

## PART VI

### ON-SITE IRRIGATION STANDARD DRAWINGS

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DRAWING NO.

TITLE

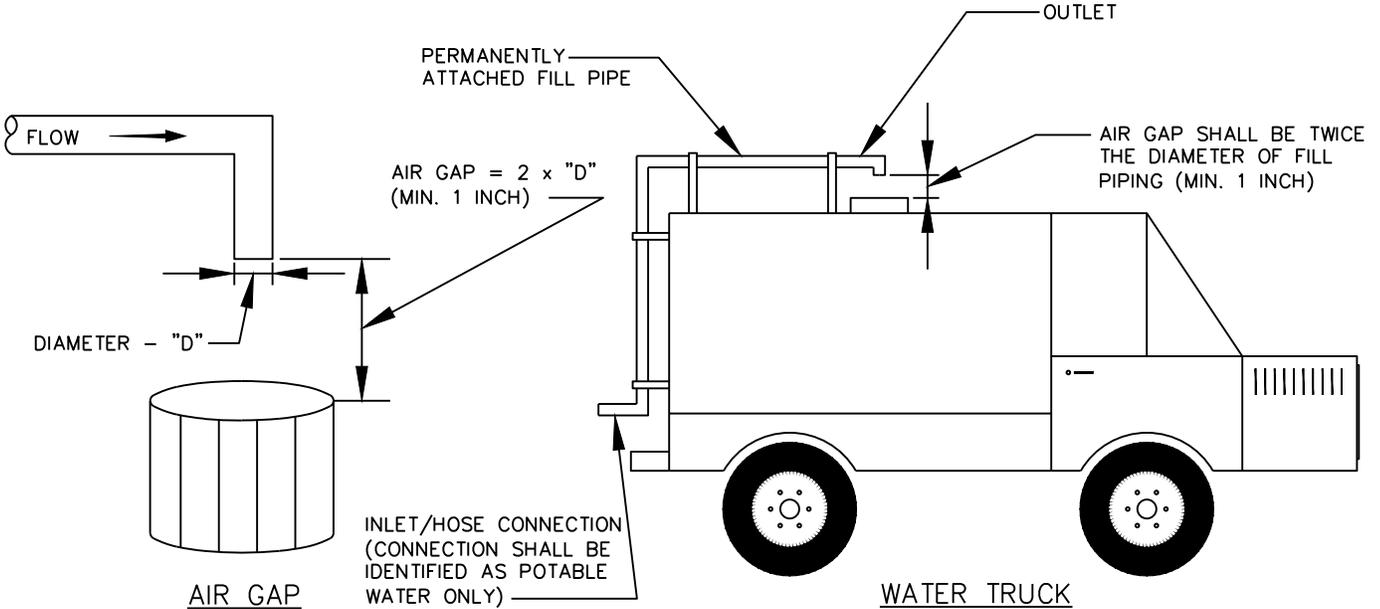
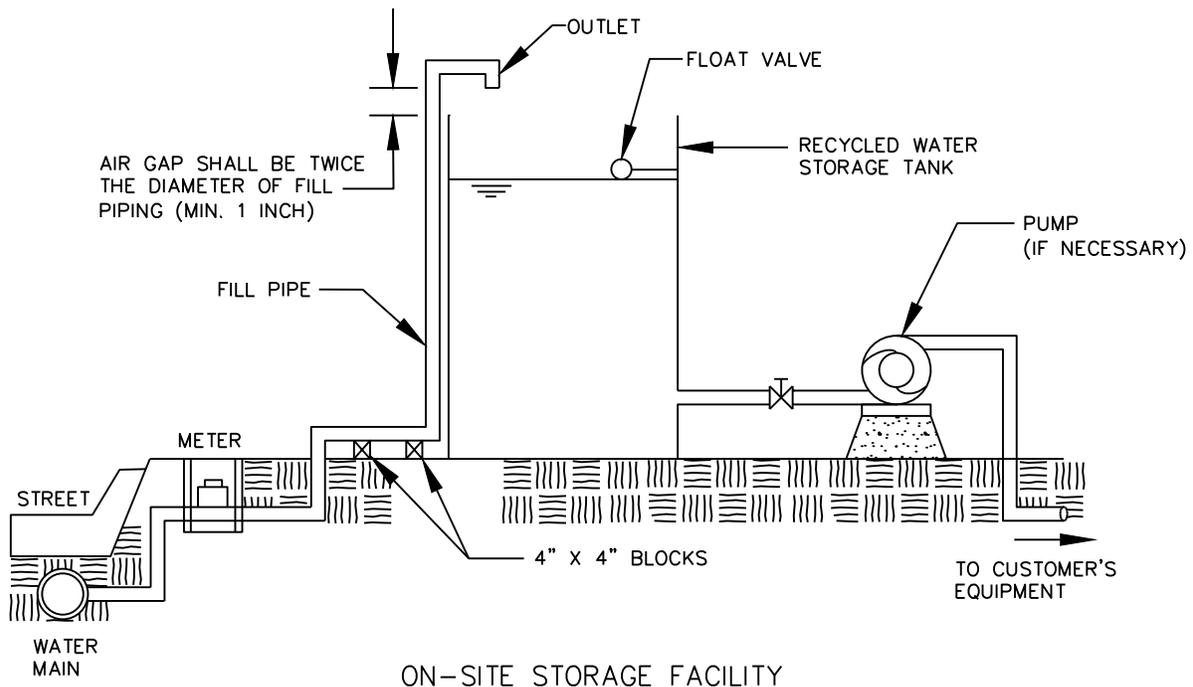
- IRR-1 AIR GAP
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REVISION	DRAWN	APP'D.	DATE	<b>WEST BASIN MUNICIPAL WATER DISTRICT</b> RECYCLED WATER ON-SITE FACILITIES <b>TITLE SHEET</b>	
APPROVED				<b>IRR-0</b>	
DISTRICT ENGINEER	RCE	DATE			



