
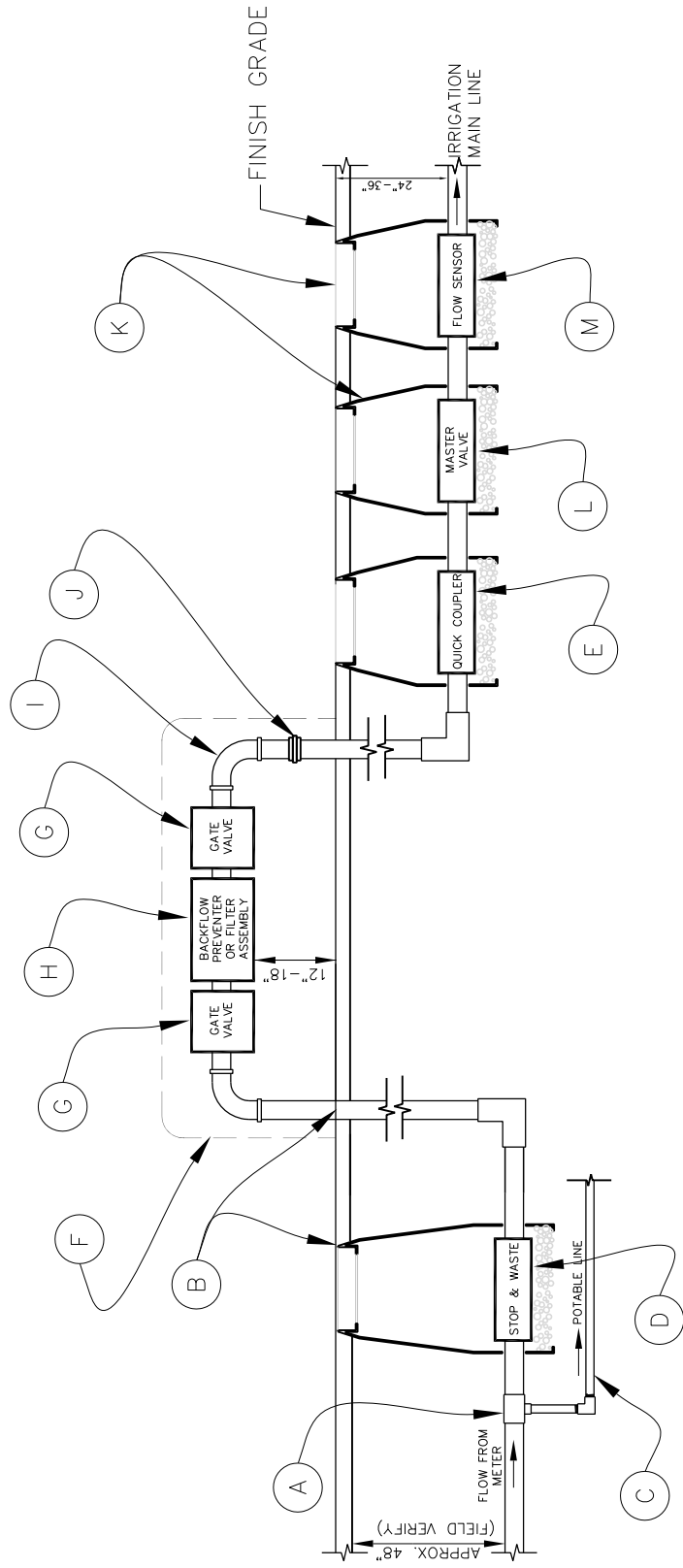


IRRIGATION WATERLINE STANDARD DETAILS

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1	APPROVED		SEPT. 06		<u>IRRIGATION WATERLINE STANDARDS</u>	<h1 style="margin: 0;">IRR-0</h1>
NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY		



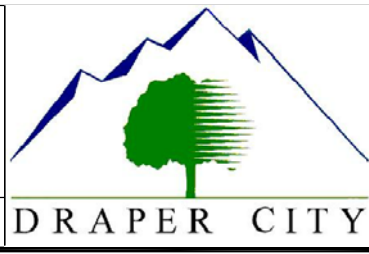
PART LIST

- A. THREADED TEE
- B. JUMBO VALVE BOX (2 REQ'D)
- C. BYPASS LINE
- D. STOP & WASTE VALVE
- E. QUICK COUPLER
- F. BACKFLOW ENCLOSURE: STRONGBOX MODEL #SBBC-45CR OR APPROVED EQUAL
- G. THREADED GATE VALVE
- H. BACKFLOW ASSEMBLY WILKENS OR APPROVED EQUAL-(AMIAD "BRUSH AWAY" FILTER ON SECONDARY APPLICATIONS)
- I. GALVANIZED 90° ELL (2 REQ'D)
- J. GALVANIZED UNION
- K. STANDARD VALVE BOX (2 REQ'D) FOR 2" OR SMALLER; 5'x5' VAULT FOR 4" OR LARGER
- L. MASTER CONTROL VALVE
- M. FLOW SENSOR

