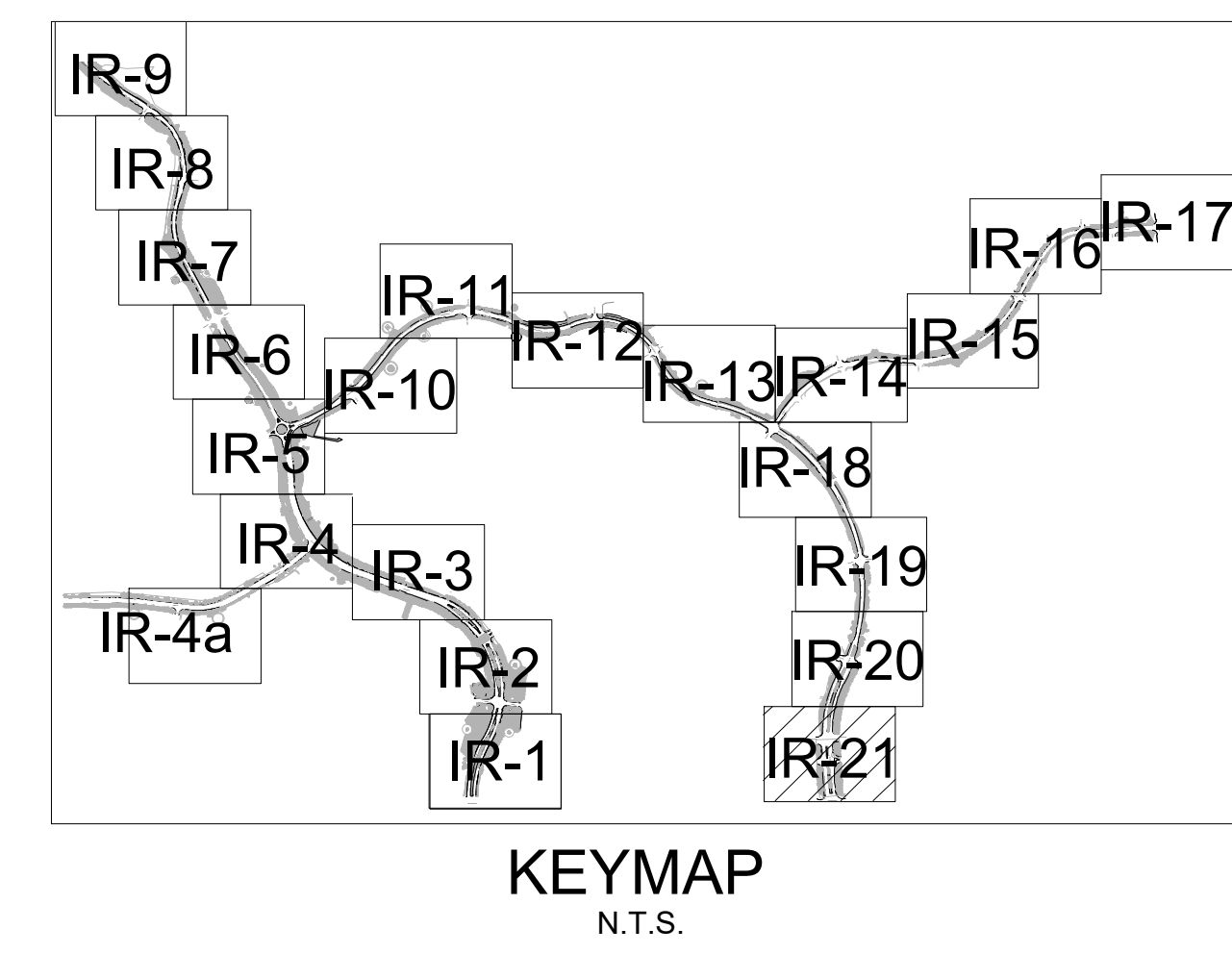
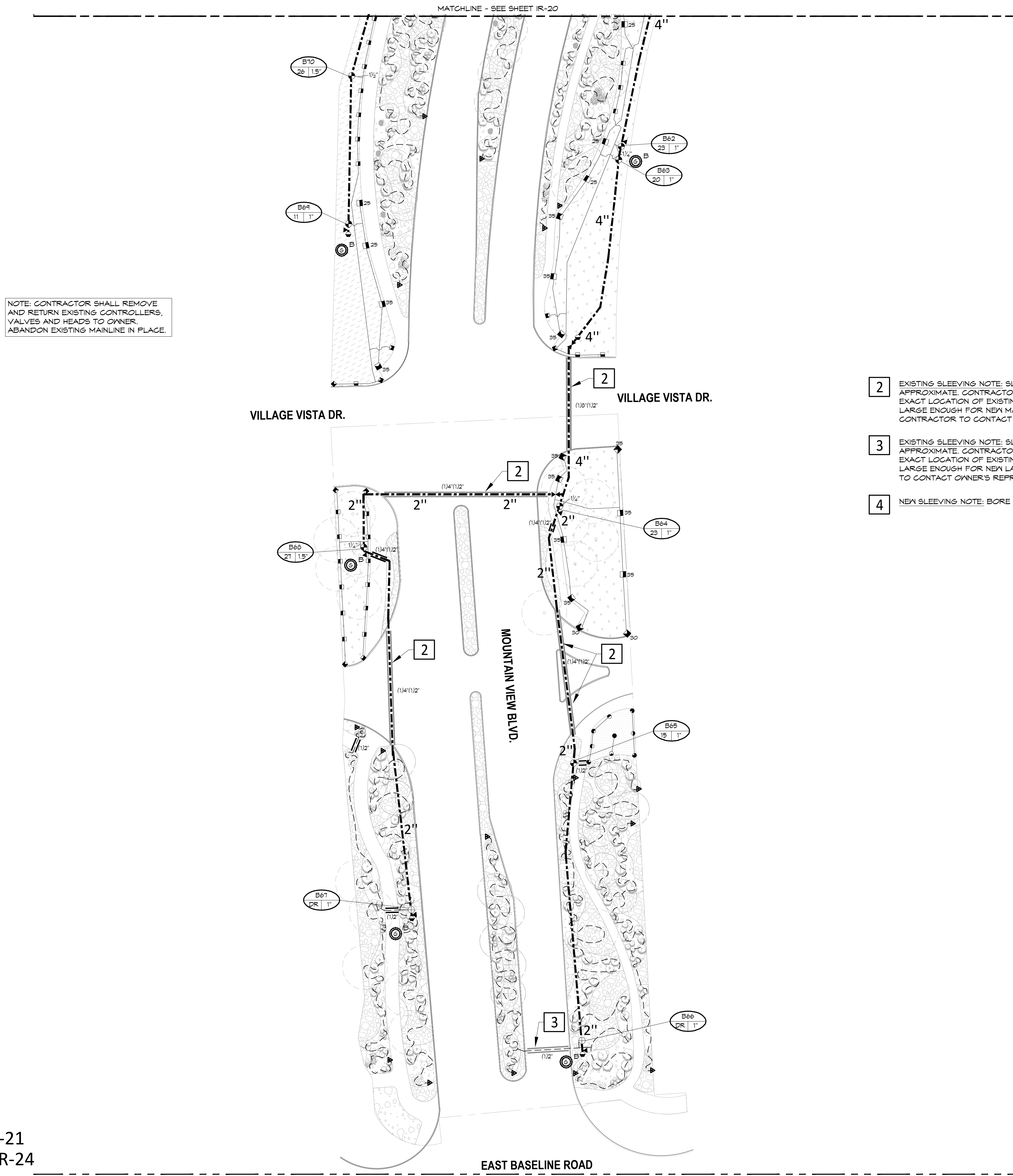
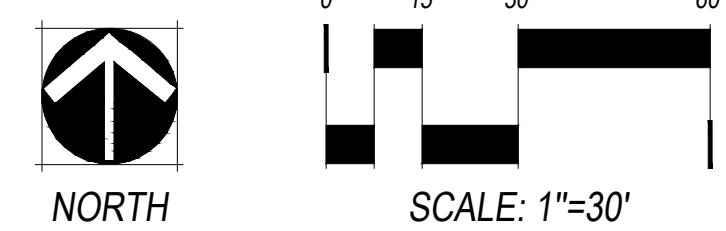
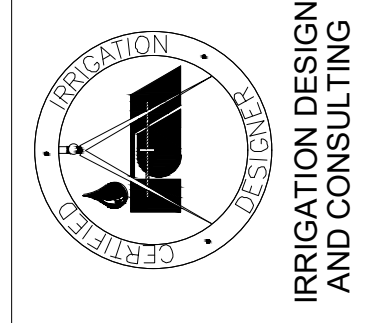


<u>DIRECTORY</u>	
IRRIGATION SCHEDULE	IR-0
IRRIGATION NOTES	IR-0
IRRIGATION PLANS	IR-1 - IR-21
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- 2 EXISTING SLEEPING NOTE: SLEEPING LOCATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY SIZE AND EXACT LOCATION OF EXISTING SLEEPING. IF SIZE IS NOT LARGE ENOUGH FOR MAIN MAINLINE AND 2-WIRE CABLE, CONTRACTOR TO CONTACT OWNER'S REPRESENTATIVE.
- 3 EXISTING SLEEPING NOTE: SLEEPING LOCATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY SIZE AND EXACT LOCATION OF EXISTING SLEEPING. IF SIZE IS NOT LARGE ENOUGH FOR MAIN LATERAL LINE, CONTRACTOR TO CONTACT OWNER'S REPRESENTATIVE.
- 4 NEW SLEEPING NOTE: BORE ONLY EXISTING ROADWAYS.

