

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED

DRAWING INDEX	
NAVFAC DWG NO	TITLE
4011856	PILOT PLAN
4011857	PLAN & PROFILE
4011858	PLAN & PROFILE
4011859	TYPICAL FIT PLANS & DETAILS
4011860	BLDG FIT PLANS & DETAILS
4011861	PIT DETAILS, STRUCTURAL

LEGEND

REMOVE EXIST STEAM & CONDENSATE RETURN LINES UNDERGROUND & CONDUIT. SHUT RETURN LINES THRU PITS. LINES UNDER STREETS SHALL BE ABANDONED IN PLACE.

NEW STEAM & CONDENSATE RETURN LINES UNDERGROUND. TIE ALL NEW CONDENSATE RETURN LINES THRU PITS & TIE INTO EXIST STEAM LINES IN PITS. SEE REFERENCE DRAWINGS FOR LEGDS, ANCHORS, PROFILES, DETAILS, ELEVATIONS, DIMENSIONS, ETC. UNDERGROUND UTILITIES SHOWN ON PLANS & PROFILES SHALL BE VERIFIED AS TO LOCATION & ELEVATION BEFORE TRENCHING IS BEGUN. SHOWN THRU BLDG PITS (APPROX 5'-0"±) & TIE TO VALVE OR UNION AS INDICATED ON DRAWINGS.

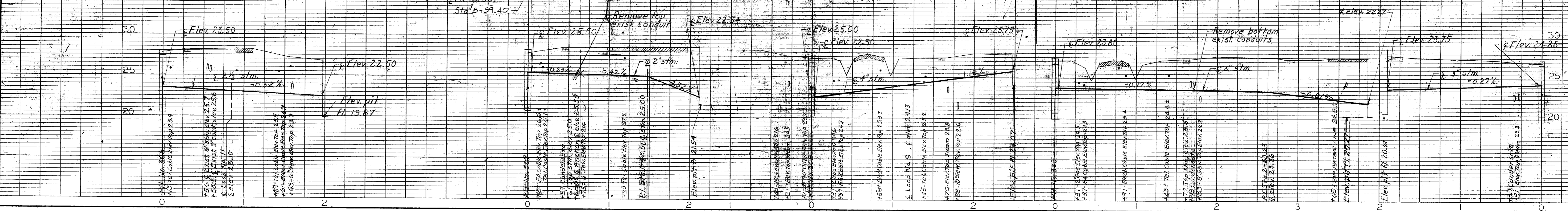
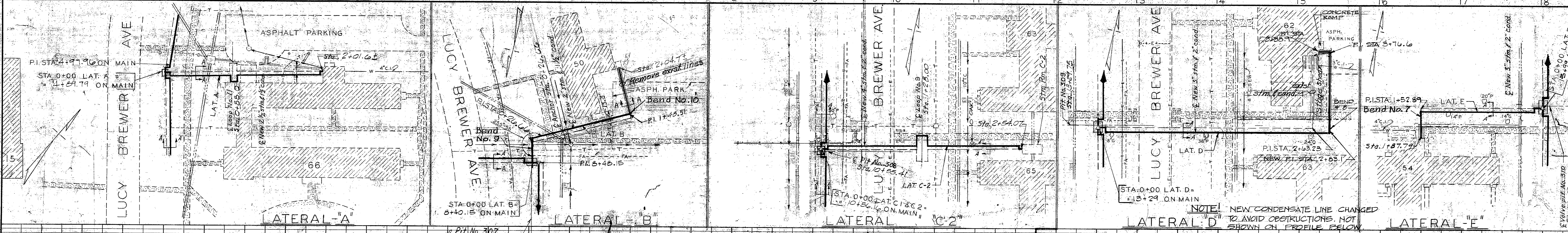
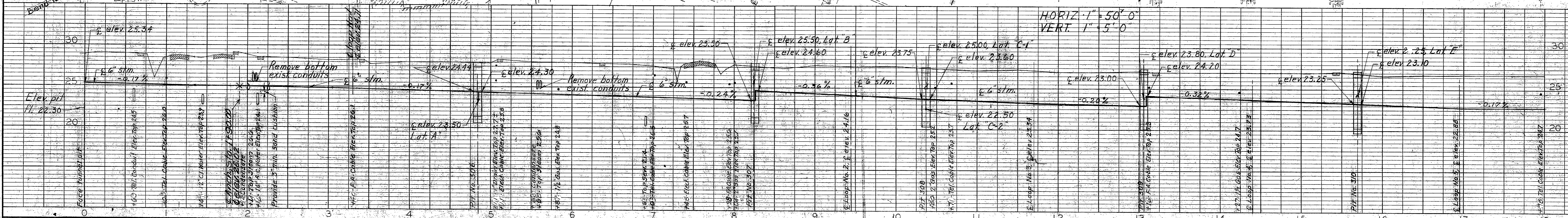
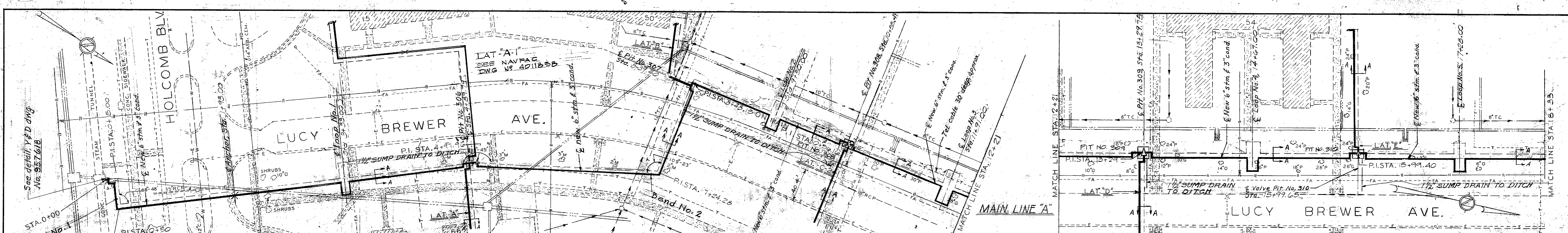
BEGINNING OR END OF STEAM & RETURN LINES THAT ARE TO BE REPLACED.

NOTE!
FOR ASSISTANCE IN LOCATING UNDERGROUND TEL & ELECTRICAL CABLES CALL 2531 (BASE TEL)

1" = 100'
GRAPHIC SCALE

PUBLIC WORKS DEPT. MARINE CORPS BASE CAMP LEJEUNE, N.C.		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC DIVISION NORFOLK, VIRGINIA	
DESC: DR 44		CHK: CDS	
PROJ MGR: SMITH		ENGR: [Signature]	
APPROVED: [Signature]		DATE: 5/14/68	
PUBLIC WORKS OFFICER			
SATISFACTORY TO: DATE:			
COMMANDING GENERAL:		NAVFAC DRAWING NO: 4011856	
EFD:		SIZE: F 80091	
HD:		CONSTR CONTR NO: N62470-75-B-0929	
APPROVED: [Signature]		SCALE AS SHOWN SPEC 05-75-0929	
FOR COMMANDER, NAVFAC		SHEET 1 OF 6	

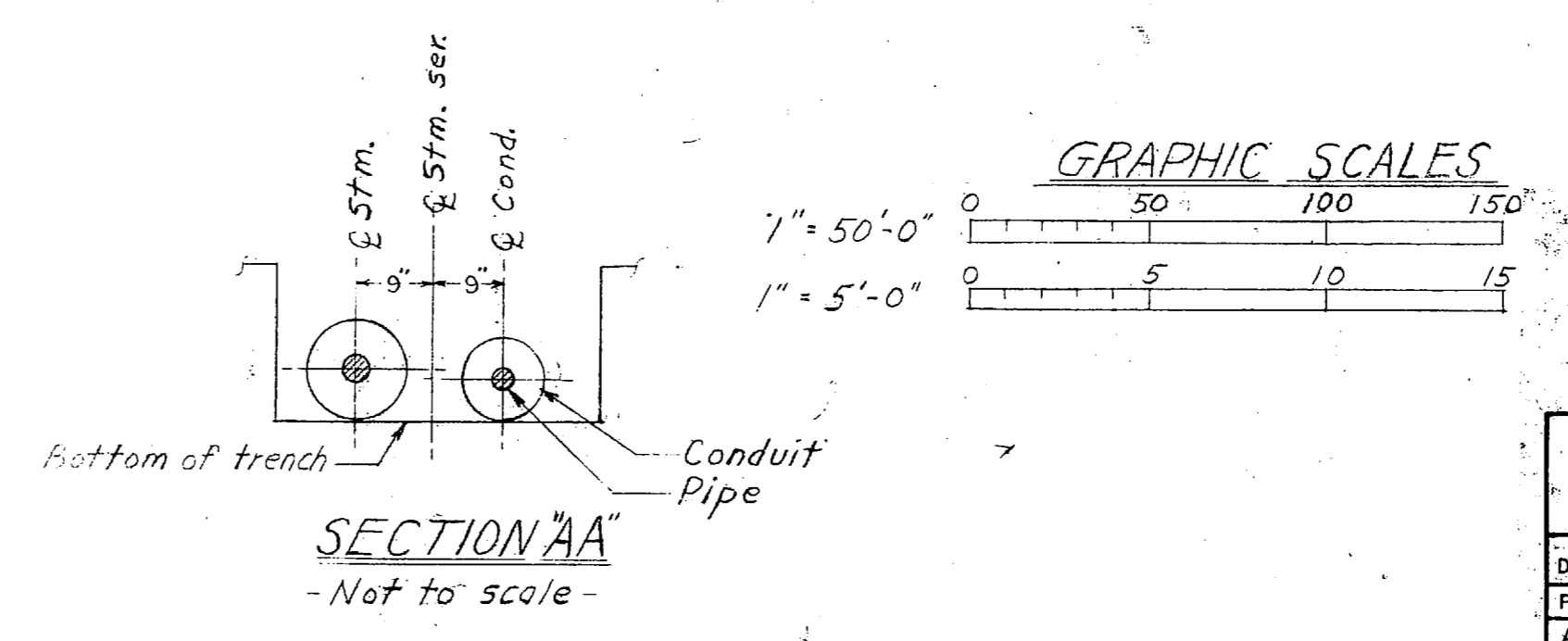




LEGEND

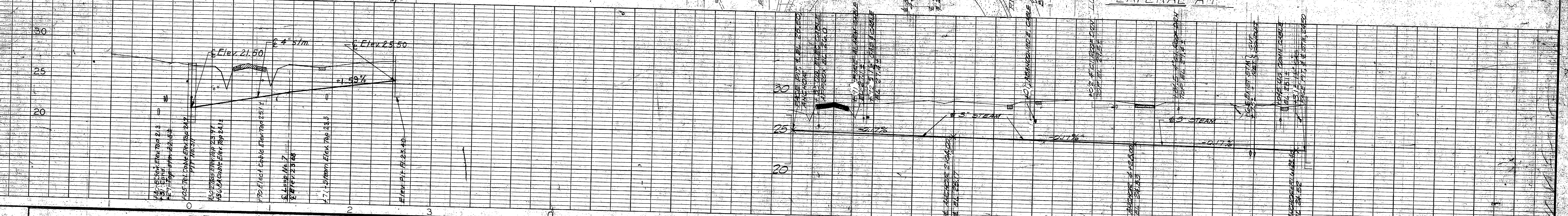
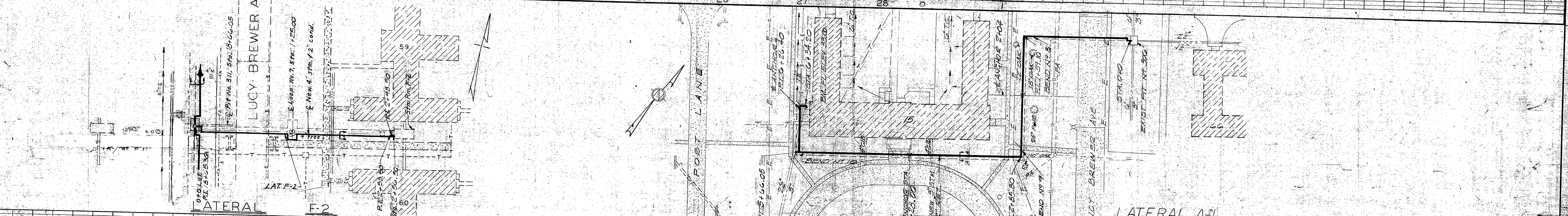
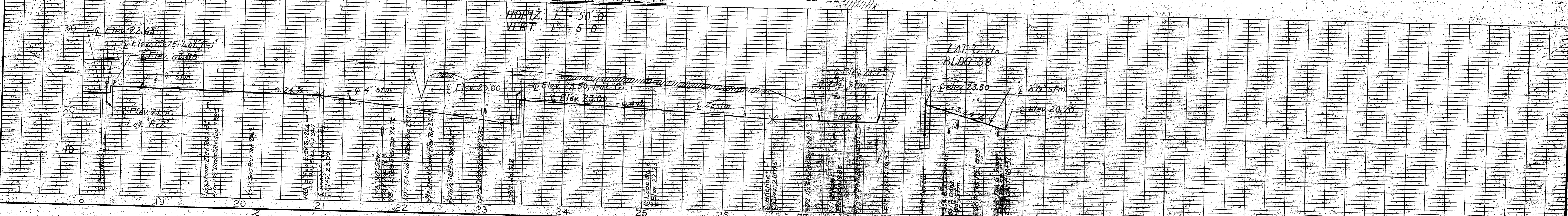
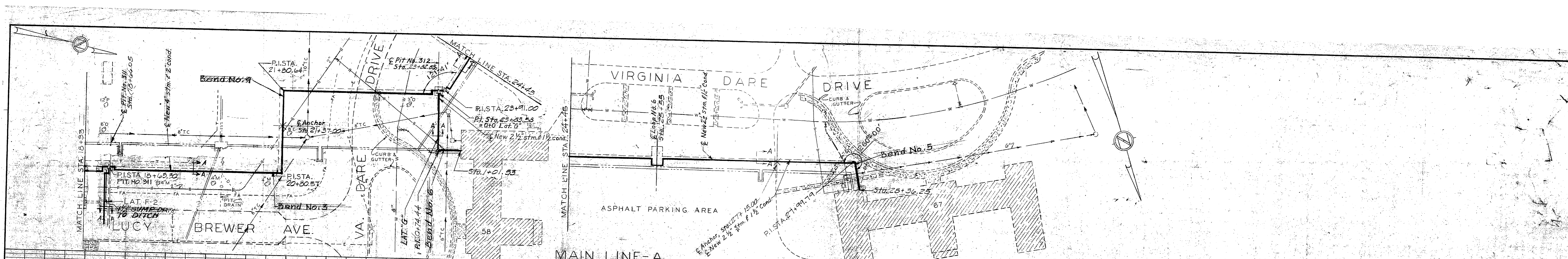
EXIST. ROADS-PARKING	---
CONC. WALKS	----
BUILDINGS	▨
SAN. SEWER	—+—+—
WATER-TREATED	— — — —
UN-TREATED	— — — —
L.P. GAS	— — — —
STEAM	— — — —
CONDENSATE	— — — —
UG TELEPHONE CABLE	— — — —
UG ELECTRIC CABLE	— — — —
STORM DRAIN	— — — —
UG FIRE ALARM CABLE	— — — —
DRAIN LINE	— — — —
INDIVIDUAL TREES	○

- GENERAL NOTES:**
1. Stations at bldg pits are at outside faces of pits.
 2. Stm. & cond. lines shall be anchored to all bldg pit walls when entering such pits unless otherwise shown. See Spec. No. 4211850.
 3. All underground electrical, telephone & fire alarm cables shall be protected by supporting in an enclosed box or channel. Re-locations requiring splicing to be done by the gov't upon notification.
 4. Unless otherwise shown, all angles are 90°.
 5. Support telephone & power poles located within 10ft. of trench prior to digging.
 6. All bends & loops shall be cold sprung 50%. Credit for cold spring will not be taken in stress evaluation.
 7. Basis for design of loops & bends: stm. 2.83" expn./100ft. cond. 2.00" expn./100 ft. (stm. 175 psi @ 377°F; cond. 260°F)
 8. For location of guides in loops & bends, see schedules for loops & bends on Plan & Profile Dwg. 4011850.
 9. Facilities located beneath pavements must be verified in field. See Spec. Such facilities are noted W/O on Plan & Profile.