NOTES

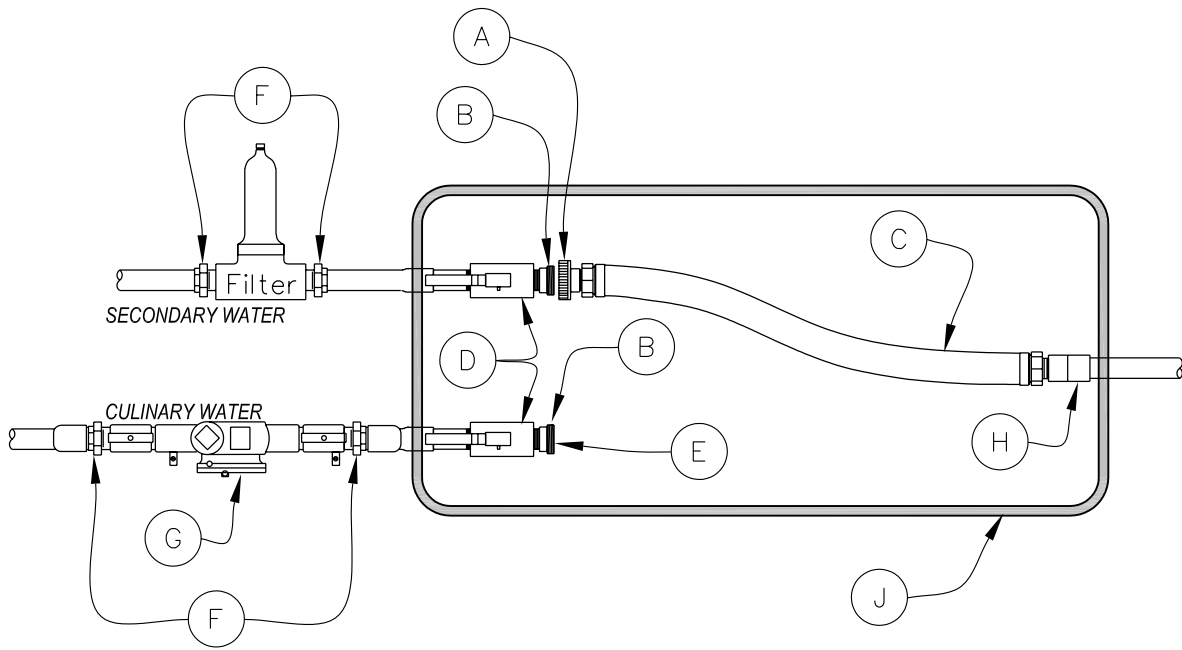
1. PIPE AND FITTING ARE PROJECT SPECIFIC
2. BACKFLOW PREVENTER SHALL BE TESTED BY CERTIFIED TESTER PRIOR TO APPROVAL

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**TYPICAL
ASSEMBLY
DIAGRAM**


IRR-01

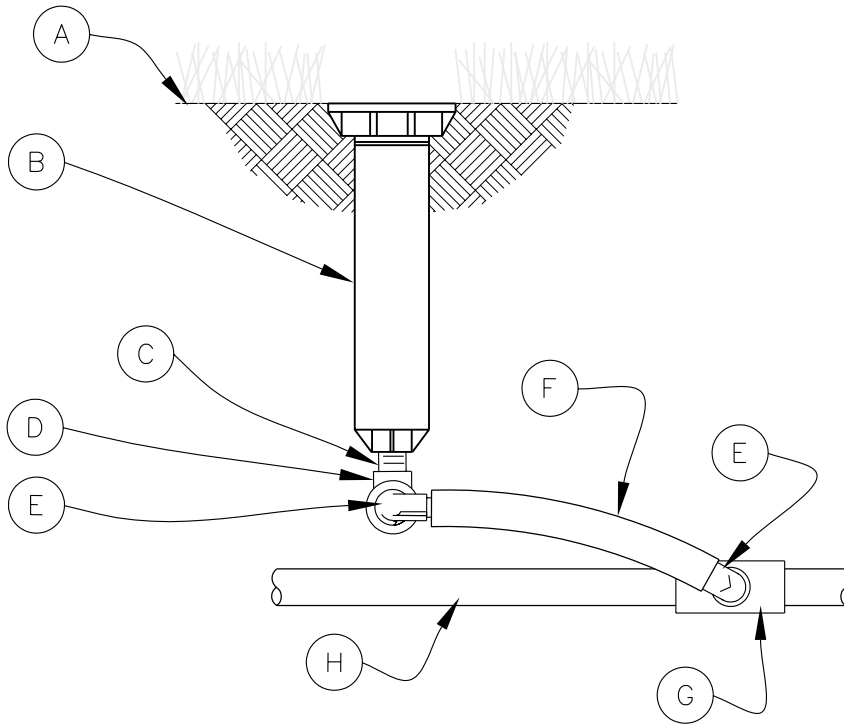


PIPE AND FITTING SIZES
ARE PROJECT SPECIFIC

PART LIST


- A. PVC UNION—MALE END
- B. PVC UNOIN—FEMALE END
- C. DURO FLEX HOSE
- D. APOLLO BALL VALVE
- E. END CAP FOR NON—USE
- F. UNION
- G. REDUCED PRINCIPLE
BACKFLOW PREVENTER
- H. FEMALE ADAPTER
- J. JUMBO VALVE BOX

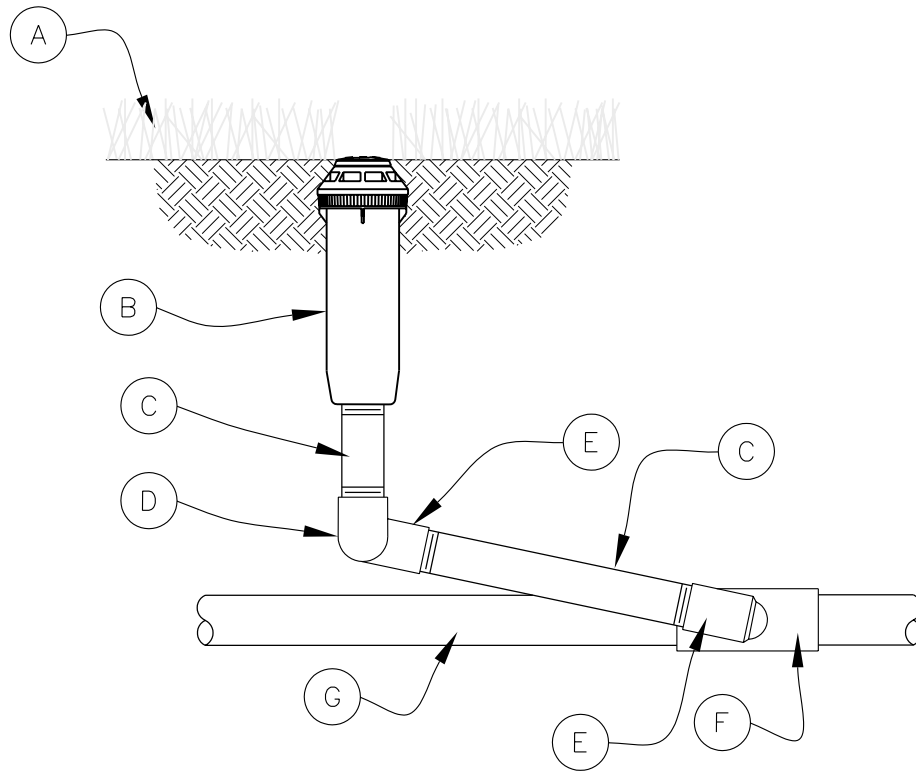
1	APPROVED		SEPT. 06		<p align="center">PHYSICAL DISCONNECT FOR DUAL WATER SOURCE</p>	<p align="center">IRR-02</p>
NO.	AUTHORIZED BY	REVISIONS	DATE			



