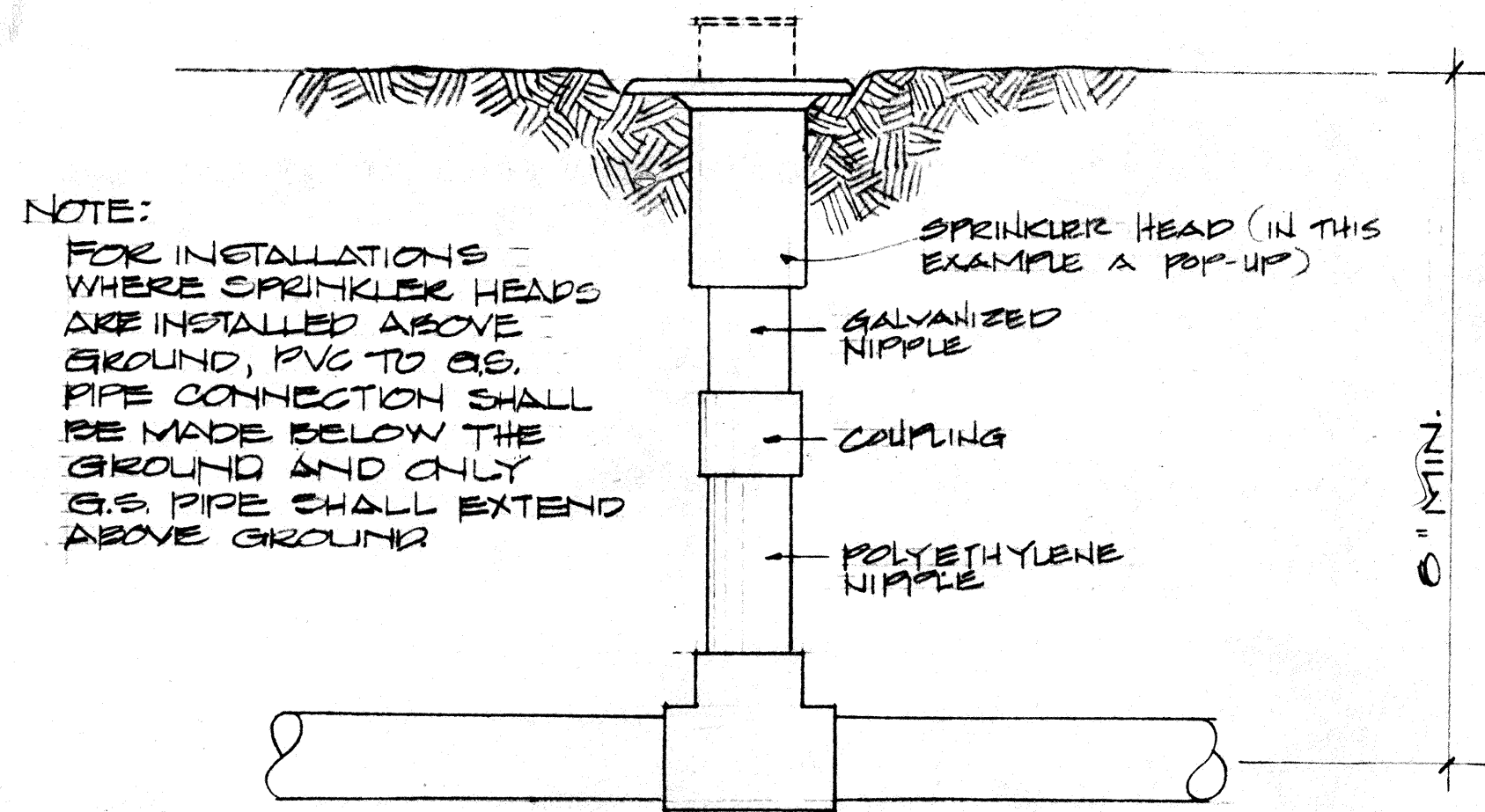
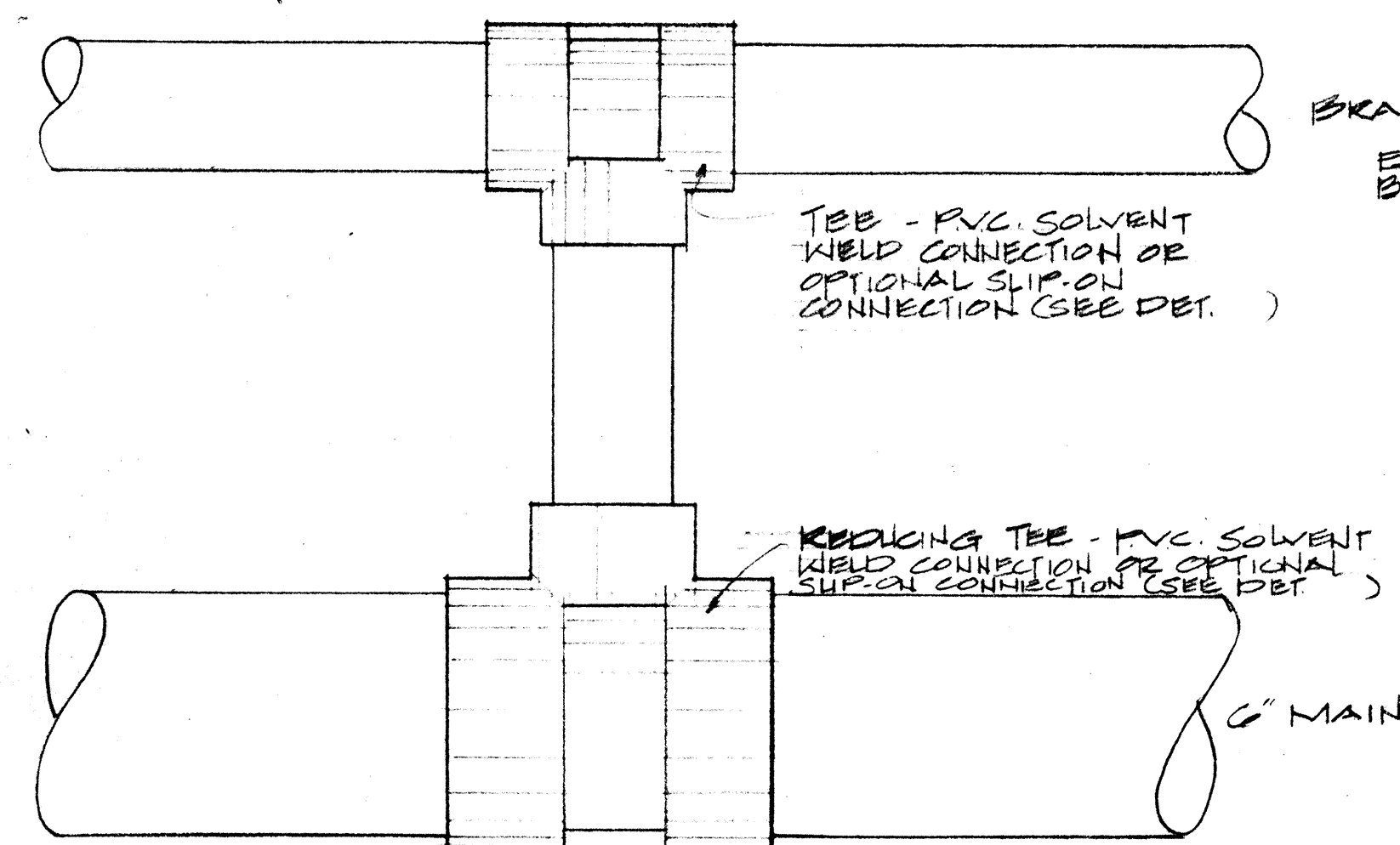


