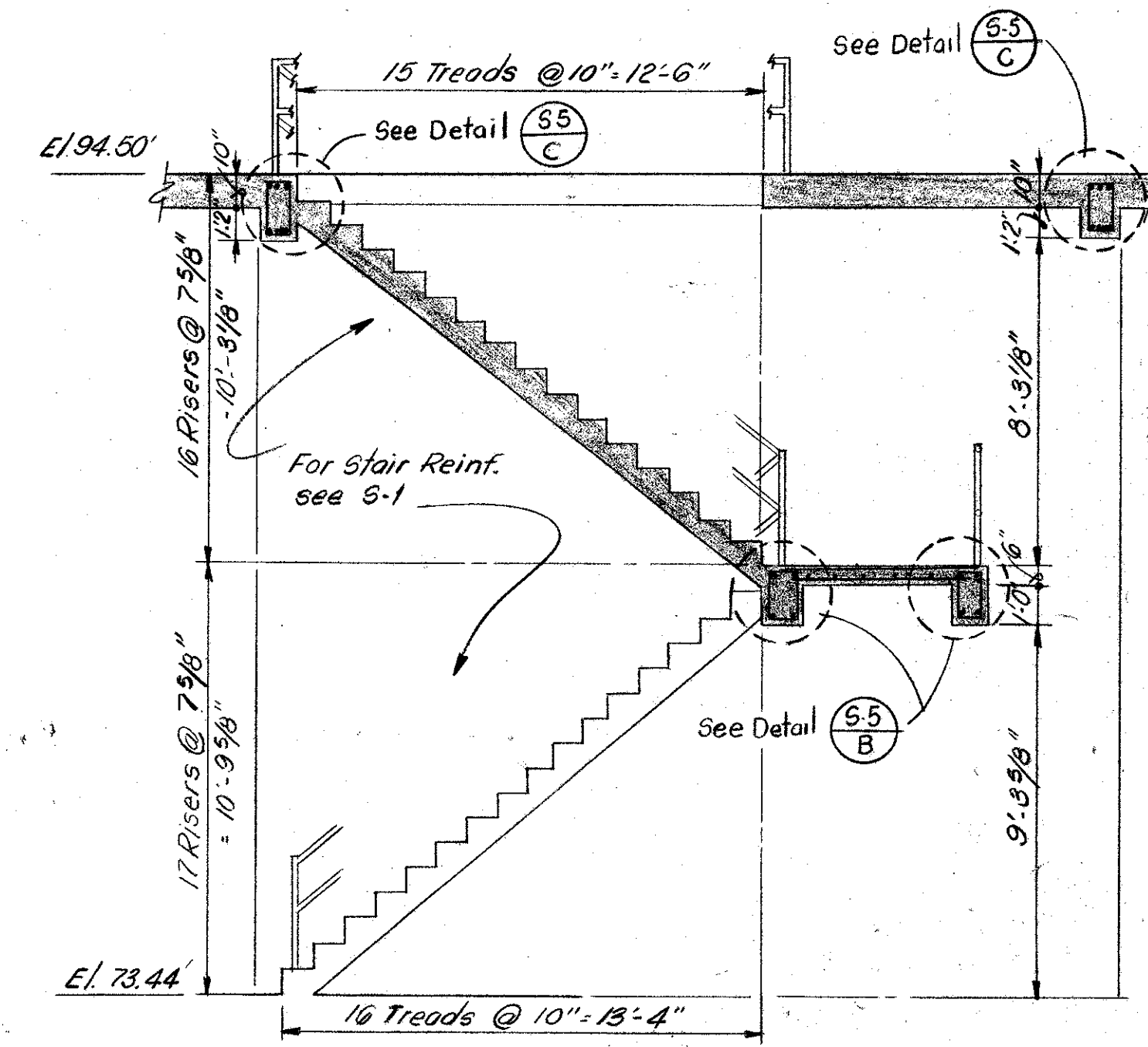
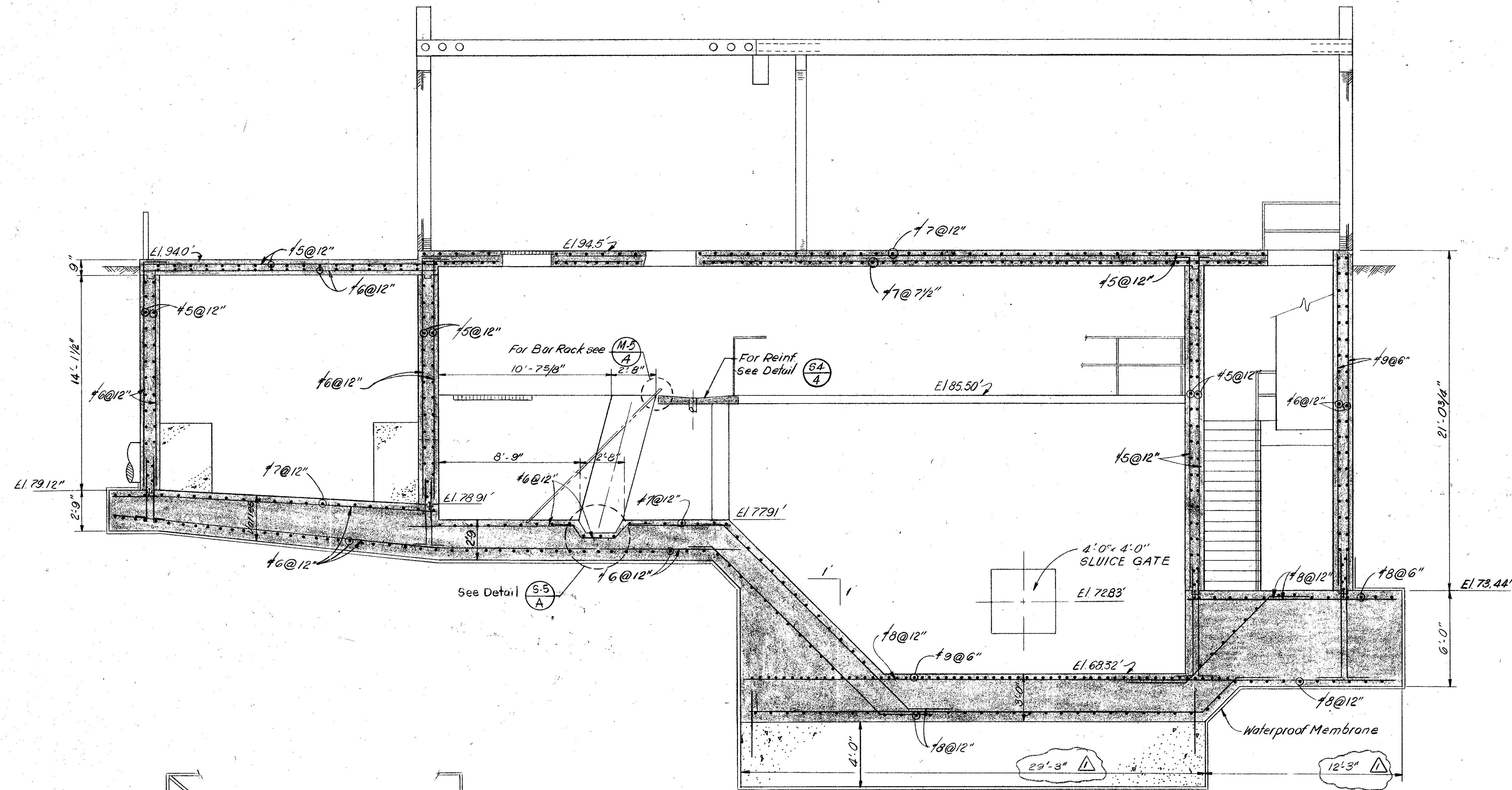


DETAIL 5-4
Scale: 3/4"=1'
5.4 A

- NOTES**
- 1) For Location and Dimensions of Pipes see Mechanical Drawings.
 - 2) For General Notes See Sheet S-1

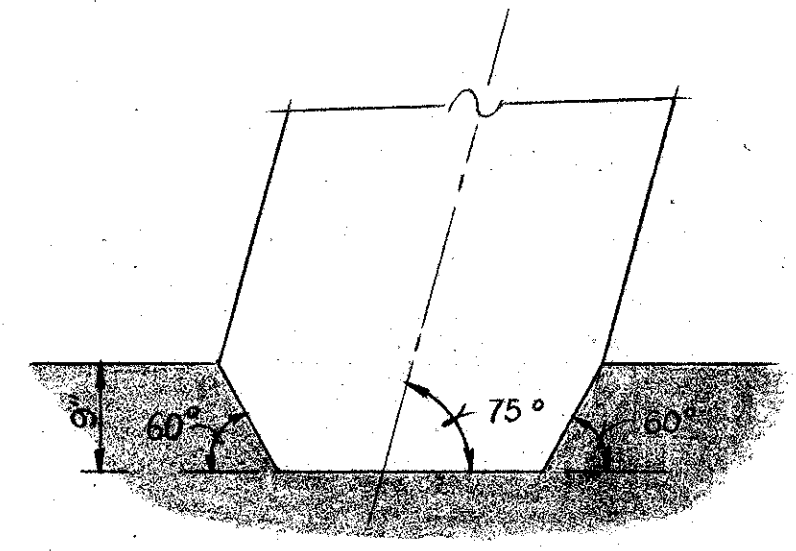
5-4

								SOUTHWEST SEWER DISTRICT WASTEWATER TREATMENT PLANT INFLUENT PUMPING STATION STRUCTURAL SECTIONS & DETAILS		PROJECT NO. F-2521	
				engineers - planners - surveyors FLA. P.E. NO. 12163				ORANGE COUNTY, FLORIDA		DATE MAY, 1973	
				DESIGNED BY: LJC DRAWN BY: RDR CHECKED BY: [Signature] APPROVED BY: [Signature]				SCALE AS NOTED		SHEET 13 OF 22	
9-12-75 REV TO "AS BUILT"				REVISED BY: J CHECKED BY: GCK						FILE NO.	