[illegible]

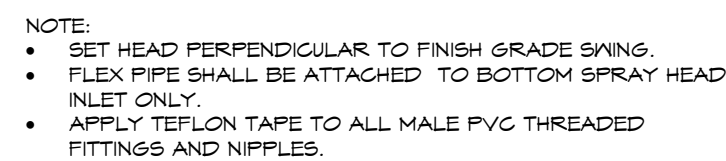
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SWING PIPE - POLY

1



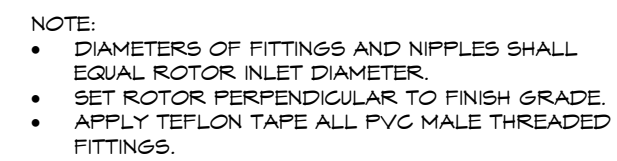
SWING PIPE - PVC

2



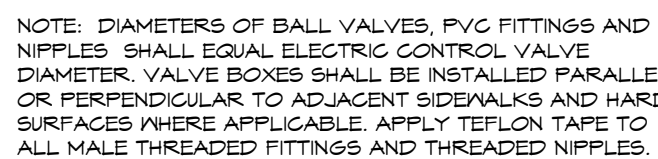
SWING PIPE - PVC

3



PVC

4



TWO-WIRE SYSTEM - PVC PIPE

5



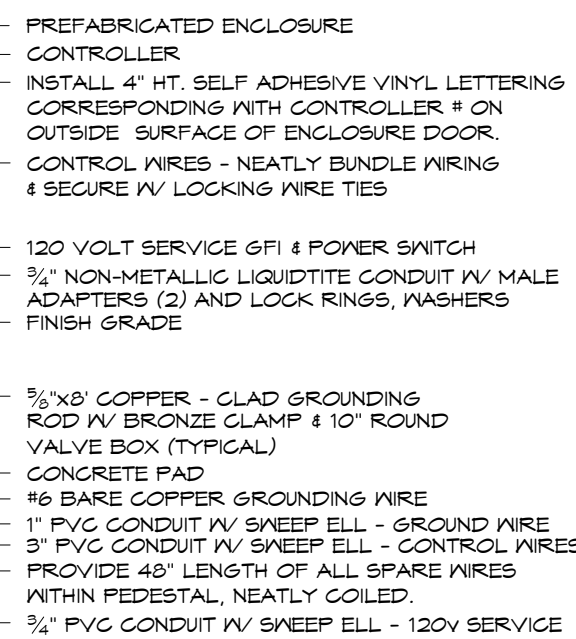
LASCOSWING - TYPICAL

6



INTERIOR WALL MOUNT - FLOOR PENETRATING

7



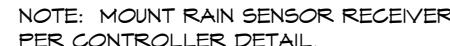
PEDESTAL - FRONT OPENING - TYPICAL

8



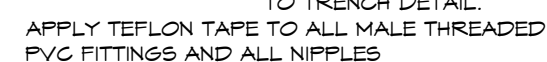
EAVE MOUNTED - Wireless

9



POLE MOUNTED - Wireless

10

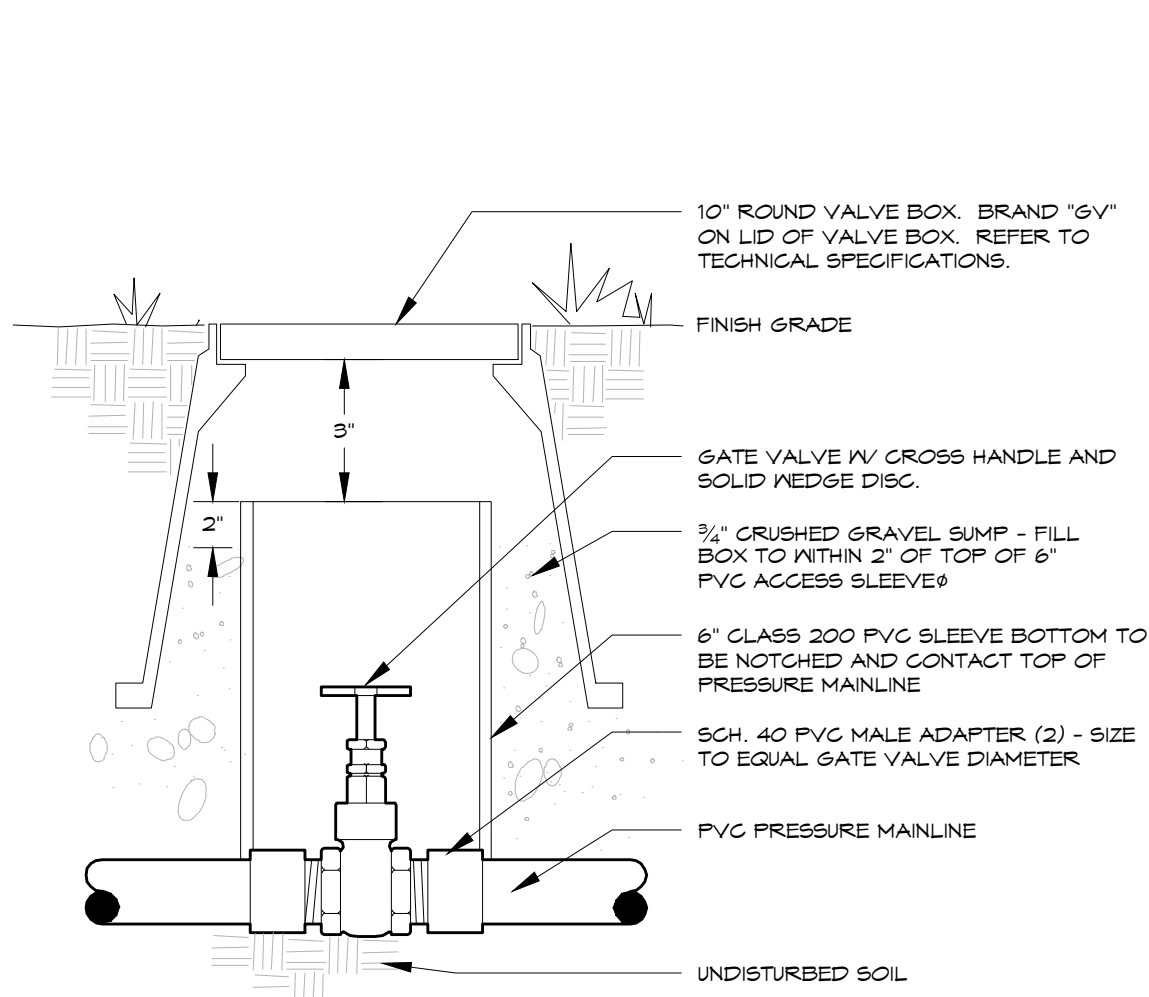


TYPICAL

11