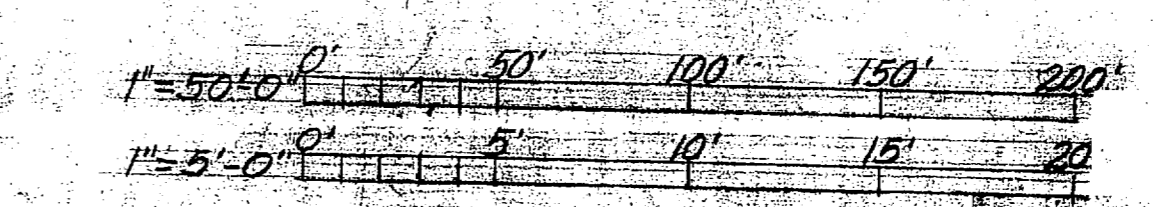
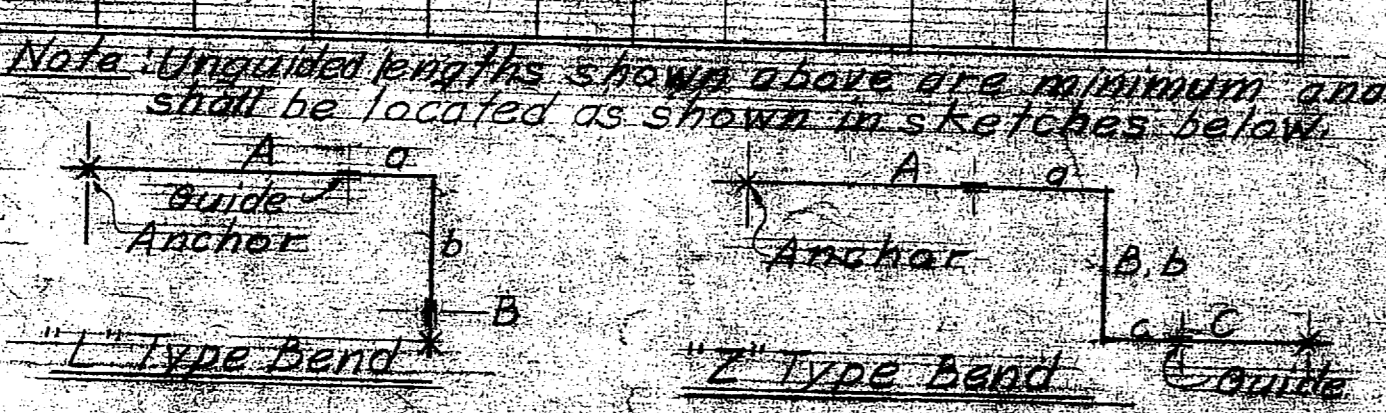
REVISIONS		DATE		APPROVED	
SYM	DESCRIPTION				

PUBLIC WORKS DEPT. MARINE CORPS BASE CAMP LEJEUNE, N.C.		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC DIVISION NORFOLK, VIRGINIA	
BESC D S DR 112 CHK C D S		MARINE CORPS BASE, CAMP LEJEUNE, N.C.	
PROJ. MGR. & SUPERVISOR: [Signature]		REPLACE STEAM AND CONDENSATE LINES, CENTRAL AREA (HQMC 5063)	
PUBLIC WORKS OFFICER: [Signature]		PLAN AND PROFILE	
Satisfactory to: [Signature]		NAVFAC DRAWING NO. 4011857	
COMMANDING GENERAL: [Signature]		SIZE: F CODE IDENT NO. 80091	
EFD: [Signature]		CONSTR. CONTR. NO. N62470-75-B-0929	
APPROVED: [Signature]		SCALE AS SHOWN SPEC. 05-75-0929 SHEET 2 OF 6	
DATE: 5/6/75		FOR COMMANDER, NAVFAC	



Bend No.	Type	Steam Cond. Size	Unguided L's			Leg A	Leg B	Leg C
			a	b	c			
1	Z	12"	18'	32'-0"	10'	4 1/2"	3 1/2"	3 1/2"
2	L	6"	18'	32'-0"	10'	2 1/2"	3 1/2"	3 1/2"
3	L	4"	18'	28'	10'	4 1/2"	2 1/2"	3 1/2"
4	L	4"	2'	18'	10'	4 1/2"	1 1/2"	3 1/2"
5	L	2 1/2"	1 1/2'	8'	10'	2 1/2"	1 1/2"	3 1/2"
6	L	2 1/2"	1 1/2'	8'	10'	2 1/2"	1 1/2"	3 1/2"
7	L	3"	2'	10'	10'	4 1/2"	3 1/2"	3 1/2"
8	L	3"	2'	10'	10'	4 1/2"	2 1/2"	3 1/2"
9	L	2"	1 1/2'	5'	10'	3 1/2"	1 1/2"	3 1/2"
10	L	2"	1 1/2'	5'	10'	2 1/2"	1 1/2"	3 1/2"

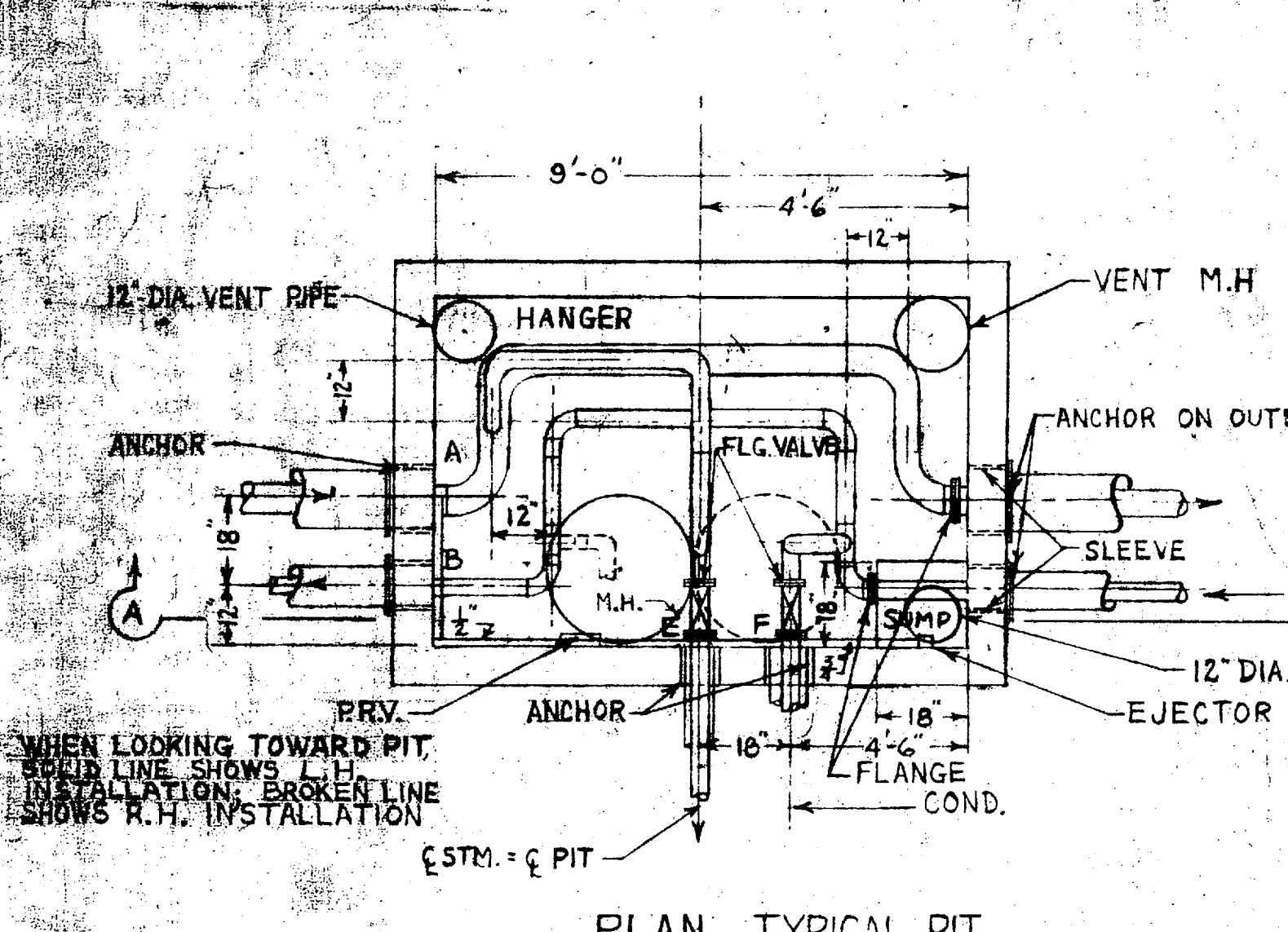
Loop No.	Steam Cond. Size	Loop Size W x H	Loop Size W x H	Loop Size W x H	Loop Size W x H	Loop Size W x H	Loop Size W x H	Loop Size W x H	Loop Size W x H	Total Expan.
1	12"	18' x 32'-0"	10'	4 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
2	6"	18' x 32'-0"	10'	2 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
3	4"	18' x 28'-0"	10'	4 1/2"	2 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
4	4"	2' x 18'-0"	10'	4 1/2"	1 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
5	2 1/2"	1 1/2' x 8'-0"	10'	2 1/2"	1 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
6	2 1/2"	1 1/2' x 8'-0"	10'	2 1/2"	1 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
7	3"	2' x 10'-0"	10'	4 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
8	3"	2' x 10'-0"	10'	4 1/2"	2 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
9	2"	1 1/2' x 5'-0"	10'	3 1/2"	1 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
10	2"	1 1/2' x 5'-0"	10'	2 1/2"	1 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"
11	2"	1 1/2' x 5'-0"	10'	2 1/2"	1 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"



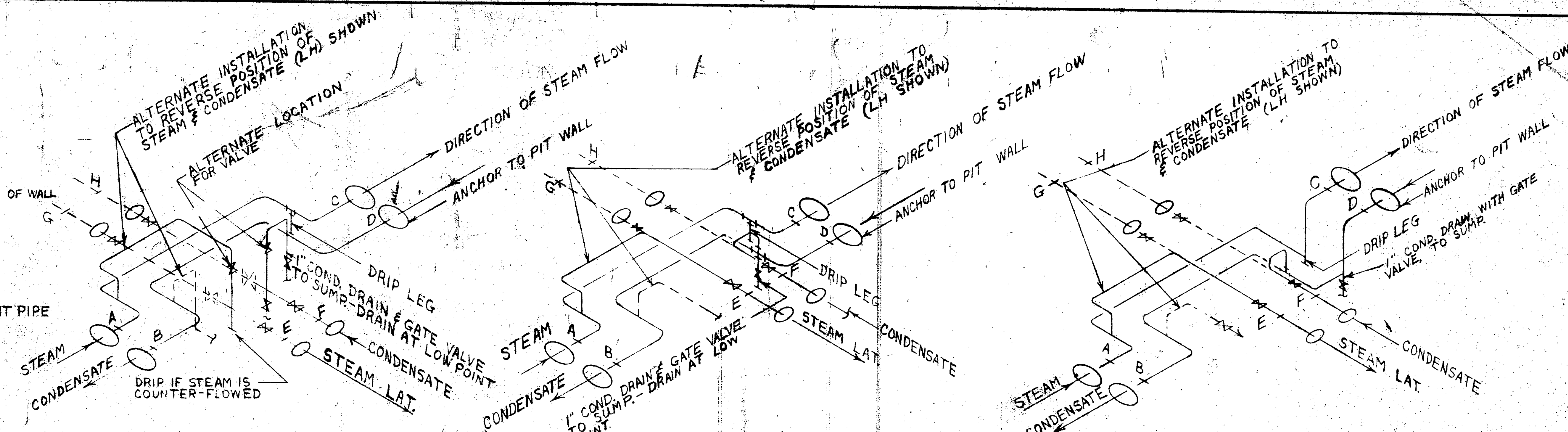
NOTE: See drawing to Legend, Gen Notes, and Section "A-A"

REVISIONS		DATE		APPROVED	
SYM	DESCRIPTION				

PUBLIC WORKS DEPT MARINE CORPS BASE CAMP LEJEUNE, N.C.		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC DIVISION	
DESIGNED BY DR. H. H. CHICK		MARINE CORPS BASE, CAMP LEJEUNE, VIRGINIA	
APPROVED BY [Signature]		REPLACE STEAM AND CONDENSATE LINES, CENTRAL AREA (HQMC 5063)	
SATISFACTORY TO [Signature]		PLAN AND PROFILE	
COMMANDING GENERAL		NAVFAC DRAWING NO.	
DATE		4011858	
SCALE AS SHOWN SPEC. 05-76-0929		CONSTR. CONTR. NO. N62470-75-B-0929	
		SHEET 3 OF 6	



PLAN, TYPICAL PIT
SCALE: 3/8" = 1'-0"