PART LIST


- A. FINISH GRADE/TOP OF MULCH
- B. ROTOR POP-UP SPRINKLER
- C. PVC SCHEDULE 80 NIPPLE (LENGTH AS REQ'D)
- D. MARLEX STREET ELL
- E. 1/2" MALE NPT x .490" BARB ELBOW
- F. SWING PIPE 12" LENGTH
- G. PVC SCHEDULE 40 TEE OR ELL
- H. PVC SCHEDULE 40 LATERAL PIPE

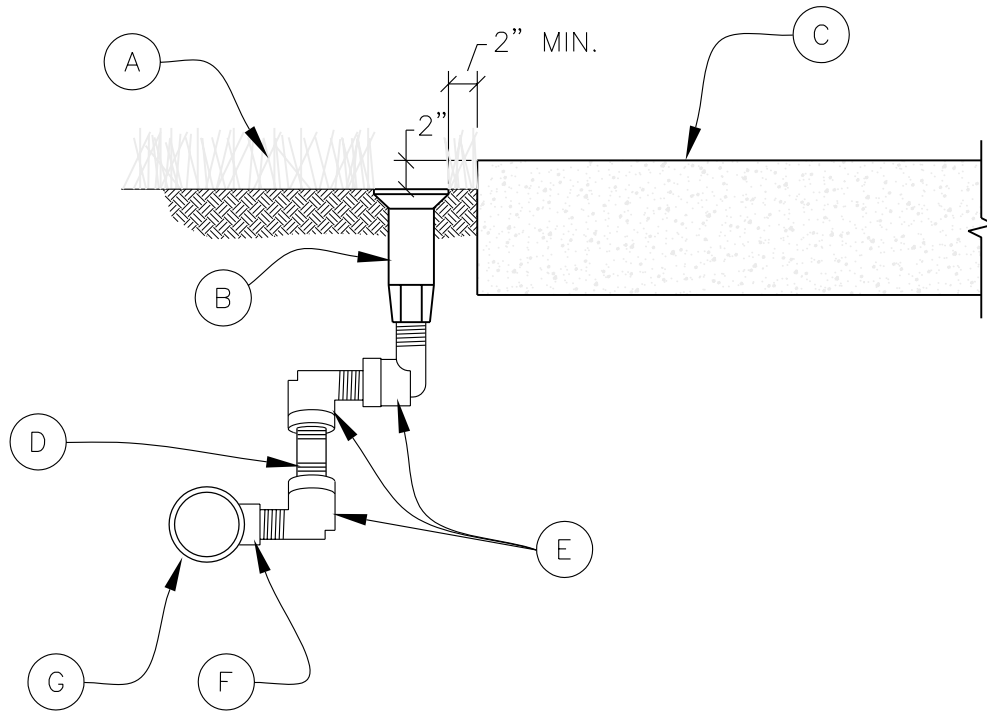
1	APPROVED		SEPT. 06		<p>POP-UP SPRAY HEAD</p>	<p>IRR-03</p>
NO.	AUTHORIZED BY	REVISIONS	DATE			



PART LIST


- A. FINISH GRADE/TOP OF MULCH
- B. ROTOR POP-UP SPRINKLER
- C. PVC SCHEDULE 80 NIPPLE (LENGTH AS REQ'D)
- D. PVC SCHEDULE 40 THREADED ELL
- E. PVC SCHEDULE 40 STREET ELL
- F. PVC SCHEDULE 40 TEE OR ELL
- G. PVC SCHEDULE 40 LATERAL PIPE