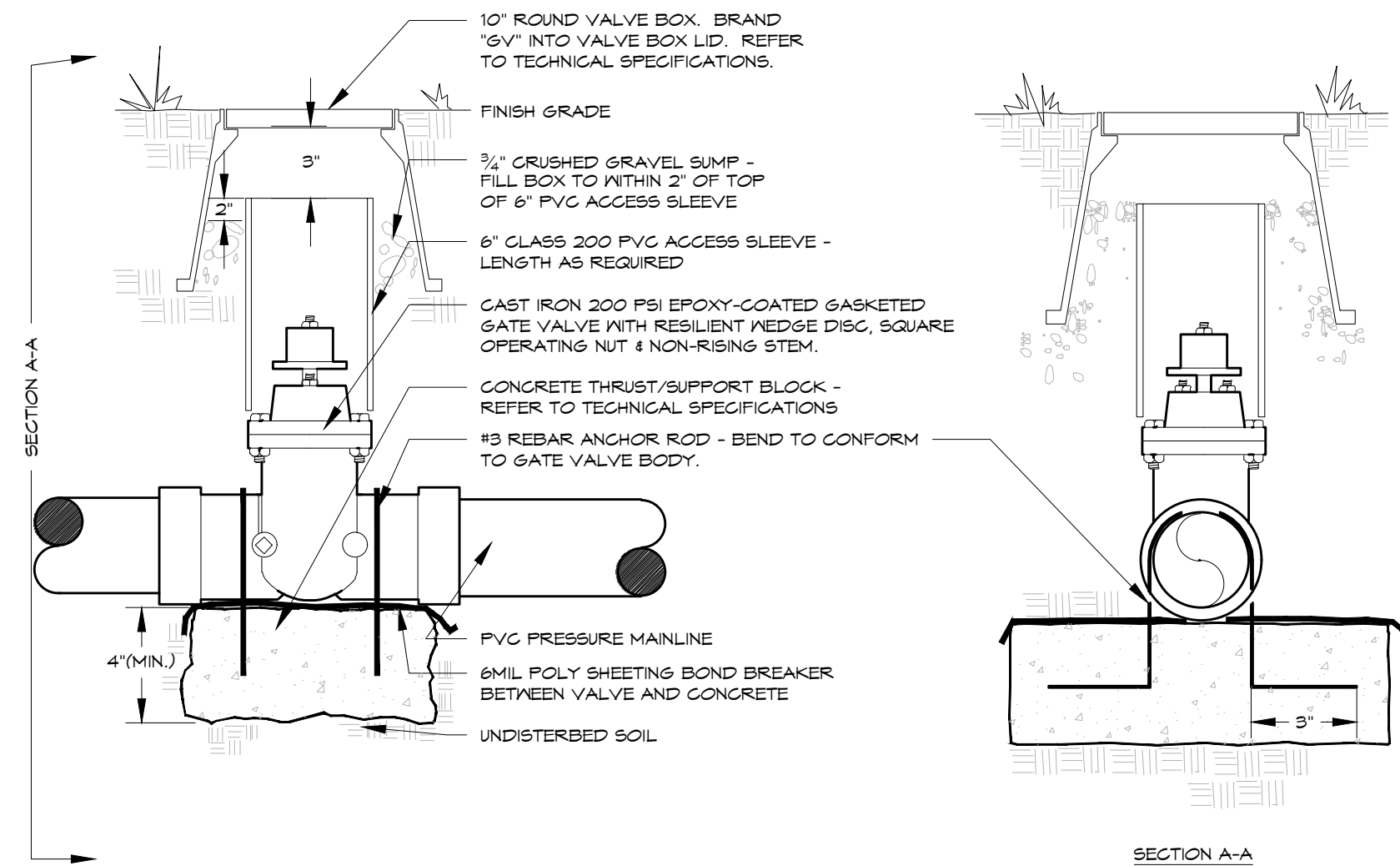
IRRIGATION DETAILS

IR-22 - IR-24



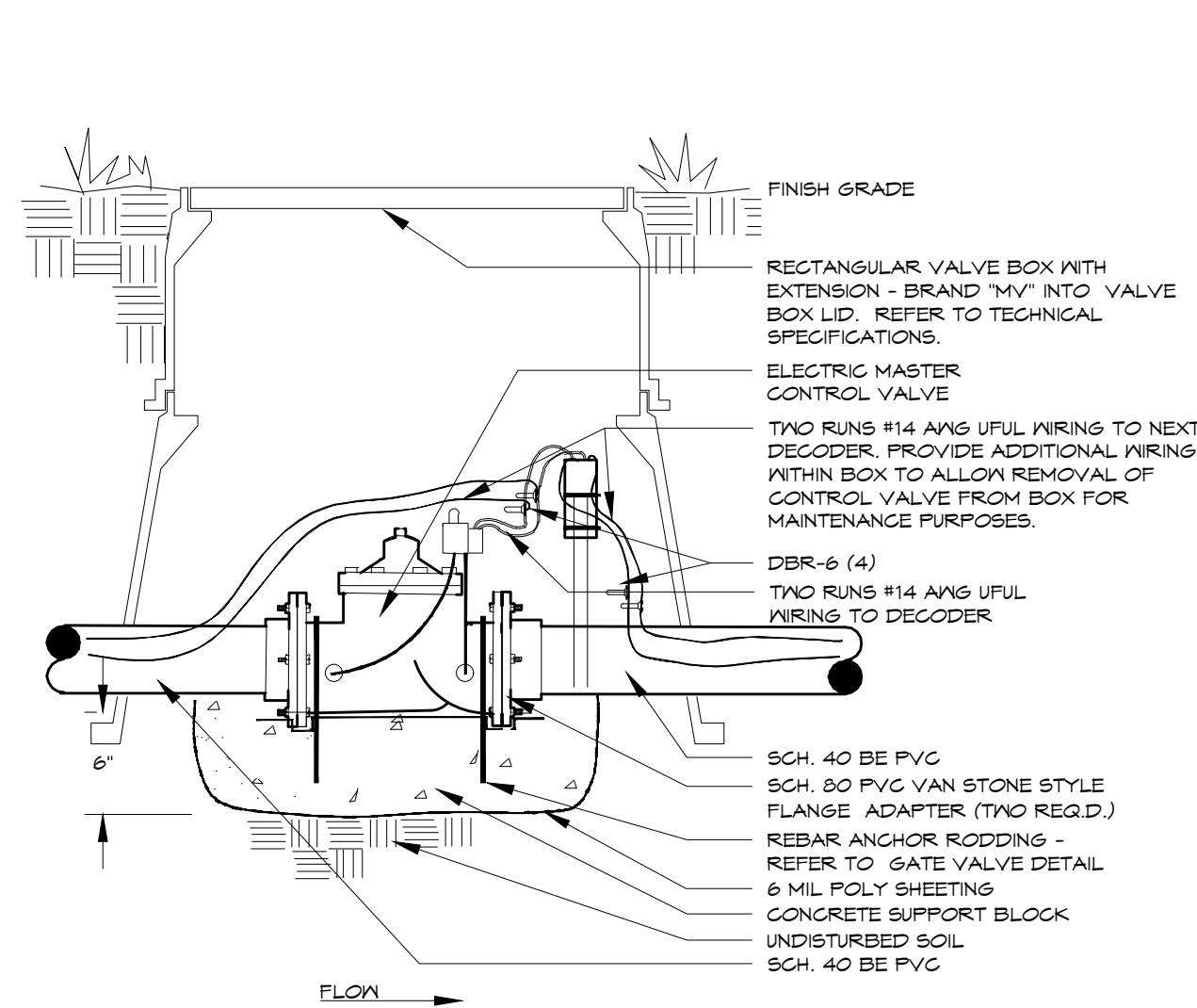
GATE VALVE
2.5" & SMALLER - X-HANDLE

12



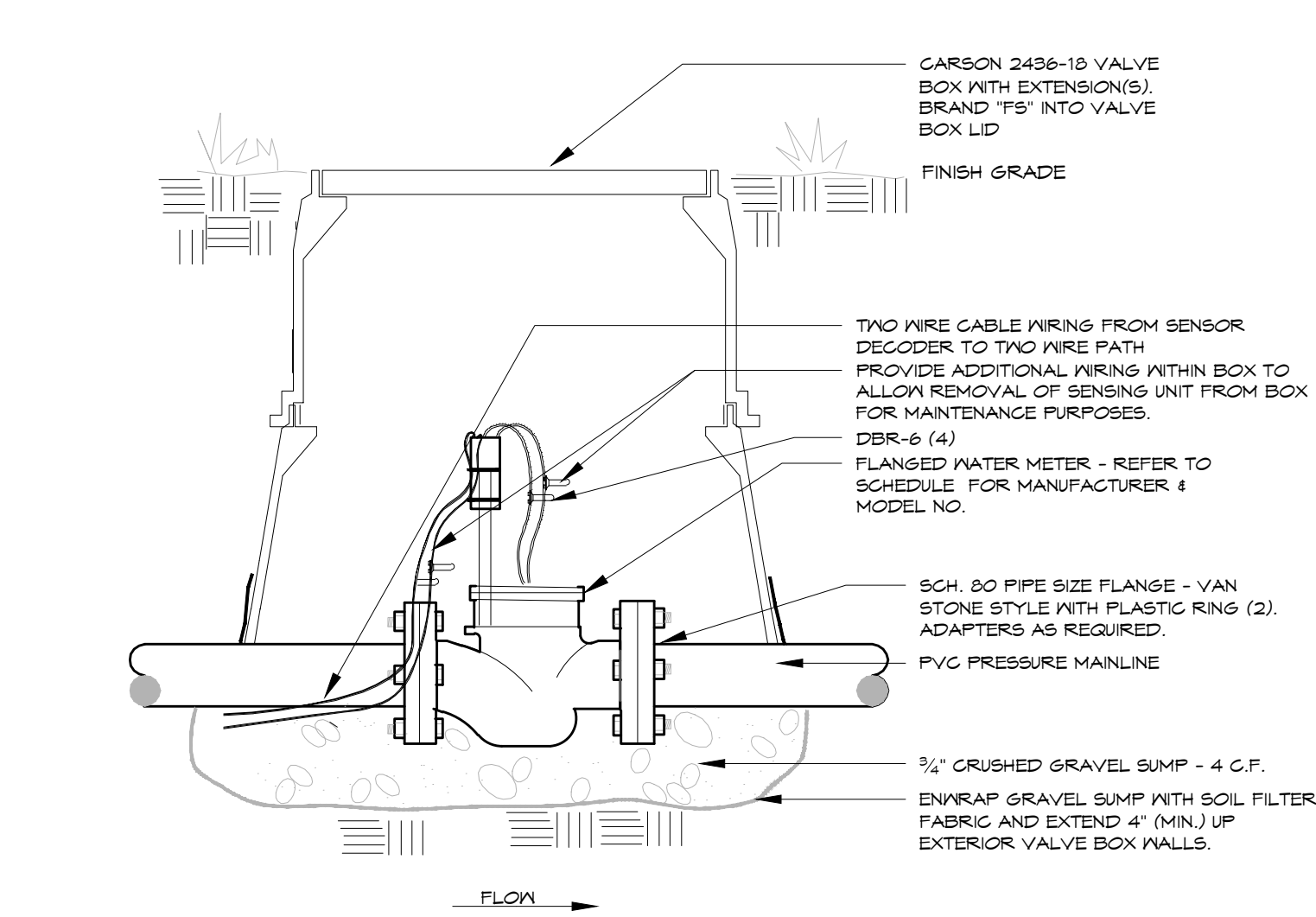
GATE VALVE
3" & LARGER - REBARANCHOR

13



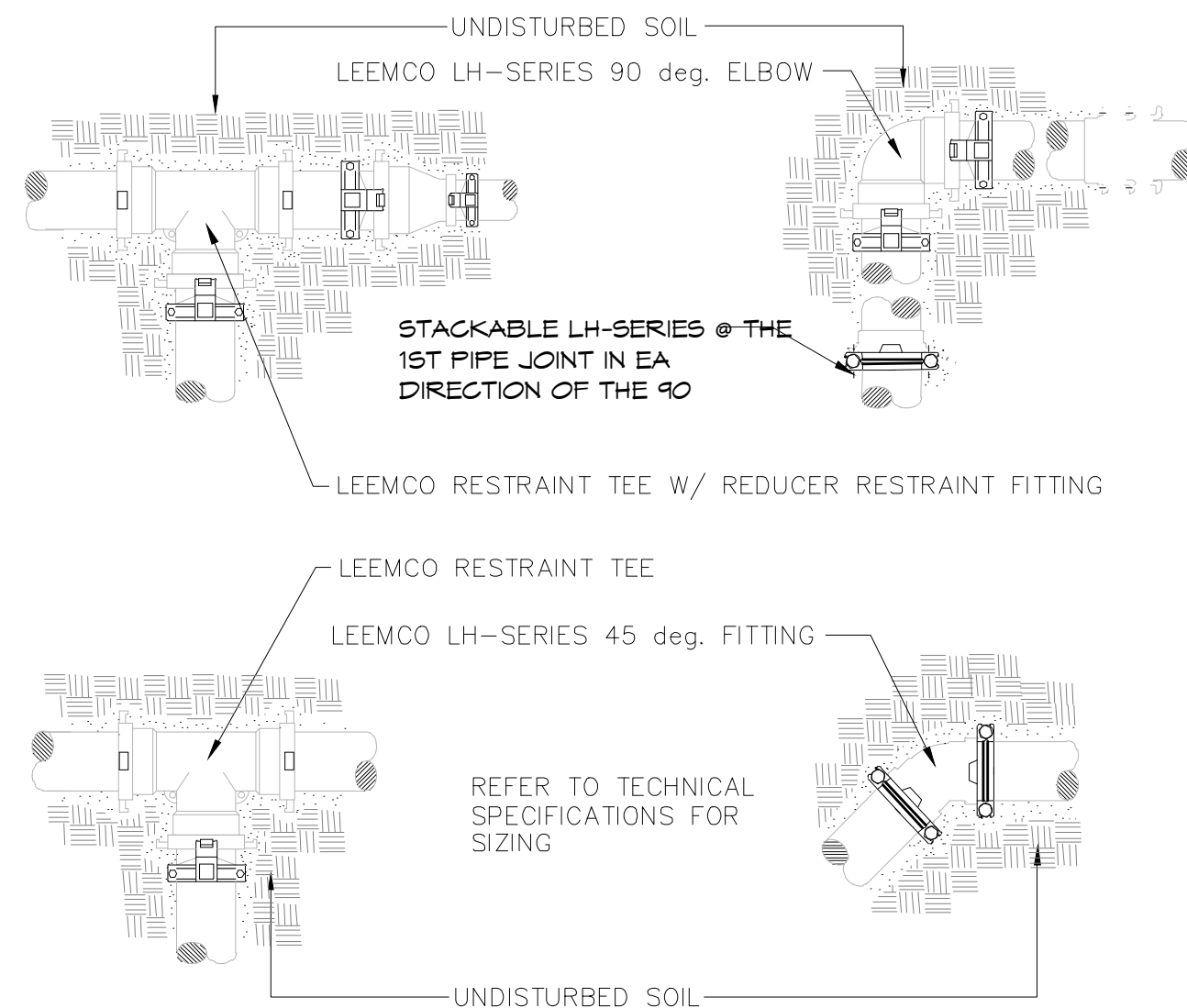
MASTER VALVE
VIA DECODER - TAPS 3" & LARGER

14



FLOW METER / SUBMETER

15

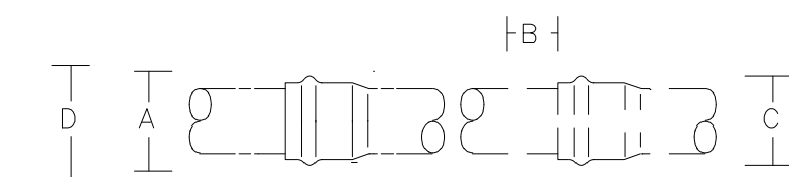


MECHANICAL RESTRAINT FITTINGS - 3" and LARGER

JOINT RESTRAINT INSTALLATION GUIDE
NOTE: WHEN THE DISTANCE BETWEEN A FITTING AND THE NEXT JOINT IS LESS THAN 20 FEET, THE FOLLOWING TABLE MUST BE USED. THE TABLE BELOW SHOWS THE DISTANCE (IN FEET) BETWEEN JOINTS WITHIN WHICH