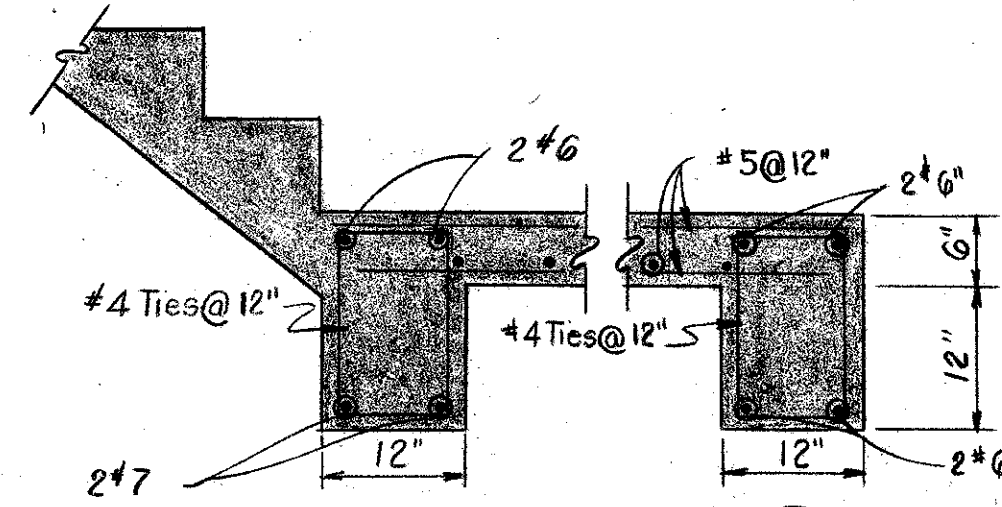


SECTION 5-5
Scale: 1/4\"/>

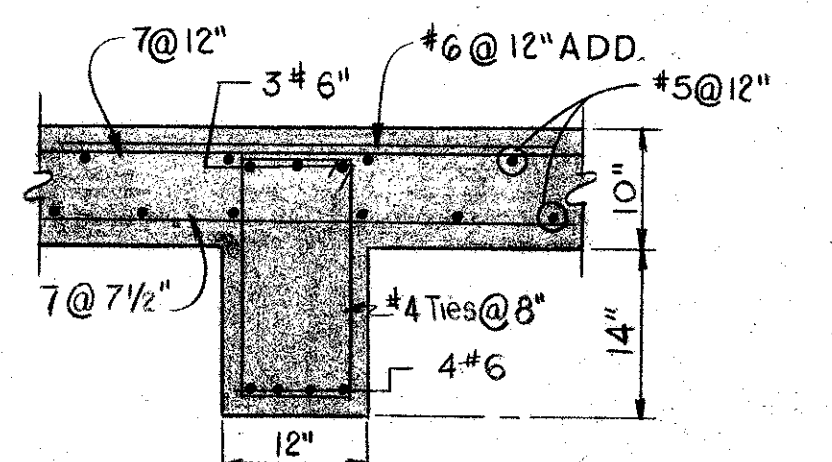
SECTION 5-5
Scale: 3/4\"/>



DETAIL 5-5
Scale: 3/4\"/>



DETAIL 5-5
Scale: 3/4\"/>

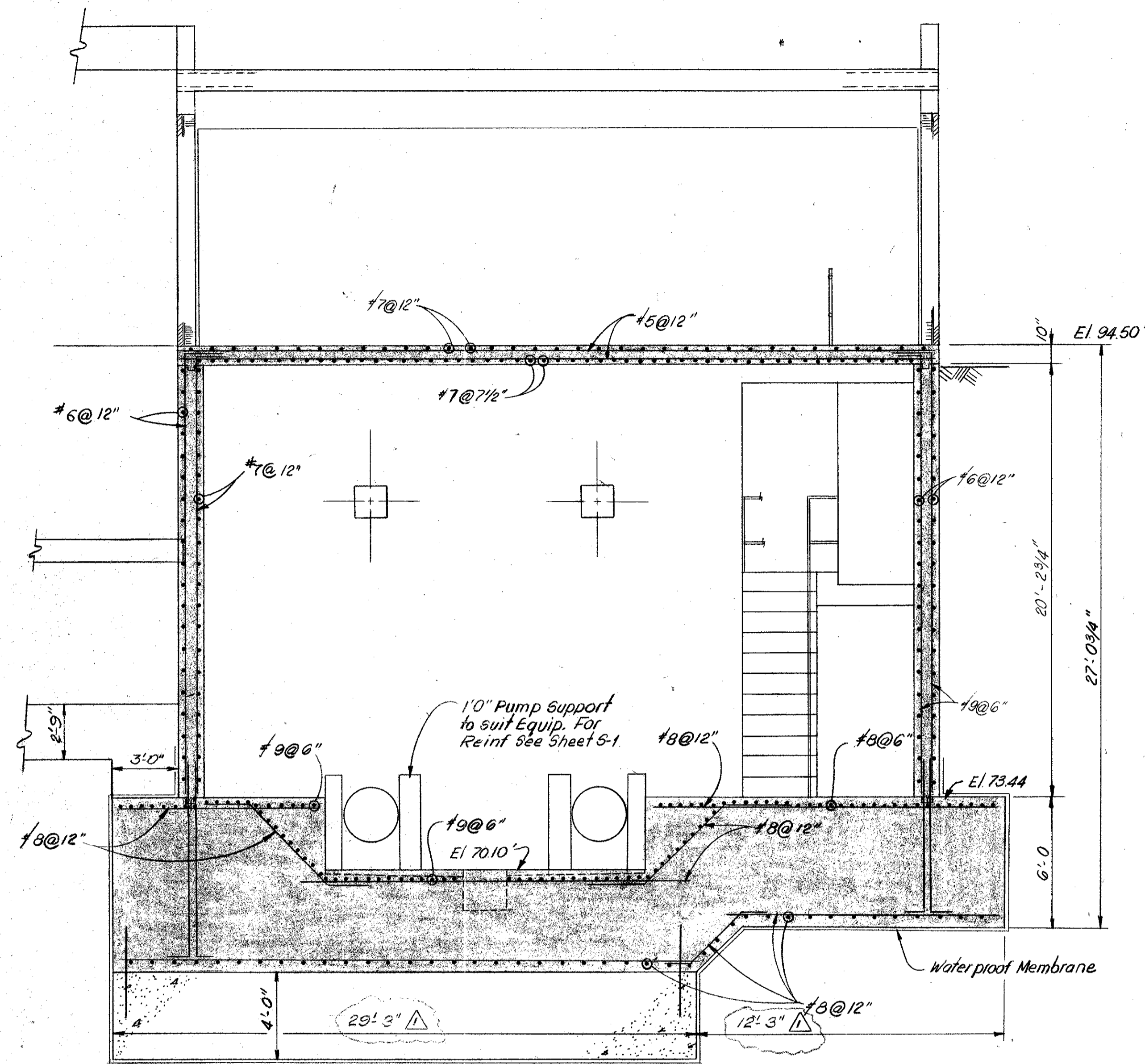


DETAIL 5-5
Scale: 3/4\"/>

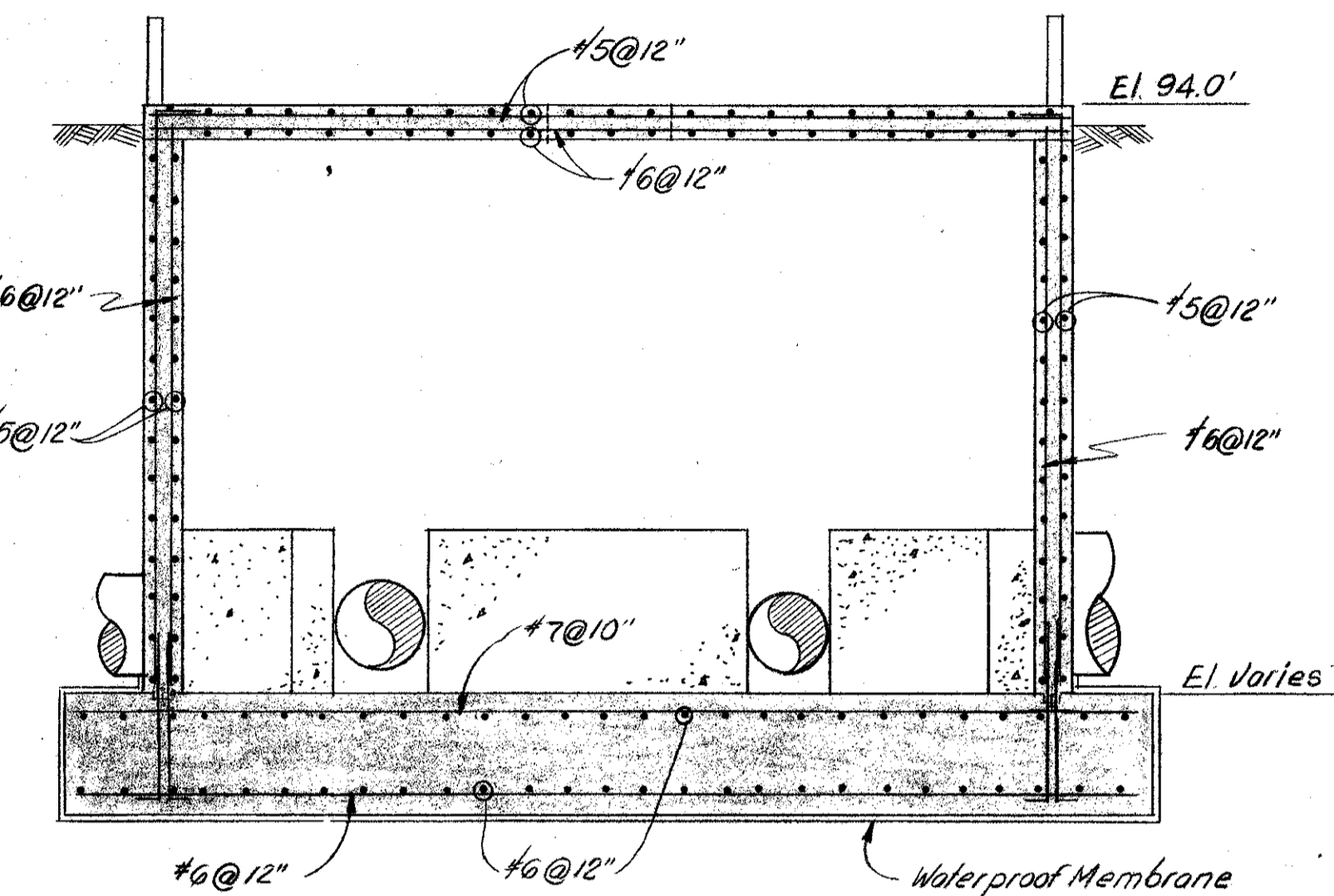
NOTE

- 1) For Location and Dimensions of Pipes see Mechanical Dwg.
- 2) For General Notes see Sheet 5-1.

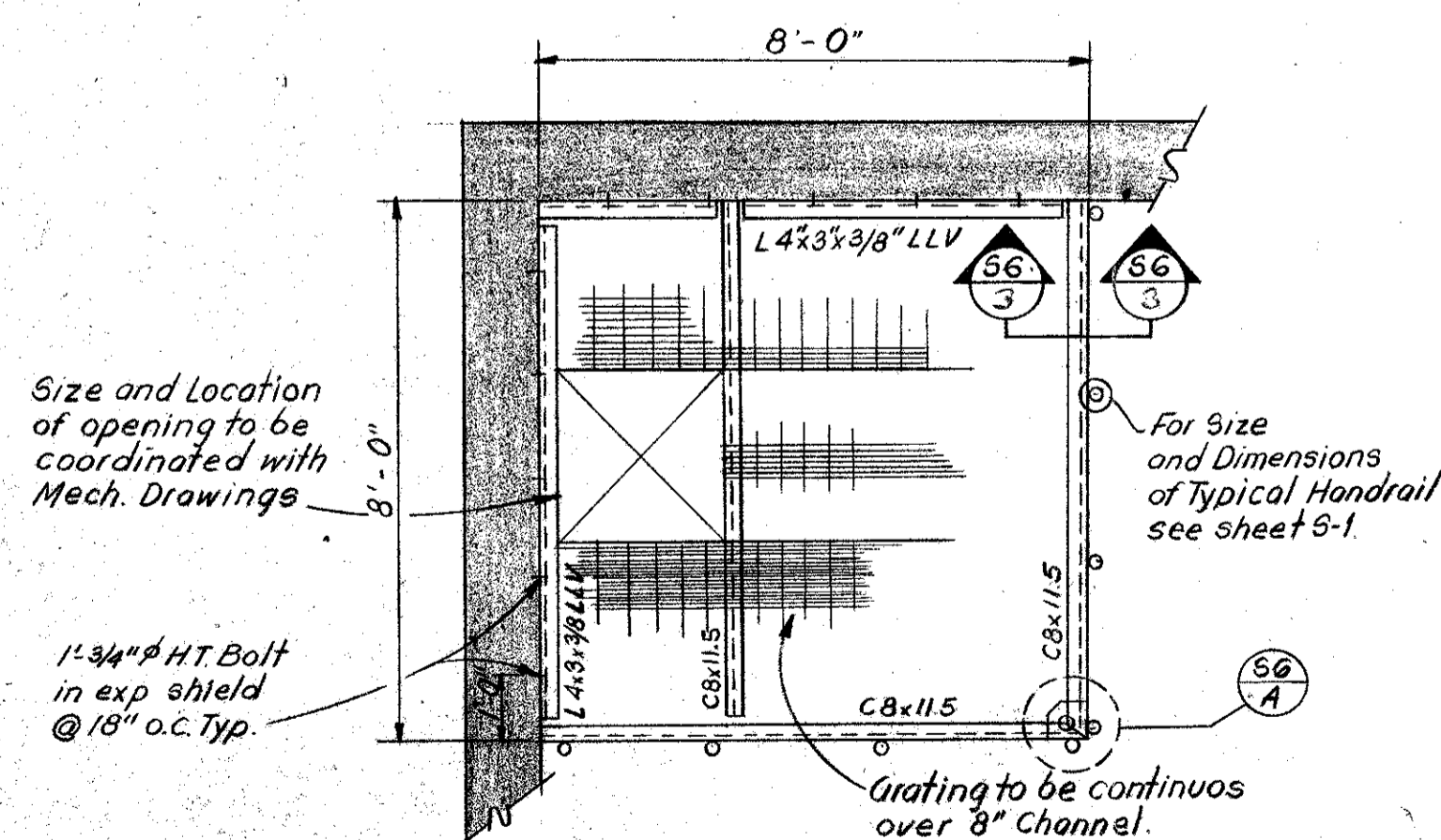
<p>9-12-75 REV TO "AS BUILT" JR GCK</p> <p>7-9-73 REVISE FOUNDATION DIMENSIONS L.J.C. D.K.B.</p>				<p>VTN inc. <i>William A. Rutter</i></p> <p>engineers - planners - surveyors FLA. P.E. NO. 12163</p> <p>DESIGNED BY LJC DRAWN BY RDR CHECKED BY [Signature] APPROVED BY [Signature]</p>				<p>SOUTHWEST SEWER DISTRICT</p> <p>WASTEWATER TREATMENT PLANT</p> <p>INFLUENT PUMPING STATION</p> <p>STRUCTURAL SECTIONS & DETAILS</p> <p>ORANGE COUNTY, FLORIDA</p>				<p>PROJECT NO. F-2521</p> <p>DATE MAY, 1973</p> <p>SCALE AS NOTED</p> <p>SHEET 14 of 22</p>	
--	--	--	--	--	--	--	--	--	--	--	--	---	--



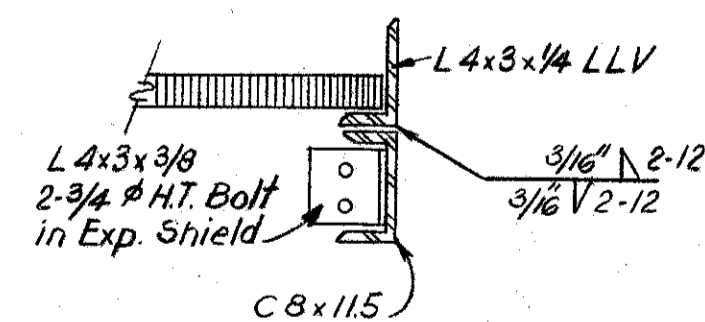
SECTION 5-6
Scale: 1/4" = 1'-0" 523 1



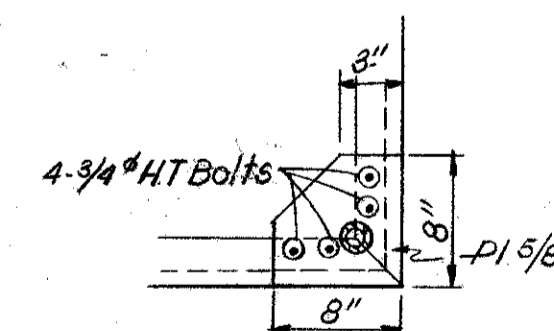
SECTION 5-6
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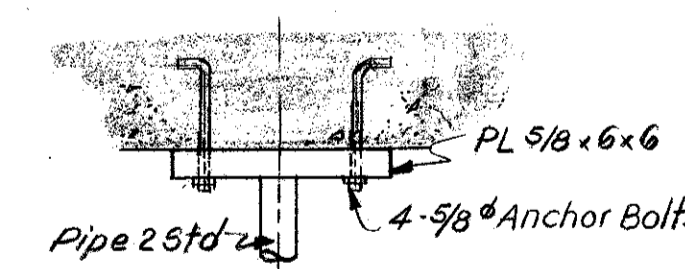
PARTIAL PLAN @ EL 86.67'
Scale: 3/8" = 1'-0"