**NOTES:**

1. THE TERM "AIR GAP" SHALL MEAN A PHYSICAL SEPARATION BETWEEN THE FREE FLOWING DISCHARGE END OF A WATER SUPPLY PIPELINE AND AN OPEN OR NON-PRESSURE RECEIVING VESSEL, AND "APPROVED AIR GAP" SHALL BE AT LEAST DOUBLE THE DIAMETER OF THE SUPPLY PIPE MEASURED VERTICALLY ABOVE THE OVERFLOW RIM OF THE VESSEL - IN NO CASE LESS THAN 1 INCH.
2. PIPING SHALL BE PERMANENTLY INSTALLED.
3. ATTACH RECYCLED WATER IDENTIFICATION LABELS AND TAGS TO PIPING STORAGE TANKS AND VEHICLES AS DIRECTED BY WEST BASIN AND ON-SITE STANDARD SPECIFICATIONS. ATTACH POTABLE WATER IDENTIFICATION LABELS AND TAGS ON ALL POTABLE WATER PIPING AND CONNECTIONS.

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**WEST BASIN MUNICIPAL WATER DISTRICT**  
 RECYCLED WATER ON-SITE FACILITIES

AIR GAP

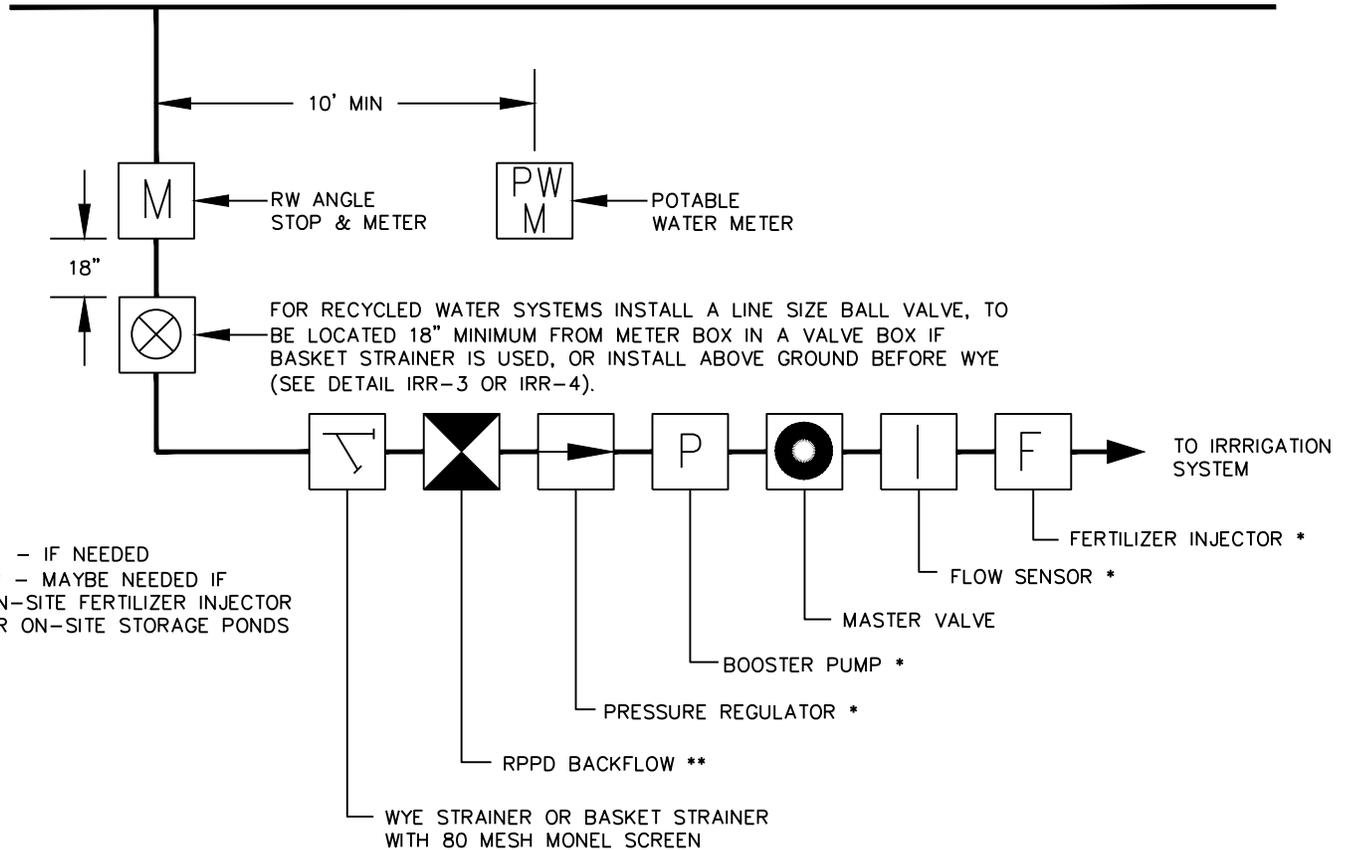
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NOTES:

