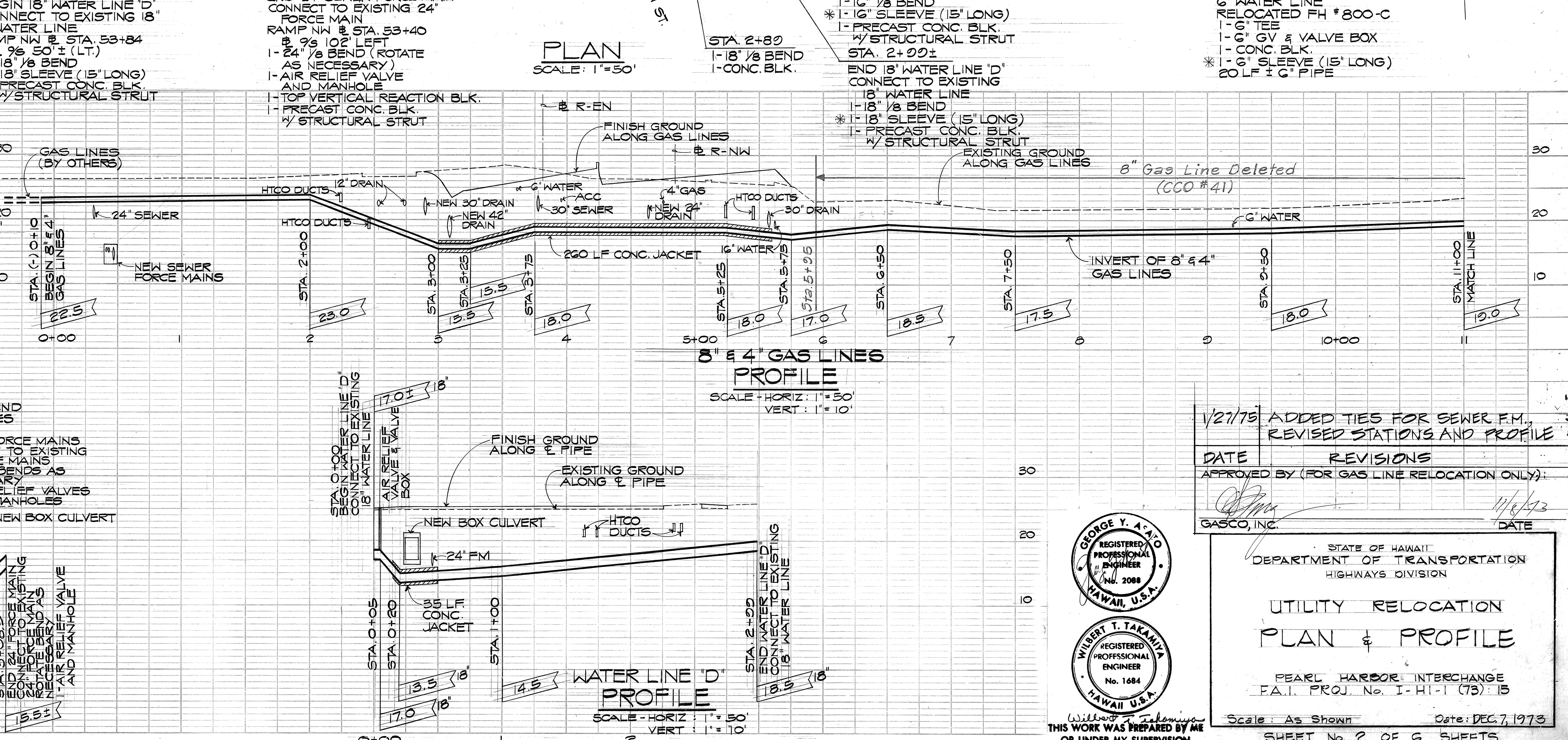
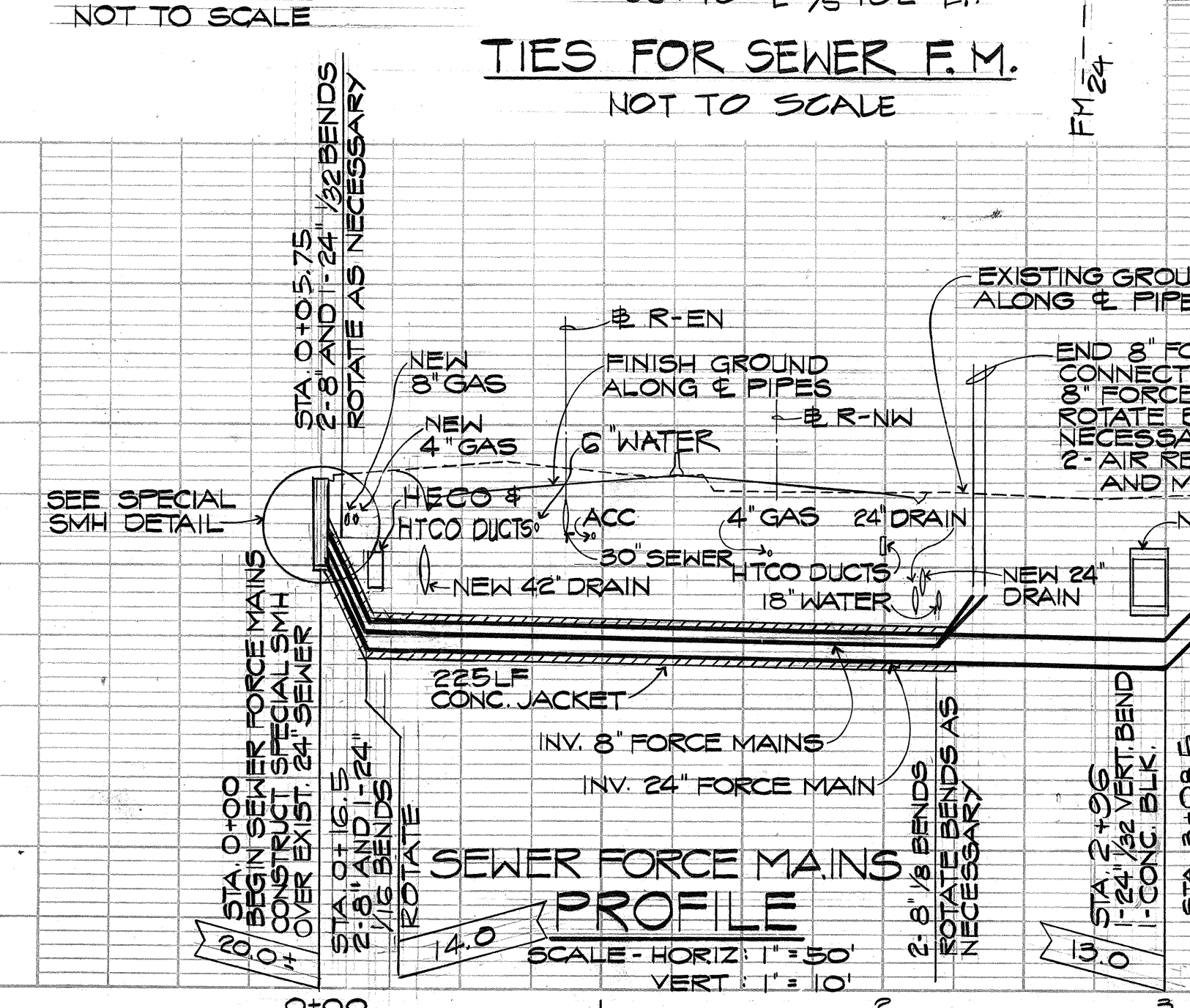
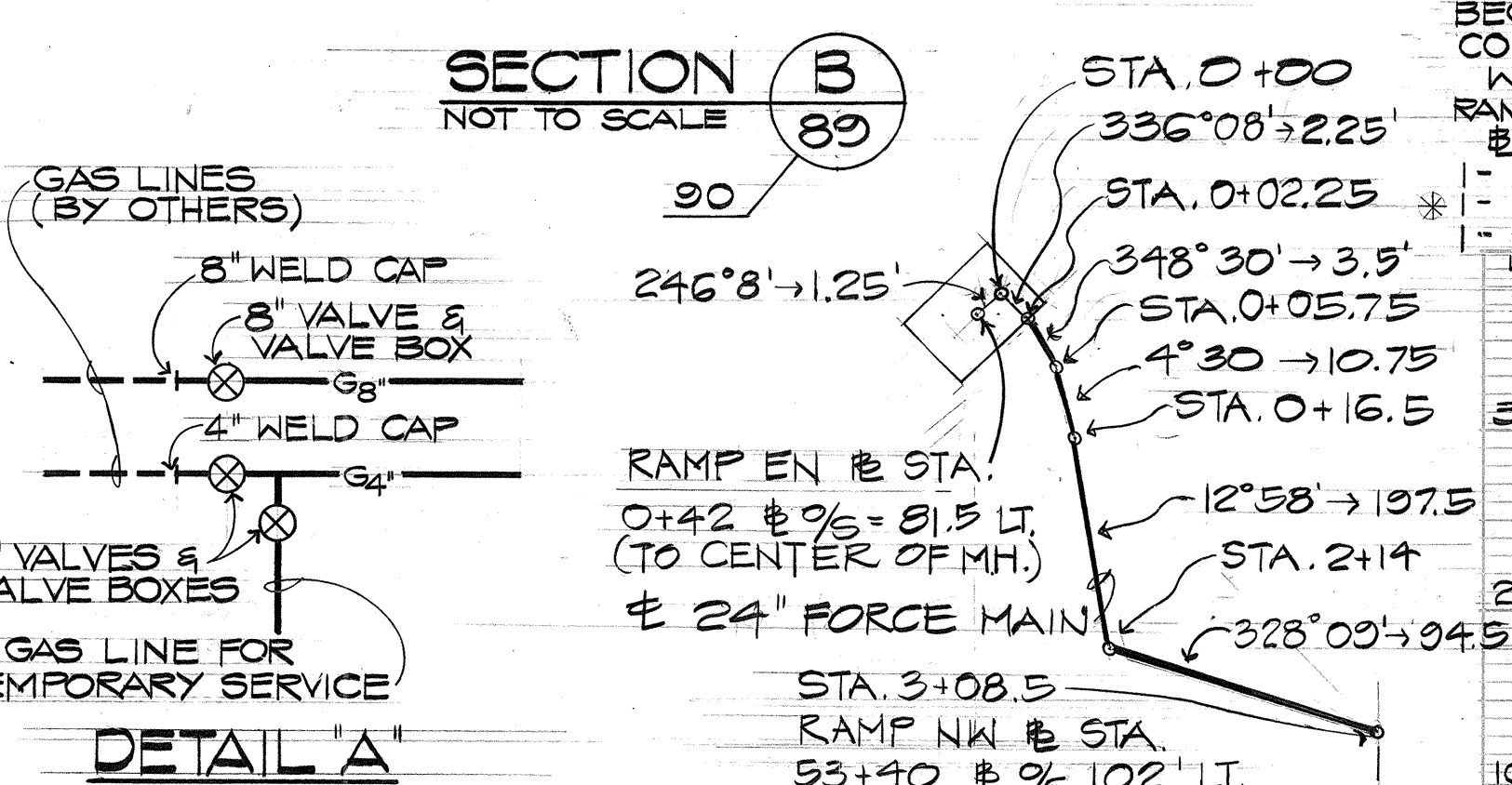
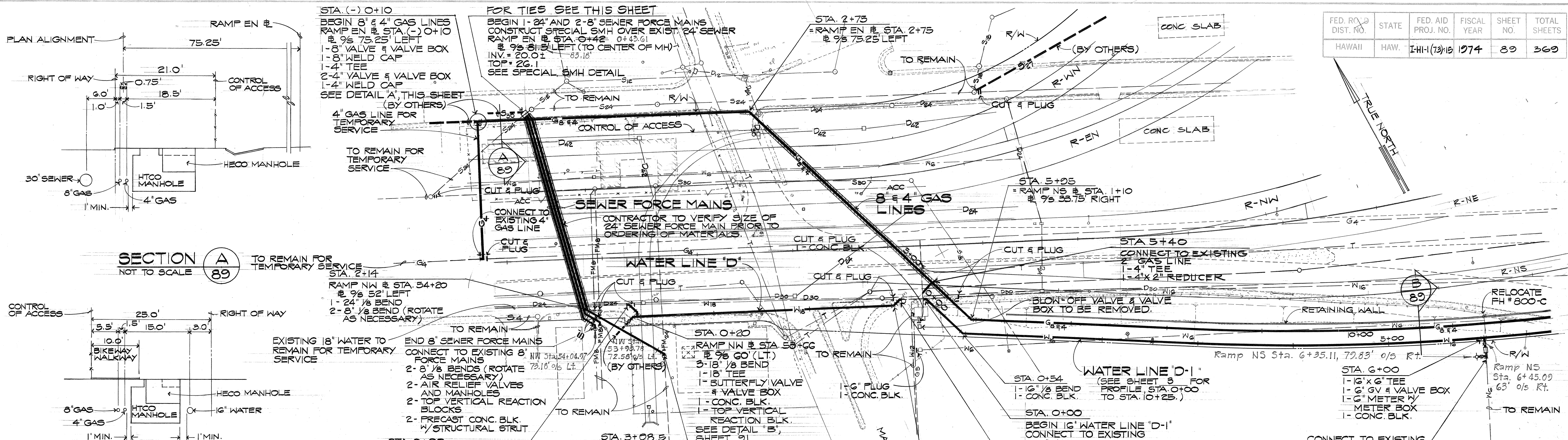
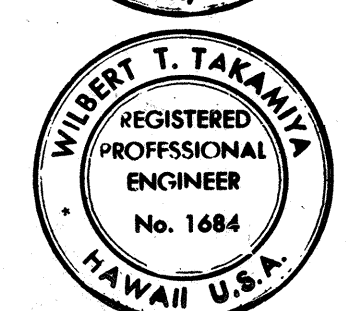
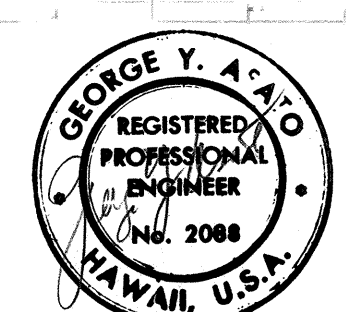


FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(73)15	1974	89	369



DATE	REVISIONS
1/27/75	ADDED TIES FOR SEWER F.M., REVISED STATIONS AND PROFILE
	APPROVED BY (FOR GAS LINE RELOCATION ONLY):
	GASCO, INC.
	DATE



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY RELOCATION
PLAN & PROFILE

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. No. I-H-1 (73) 15

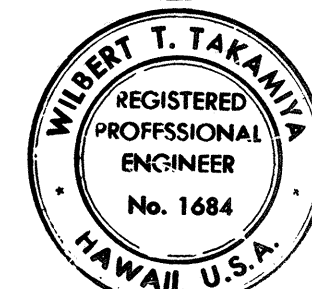
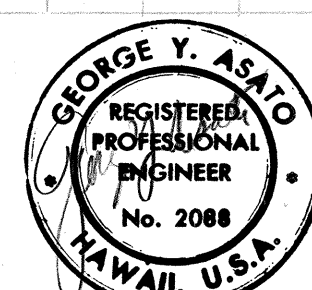
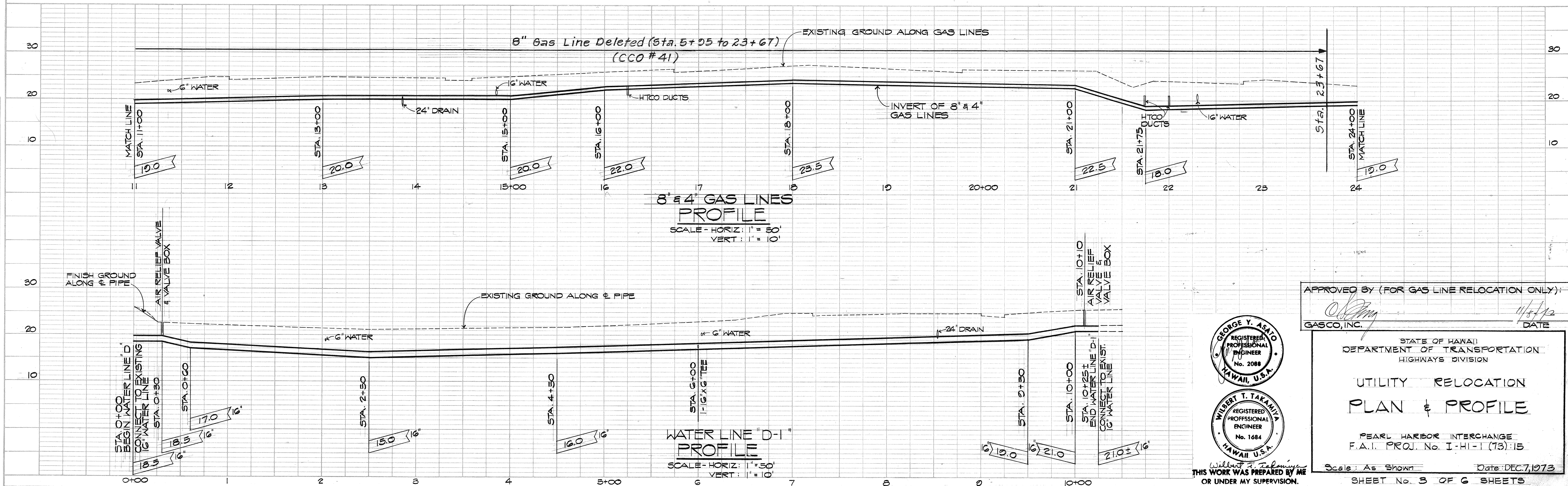
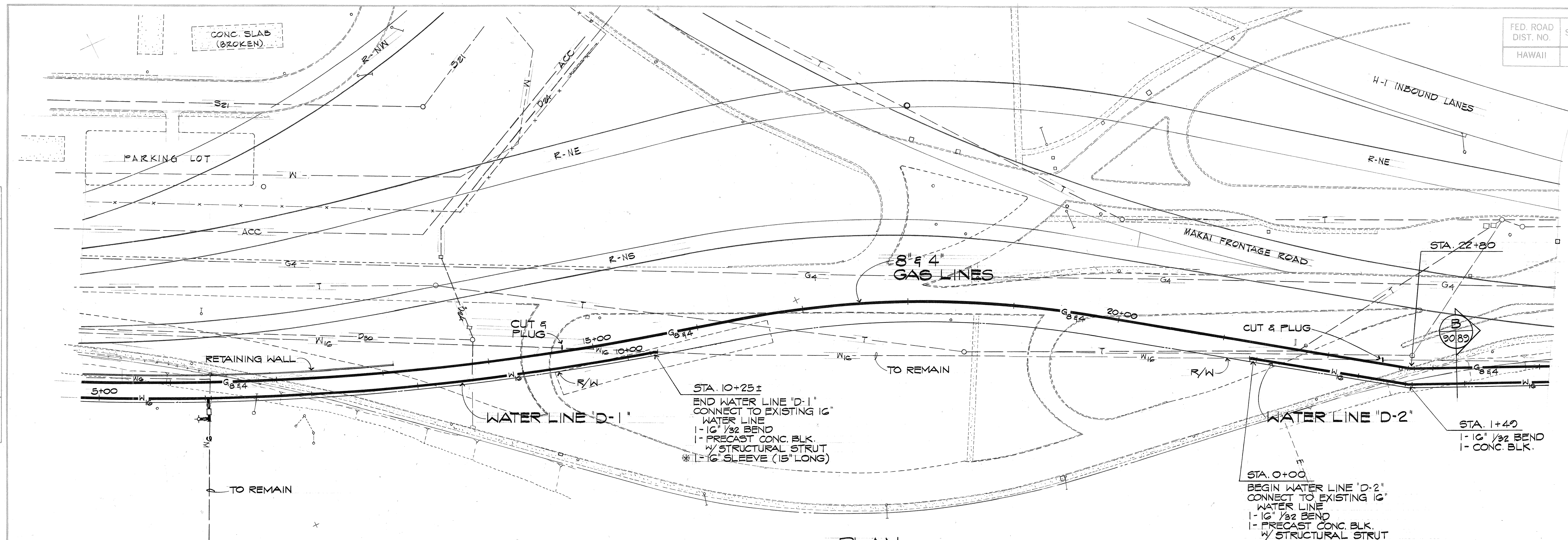
Scale: As Shown Date: DEC 7, 1973

SHEET No. 2 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73)15	1974	90	369

PLAN	DATE	BY	DATE	BY
SURVEYED				
PLOTTED				
GRADES CHECKED				
STRUCTURE NOTATIONS CHKD				
NOTE BOOK NO.				

PROFILE	DATE	BY	DATE	BY
SURVEYED				
PLOTTED				
GRADES CHECKED				
STRUCTURE NOTATIONS CHKD				
NOTE BOOK NO.				