IF THERE IS A JOINT, IT MUST BE MECHANICALLY RESTRAINED. THE TABLE IS BASED ON 125 PSI, TYPE 3 TRENCH, AND 2-4 FEET DEPTH OF BURY (SMALL TO LARGE) DEPENDING ON PIPE SIZE. FOR OTHER PRESSURE MULTIPLY THE NUMBERS IN THE TABLE (FEET) BY THE ACTUAL PRESSURE AND DIVIDE BY 125.

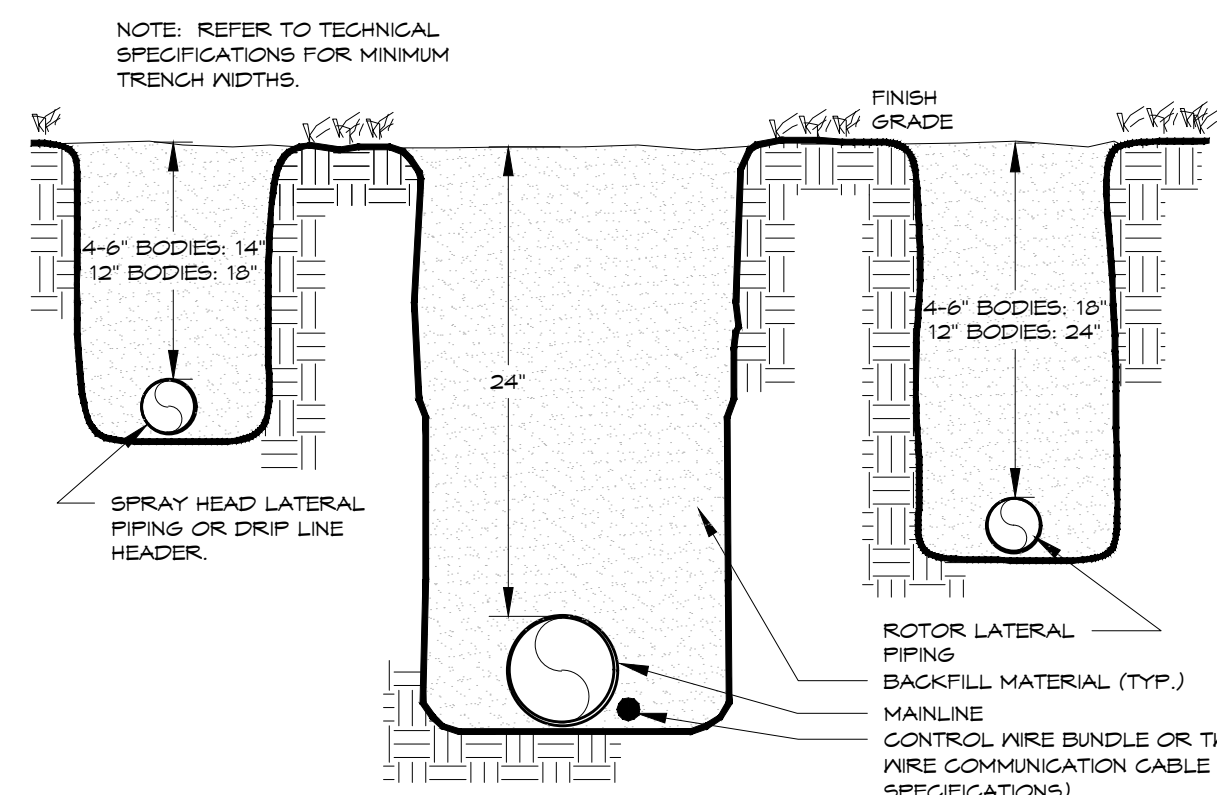
PIPE SIZE	BENDS				STEP REDUCTION			DEAD END	GATE VALVE
	11	22	45	90	1	2	3		
2"	1	1	2	6				19	10
2.5"	1	2	4	9	4			23	12
3"	2	3	6	11	8	10		30	15
4"	2	4	9	20	14	20	31	45	23
6"	3	6	13	29	30	40	53	63	31
8"	4	8	15	38	33	55	63	75	38
10"	5	9	19	45	31	56	75	96	48
12"	5	10	21	53	54	58	79	112	56
14"	6	11	24	58	30	70	74	118	58
16"	6	13	27	65	30	54	90	130	65