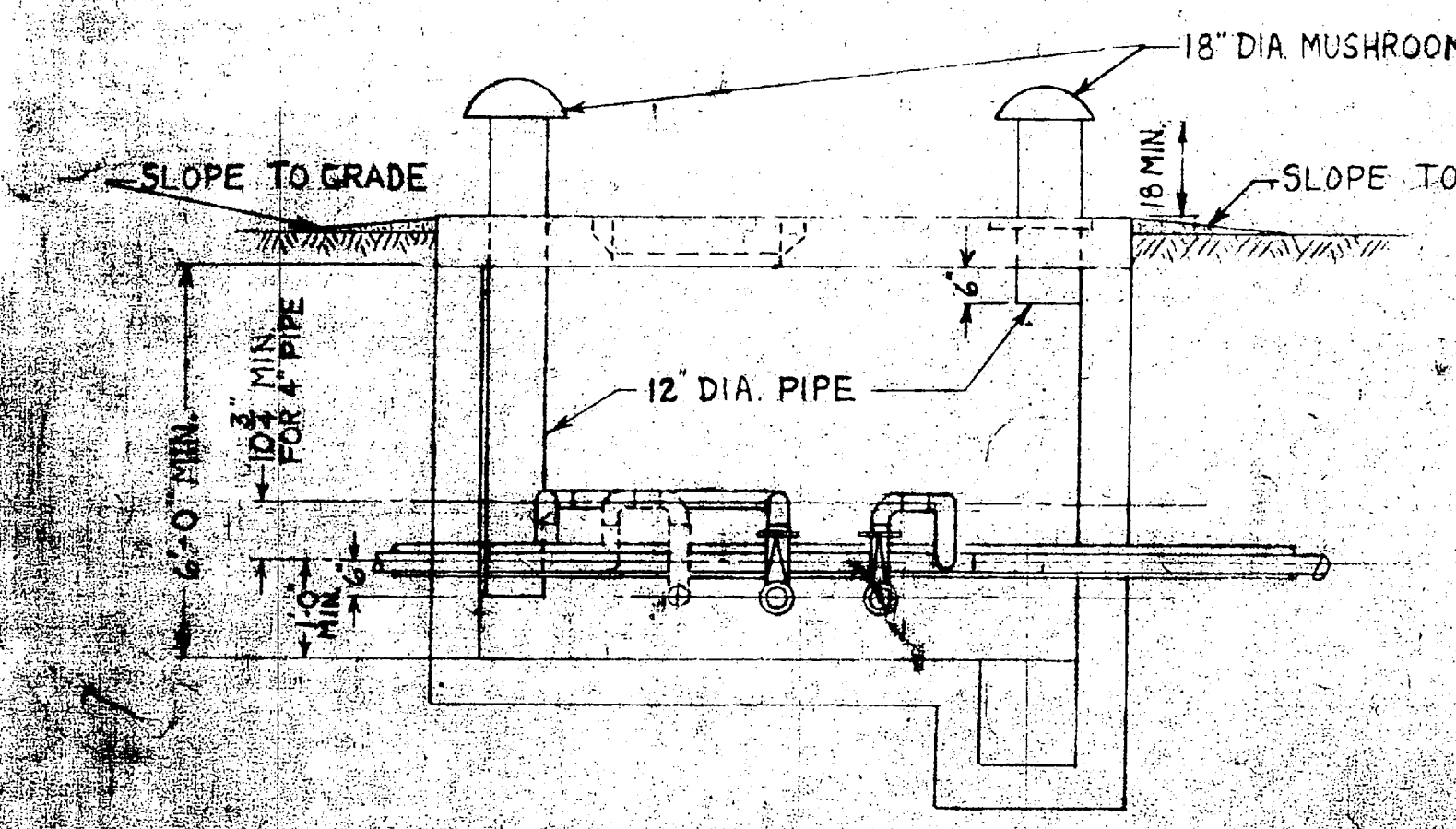
SCHMATIC PIPING DIAGRAM
TYPICAL WHEN SERVICE BRANCHES ARE BELOW TOP OF TAKE-OFF (LH SHOWN)
-NO SCALE-

SCHMATIC PIPING DIAGRAM IN PIT
SERVICE BRANCHES ABOVE SUPPLY LINE (LH SHOWN)
-NO SCALE-

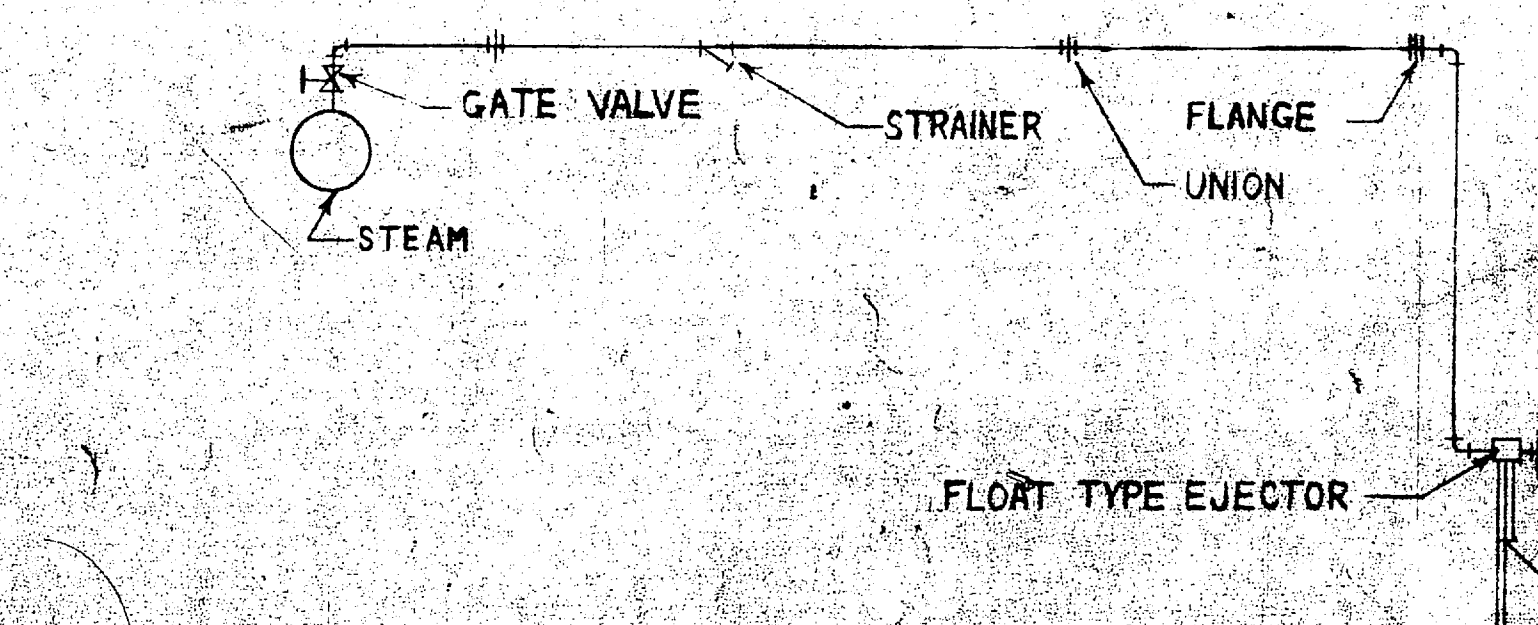
SCHMATIC PIPING DIAGRAM IN PIT
ELEVATION OF MAIN SUPPLY LINE CHANGES (LH SHOWN)
-NO SCALE-

PIT NUMBER	ELEVATIONS								REMARKS
	A	B	C	D	E	F	G	H	
306	2444 *	2430 *	2350 *						Right hand
307	2350 *	2460 *				2550 *			Left hand
308	2375 *	2360 *	2250 *			2500 *			Left hand
309	2300 *	2420 *	2380 *						Left hand
310	2325 *	2370 *				2425 *			VALVE PIT - Left hand
311	2265 *	2350 *	2150 *			2375 *			Left hand
312	2000 *	2300 *	2350 *						Left hand

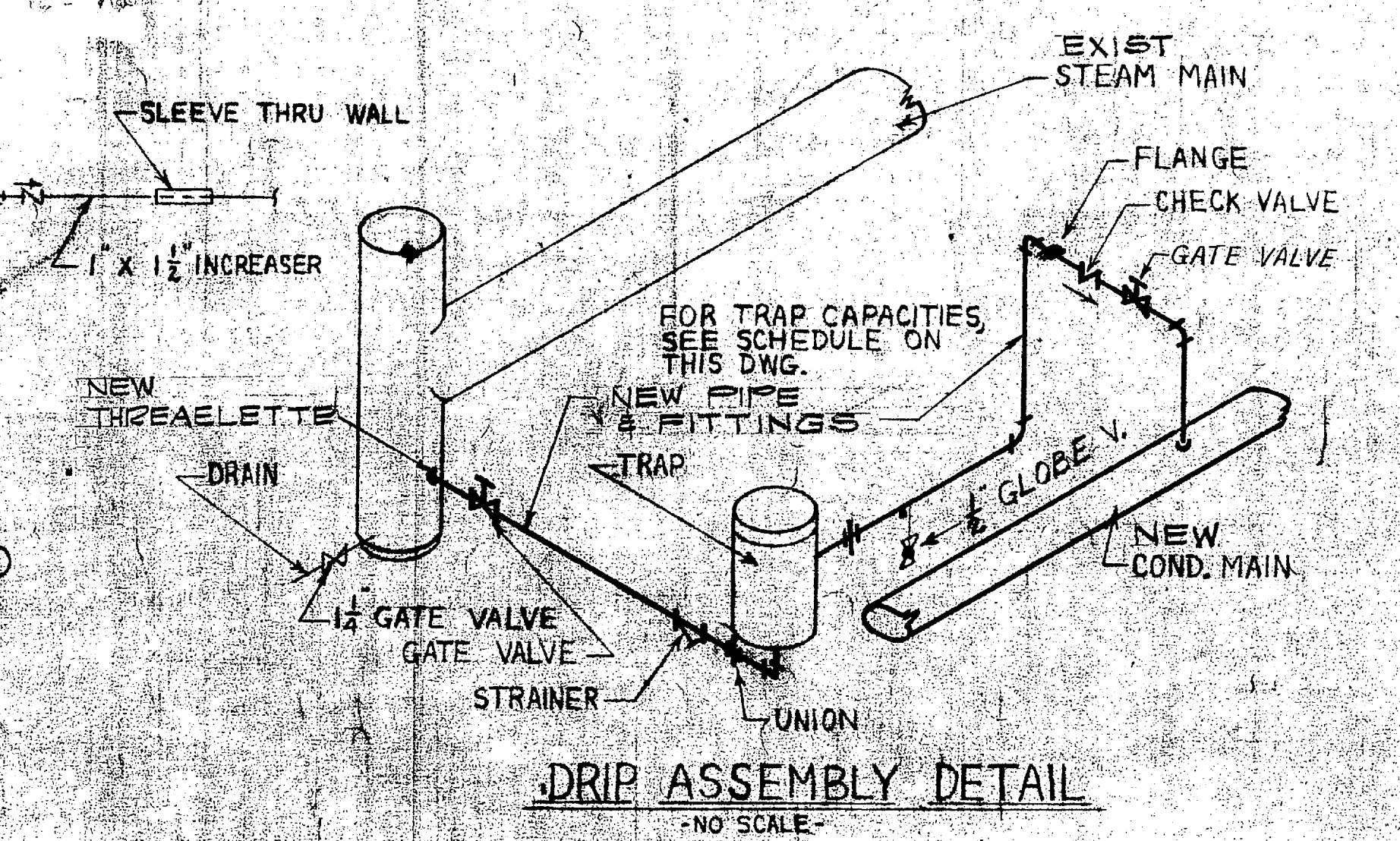
* BOTTOM OF CONDENSATE CONDUIT TO BE SAME ELEV. AS BOTTOM OF STEAM CONDUIT.
** REFERENCE TO SCHMATIC PIPING DIAGRAM IN DETERMINING "HAND" OF STM. LAT. INSTALLATION.



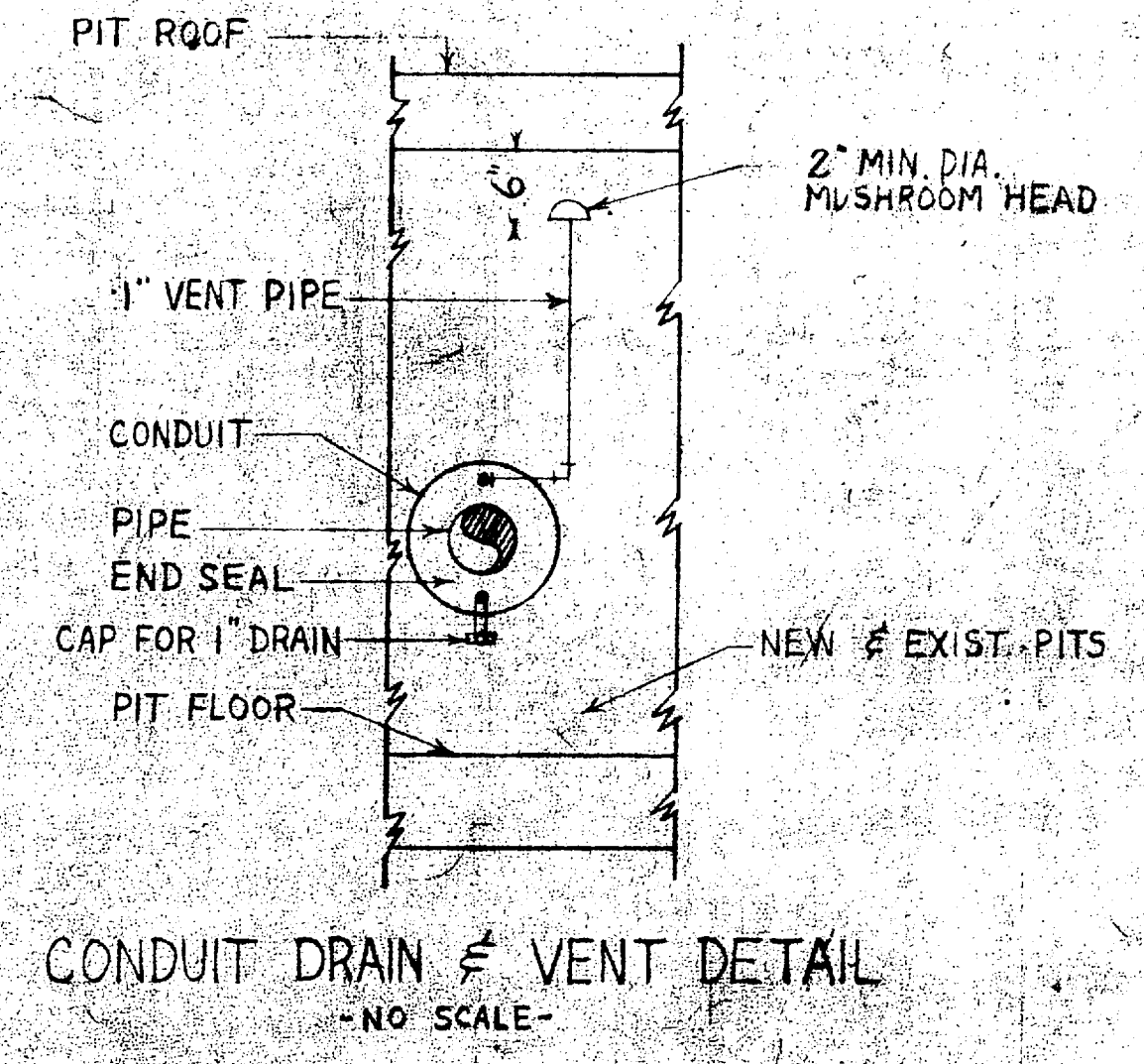
SECTION A-A
SCALE: 3/8" = 1'-0"



