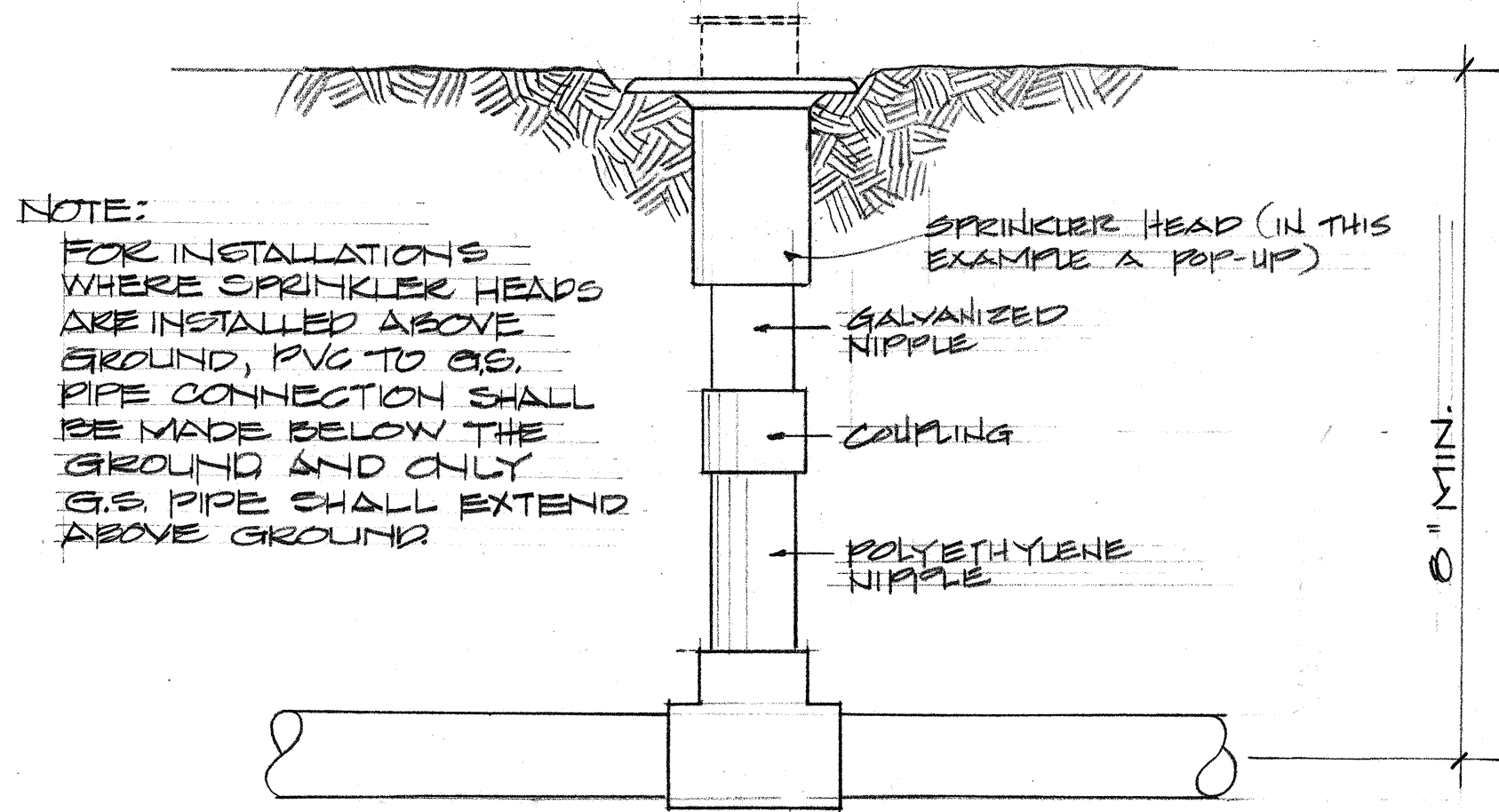
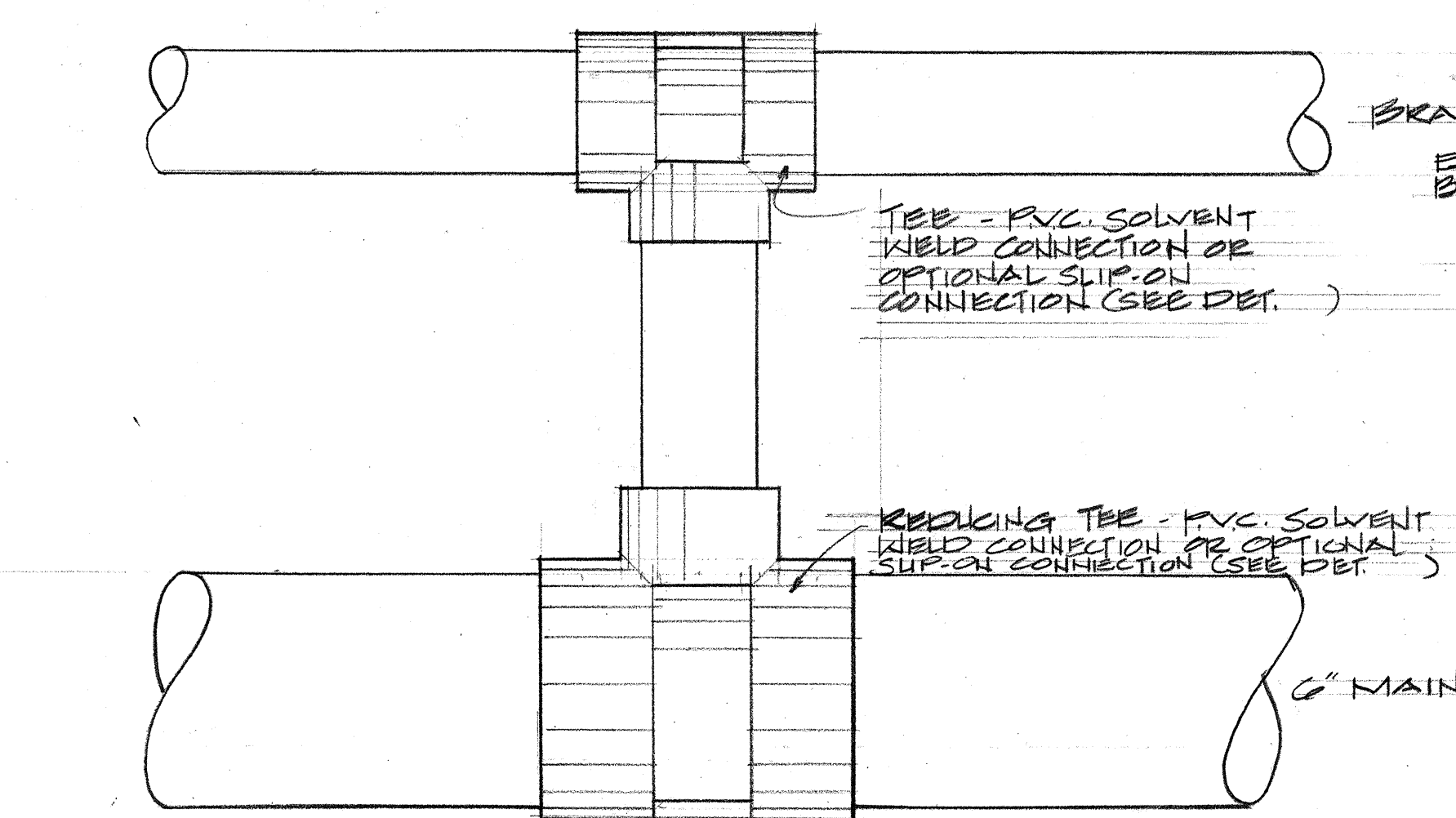