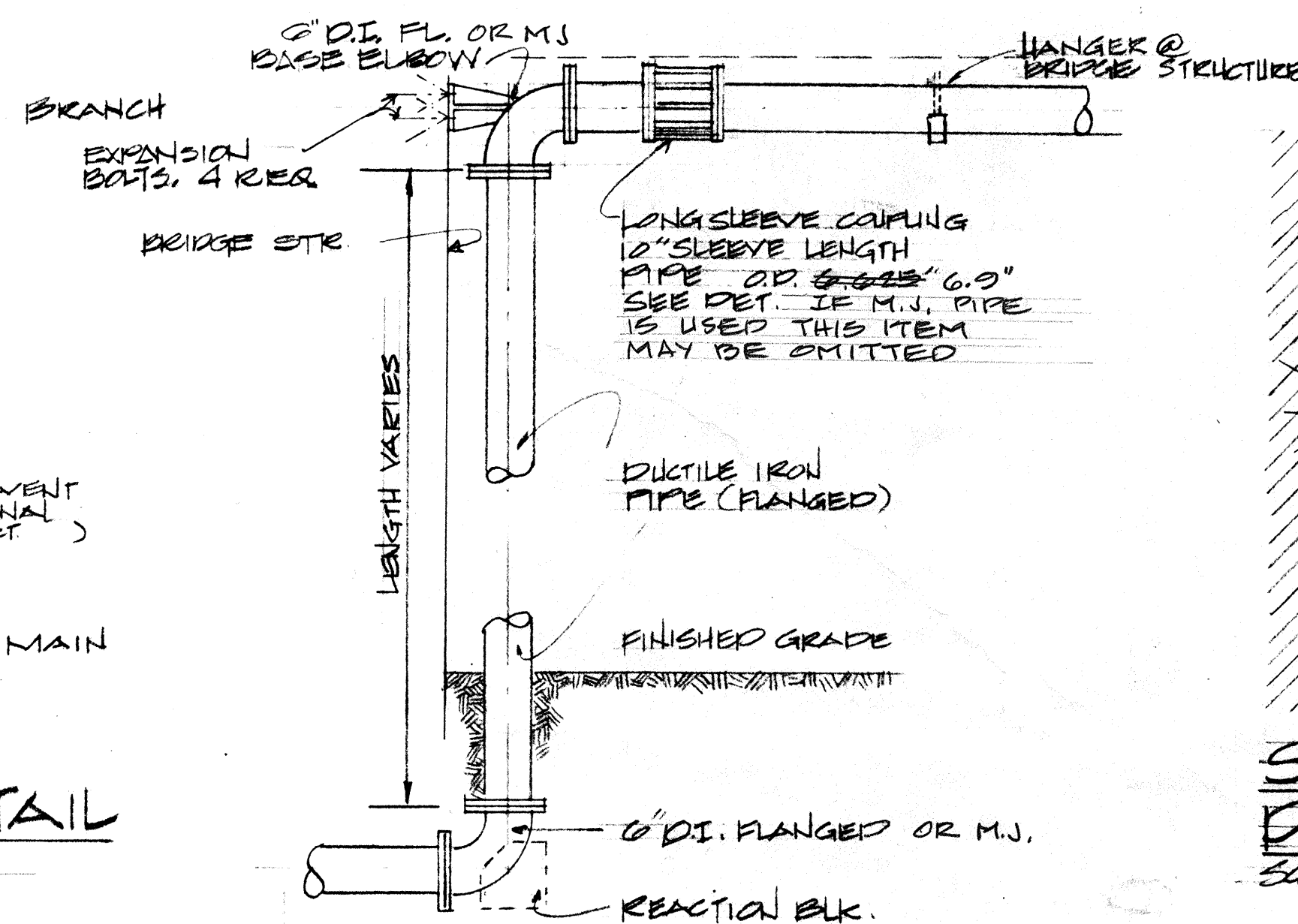
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(97)8	1973	12	27



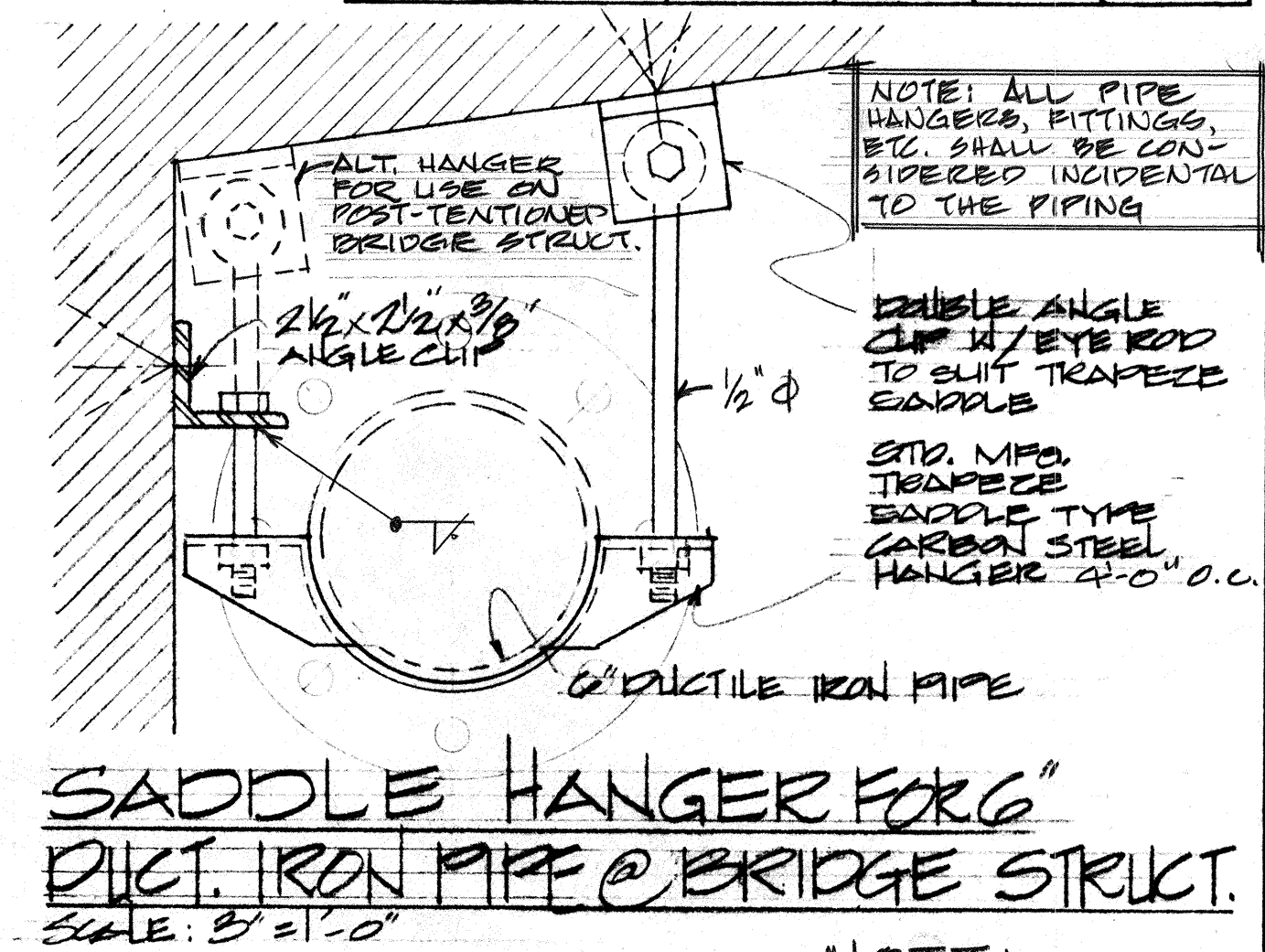
TYPICAL SPRINKLER HEAD TO FEEDER DETAIL
SCALE: 3"=1'-0"