1. INSTALL BRASS PIPING UP TO INLET SIDE OF MASTER VALVE.
2. WRAP ALL BRASS PIPING WITH UPC 10 MIL BLACK PIPE WRAP.
3. IDENTIFY RECYCLED WATER PIPING BY ATTACHING PURPLE WARNING TAPE PER ON-SITE STANDARD SPECIFICATIONS.
4. IDENTIFY NON-POTABLE WATER (POTABLE WATER PIPING USED FOR IRRIGATION) BY ATTACHING YELLOW WARNING TAPE PER ON-SITE STANDARD SPECIFICATIONS.
5. INSTALL RECYCLED WATER METER, METER BOX, AND BALL VALVE PER WEST BASIN STANDARD DRAWINGS.
6. ATTACH PURPLE RECYCLED WATER WARNING TAG AS DIRECTED ON RECYCLED SYSTEM TO RECYCLED WATER METER.
7. ATTACH YELLOW IRRIGATION WARNING TAG TO THE NON-POTABLE WATER (POTABLE WATER USED FOR IRRIGATION) AS DIRECTED ON NON-POTABLE IRRIGATION SYSTEMS TO DOWNSTREAM SIDE OF BACKFLOW PREVENTION DEVICE.
8. IF BOOSTER PUMP IS NOT INSTALLED IN CLOSE PROXIMITY TO THE RECYCLED WATER METER CONTACT WEST BASIN FOR SPECIFIC INSTALLATION INSTRUCTIONS FOR ALL APPURTENANCES.
9. ATTACH IDENTIFICATION/WARNING TAPE TO ALL BELOW GRADE BRASS PIPING AS DIRECTED BY WEST BASIN AND THE ON-SITE STANDARD SPECIFICATIONS.

### RECYCLED WATER MAINLINE



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## WEST BASIN MUNICIPAL WATER DISTRICT

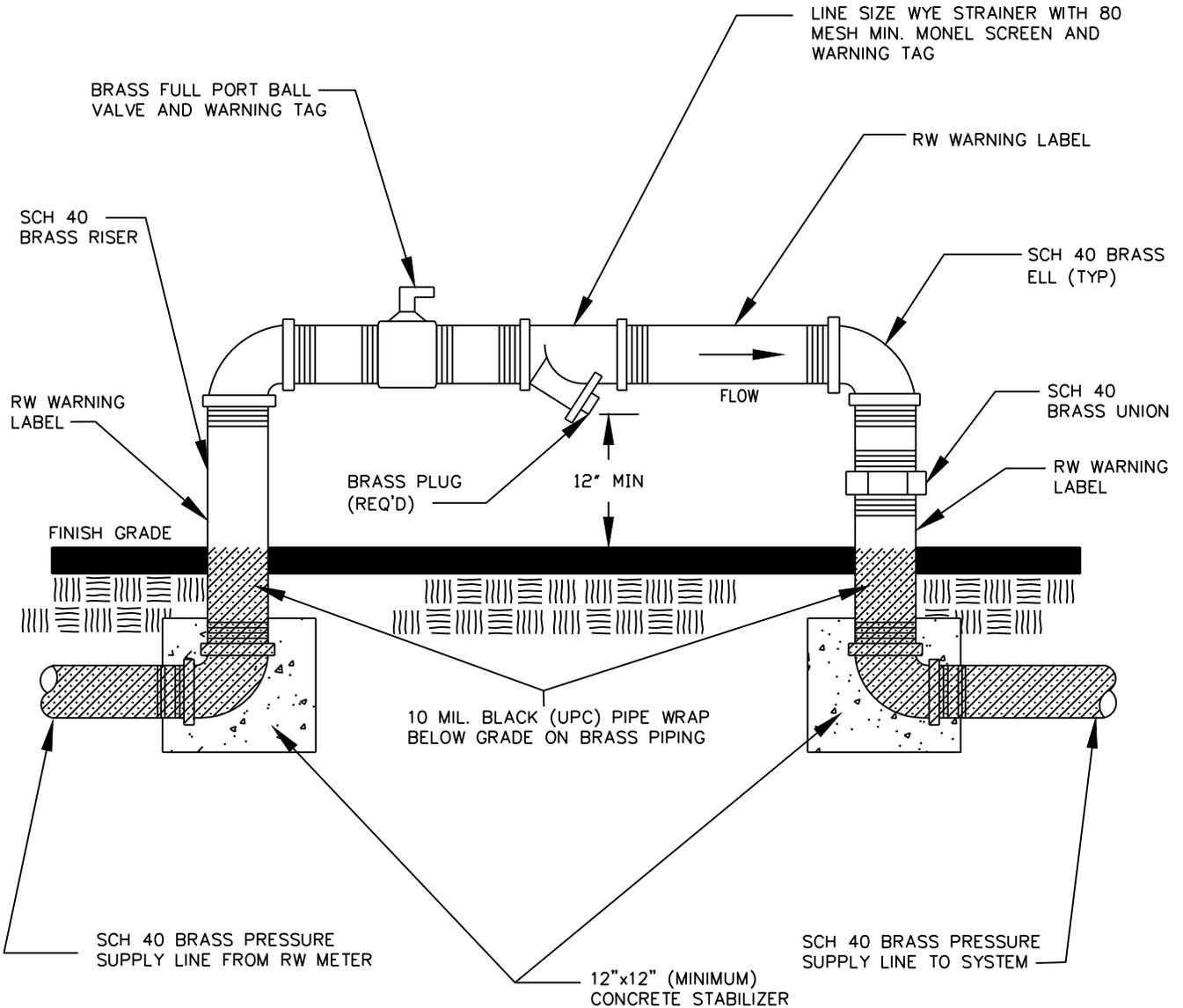
RECYCLED WATER ON-SITE FACILITIES

APPURTENANCE LAYOUT

IRR-2

**NOTES:**

1. ATTACH PURPLE RECYCLED WARNING (ID) LABELS AND TAGS AS DIRECTED ON RECYCLED SYSTEM PER ON-SITE STANDARD SPECIFICATIONS.
2. IDENTIFY RECYCLED WATER PIPING BY ATTACHING PURPLE WARNING TAPE TO ALL BELOW GRADE PIPING PER ON-SITE STANDARD SPECIFICATIONS.



