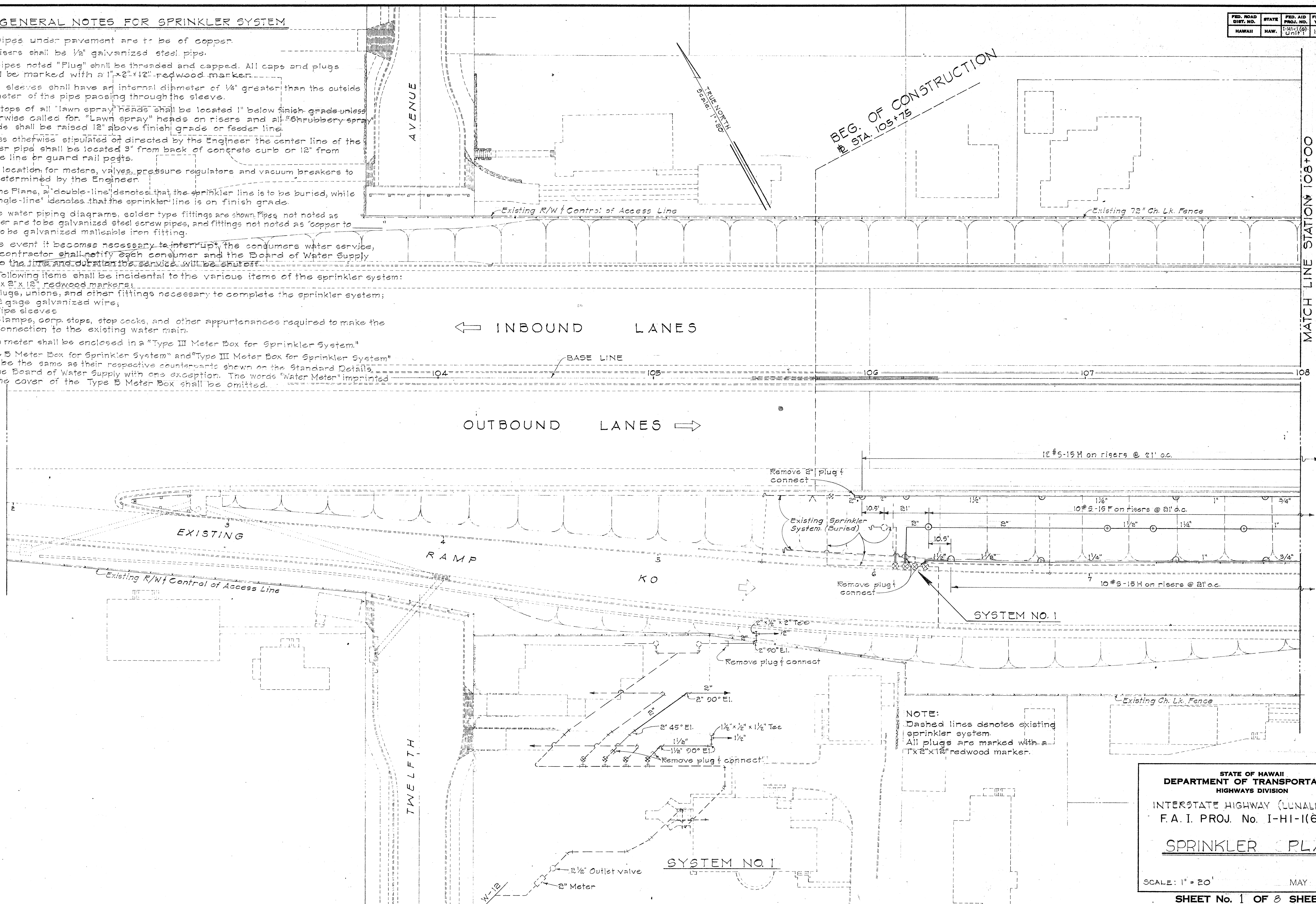


GENERAL NOTES FOR SPRINKLER SYSTEM

- All pipes under pavement are to be of copper.
- All risers shall be 1/2" galvanized steel pipe.
- All pipes noted "Plug" shall be threaded and capped. All caps and plugs shall be marked with a 1"x2"x12" redwood marker.
- Pipe sleeves shall have an internal diameter of 1/4" greater than the outside diameter of the pipe passing through the sleeve.
- The tops of all "lawn spray" heads shall be located 1" below finish grade unless otherwise called for. "Lawn spray" heads on risers and all "Shrubbery spray" heads shall be raised 12" above finish grade or feeder line.
- Unless otherwise stipulated or directed by the Engineer the center line of the feeder pipe shall be located 3" from back of concrete curb or 12" from fence line or guard rail posts.
- Final location for meters, valves, pressure regulators and vacuum breakers to be determined by the Engineer.
- On the Plans, a "double-line" denotes that the sprinkler line is to be buried, while a "single-line" denotes that the sprinkler line is on finish grade.
- In the water piping diagrams, solder type fittings are shown. Pipes not noted as copper are to be galvanized steel screw pipes, and fittings not noted as "copper" are to be galvanized malleable iron fitting.
- In the event it becomes necessary to interrupt the consumers water service, the contractor shall notify each consumer and the Board of Water Supply as to the time and duration the service will be shut off.
- The following items shall be incidental to the various items of the sprinkler system:
 - 1"x2"x12" redwood markers;
 - Plugs, unions, and other fittings necessary to complete the sprinkler system;
 - 12 gage galvanized wire;
 - Pipe sleeves;
 - Clamps, corp. stops, stop cocks, and other appurtenances required to make the connection to the existing water main.
- Each meter shall be enclosed in a "Type III Meter Box for Sprinkler System."
- "Type B Meter Box for Sprinkler System" and "Type III Meter Box for Sprinkler System" shall be the same as their respective counterparts shown on the Standard Details of the Board of Water Supply with one exception. The words "Water Meter" imprinted on the cover of the Type B Meter Box shall be omitted.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-11-1(6)	1965	89	129