SECTION 5-6
Scale: 3/4" = 1'-0" 56 3



DETAIL 5-6
Scale: 1" = 1'-0" 56 A



DETAIL TOP PLATE 5-6
Scale: 3/4" = 1'-0" 54 B

NOTE

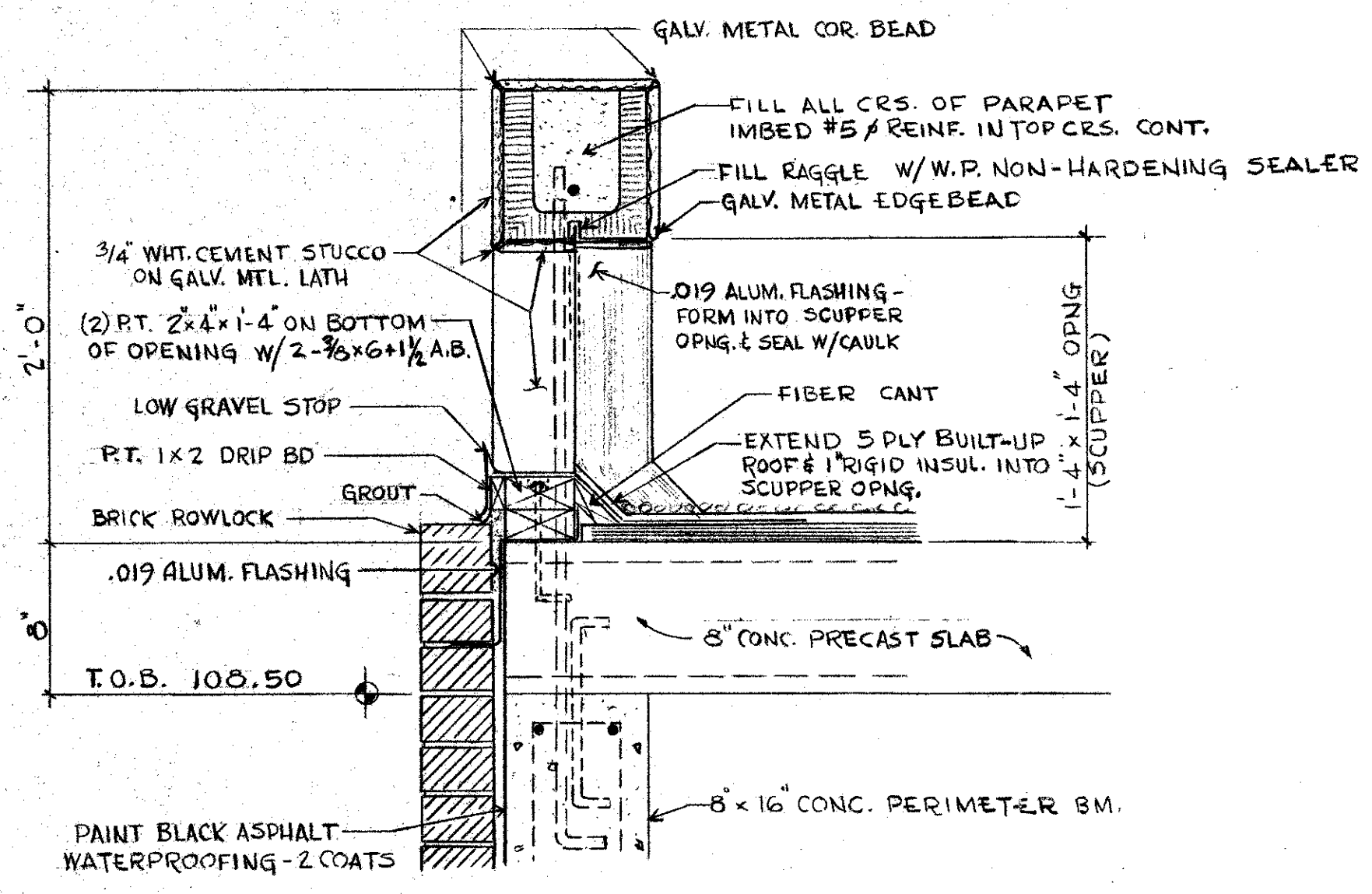
All connections not specifically shown to be furnished by detailer and submitted to the Engineer for approval.

NOTES

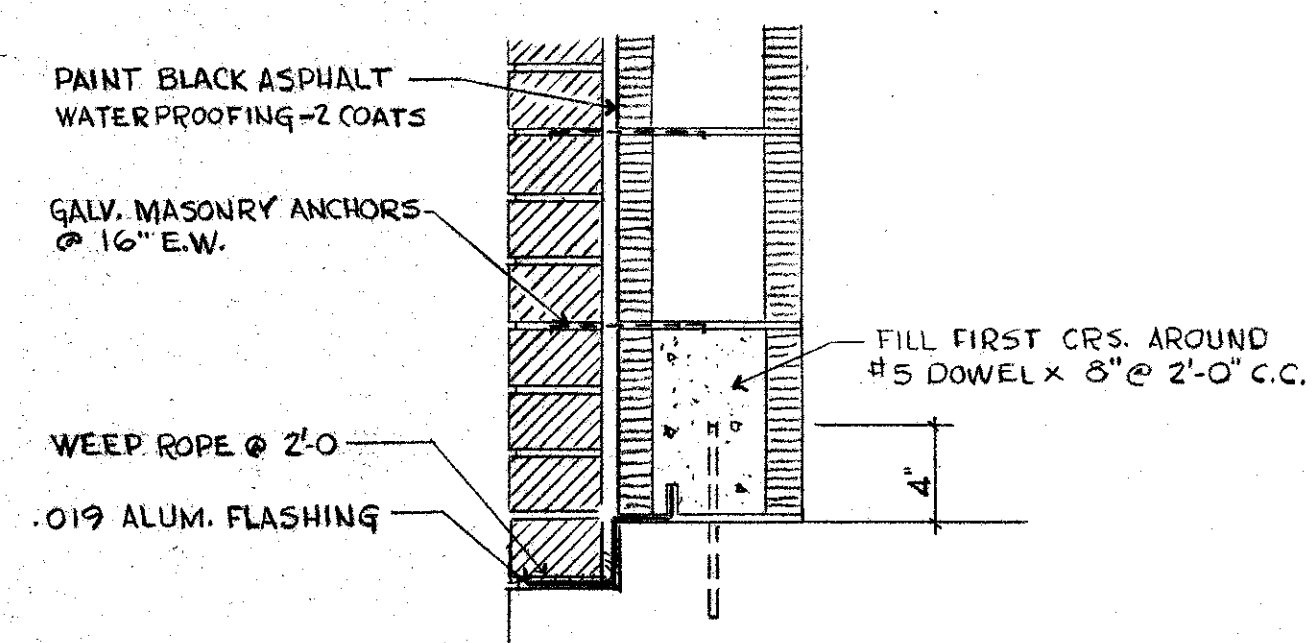
- 1) For Location and Dimensions of Pipes see Mechanical Drawings.
- 2) For General Notes see Sheet S-1.

5-6

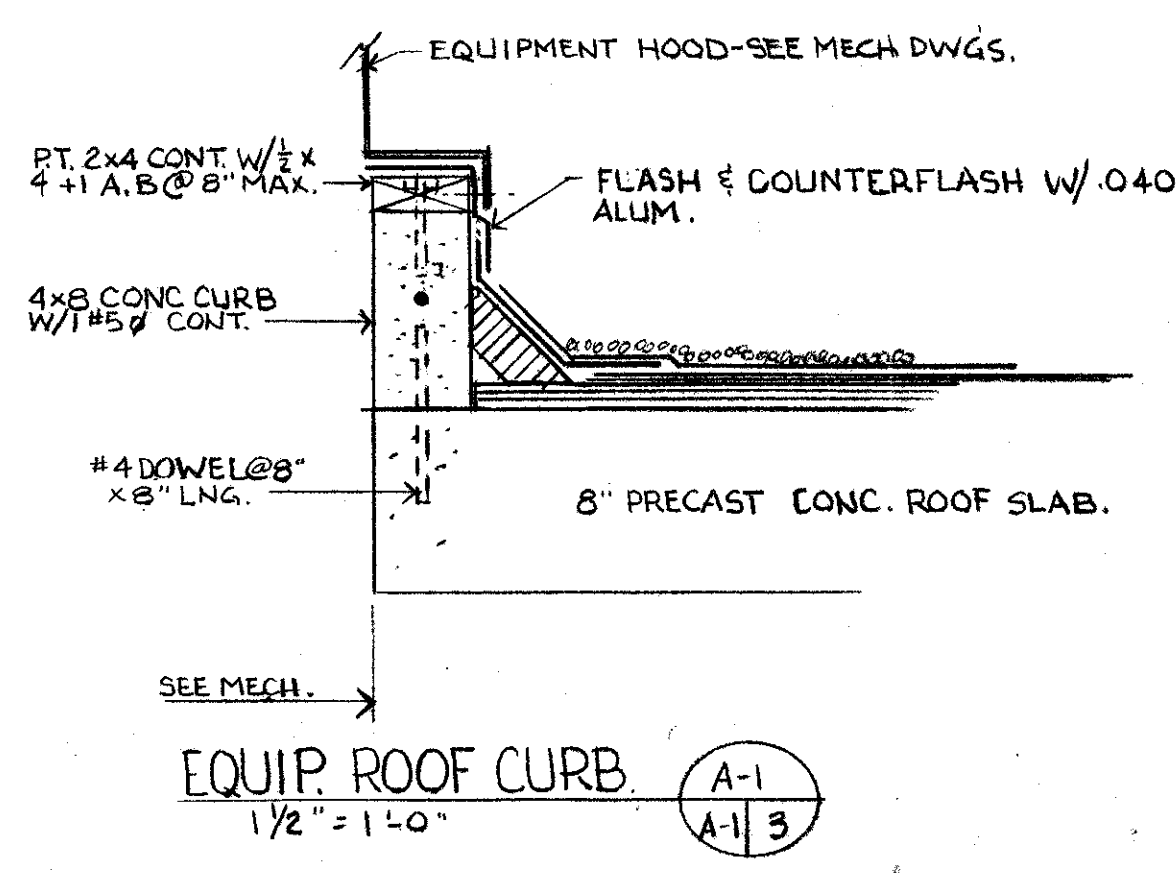
<p>VTN Inc. <i>Southwest Center</i> engineers - planners - surveyors FLA. P.E. NO. 12163</p>				<p>SOUTHWEST SEWER DISTRICT WASTEWATER TREATMENT PLANT INFLUENT PUMPING STATION STRUCTURAL SECTIONS & DETAILS</p>		<p>PROJECT NO. F-2521</p>
<p>DESIGNED BY LJC DRAWN BY RDR CHECKED BY JLC APPROVED BY JLC</p>				<p>DATE 9-12-75 REVISIONS REV. TO 'AS BUILT' REVISED BY JLC CHECKED BY G.C.K.</p>		<p>DATE MAY, 1973</p>
<p>DATE 7-9-73 REVISIONS REVISE FOUNDATION DIMENSIONS REVISED BY LJC CHECKED BY D.K.B.</p>				<p>SCALE AS NOTED</p>		<p>ORANGE COUNTY, FLORIDA</p>
<p>DATE 9-12-75 REVISIONS REV. TO 'AS BUILT' REVISED BY JLC CHECKED BY G.C.K.</p>				<p>SCALE AS NOTED</p>		<p>SHEET 15 OF 22</p>



SECTION A1 (TYP. SCUPPER DET.)
1/2" = 1'-0"



SECTION A1-2
1/2" = 1'-0"



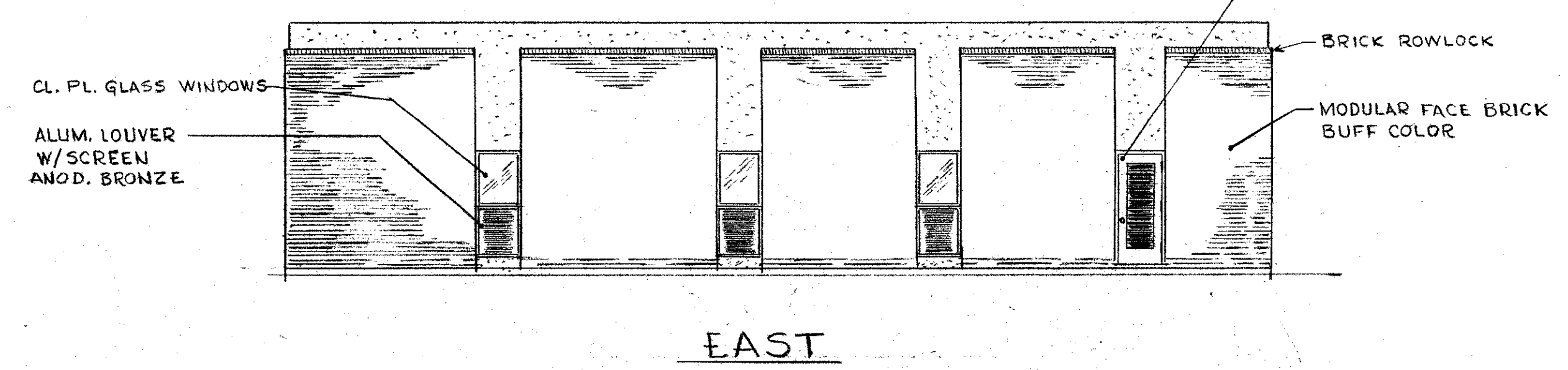
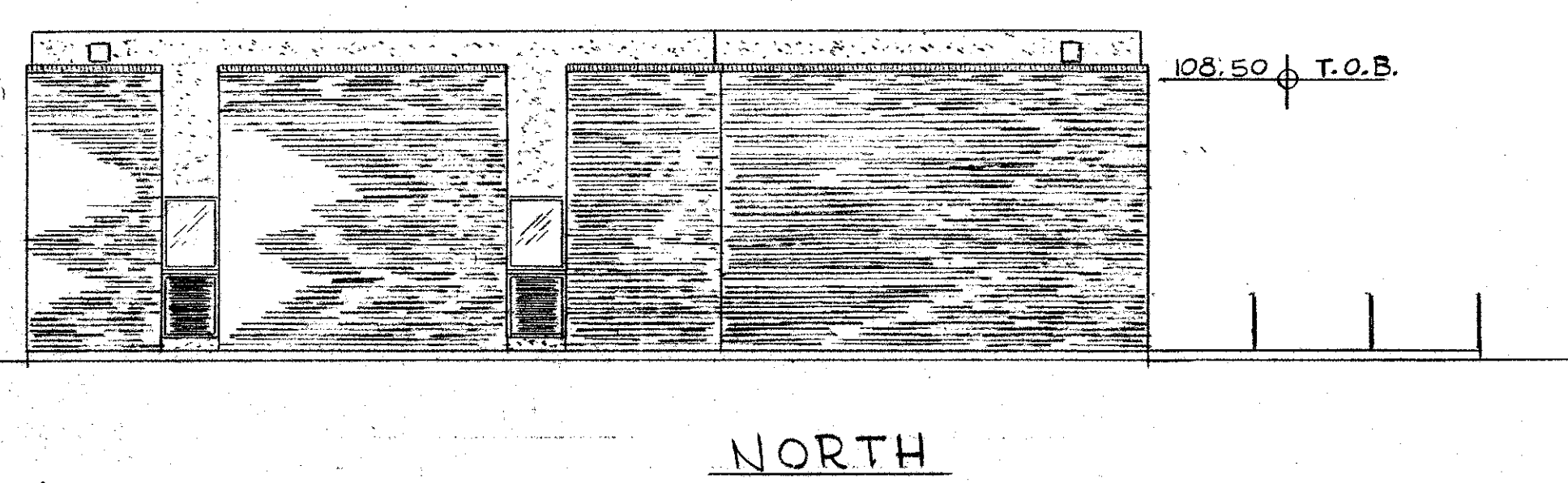
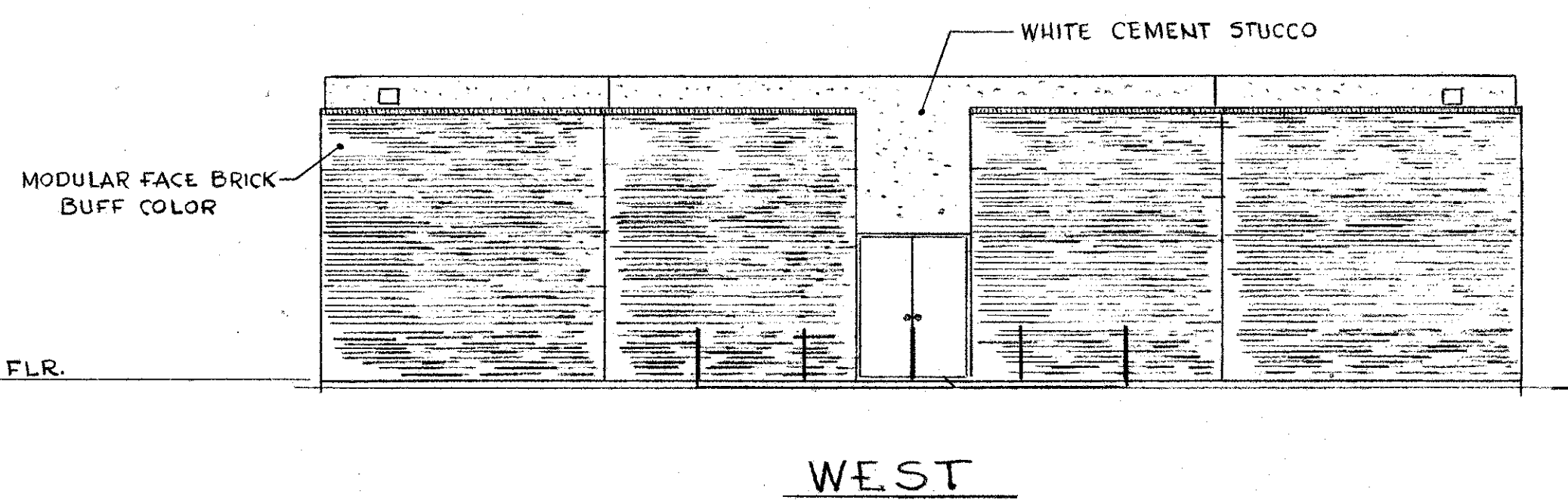
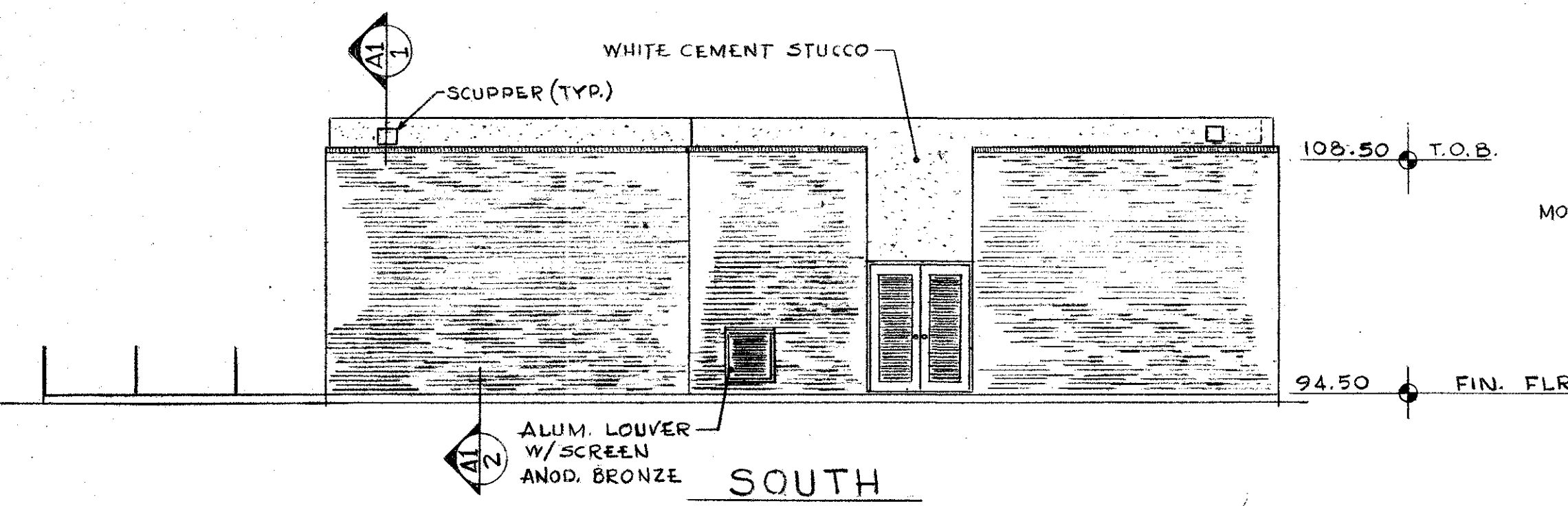
EQUIP. ROOF CURB
1/2" = 1'-0"

