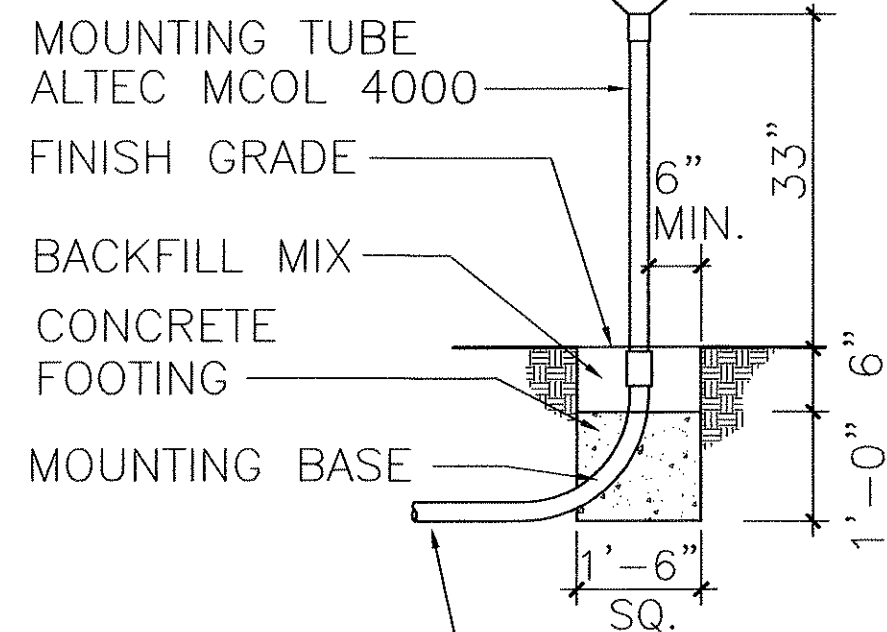


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-076-1(4)	1999	24	31

CONTROLLER, SEE IRRIGATION LEGEND



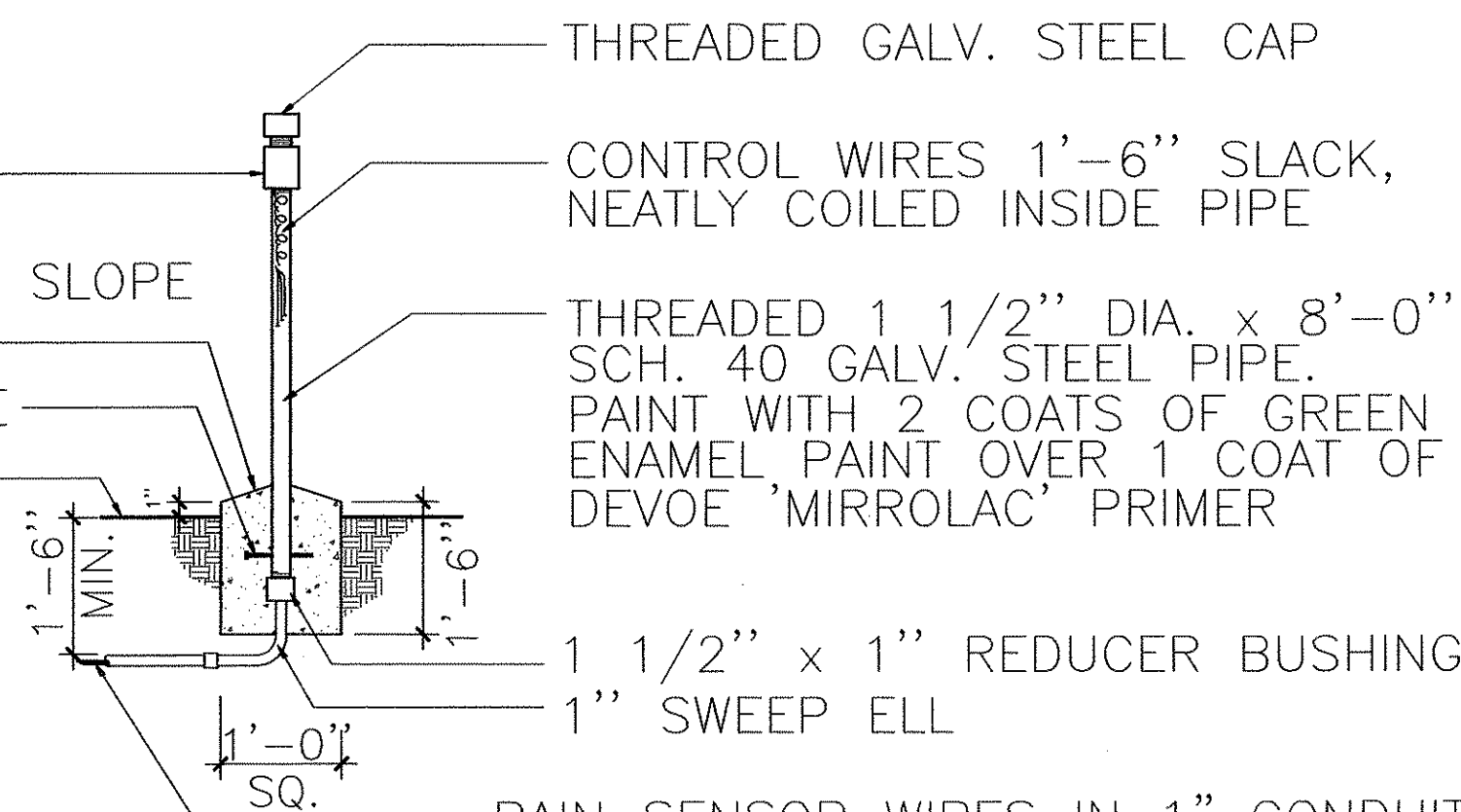
CONTROL WIRES, TYPE UF-600 V., AWG 14/1 IN 1" CONDUIT TO VALVES.