EJECTOR DETAIL
-NO SCALE-

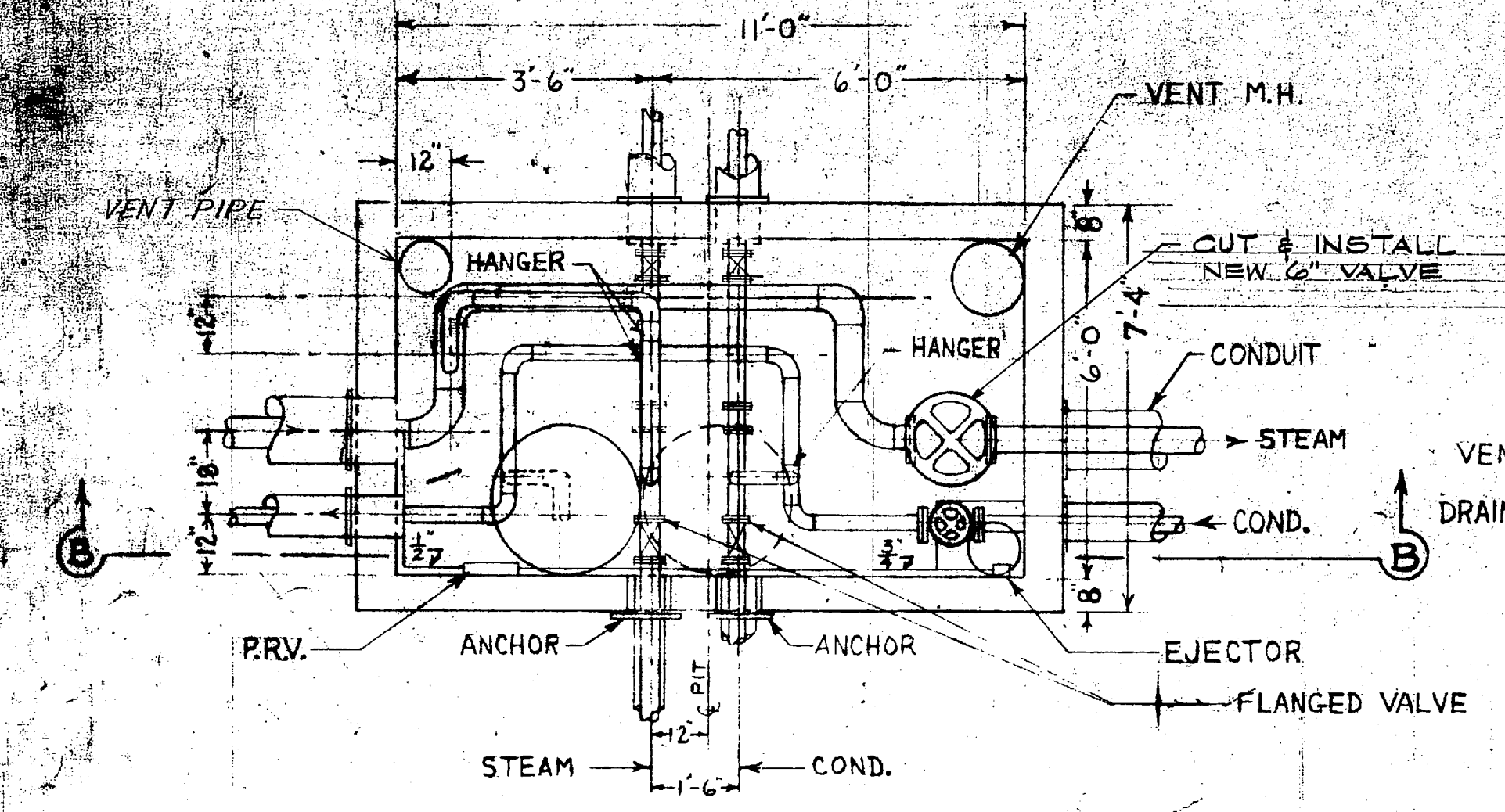


DRIP ASSEMBLY DETAIL
-NO SCALE-

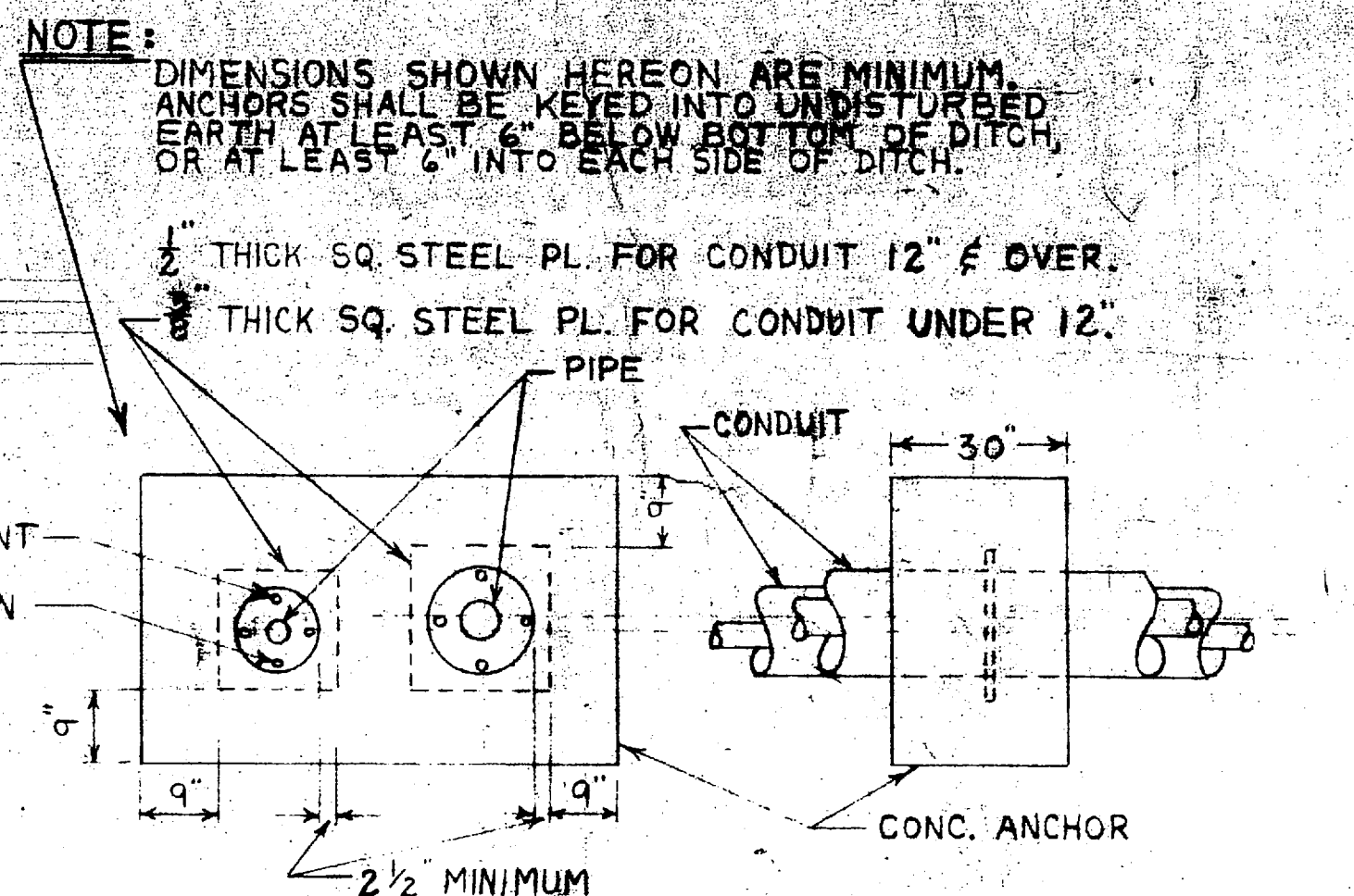


CONDUIT DRAIN & VENT DETAIL
-NO SCALE-

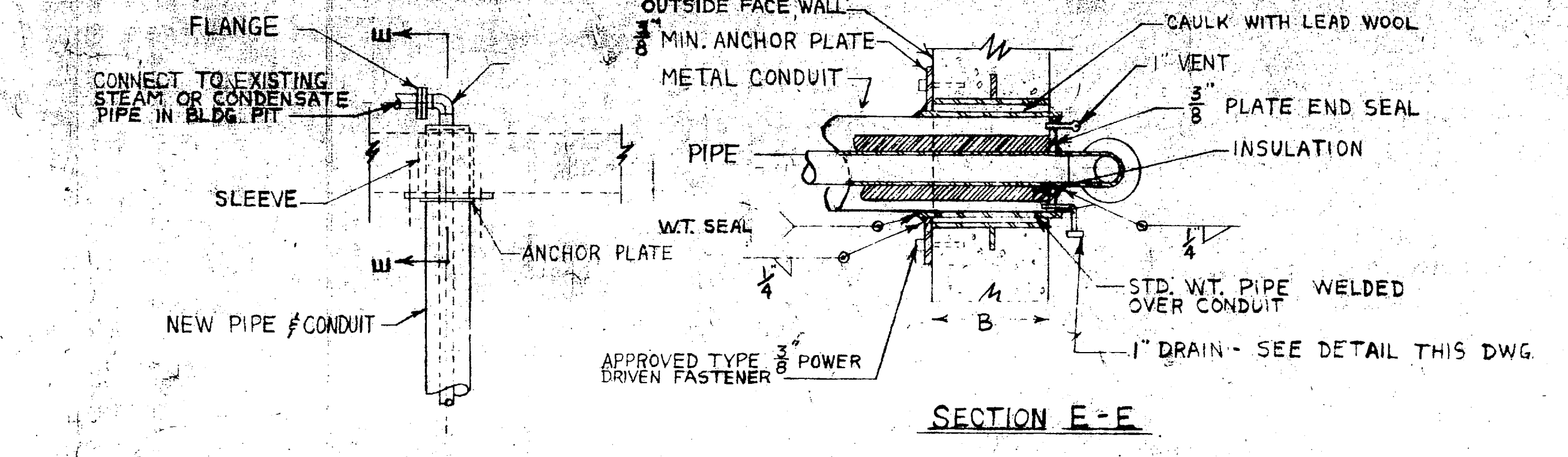
PIT NO.	COND. LBS/HR.	PRESS. DIFF.
306	4500	75#
307	3500	75#
308	4500	75#
309	3000	75#
310	3000	75#
311	5000	75#
312	3500	75#



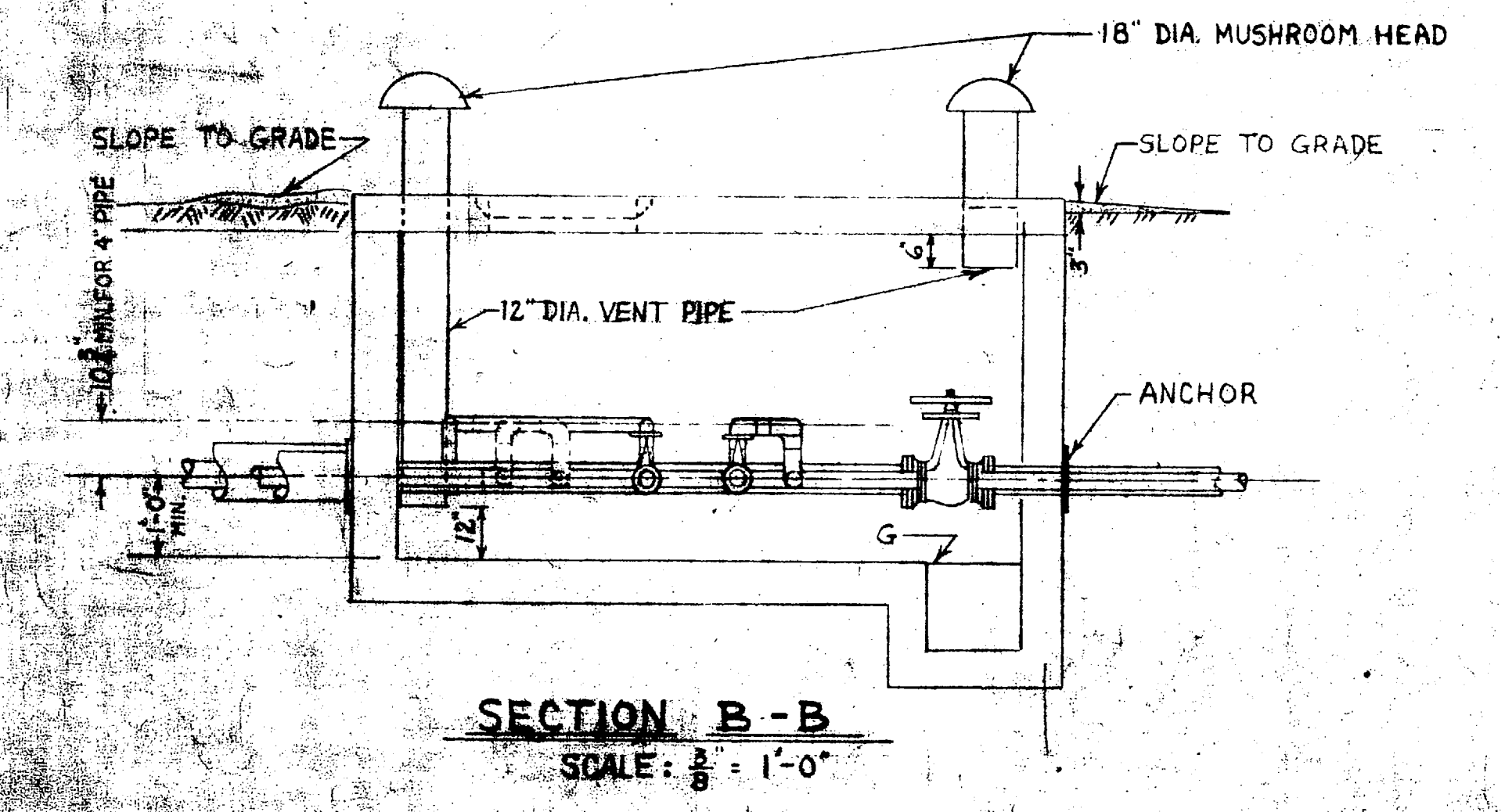
PLAN, TYPICAL VALVE PIT NO 306
SCALE: 3/8" = 1'-0"



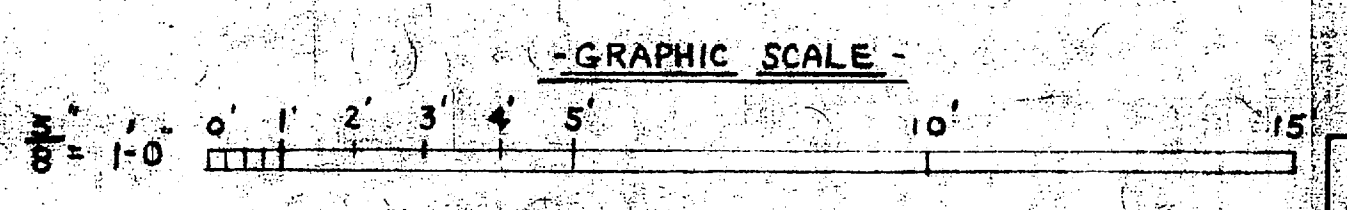
CONCRETE ANCHOR DETAIL
-NO SCALE-



DETAIL OF CONNECTION OF STEAM & CONDENSATE PIPING AT EXISTING BUILDING PITS
-NOT TO SCALE-



SECTION B-B
SCALE: 3/8" = 1'-0"