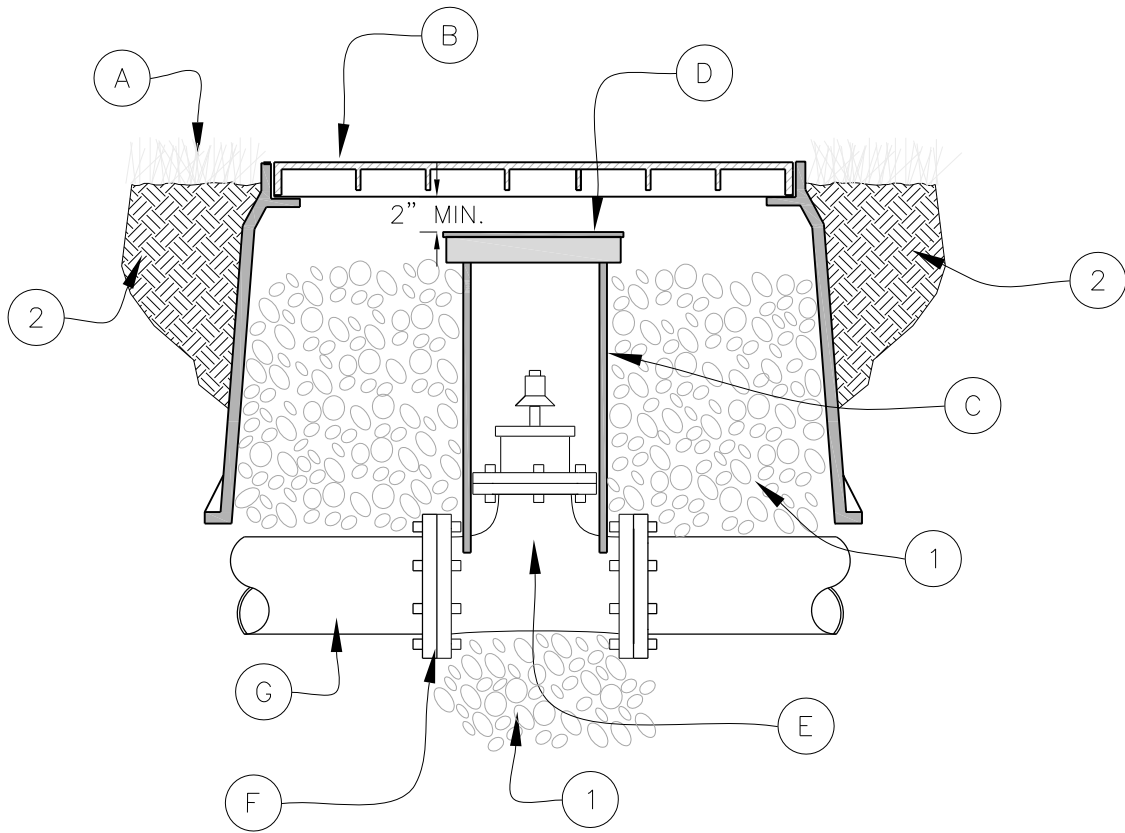
1	APPROVED		SEPT. 06		<p>POP-UP ROTOR HEAD</p>	<p>IRR-04</p>
NO.	AUTHORIZED BY	REVISIONS	DATE			



PART LIST

- A. FINISH GRADE/TOP OF MULCH
- B. SPRINKLER HEAD
- C. CURB, SIDEWALK OR MOW STRIP
- D. PVC SCHEDULE 80 NIPPLE (8" MIN.)
NOT TO EXCEED 45°ANGLE
- E. MARLEX STREET ELL
- F. PVC SCHEDULE 40 TEE OR ELL
- G. PVC SCHEDULE 40 LATERAL PIPE

1	APPROVED		SEPT. 06		<p>ALTERNATIVE MARLEX ASSEMBLY: SPRAY HEADS ONLY</p>	<p>IRR-05</p>
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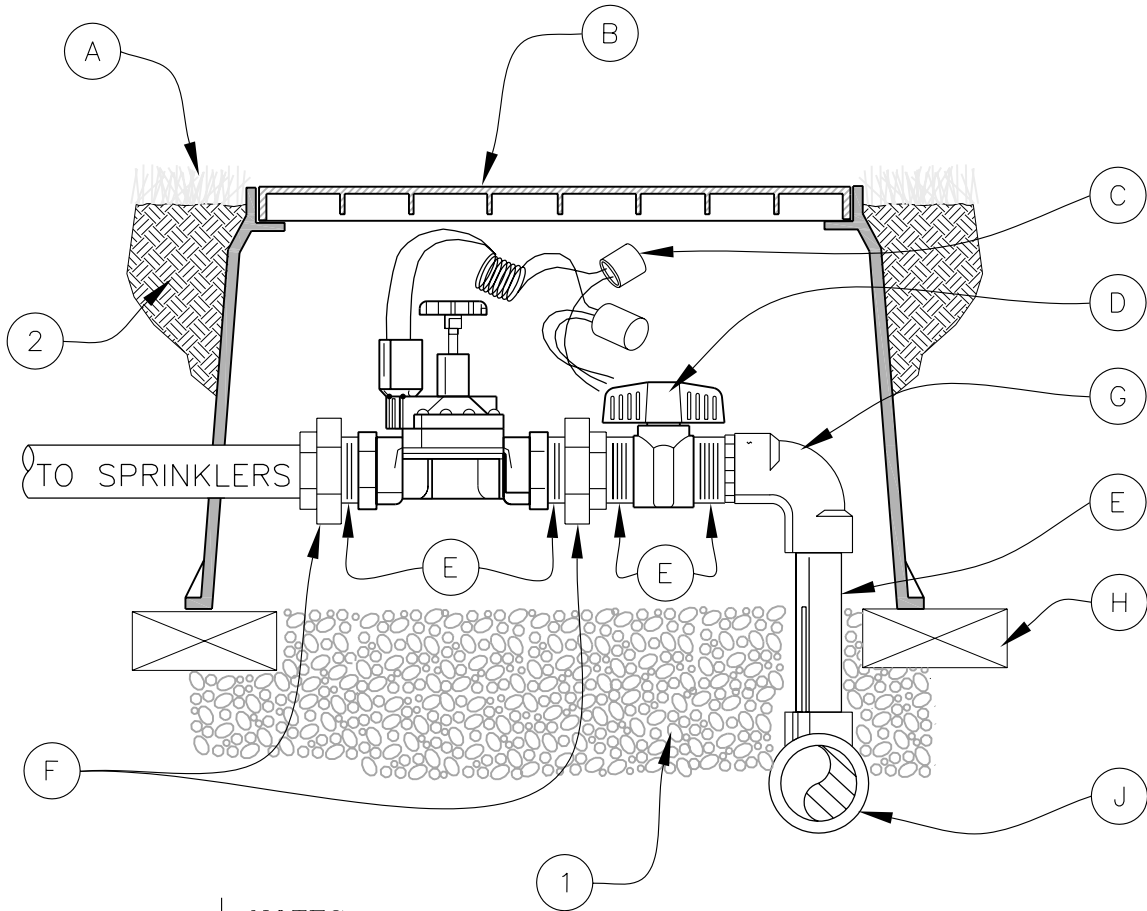
NOTES