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

APPROVED BY (FOR GAS LINE RELOCATION ONLY):
GASCO, INC. DATE: 11/8/73

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

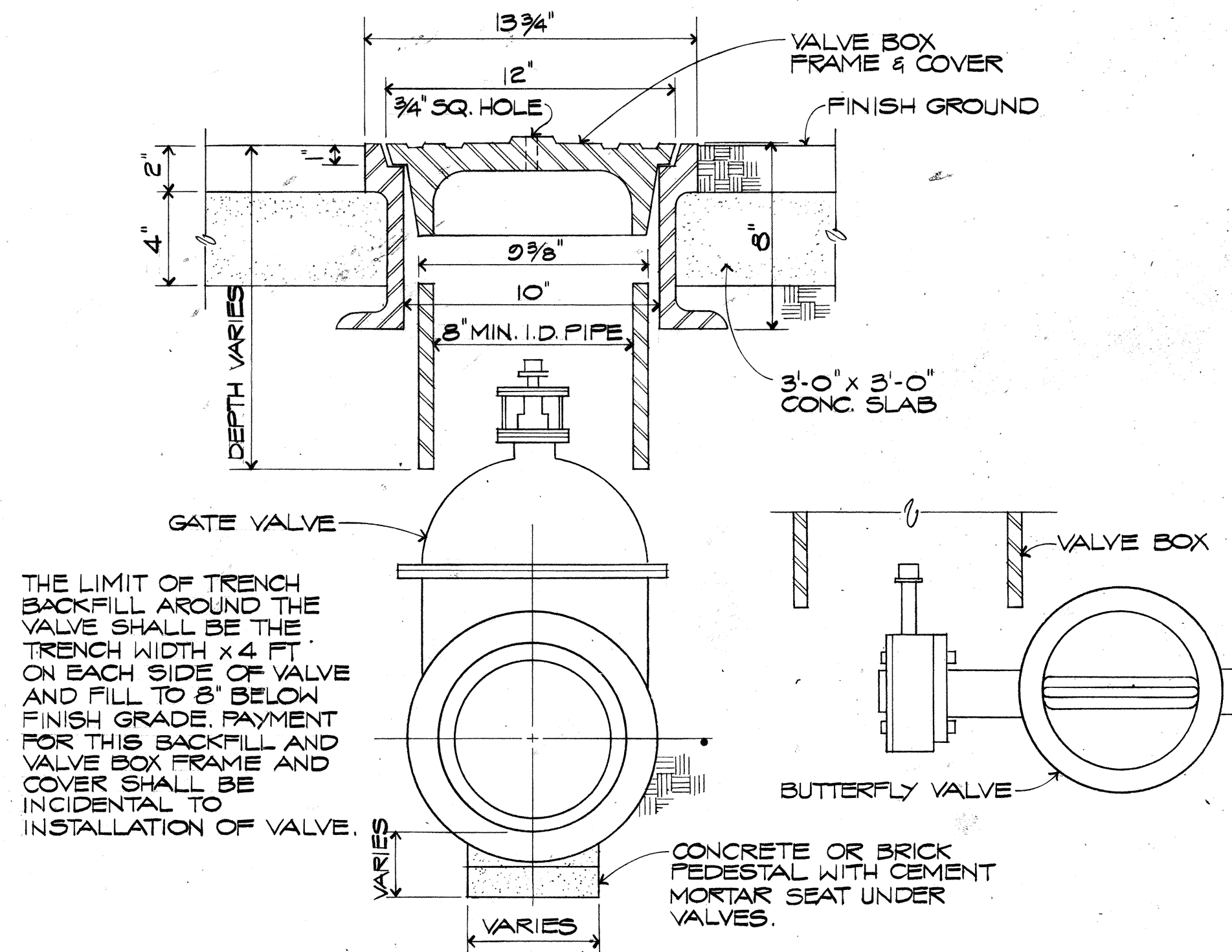
**UTILITY RELOCATION
PLAN & PROFILE**

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. No. I-HI-1 (73)15

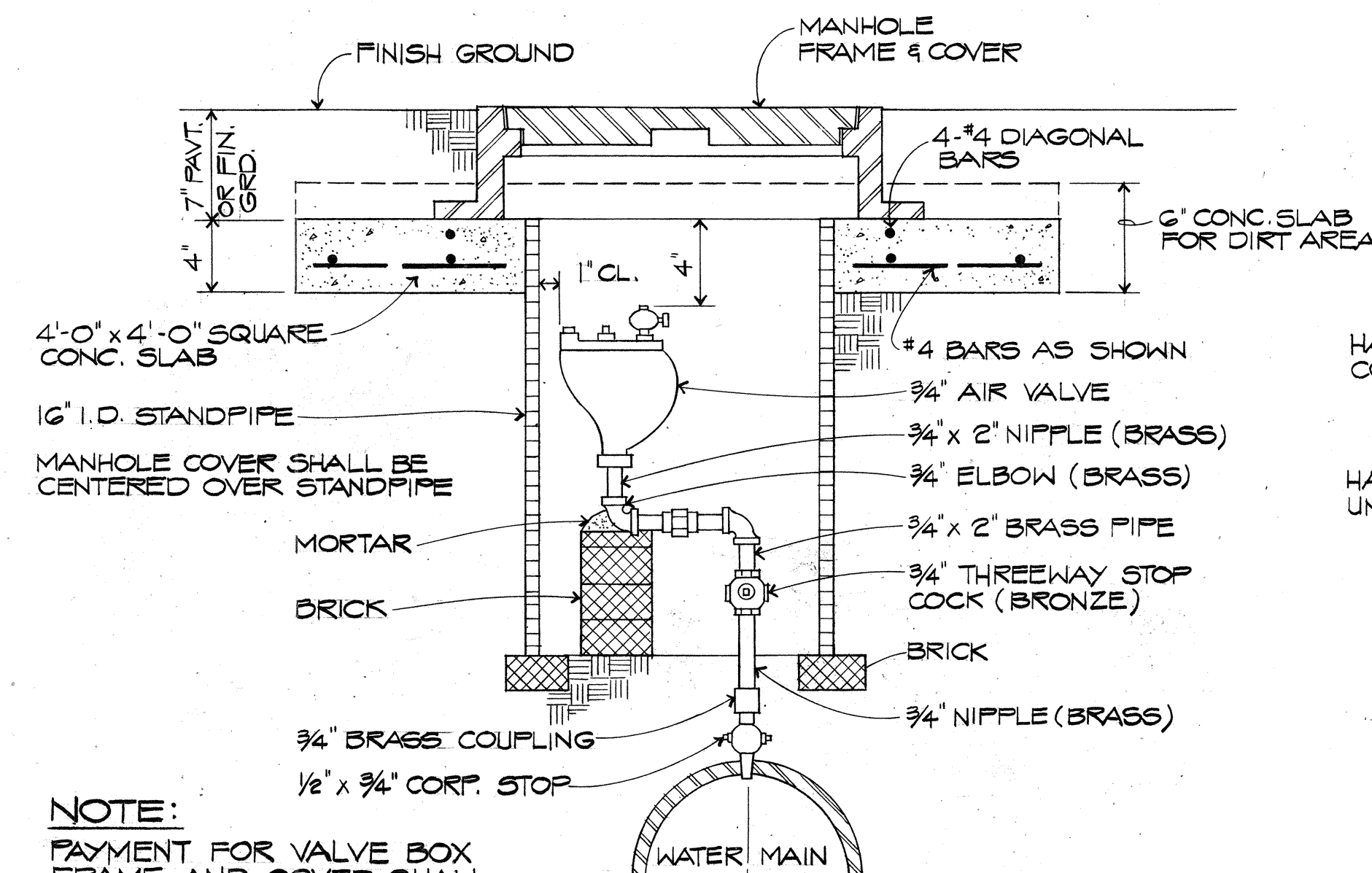
Scale: As Shown Date: DEC. 7, 1973
SHEET No. 3 OF 6 SHEETS

NOTE:

1/8" RAISED LETTERS FOR IDENTIFICATION TO BE CAST ON COVER.
ALL CASTINGS SHALL BE MADE ACCURATELY TO THE DIMENSIONS SHOWN. SEAT AND COVER SHALL BE MACHINED NOT GROUND, TO SECURE FLAT AND TRUE SURFACES. THE COVER SHALL NOT RATTLE IN ANY POSITION.

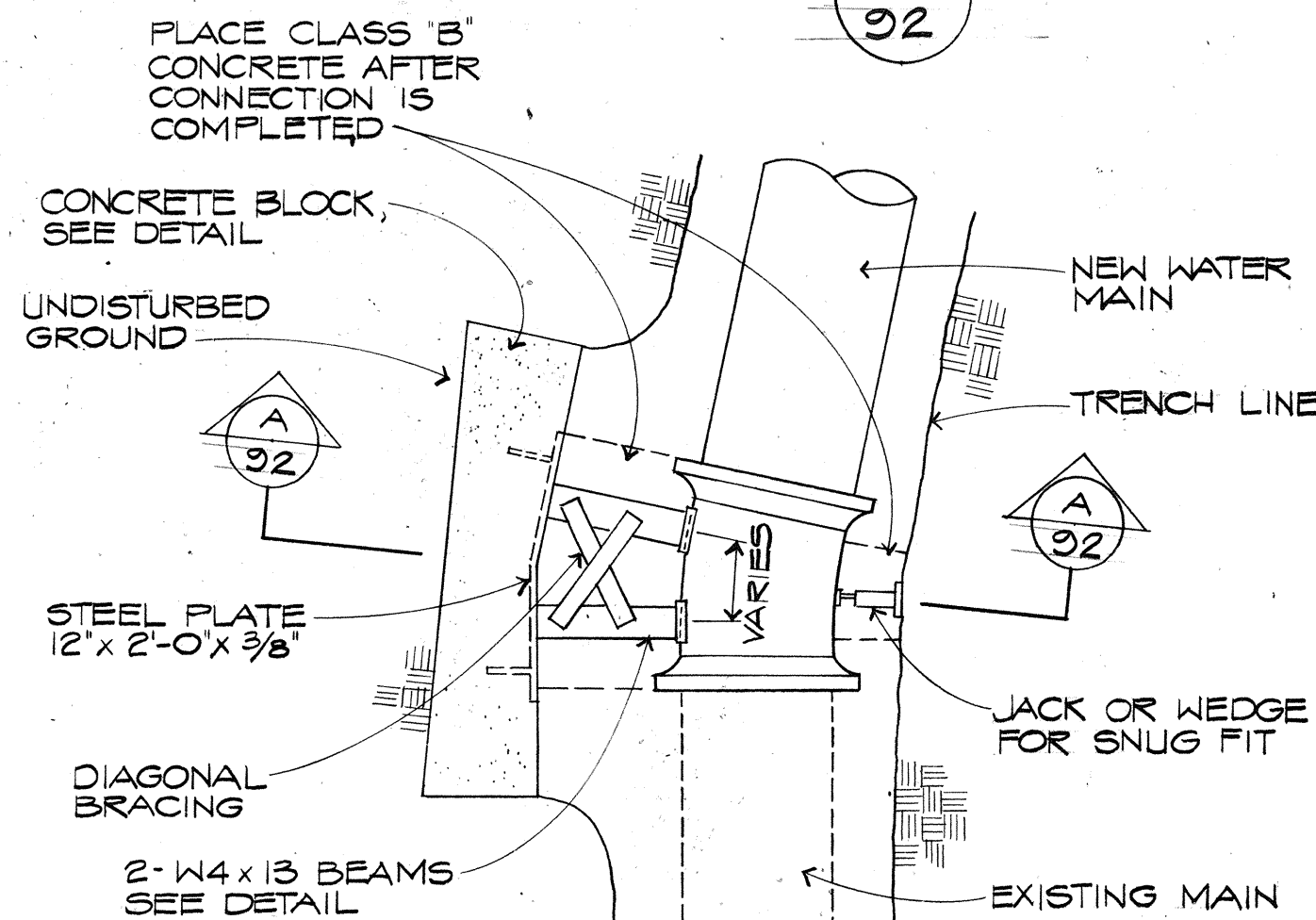
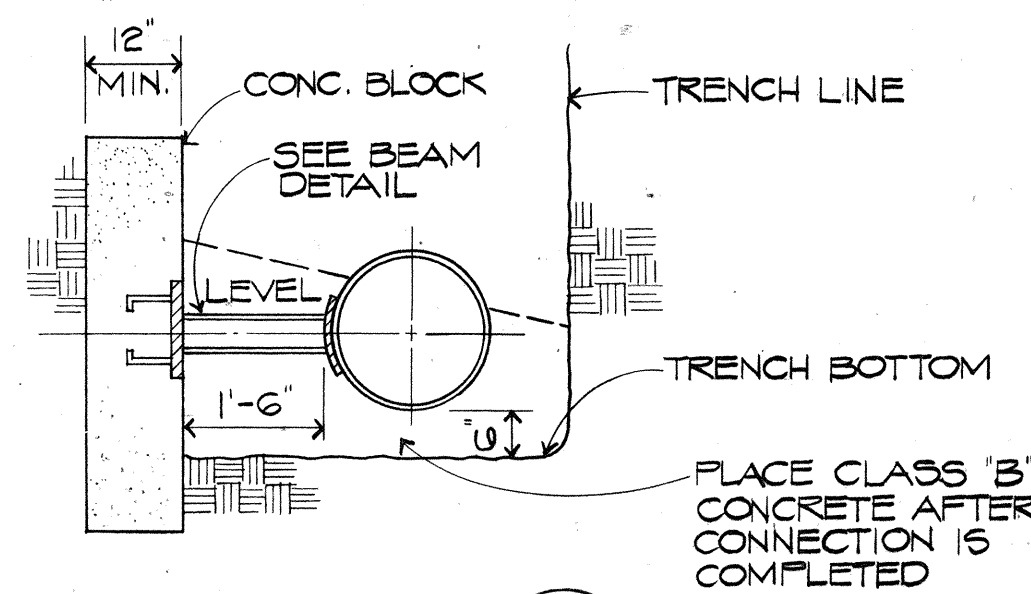