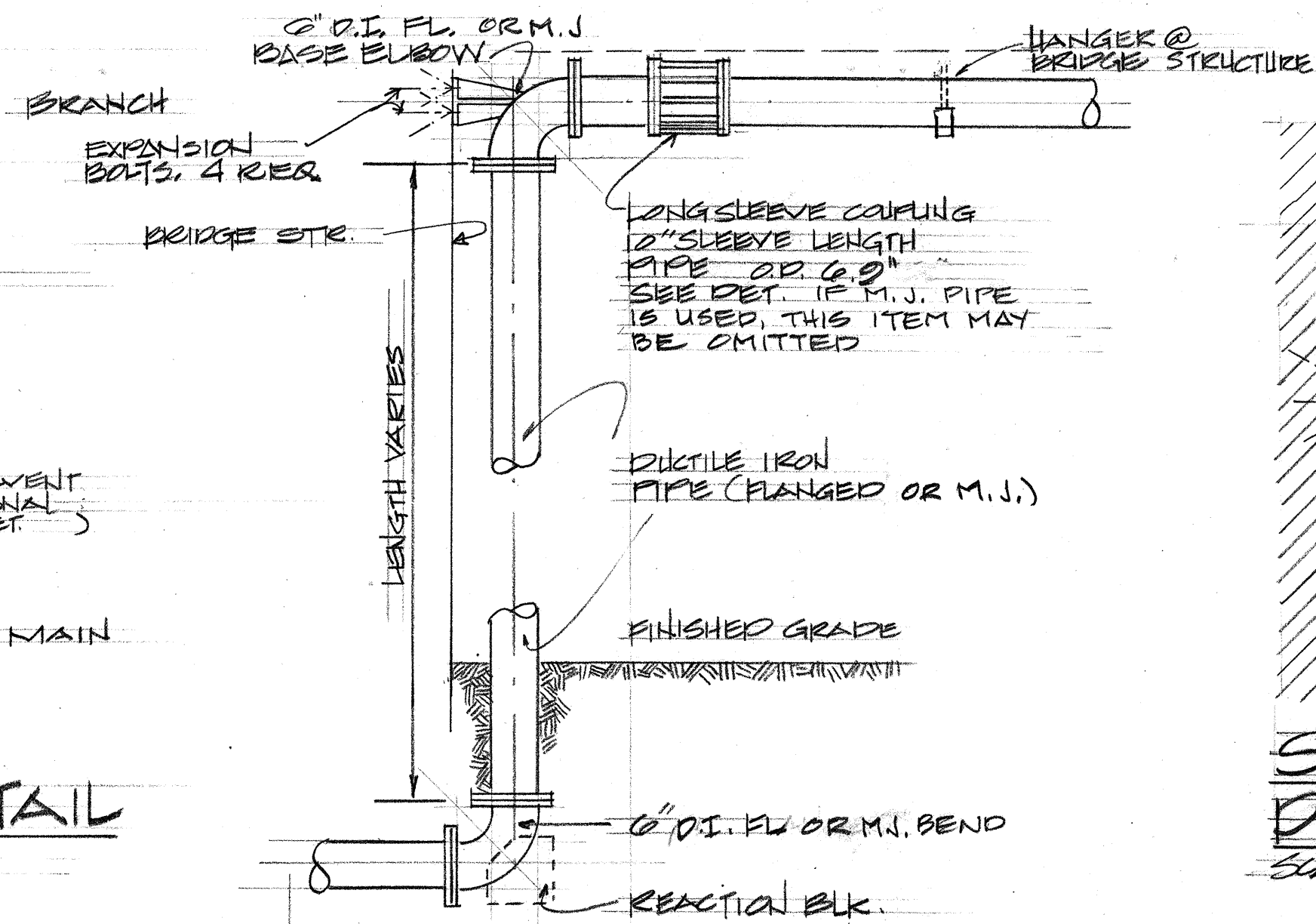
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HH(102)8	1973	17	38



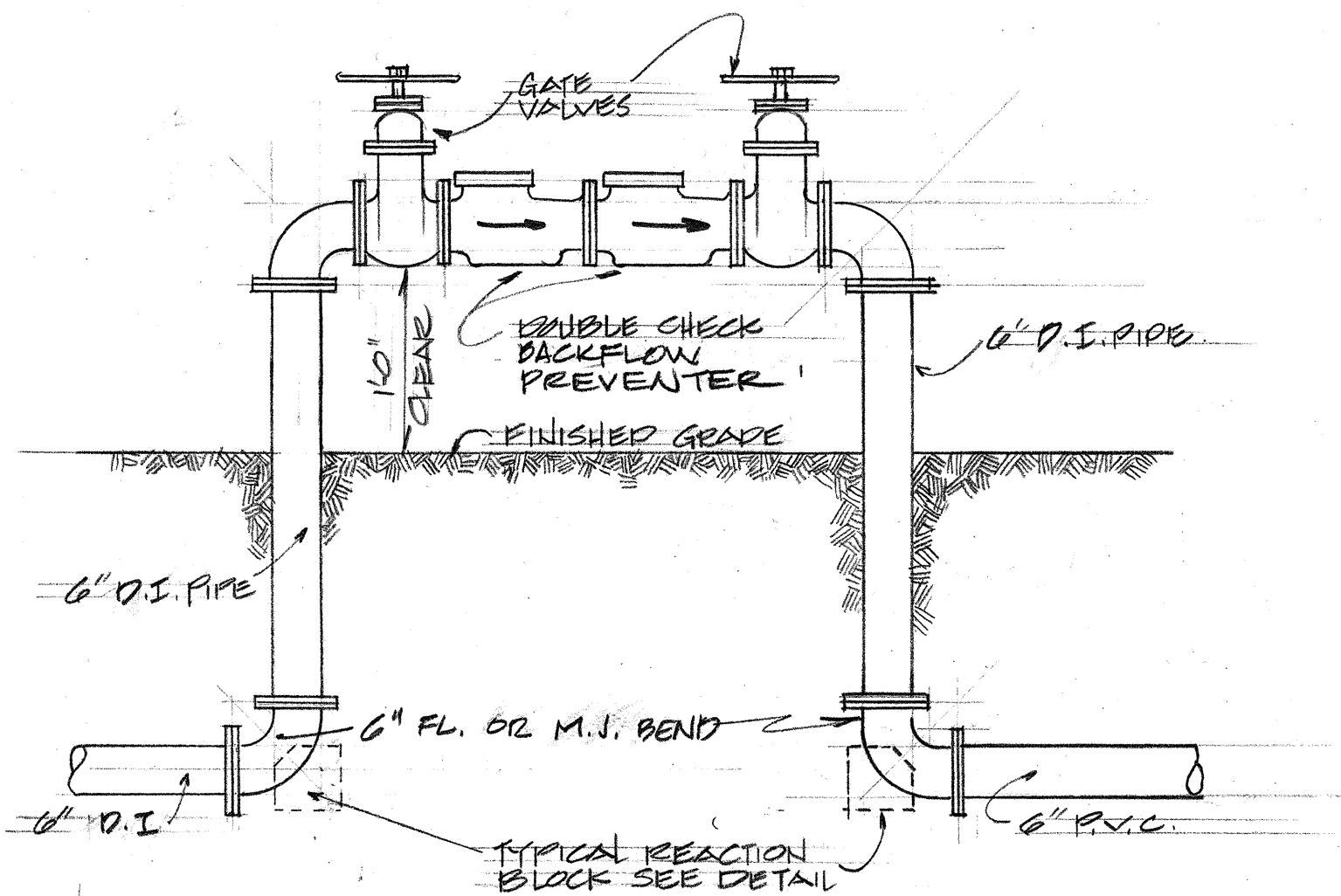
TYPICAL SPRINKLER HEAD TO FEEDER DETAIL
SCALE: 3"=1'-0"