MARK	DOOR				GLASS			LOUVER			FRAME		HARDWARE	THRESHOLD	REMARKS
	TYPE	SIZE	MATL.	FINISH	SIZE	TYPE	SIZE	MATL.	FINISH	TYPE	MATL.	FINISH			
1	FLUSH	2/3 x 8 x 1 3/4	ALUM.	ANOD. BRONZE	-	-	-	-	-	-	-	-	A	SEE DET.	ALUM.
2	FLUSH	2/3 x 8 x 1 3/4	ALUM.	ANOD. BRONZE	-	-	FULL	ALUM.	ANOD. BRONZE	-	-	-	A	SEE DET.	ALUM.
3	FLUSH	3 x 8 x 1 3/4	ALUM.	ANOD. BRONZE	-	-	FULL	ALUM.	ANOD. BRONZE	-	-	-	B	SEE DET.	ALUM.
4 & 5	FLUSH	2 1/2 x 6 1/2 x 1 3/4	ALUM.	ANOD. BRONZE	-	-	-	-	ANOD.	-	-	-	C	-	-

MARK	WINDOW				GLASS			LOUVER			REMARKS
	TYPE	SIZE	MATL.	FINISH	TYPE	SCREEN	SILL	HEAD	SIZE	MATL.	
1 thru 3	FIXED	3 1/2 x 3 3/4	ALUM.	ANOD. BRONZE	1/4\"/>						

HARDWARE:

- A. CYLINDER LOCK DEAD BOLT - KEY OPERATED FROM OUTSIDE ONLY - THUMB LATCH INSIDE - PASSAGE SET - 3 PR. NON-FERROUS BALL BEARING BUTT HINGES - FINISH: U.S.-10 - STYLE: YALE, MAYFAIR OR EQUAL
- B. CYLINDER LOCK DEAD BOLT - KEY OPERATED FROM OUTSIDE ONLY - THUMB LATCH INSIDE - PASSAGE SET - 3 PR. NON-FERROUS BALL BEARING BUTT HINGES - UNIVERSAL TYPE STRIKE TOP & BOTTOM OPPOSITE DOOR W/ FLUSH BOLTS TOP & BOTTOM FINISH: U.S.-10 - STYLE: YALE, MAYFAIR OR EQUAL
- C. COURTESY LOCK - 1 1/2 PR. 4 1/2 x 4 1/2 NON-FERROUS BALL BEARING BUTT HINGES - FINISH: U.S.-10 - STYLE: YALE, MAYFAIR OR EQUAL
- D. DOOR HOLDER - YALE OVERHEAD TYPE - 2 @ DOUBLE DOORS - FINISH: U.S.-10



FINISH NOTES:

- 1 EXTERIOR - SEE ELEVATIONS
- 2 INTERIOR:
 - FLOORS - TROWEL FIN. W/ 2 COATS APPROVED CONC. SEALER
 - WALLS - 2 COATS ACRYLIC ENAMEL OVER APPROVED BLOCK SEALER (SEE SPECS.)
 - CEILING - SAME AS WALLS
 - TRIM - SEE DOOR & WINDOW SCHEDULES
 - COLORS SUBJECT TO APPROVAL BY OWNER

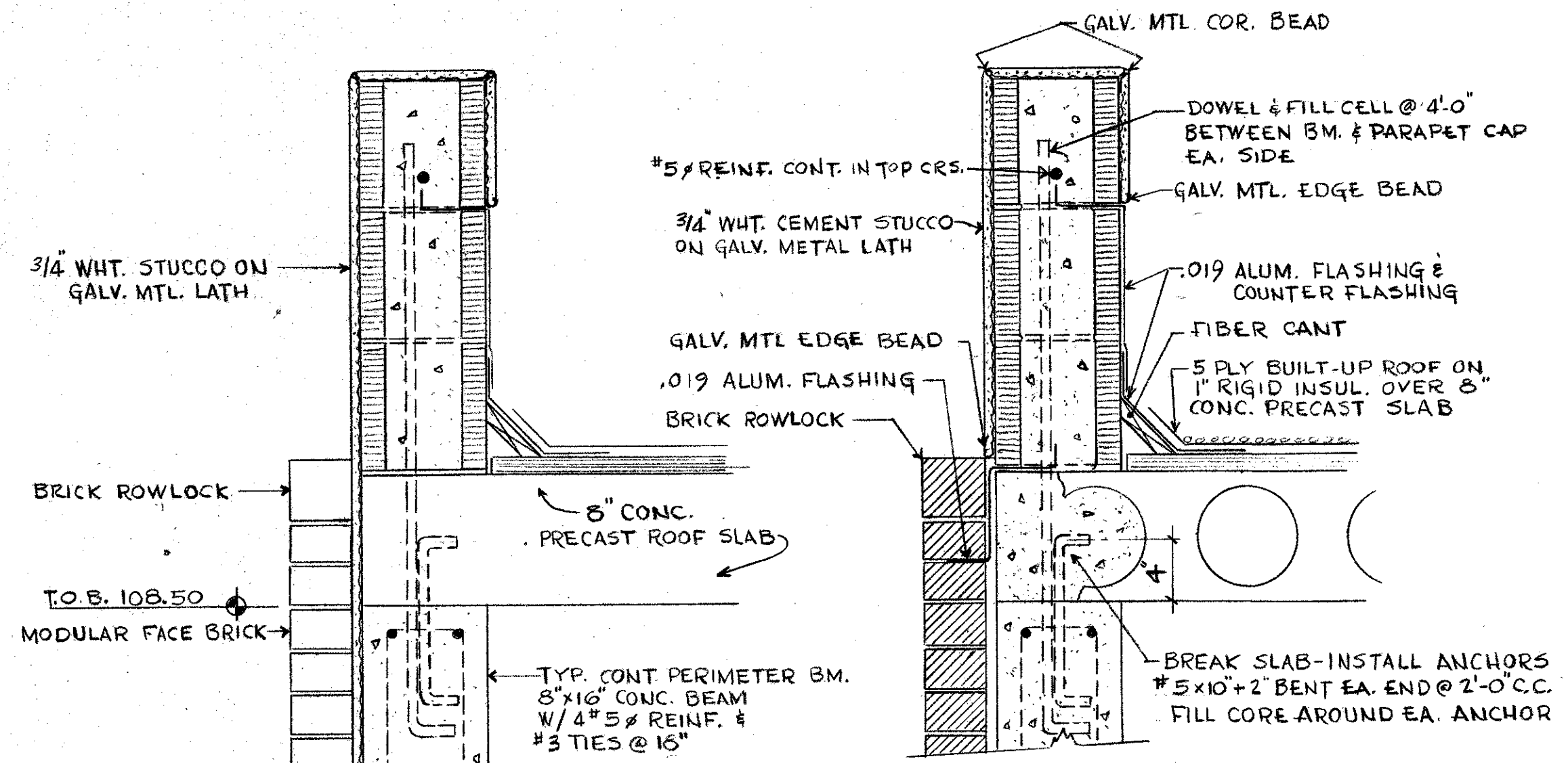
SHOP DWGS - MFR. SPEC. DATA & OR SAMPLES REQ'D

- BRICK
- WINDOWS, DOORS & FRAMES
- LOUVERS
- FLASHING
- SEALANT
- MASONRY REINF.
- HARDWARE & ACCESSORIES
- HOISTING EQUIP.
- ROOF SLABS
- REINF. STEEL
- PAINTS & SEALERS

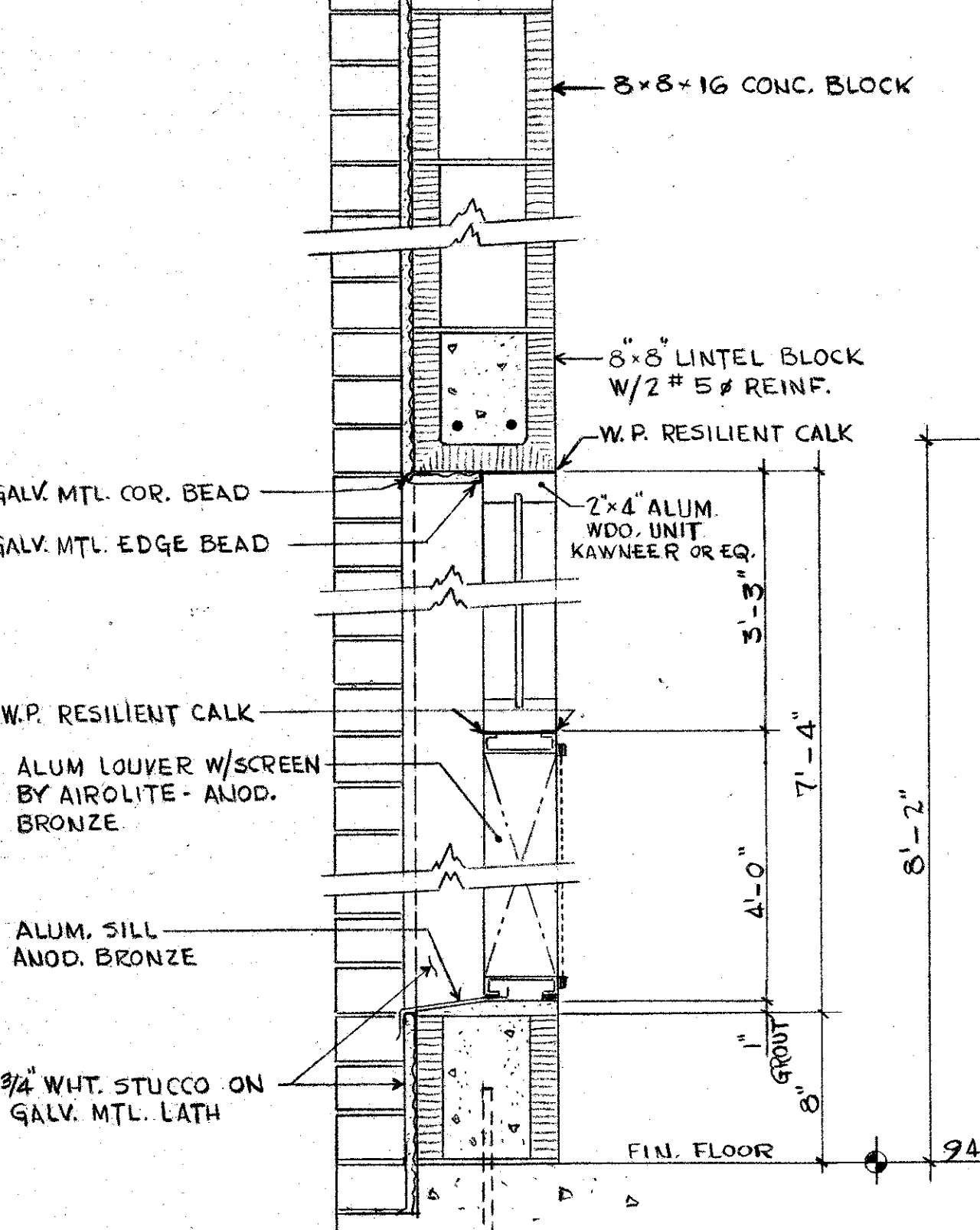
ELEVATIONS
1/8" = 1'-0"

				<p>SOUTHWEST SEWER DISTRICT WASTEWATER TREATMENT PLANT INFLUENT PUMPING STATION ARCHITECTURAL ELEVATIONS, SCHEDULES, & DETAILS ORANGE COUNTY FLORIDA</p>				<p>PROJECT NO. F-2521 DATE MAY 1973 SCALE AS NOTED SHEET 16 OF 22</p>	
DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY	R.B.	AEB	JD			
DATE	REVISIONS	REVISED BY	CHECKED BY	9-12-75	REV TO "AS BUILT"	J	G.C.K.		