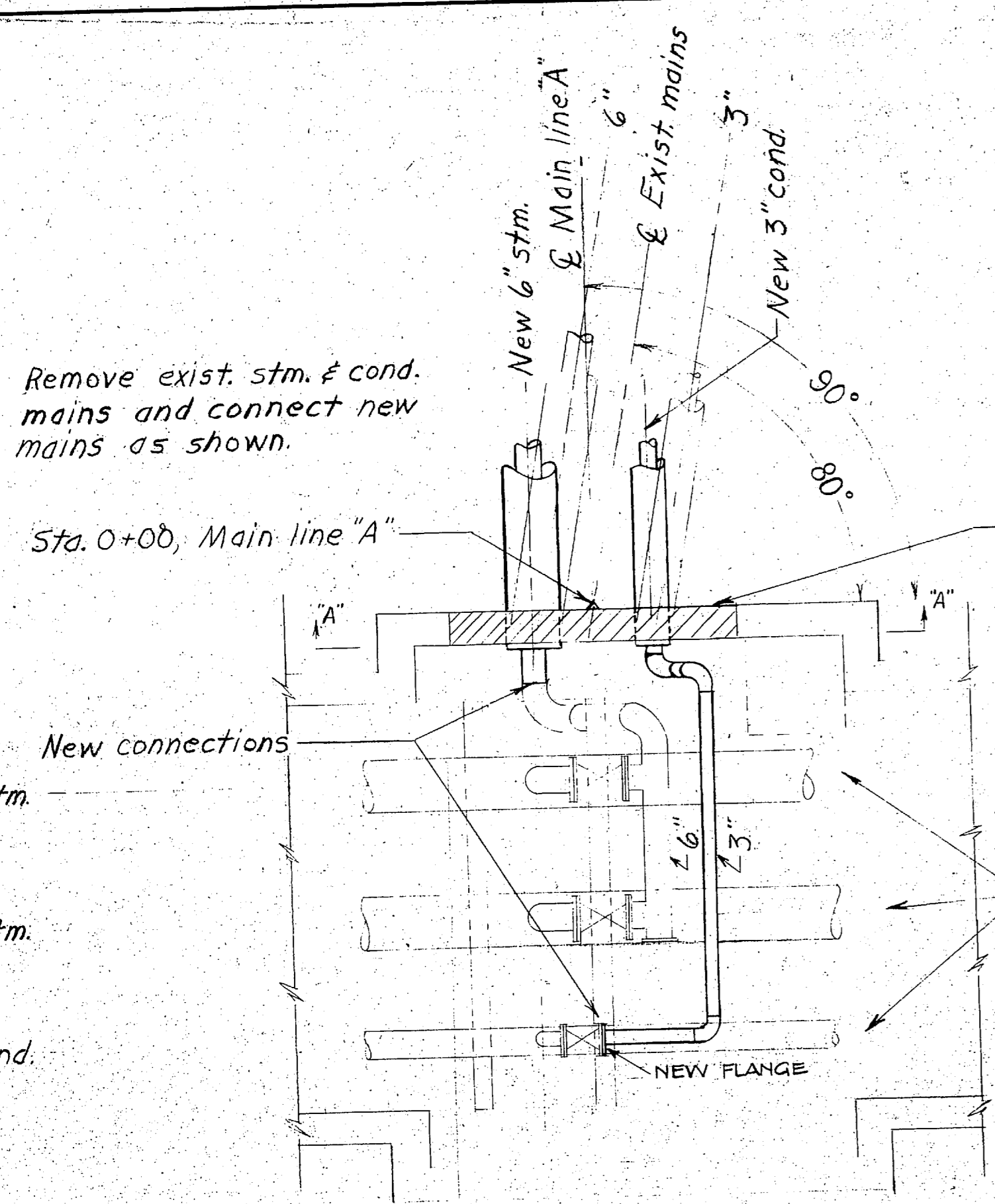


-GENERAL NOTES-

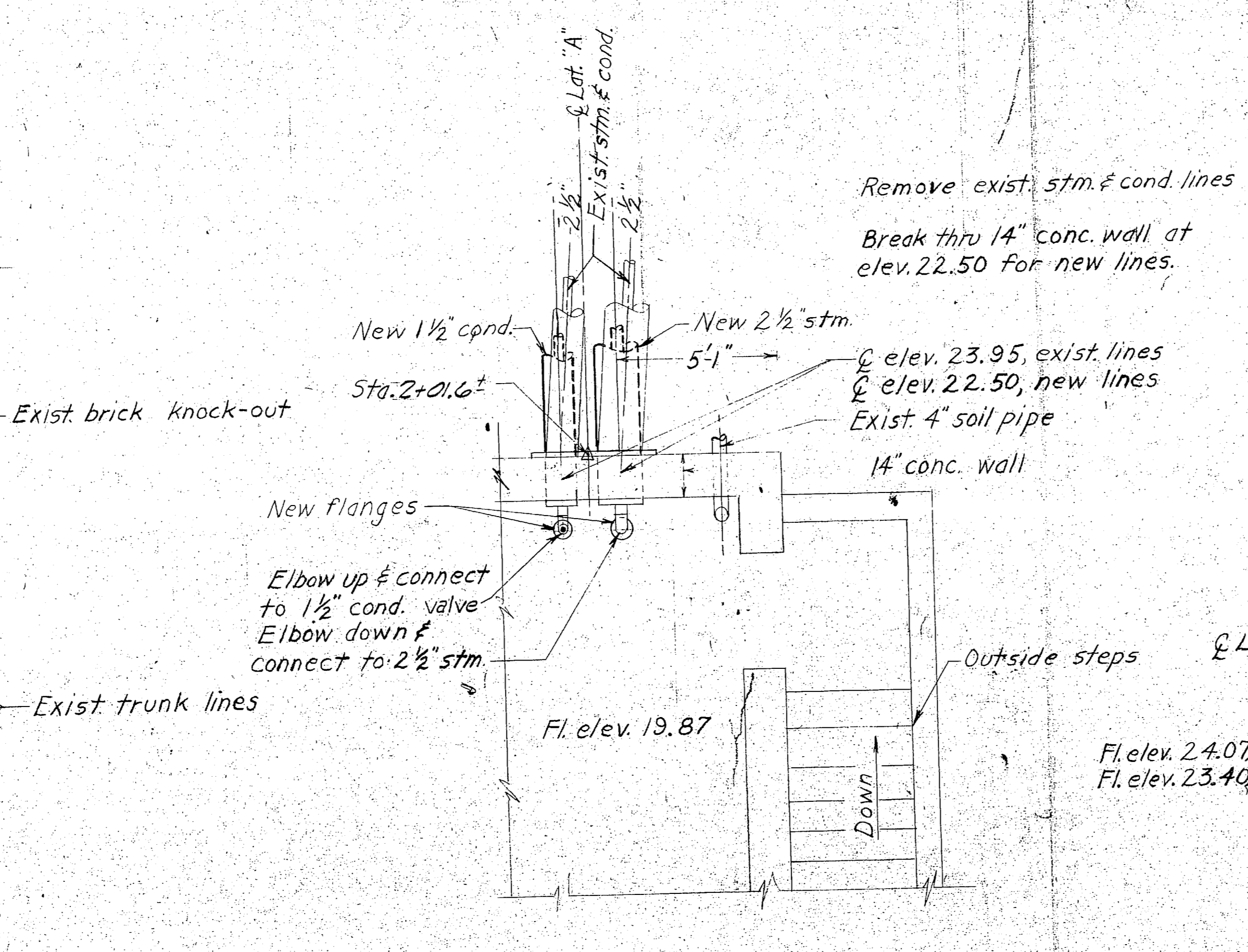
- FOR SIZE OF PIPING IN PITS, SEE PLAN AND PROFILE SHEET.
- ALL CONDENTS ENTERING PIT SHALL HAVE END SEALS, DRAINS, & VENT PIPING AS SHOWN.
- ALL PITS MADE REVERSE TO TYPICAL PIT & SPECIAL PIT DWGS. SHALL BE ROTATED ABOUT C OF STEAM & CONDENSATE MAINS. SEE DETAILS.
- ANCHOR STM. COND. PIPES AT PIT WALLS UNLESS SHOWN OTHERWISE.
- SLEEVES 1" LARGER THAN O.D. OF PIPE WELDED OVER THE CONDUIT SHALL BE INSTALLED FOR ALL CONDENTS ENTERING LEAVING PITS.
- SUITABLE TEMPORARY ANCHORS SHALL BE PROVIDED FOR UNRESTRAINED PIPE WHERE NECESSARY.
- REPACK & REUSE ALL EXIST. VALVES IN PITS EXCEPT PROVIDE NEW G" VALVE ON MAIN IN PIT NO 306.

REVISIONS		DATE		APPROVED	
SYM	DESCRIPTION	DATE	APPROVED	DATE	APPROVED

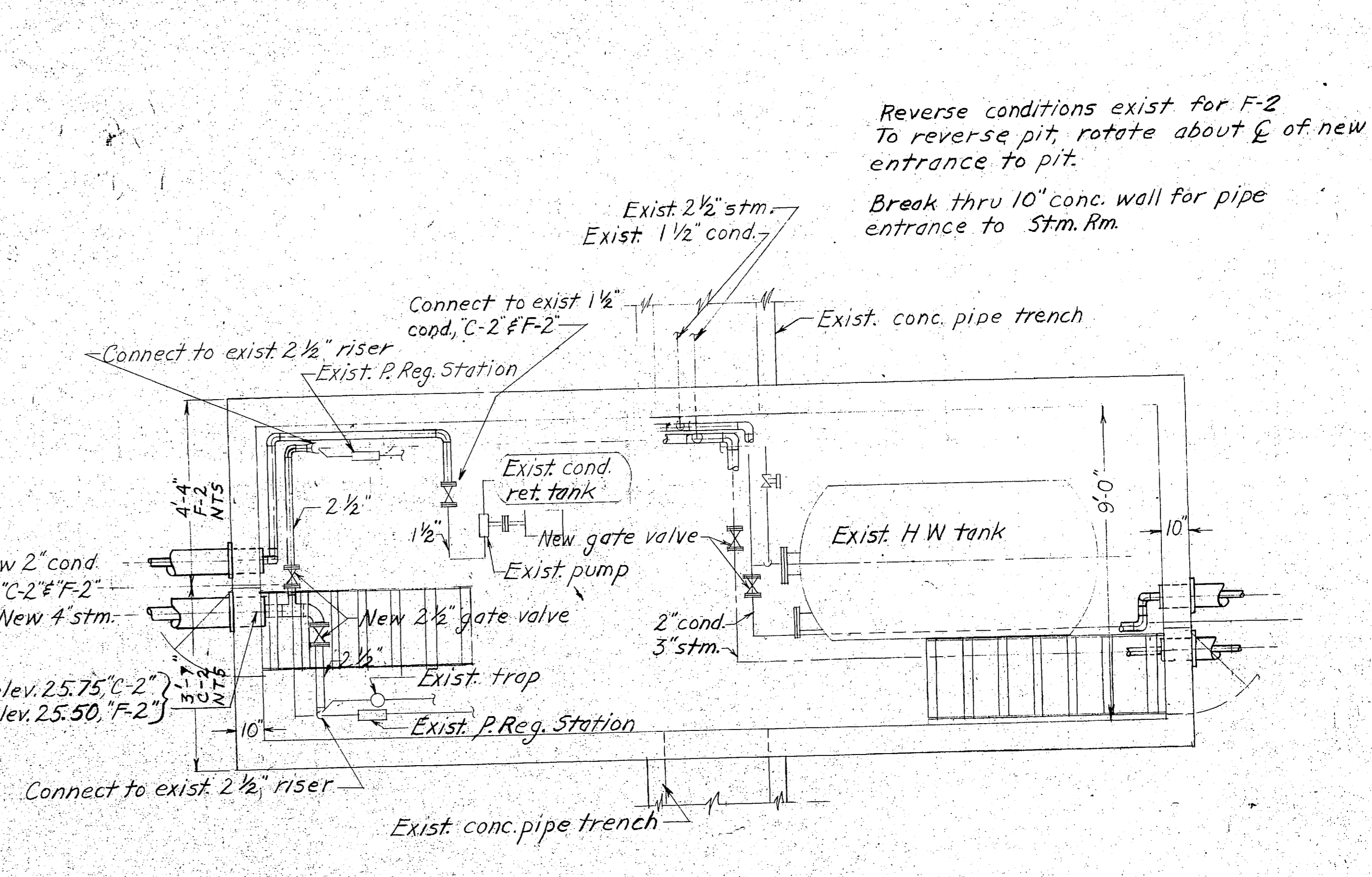
PUBLIC WORKS DEPT. MARINE CORPS BASE CAMP LEJUNE, N.C.	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC DIVISION MARINE CORPS BASE, CAMP LEJUNE, N.C.
PREP'D BY: <i>W. C. Stiles</i> CHECKED BY: <i>W. C. Stiles</i> DATE: <i>5/10/75</i>	NAVAC DRAWING NO: 4011859
COMMANDED GENERAL: R.V.D.	SIZE: F 80091
APPROVED BY: <i>W. C. Stiles</i> DATE: <i>5/10/75</i>	CONSTR. CONTR. NO: 62470-75-B-0929
FOR COMMANDER, NAVAC	SCALE AS SHOWN SPEC: 05-75-0929