1. WASHED AGGREGATE FOR SETTING BED TO SECURE SLEEVE AND VALVE
2. BACKFILL ALL SIDES TO SET VALVE BOX AND TO PREVENT SETTLING

PART LIST

- A. FINISH GRADE/TOP OF MULCH
- B. STANDARD PLASTIC VALVE BOX
(WITH BOLT DOWN COVER)
- C. CLASS 200 PVC SLEEVE
(LENGTH AND SIZE AS REQ'D)
NOTCH OVER VALVE FOR STABILITY
- D. PVC CAP
- E. AWWA CAST IRON VALVE
(GATE VALVE FOR 2" OR LARGER LINES
BALL VALVE FOR LINES UNDER 2")
- F. COMPANION FLANGE W/GASKETS & FITTINGS
- G. MAINLINE

1	APPROVED		SEPT. 06		<p><u>ISOLATION SHUT-OFF VALVE</u></p>	<p>IRR-06</p>
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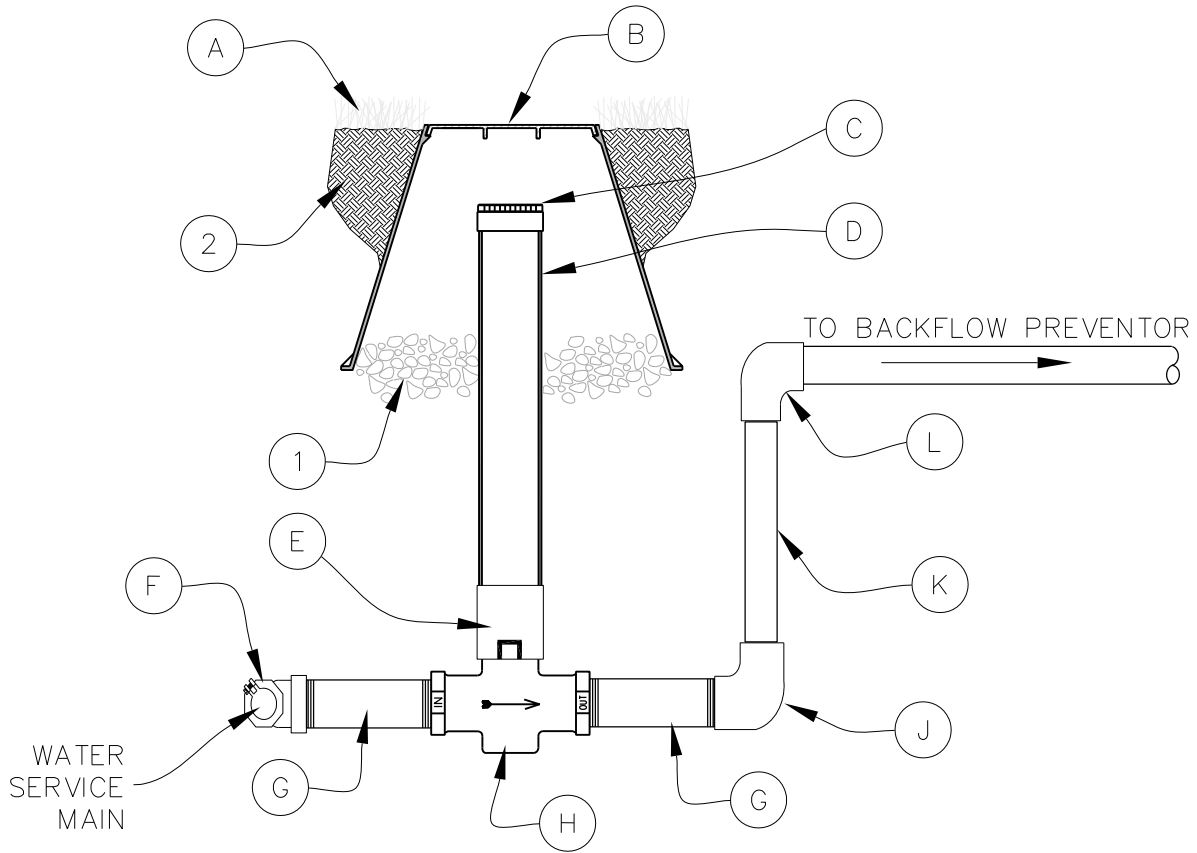
NOTES

1. WASHED AGGREGATE FOR SUMP DRAIN AND STABILIZING VALVE BOX
2. BACKFILL ALL SIDES TO SET VALVE BOX AND TO PREVENT SETTLING
3. SCRUBBER VALVES REQUIRED FOR ALL SECONDARY WATER APPLICATIONS

PART LIST

- A. FINISH GRADE/TOP OF MULCH
- B. STANDARD PLASTIC VALVE BOX (WITH BOLT DOWN COVER)
- C. WATERPROOF WIRE CONNECTORS
- D. PVC SCHEDULE 80 THREADED BALL VALVE
- E. PVC SCHEDULE 80 NIPPLE (LENGTHS WILL VARY)
- F. DURA UNIONS
- G. PVC SCHEDULE 80 90° SLIP x THREADED ELL
- H. BRICK (4 NEEDED)
- J. MAINLINE