HARDWARE SIZE AND TORQUE REQUIREMENTS



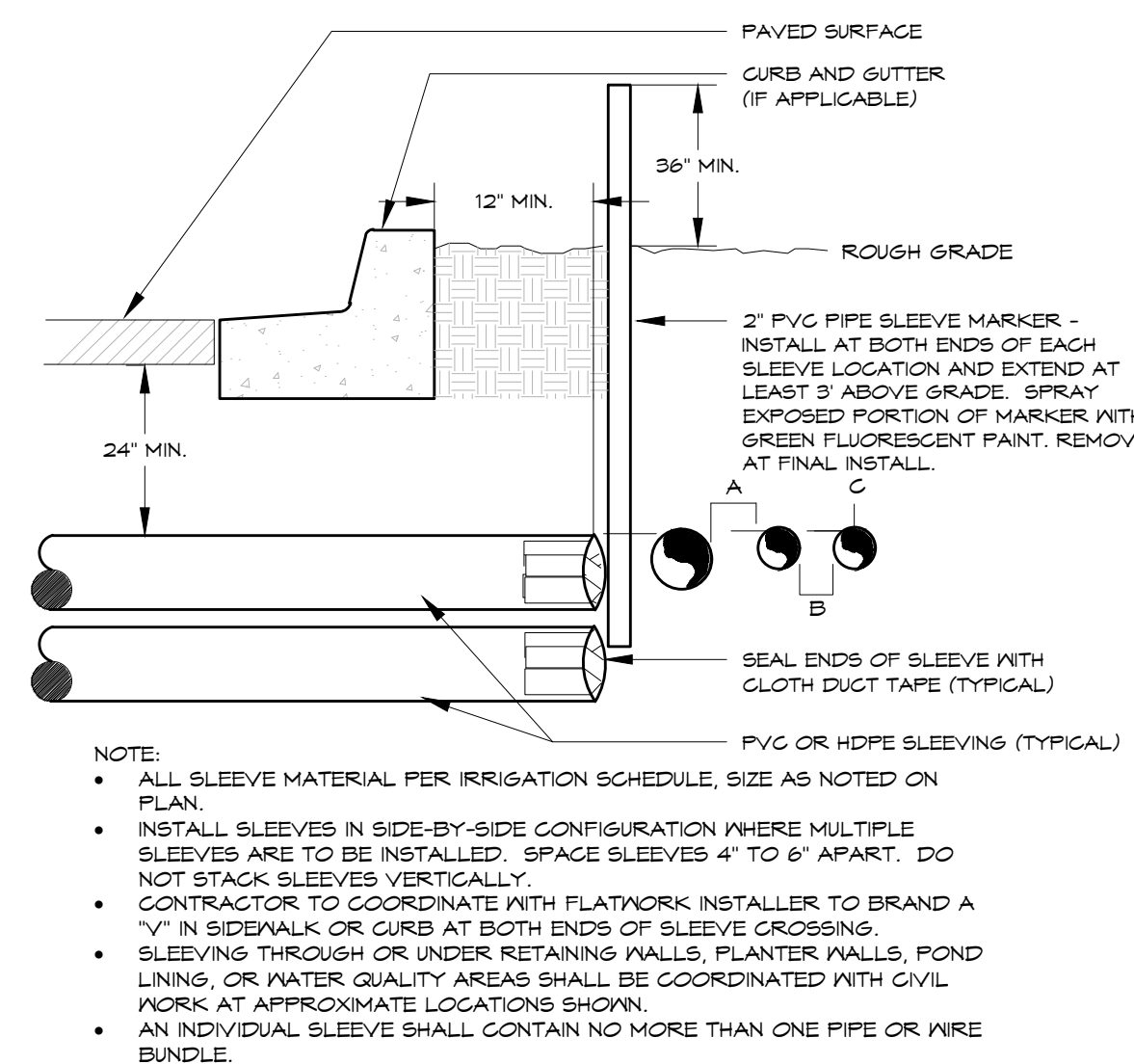
PIPE SIZE	PIPE O.D.	NO OF BOLTS	BOLT SIZE	TORQUE FT-LB	DIMENSIONS (INCH)			
					A	B	C	D
2"	2.375	2	3/8-16 X 2.5	20	4.1	3.1	4.8	5.0
2.5"	2.875	2	3/8-16 X 2.5	20	5.1	3.1	5.0	5.5
3"	3.500	2	3/8-16 X 2.5	20	5.6	3.4	5.9	6.5
4"	4.500	2	1/2-13 X 3	50	6.7	3.8	7.3	7.6
6"	6.625	2	1/2-13 X 3.5	50	9.0	4.6	9.8	9.9
8"	8.625	4	1/2-13 X 4	50	11.2	5.9	12.0	12.2
10"	10.750	4	5/8-11 X 5.5	100	13.4	7.3	14.8	14.8
12"	12.750	4	5/8-11 X 5.5	100	15.4	8.8	17.5	16.7
14"	15.300	4	5/8-11 X 5.5	100	23.0	9.5	21.0	29.0
16"	17.400	4	5/8-11 X 5.5	100	25.0	10.5	23.5	31.0

16



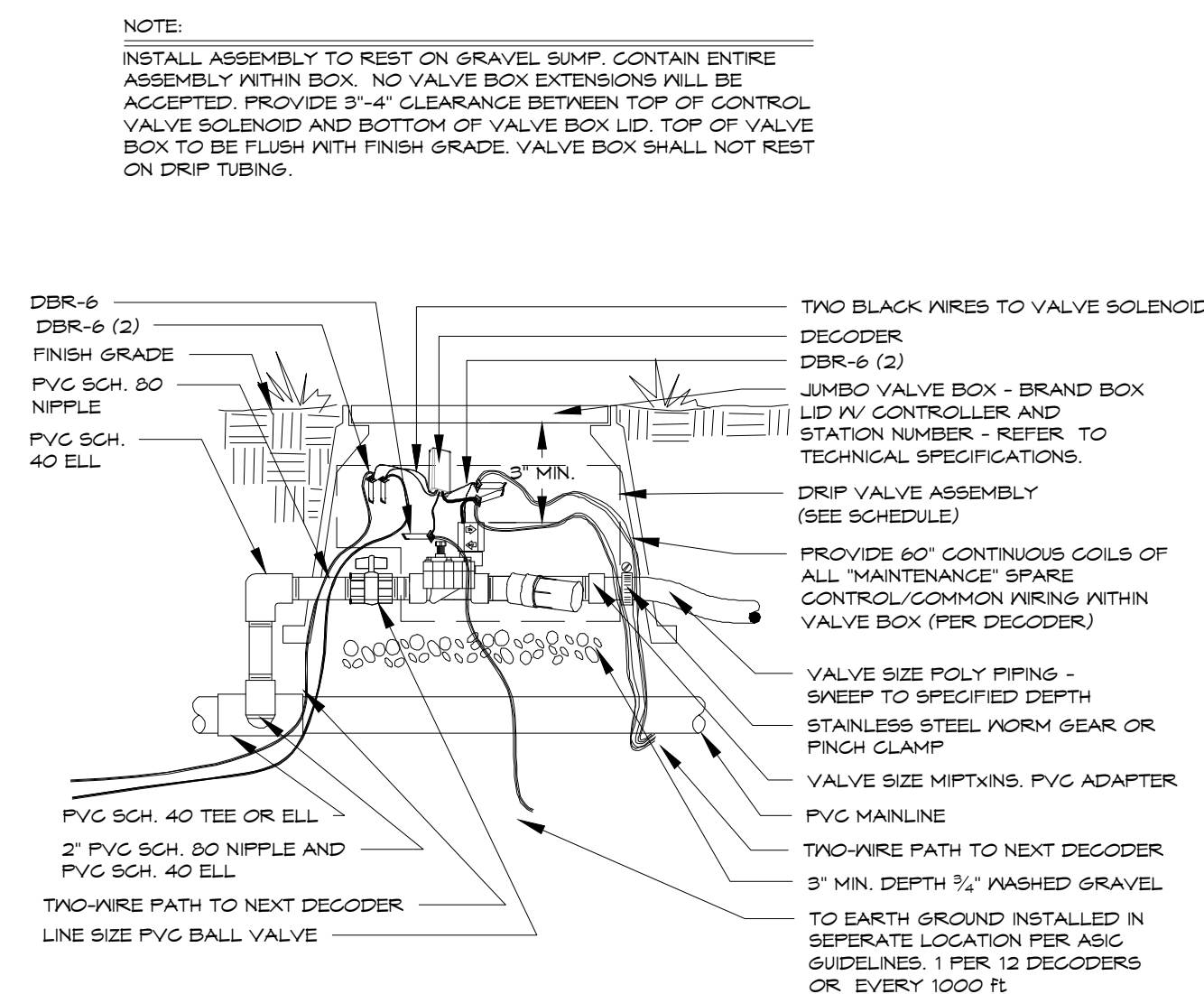
TRENCH
24" MAINLINE

17



IRRIGATION SLEWING
TYPICAL

18



DRIP VALVE
TWO-WIRE SYSTEM - KIT - POLY PIPE

19

DIRECTORY
IRRIGATION SCHEDULE
IRRIGATION NOTES
IRRIGATION PLANS
IRRIGATION DETAILS

IR-0
IR-0
IR-1 - IR-21
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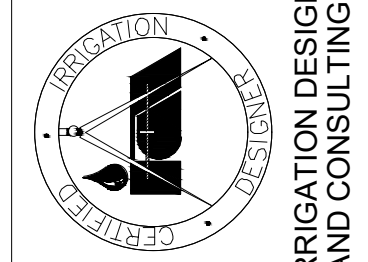
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REVISION	DATE	DESCRIPTION
BY		

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DRAWN BY: JK
CHECKED BY: JB

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IRRIGATION
DETAILS

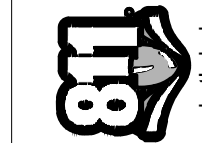
IR-23



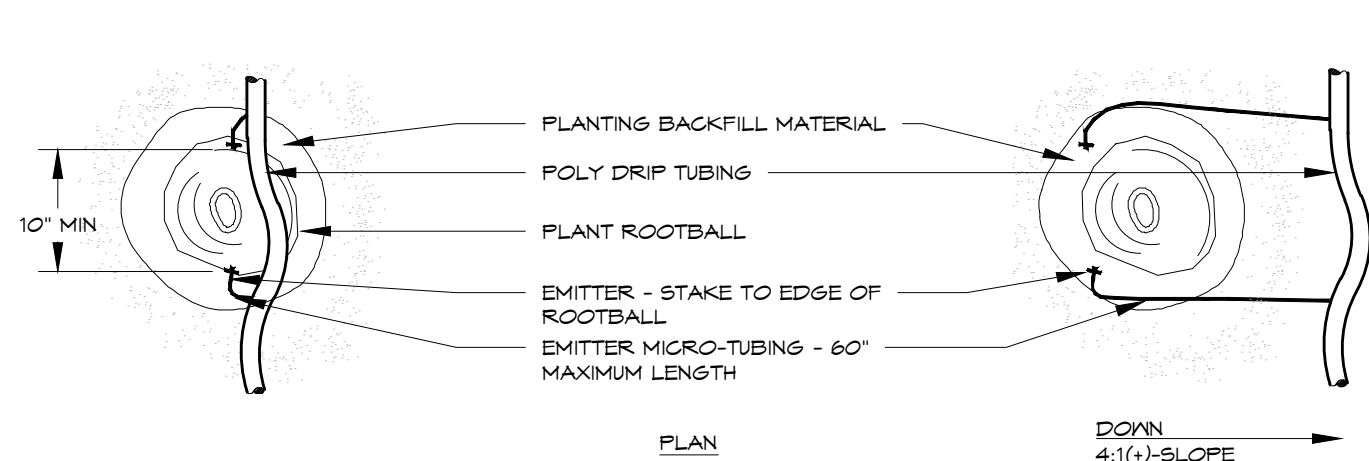
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o. 303.980.5327
www.hydrosystemsdi.com