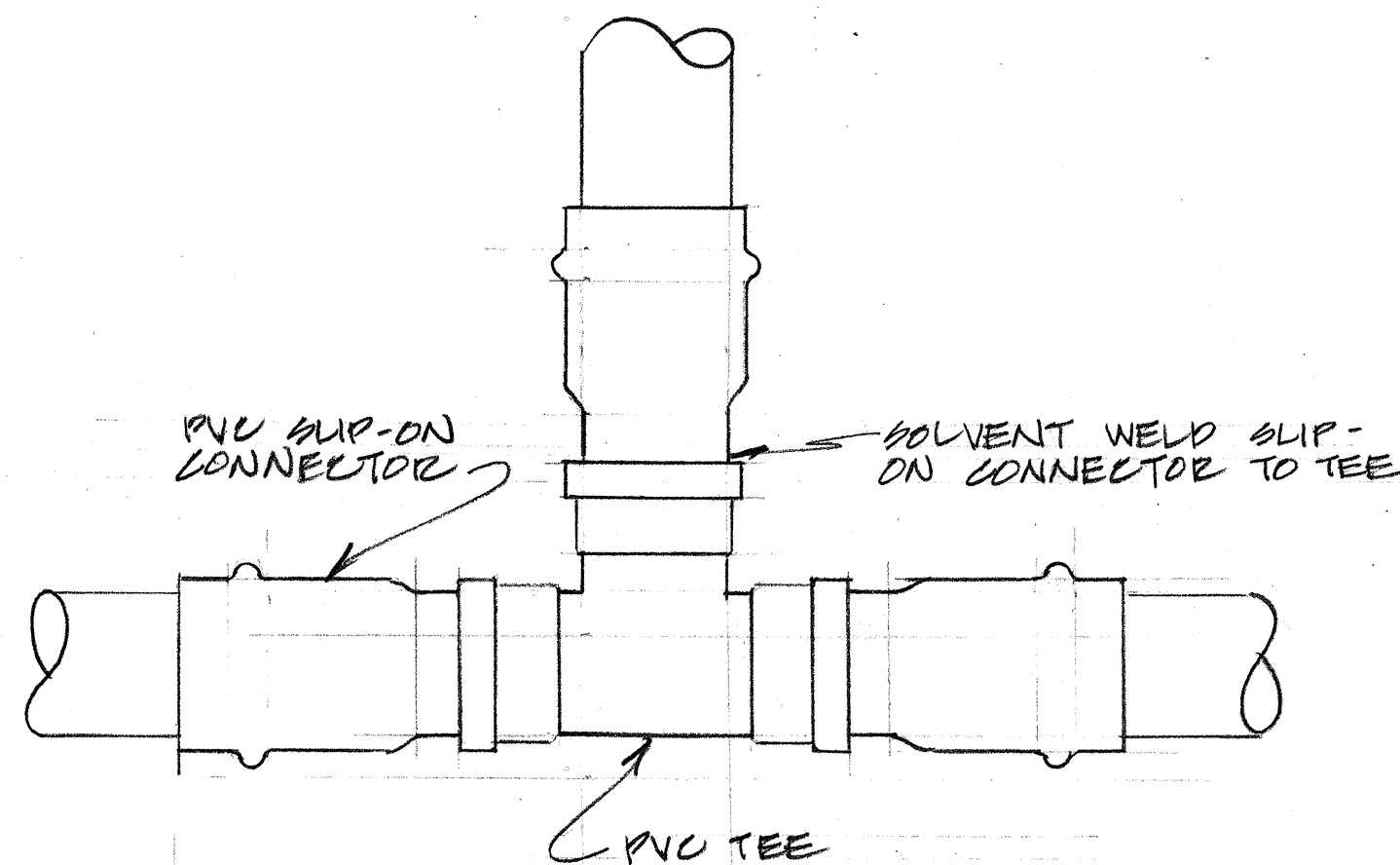
TYPICAL MAIN TO BRANCH DETAIL
SCALE 3"=1'-0" ALL FITTINGS INCIDENTAL TO PIPING



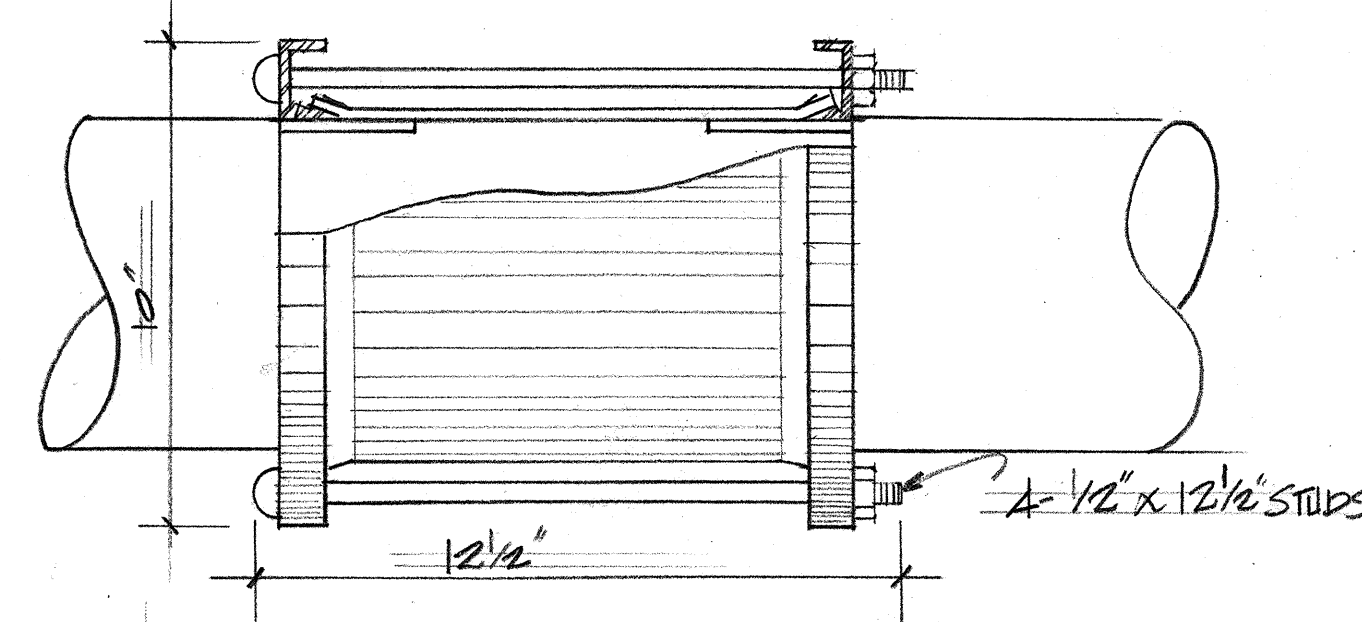
TYPICAL PIPE PROFILE @ BRIDGE ABUTMENT
SCALE: 1/2"=1'-0"



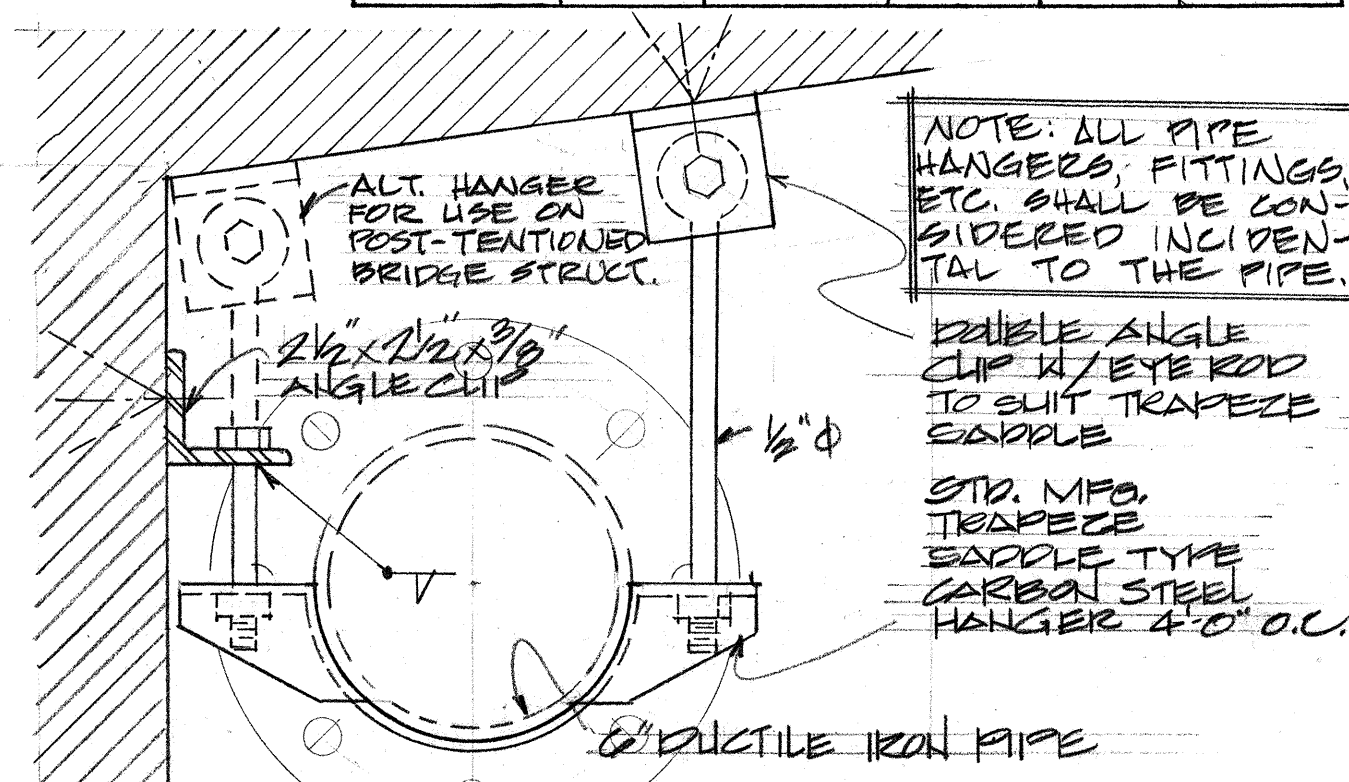
TYPICAL BACKFLOW PREVENTER
SCALE: 1/2"=1'-0"



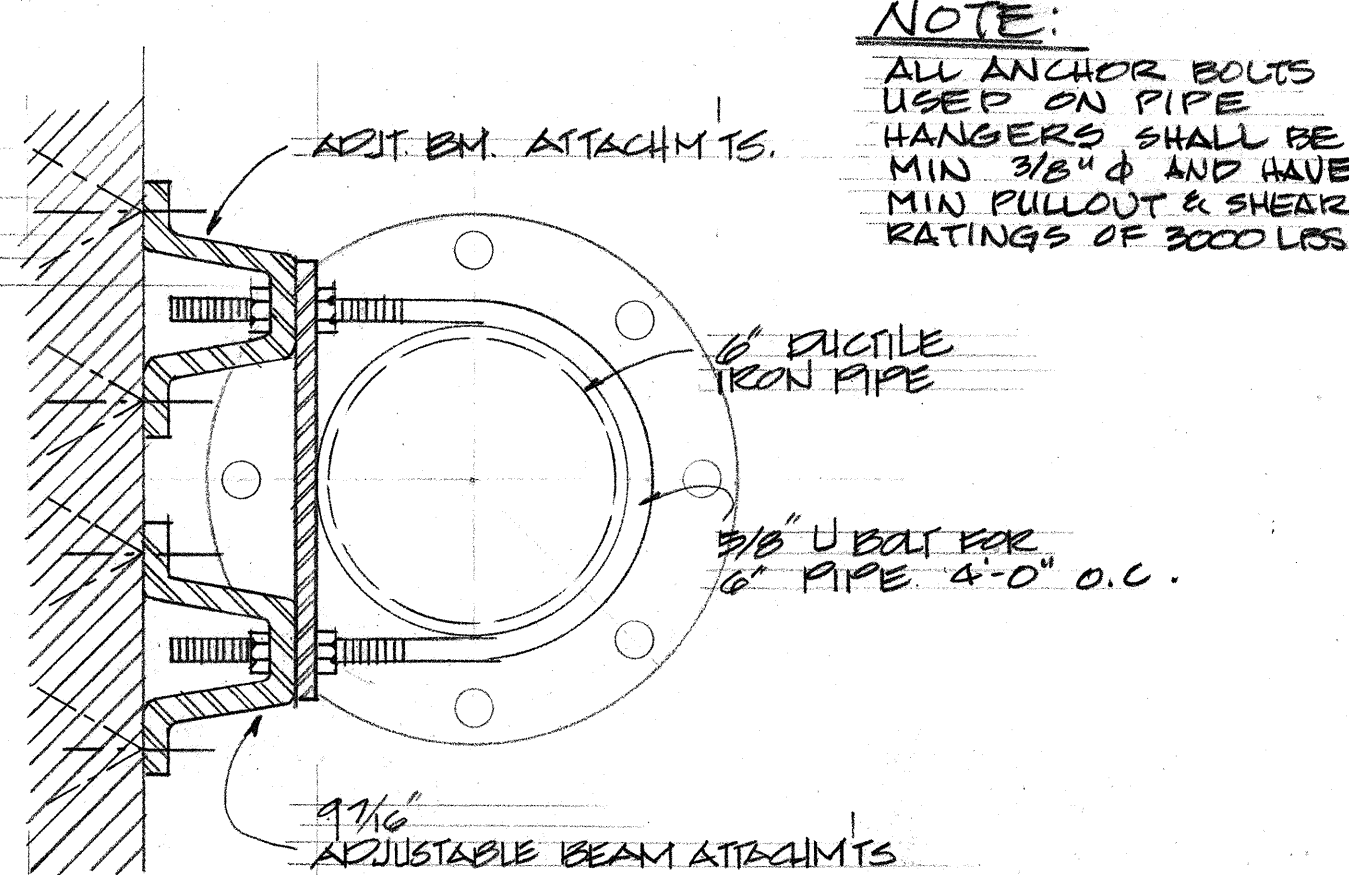
TYPICAL SLIP-ON CONNECTION OPTION
SCALE: 3"=1'-0"