1	APPROVED		SEPT. 06		<p style="text-align: center;">REMOTE CONTROL VALVE</p>	<p style="text-align: center;">IRR-07</p>
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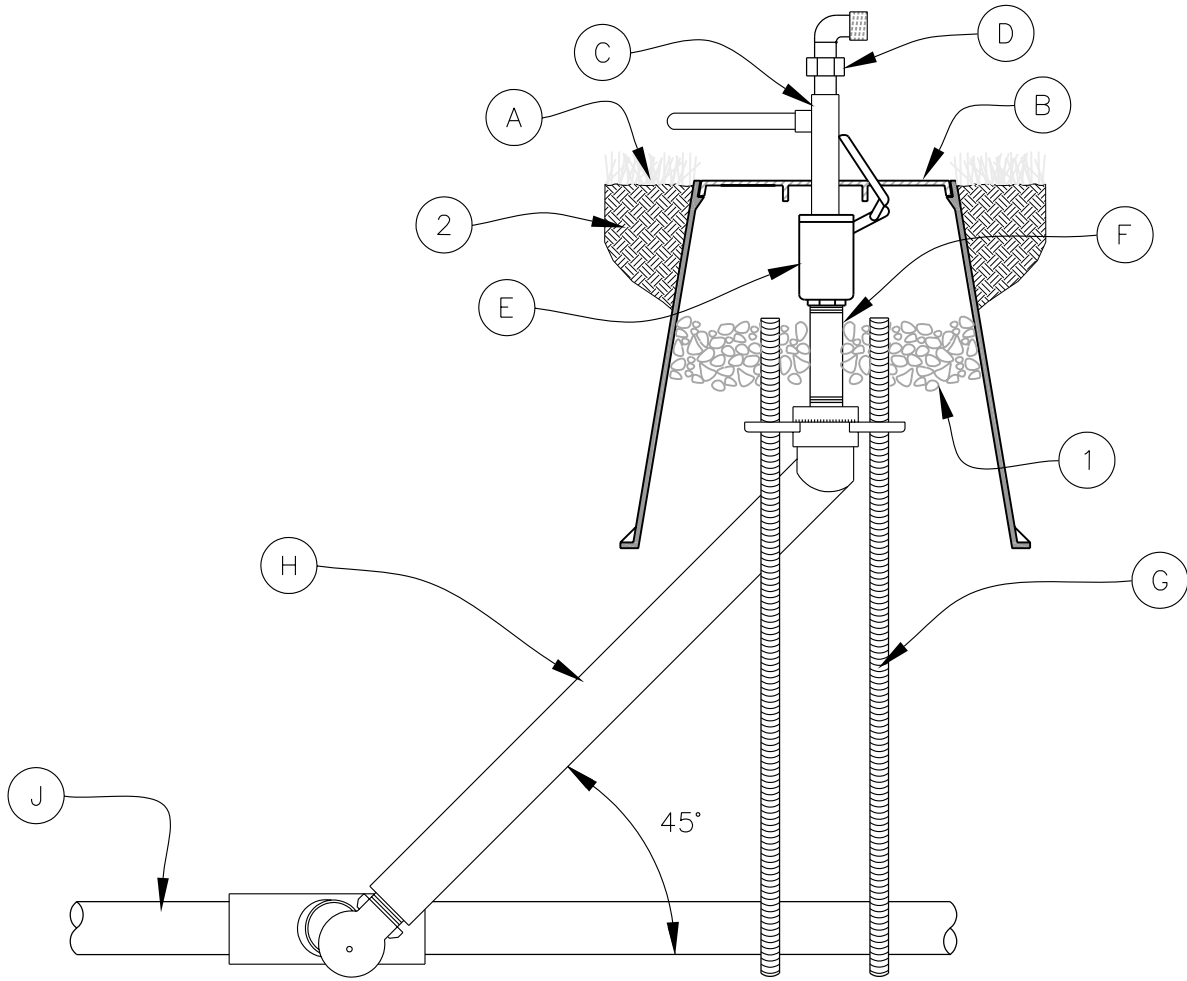
NOTES

1. WASHED AGGREGATE FOR SUMP DRAIN AND STABILIZING 2" PVC PIPE
2. BACKFILL ALL SIDES TO SET VALVE BOX AND TO PREVENT SETTLING

PART LIST

- A. FINISH GRADE/TOP OF MULCH
- B. 6" ROUND VALVE BOX (WITH BOLT DOWN COVER)
- C. 2" SNUG CAP (YELLOW)
- D. 2" PVC SCHEDULE 80 PIPE (LENGTH VARIES)
- E. 2" PVC ADAPTOR
- F. FORD COMPRESSION TEE
- G. BRASS NIPPLE (LENGTH VARIES)
- H. STOP & WASTE VALVE—MUELLER OR EQUAL
- J. PVC SCHEDULE 80 90° ELL (THREADED X SLIP)
- K. PVC SCHEDULE 80 NIPPLE
- L. PVC SCHEDULE 80 90° ELL