VALVE BOX FRAME & COVER
FOR GATE AND BUTTERFLY VALVES
NOT TO SCALE



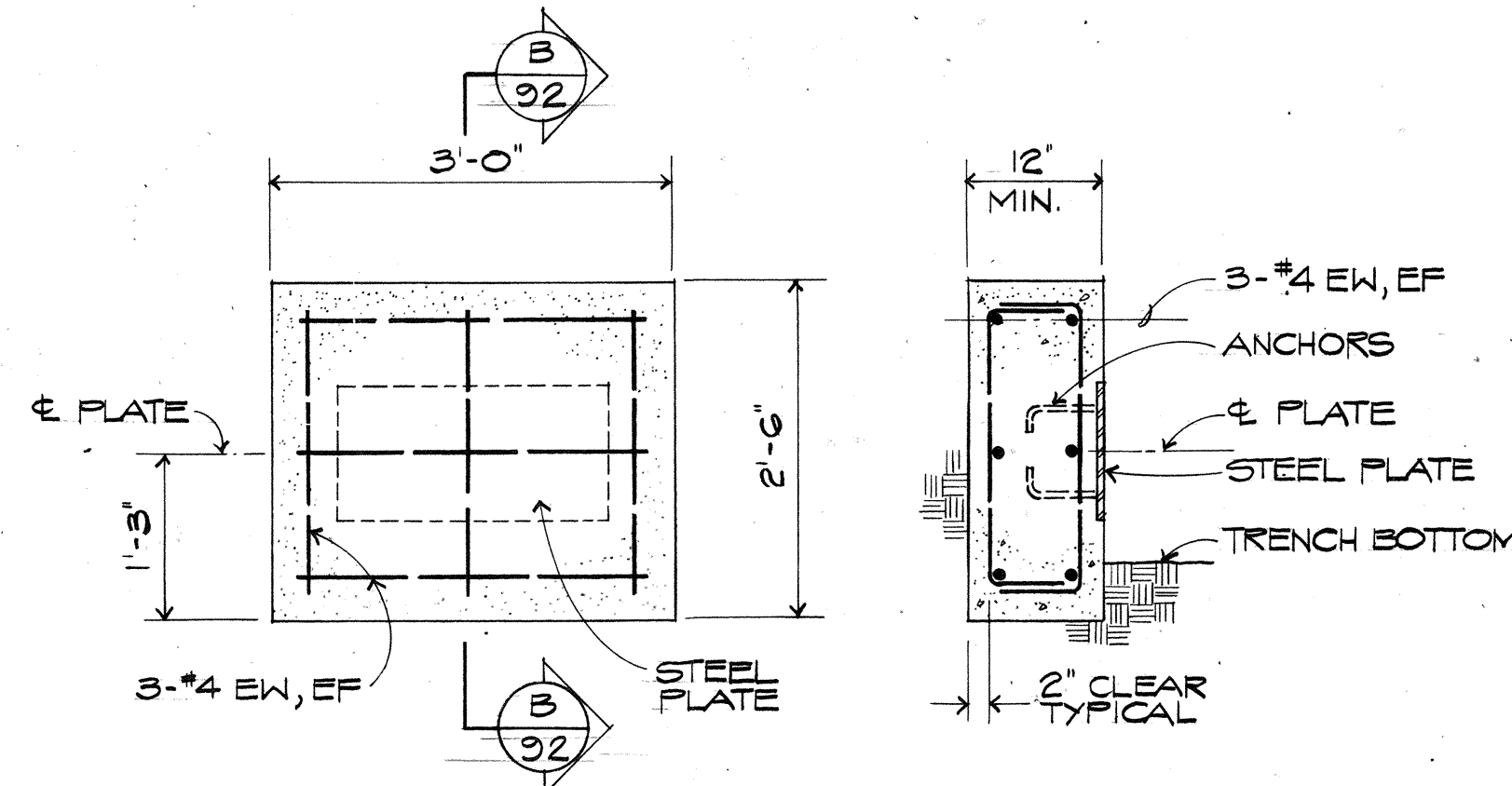
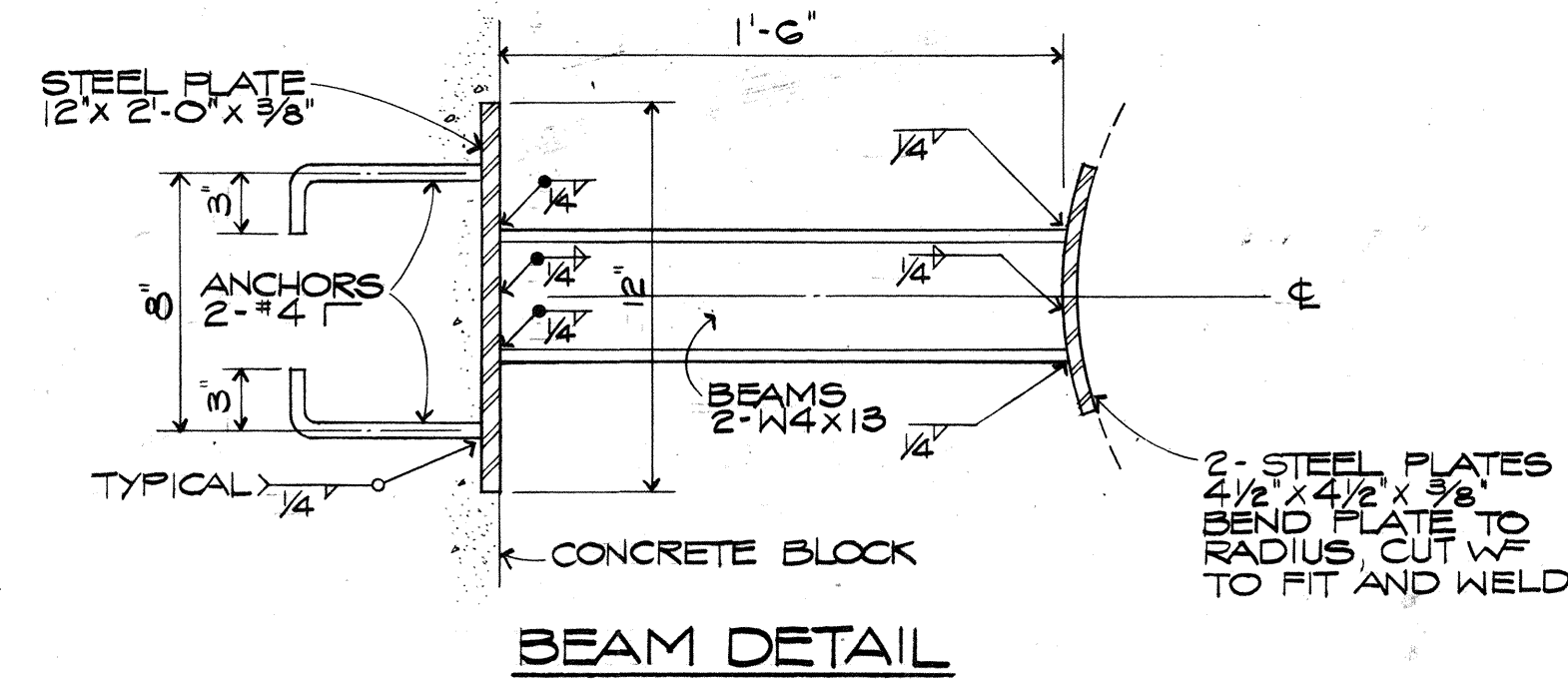
NOTE:
PAYMENT FOR VALVE BOX FRAME AND COVER SHALL BE INCIDENTAL TO INSTALLATION OF VALVE.

AIR RELIEF VALVE AND
VALVE BOX FOR WATER MAIN
NOT TO SCALE



NOTE:
COST OF STRUCTURAL STRUT SHALL BE INCIDENTAL TO CLASS B CONCRETE.