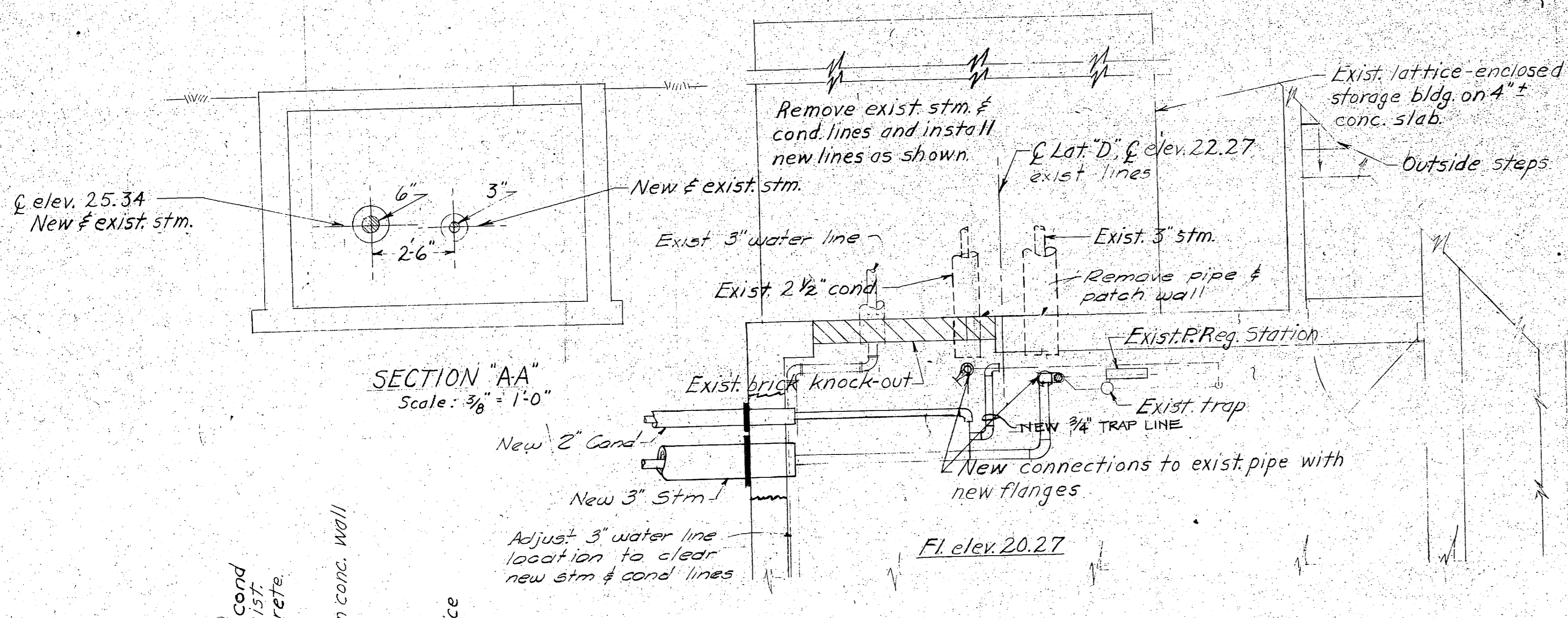
PLAN EXIST TUNNEL PIT
Scale: 3/8" = 1'-0"



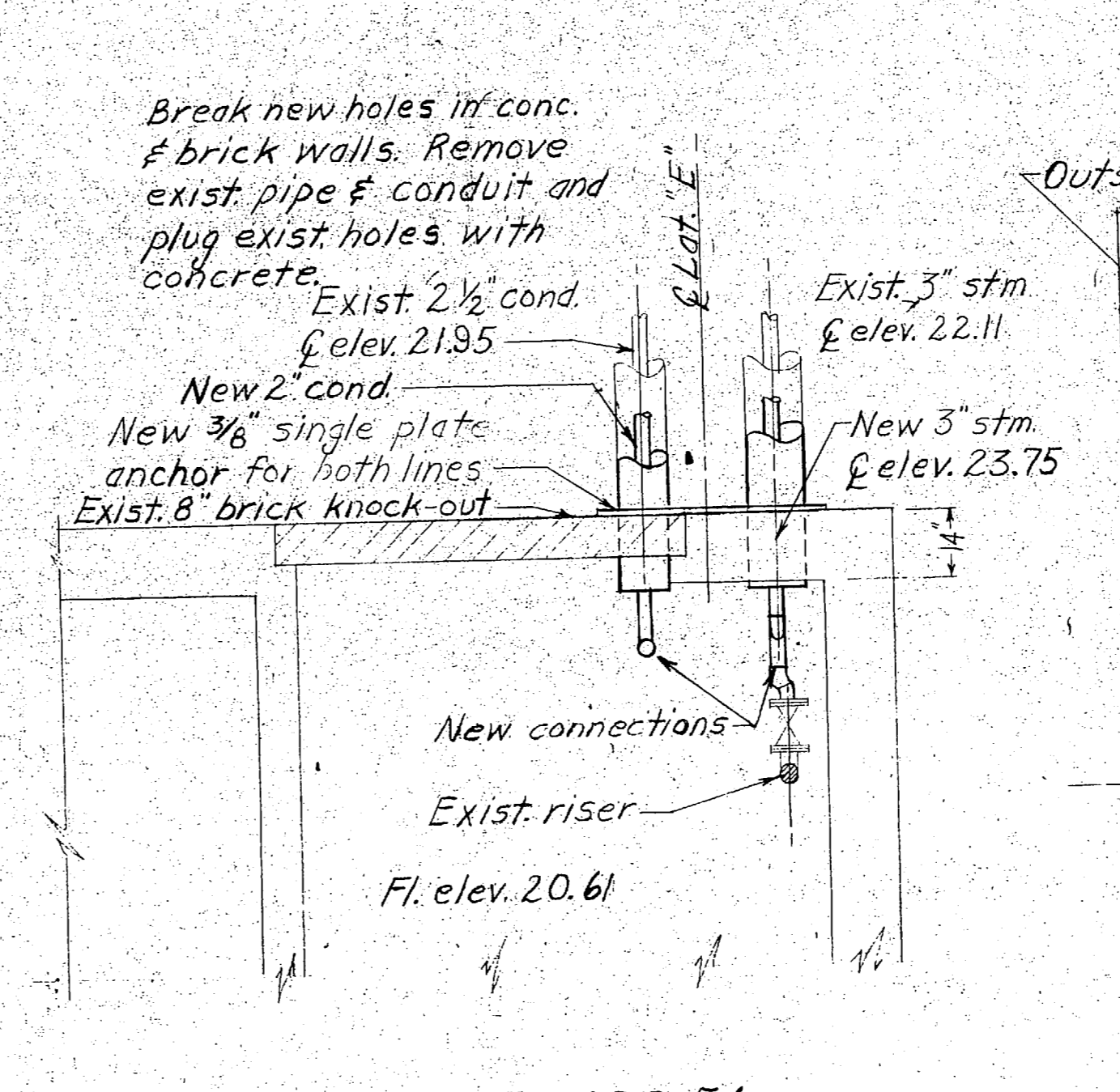
PLAN PIT, BLDG. 66
Scale: 3/8" = 1'-0"



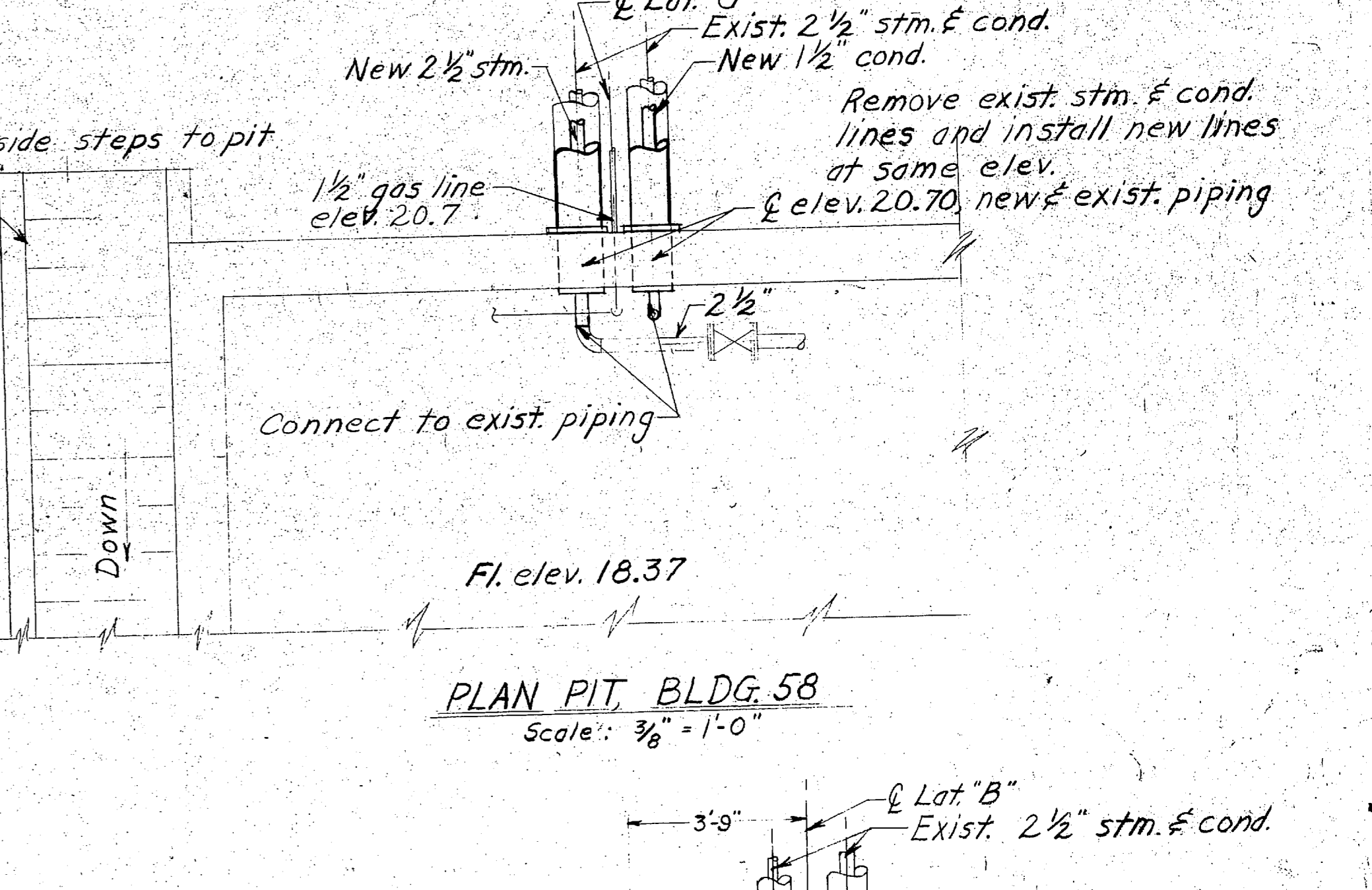
TYPICAL PLAN, STEAM ROOMS, 'C-2' - 'F-2' REVERSED
Scale: 3/8" = 1'-0"



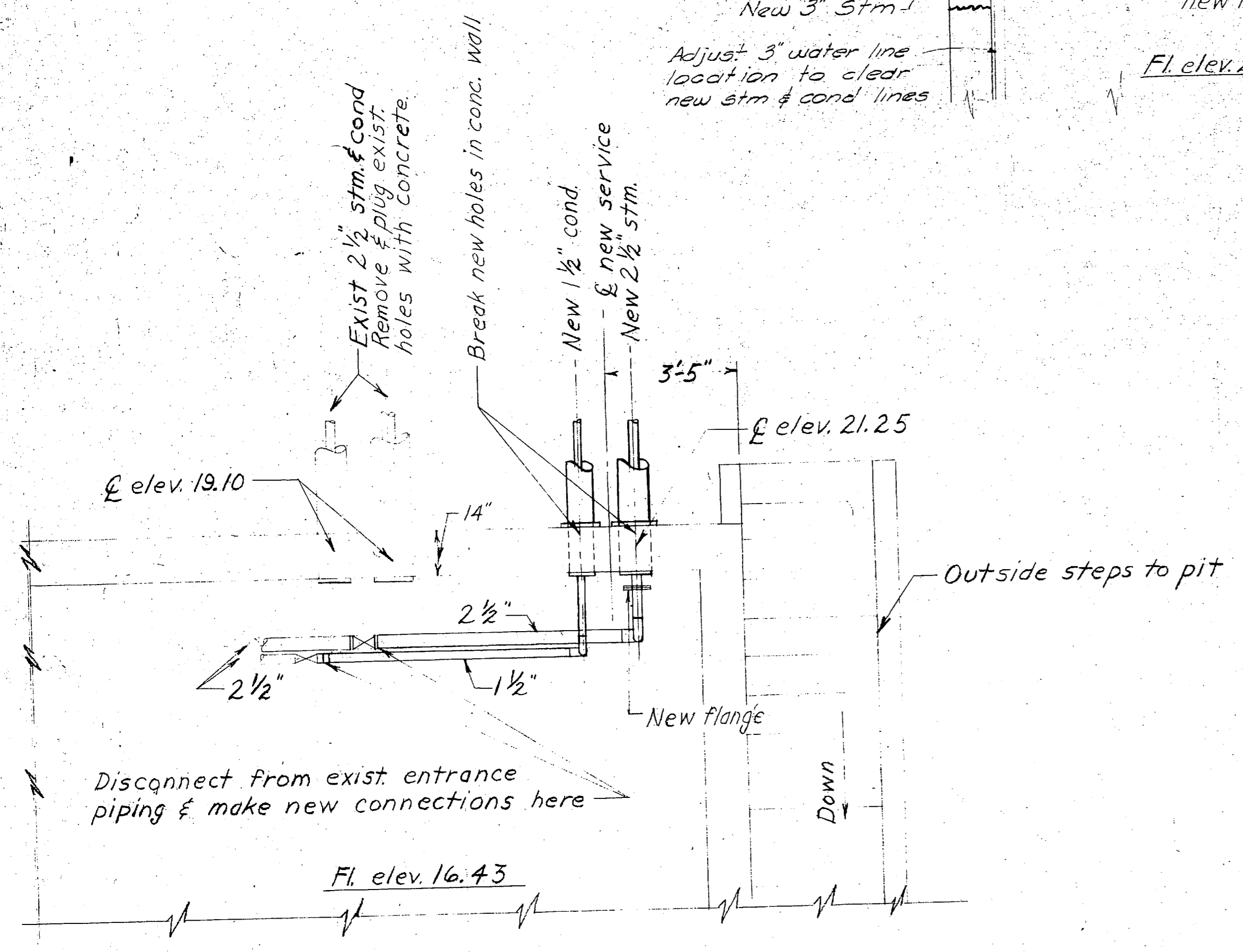
SECTION "AA"
Scale: 3/8" = 1'-0"