1 CONTROLLER

L-24 NOT TO SCALE

RAIN SENSOR, SEE IRRIGATION LEGEND SECURE TO PIPE

CONCRETE FOOTING, SLOPE AWAY FROM PIPE
BOLT THROUGH PIPE
FINISH GRADE

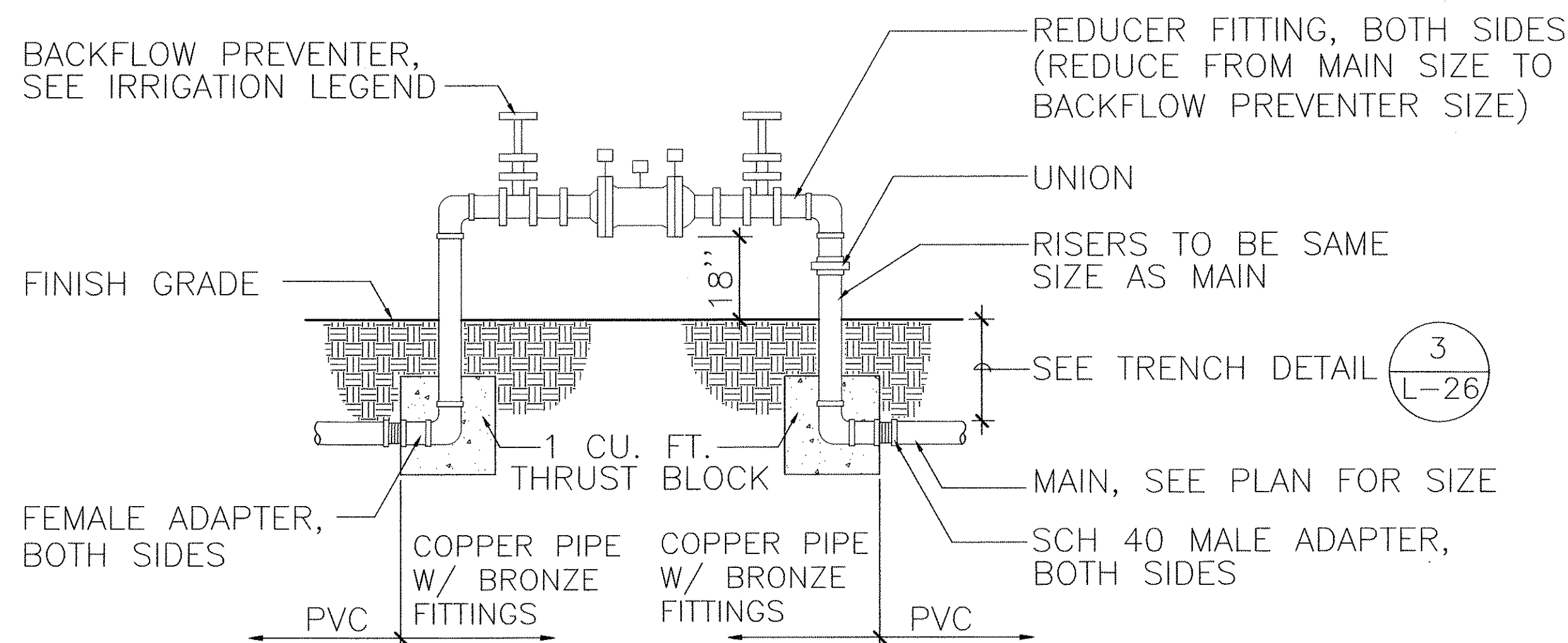


RAIN SENSOR WIRES IN 1" CONDUIT. INSTALL PER MANUFACTURER'S WIRING DIAGRAM.

2 RAIN SENSOR

L-24 NOT TO SCALE

BACKFLOW PREVENTER, SEE IRRIGATION LEGEND



3 BACKFLOW PREVENTER

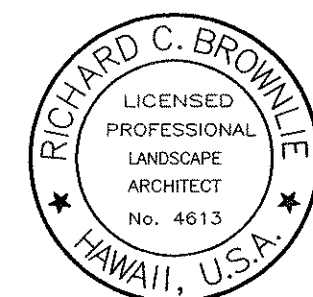
L-24 NOT TO SCALE

IRRIGATION LEGEND & NOTES

SYMBOL	DESCRIPTION	P.S.I.	G.P.M.	RAD.	MANUFACTURER & MODEL NO. (or approved equal)
●●●●	12" POP-UP SPRAY HEAD FULL, 1/2, 1/3, 1/4 CIRCLE	20-30	4/2/1.5/1	4'-15'	RAINBIRD 1812-SAM-PRS-15
○○○○	4" POP-UP SPRAY HEAD FULL, 1/2, 1/3, 1/4 CIRCLE	20-30	4/2/1.5/1	4'-15'	RAINBIRD 1804-SAM-PRS-15
●	4" POP-UP BUBBLER HEAD	30	0.5	0'-5'	RAINBIRD 1804-SAM-PRS-5CST-B
■□	ROTOR HEAD, 12" POP-UP, FULL, PART CIRCLE	25-55	4-6	22'-30'	RAINBIRD T-12SAM-FC-T30-5.0, -PC-T30-5.0
⊙	ROTOR HEAD, 4" POP-UP, PART CIRCLE	25-55	4-6	22'-30'	RAINBIRD T-4SAM-PC-T30-5.0
☐	SOLAR IRRIGATION CONTROLLER WITH RAIN SENSOR				ALTEC LEIT 4000, 8000-CW8, 8000-CW12 **SEE NOTE 1** MINI-CLICK 502-C
☐	1" REDUCED PRESSURE BACKFLOW PREVENTER				FEBCO 825Y
⊕	1" ELECTRIC CONTROL VALVE/ 1" MANUAL ANGLE VALVE ASSEMBLY				GRISWOLD DWS, RAINBIRD GB **SEE NOTE 2** / BUCKNER VBM, CHAMPION 200
Ⓚ9	VALVE STATION I.D.				
✕	GATE VALVE (LINE SIZE)				NIBCO TII3 WITH BRONZE HANDWHEEL
☒	QUICK COUPLER VALVE				RAINBIRD 44 NP
└─┐	IRRIGATION MAIN / SIZE				PVC SCHEDULE 40, SEE SPECIFICATIONS
└─┐	IRRIGATION LATERAL / SIZE				PVC CLASS 200, SEE SPECIFICATIONS
└─┐	IRRIGATION SLEEVE / SIZE				PVC SCHEDULE 40, SEE SPECIFICATIONS

IRRIGATION NOTES

- CONTROLLER TO BE 4, 8 OR 12 STATION WITH POLE MOUNT AS INDICATED ON PLANS. RAIN SENSOR TO BE POLE MOUNTED AS INDICATED ON DETAIL, IN AREA CLEAR OF OBSTRUCTIONS THAT WOULD HINDER ACCURATE RAIN MEASUREMENT. RAIN SENSOR TO BE WIRED PER IRRIGATION CONTROLLER MANUFACTURER'S INSTRUCTIONS. STAKE LOCATIONS OF IRRIGATION CONTROLLERS AND RAIN SENSORS AND OBTAIN APPROVAL OF ENGINEER PRIOR TO INSTALLATION.
- ELECTRIC CONTROL VALVES SHALL BE FITTED WITH SOLENOID ACTUATING DEVICES AS RECOMMENDED BY IRRIGATION CONTROLLER MANUFACTURER. VALVE NEAREST TO RAIN SENSOR MAY REQUIRE SPECIAL ACTUATOR AS RECOMMENDED BY IRRIGATION CONTROLLER MANUFACTURER.
- IRRIGATION WIRE SHALL BE MINIMUM THICKNESS #14 AWG SOLID COPPER CORE INSULATED WIRE. CONTRACTOR SHALL PROVIDE THICKER WIRE IF NECESSARY TO ACCOUNT FOR VOLTAGE DROP.
- IRRIGATION WIRE SHALL BE INSTALLED IN 1" PVC SCHEDULE 40 CONDUIT, 1'-6" MINIMUM BELOW FINISH GRADE.