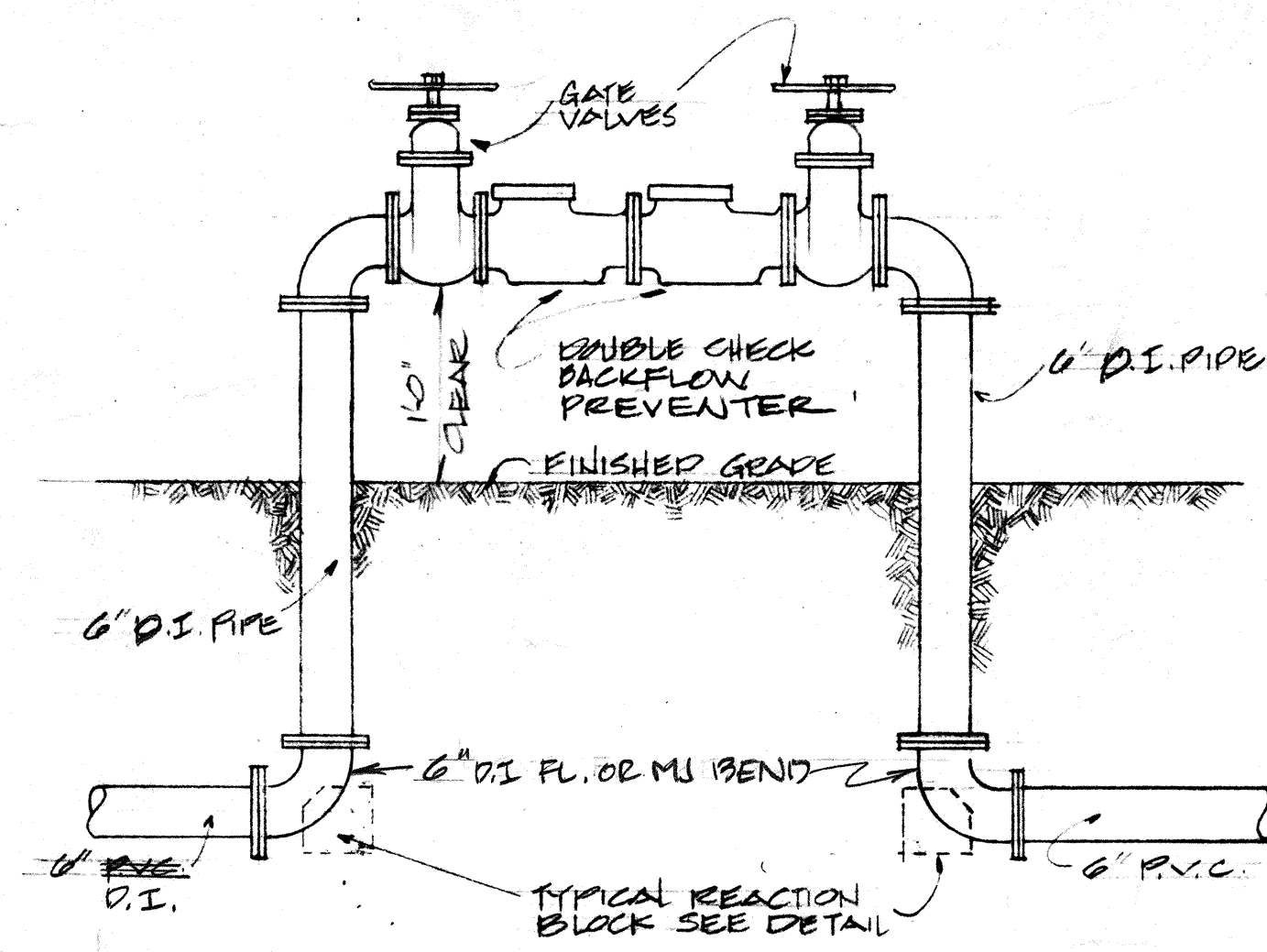
TYPICAL MAIN TO BRANCH DETAIL
SCALE 3"=1'-0" ALL FITTINGS INCIDENTAL TO PIPING



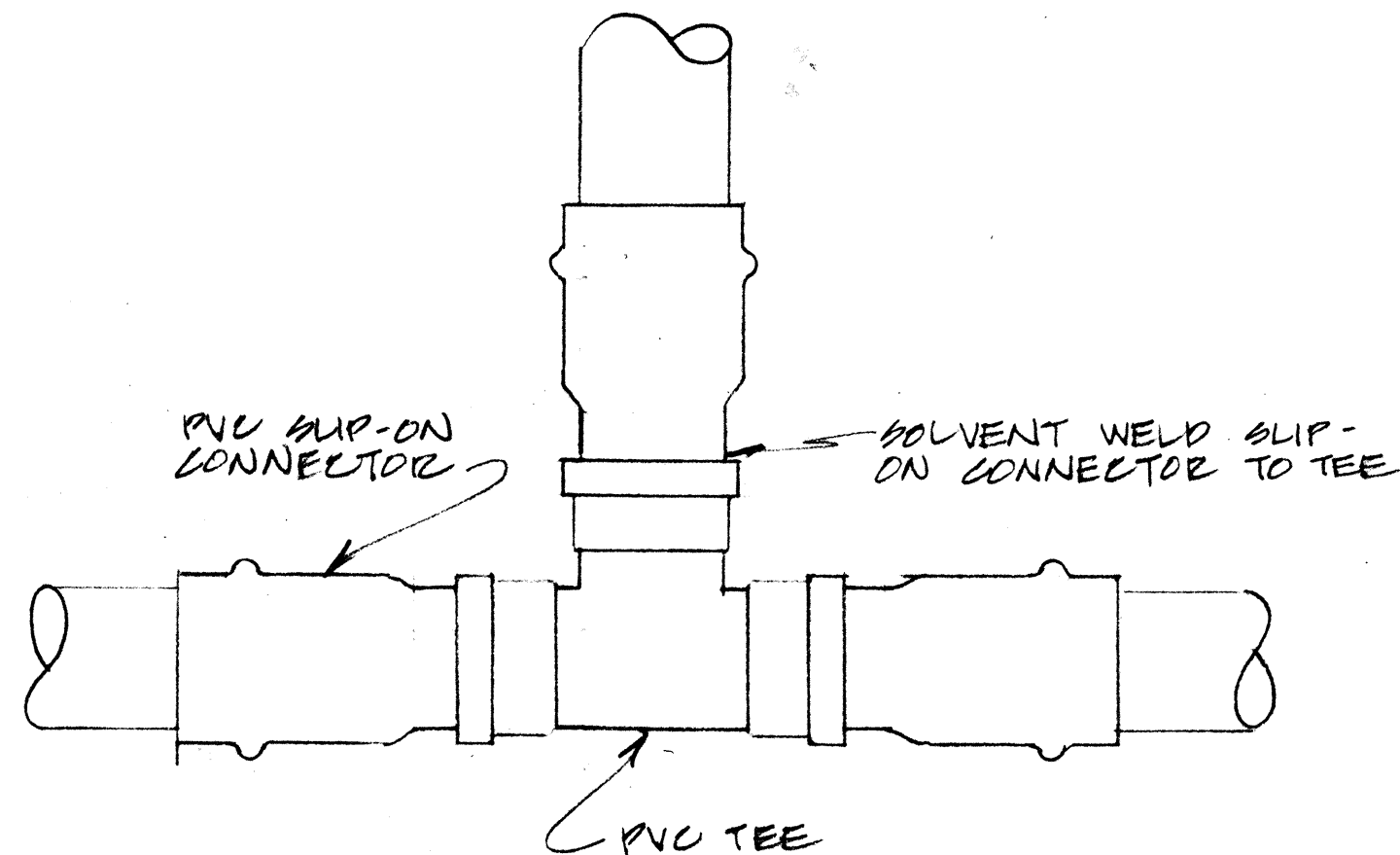
TYPICAL PIPE PROFILE @ BRIDGE ABUTMENT
SCALE: 1/2"=1'-0"