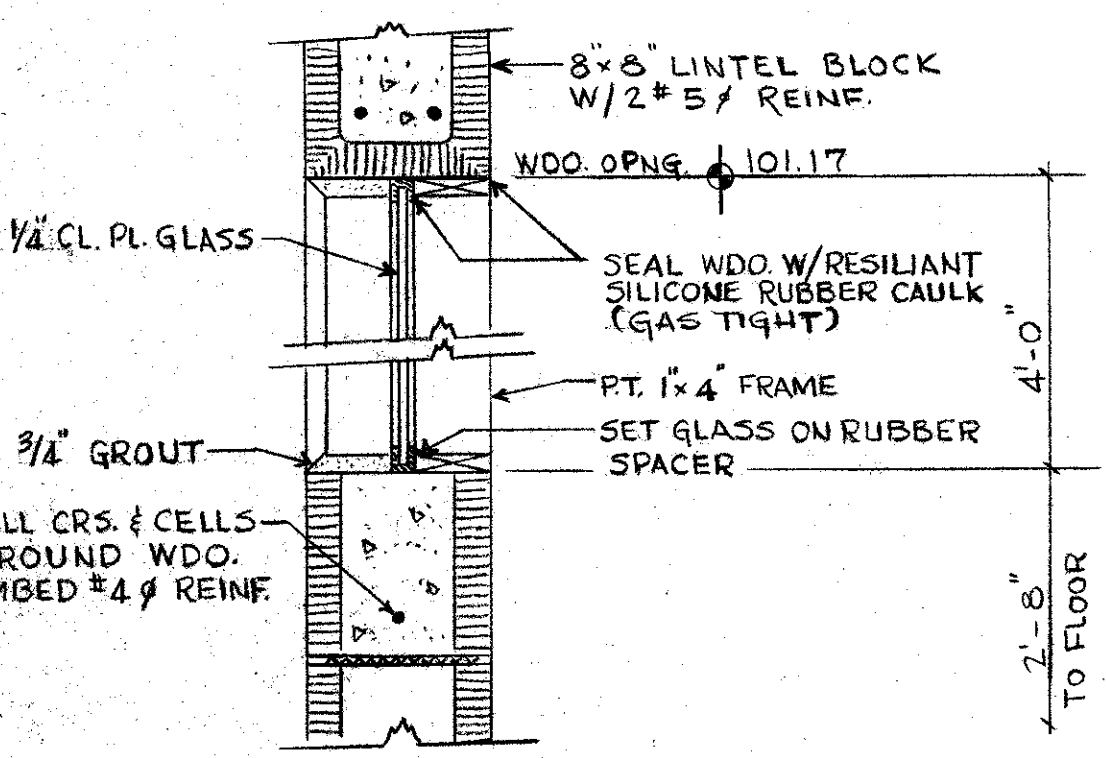
(A-1)



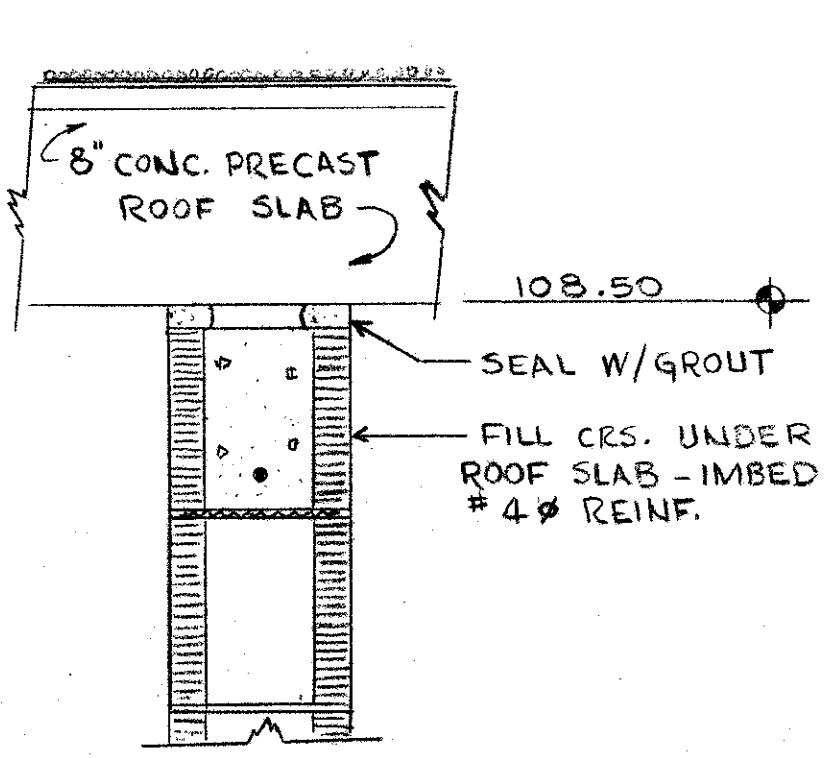
SECTION A2-1
1/2" = 1'-0"



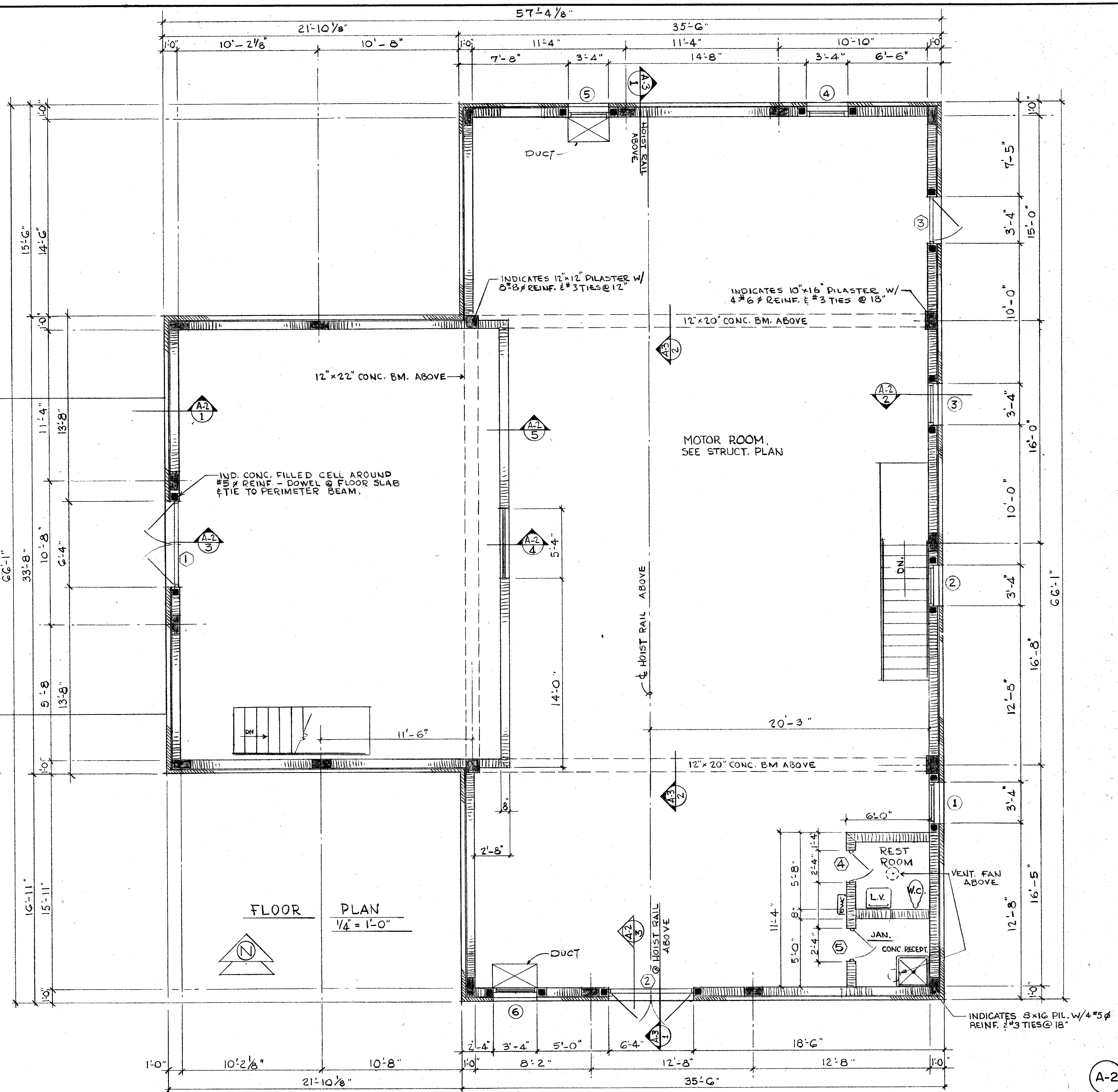
SECTION A2-2
1/2" = 1'-0"



SECTION A2-4
1/2" = 1'-0"

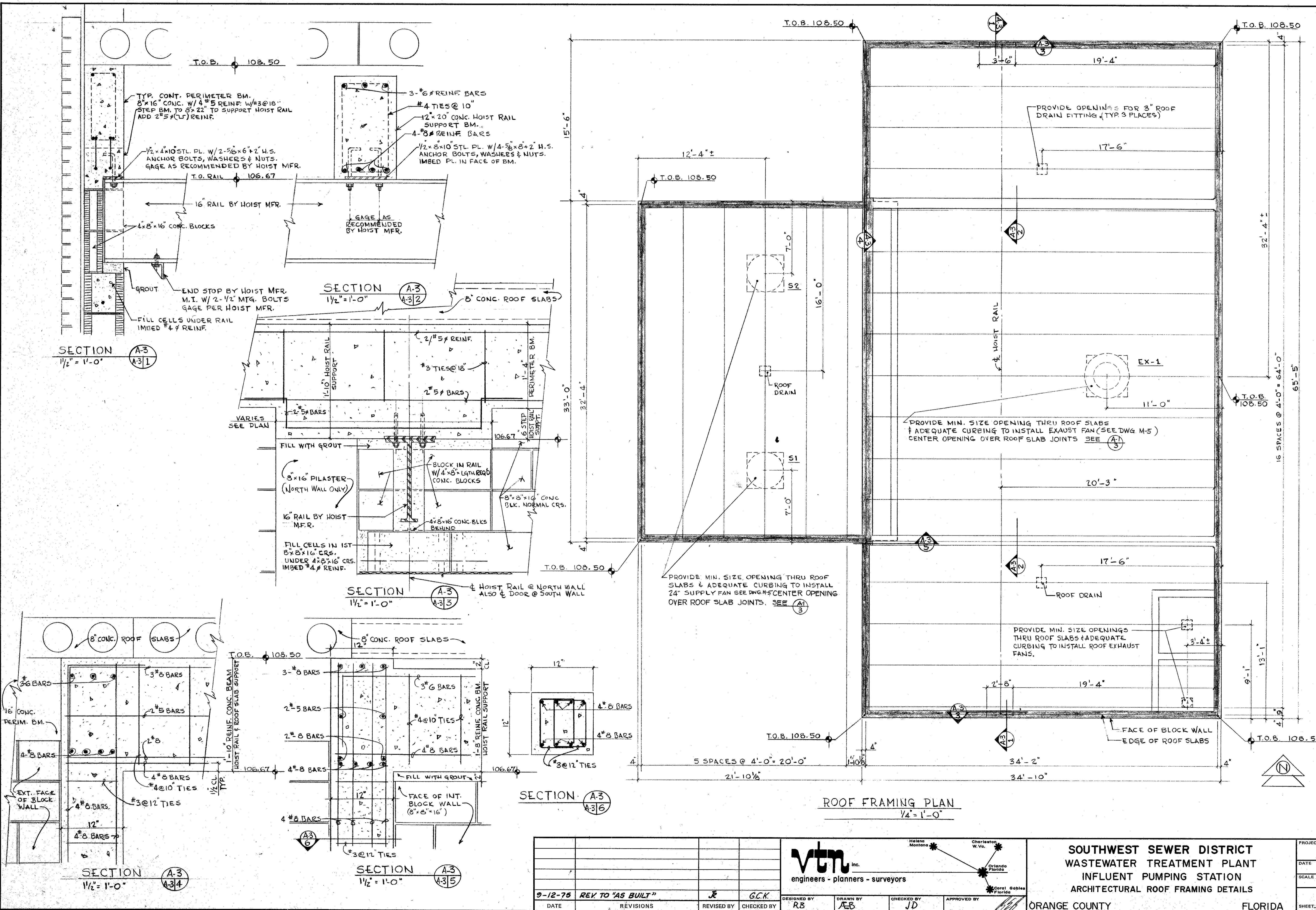


SECTION A2-5 (TYP. INT. WALL)
1/2" = 1'-0"