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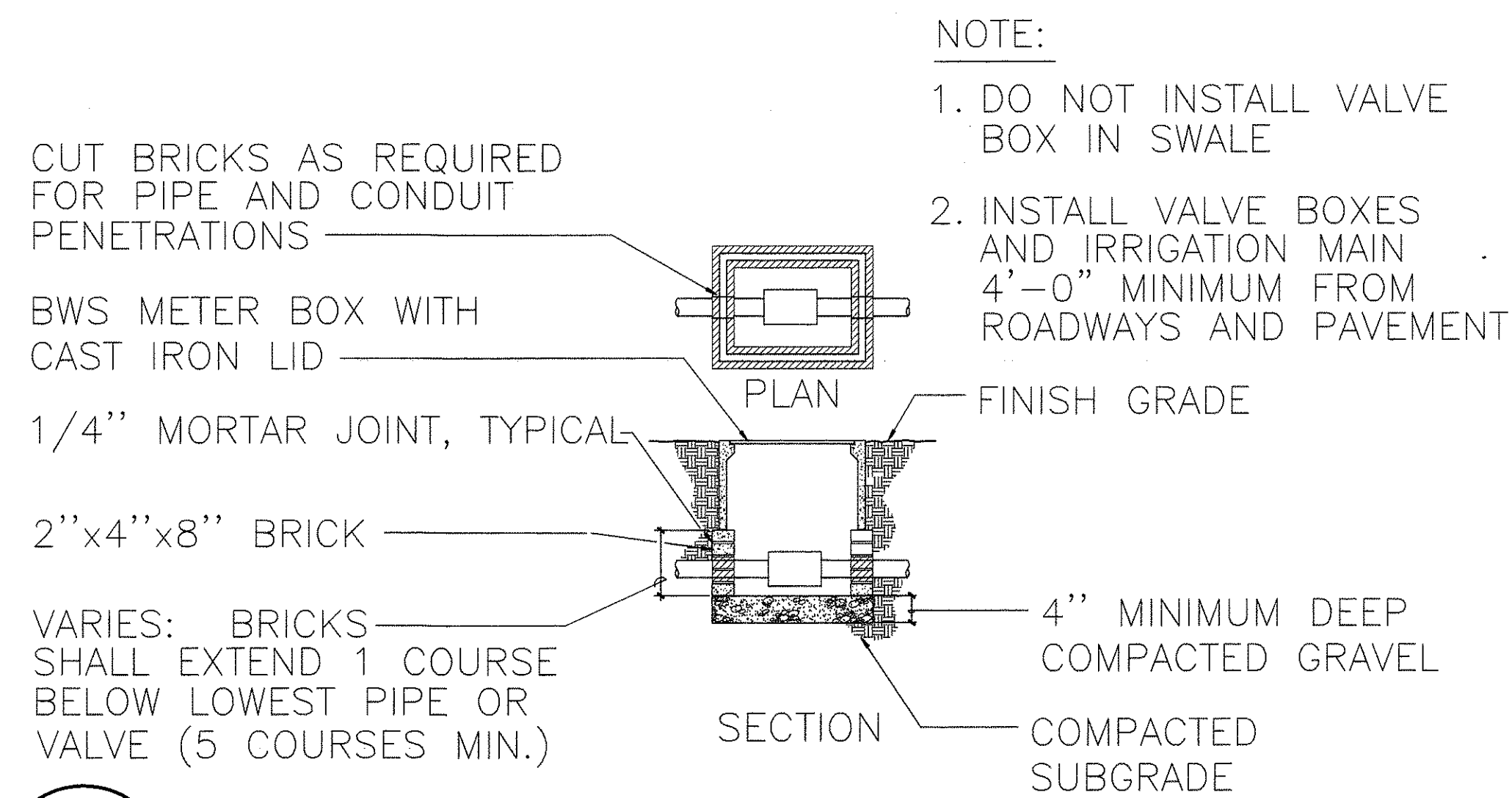
LANDSCAPE IRRIGATION LEGEND.
NOTES AND DETAILS

FORT WEAVER ROAD LANDSCAPING
VICINITY OF FARRINGTON HWY. TO HANAKAHI ST.
PROJECT NO. STP-076-1(4)

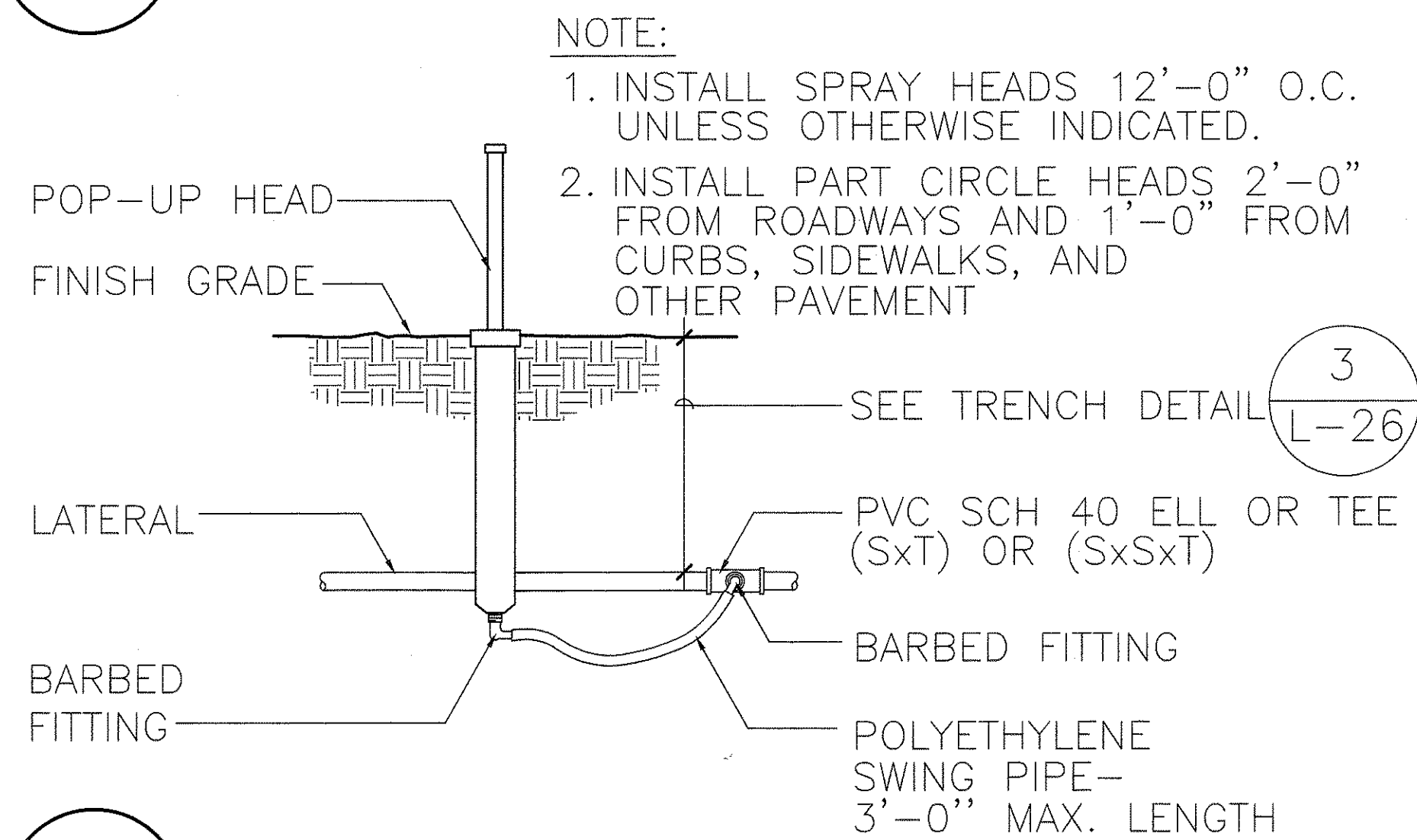
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SHEET No. L-24 OF 26 SHEETS