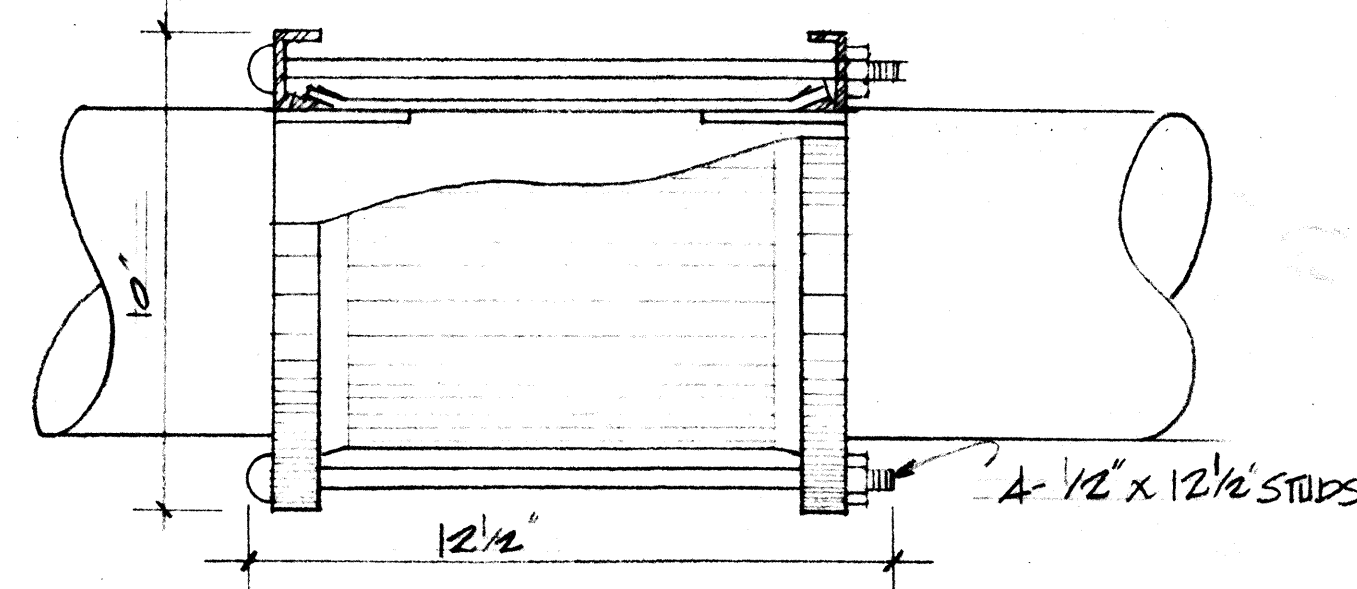
SADDLE HANGER FOR 6" DUCTILE IRON PIPE @ BRIDGE STRUCT.
SCALE: 3"=1'-0"



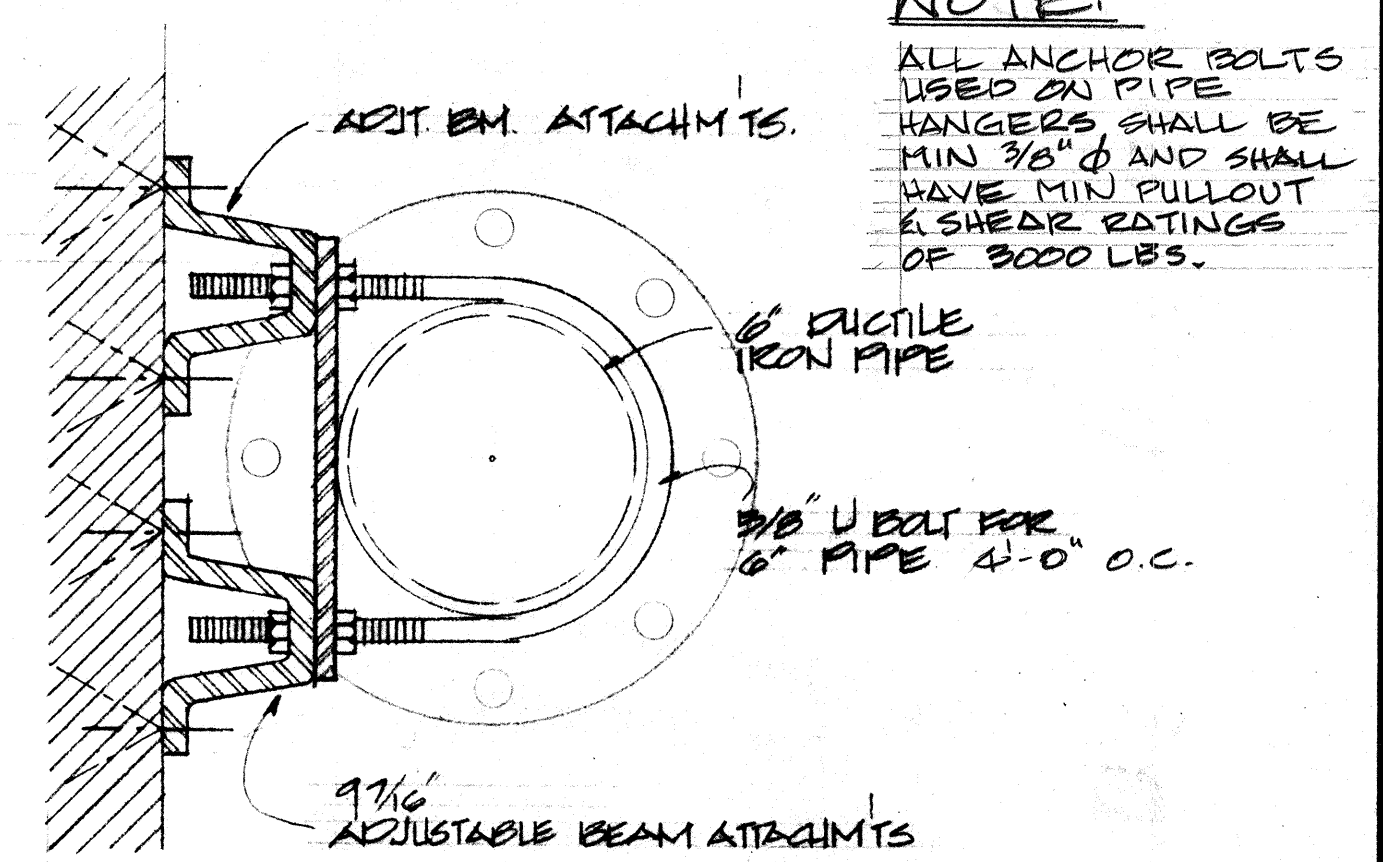
TYPICAL BACKFLOW PREVENTER
SCALE: 1/2"=1'-0"