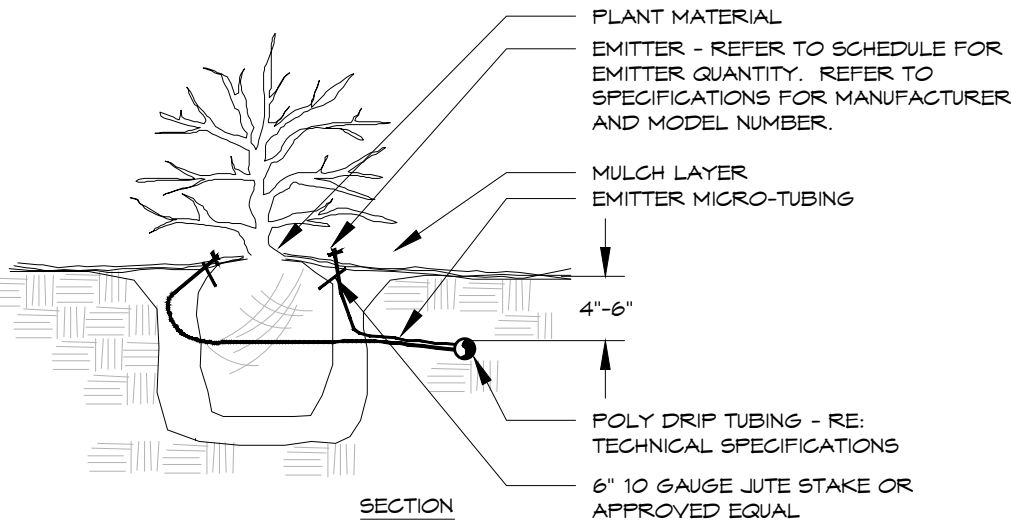
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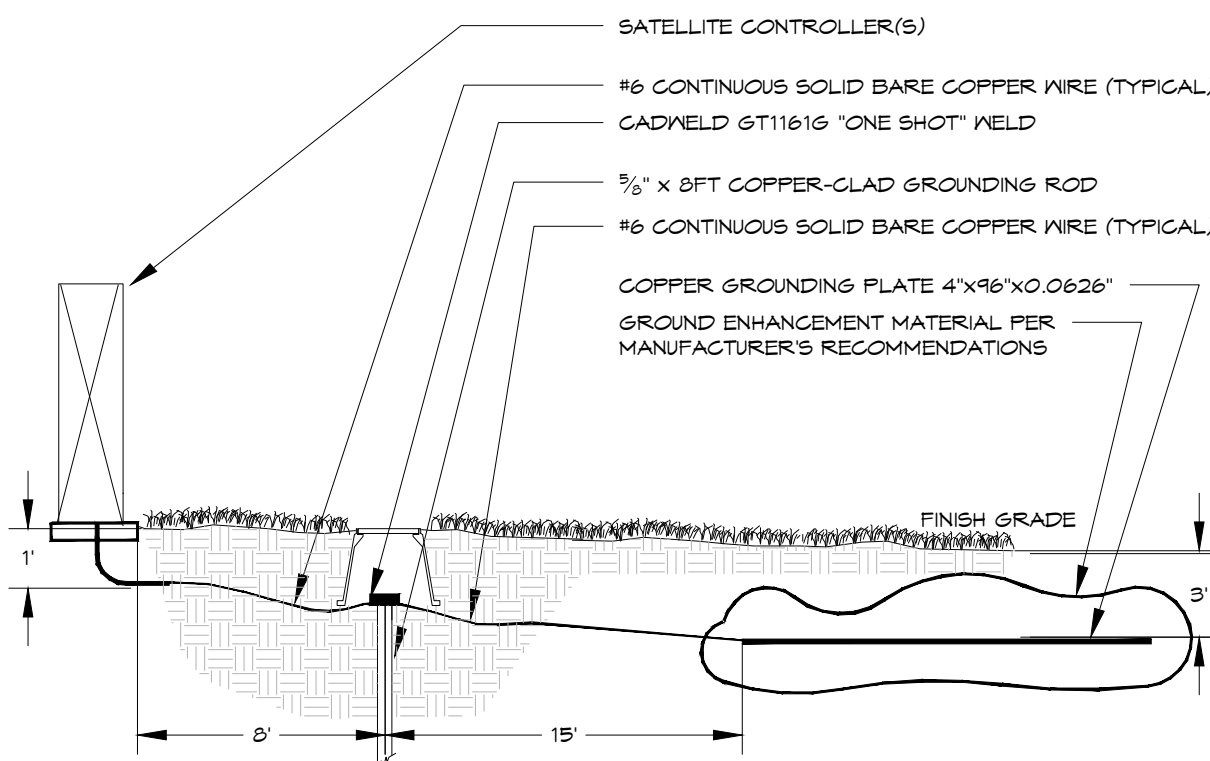
PLANT SIZE	EMITTER FLOW RATE	EMITTER QTY. AT MULCHED BED LOCATIONS	EMITTER QTY. AT NATIVE SEED LOCATIONS
1 - 2 GALLON MATERIAL	0.5 GPH	ONE EACH	ONE EACH
3 GALLON MATERIAL	0.5 GPH	TWO EACH	TWO EACH
1 1/2\" CALIPER TREE	1.0 GPH	THREE EACH	FOUR EACH
2\" CALIPER TREE	1.0 GPH	FOUR EACH	SIX EACH
2 1/2\" CALIPER TREE	1.0 GPH	SIX EACH	EIGHT EACH
3\" CALIPER TREE	1.0 GPH	EIGHT EACH	TEN EACH
3 1/2\" CALIPER TREE	1.0 GPH	NINE EACH	ELEVEN EACH
4\" CALIPER TREE	1.0 GPH	TEN EACH	TWELVE EACH
6 FT. CONIFEROUS TREE	1.0 GPH	FOUR EACH	SIX EACH
8 FT. CONIFEROUS TREE	1.0 GPH	SIX EACH	NINE EACH
10 FT. CONIFEROUS TREE	1.0 GPH	EIGHT EACH	TWELVE EACH
12 FT. CONIFEROUS TREE	1.0 GPH	TEN EACH	FOURTEEN EACH



- NOTES:
- INSTALL EMITTERS ON OPPOSING SIDES OF ROOTBALL. THREE OR MORE EMITTERS SHALL BE EQUALLY SPACED AROUND ROOT BALL.
 - EMITTERS ARE TO BE INSTALLED TO CLEAR SURFACE BY A MINIMUM OF 1" AND A MAXIMUM OF 2".
 - FLUSH ALL LINES THOROUGHLY, INCLUDING EMITTER MICRO-TUBING PRIOR TO EMITTER INSTALLATION.
 - IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL BOTH EMITTERS ON UPHILL SIDE OF ROOT BALL.
 - EMITTERS SHALL BE SELF-FLUSHING, PRESSURE COMPENSATING-TYPE UNLESS NOTED OTHERWISE WITHIN TECHNICAL SPECIFICATIONS.
 - DRIP VALVE ZONES ARE DESIGNED TO ACCOUNT FOR DIFFERENCES IN PLANT REQUIREMENTS (HYDROZONES) AND SUN EXPOSURE.
 - CONTRACTOR SHALL ENSURE HYDROZONES ARE VALVED SEPARATELY AS SHOWN ON PLAN.
 - SITE CONDITIONS MAY DICTATE THAT MULTIPLE SUN EXPOSURES ARE VALVED TOGETHER DURING THE DESIGN PROCESS. CONTRACTOR SHALL ADJUST EMITTER SCHEDULE AS FOLLOWS:
 - EMITTER QUANTITIES SHALL REMAIN THE SAME BUT EMITTER GALLONAGES SHALL BE DOUBLED FOR PLANTS WITH SOUTH AND WEST EXPOSURES.
 - EMITTER QUANTITIES AND GALLONAGE SHALL BE AS SHOWN IN SCHEDULE FOR PLANTS WITH NORTH AND EAST EXPOSURES.
 - PLANTINGS WITH NORTH AND EAST EXPOSURE SHALL DICTATE VALVE RUN-TIMES AND CONTRACTOR SHALL ADJUST SCHEDULING ACCORDINGLY.