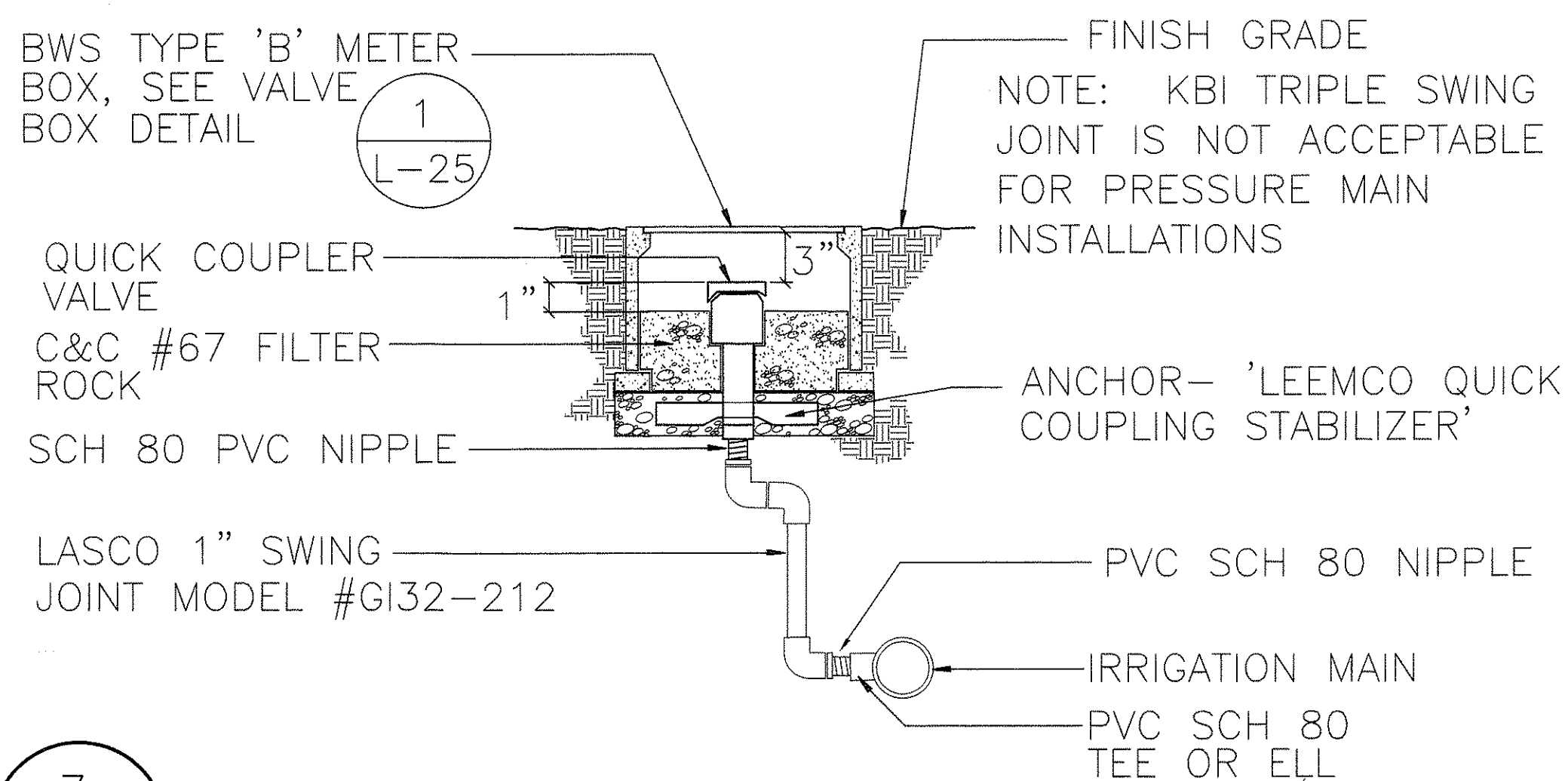
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-076-1(4)	1999	25	31