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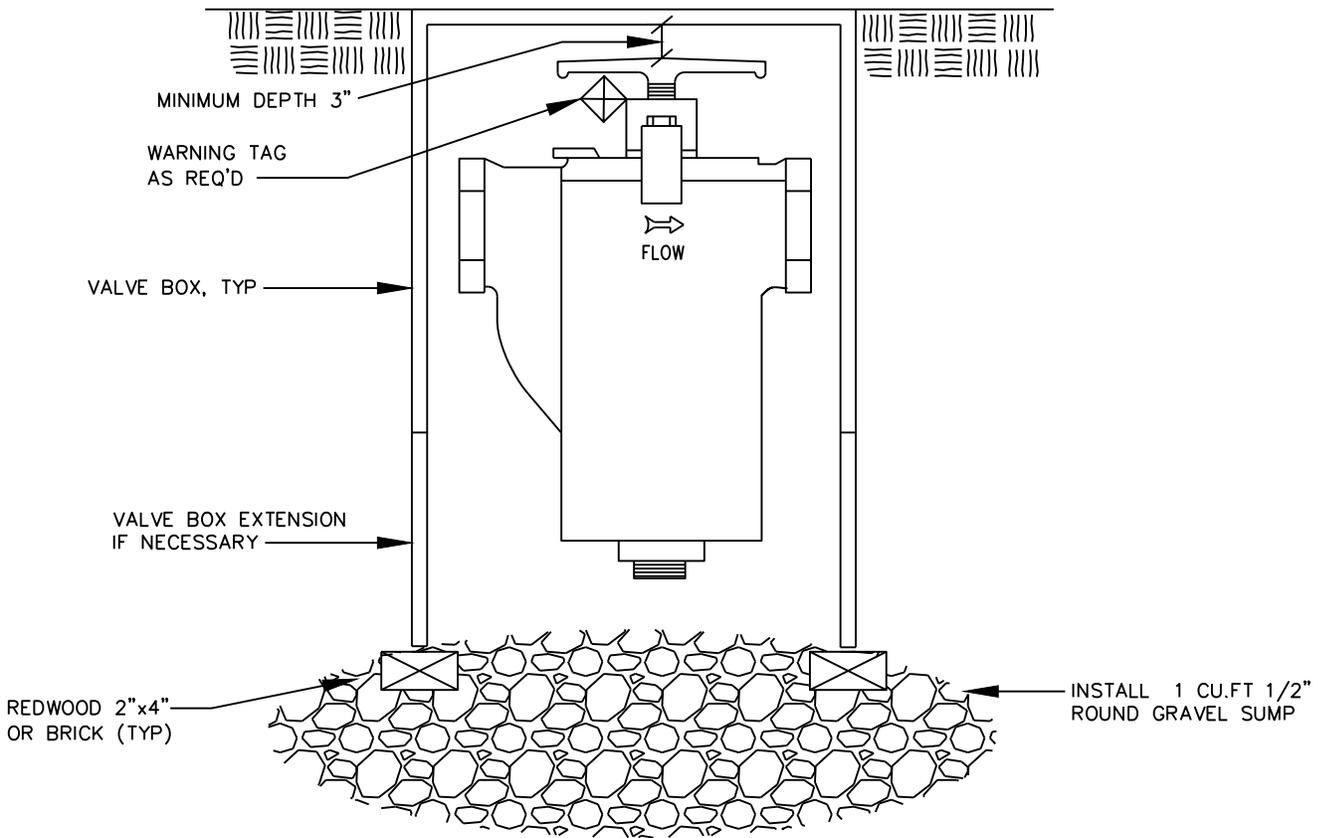
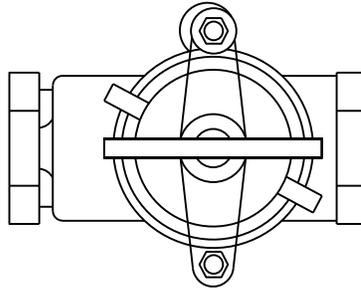
**WEST BASIN MUNICIPAL WATER DISTRICT**  
 RECYCLED WATER ON-SITE FACILITIES  
**WYE STRAINER**

IRR-3

NOTES:

1. ATTACH PURPLE RECYCLED WATER WARNING TAGS AS DIRECTED ON RECYCLED SYSTEM.
2. ATTACH YELLOW NON-POTABLE WATER, USED FOR IRRIGATION, WARNING TAGS AS DIRECTED ON NON-POTABLE IRRIGATION SYSTEMS.
3. INSTALL RECTANGULAR PLASTIC VALVE BOX WITH LOCKING COVER. BOLT DOWN COVER WITH STAINLESS STEEL BOLT AND WASHER. COVER SHALL BE BRANDED TO IDENTIFY BASKET STRAINER. SEE "BRANDING DETAILS". USE PURPLE RECYCLED WATER IDENTIFICATION BOXES AND COVER FOR RECYCLED SYSTEMS.