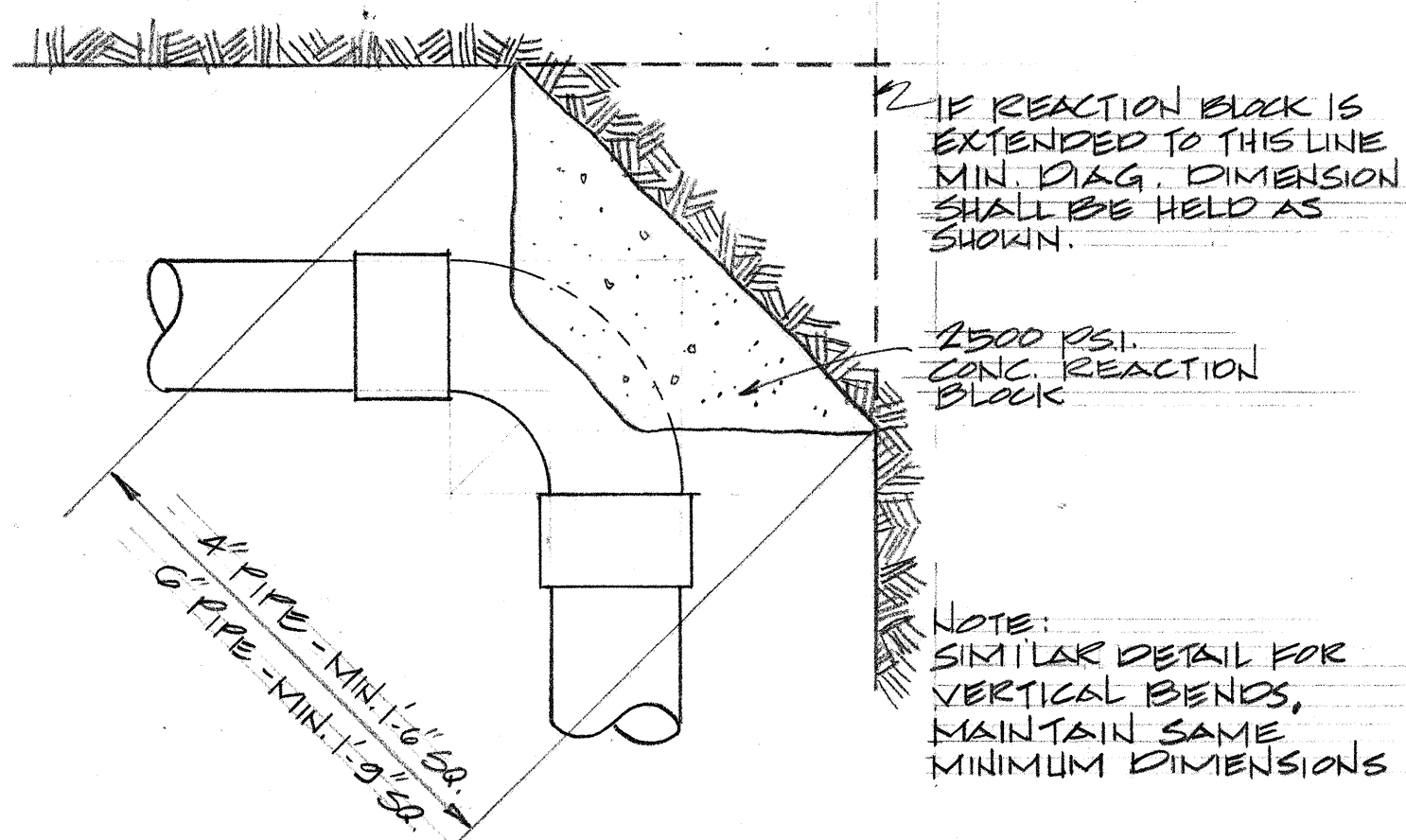
10' LONG SLEEVE COUPLING FOR 6' DUCTILE IRON PIPE
SCALE: 3"=1'-0" INCIDENTAL TO PIPING



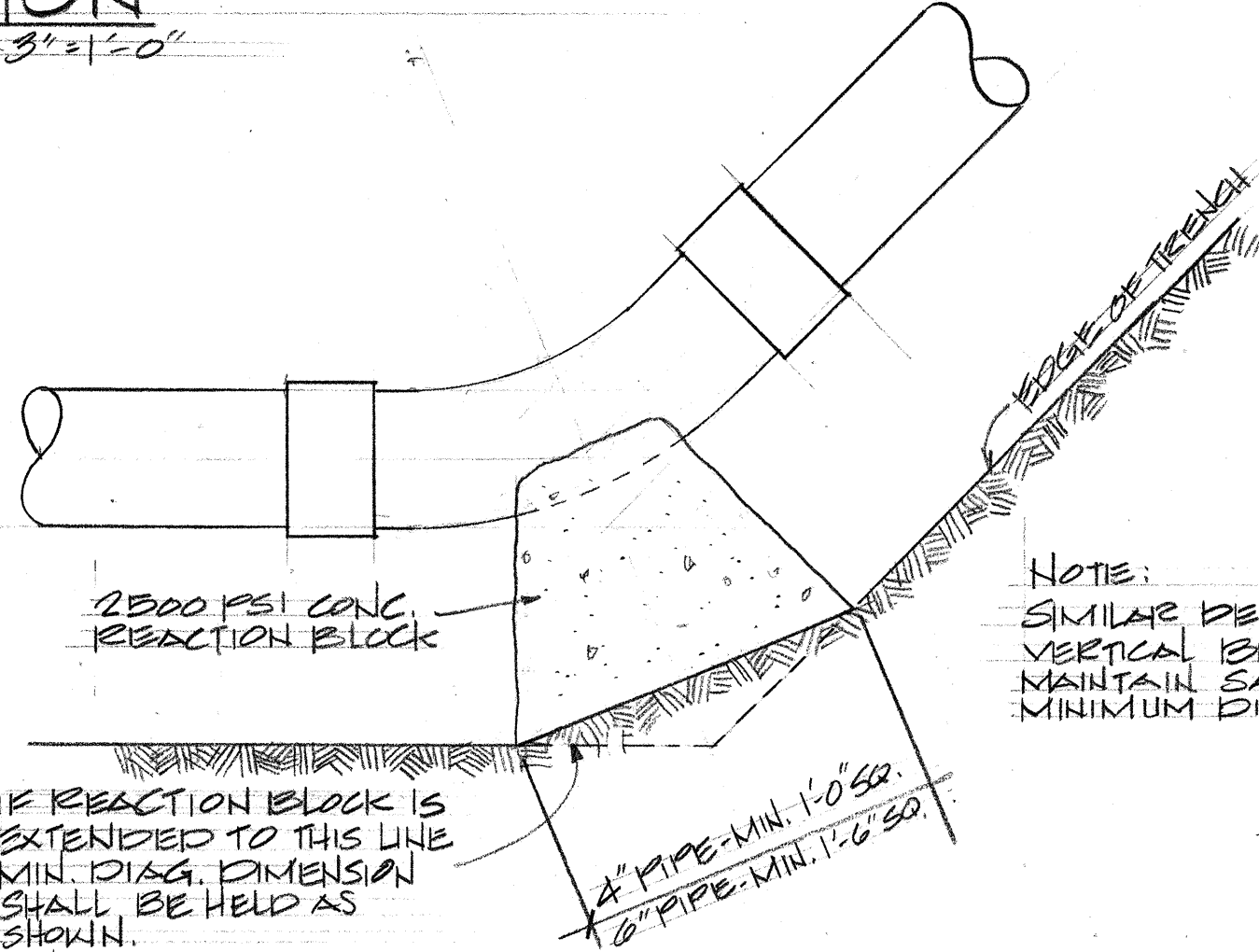
SADDLE HANGER FOR 6' DUCT. IRON PIPE @ BRIDGE STRUCT.
SCALE: 3"=1'-0"