DRIP EMITTER BELOW GRADE

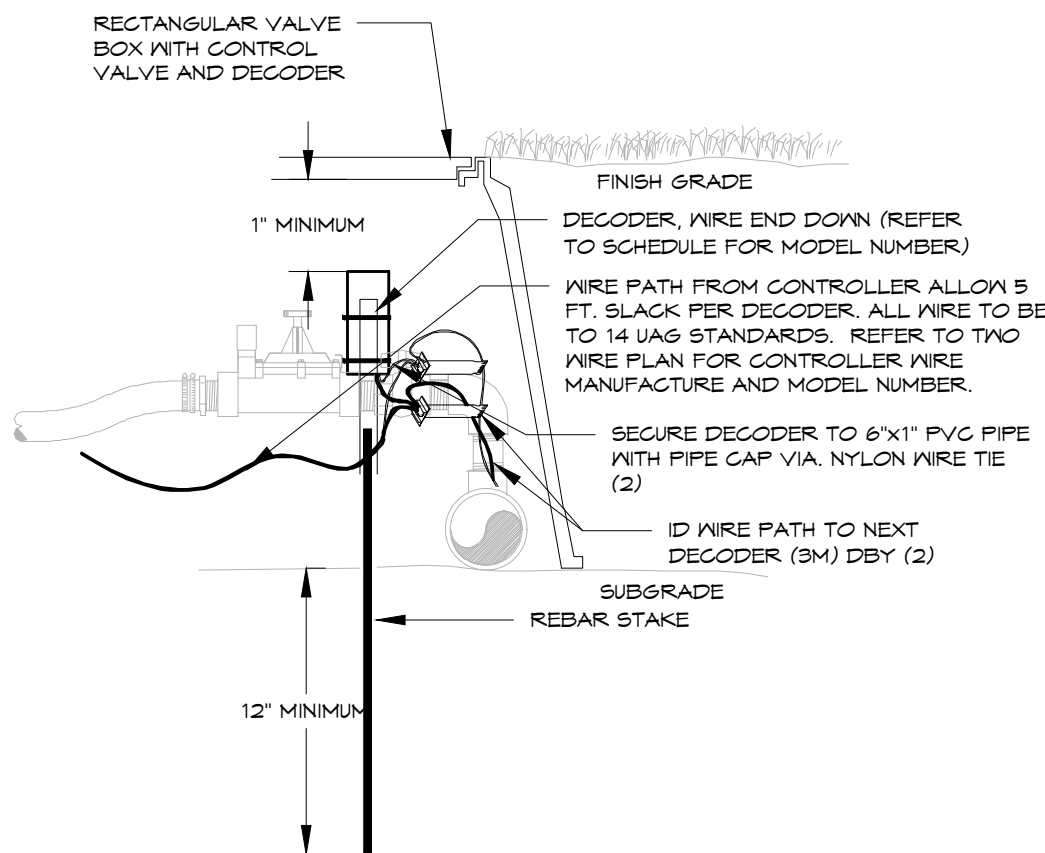
20



GROUNDING MUST MEET ALL MANUFACTURER'S REQUIREMENTS. IN ADDITION, GROUNDING PLATE DESIGN CONSISTS OF ONE VERTICAL 8-FOOT COPPER CLAD GROUNDING ROD (AT LEAST EIGHT FEET FROM THE EQUIPMENT), AND ONE COPPER GROUNDING PLATE PER 40 STATIONS REQUIRING GROUNDING. INSTALL GROUNDING PLATE HORIZONTALLY, THREE FEET DEEP AND 18" FROM THE GROUNDING ROD. SHOULD MULTIPLE RODS/PLATES BE REQUIRED, THEY SHALL BE PLACED A MINIMUM OF 3 LINEAR FEET FROM EACH OTHER. PERFORM CADWELD CONNECTION TO GROUNDING ROD(S) AND PLACEMENT OF GROUNDING PLATE(S) IN OWNER'S PRESENCE PRIOR TO BACKFILL. REFER TO ASIG STANDARDS FOR MORE INFORMATION.

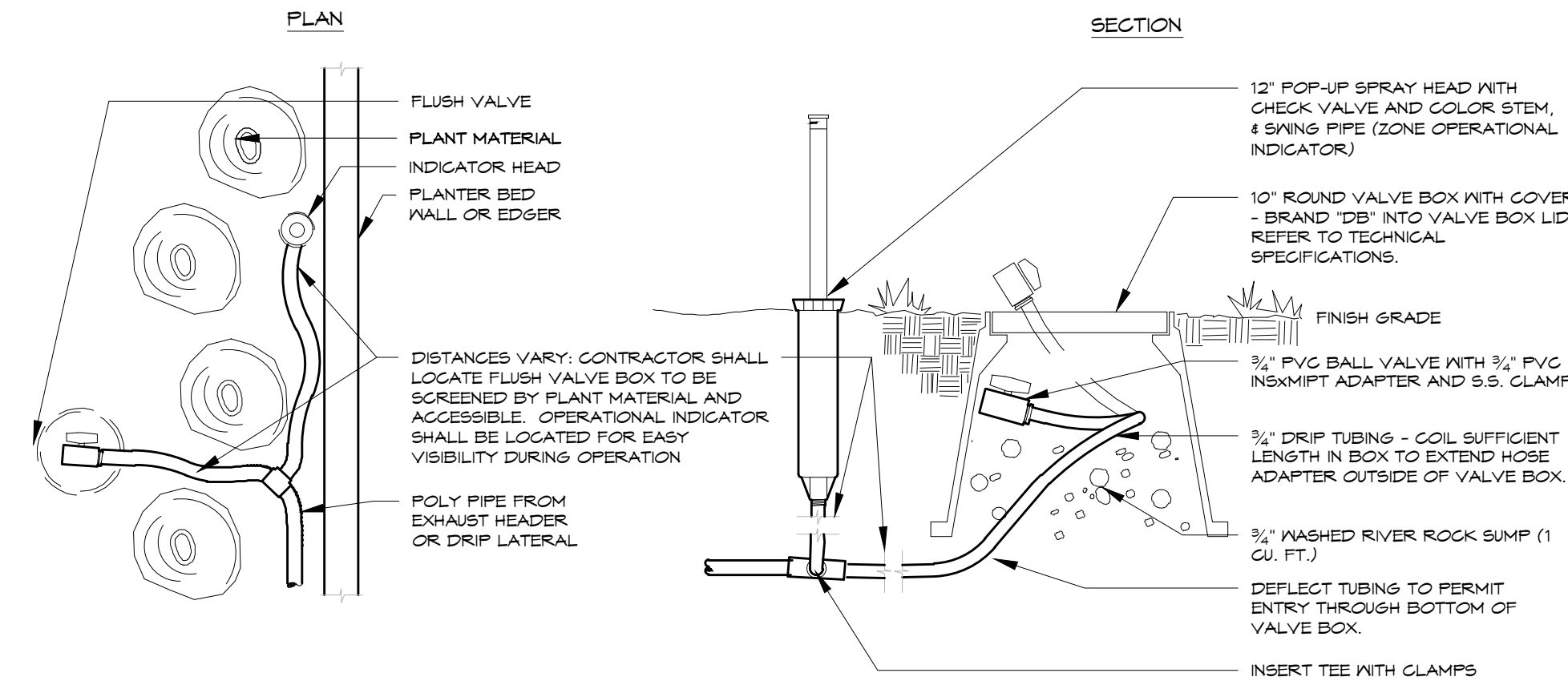
CONTROLLER GROUNDING TWO-WIRE SYSTEM - Pedestal Mount