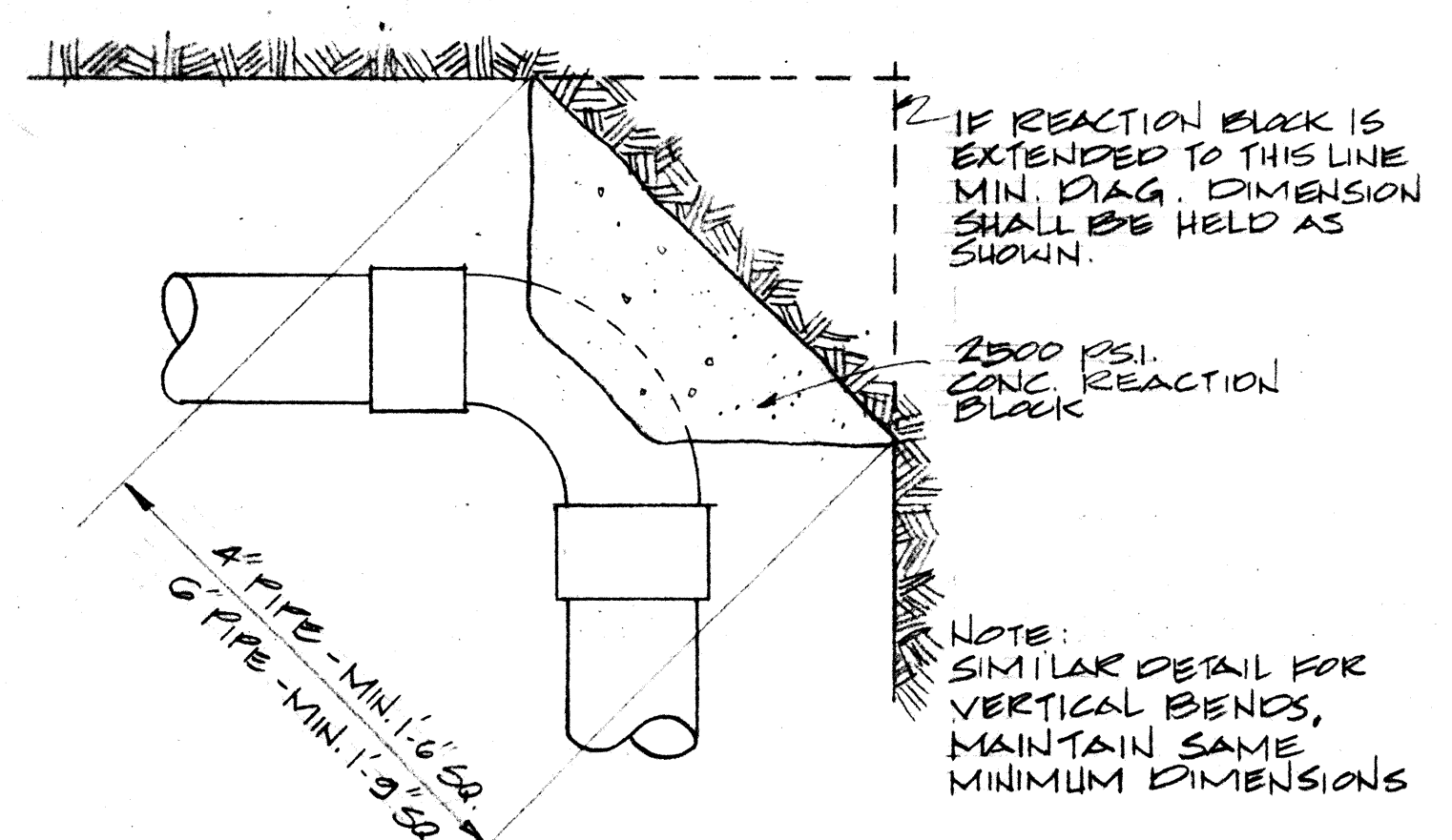
TYPICAL SLIP-ON CONNECTION OPTION
SCALE: 3"=1'-0"



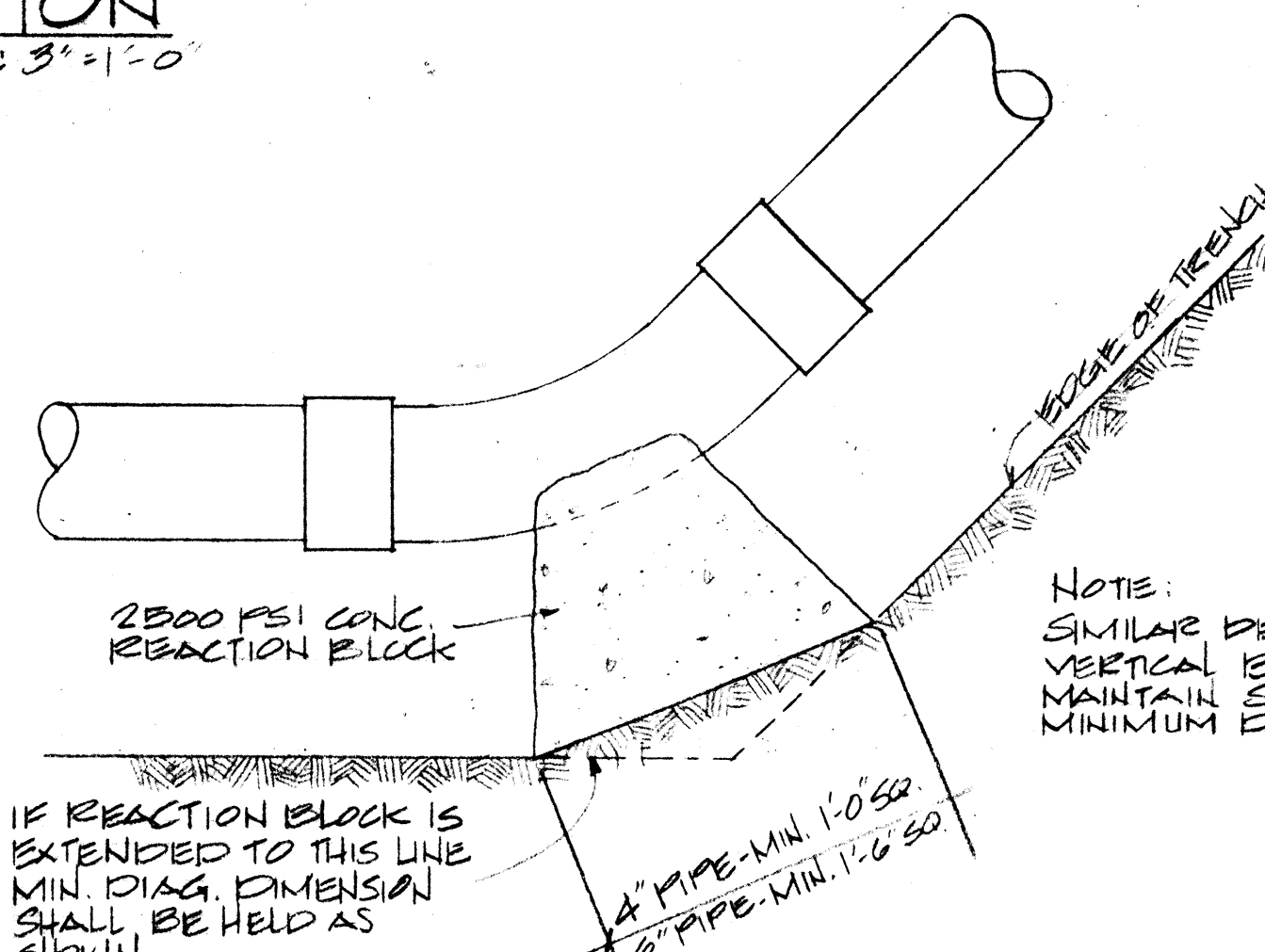
10" LONG SLEEVE COUPLING FOR 6" DUCTILE IRON PIPE
SCALE: 3"=1'-0" INCID. TO PIPING