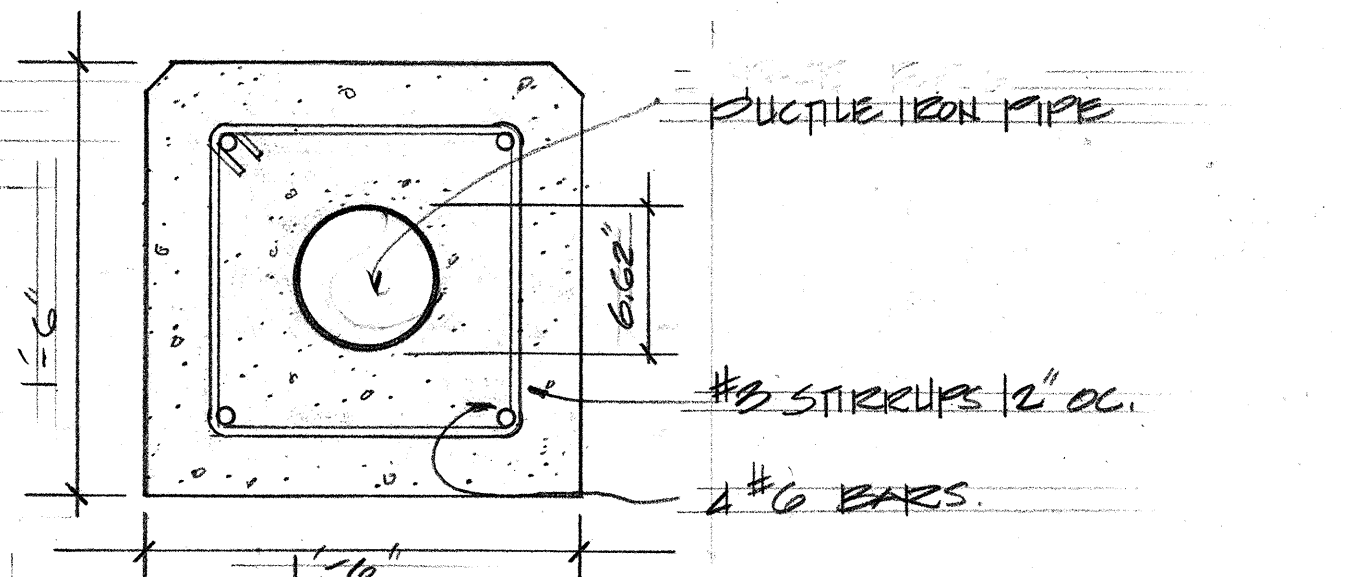
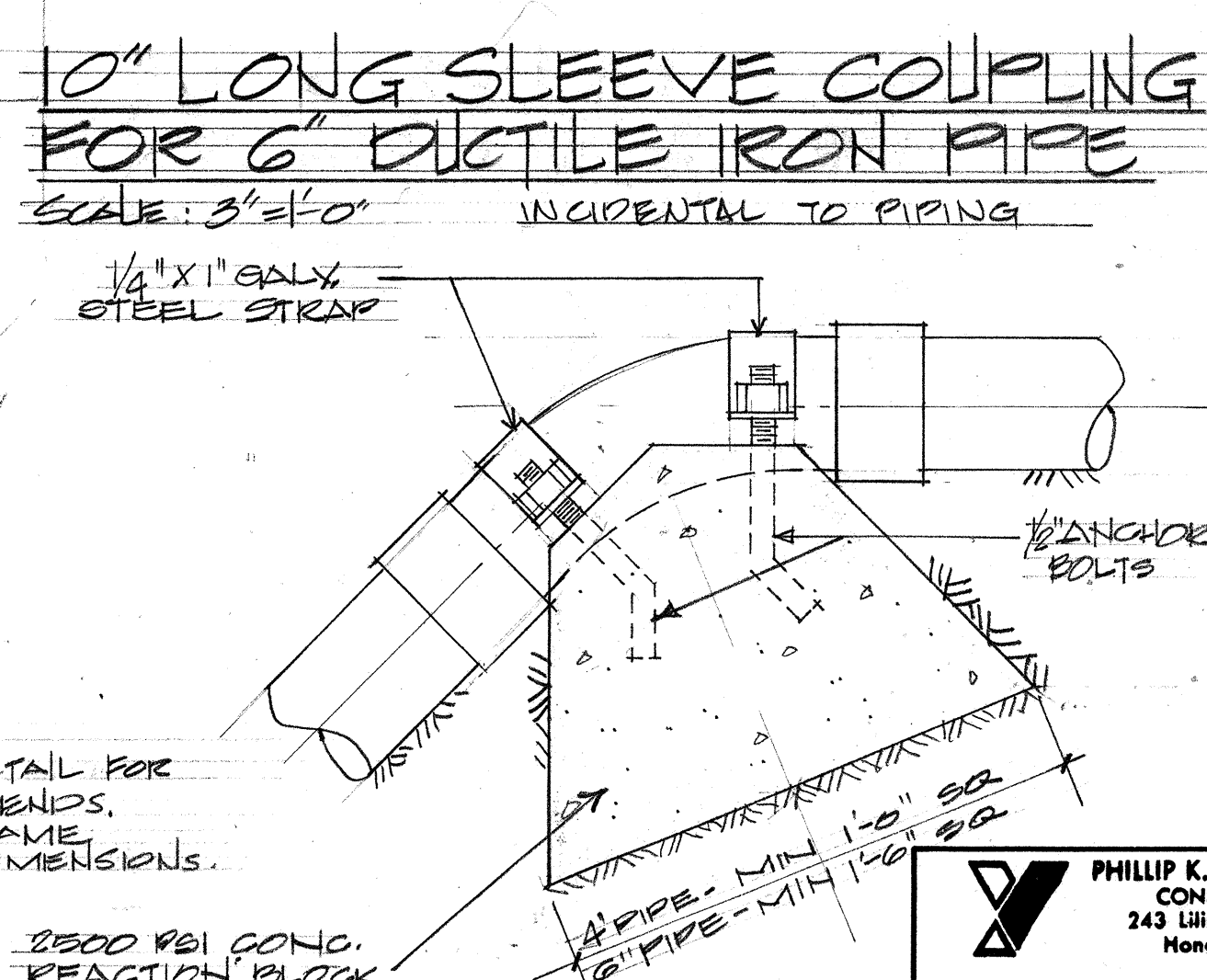
STRAP DETAIL FOR 6' DUCTILE IRON PIPE @ BRIDGE STRUCTURE
SCALE: 3"=1'-0"



TYPICAL REACTION BLOCK @ ELL
NOT TO SCALE INCIDENTAL TO PIPING



TYPICAL REACTION BLOCK @ 45° BEND
NOT TO SCALE INCIDENTAL TO PIPING



CONC. JACKET DETAIL @ 6' MAIN CROSSING FOR STREET #8
SCALE: 1/2"=1'-0" INCIDENTAL TO PIPING

DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
NO.	_____

PHILLIP K. H. YEE & ASSOCIATES
CONSULTING ENGINEERS
243 Liliuokalani Ave., Rm. 101
Honolulu, Hawaii 96815

REGISTERED PROFESSIONAL ENGINEER
No. 2024-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

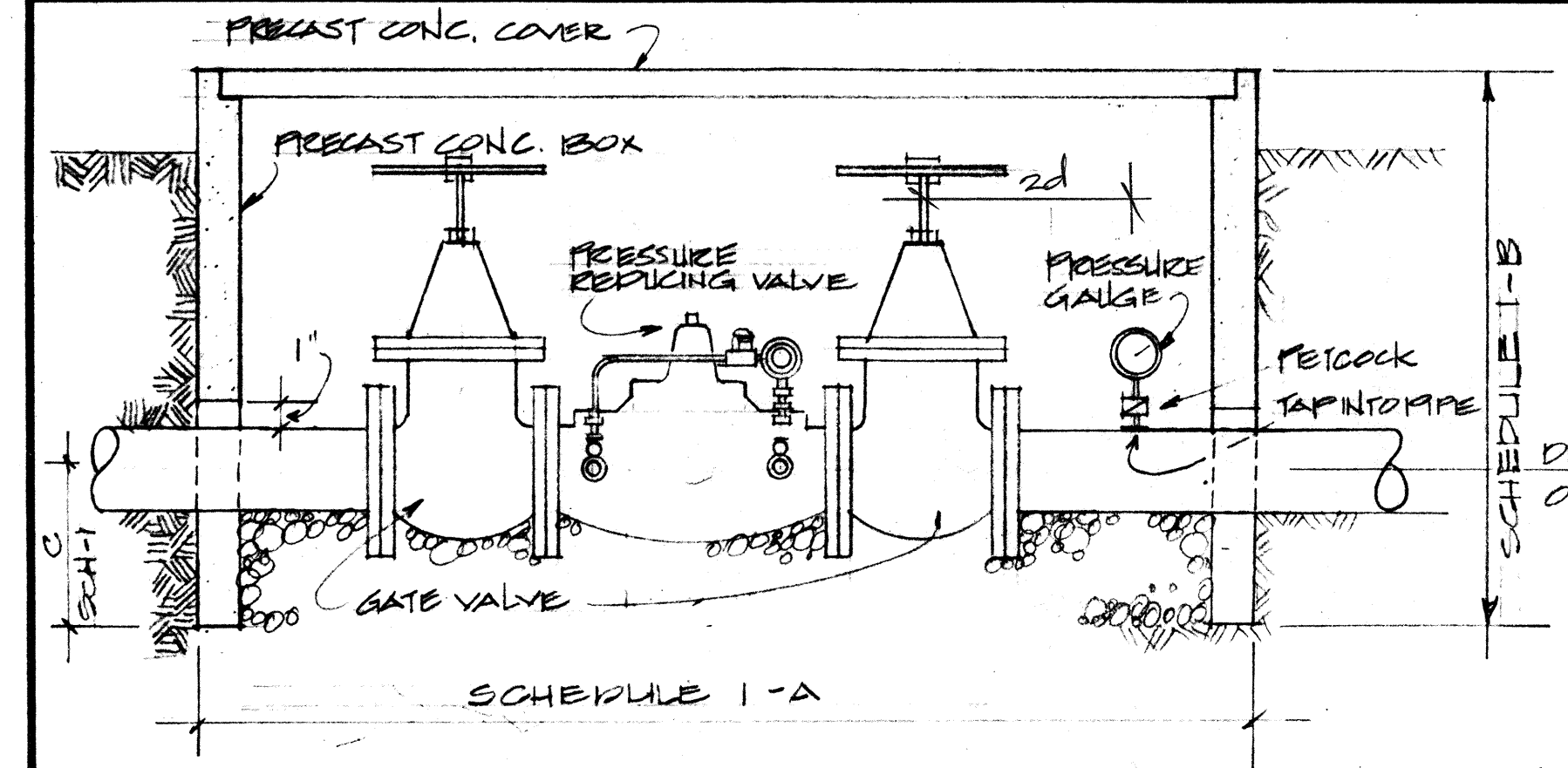
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAI'AWA INTERCHANGE
WATER SPRINKLER SYSTEM
PROJ # I-HH-1(102)8