BASKET STRAINER WITH  
80 MESH MONEL SCREEN



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WEST BASIN MUNICIPAL WATER DISTRICT

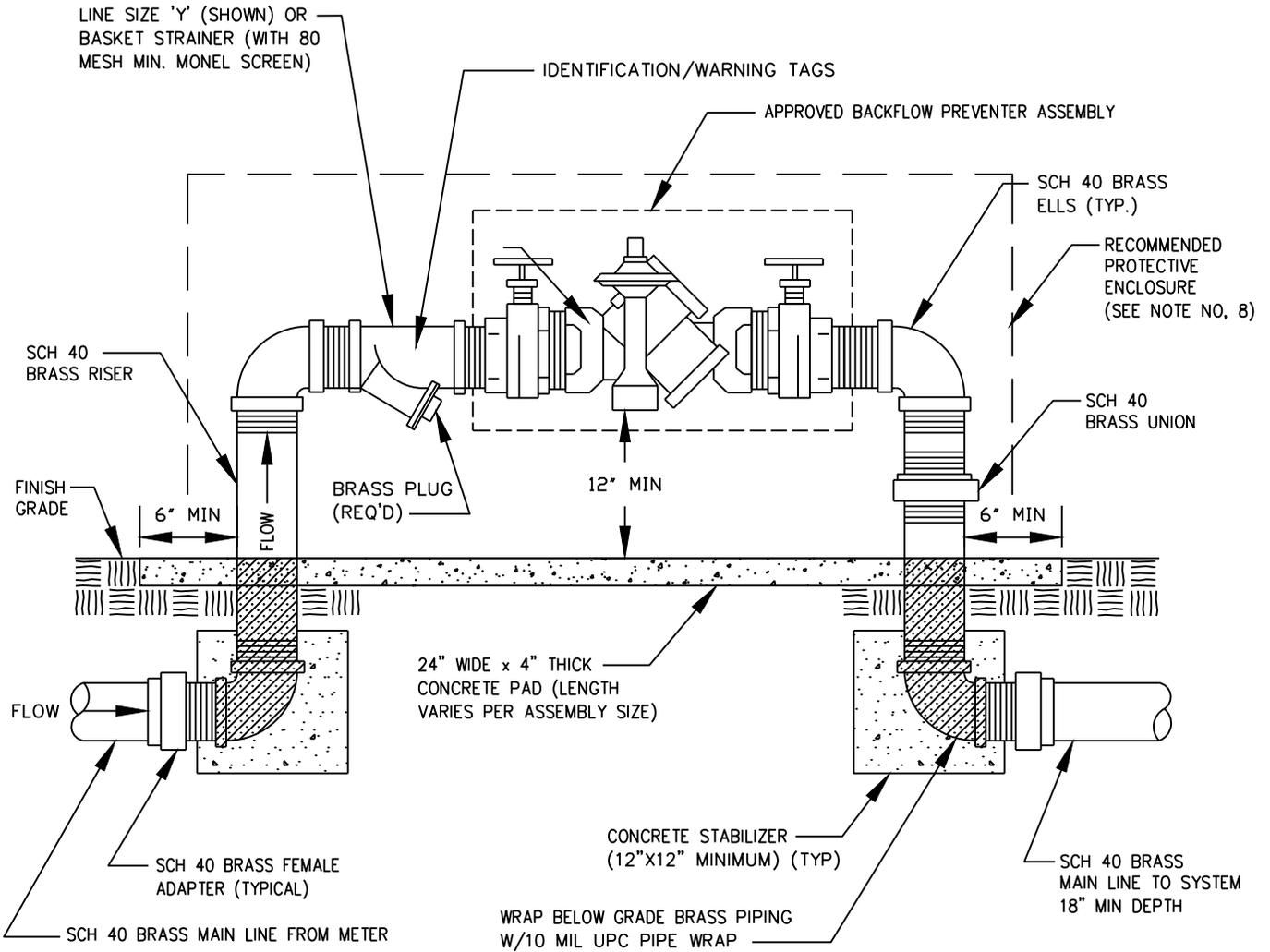
RECYCLED WATER ON-SITE FACILITIES

BASKET STRAINER

IRR-4

**NOTES:**

1. ATTACH PURPLE RECYCLED WATER WARNING TAGS AS DIRECTED ON RECYCLED SYSTEMS.
2. ATTACH BLUE POTABLE WATER IDENTIFICATION TAGS AS DIRECTED ON POTABLE SYSTEMS.
3. ATTACH YELLOW NON-POTABLE WATER, USED FOR IRRIGATION, WARNING TAGS AS DIRECTED ON NON-POTABLE IRRIGATION SYSTEMS.
4. ALL BACKFLOW PREVENTION DEVICES FOR METER PROTECTION SHALL BE INSTALLED DIRECTLY OUTSIDE OF THE WATER METER BOX.
5. ATTACH PURPLE RECYCLED WATER WARNING TAPE TO ALL BRASS PIPING AS DIRECTED ON RECYCLED WATER SYSTEMS PER ON-SITE STANDARD SPECIFICATIONS.
6. ATTACH BLUE POTABLE WATER IDENTIFICATION TAPE TO ALL BRASS PIPING AS DIRECTED ON POTABLE WATER SYSTEMS PER ON-SITE STANDARD SPECIFICATIONS.
7. ATTACH YELLOW NON-POTABLE WATER, USED FOR IRRIGATION, WARNING TAPE TO ALL BRASS PIPING AS DIRECTED ON NON-POTABLE IRRIGATION SYSTEMS PER ON-SITE STANDARD SPECIFICATIONS.
8. PROTECTIVE ENCLOSURE IS RECOMMENDED. MANUFACTURERS: BPGI, GUARDIAN ENCLOSURE, ATLAS BACKFLOW OR APPROVED EQUAL