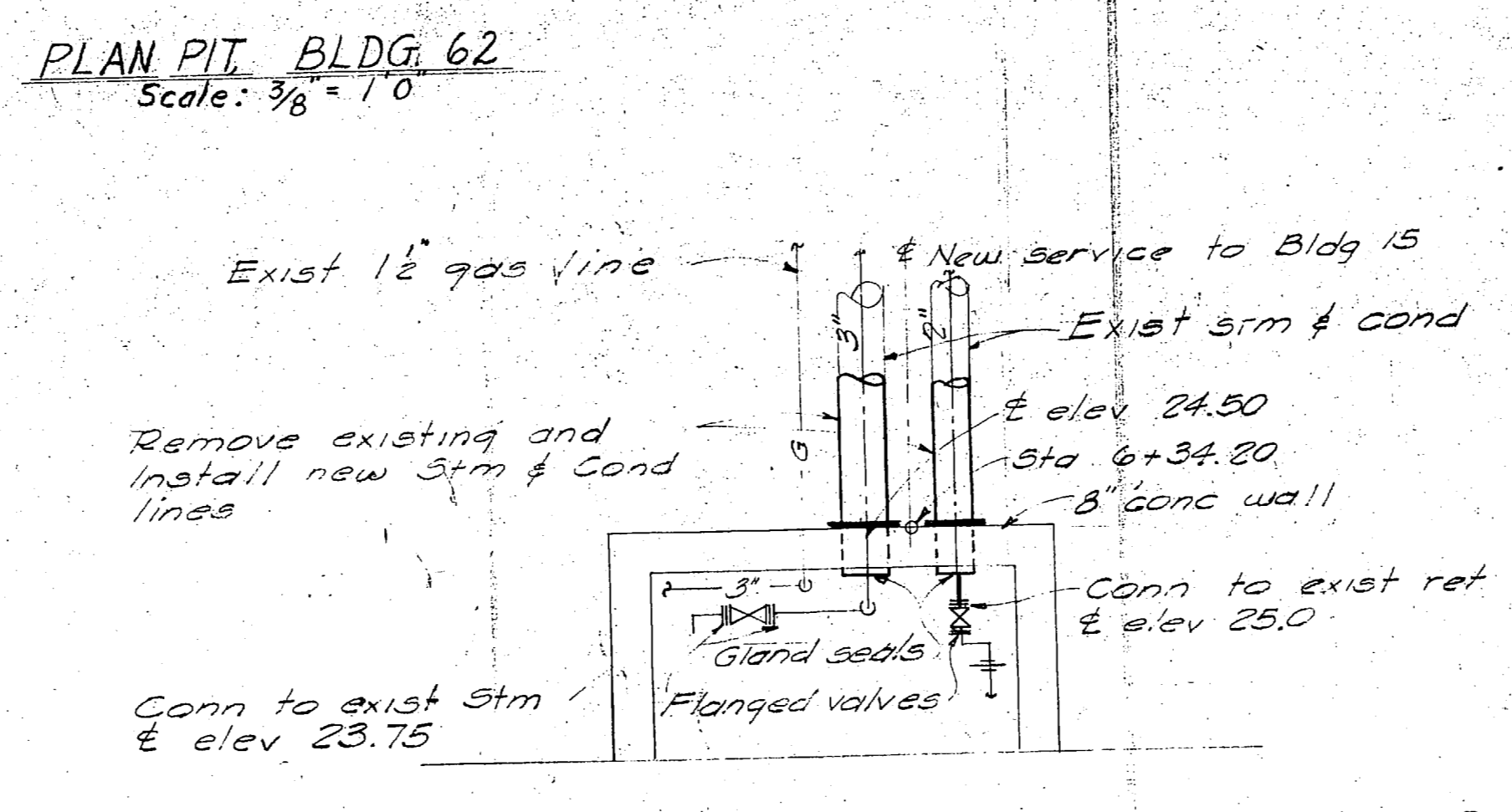
PLAN PIT, BLDG. 54
Scale: 3/8" = 1'-0"



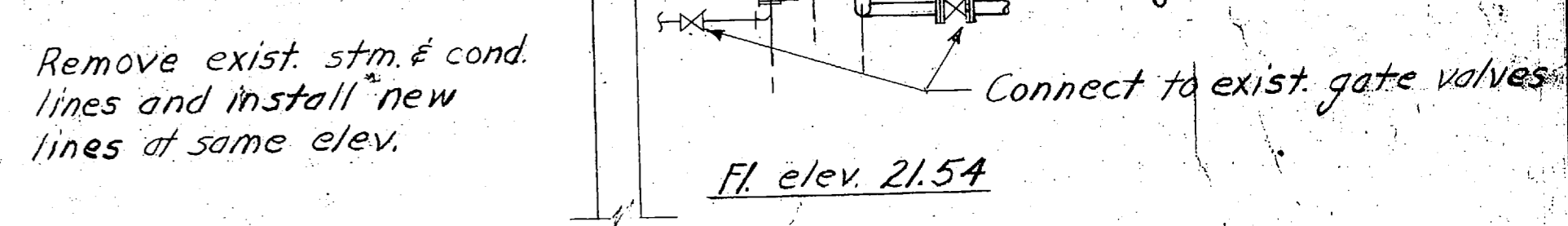
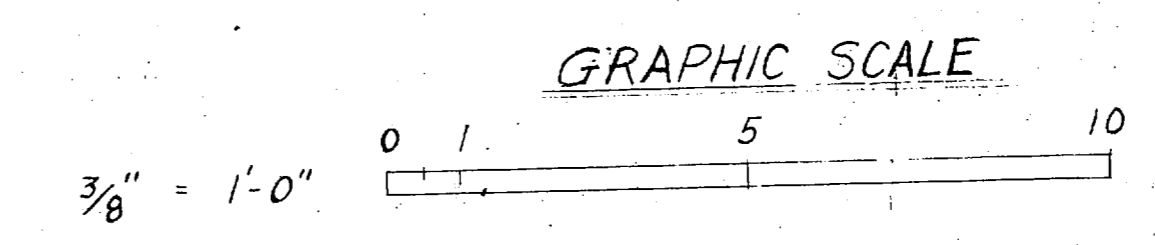
PLAN PIT, BLDG. 58
Scale: 3/8" = 1'-0"



PLAN PIT, BLDG. 67
Scale: 3/8" = 1'-0"



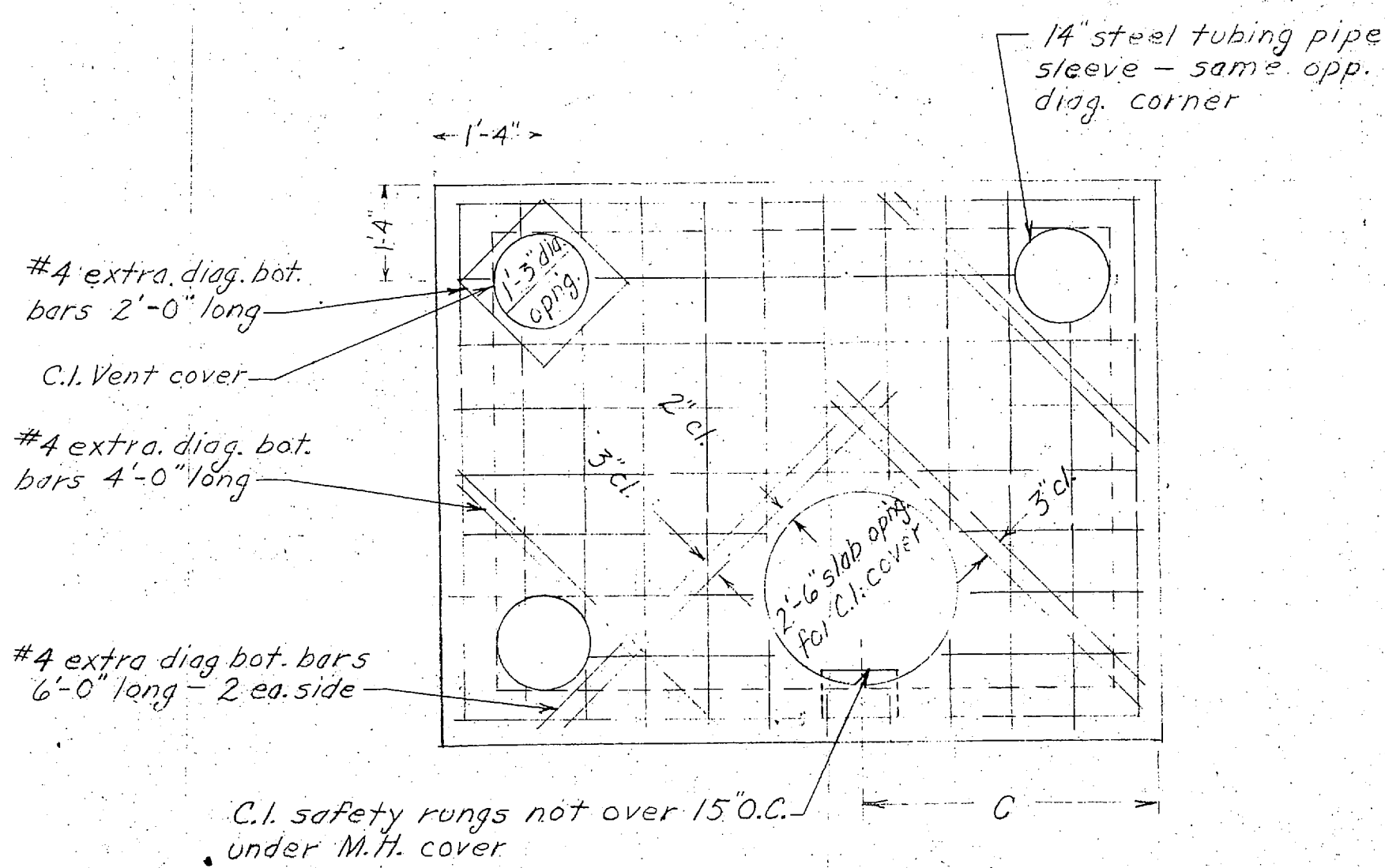
PLAN-NEW CONNECTIONS IN PIT BLDG. 15
Scale: 3/8" = 1'-0"



PLAN PIT, BLDG. 50
Scale: 3/8" = 1'-0"

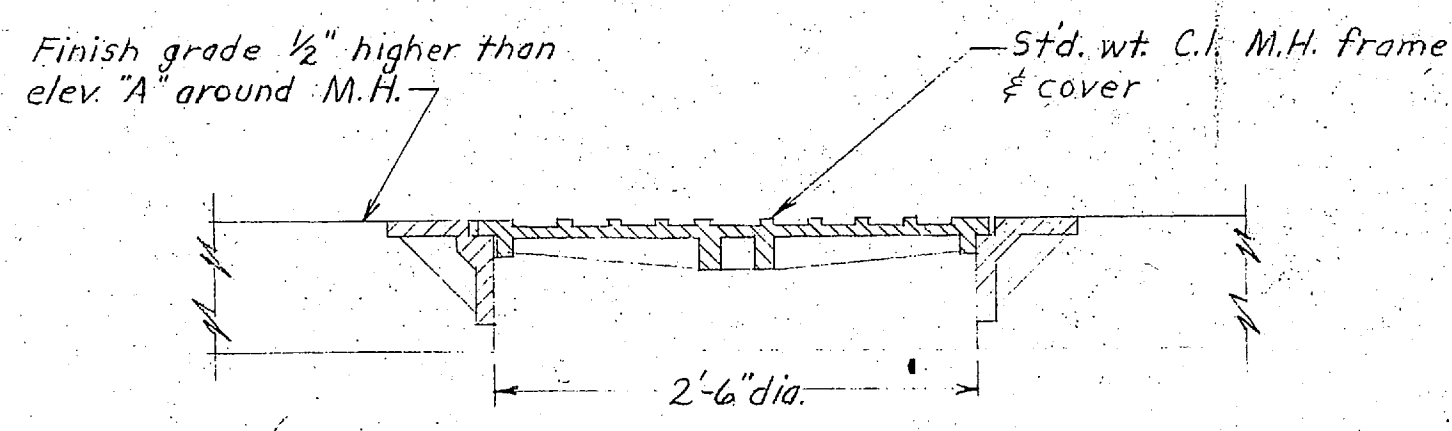
REVISIONS		
SYM	DESCRIPTION	DATE APPROVED

PUBLIC WORKS DEPT. MARINE CORPS BASE CAMP LEJEUNE, N.C.		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC DIVISION MARINE CORPS BASE, CAMP LEJEUNE, N.C.	
DESIGNED BY CHK'D BY	APPROVED BY DATE	REPLACE STEAM AND CONDENSATE LINES, CENTRAL AREA (HQMC 5063)	
PUBLIC WORKS OFFICER		BLDG. PIT PLANS AND DETAILS	
COMMANDED GENERAL	SIZE	CODE IDENT NO	NAVFAC DRAWING NO
EFD	F	80091	4011860
NO	CONSTR CONTR NO	162470-75-B-0929	
APPROVED BY DATE	SPEC	05-75-0929	SHEET 5 OF 6
FOR COMMANDER, NAVFAC	SCALE AS SHOWN	LANTDIV DWS NO	



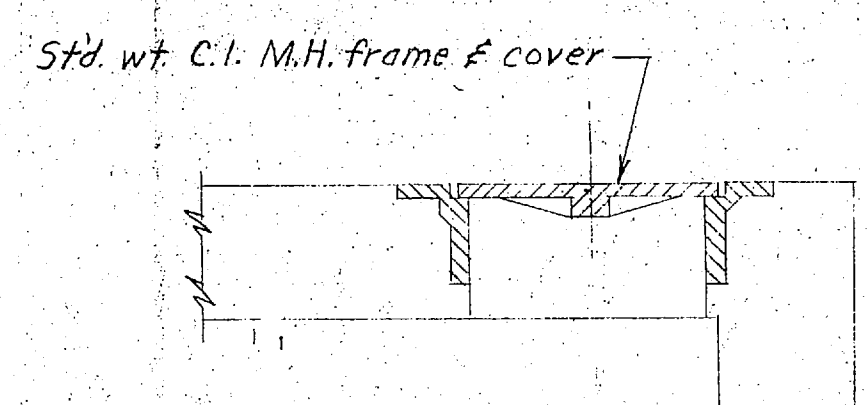
ROOF PLAN TYPICAL PITS

Note: Scale: 1/2" = 1'-0"
Roof plan shown for left hand (L.H.) pit.
For right hand (R.H.) pit, reverse Pit Cover
Opening Arrgt.