PRE-CAST CONCRETE BLOCK
WITH STRUCTURAL STRUT
NOT TO SCALE

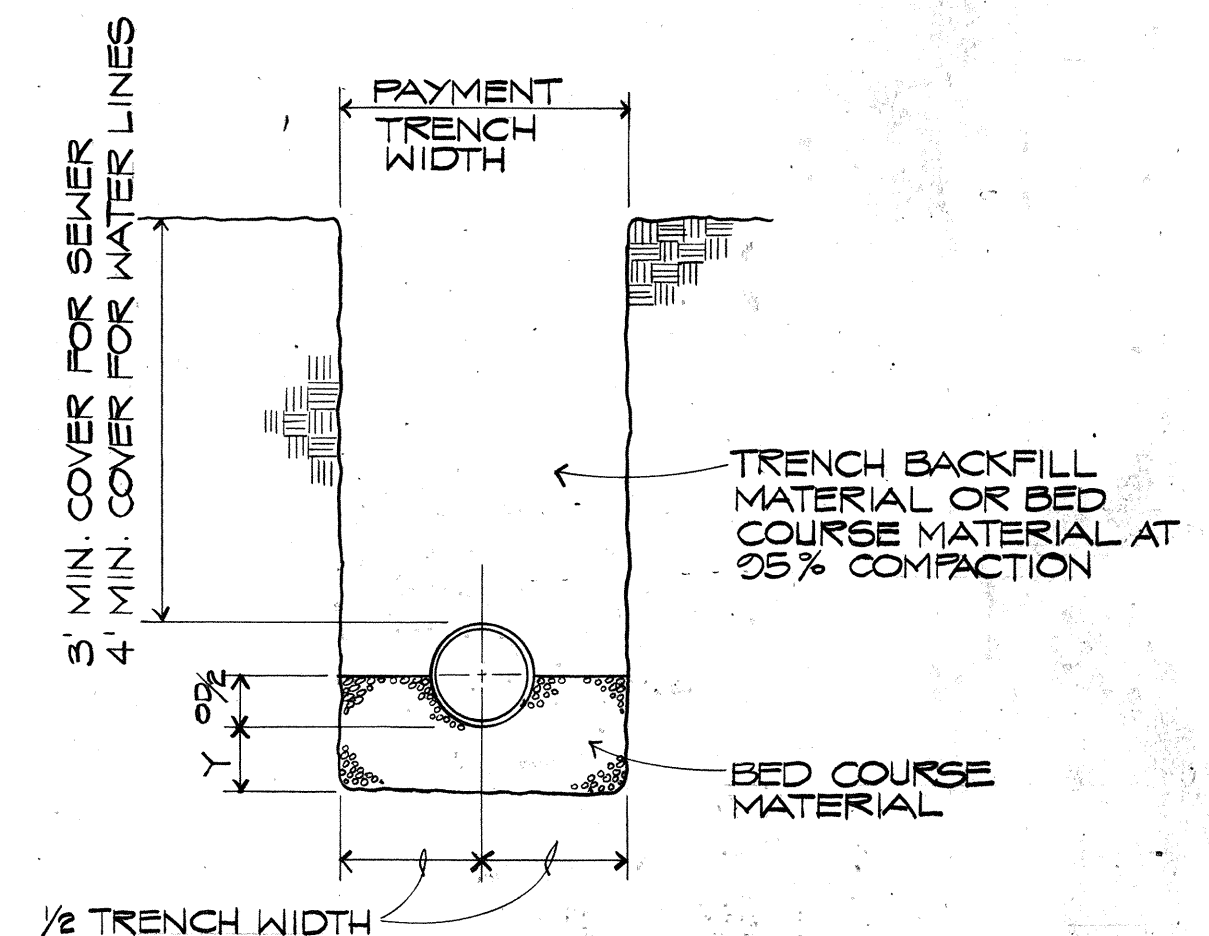


DETAILS OF CONCRETE BLOCK

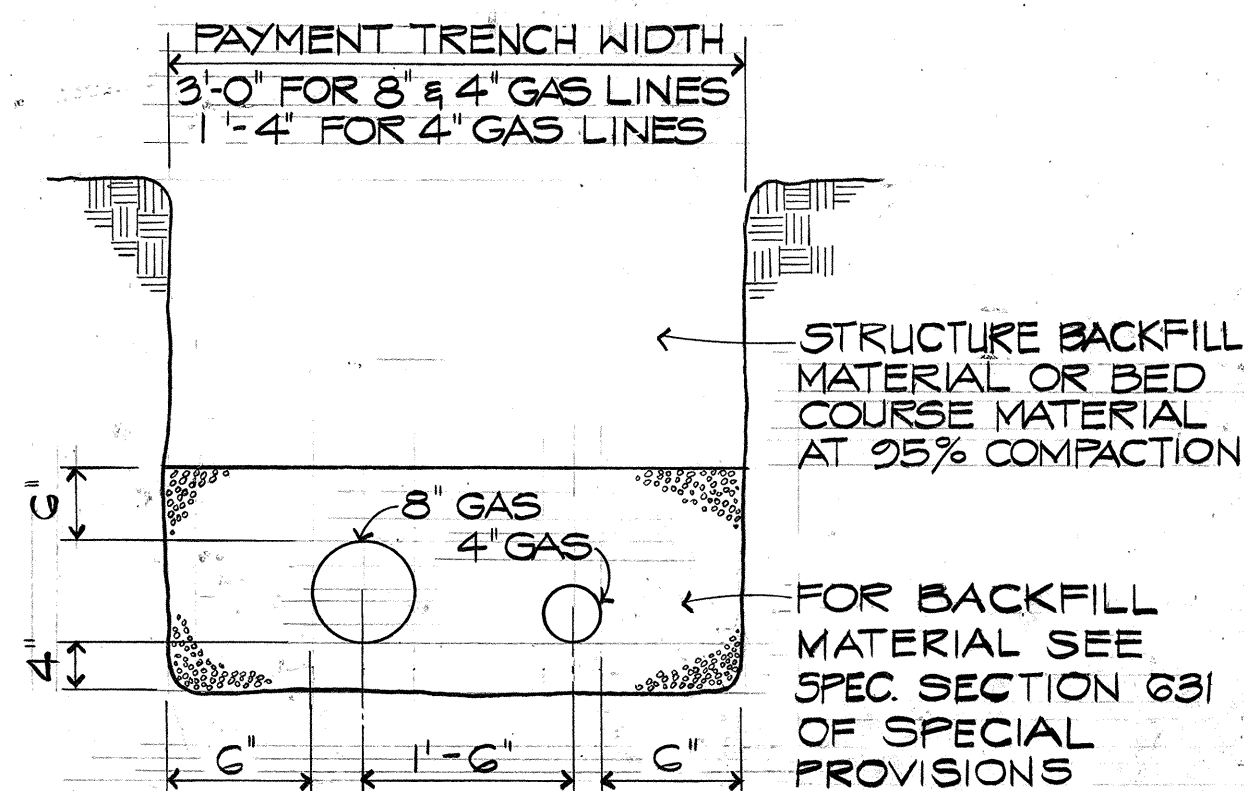
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73)15	1974	92	369

PIPE SIZE	TRENCH WIDTH	Y *
6" WATER	24"	4"
16" WATER	30"	6"
18" WATER	36"	6"
24" SEWER	48"	8"

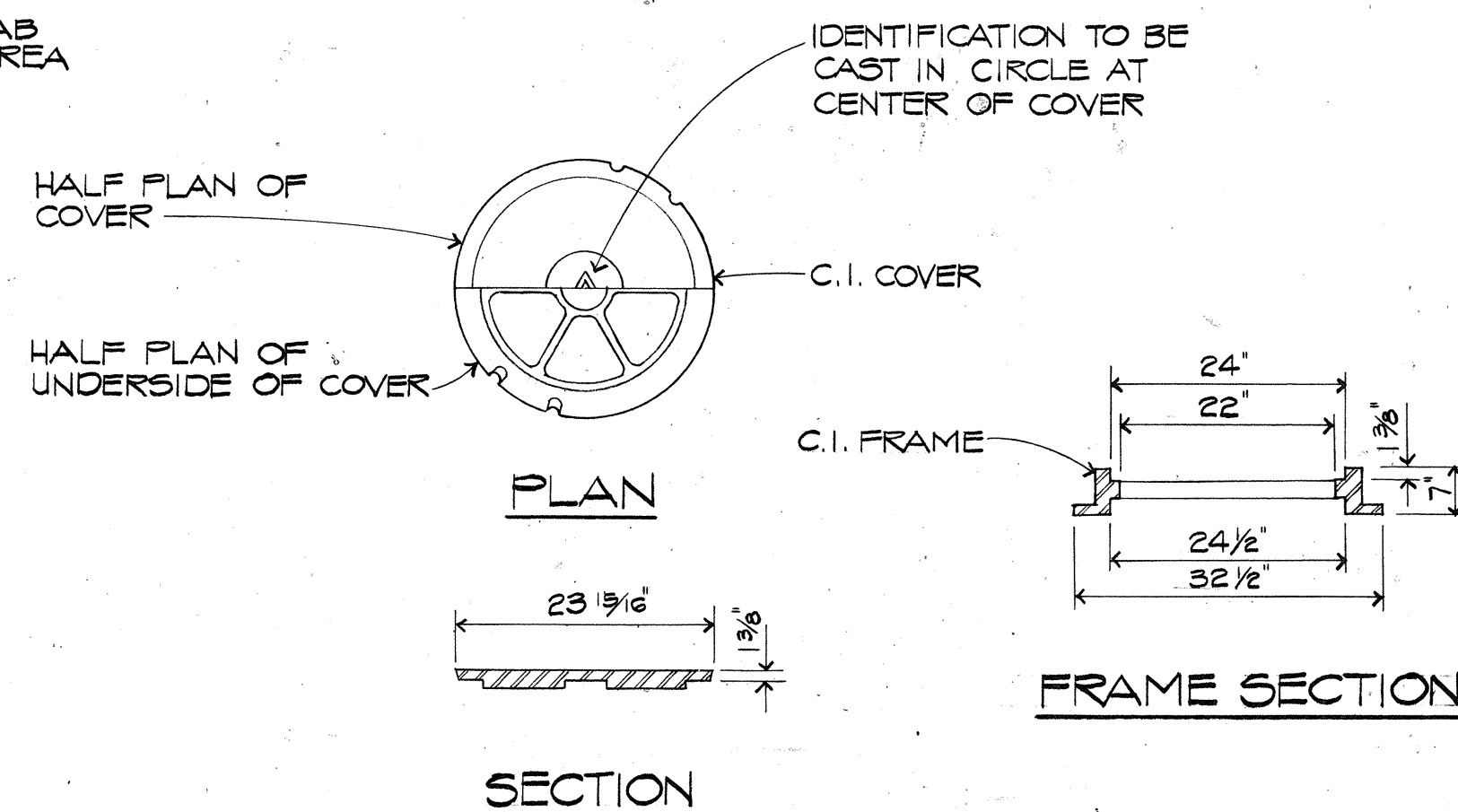
* DISREGARD "Y" DIMENSION WHEN LINE IS ENCASED IN CONCRETE JACKET.