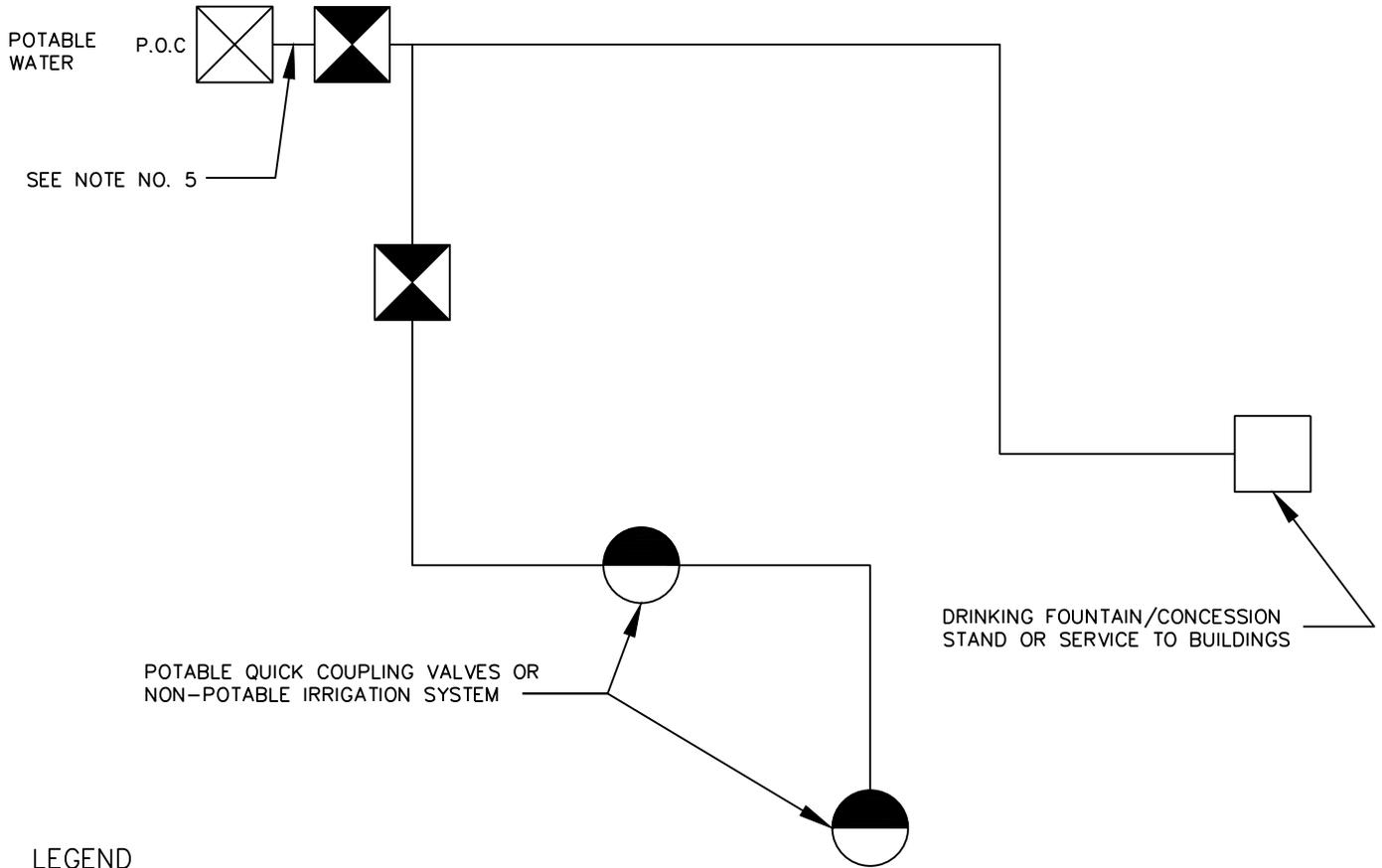
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<b>WEST BASIN MUNICIPAL WATER DISTRICT</b>	
RECYCLED WATER ON-SITE FACILITIES	
<b>BACKFLOW PREVENTION DEVICE</b>	<b>IRR-5</b>

NOTES:

1. SEE DETAILS IRR-2 FOR POINT OF CONNECTION (P.O.C.) INFORMATION AND IRR-5 FOR BACKFLOW PREVENTION DEVICE INFORMATION.
2. ATTACH APPROPRIATE IDENTIFICATION/WARNING TAPES, LABELS AND TAGS AS DIRECTED BY WEST BASIN AND ON-SITE STANDARD SPECIFICATIONS.
3. USE SCH 40 BRASS PIPING AND FITTINGS UP TO THE INLET SIDE OF BACKFLOW ASSEMBLIES. SEE DETAILS IRR-2, IRR-3 AND IRR-4 FOR INSTALLATION REQUIREMENTS.
4. IDENTIFY ALL PIPING AS DIRECTED BY WEST BASIN AND ON-SITE STANDARD SPECIFICATIONS
5. SLURRY BACKFILL (12" SQUARE MINIMUM WITH IDENTIFICATION TAPE) FOR THE POTABLE WATER LINE BETWEEN METER AND RPPD BACKFLOW ASSEMBLY FOR DISTANCES GREATER THAN FIVE (5) FEET.



LEGEND



P.O.C./ POTABLE WATER METER



APPROVED RPPD BACKFLOW ASSEMBLY



QUICK COUPLING VALVE (USE PIN TYPE QUICK COUPLING VALVES ON NON-POTABLE WATER IRRIGATION SYSTEMS)