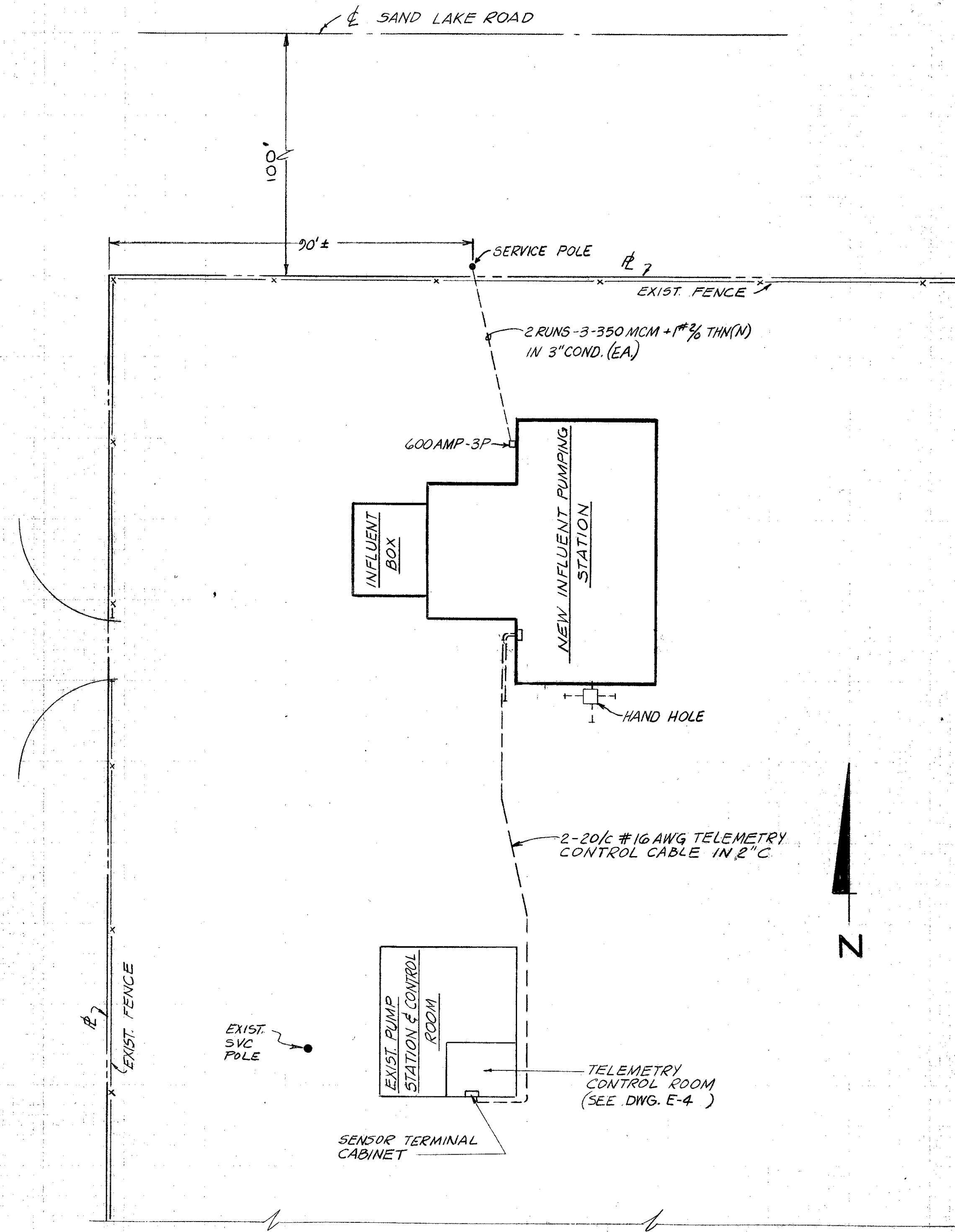
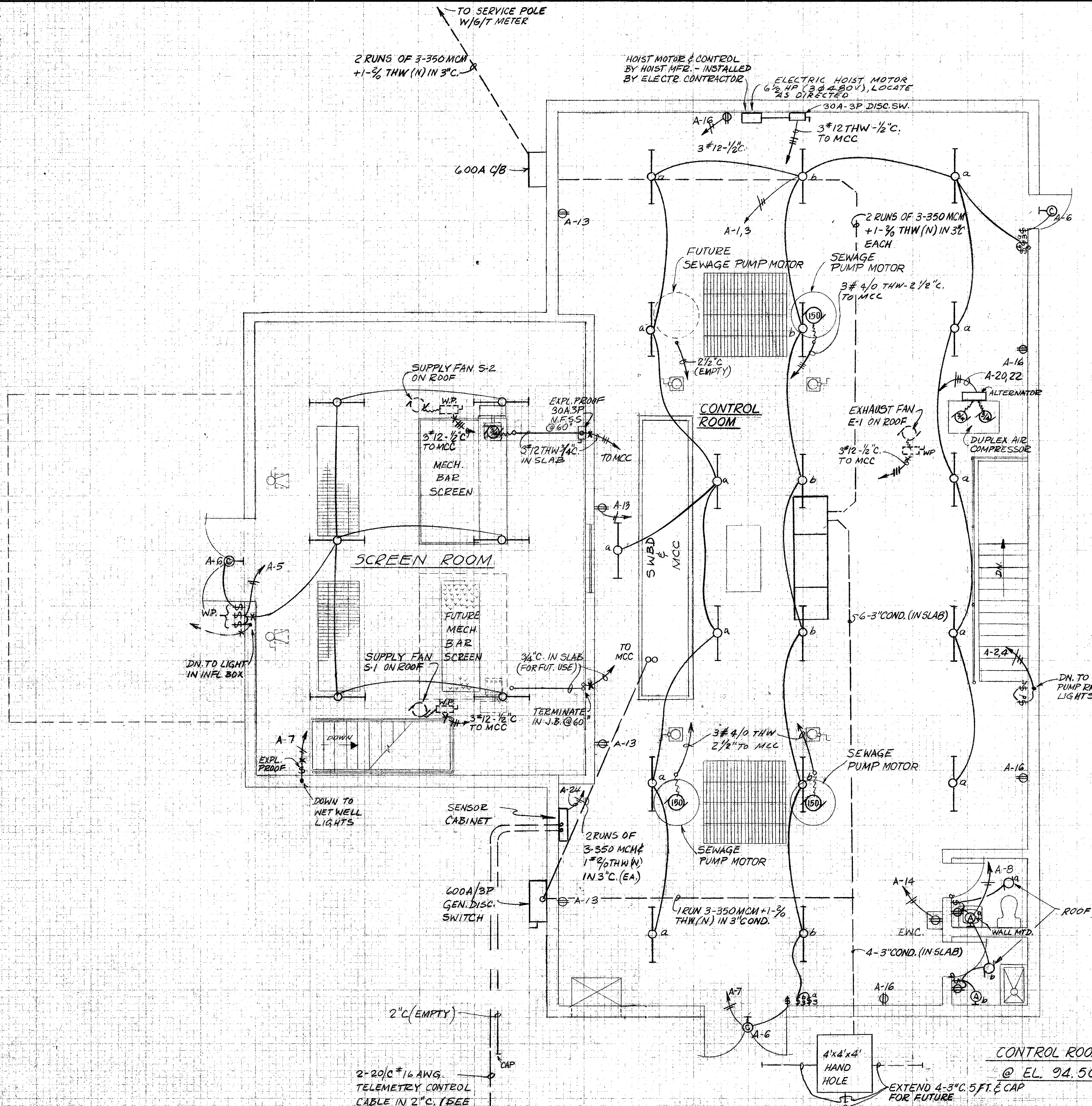
FLOOR PLAN
1/4" = 1'-0"

				 vtm inc. engineers - planners - surveyors		Heine Montana Charleston W. Va. Orlando Florida Coral Gables Florida		SOUTHWEST SEWER DISTRICT WASTEWATER TREATMENT PLANT INFLUENT PUMPING STATION ARCHITECTURAL FLOOR PLAN, SECTIONS, & DETAILS ORANGE COUNTY FLORIDA		PROJECT NO. F-2521
										DATE MAY 1973
										SCALE AS NOTED
										SHEET 17 OF 22
9-12-75 DATE	REV. TO "AS BUILT" REVISIONS	J REVISED BY	G.C.K. CHECKED BY	DESIGNED BY R.B.	DRAWN BY A.E.S.	CHECKED BY J.D.	APPROVED BY 			



VTN engineers - planners - surveyors Helena Montana Charleston W. Va. Orlando Florida Coral Gables Florida	SOUTHWEST SEWER DISTRICT WASTEWATER TREATMENT PLANT INFLUENT PUMPING STATION ARCHITECTURAL ROOF FRAMING DETAILS ORANGE COUNTY FLORIDA	PROJECT NO. F - 2521 DATE MAY 1973 SCALE AS NOTED SHEET 18 OF 22
	DESIGNED BY RB DRAWN BY AEB CHECKED BY JD APPROVED BY 	DATE 9-12-75 REVISIONS REV TO "AS BUILT" REVISOR G.C.K.
	FILE NO.	

A-3



CONTROL ROOM PLAN
@ EL. 94.50

PART SITE PLAN
SCALE: 1" = 20'

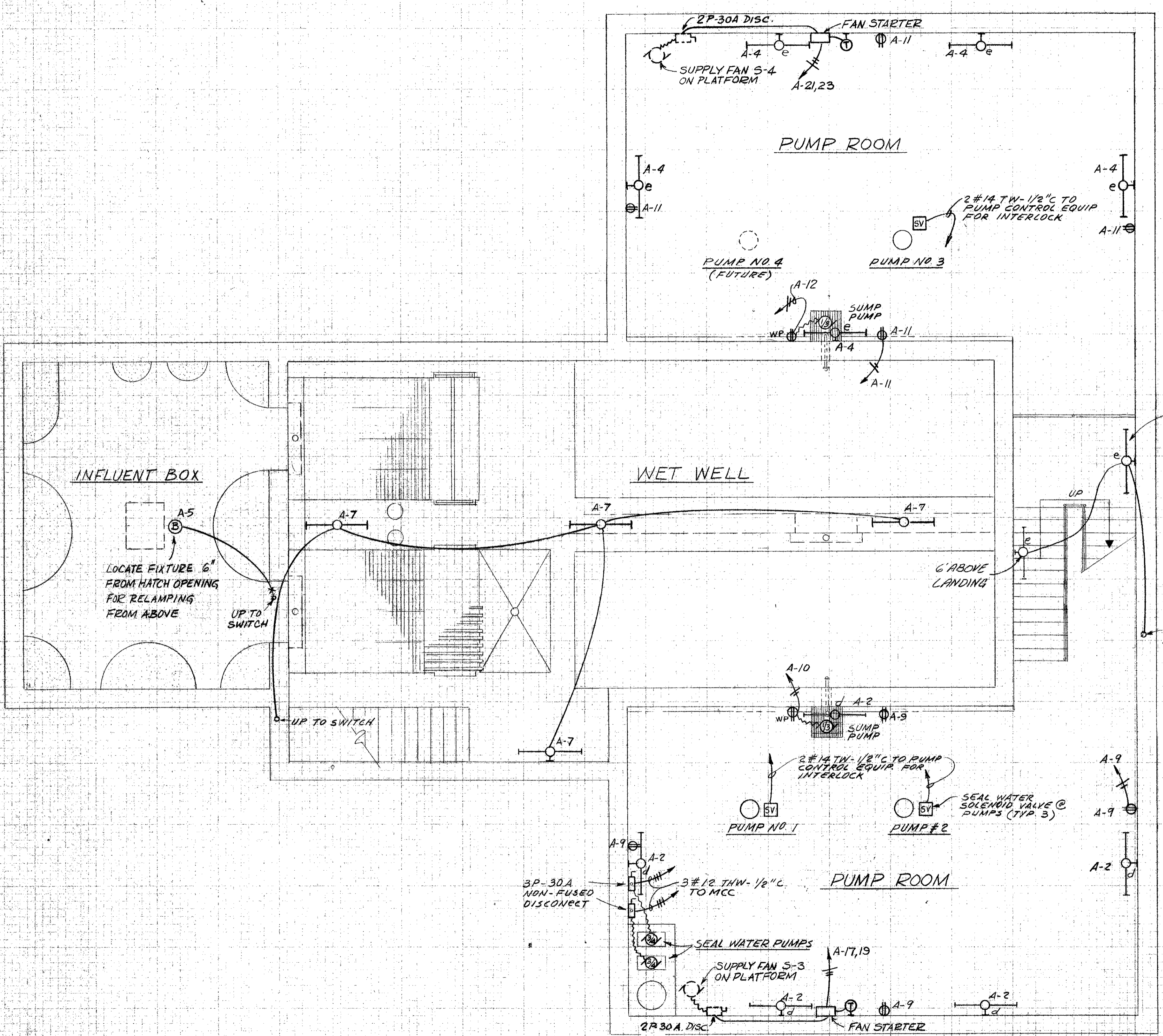
9-12-75	REV. TO '45 BUILT	JR	GCK	DESIGNED BY RG/KN	DRAWN BY KN	CHECKED BY [Signature]	APPROVED BY [Signature]
DATE	REVISIONS	REVISED BY	CHECKED BY	DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY

VTN inc. *John M. Nepley*
engineers - planners - surveyors
FLA. P.E. # 2512

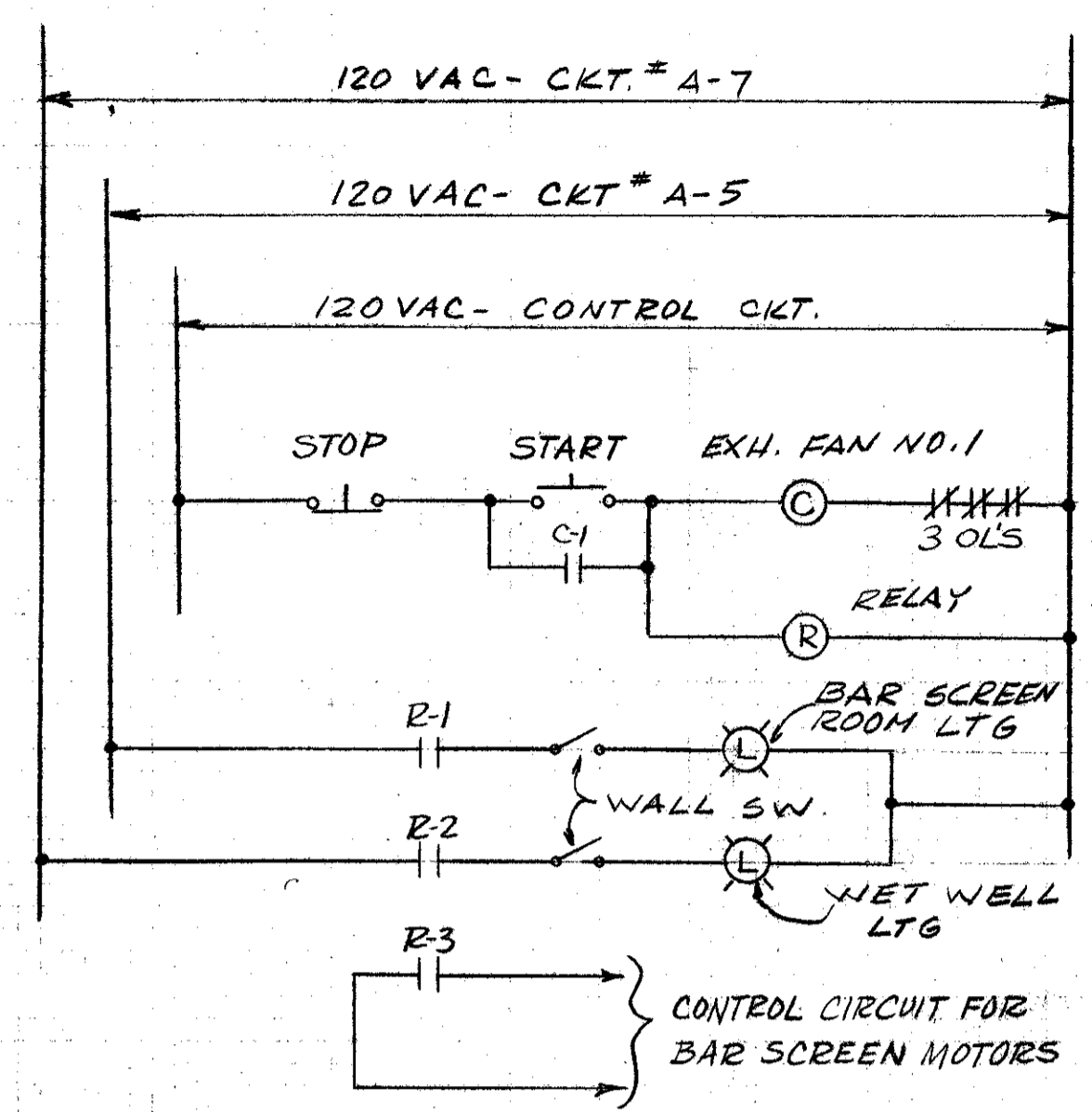
SOUTHWEST SEWER DISTRICT
WASTEWATER TREATMENT PLANT
INFLUENT PUMPING STATION
ELECTRICAL PLAN AT ELEV. 94.50