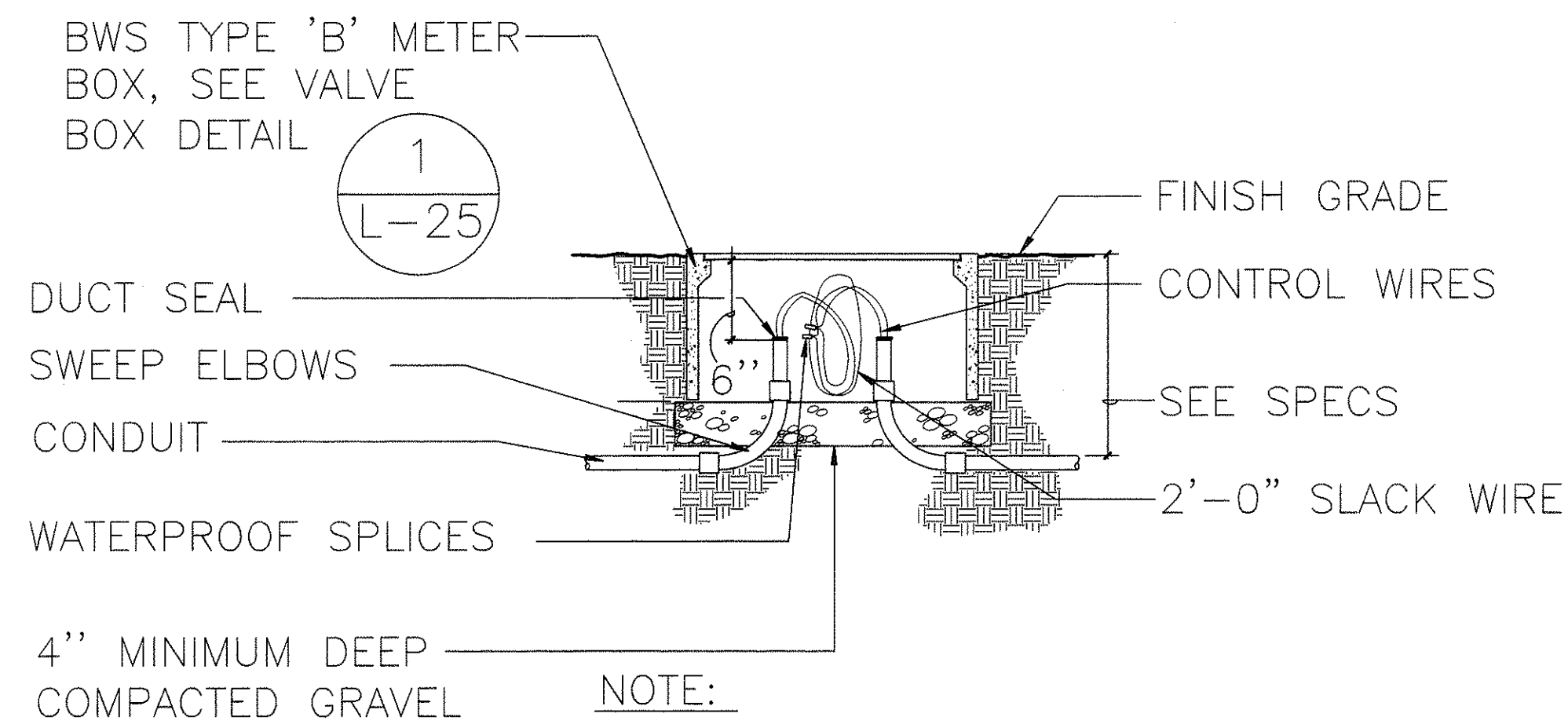
1 VALVE BOX DETAIL
L-25 NOT TO SCALE



4 SPRAY HEAD
L-25 NOT TO SCALE



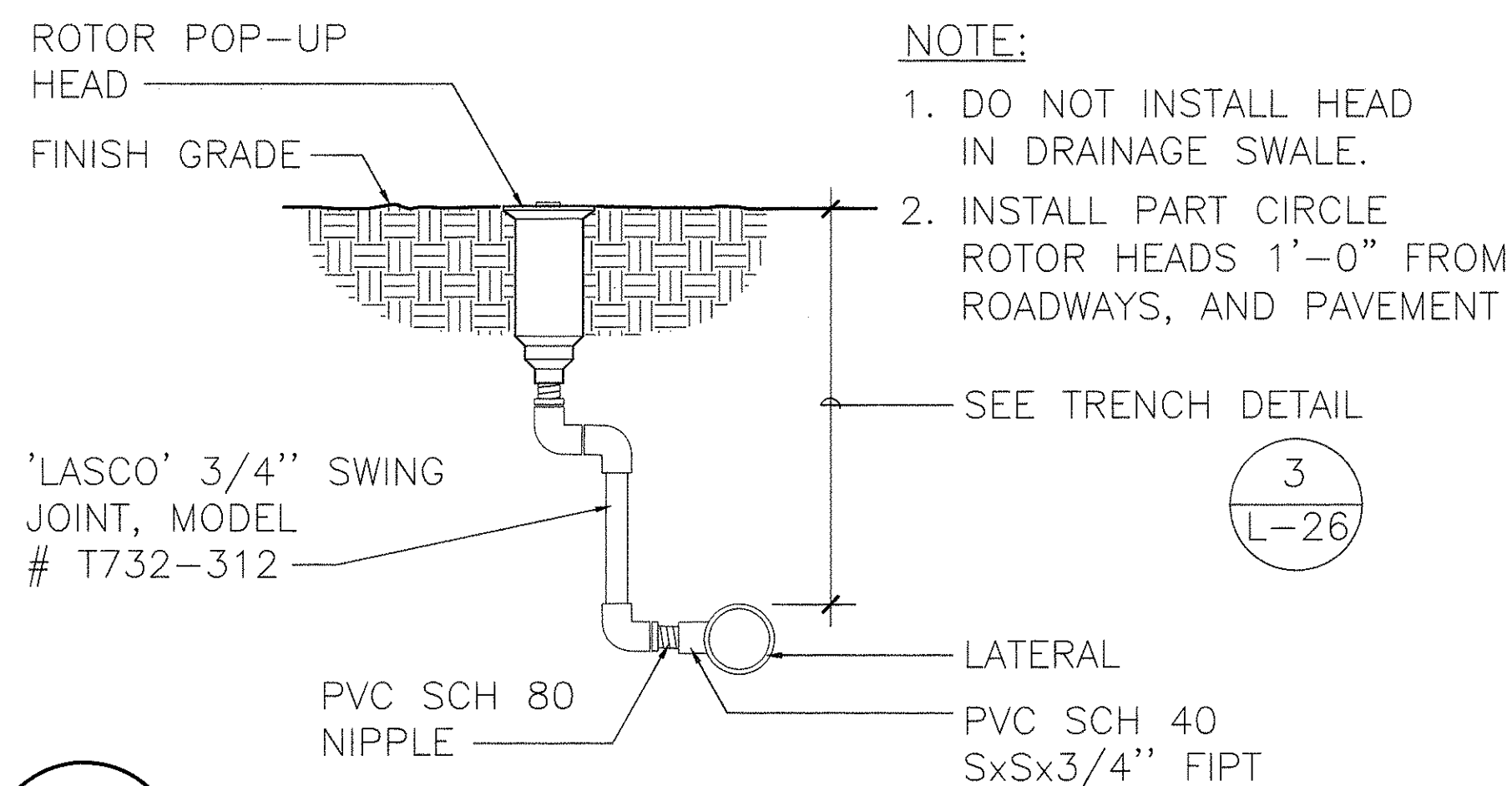
7 QUICK COUPLER VALVE DETAIL
L-25 NOT TO SCALE



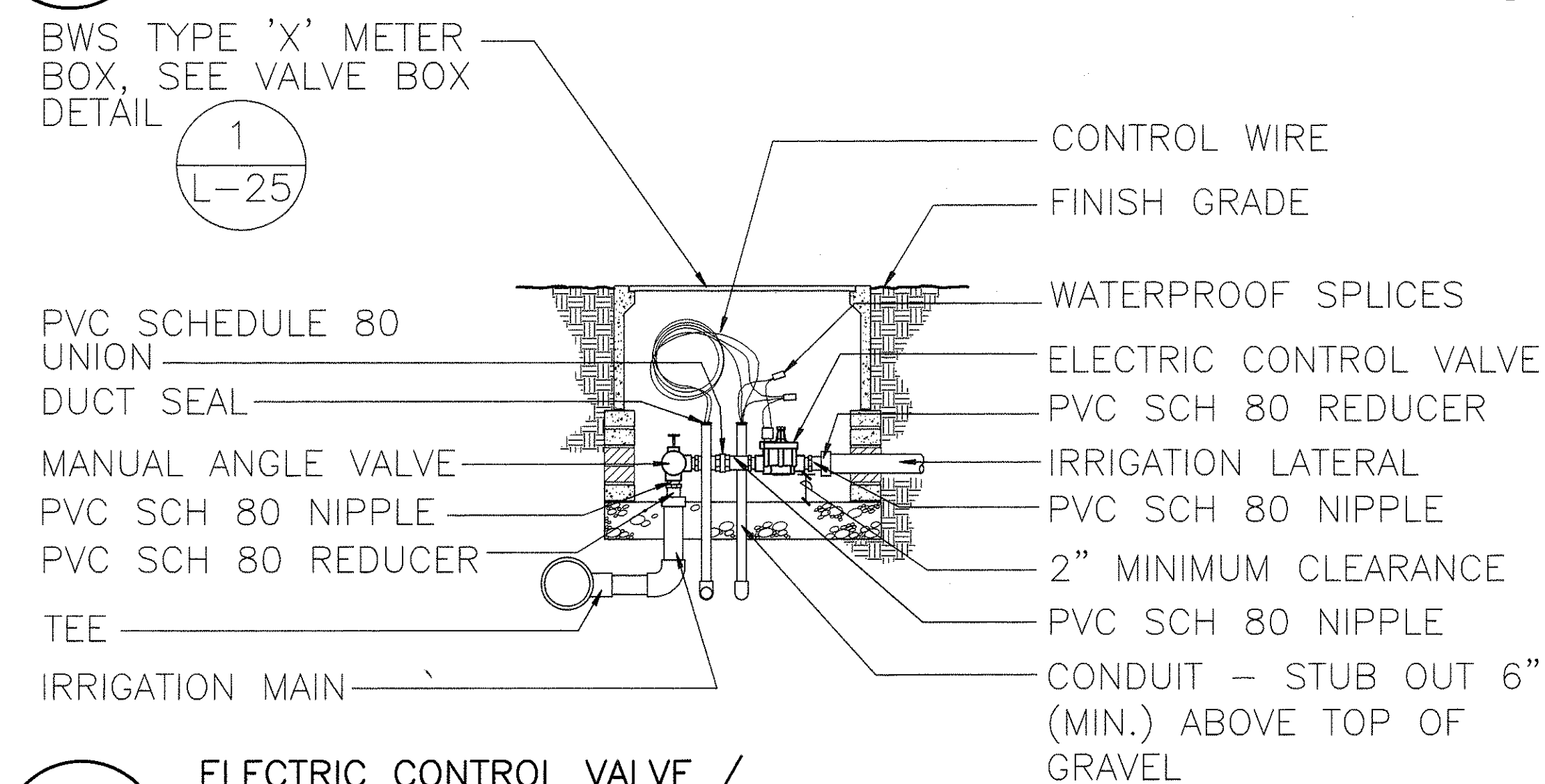
NOTE:

- DO NOT SPLICE WIRES EXCEPT IN VALVE BOXES & PULL BOXES.
- VALVE BOXES MAY SERVE AS PULL BOXES, SEE DETAIL.