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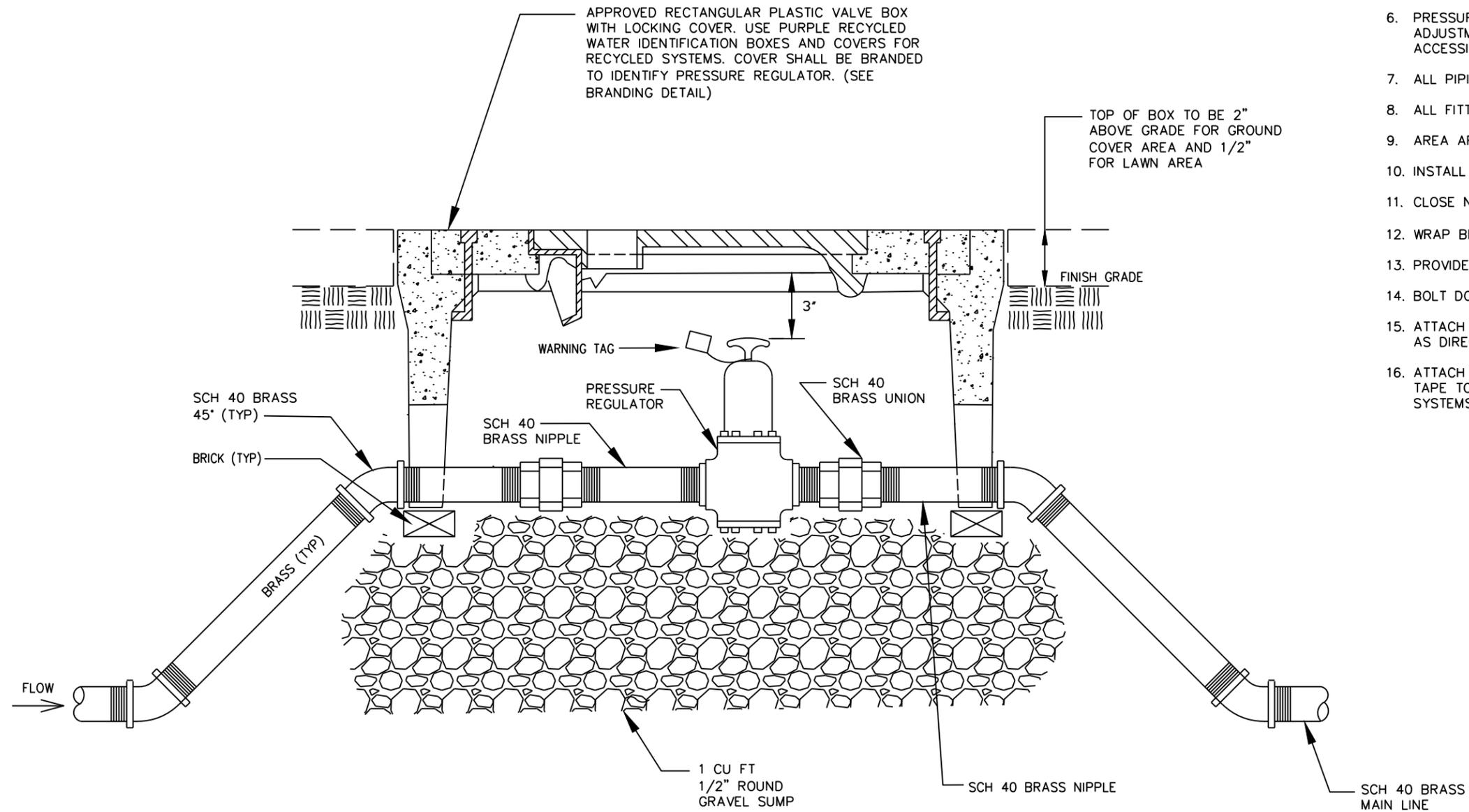
**WEST BASIN MUNICIPAL WATER DISTRICT**

RECYCLED WATER ON-SITE FACILITIES

**BACKFLOW PREVENTION LAYOUT**

**IRR-6**

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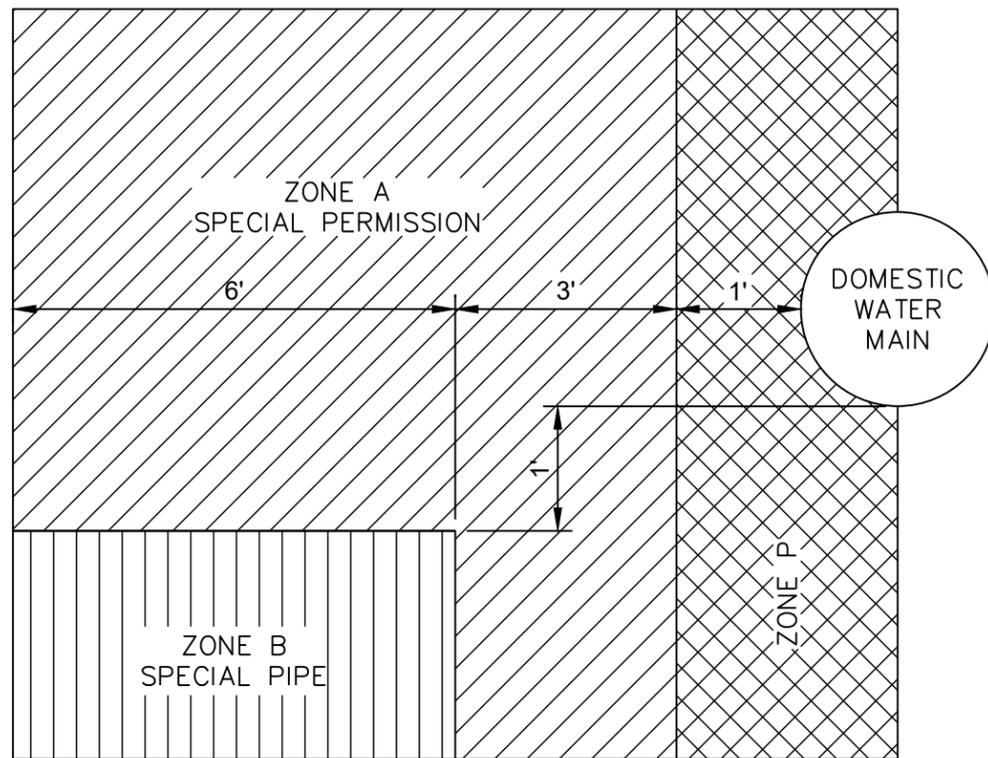
**NOTES:**