ORANGE COUNTY FLORIDA

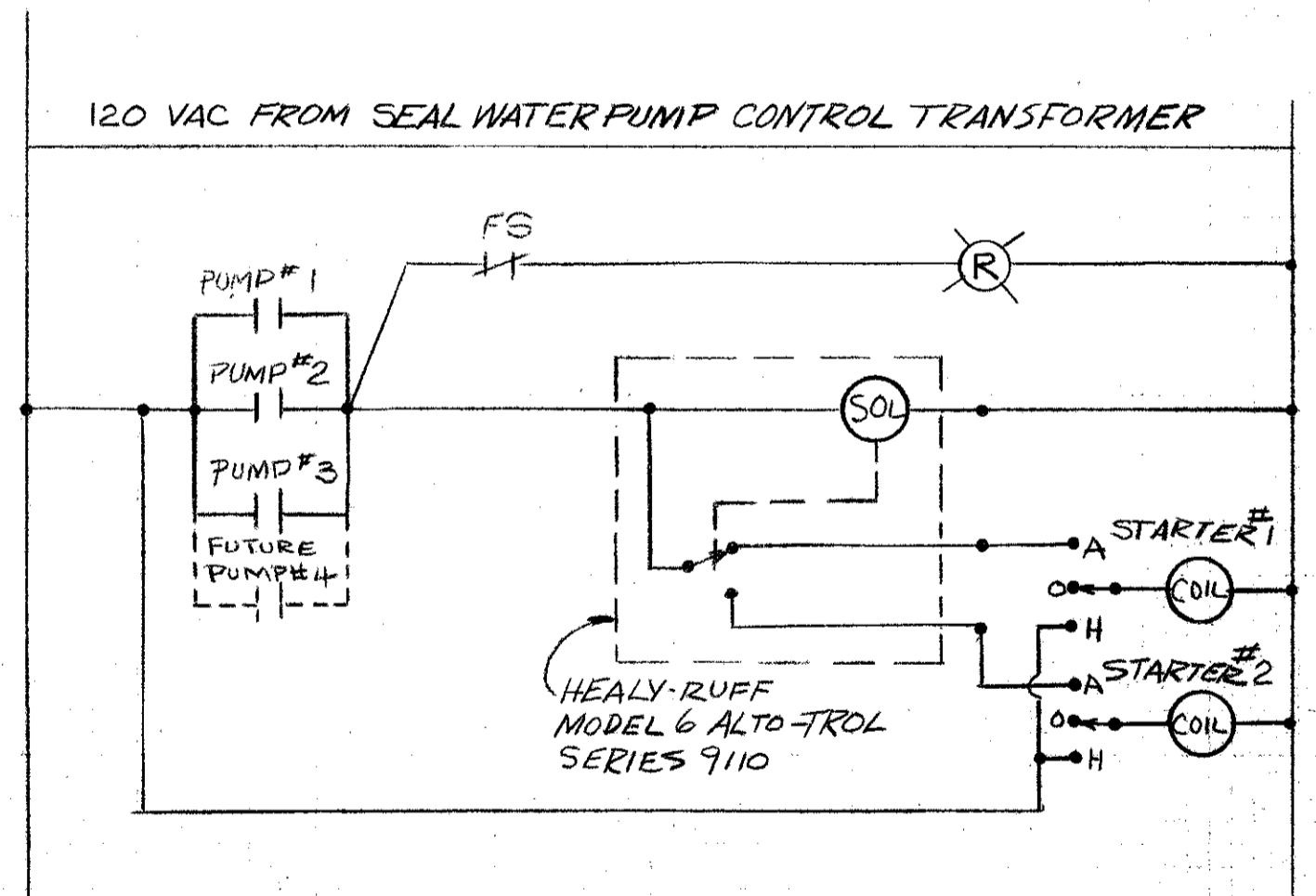
PROJECT NO. F-2521
DATE MAY 1973
SCALE AS NOTED
SHEET 19 OF 22



PUMP ROOM AND WET WELL PLAN @ ELEV. 73.44
 SCALE: 1/4" = 1'-0"

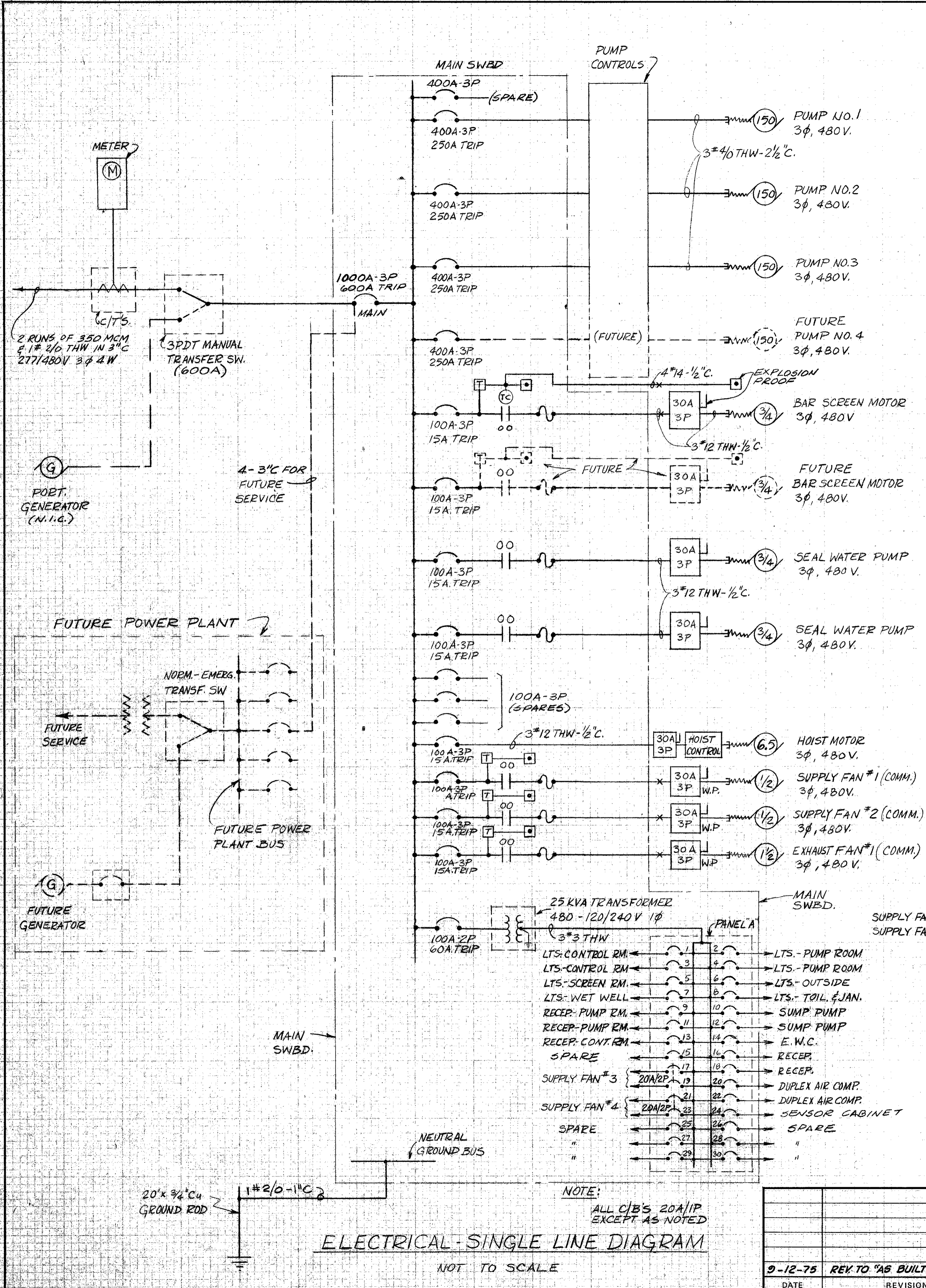


EXHAUST FAN-WET WELL LTG. & BAR SCREEN MOTOR INTERLOCK
 NOT TO SCALE



SEAL WATER PUMPS CONTROL DIAGRAM
 NTS

				SOUTHWEST SEWER DISTRICT WASTEWATER TREATMENT PLANT INFLUENT PUMPING STATION ELECTRICAL PLAN AT ELEV. 73.44		PROJECT NO. F-2521
9-12-75 REV TO "AS BUILT"				DESIGNED BY RN/rg	DRAWN BY K.N.	DATE MAY 1973
REVISIONS				CHECKED BY RG	APPROVED BY VTN	SCALE AS NOTED
DATE				REVISOR	CHECKED BY	SHEET 20 OF 22
ORANGE COUNTY				FLORIDA		VTN DWG. FILE NO.



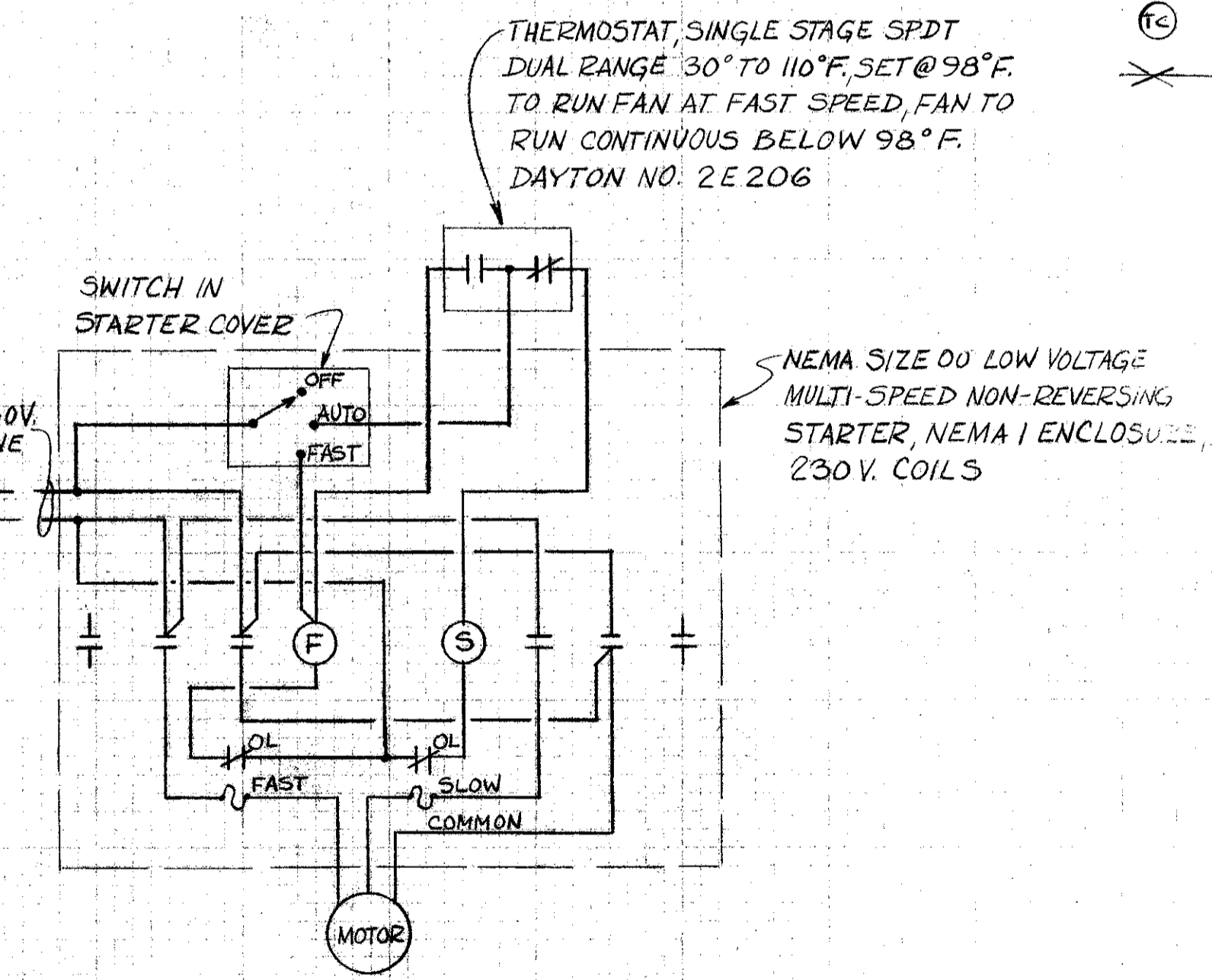
NOTES

- CONTRACTOR TO FURNISH SHOP DRAWINGS ON PUMP CONTROLS & SWITCHBOARD TO ENGINEER FOR APPROVAL.
- TRANSFORMER SHALL BE 25 KVA, 480-120/240V, 1φ WITH UL LABEL & 4-2 1/2% TAPS (2 ABOVE & 2 BELOW 480V) SUITABLE FOR SWITCH BOARD MOUNTING.
- MAIN SWITCHBOARD SHALL BE FREESTANDING NEMA TYPE B ENCLOSURE, CLASS II FRONT ACCESS, 3φ 480VAC-1000A BUS BRACED FOR 25,000 ASYM. WITH NEUTRAL & NEUTRAL COPPER GROUND BUS (MIN. 1/4" x 4") SQUARE "D" POWER STYLE SWITCHBOARD OR EQUAL. ALL BREAKERS INCLUDING MAIN C/B SHALL BE MOLDED CASE TYPE WITH CHARACTERISTICS AS FOLLOWS:

FRAME	ASYM. AIC @ 480V. MIN.
400 A	35,000
225 A	25,000
100 A	15,000
- CONTRACTOR SHALL CO-ORDINATE ELECTRICAL SERVICE REQUIREMENTS WITH POWER COMPANY.
- SEAL WATER BOOSTER PUMP TO RUN WHEN ANY PUMP IS RUNNING (RUN 2" 1/4 THW-1/2" C. TO PUMP CONTROL FOR INTERLOCK)
- SEAL WATER SOLENOID VALVE ON EACH PUMP TO OPEN WHEN RESPECTIVE PUMP OPERATES.
- ALL INCANDESCENT LAMPS TO BE LONG LIFE TYPE (10,000 HRS.)
- ALL ELECTRICAL WORK TO CONFORM TO THE NATIONAL ELECTRICAL CODE AND OTHER APPLICABLE LOCAL CODES.