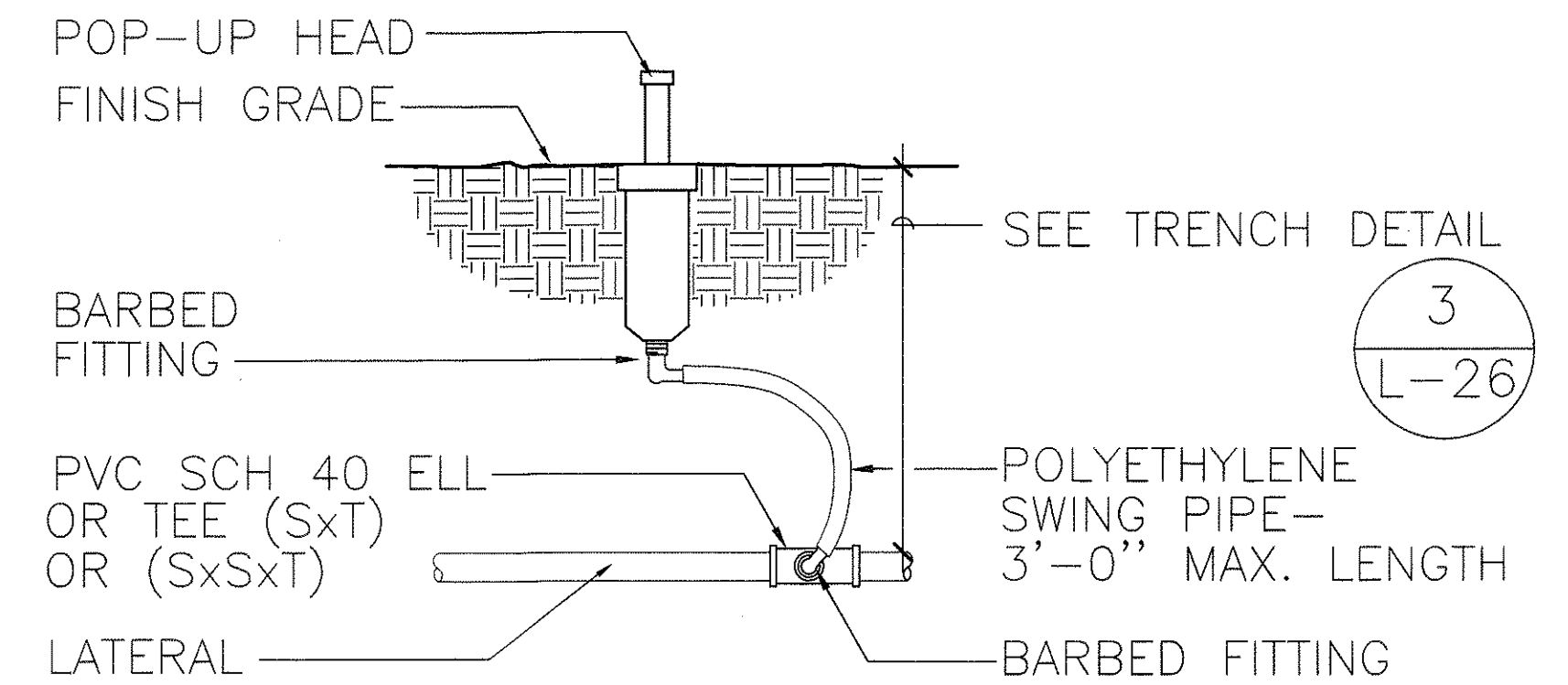
2 PULL BOX DETAIL
L-25 NOT TO SCALE



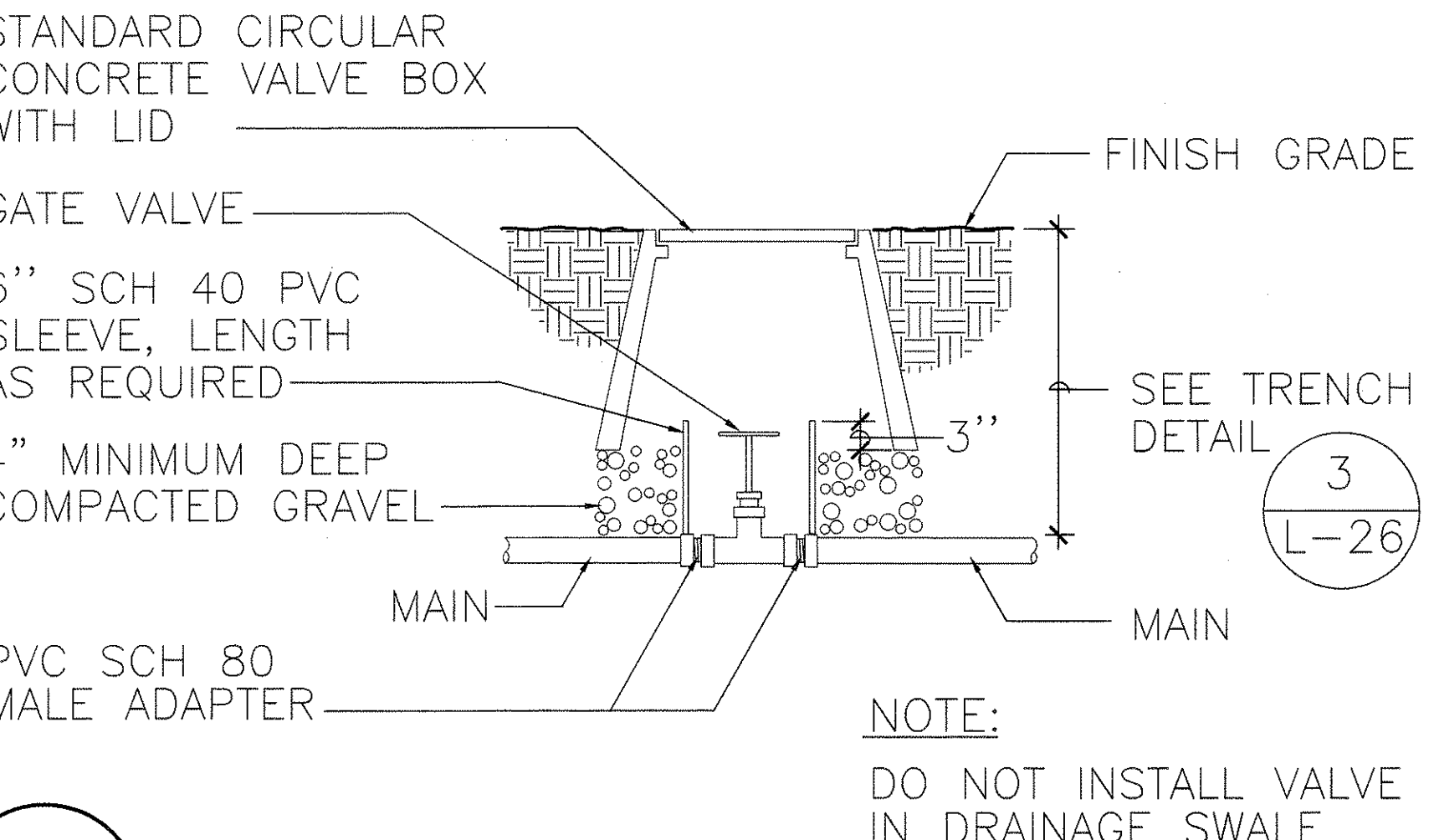
5 ROTOR HEAD - POP-UP
L-25 NOT TO SCALE



8 ELECTRIC CONTROL VALVE / MANUAL ANGLE VALVE ASSEMBLY
L-25 NOT TO SCALE

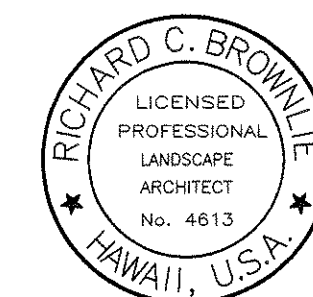


3 BUBBLER HEAD - 4" POP-UP
L-25 NOT TO SCALE



6 GATE VALVE DETAIL
L-25 NOT TO SCALE

ORIGINAL PLAN
DATE
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LANDSCAPE IRRIGATION DETAILS

FORT WEAVER ROAD LANDSCAPING
VICINITY OF FARRINGTON HWY. TO HANAKAHI ST.
PROJECT NO. STP-076-1(4)

SCALE: N/A DATE: AUGUST 10, 1998

SHEET No. L-25 OF 26 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-076-1(4)	1999	26	31

NOTE:

INSTALL IRRIGATION MAIN
4'-0" MINIMUM FROM
ROADWAYS AND PAVEMENT

SCREENED SOIL, 4" DEEP

BACKFILL MATERIAL
(NO ROCKS LARGER
THAN 1/2" DIA.)