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

INTERSTATE HIGHWAY (LUNALILO FWY)
F.A.I. PROJ. No. I-HI-1(6) UNIT 1

SPRINKLER PLAN

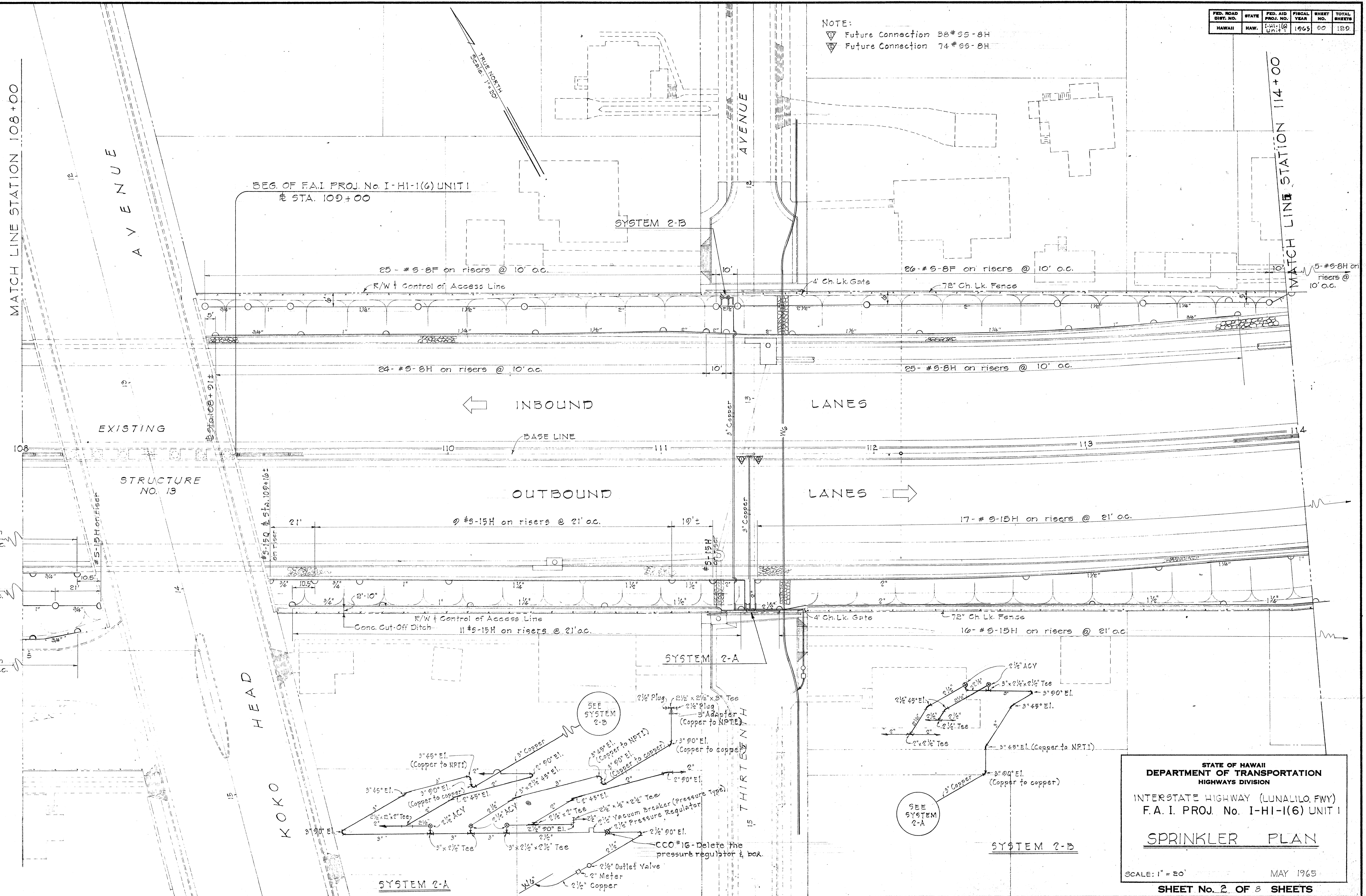
SCALE: 1" = 20' MAY 1965

SHEET No. 1 OF 8 SHEETS

ORIGINAL PLAN	DATE
DRAWN BY	1964
DESIGNED BY	
NOTED BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	101-1(6)	1965	02	120

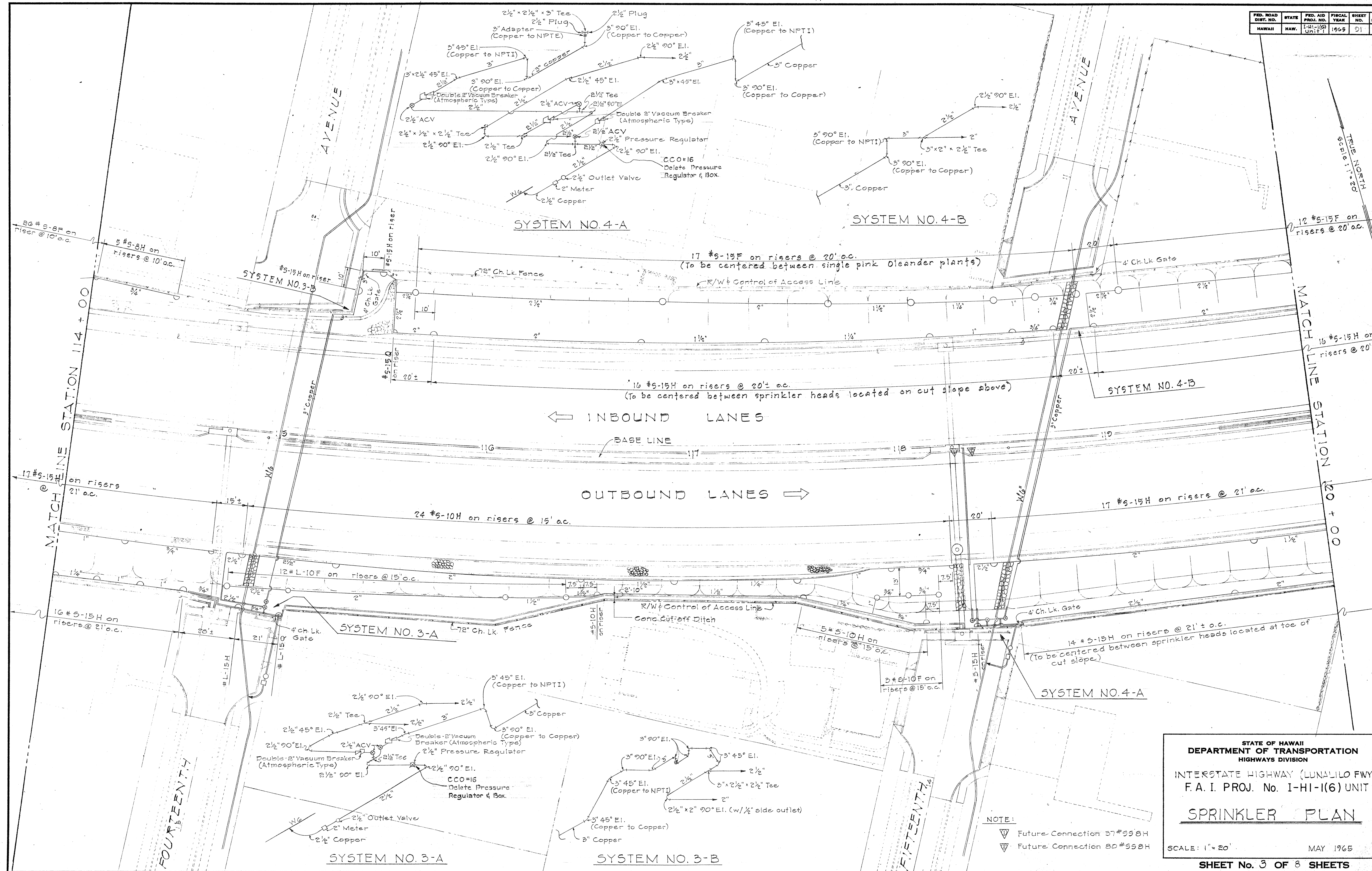
NOTE:
 ▽ Future Connection 38#SS-BH
 ▽ Future Connection 74#SS-BH



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
TRACED BY		
QUANTITIES BY		
CHECKED BY		

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
 INTERSTATE HIGHWAY (LUNALILO Fwy)
 F.A.I. PROJ. No. I-HI-1(6) UNIT I
SPRINKLER PLAN
 SCALE: 1" = 20'
 MAY 1965
SHEET No. 2 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-1(16) UNIT 1	1965	01	129



DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
NOTED BY	_____
CHECKED BY	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