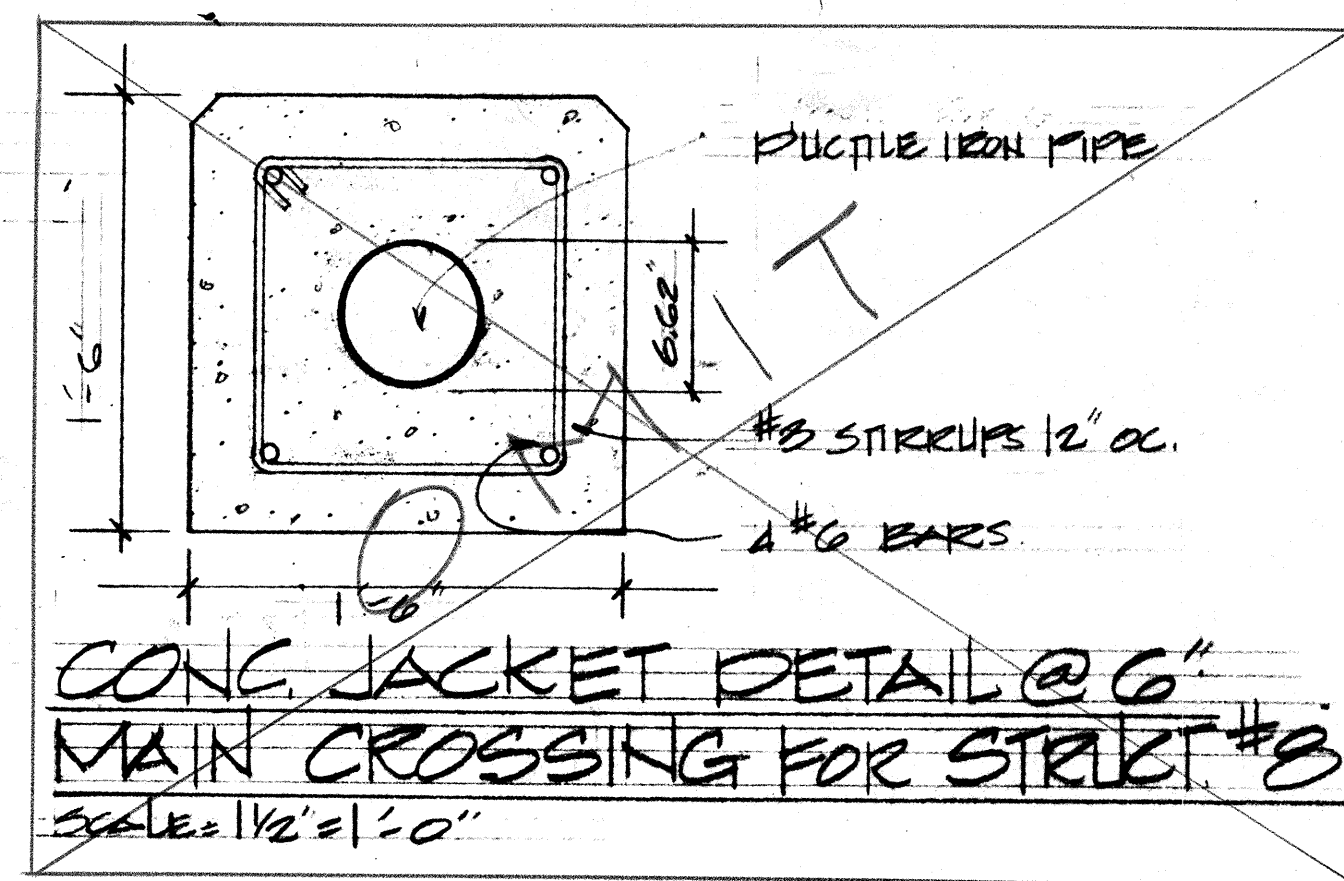
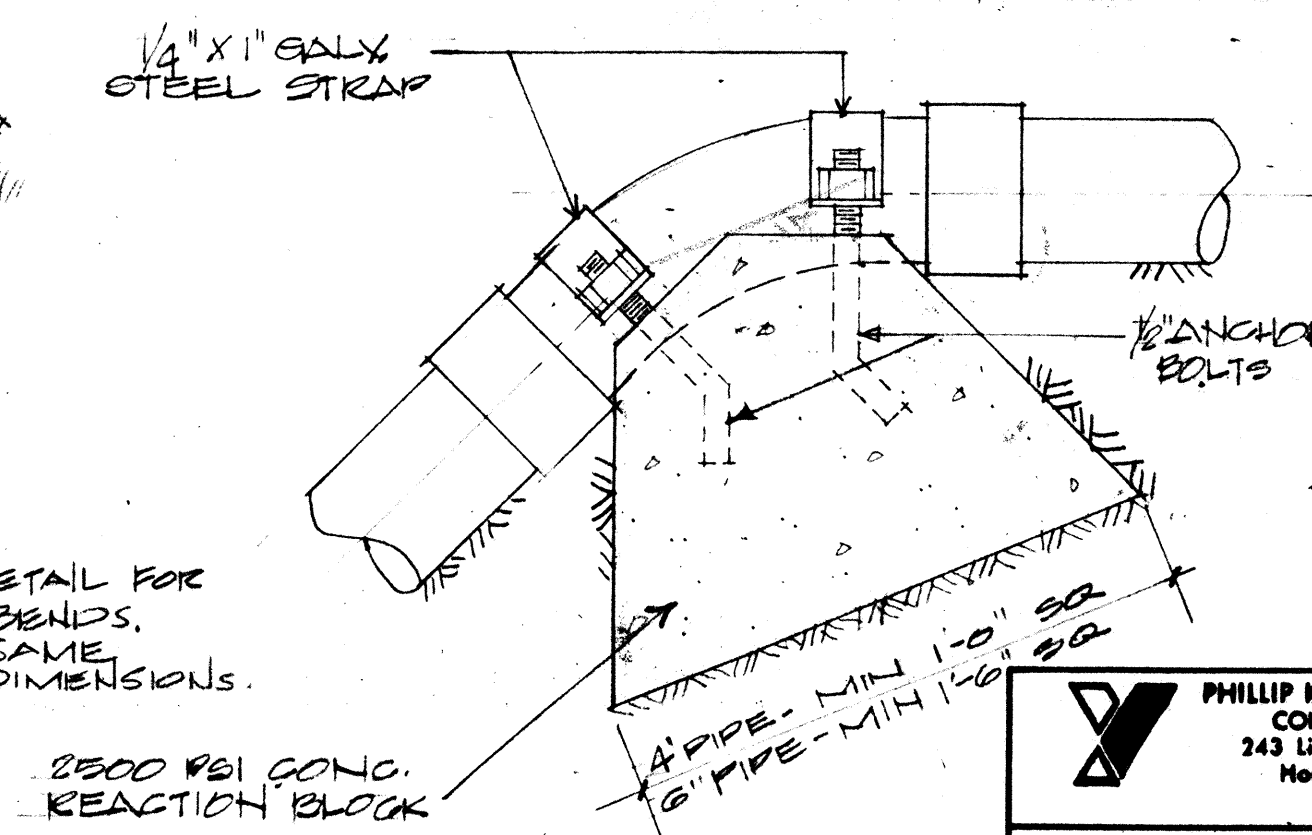
STRAP DETAIL FOR 6" DUCTILE IRON PIPE @ BRIDGE STRUCTURE
SCALE: 3"=1'-0" INCID. TO PIPING



TYPICAL REACTION BLOCK @ ELL
NOT TO SCALE INCID. TO PIPING



TYPICAL REACTION BLOCK @ 45° BEND
NOT TO SCALE INCID. TO PIPING



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

DATE	_____
SURVEY MONITOR BY	_____
DRAWN BY	_____
CHECKED BY	_____
NOTED BY	_____
NO.	_____

PHILIP K. H. YEE & ASSOCIATES
CONSULTING ENGINEERS
243 Liliuokalani Ave., Rm. 101
Honolulu, Hawaii 96813

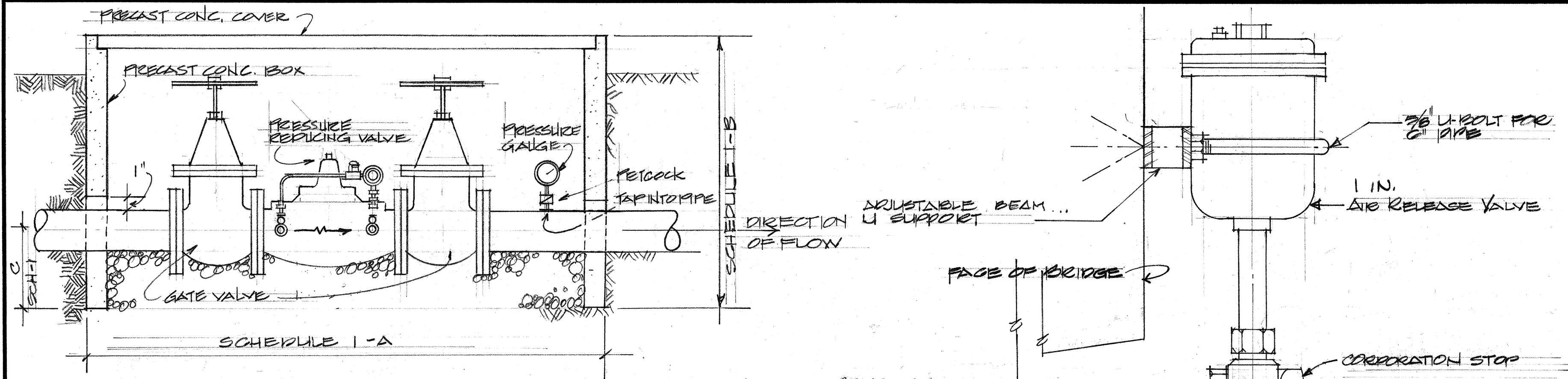
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAI'AWA INTERCHANGE
WATER SPRINKLER SYSTEM
PROJ # I-H-1(97)8