FINISH GRADE

PIPE (MAIN OR
LATERAL)

CONDUIT

24 V. WIRING OR
COMMUNICATION
CABLE

4" MIN. CLEARANCE

DETECTABLE MARKER
TAPE, SEE NOTE
7 FOR SPEC.
INSTALL 6" BELOW
FINISH GRADE

SELECT TRENCH BACKFILL
MATERIAL (NO PARTICLES
LARGER THAN 1/2" DIA.)

SEE NOTE #4.

6" DEEP SELECT
BACKFILL BEDDING
WHERE ROCK IS
ENCOUNTERED

24" MIN. CLEARANCE

NOTES:

1. ALL PIPE TO BE INSTALLED IN
ACCORDANCE WITH MANUFACTURERS
INSTALLATION SPECIFICATIONS.

2. PIPING TO BE SNAKED SIDE TO
SIDE IN TRENCH TO ALLOW FOR
EXPANSION AND CONTRACTION.

3. ALL WIRING IN CONDUIT TO BE
INSTALLED IN ACCORDANCE WITH
LOCAL CODES.

4. PROVIDE MINIMUM COVERS AS
FOLLOWS:

MAINS = 18"

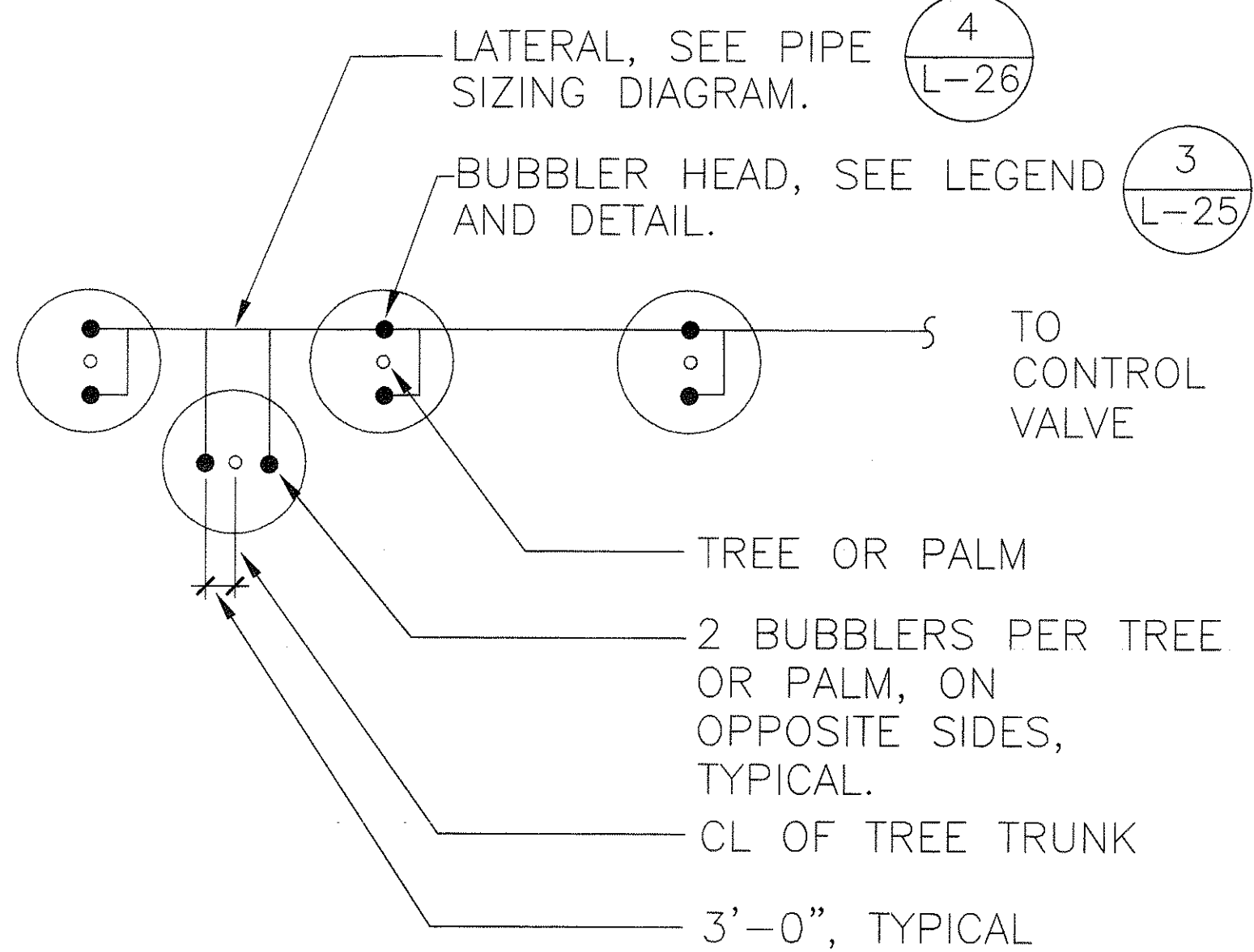
LATERALS = 12"

LATERALS UNDER PAVING
(EXCLD. ROADWAYS) = 18"
CONDUIT = 18"

5. WHEN TRENCHING THROUGH
EXISTING PAVEMENT, RESTORE
PAVEMENT TO ORIGINAL CONDITION.

6. WHEN INSTALLING
MORE THAN
ONE PIPE PER
TRENCH, CLEARANCE
BETWEEN PIPES SHALL
BE PER SPECIFICATIONS.

7. DETECTABLE MARKER TAPE
SHALL BE INSTALLED OVER
ALL IRRIGATION MAINS
AND LATERALS. DETECTABLE
MARKER TAPE SHALL BE 3" WIDE,
PURPLE COLOR W/ "NON-POTABLE
WATER PIPE BURIED BELOW.
'DO NOT DRINK.' REPEATING MESSAGE
PERMANENTLY IMPRINTED ON IT.
'MAGNETIC' DETECTABLE UNDERGROUND
UTILITY TAPE, AVAILABLE THROUGH
'SAFETY SYSTEMS' (PH. 847-4017,
SPECIAL ORDER REQUIRED),
OR APPROVED EQUAL.