INTERSTATE HIGHWAY (LUNALILO FWY)
F.A.I. PROJ. No. I-HI-1(16) UNIT 1

SPRINKLER PLAN

SCALE: 1" = 20' MAY 1965

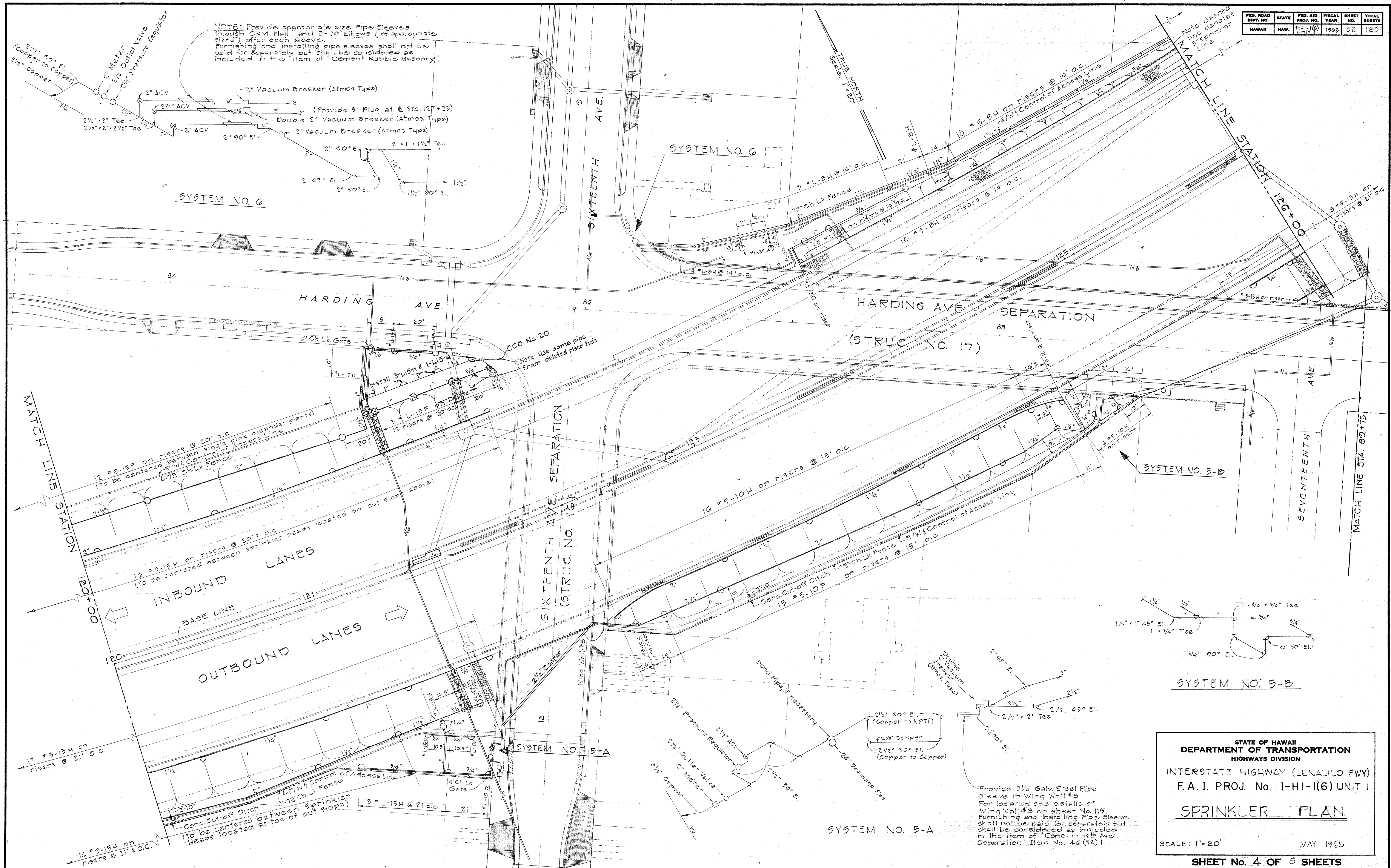
SHEET No. 3 OF 8 SHEETS

NOTE:

▽ Future Connection 37#558H

▽ Future Connection 80#558H

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-1(G) Unit 1	1965	02	120



ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
NOTE BOOK	DRAWN BY _____	4
	TRACED BY _____	4
	DESIGNED BY _____	4
	QUANTITIES BY _____	4
No. _____	CHECKED BY _____	4

PRINTED ON NO. 1000H CLEARPRINT

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

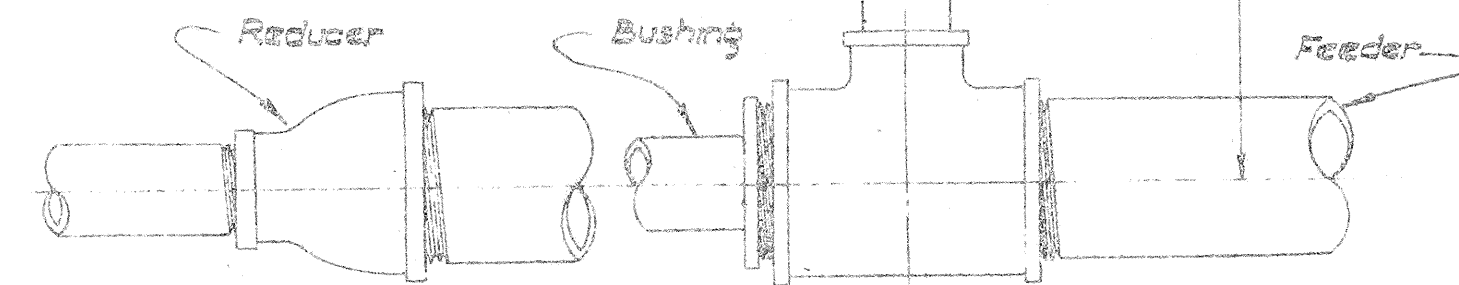
INTERSTATE HIGHWAY (LUNALILO FWY)
F.A.I. PROJ. No. I-HI-1(6) UNIT 1

SPRINKLER PLAN

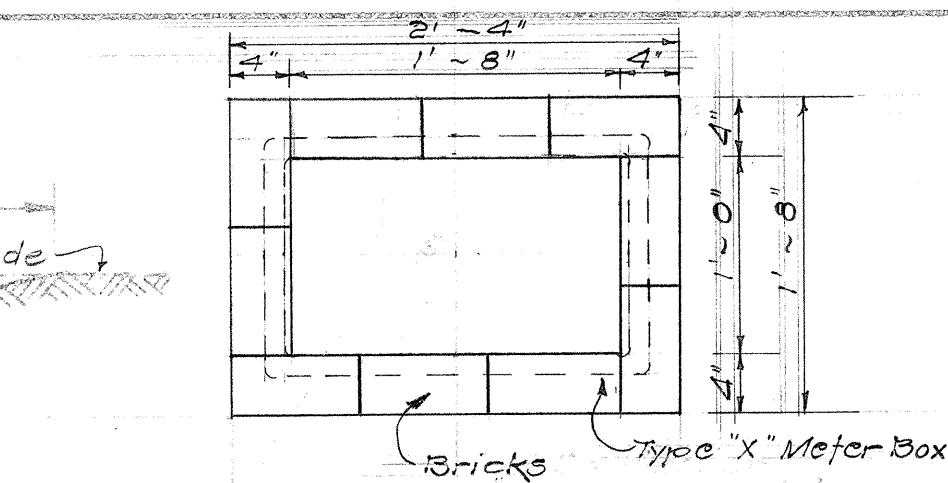
SCALE: 1" = 20' MAY 1965

SHEET No. 4 OF 8 SHEETS

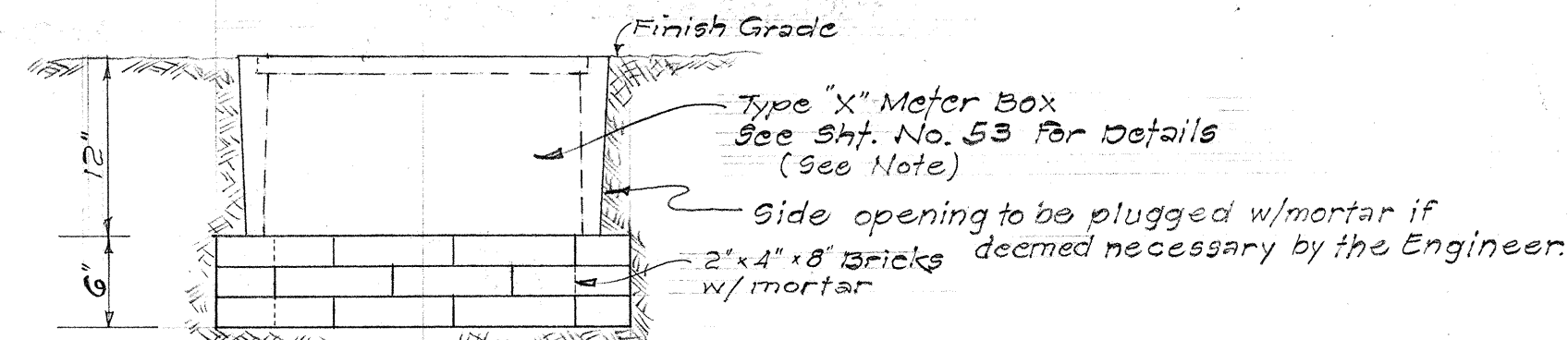
Note: Reducer or Bushing not required in every case. Reducing Tee may be used. All lawn heads shall be located 1" below finish grade as shown unless otherwise called for on the plans.