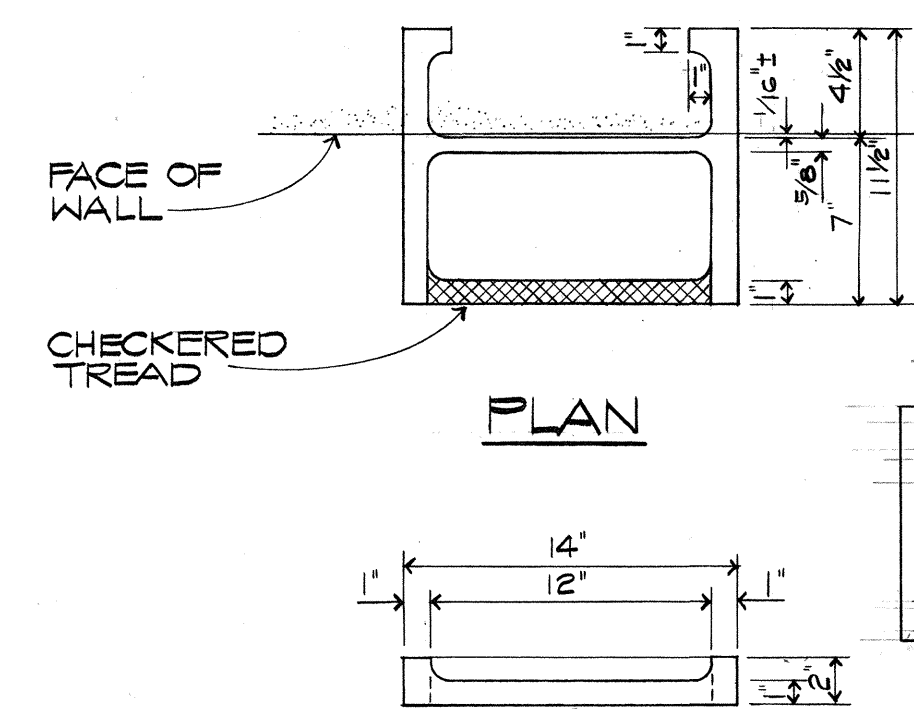
TRENCH DETAIL
(FOR WATER AND SEWER)
NOT TO SCALE



TRENCH DETAIL
(FOR GAS LINES)
NOT TO SCALE



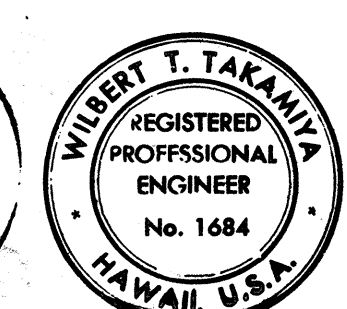
TYPICAL MANHOLE FRAME & COVER
(TRAFFIC TYPE)
NOT TO SCALE



FRONT ELEVATION

RUNG DETAIL
NOT TO SCALE

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GASCO, INC.
DATE 11/8/73



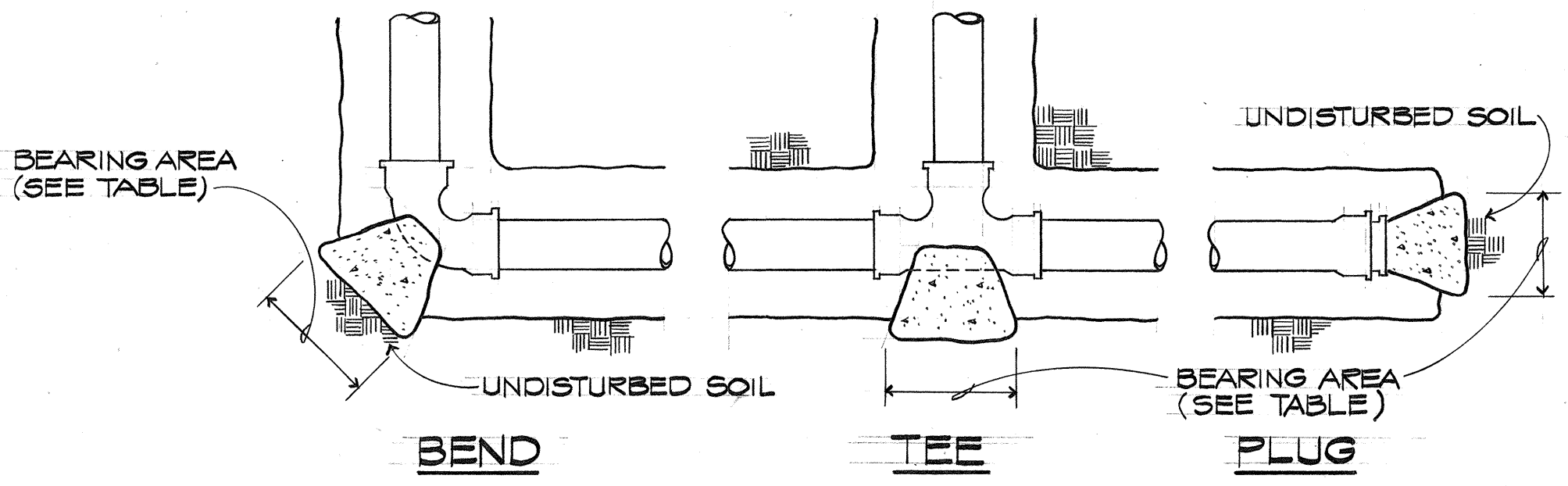
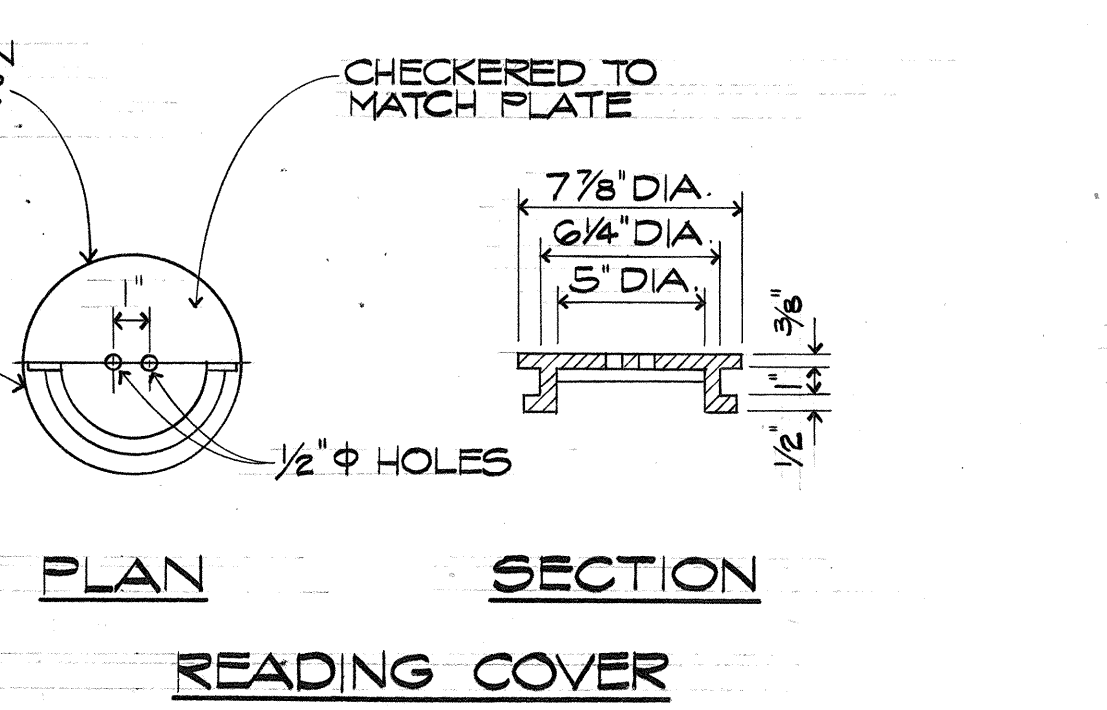
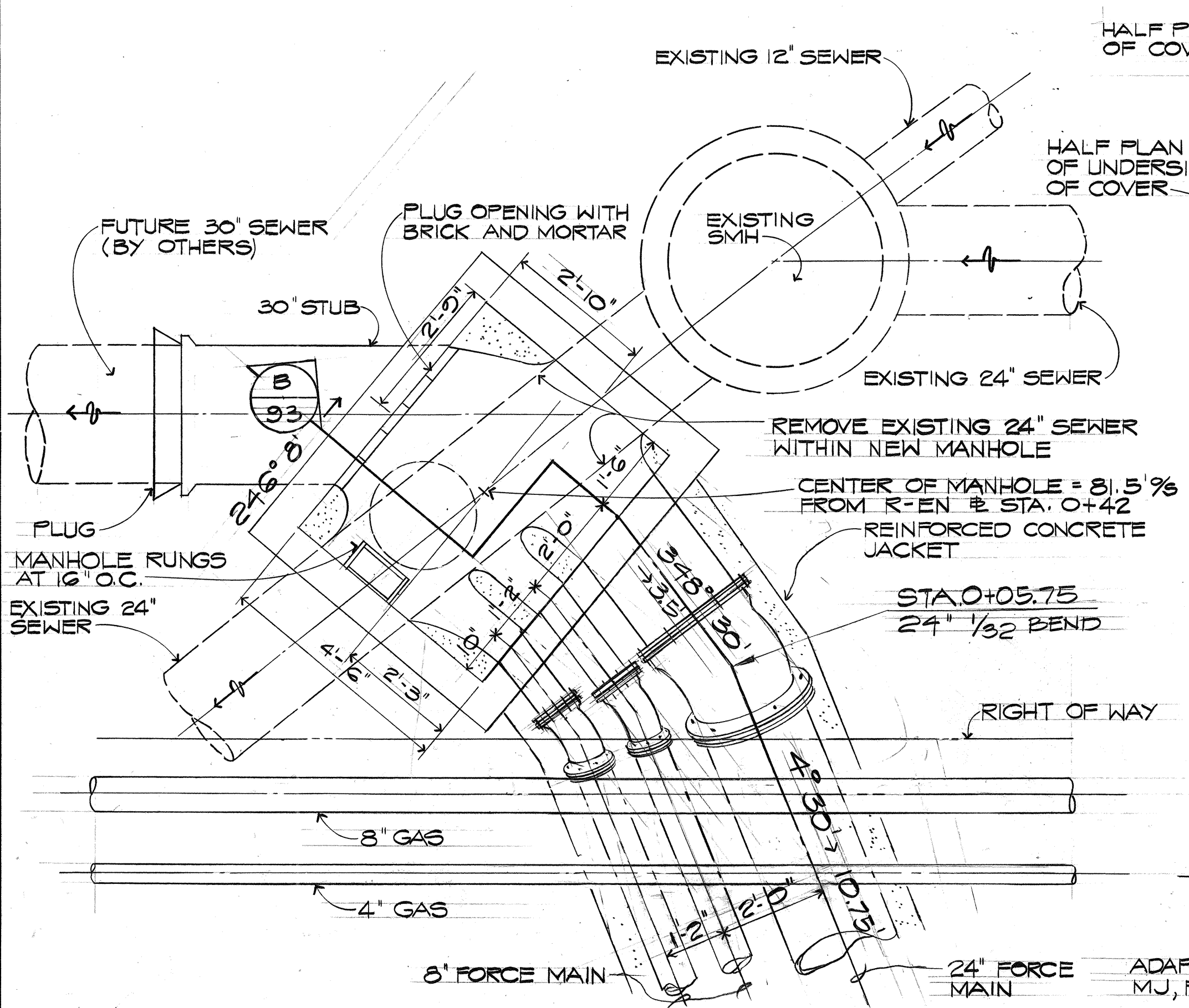
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