MISCELLANEOUS PIPING DETAILS

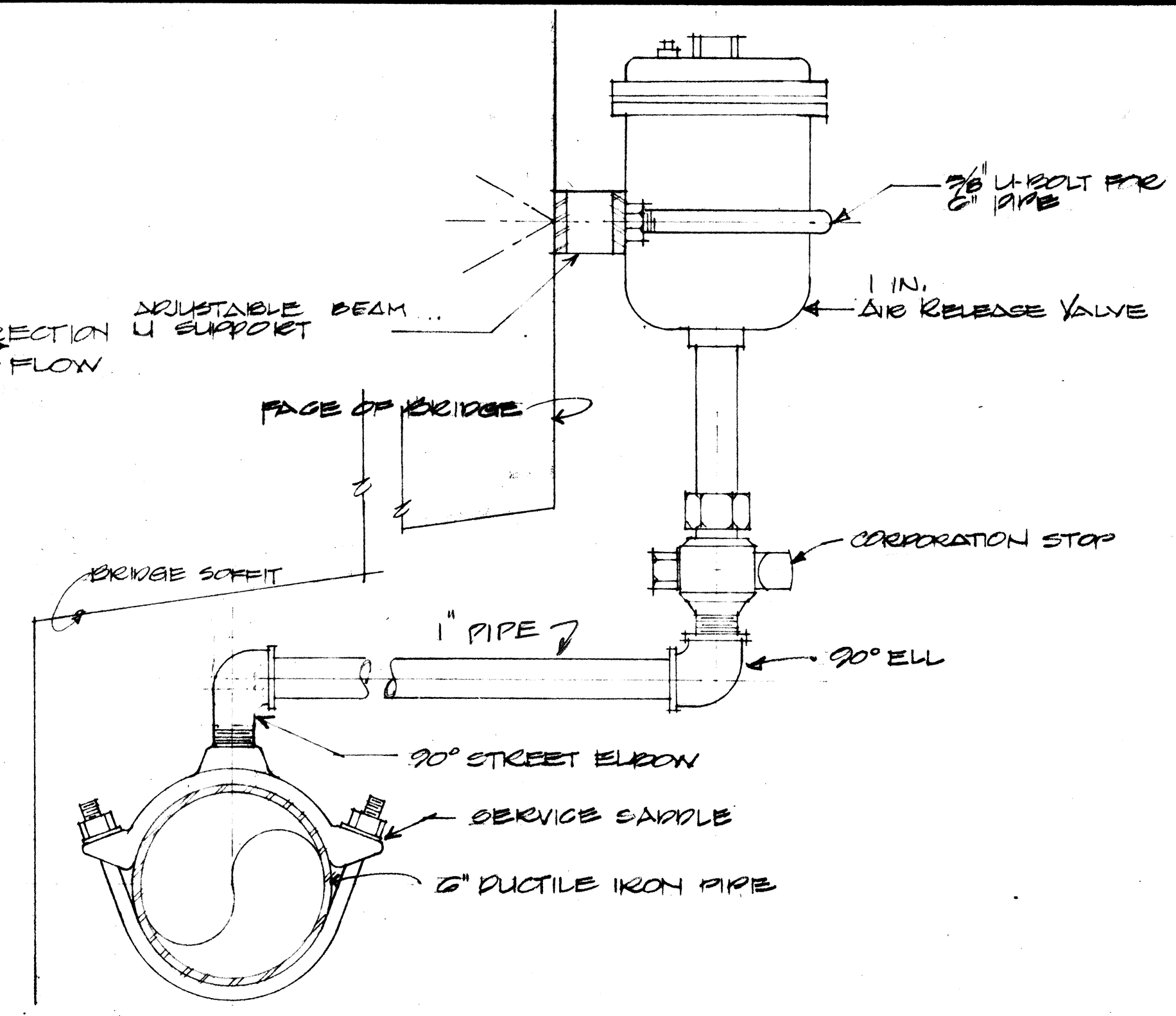
SHEET No. 17 OF 38 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	241-1(102)B	1973	18	38



NOTE: ① PRESSURE SHALL BE ADJUSTED TO THE MAGNITUDE SPECIFIED FOR @ PARTICULAR LOCATION WHILE SPRINKLERS ARE IN OPERATION
② IN CASES WHERE SCREWED FITTINGS ARE USED, A PIPE UNION SHALL BE ADDED TO THE INSTALLATION

A TYPICAL PRESSURE REDUCING VALVE INSTALLATION
N.T.S.



B TYPICAL AIR RELEASE VALVE AT BRIDGE
SCALE: 3" = 1'-0"

SCHEDULE 1

SIZE	FLANGE	COREW	BOX WIDTH
1/2"	3'-5 1/2"	4'-0"	1'-2"
2"	3'-5 1/2"	4'-0"	1'-2"
2 1/2"	3'-10"	4'-0"	1'-2"
3"	3'-10"	4'-0"	1'-2"
4"	4'-0"	4'-0"	1'-2"
6"	4'-0"	4'-0"	1'-2"

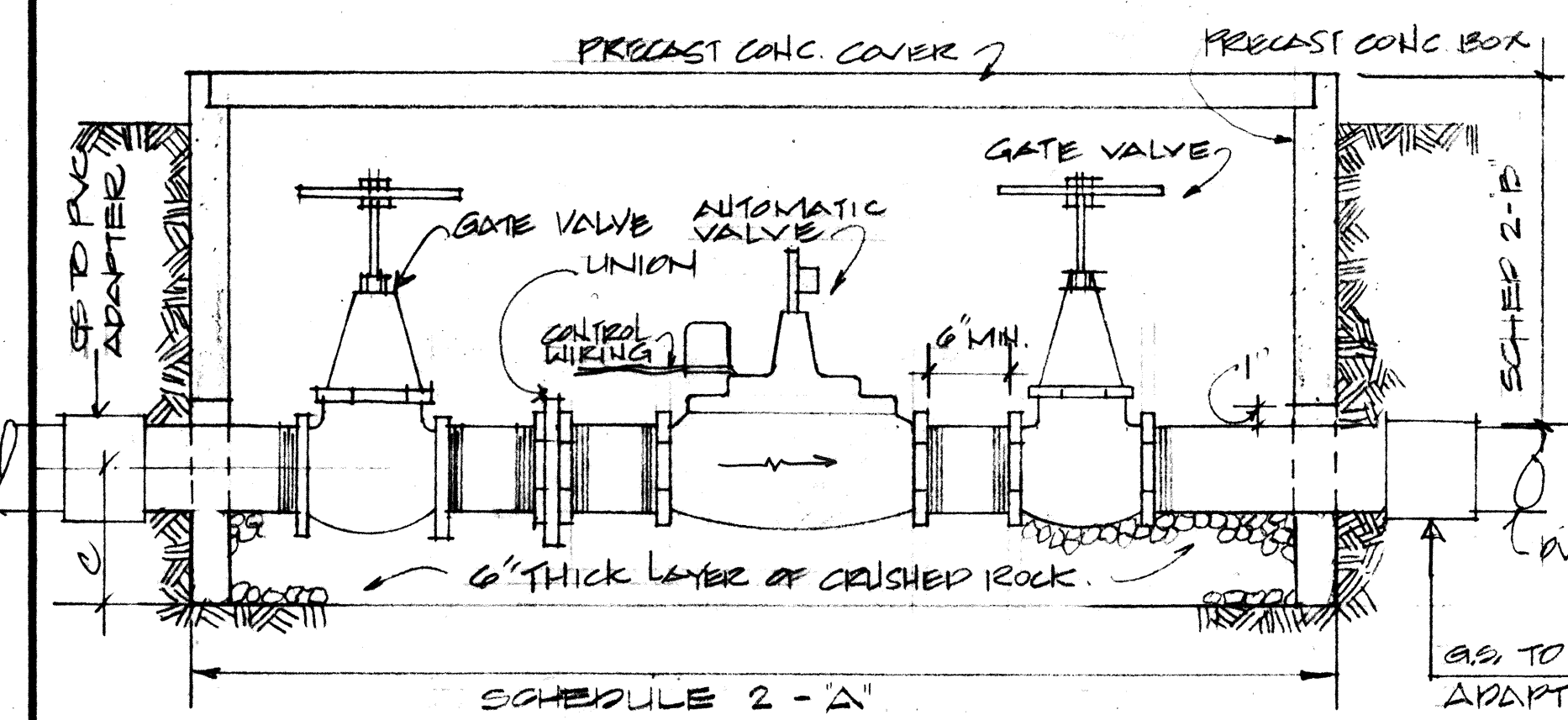
SCHEDULE 2

SIZE	FLANGE	COREW	BOX WIDTH
1/2"	3'-0"	1'-2"	4'-0"
2"	3'-0"	1'-2"	4'-0"
2 1/2"	3'-0"	1'-2"	4'-0"
3"	3'-0"	1'-2"	4'-0"
4"	4'-4"	1'-8"	6"