DETAIL OF LAWN HEAD AND CONNECTION OF SPRINKLER HEAD TO FEEDER PIPE
Not to Scale



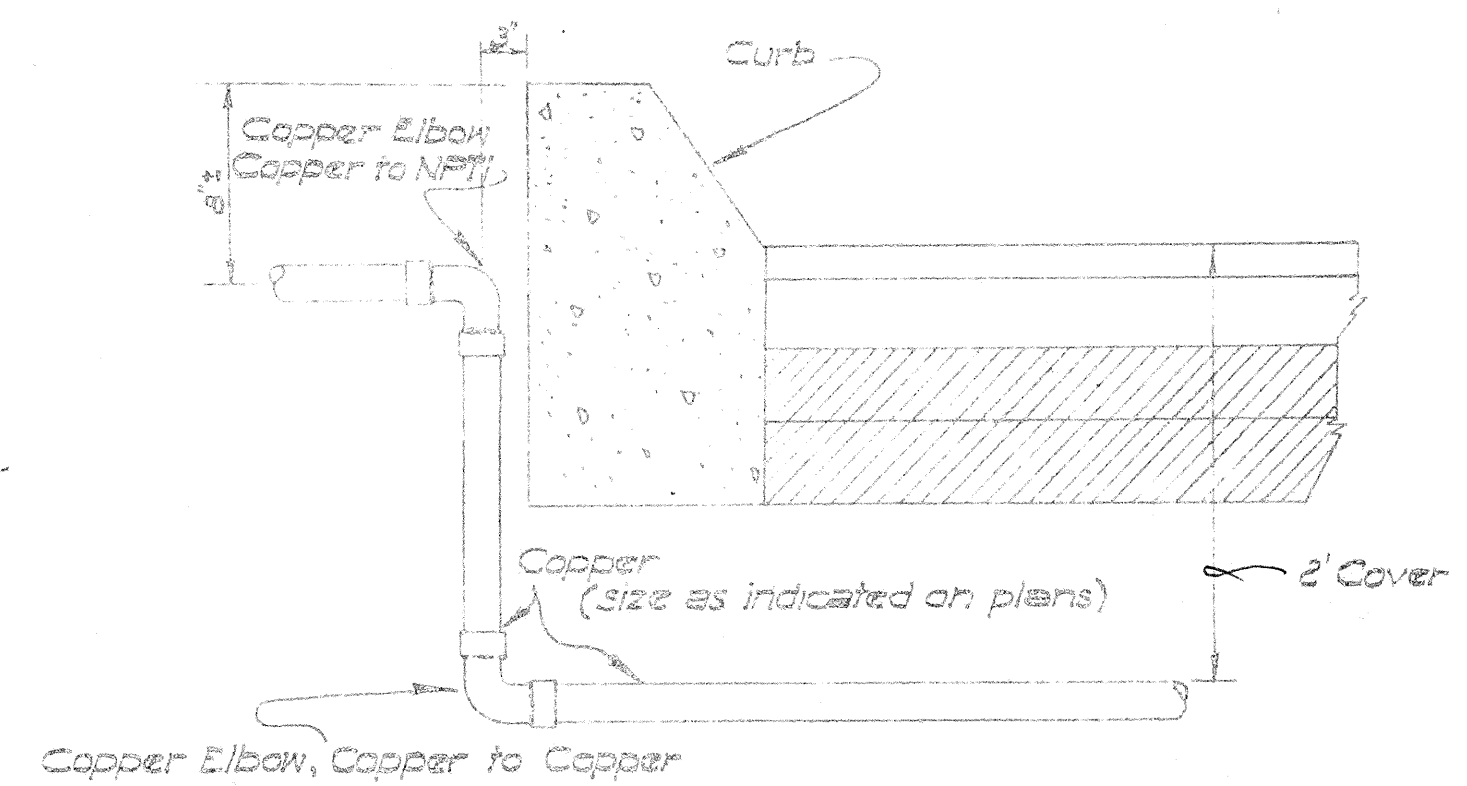
PLAN



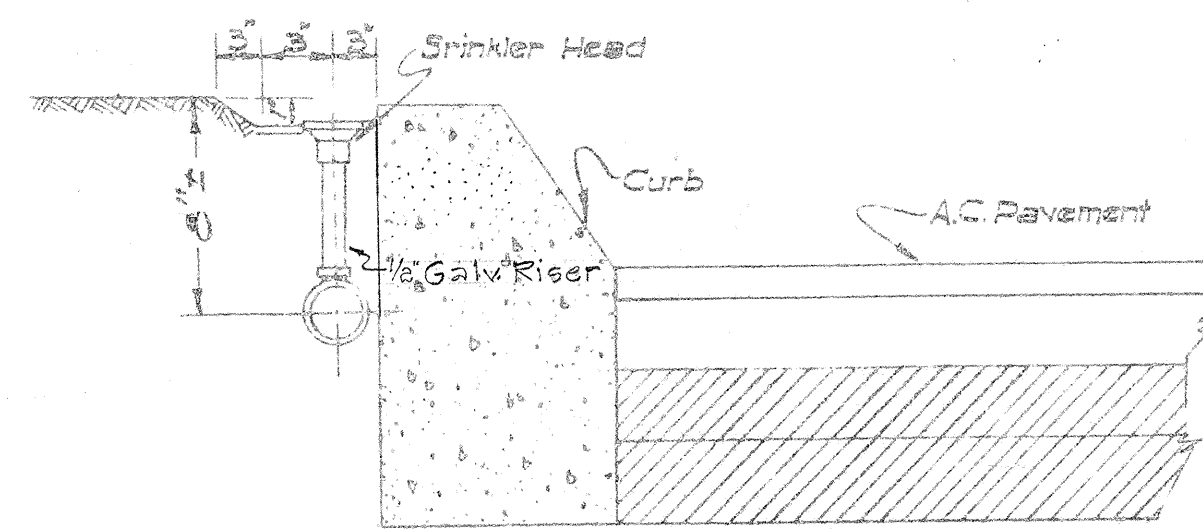
ELEVATION

PRESSURE REGULATOR BOX
Not to Scale

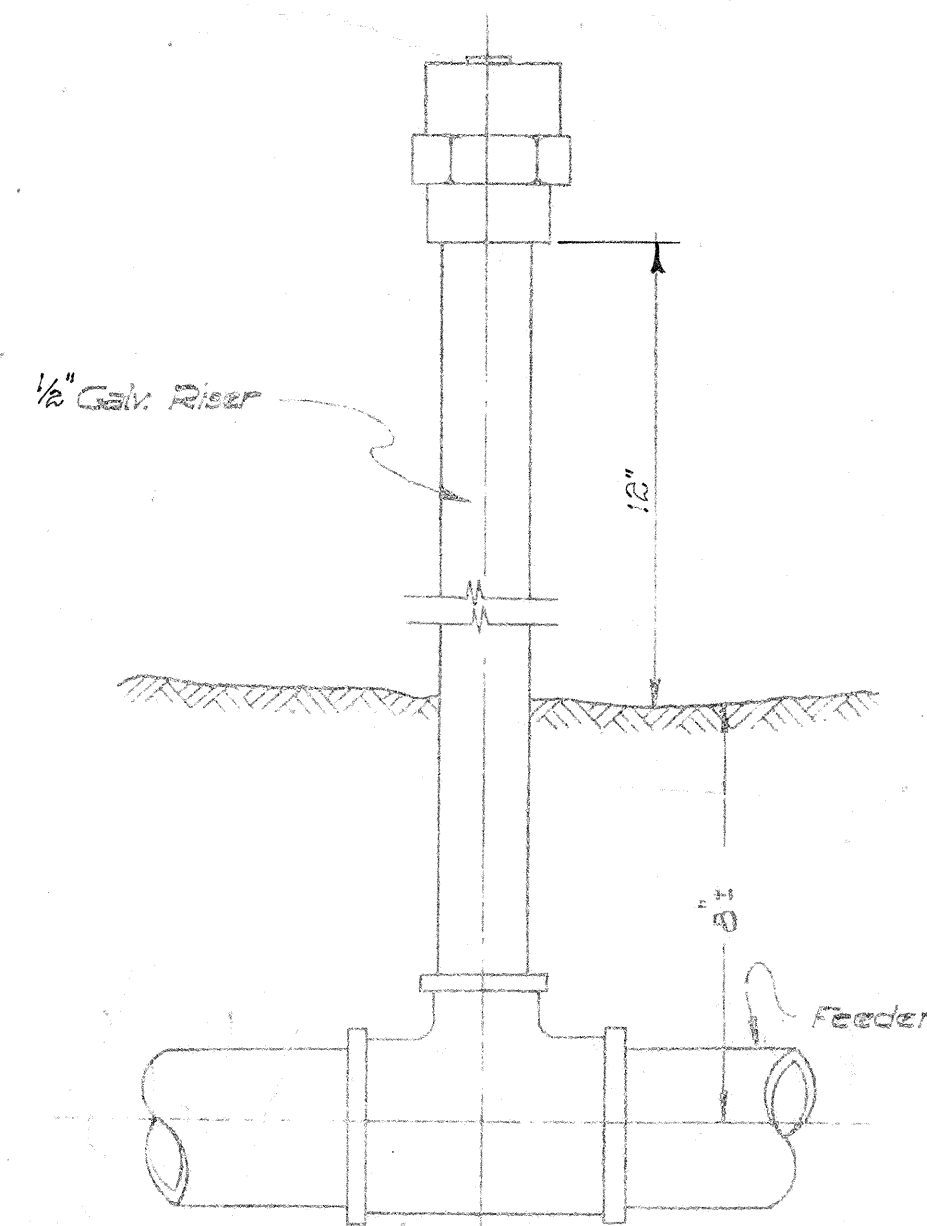
Note: Do not imprint "Board of Water Supply" and "Water Meter" on the Cast Iron Cover. Side openings shall be provided to correspond to the location of the regulator inlet and outlet.