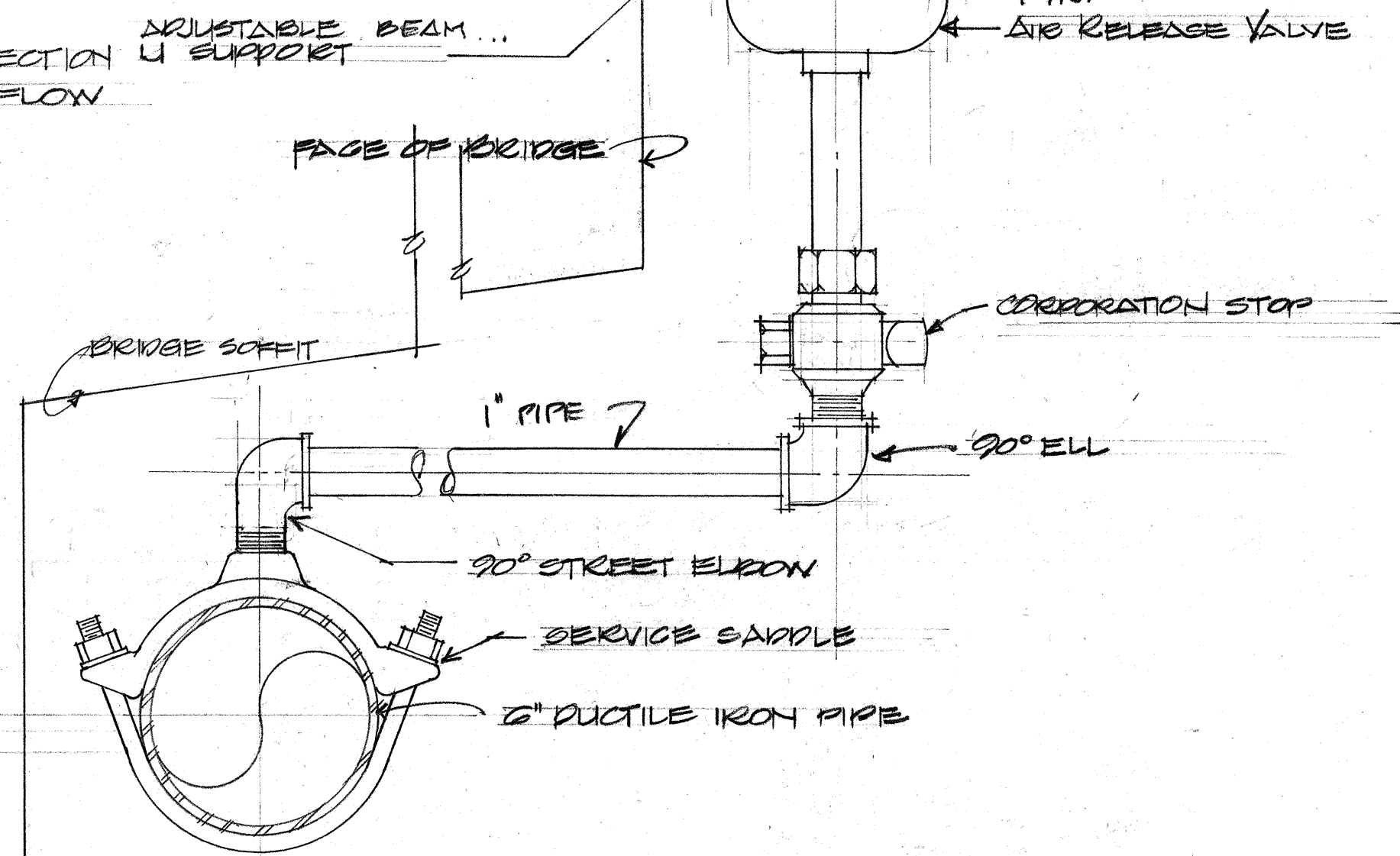
MISCELLANEOUS PIPING DETAILS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(97):8	1973	13	27



NOTE: ① PRESSURE SHALL BE ADJUSTED TO THE MAGNITUDE SPECIFIED FOR ② PARTICULAR LOCATION WHILE SPRINKLERS ARE IN OPERATION
③ 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.



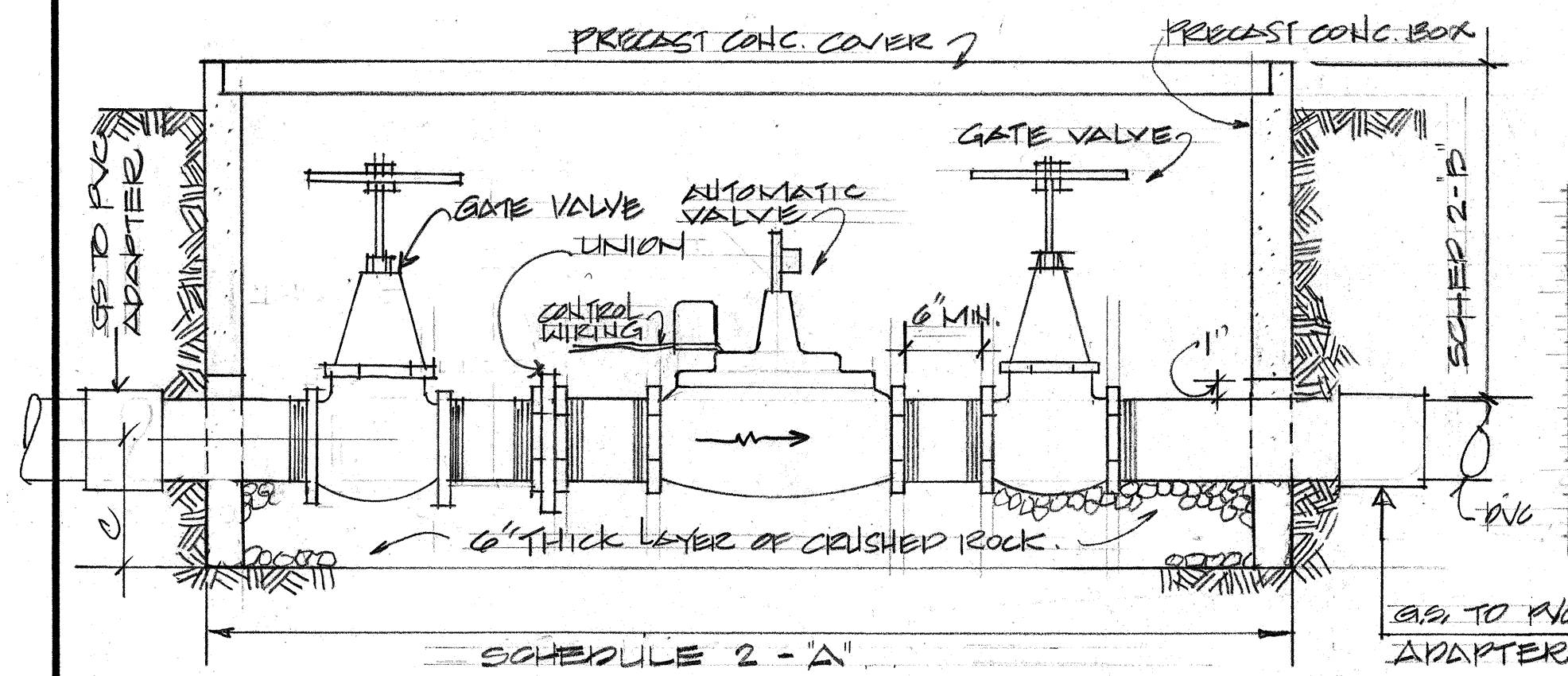
K TYPICAL AIR RELEASE VALVE AT BRIDGE
SCALE: 3" = 1'-0"