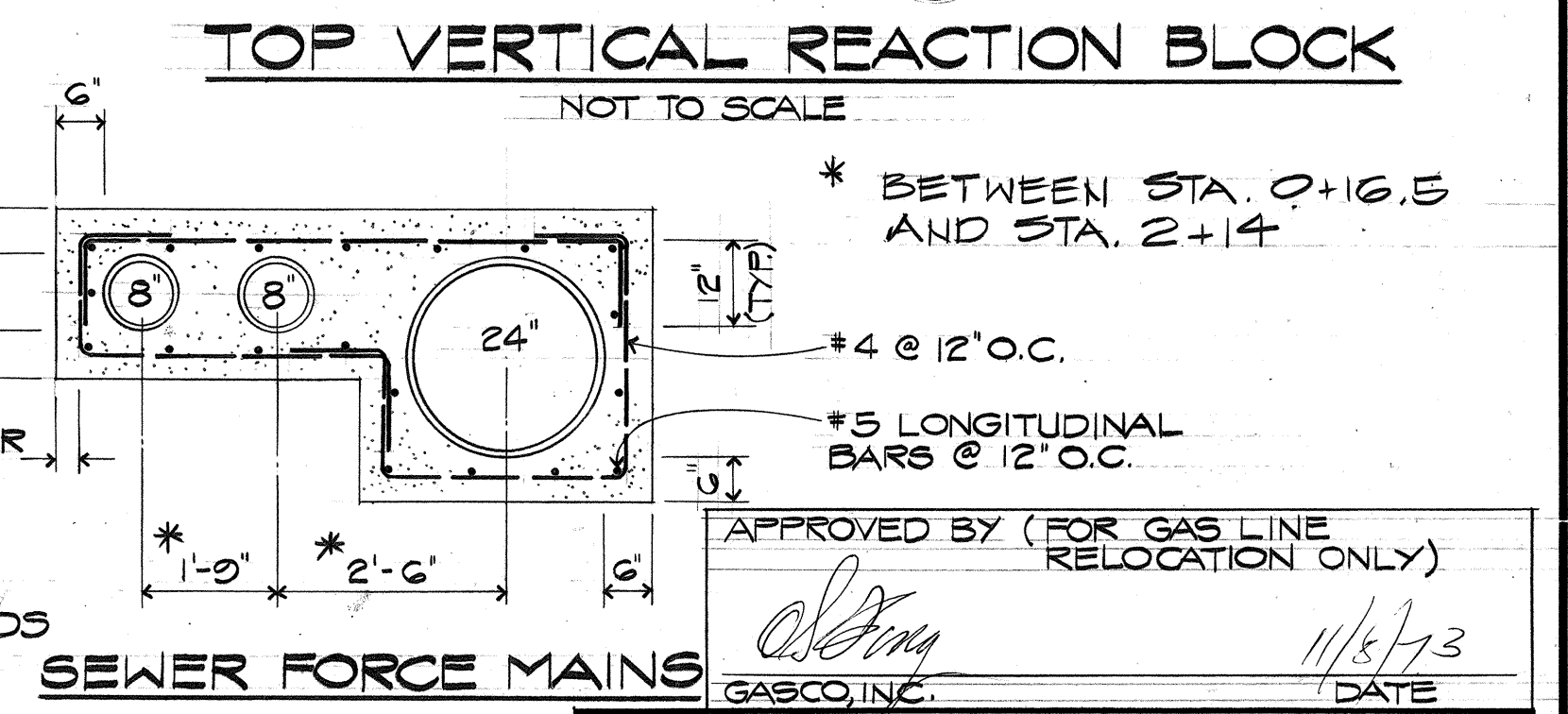
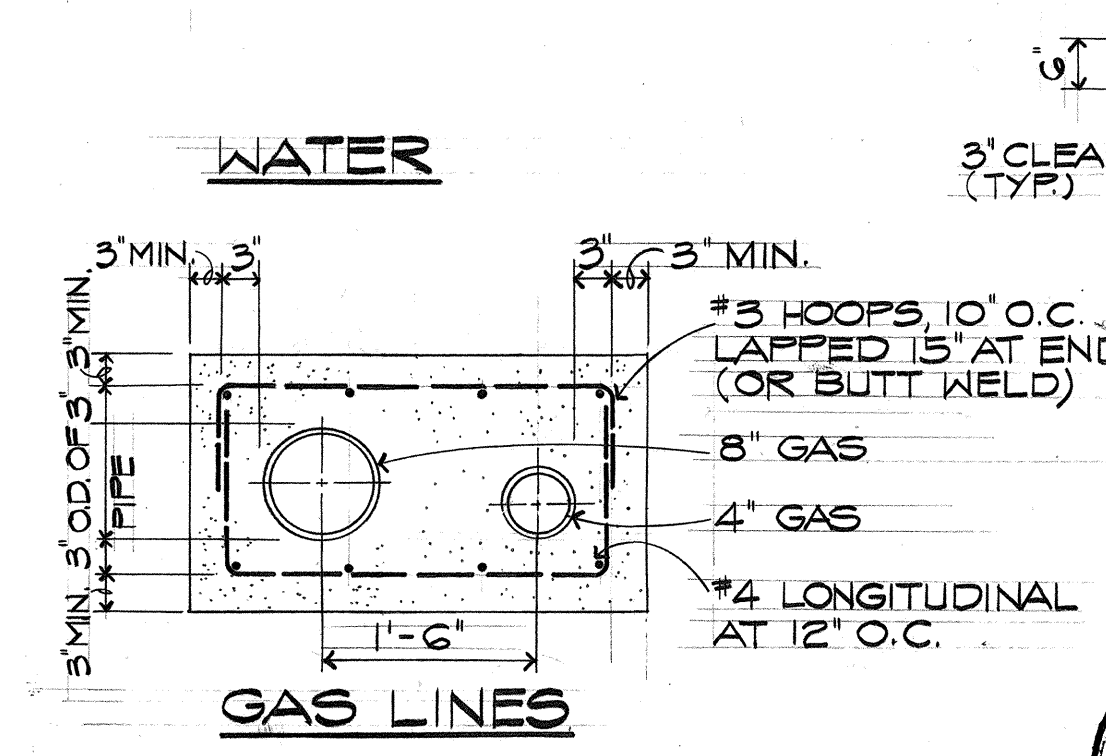
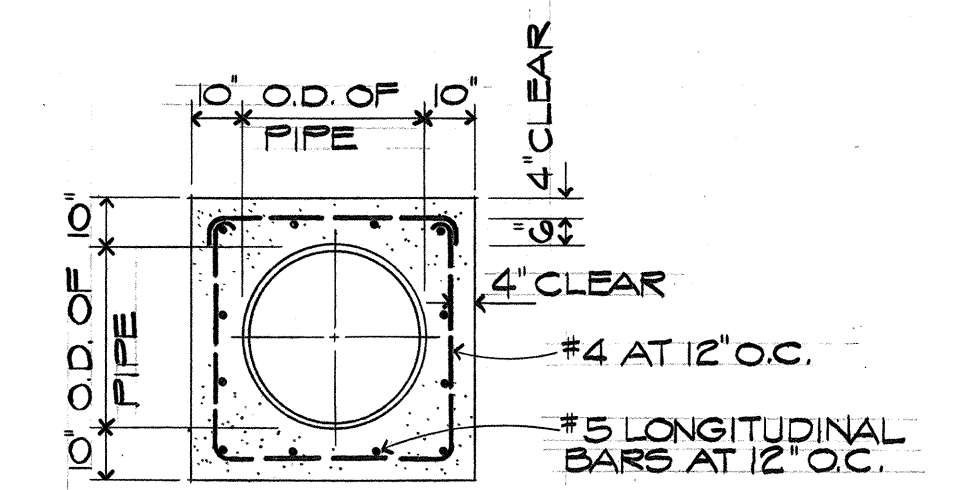
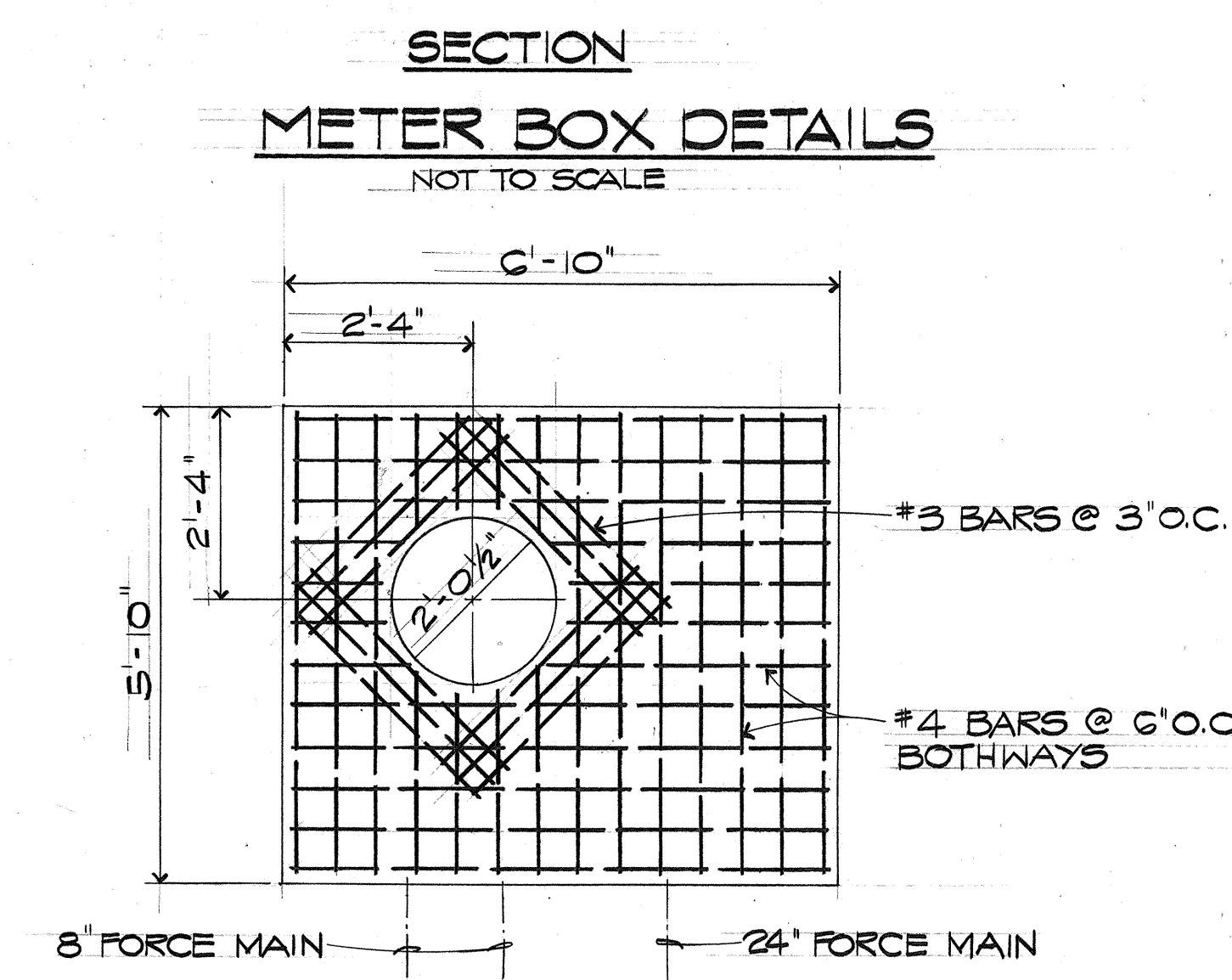
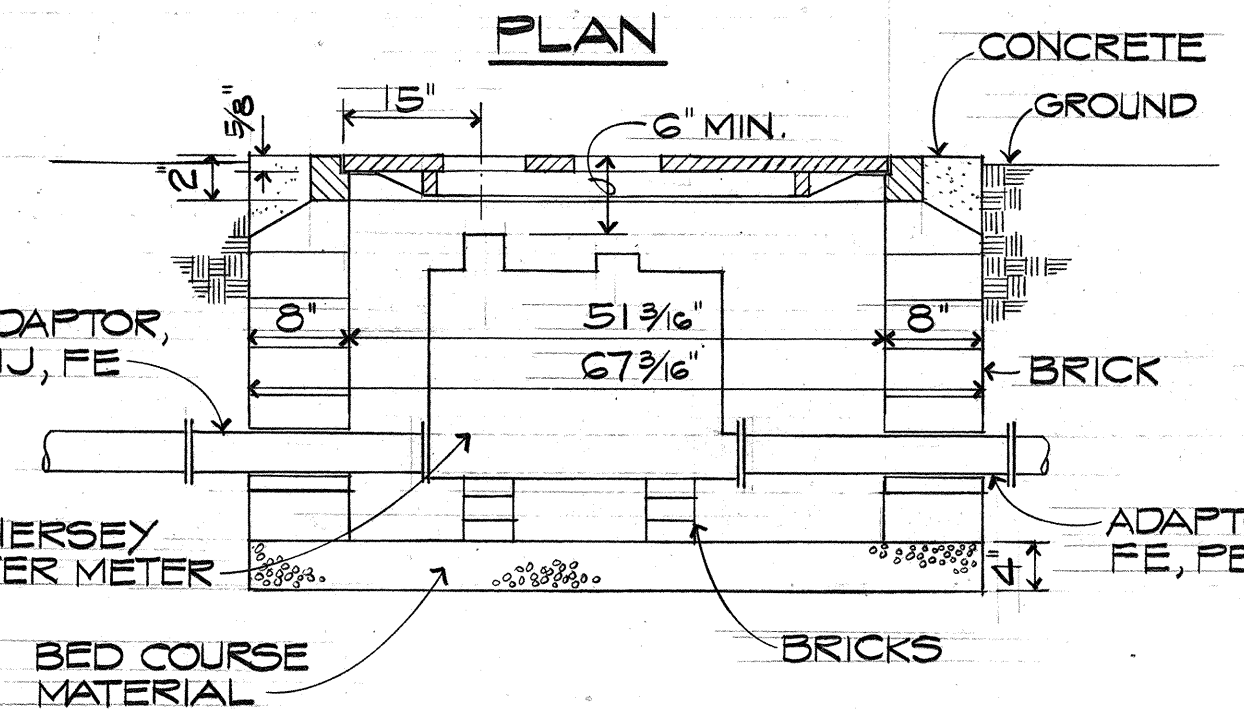
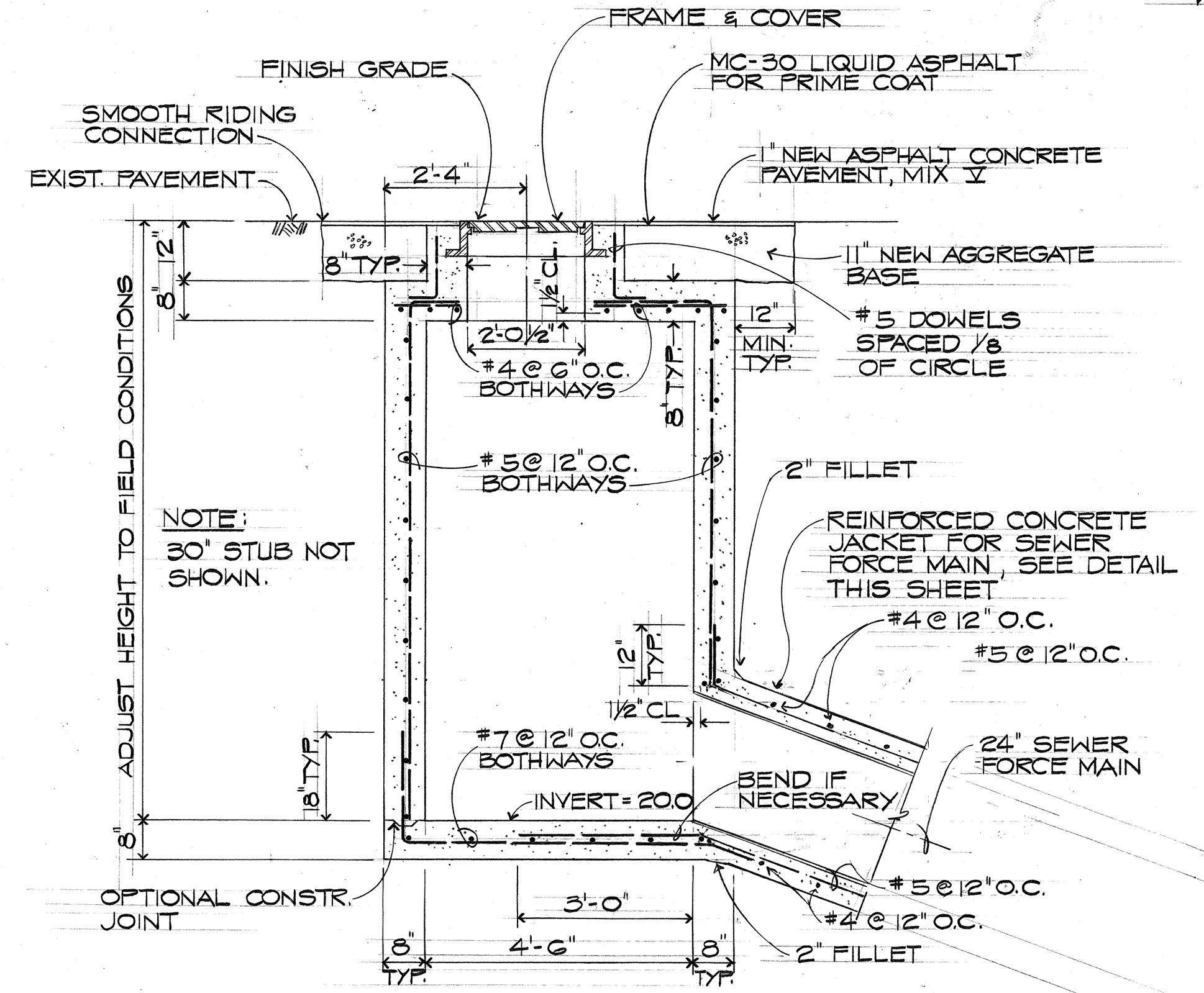
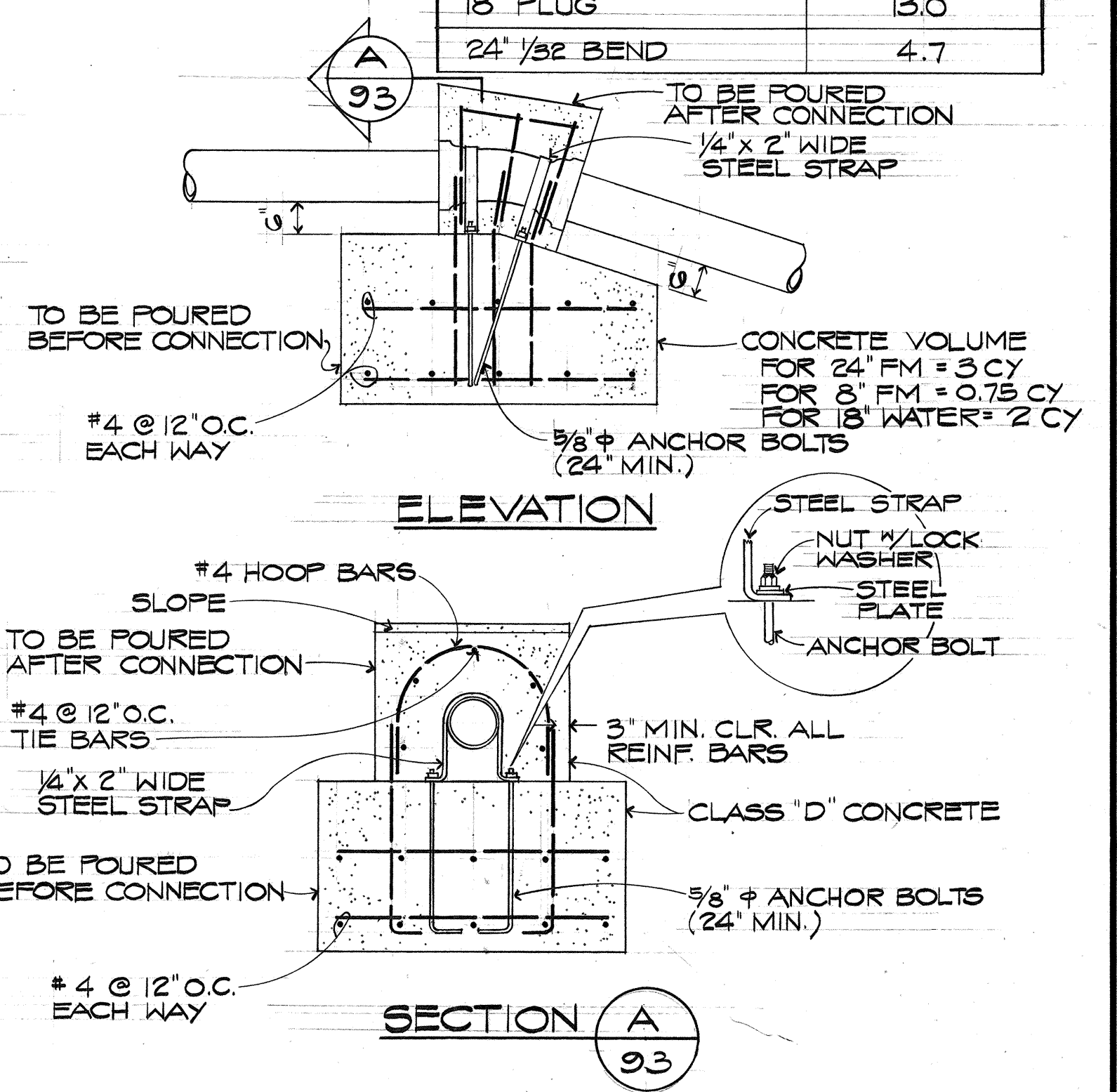
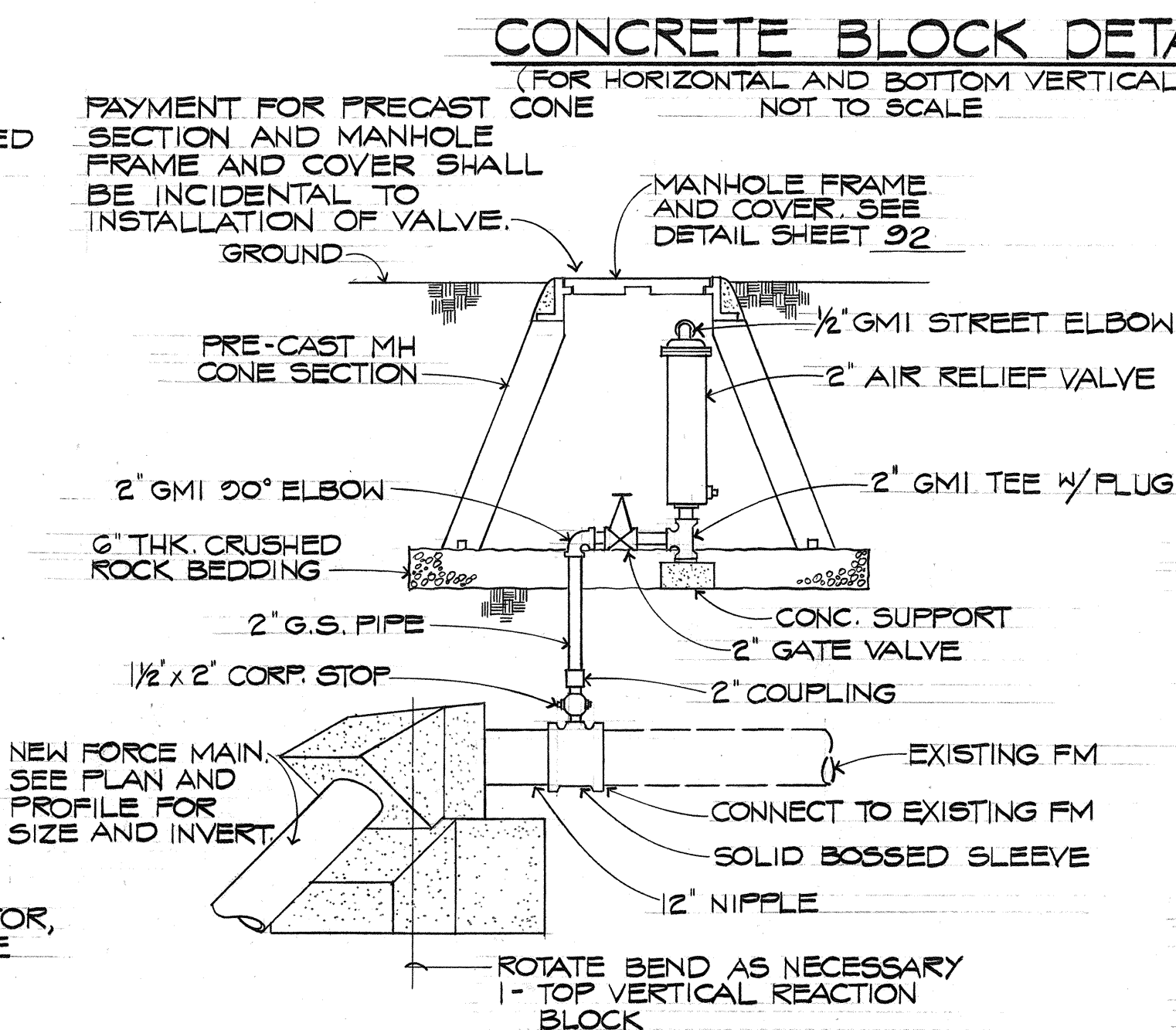
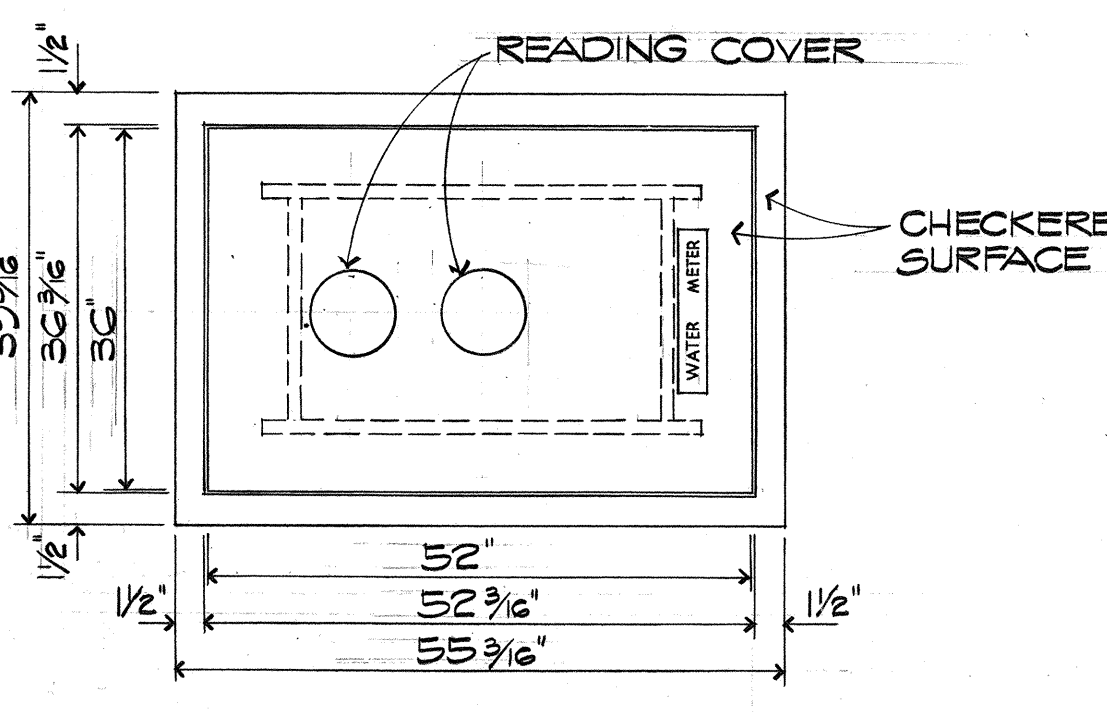
UTILITY RELOCATION
WATER, SEWER & GAS DETAILS