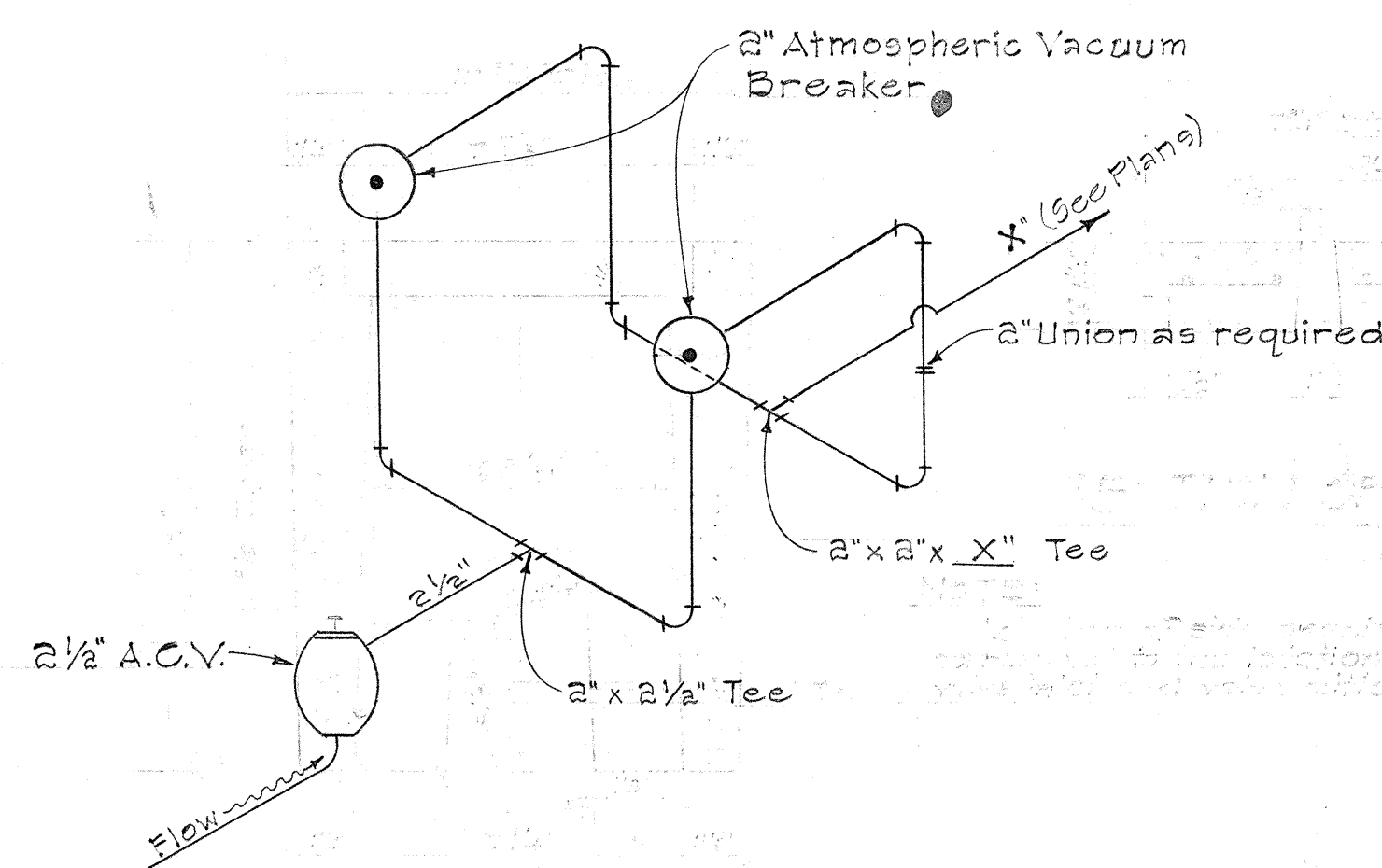
TYPICAL DETAIL OF ROADWAY CROSSING
Not to Scale



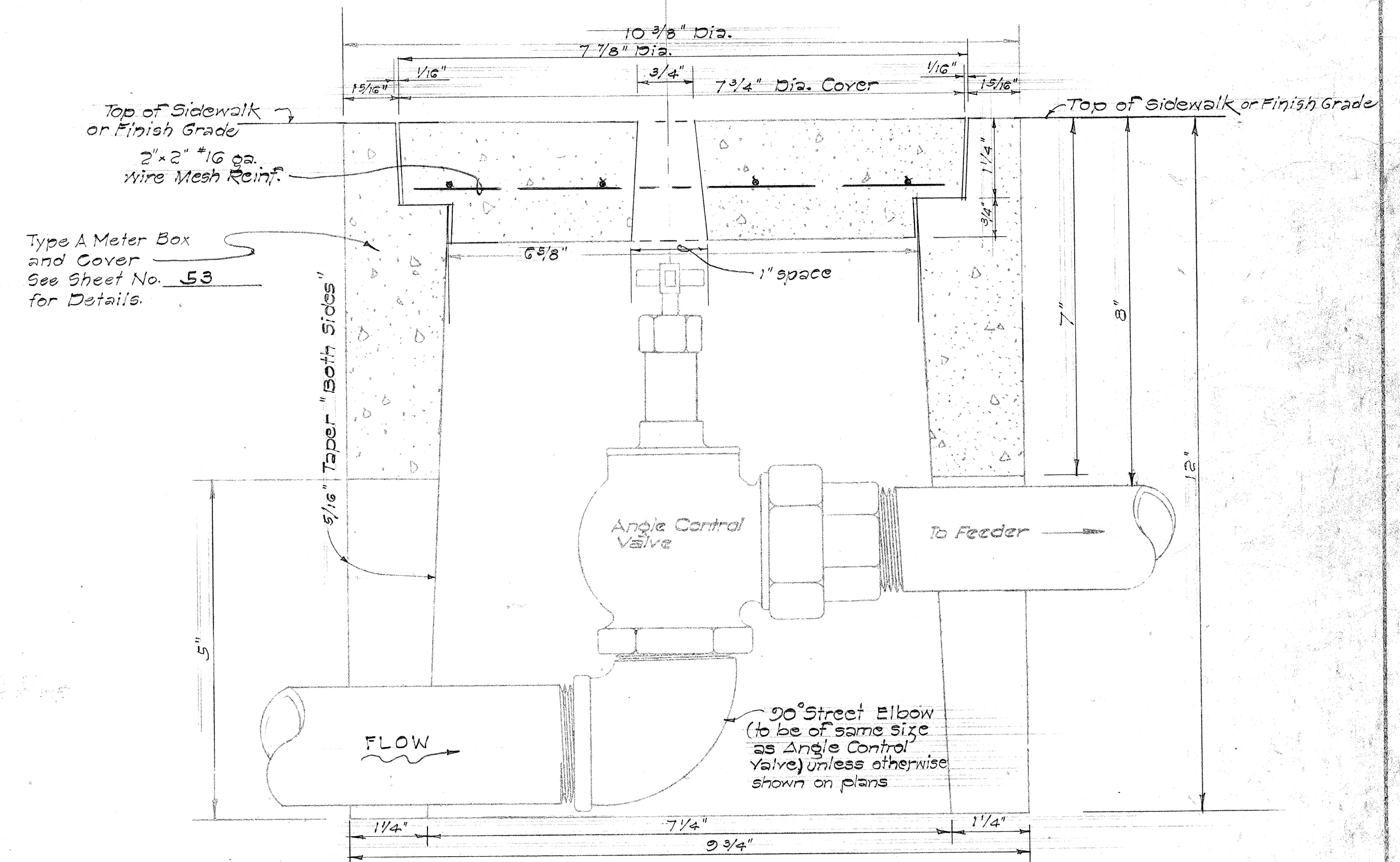
TYPICAL DETAIL OF LAWN HEAD AT CONC. CURB
Not to Scale