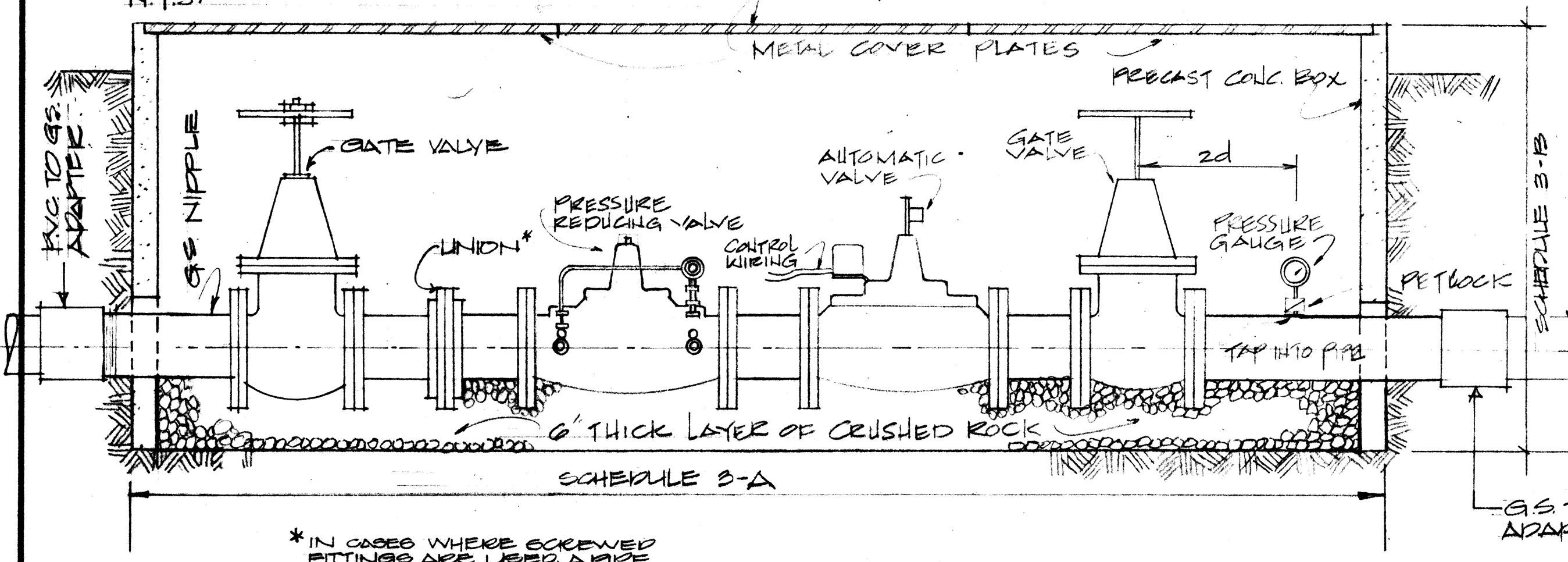
SCHEDULE 2

SIZE	FLANGE	COREW	BOX WIDTH
1/2"	3'-0"	1'-2"	4'-0"
2"	4'-0"	1'-2"	5'-4"
2 1/2"	4'-0"	1'-2"	5'-4"
3"	4'-0"	1'-2"	5'-4"
4"	5'-0"	1'-8"	6"

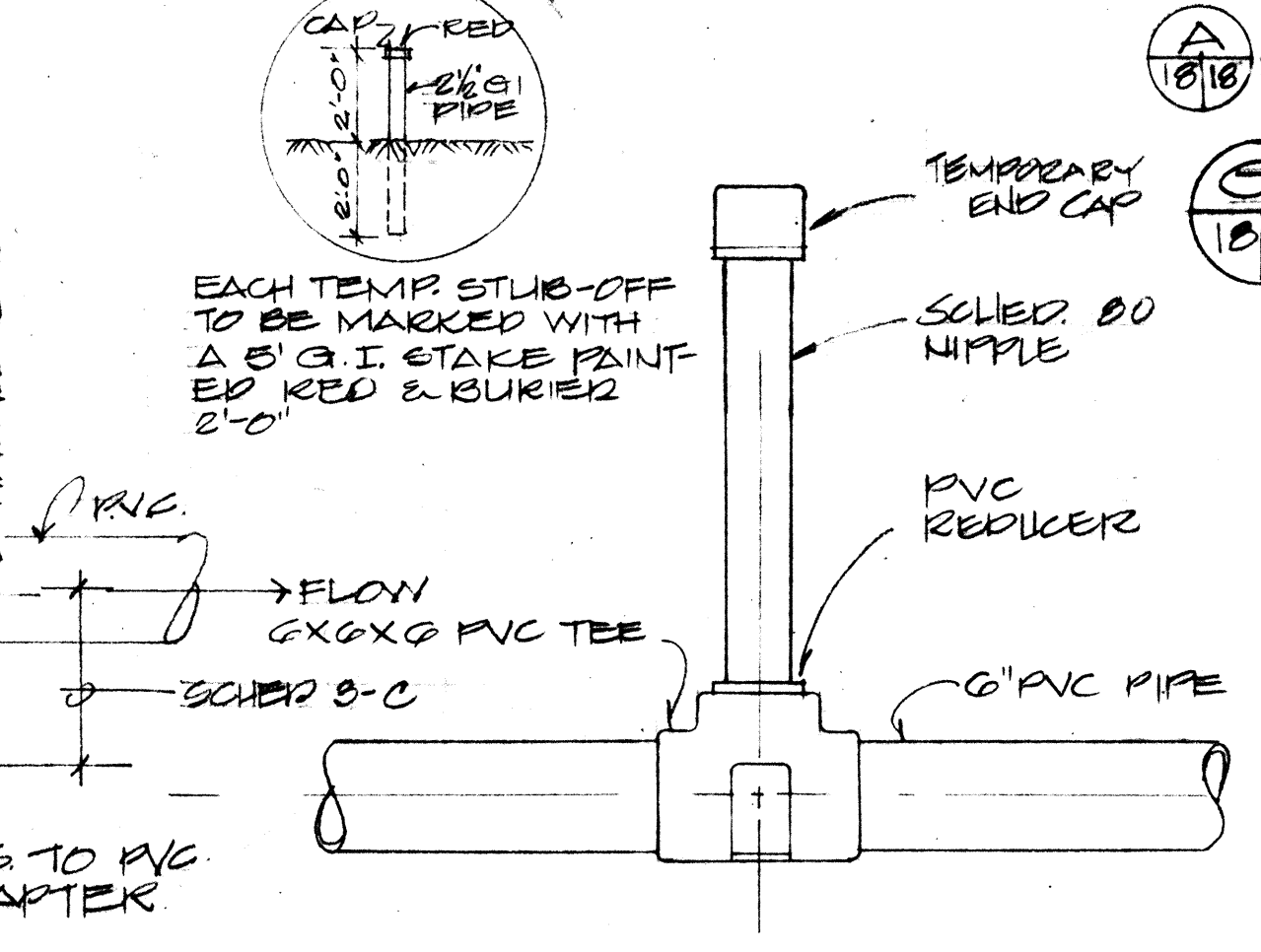
VALVE BOX SIZE SCHEDULE



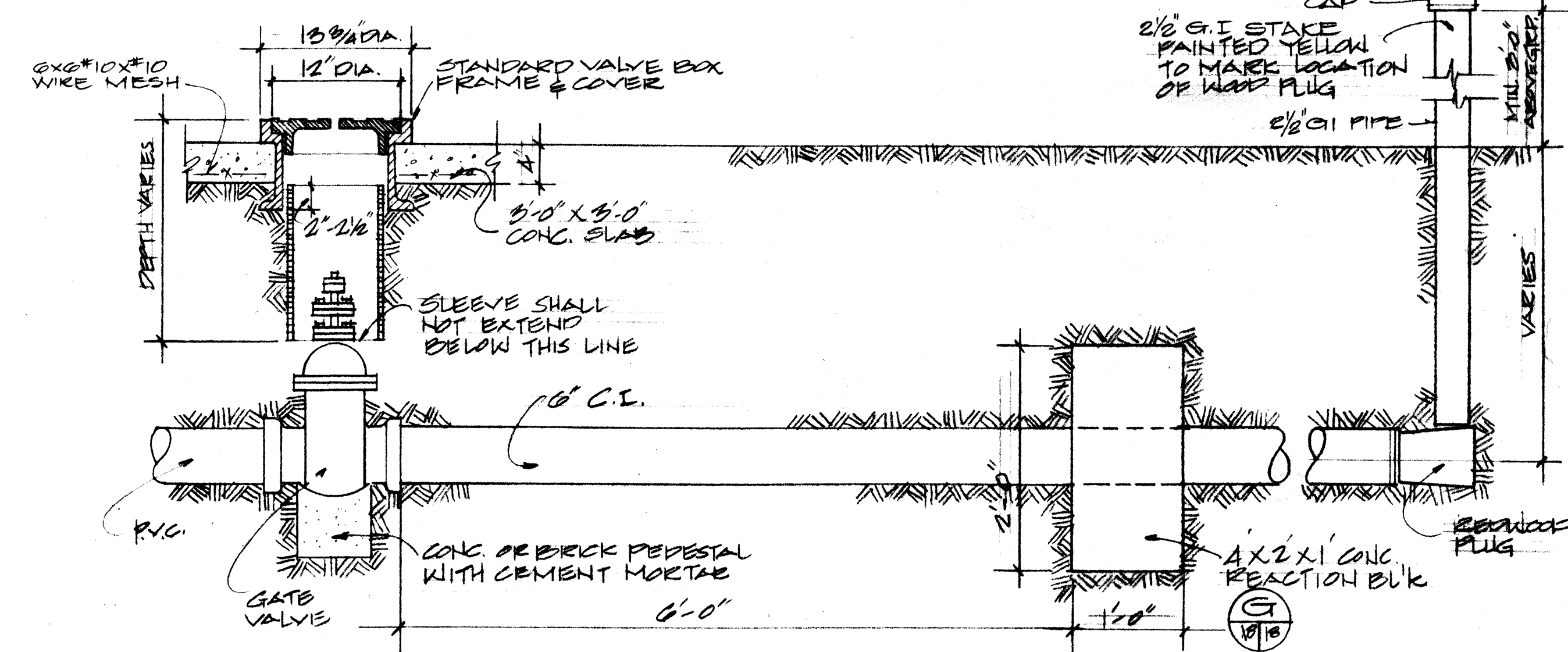
C TYPICAL AUTOMATIC SPRINKLER CONTROL VALVE
N.T.S.