1	APPROVED		SEPT. 06		<p>STOP & WASTE VALVE</p>	<p>IRR-08</p>
NO.	AUTHORIZED BY	REVISIONS	DATE			




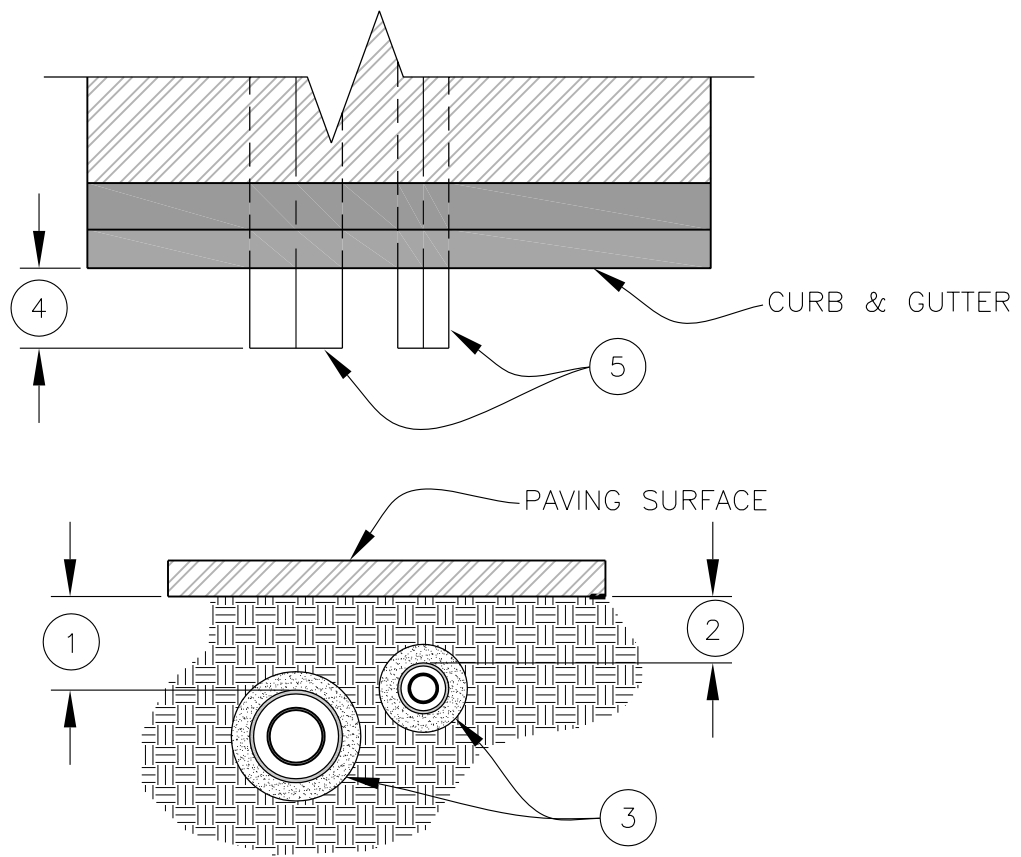
NOTES

1. WASHED AGGREGATE FOR SUMP DRAIN AND STABILIZING APERTURE
2. BACKFILL ALL SIDES TO SET VALVE BOX AND TO PREVENT SETTLING

PART LIST

- A. FINISH GRADE/TOP OF MULCH
- B. STANDARD 10" DIA. VALVE BOX (WITH BOLT DOWN COVER)
- C. VALVE COUPLER KEY
- D. BRASS SWIVEL HOSE & ELBOW W/PVC END CAP (TYP.)
- E. TWO PIECE DESIGN QUICK COUPLING VALVE (W/VALVE COVER)
- F. BRASS NIPPLE (LENGTH WILL VARY)
- G. #5 (5/8" DIA.) REBAR 2 REQ'D. (LENGTHS WILL VARY)
- H. LASCO UNITIZED BRASS INSERT SWING JOINT WITH STABILIZER ELBOW
- J. MAINLINE

1	APPROVED		SEPT. 06		QUICK COUPLING VALVE	IRR-09
NO.	AUTHORIZED BY	REVISIONS	DATE			



WIRE CONDUIT SIZES – 14 GAUGE

NUMBER OF WIRES	MIN. CONDUIT SIZE
1-4	3/4"
5-7	1"
8-11	1 1/2"
12-22	2"
23-31	2 1/2"
32-36	3"

*WIRES SHALL BE IN SEPARATE CONDUIT AS PER CHART BELOW

SLEEVE SIZE CHART

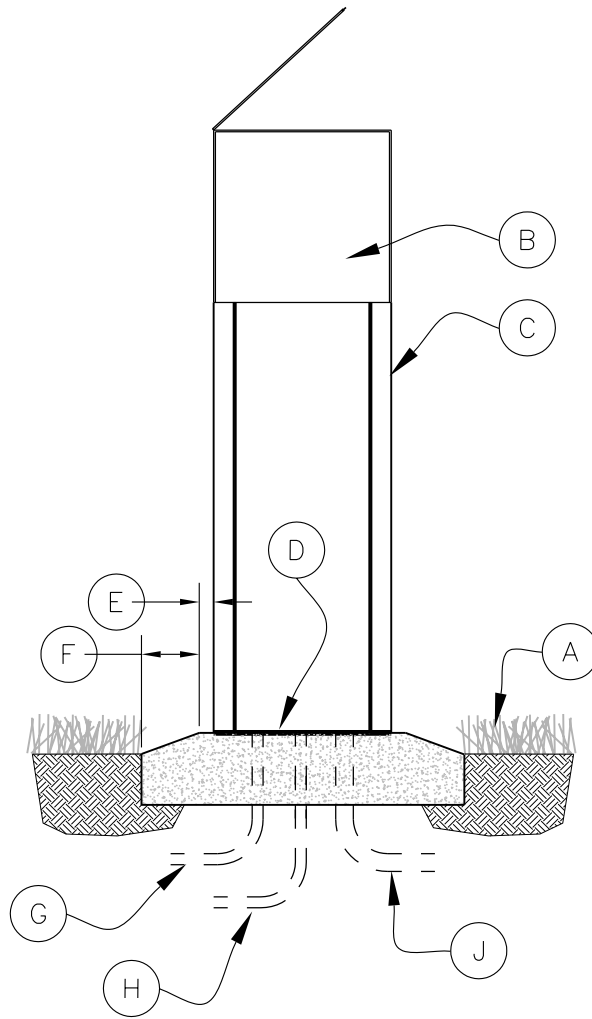
PIPE SIZE	MIN. SLEEVE SIZE
3/4"	1 1/2"
1"	2"
1 1/4"	2 1/2"
1 1/2"	2 1/2"
2"	3"
2 1/2"	4"
3"	4"
4"	6"
6"	8"

*WHEN MULTIPLE PIPES OCCUR IN ONE TRENCH, ADD REQUIRED SLEEVE SIZES TOGETHER FOR 1 SLEEVE SIZE

NOTES


1. 18" TO 24" DEPTH FOR MAINLINE SLEEVING
2. 12" TO 18" DEPTH FOR LATERAL LINE SLEEVING
3. SURROUND ALL SLEEVING WITH 2" MINIMUM SAND
4. EXTEND ALL SLEEVING A MINIMUM OF 12" BEYOND EDGE OF PAVING.
5. REFER TO SLEEVING DIAGRAM FOR SIZES OF ALL SLEEVING
6. TRACER WIRE REQUIRED UNDER ALL MAINS.