DETAIL OF SHRUBBERY HEAD
Not to Scale



DOUBLE 2" VACUUM BREAKER (ATMOSPHERIC TYPE)
Not to Scale



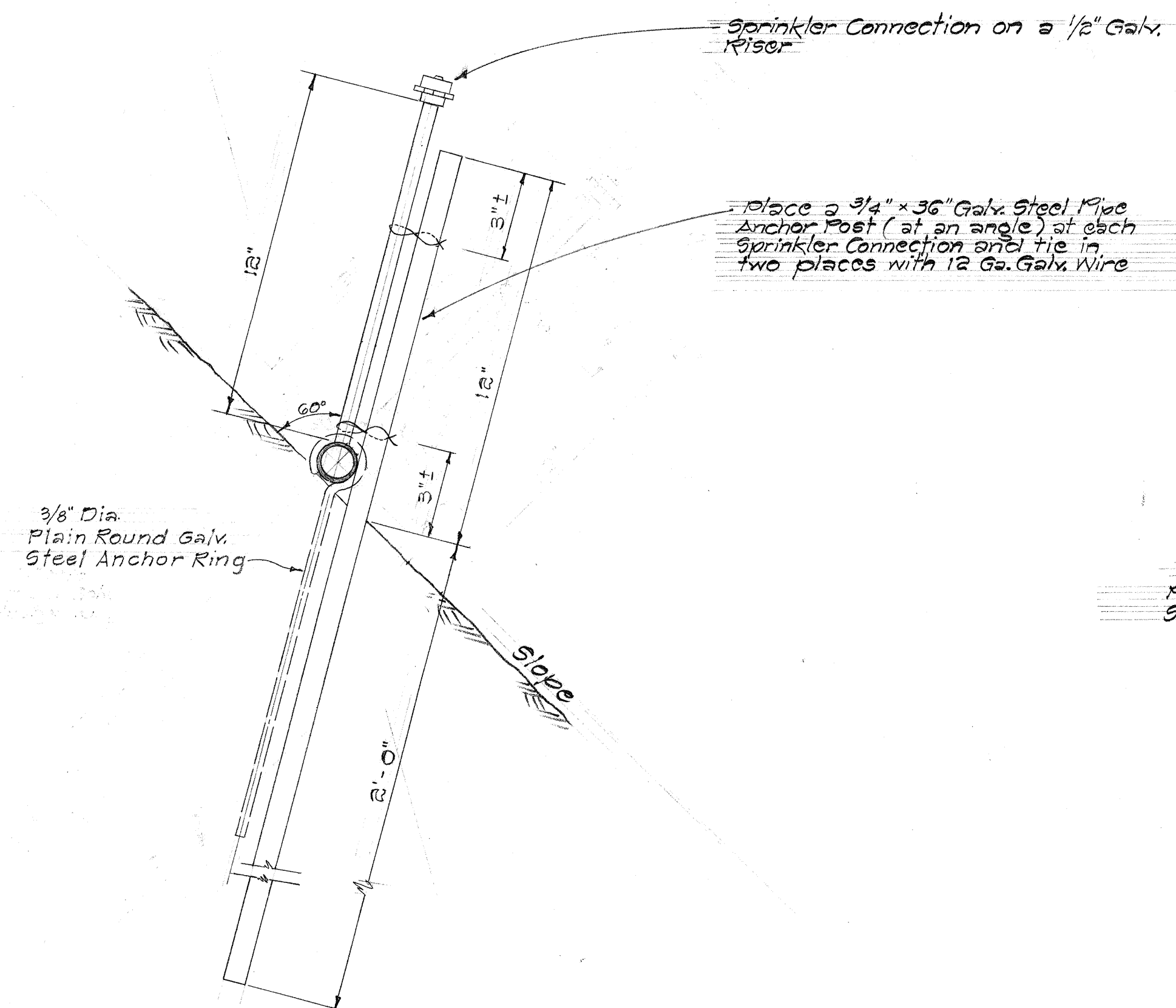
PRECAST CONCRETE ANGLE CONTROL VALVE BOX
Not to Scale

- NOTES:
- 1) Location of side openings shall correspond to the location of the valve inlet and valve outlet.
 - 2) When the angle control valve is located in the sidewalk area, the valve shall be located at a sufficient depth so as to allow the cover to be replaced with the valve wide open.

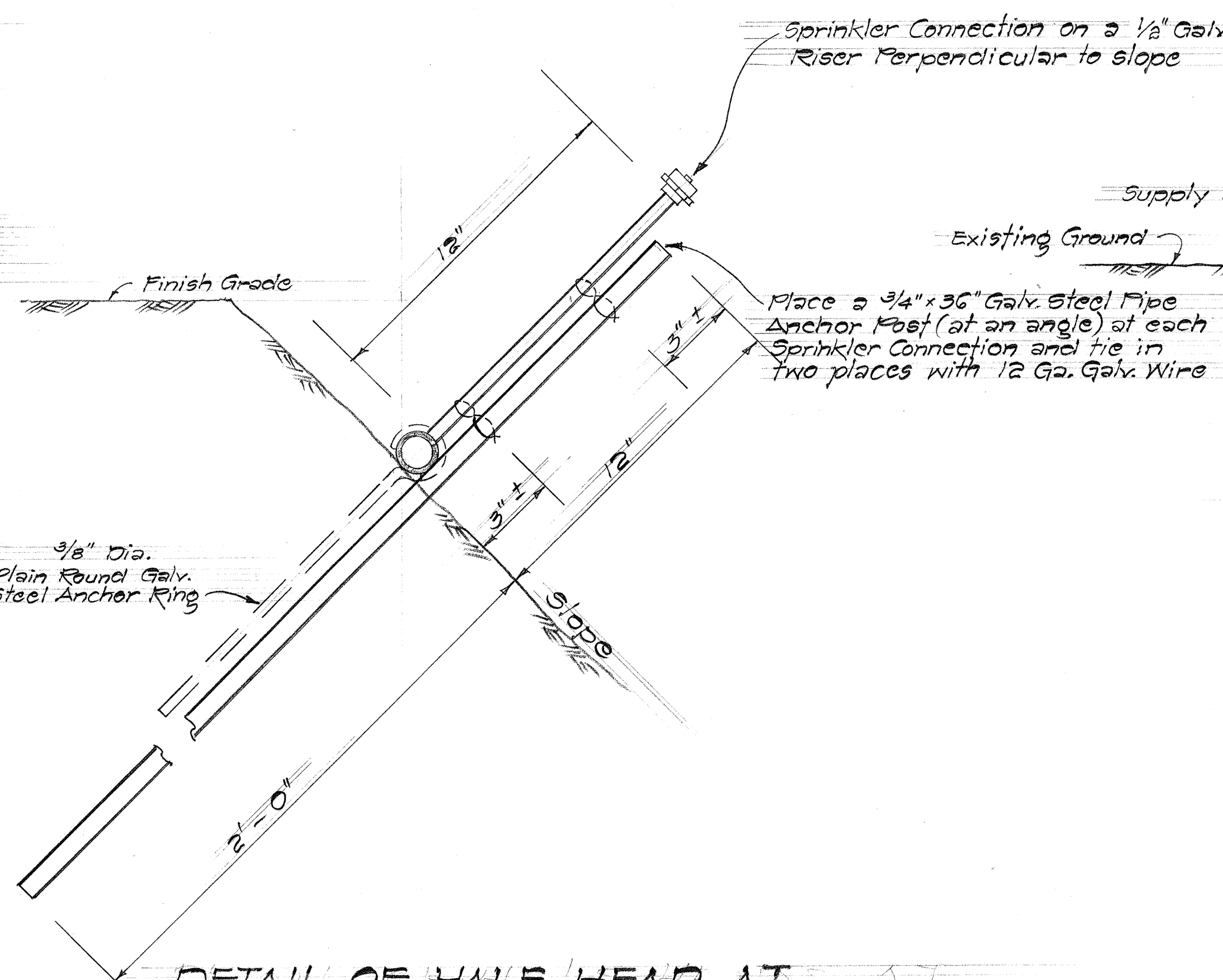
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STATE OF HAWAII
Interstate Highway (Lunalilo Fwy.)
F.A.I. Proj. No. I-H-1(6) UNIT 1
SPECIAL DETAILS
SPRINKLER PLAN
Not to Scale May, 1965