SCHEDULE 1					
SIZE	FLANGE	SCREW	A	B	BOX WIDTH
1 1/2"	3'-5"	1'-2"	4'-0"	1'-2"	3" 2'-0"
2"	3'-5"	1'-2"	4'-0"	1'-2"	4" 2'-0"
2 1/2"	3'-10"	1'-2"			4" 2'-0"
3"	3'-10"	1'-2"			4" 2'-0"
4"	4'-0"	1'-8"			6" 3'-0"
6"	4'-0"	2'-0"			6" 3'-0"

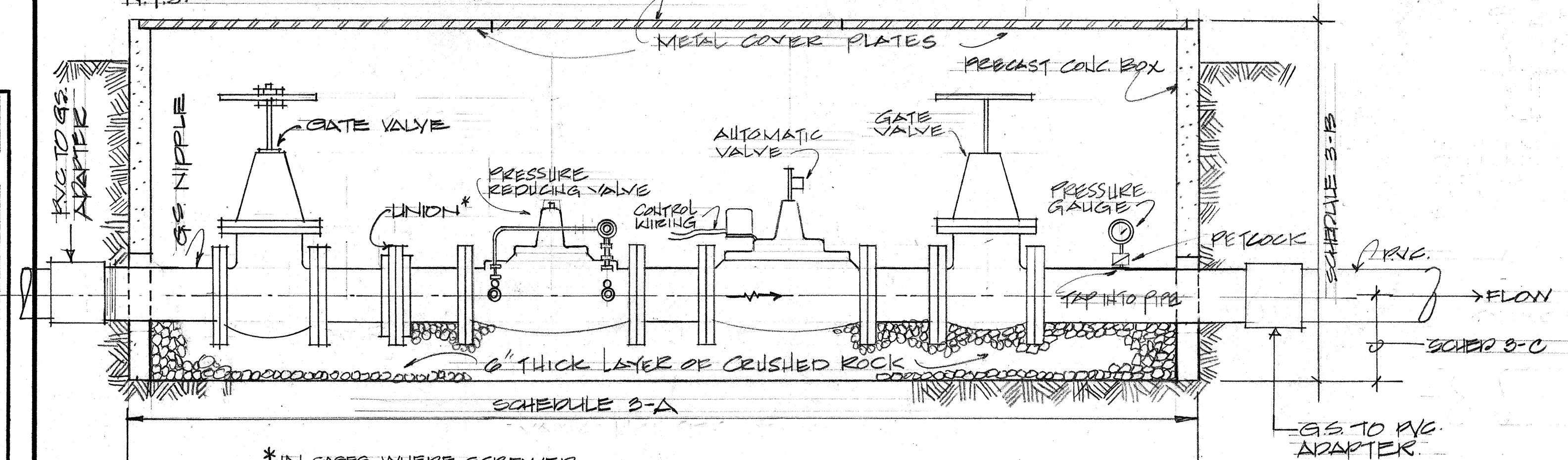
SCHEDULE 2					
SIZE	FLANGE	SCREW	A	B	BOX WIDTH
1 1/2"	3'-0"	1'-2"	4'-0"	1'-2"	3" 2'-0"
2"	3'-0"	1'-2"	4'-4"	1'-2"	4" 2'-0"
2 1/2"	3'-0"	1'-2"			4" 2'-0"
3"	3'-0"	1'-6"			4" 2'-0"
4"	4'-4"	1'-8"			6" 3'-0"

SCHEDULE 3					
SIZE	FLANGE	SCREW	A	B	BOX WIDTH
1 1/2"	3'-0"	1'-2"	4'-0"	1'-2"	3" 2'-0"
2"	4'-0"	1'-2"	5'-4"	1'-2"	4" 2'-0"
2 1/2"	4'-0"	1'-2"			4" 2'-0"
3"	4'-0"	1'-2"			4" 2'-0"
4"	5'-0"	1'-8"			6" 3'-0"

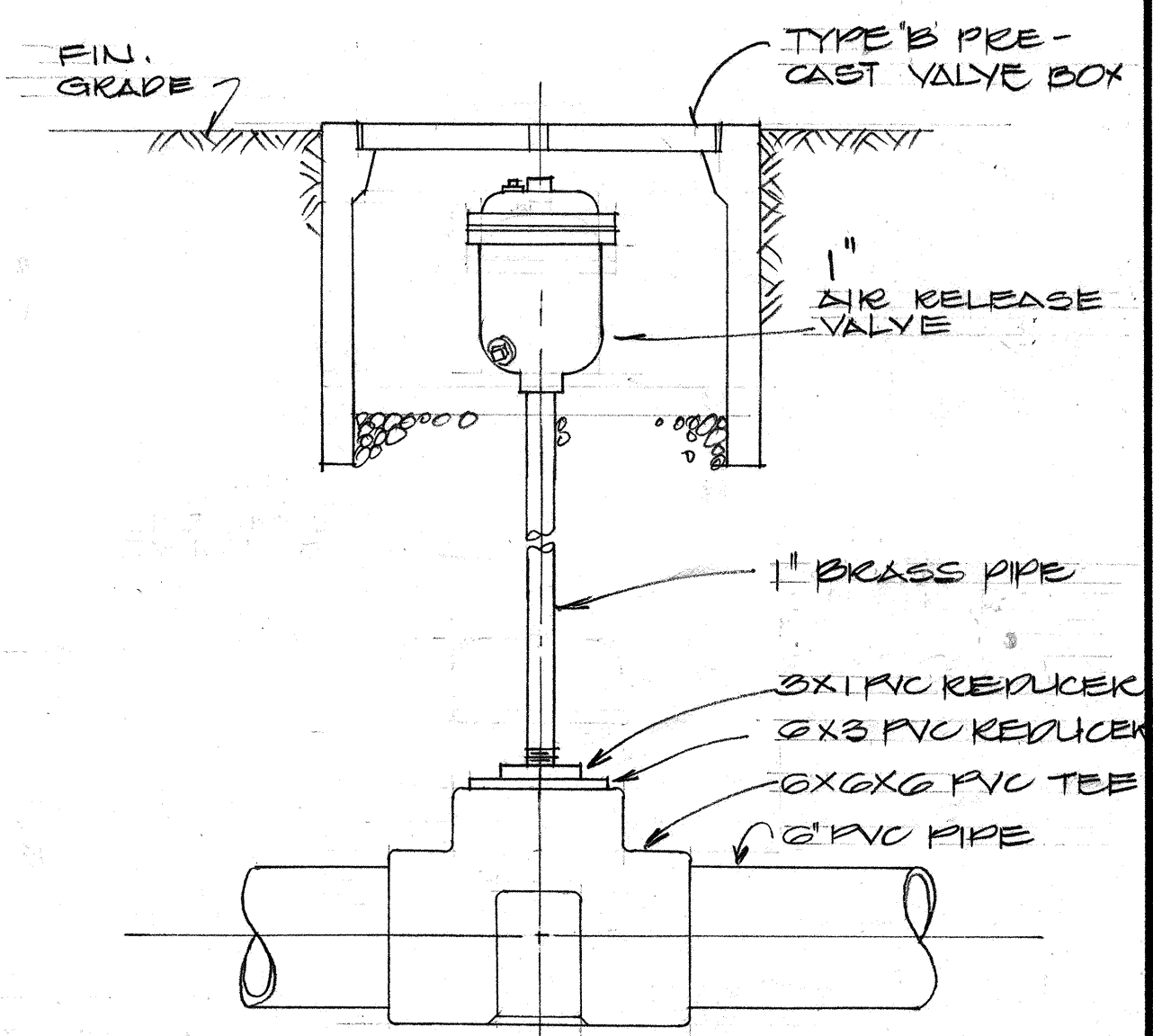
VALVE BOX SIZE SCHEDULE



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



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



J TYP. AIR RELEASE DET.
NOT TO SCALE

PHILLIP K. H. 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

WAIAWA INTERCHANGE
WATER SPRINKLER SYSTEM
PROJ # I-HI-1(97):8

MISCELLANEOUS DETAILS