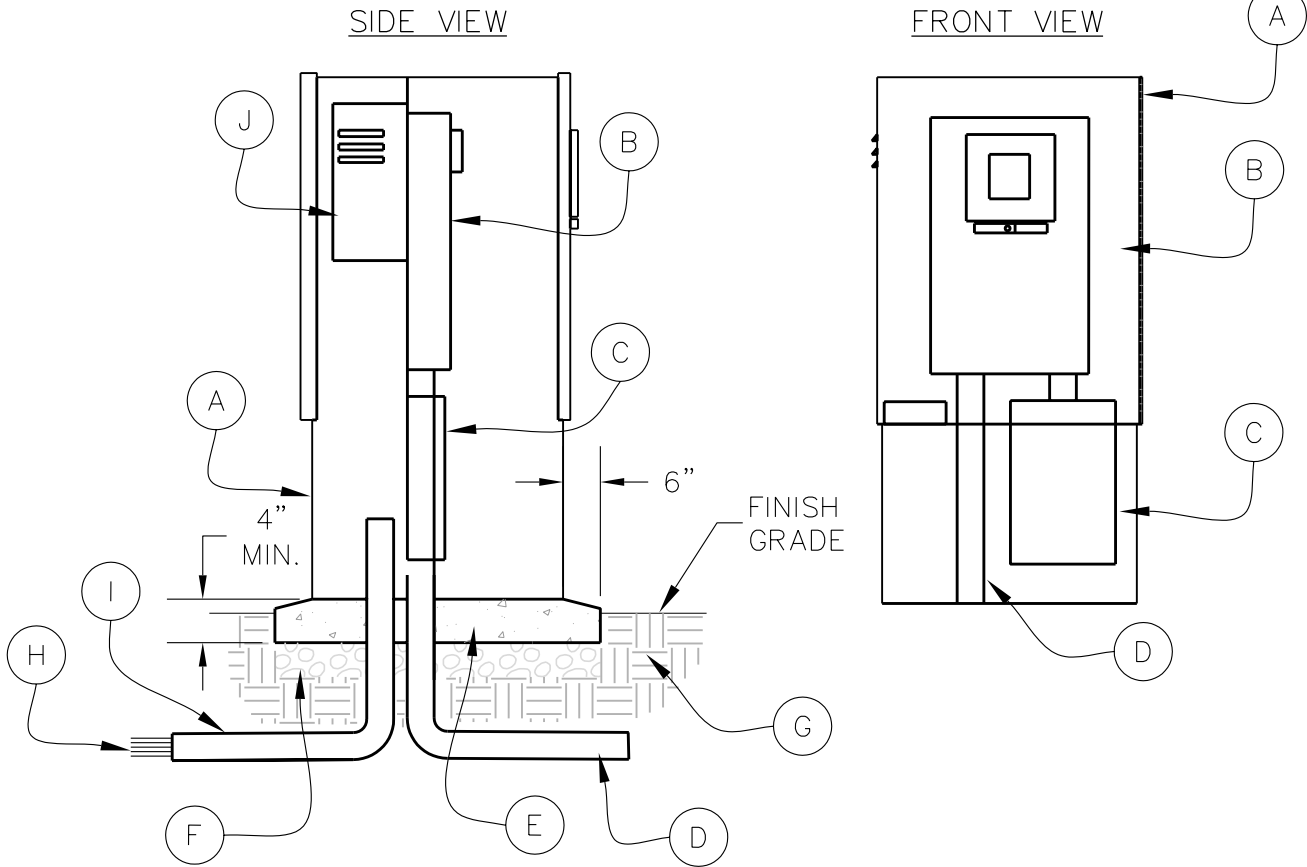
1	APPROVED		SEPT. 06		<p>PIPE SLEEVING DETAIL</p>	<p>IRR-10</p>
NO.	AUTHORIZED BY	REVISIONS	DATE	<p>DRAPER CITY</p>		



PART LIST

- A. FINISH GRADE/TOP OF MULCH
- B. CONTROLLER & METAL CABINET
(HUNTER ICC OR EQUIVALENT)
- C. INSTALL RAIN SENSOR PER MANUFACTURE'S SPECIFICATIONS
(HUNTER MINI-CLICK-SG-MC OR EQUIVALENT)
- D. CONCRETE PAD FOR PEDESTAL
(SIZE SHALL BE FIELD DETERMINED)
- E. 1" MIN. CLEARANCE BETWEEN PEDESTAL AND SLOPE OF PAD
- F. 5" MIN. WIDTH FOR DRAINAGE SLOPE AROUND PEDESTAL PAD
(SLOPE SHALL BE APPROX. 2% ALL FOUR SIDES)
- G. 1" CONDUIT FOR 120/230 VAC
- H. 3/4" CONDUIT FOR GROUND
- J. 4" CONDUIT FOR VALVE WIRES

1	APPROVED		SEPT. 06		<p align="center"><u>CONTROLLER</u> <u>AND</u> <u>PEDESTAL</u></p>	<p align="center">IRR-11</p>
NO.	AUTHORIZED BY	REVISIONS	DATE			




NOTES

1. GROUND LOW VOLTAGE WITH 3 GROUND ROD GRID 8 FEET APART

PART LIST

- A. METERED CONTROLLER ENCLOSURE
- B. METER SOCKET WITH TEST BLOCKS
- C. LOAD CENTER
- D. CONDUIT FOR LINE FEED INTO METER
- E. POURED CONCRETE BASE 0.5% MIN. SLOPE FOR DRAINAGE
- F. 6" MIN. ROAD BASE
- G. SUBGRADE: COMPACTED TO 95%
- H. DIRECT BURIAL CONTROL VALVE WIRES
- I. PVC LONG SWEEP ELL (2 REQ'D) ONE IS FOR FUTURE USE
- J. AUTOMATIC CONTROLLERS—REMOVE FRONT DOORS OF CONTROLLERS AND PLACE SIDE BY SIDE

1	APPROVED		SEPT. 06		<p>CONTROLLER METER ENCLOSURE</p>	<p>IRR-12</p>
NO.	AUTHORIZED BY	REVISIONS	DATE			