SHEET NO. 6 OF 8 SHEETS

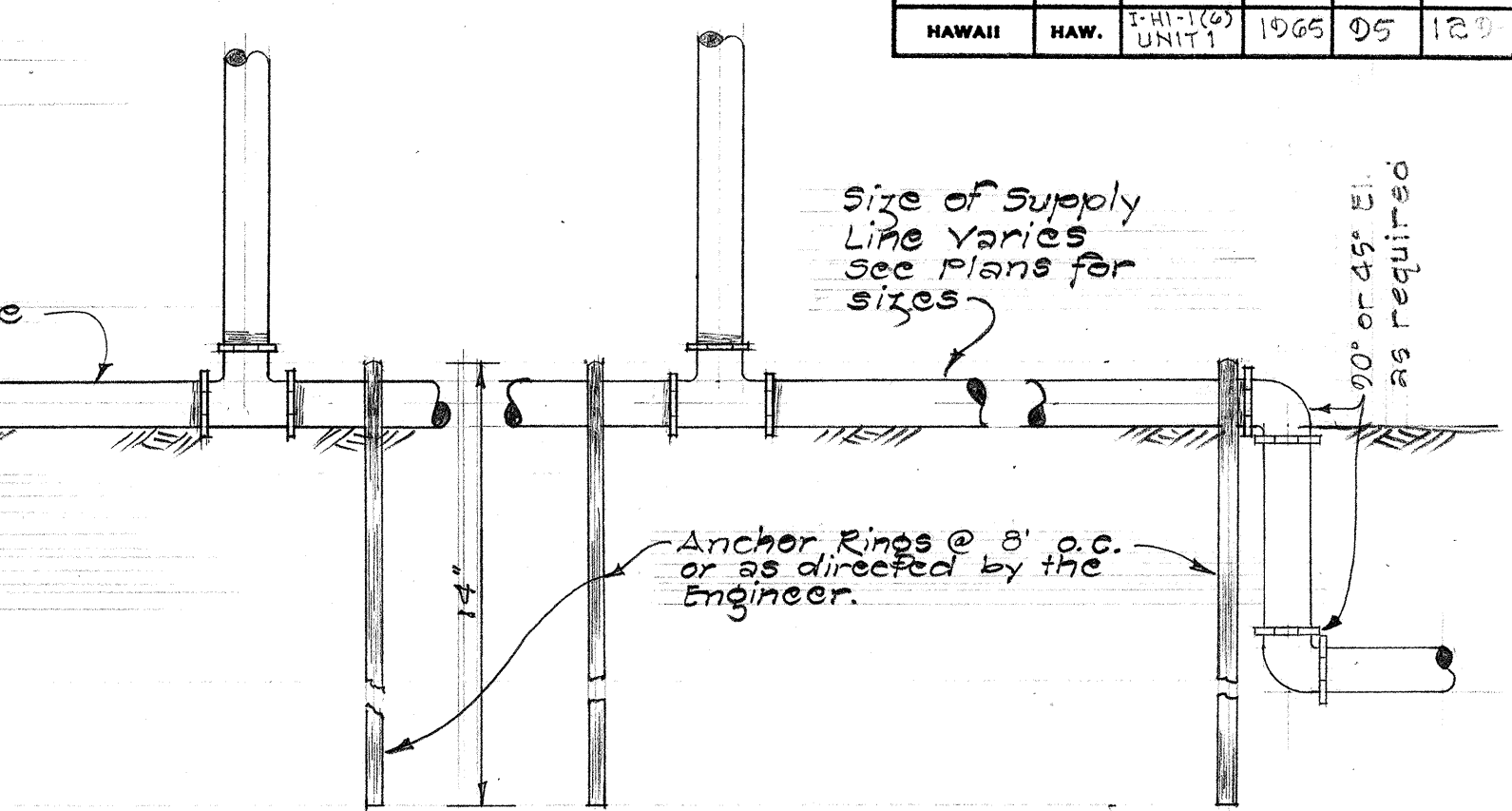
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(6) UNIT 1	1965	95	129



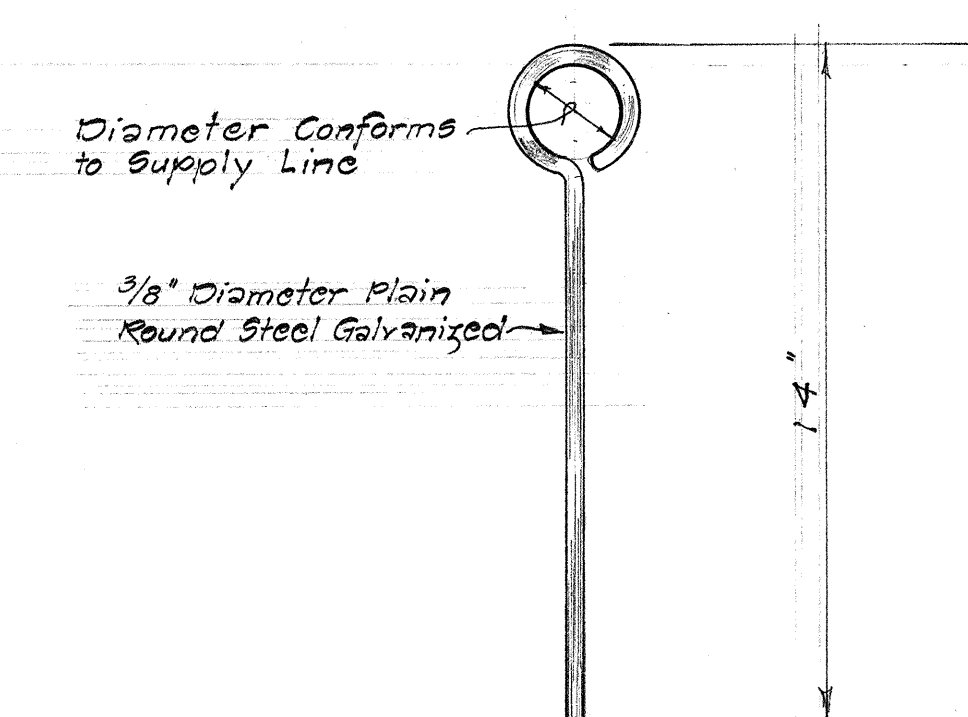
**TYPICAL DETAIL
SPRINKLER ALONG SLOPES**
Not to scale