PLAN VIEW

3
L-26 TRENCH DETAIL

NOT TO SCALE

BUBBLER CIRCUIT

PIPE #	SIZE
① THROUGH ⑧	1/2"
⑨ THROUGH ⑱	3/4"
⑲ THROUGH ⑳	1"
㉑ THROUGH ㉔	1-1/4"
㉕ THROUGH ㉗	1-1/2"

PART CIRCLE SPRAY HEAD CIRCUIT

PIPE #	SIZE
① AND ②	1/2"
③ AND ④	3/4"
⑤ THROUGH ⑧	1"
⑨ THROUGH ⑱	1-1/4"
⑲ THROUGH ㉒	1-1/2"

FULL CIRCLE SPRAY HEAD CIRCUIT

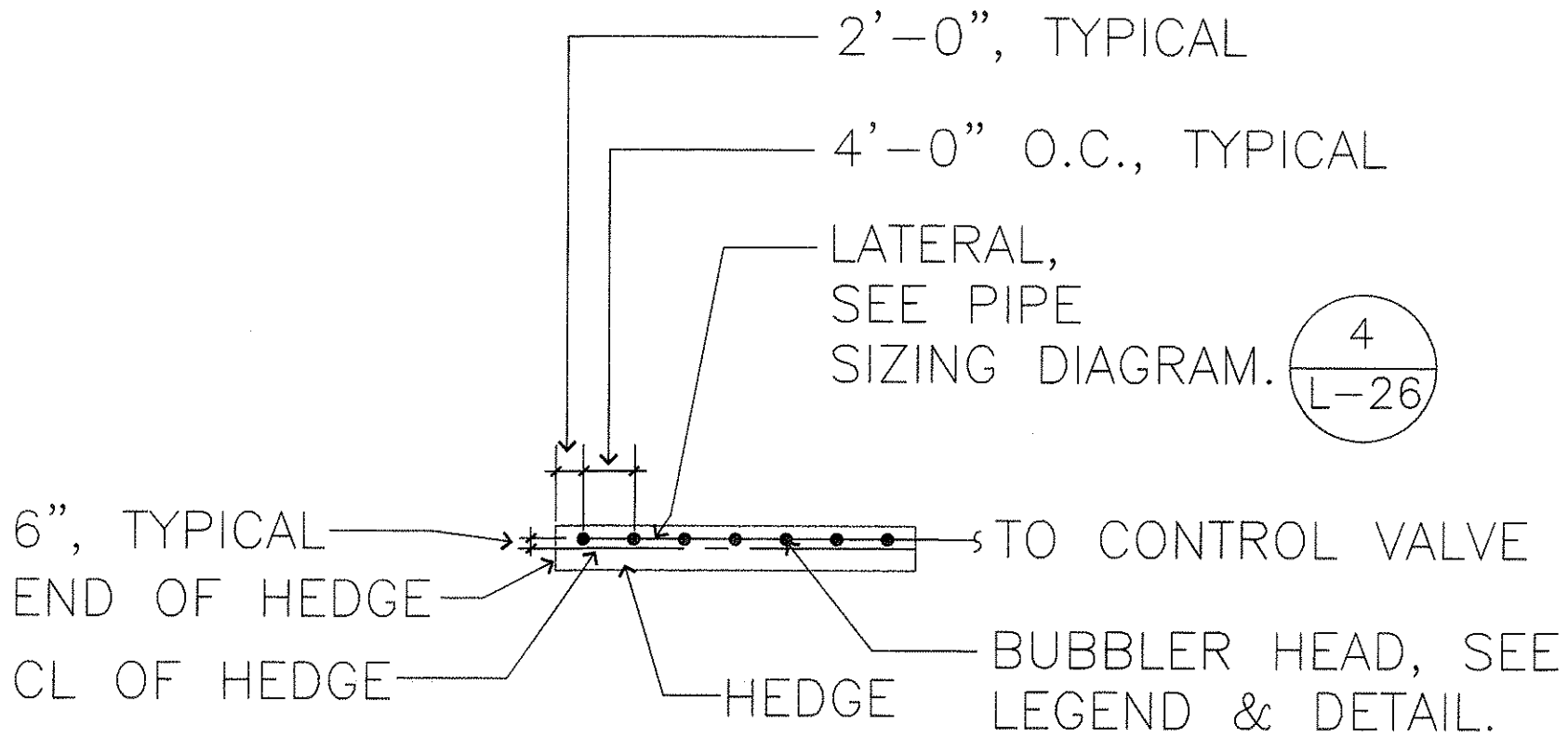
PIPE #	SIZE
①	1/2"
②	3/4"
③ AND ④	1"
⑤ AND ⑥	1-1/4"
⑦ THROUGH ⑨	1-1/2"

ROTOR CIRCUIT

PIPE #	SIZE
① AND ②	3/4"
③	1"
④ AND ⑦	1-1/4"
⑧ AND ⑨	1-1/2"

1
L-26 TREE AND PALM BUBBLER CIRCUITS

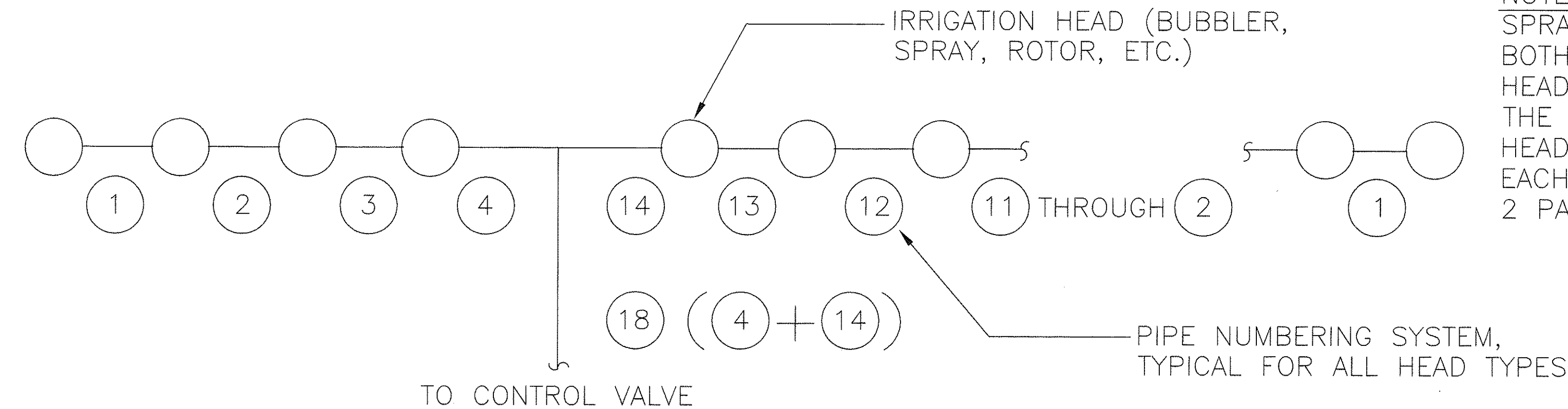
NOT TO SCALE



PLAN VIEW

2
L-26 HEDGE BUBBLER CIRCUITS

NOT TO SCALE



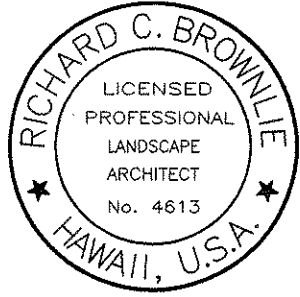
4
L-26 PIPE SIZING DIAGRAM

NOT TO SCALE

NOTE:

SPRAY HEAD CIRCUITS WITH
BOTH FULL AND PART CIRCLE
HEADS SHALL BE SIZED USING
THE PART CIRCLE SPRAY
HEAD CIRCUIT TABLE. COUNT
EACH FULL CIRCLE HEAD AS
2 PART CIRCLE HEADS.

ORIGINAL PLAN
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LANDSCAPE IRRIGATION DETAILS

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