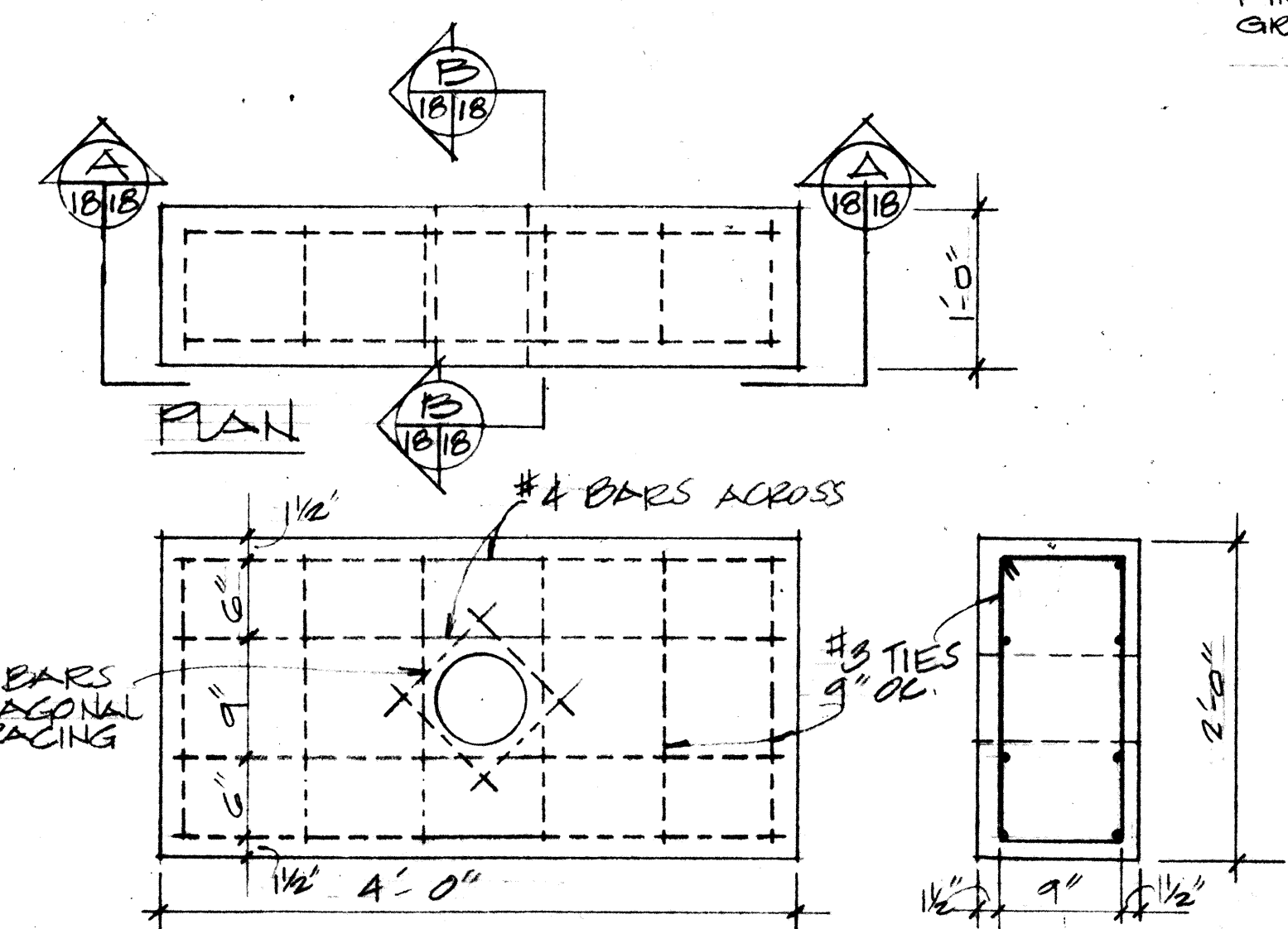
D TYPICAL DETAIL: PRESSURE REDUCING & AUTOMATIC SPRINKLER CONTROL VALVE INSTALLATION
NOT TO SCALE



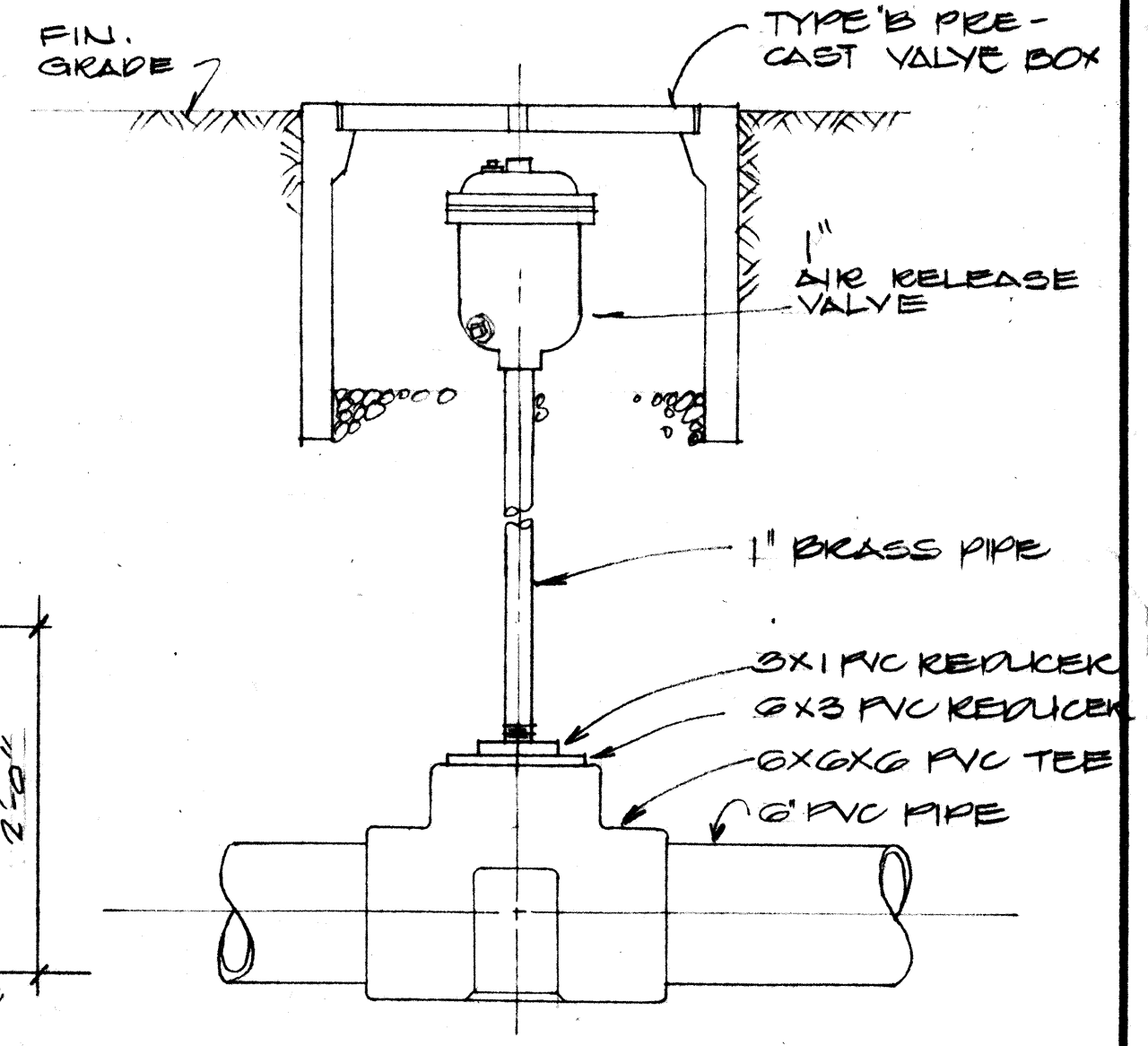
E TYPICAL TEMPORARY STUB-OFF TEE
SCALE: 1" = 1'-0"



F TYPICAL WATERLINE TEMPORARY STUB-OFF
SCALE: 1" = 1'-0"



G REACTION BLOCK @ TEMP. STUB-OFF
SCALE: 1" = 1'-0"



H TYP. AIR RELEASE DET.
NOT TO SCALE

PHILIP K. M. YEE & ASSOCIATES
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CURTIS Q. H. YEE
REGISTERED PROFESSIONAL ENGINEER
No. 2624-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAI'AWA INTERCHANGE
WATER SPRINKLER SYSTEM
PROJ # 1-HI-1(102)B

MISCELLANEOUS DETAILS