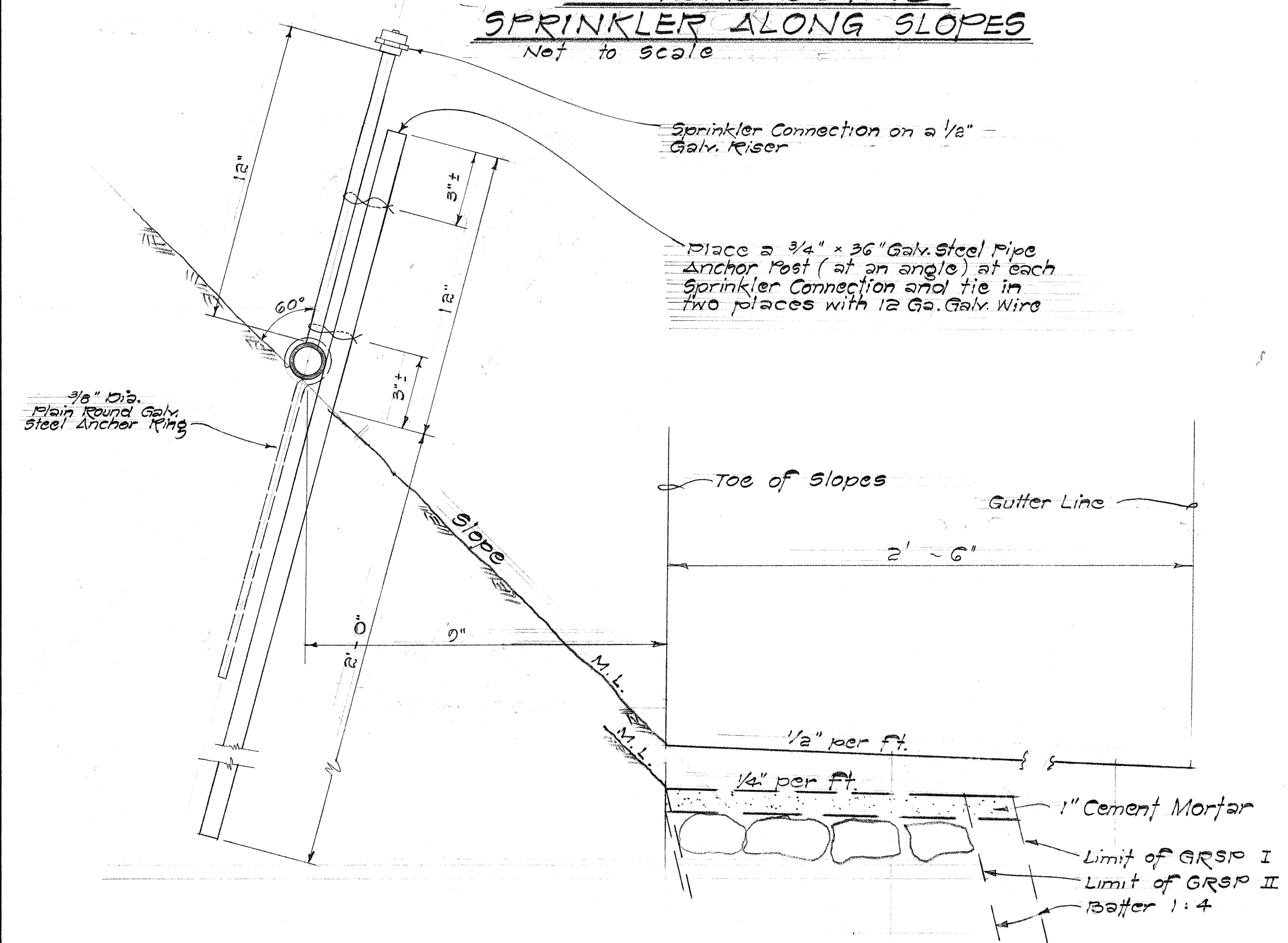
**DETAIL OF HALF HEAD AT
TOP OF SLOPES**
Not to scale



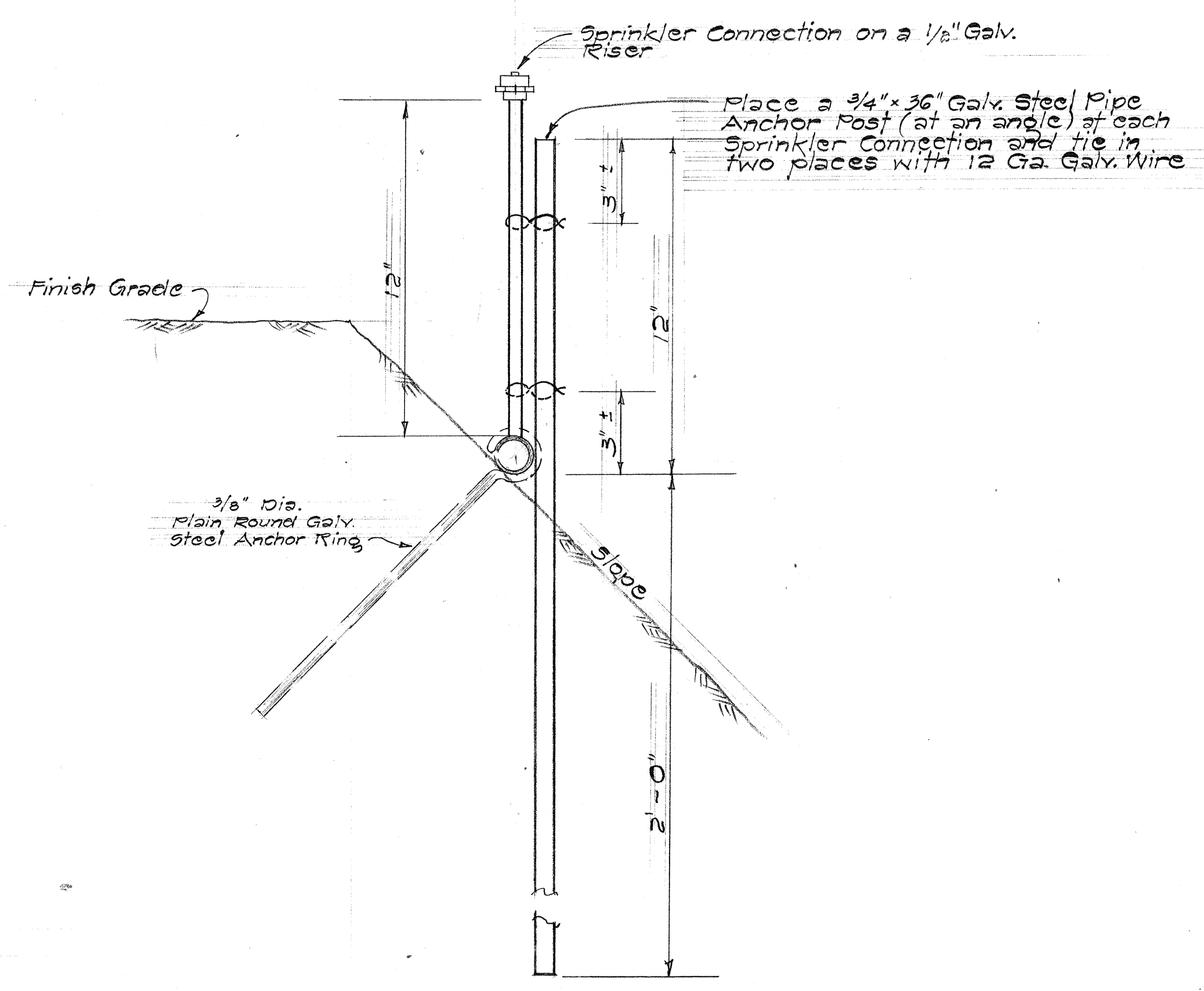
**TYPICAL DETAIL
SPRINKLER LINE ON FINISH GROUND**
Not to scale



ANCHOR RING
Not to scale



DETAIL OF SPRINKLER AT TOE OF SLOPES
Not to scale



DETAIL OF FULL HEAD AT TOP OF SLOPES
Not to scale

- NOTES:
- 12 Ga. galvanized wire shall be incidental to Anchor Post.
 - Final location of anchor rings to be determined in the field by the Engineer.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Interstate Highway (Lunalilo Fwy.)
F.A.I. Proj. No. I-HI-1(6) Unit 1

**SPECIAL DETAILS
SPRINKLER PLAN**

Not to scale May, 1965

SHEET No. 7 OF 8 SHEETS

[illegible]

* CHARACTERISTICS OF SPRINKLER HEADS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SUMMARY SHEET
SPRINKLER PLAN

INTERSTATE HIGHWAY (LUNALILLO FWY)
F.A.I. PROJ. NO. I-H-1-(16) UNIT I

MAY, 1965

SHEET No. 8 OF 8