22



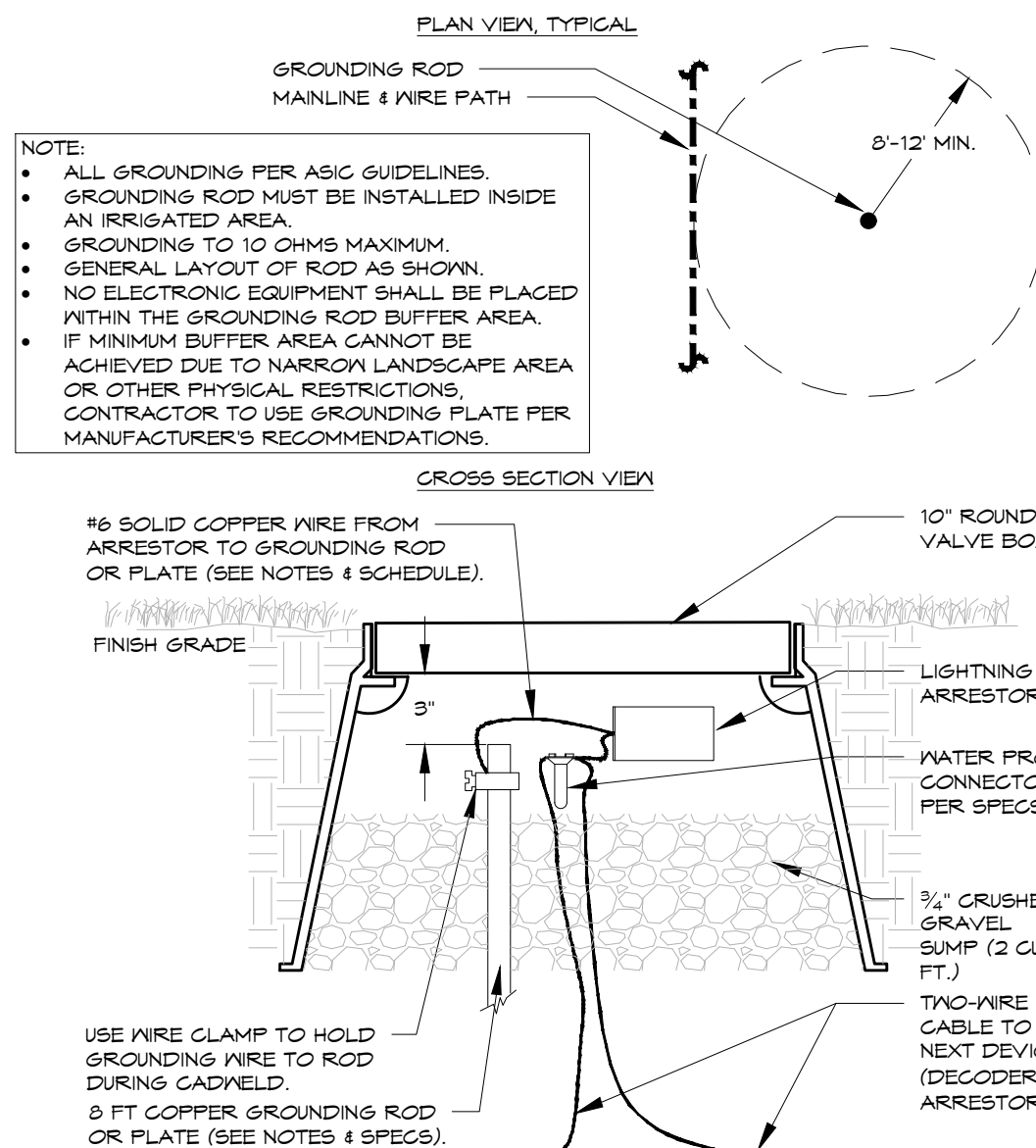
DECODER INSTALLATION TWO-WIRE SYSTEM

23



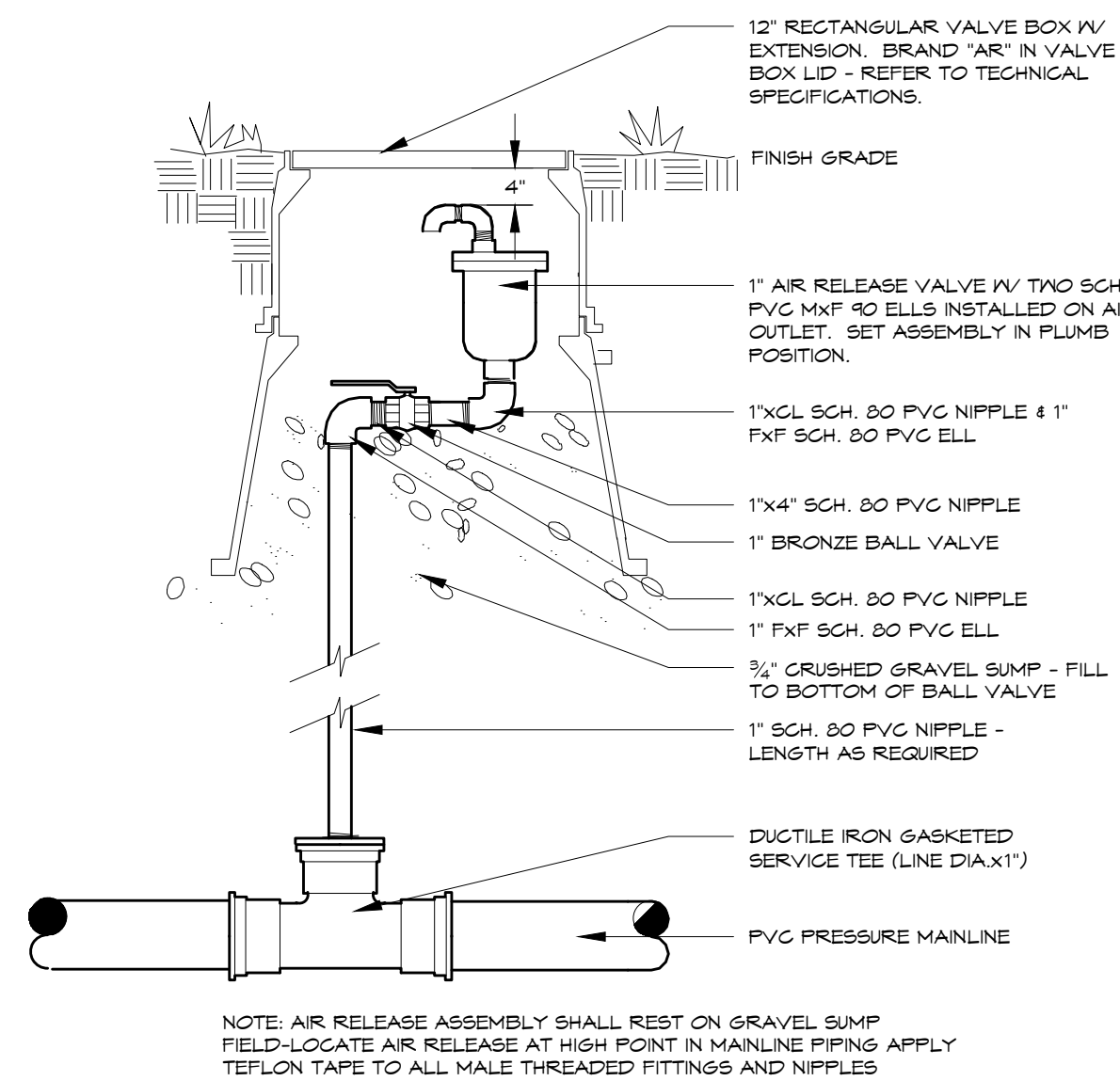
DRIP FLUSH VALVE WITH OPERATIONAL INDICATOR

21



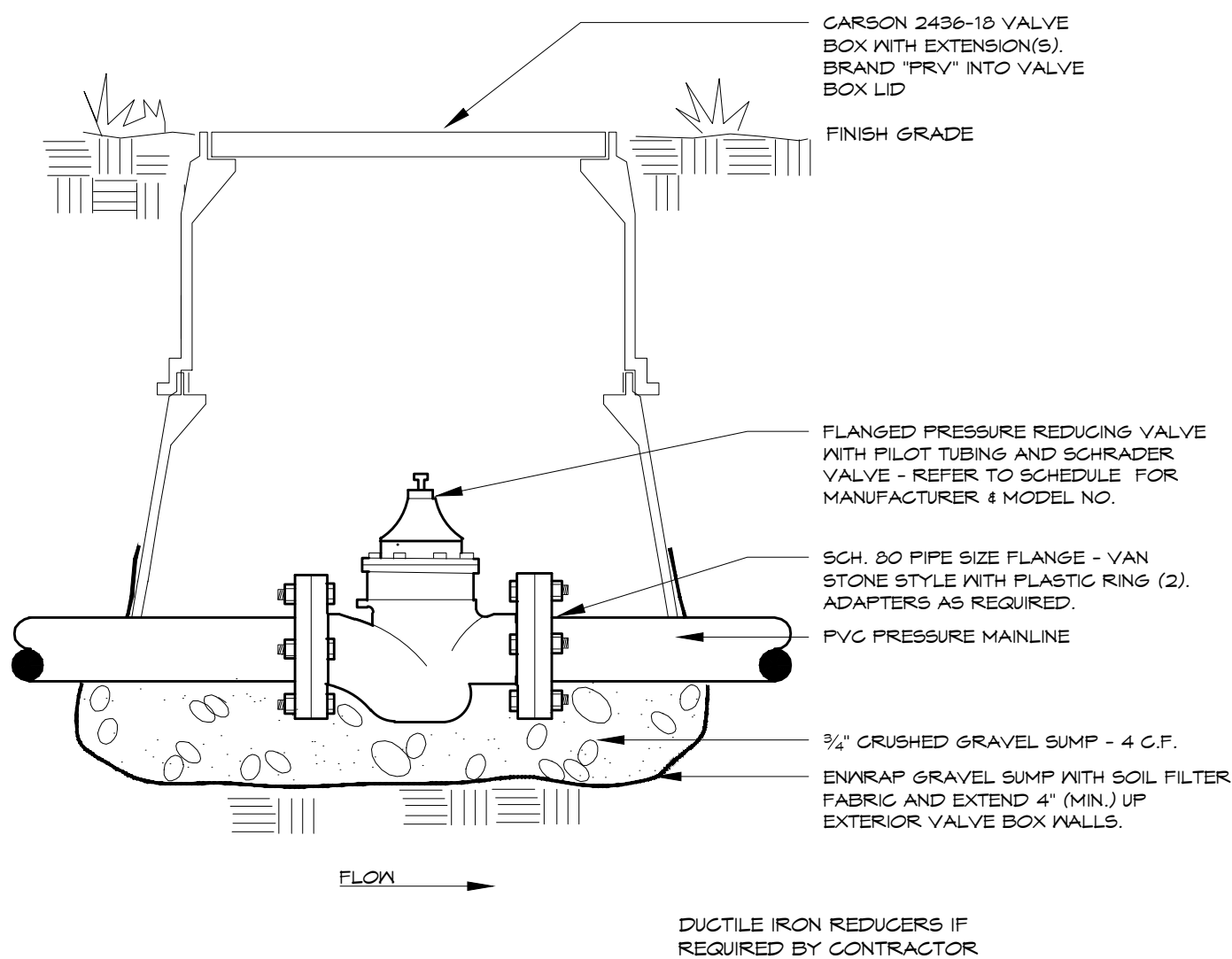
ARRESTOR GROUNDING TWO-WIRE SYSTEM - TYPICAL

24



AIR RELIEF VALVE

25



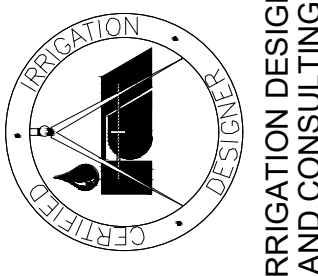
PRESSURE REDUCING VALVE 3\" & LARGER - TYPICAL

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REVIEW
NOT FOR
CONSTRUCTION

DIRECTORY
IRRIGATION SCHEDULE
IRRIGATION NOTES
IRRIGATION PLANS
IRRIGATION DETAILS

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IR-0
IR-1 - IR-21
IR-22 - IR-24



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