M.H. COVER SETTING

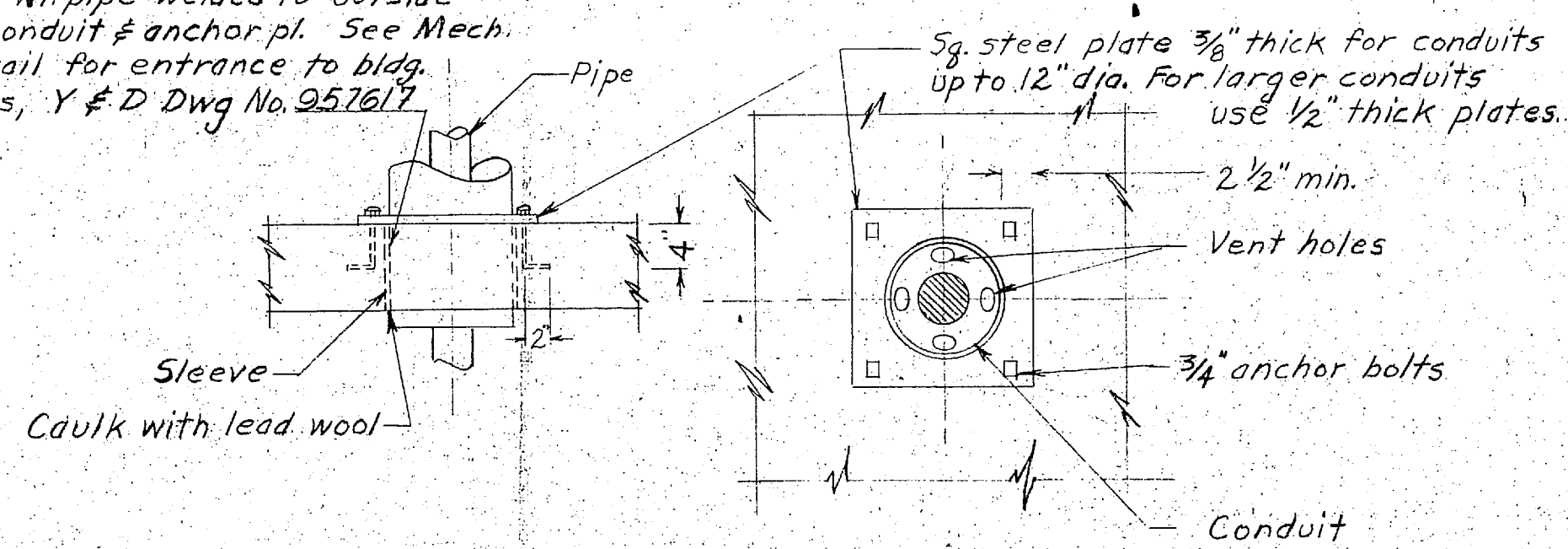
Scale: 1" = 1'-0"



VENT COVER SETTING

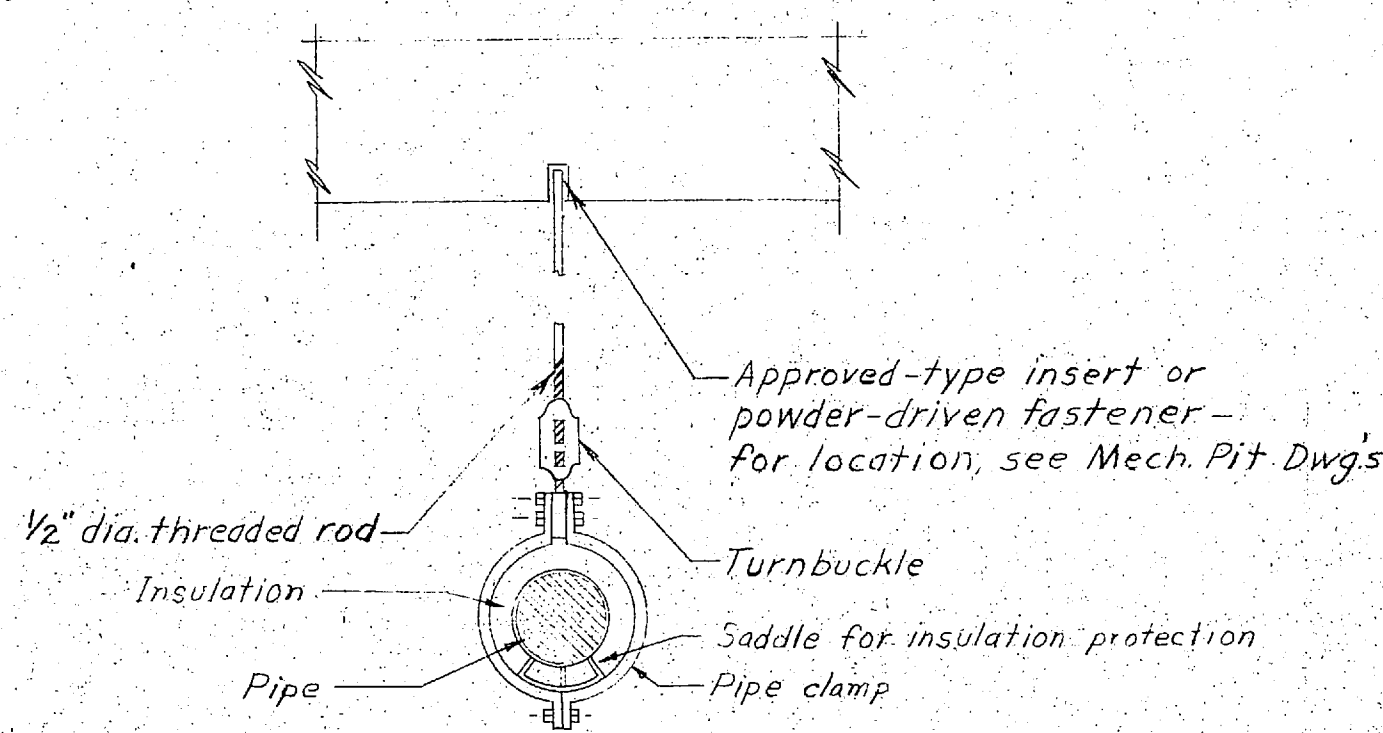
Scale: 1" = 1'-0"

Std. wt. pipe welded to outside
of conduit & anchor pl. See Mech.
Detail for entrance to bldg.
pits, Y & D Dwg No. 952617



TYPICAL PLATE ANCHOR DETAIL AT PITS

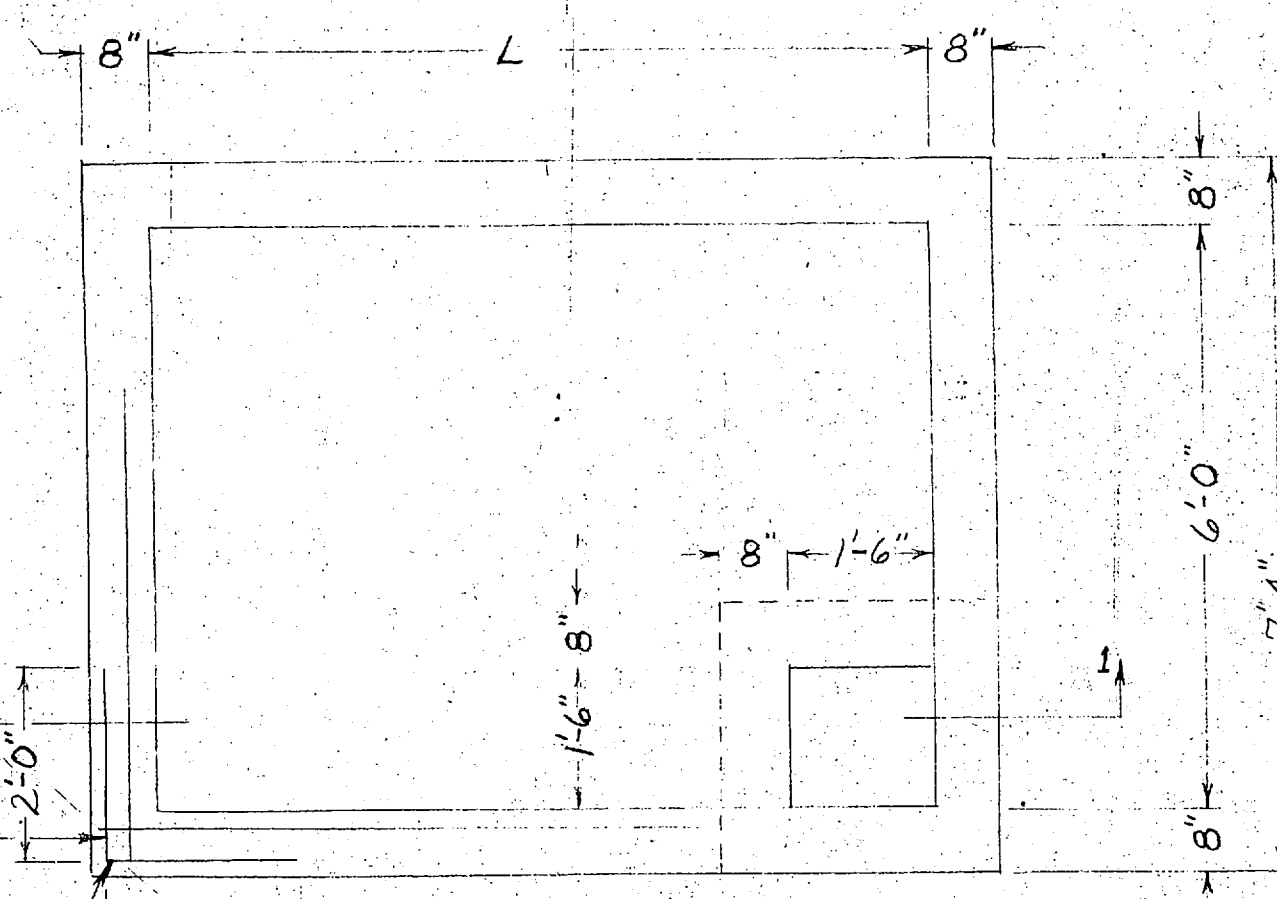
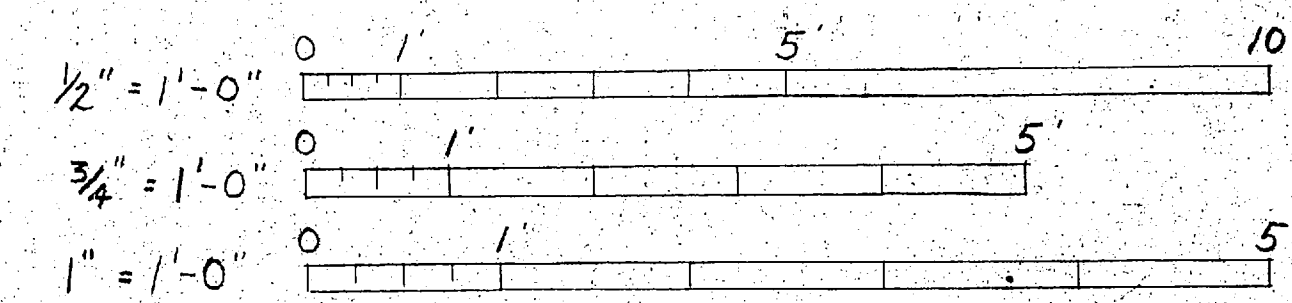
Scale: 3/4" = 1'-0"



**TYPICAL INSERT & PIPE
HANGER ARRGT.**

Scale: 1" = 1'-0"

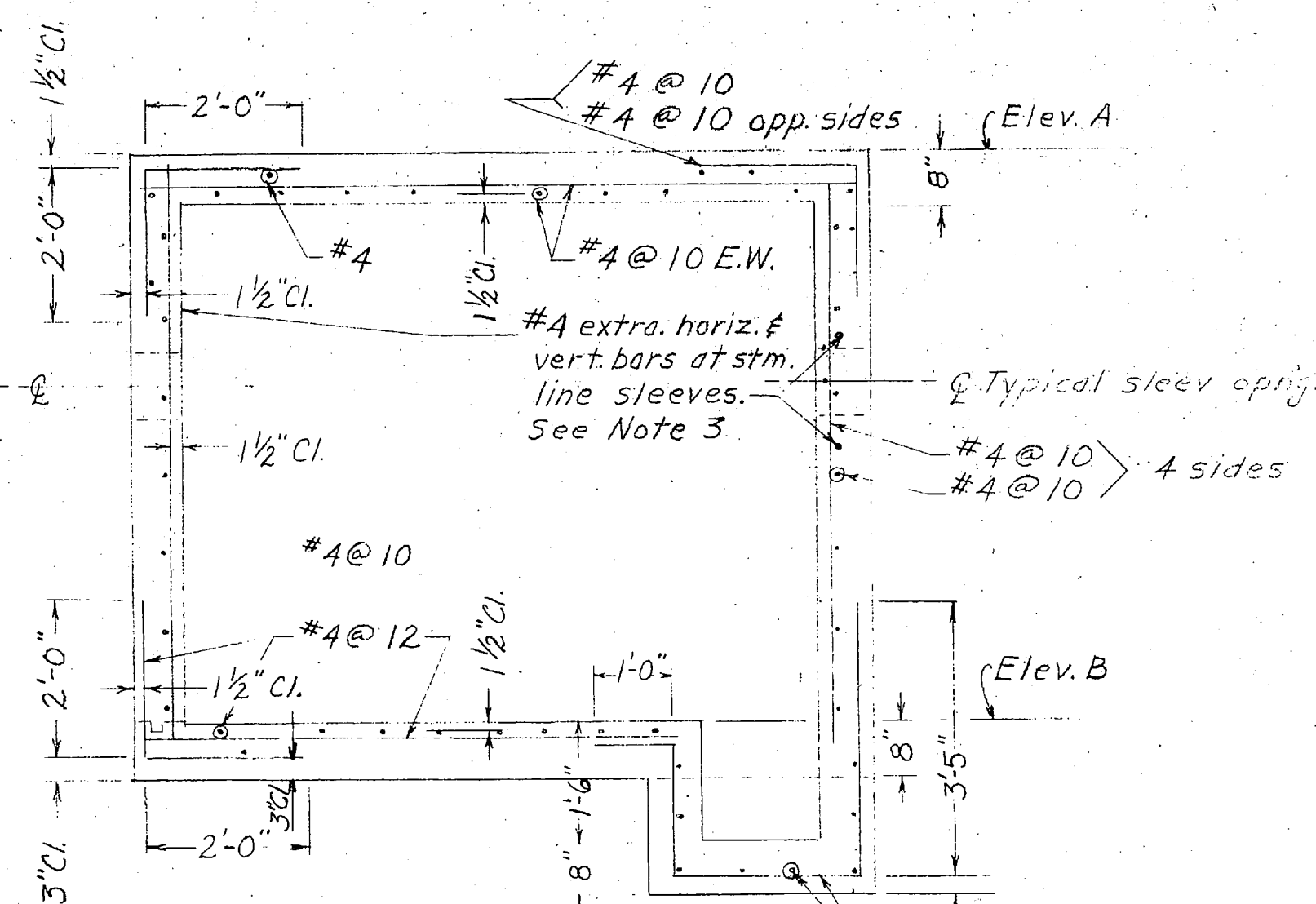
GRAPHIC SCALES



FLOOR PLAN

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

Typical arrgt. of horiz.
corner reinf. Other
wall bars not shown.



SECTION 11

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

EXISTING TYPICAL STRUCTURAL DETAILS

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

SCHEDULE OF PITS					
PIT NO.	STATION	L	ELEV. TOP 'A'	FLOOR 'B'	REMARKS
306	1+59.79	9	28.25	21.55	Main Line 'A'
307	8+39.40	9	28.00	21.30	"
308	10+35.41	9	27.75	21.05	"
309	13+29.75	9	27.40	20.70	"
310	15+99.69	11	27.25	20.55	"
311	18+60.05	9	27.00	20.30	"
312	23+32.23	9	26.75	19.00	"

GENERAL NOTES

1. Provide metal sleeves for all stem & cond. pipe conduit passing thru concrete walls of pits. See spec's for details. For location & elev. of sleeves, see Plan and Profile & Schematic Piping Diagram With Elev. Sched, Dwg No. 401189. Sleeves for cond. lines shall be set tangent at invert to stem line sleeves. Sleeves shall be 1" larger I.D. than O.D. of pipe welded over conduit.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED

PUBLIC WORKS DEPT. MARINE CORPS BASE CAMP LEJEUNE, N.C.		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC DIVISION NORFOLK, VIRGINIA	
NAVAL STATION MARINE CORPS BASE, CAMP LEJEUNE, N.C.		REPLACE STEAM AND CONDENSATE LINES, CENTRAL AREA (HQMC 5063)	
EXISTING PIT DETAILS, STRUCTURAL		4011861	
COMMAN. GENERAL	SIZE	CODE IDENT NO	NAVFAC DRAWING NO
	F	80091	
			CONSTR CONTR NO N62470-75-B-0929
			SHEET 6 OF 6
			LANTRIV DWG NO