LEGEND

- FLUORESCENT FIXTURE, 120 VAC, 60 CYCLE, WALL MTD. 7'-0" ABOVE FINISHED FLOOR EXCEPT AS NOTED, VAPOR PROOF, PARAMOUNT IND. CAT. NO. 80425 - 2-F40T12 C/W LAMPS
- INCANDESCENT FIXTURE, WALL MTD, 200W. KENALL # 3808
- INCANDESCENT FIXTURE, WIDE SPREAD, WALL MTD, 150W, 120VAC, HOLOPHANE WALL PACK CAT. NO. 400
- DUPLEX RECEPTACLE - 20A, 120 VAC, 3 W-AUTO-GROUNDING TYPE, SURFACE MTD. 1-6" ABOVE FIN. FL, IVORY PLATE
- WALL SWITCH, 1P-20 A, 120VAC - SURFACE MTD, 4'-0" ABOVE FIN. FL. LETTER INDICATES SWITCHING
- INDICATES WEATHERPROOF ENCLOSURE
- HOMERUN TO PANEL - NUMBER OF CIRCUITS OR WIRES AND GROUND CONDUCTOR
- CONDUIT UP
- CONDUIT DOWN
- FLEXIBLE CONNECTION
- ELECTRIC MOTOR - HORSEPOWER AS SHOWN
- DISCONNECT SWITCH - SIZE AS SHOWN
- SOLENOID VALVE - 1-WAY, NORMALLY CLOSED, 118V, 60 CY, ASCO BULLETIN # 3268-91
- THERMOSTAT (5'A.F.)
- JUNCTION BOX
- CONDUIT IN SLAB
- CONDUIT EXPOSED
- CONTROL TRANSFORMER, 480V/120V
- START-STOP SWITCH W/PILOT LIGHT
- INCANDESCENT FIXTURE, CEILING MTD, 150W, 120 VAC VAPORTIGHT W/ GLOBE
- SPST. SWITCH W/PILOT
- TIMER CONTROL - 0 TO 24 HOURS ADJUSTIBLE TIMER 120V 60CY
- CONDUIT SEALING FITTING WITH COMPOUND



VTN inc. *John W. Neffly*
engineers - planners - surveyors FLA. P.E. 6512

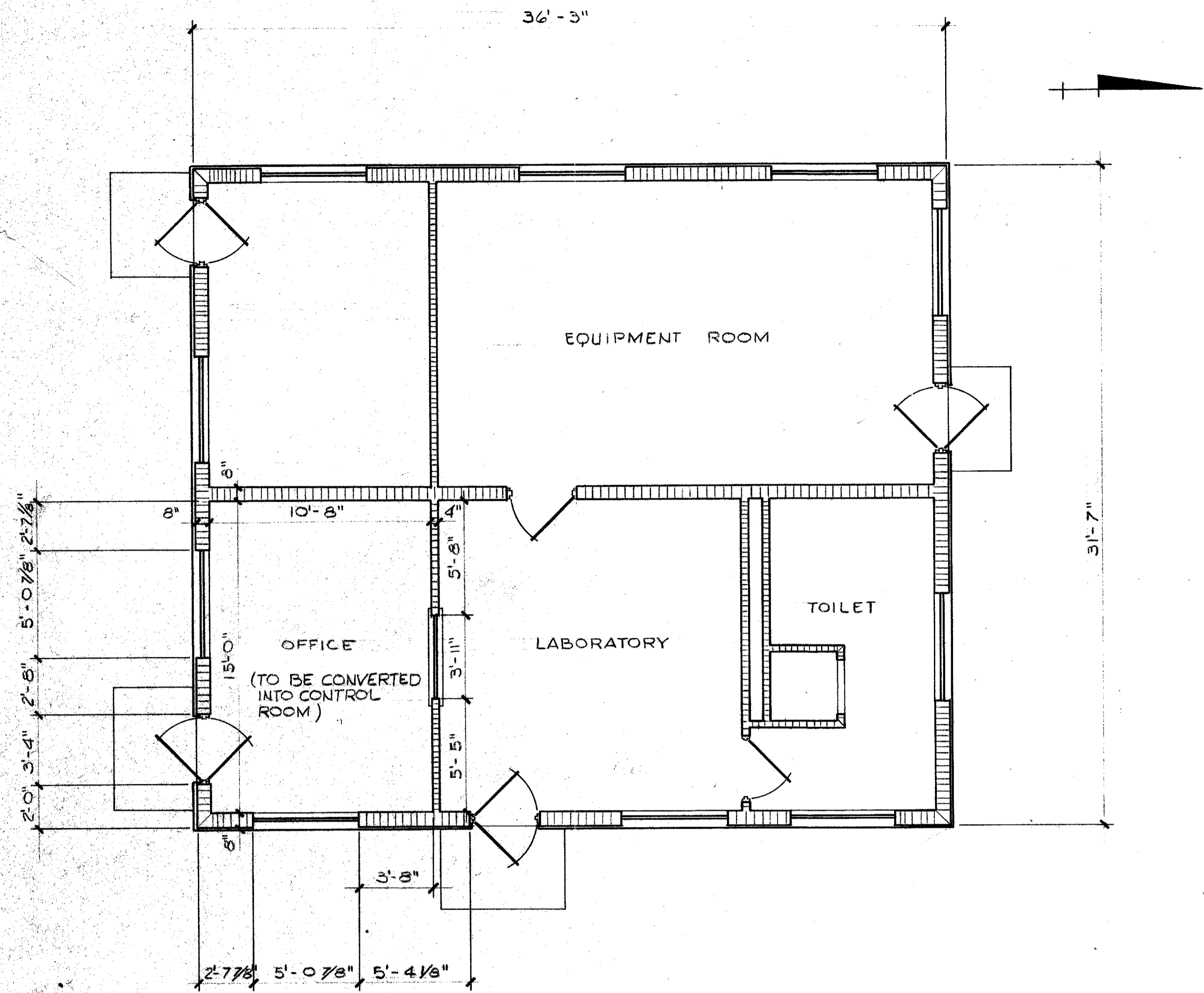
DESIGNED BY: *R.G./K.N.*
DRAWN BY: *K.N.*
CHECKED BY: *SB*
APPROVED BY: *V.N.*

**SOUTHWEST SEWER DISTRICT
WASTEWATER TREATMENT PLANT
INFLUENT PUMPING STATION
ELECTRICAL DETAILS**

ORANGE COUNTY FLORIDA

PROJECT NO.	F-2521
DATE	MAY 1973
SCALE	AS NOTED
SHEET	21 OF 22

9-12-75	REV TO "AS BUILT"	R	GCK
DATE	REVISIONS	REVISOR	CHECKED BY



CONTROL BUILDING PLAN
1/4" = 1'-0"

3/4" THW-1" HOMERUN TO BUILDING POWER (EMERGENCY SOURCE)

NEW ELECTRICAL PANEL: 100 AMP, 120-240V, 1Φ SURFACE MOUNTED W/BRANCHES AS FOLLOWS:
2-1P-30A
8-1P-20A

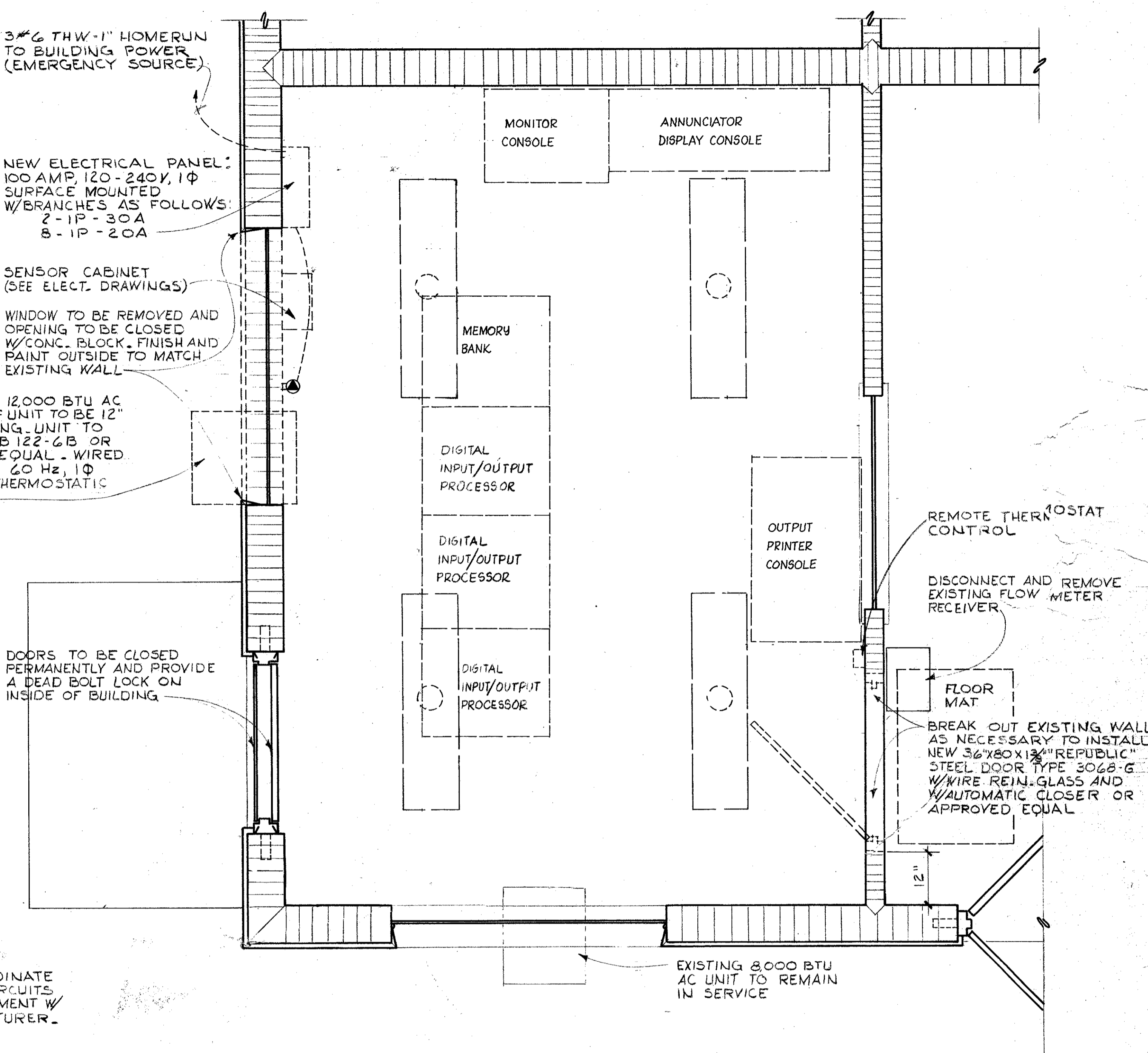
SENSOR CABINET (SEE ELECT. DRAWINGS)

WINDOW TO BE REMOVED AND OPENING TO BE CLOSED W/CONC. BLOCK, FINISH AND PAINT OUTSIDE TO MATCH EXISTING WALL

MOUNT NEW 12000 BTU AC UNIT. TOP OF UNIT TO BE 12" BELOW CEILING. UNIT TO BE YORK LB 122-6B OR APPROVED EQUAL - WIRED FOR 230V, 60 Hz, 1Φ W/REMOTE THERMOSTATIC CONTROL

DOORS TO BE CLOSED PERMANENTLY AND PROVIDE A DEAD BOLT LOCK ON INSIDE OF BUILDING

NOTE: CONTRACTOR TO COORDINATE AND INSTALL BRANCH CIRCUITS TO TELEMETERING EQUIPMENT W/ EQUIPMENT MANUFACTURER.



PROPOSED CONTROL ROOM
3/4" = 1'-0"

CONTROL ROOM INTERIOR MODIFICATION NOTES

- (1) INTERIOR WALLS TO BE PAINTED.
- (2) CEILING TO BE COVERED W/12"X12" X 1/2" "CELOTEX" WHITE TILE "SAFETONE RANDOM II" OR APPROVED EQUAL.
- (3) EXISTING FLOOR TILE TO BE REMOVED, ALL IRREGULARITIES IN FLOOR SURFACE TO BE REMOVED AND NEW 1/16" VINYL FLOOR TILE TO BE INSTALLED.
- (4) INSTALL 4-2 LAMP (F40T12 C/W) SURFACE MOUNTED FIXTURES CONNECT TO EXISTING LIGHTING CIRCUIT.
- (5) FURNISH 3'X4' BROWN "CROWN" CARPET COVER NYLON-ON SMOOTH VINYL MAT OR APPROVED EQUAL.

E-4

				<p>engineers - planners - surveyors</p>			<p>SOUTHWEST SEWER DISTRICT WASTEWATER TREATMENT PLANT TELEMETERING CONTROL CENTER CONTROL ROOM MODIFICATIONS</p>		<p>PROJECT NO. F-2521</p>	
							<p>ORANGE COUNTY FLORIDA</p>		<p>DATE MAY 1973</p>	
							<p>SCALE AS NOTED</p>		<p>SHEET 22 OF 22</p>	
							<p>DATE 9-12-75</p>		<p>REVISIONS REX TO "AS BUILT"</p>	
							<p>DESIGNED BY MTS</p>		<p>CHECKED BY MTS</p>	
							<p>DRAWN BY RHW</p>		<p>APPROVED BY [Signature]</p>	
							<p>REVISED BY G.C.K.</p>		<p>FILE NO.</p>	