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. I - HI-1 (73) 15
SCALE: AS SHOWN DATE: DEC. 7, 1973
SHEET NO. 3 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(73)19	1974	93	369



FITTING	BEARING AREA SQ. FT.
6" 1/4 BEND	2.0
6" TEE	1.5
6" PLUG	1.5
16" 1/2 BEND	2.2
16" 1/8 BEND	8.5
16" x 6" TEE	1.5
16" x 8" TEE	2.8
16" TEE	10.0
18" 1/8 BEND	10.1
18" TEE	13.0
18" PLUG	13.0
24" 1/32 BEND	4.7



APPROVED BY (FOR GAS LINE RELOCATION ONLY)
[Signature]
GASCO, INC. 11/5/73 DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY RELOCATION
WATER, SEWER & GAS DETAILS

PEARL HARBOR INTERCHANGE
F.A.I. PROJ. NO. I-H-1(73):15
SCALE: AS SHOWN DATE: DEC. 7, 1973
SHEET NO. 6 OF 6 SHEETS

1/27/75	REVISED SPECIAL SMH - PLAN AND SECTIONS
DATE	REVISIONS

REINFORCED CONCRETE JACKETS
NOT TO SCALE

GEORGE Y. ASH
REGISTERED PROFESSIONAL ENGINEER
No. 2088
HAWAII, U.S.A.

WILBERT T. TAKAHARA
REGISTERED PROFESSIONAL ENGINEER
No. 1684
HAWAII, U.S.A.

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ORIGINAL PLAN	DATE
DESIGNED BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	