1. ATTACH PURPLE RECYCLED WATER WARNING TAGS AS DIRECTED ON RECYCLED SYSTEMS.
2. ATTACH YELLOW NON-POTABLE WATER, USED FOR IRRIGATION, WARNING TAGS AS DIRECTED ON NON-POTABLE IRRIGATION SYSTEMS.
3. PRESSURE REGULATOR SHALL BE OF BRONZE AND/OR BRASS CONSTRUCTION.
4. PRESSURE SETTING SHALL BE AS SPECIFIED ON PLANS.
5. VALVE BOX SHALL BE OF SUFFICIENT SIZE TO ACCOMMODATE PRESSURE REGULATOR ASSEMBLY.
6. PRESSURE REGULATOR SHALL BE INSTALLED HORIZONTAL SO ADJUSTMENT NUT, AND MAIN CAP ON PRESSURE REGULATOR ARE ACCESSIBLE.
7. ALL PIPING SHALL BE BRASS, SCH 40.
8. ALL FITTINGS, EXCEPT AS NOTED, SHALL BE THREADED BRASS.
9. AREA AROUND BOX MAY BE PLANTED, HARD-SURFACE OR COMBINATION.
10. INSTALL GRAVEL SUMP AS SHOWN.
11. CLOSE NIPPLES SHALL NOT BE USED.
12. WRAP BELOW GRADE BRASS PIPING W/UPC 10 MIL. BLACK PIPE
13. PROVIDE THRUST BLOCKS AS REQUIRED.
14. BOLT DOWN VALVE BOX COVER WITH STAINLESS STEEL BOLT AND WASHER.
15. ATTACH PURPLE RECYCLED WATER WARNING TAPE TO ALL BRASS PIPING AS DIRECTED ON RECYCLED WATER SYSTEMS.
16. ATTACH YELLOW NON-POTABLE WATER, USED FOR IRRIGATION, WARNING TAPE TO ALL BRASS PIPING AS DIRECTED ON NON-POTABLE IRRIGATION SYSTEMS.

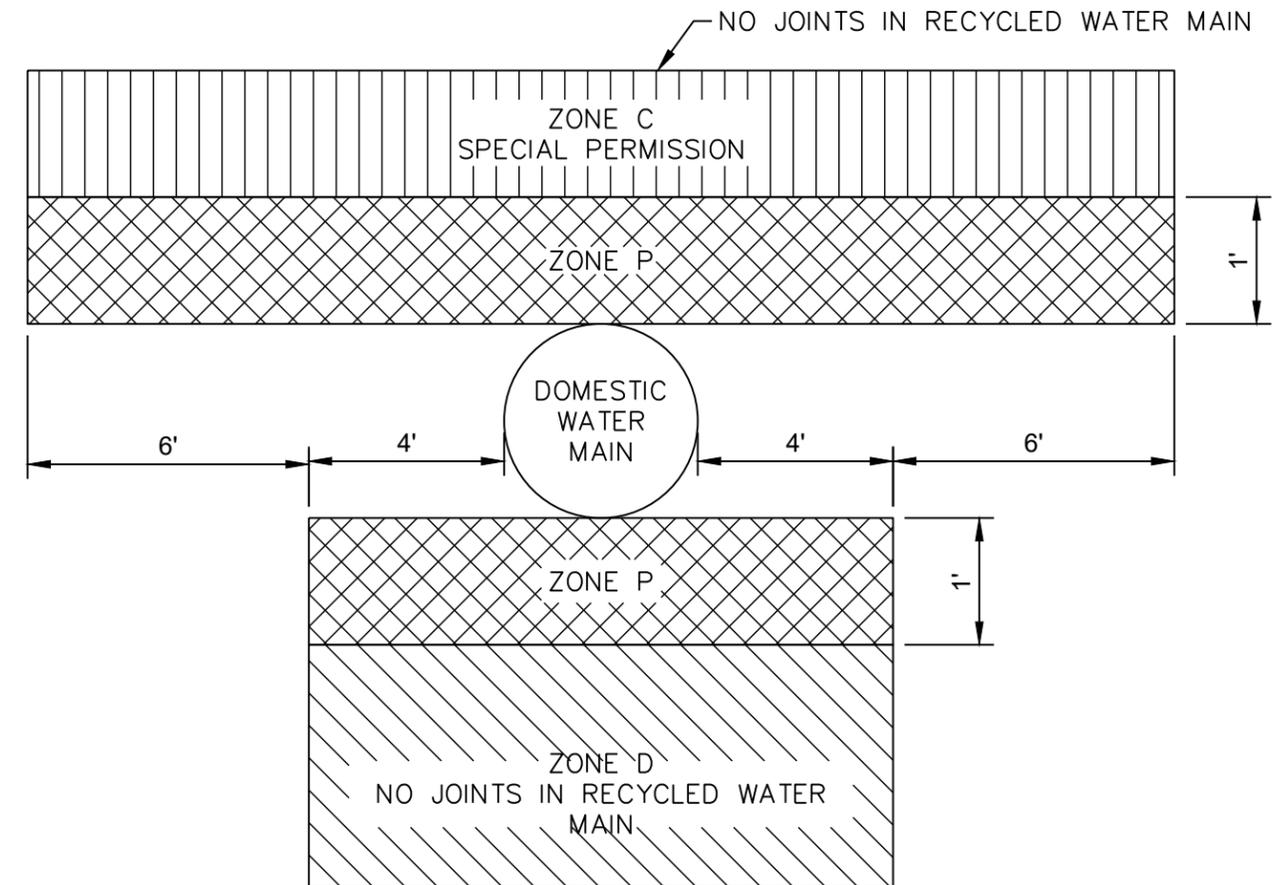
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<b>WEST BASIN MUNICIPAL WATER DISTRICT</b>	
RECYCLED WATER ON-SITE FACILITIES	
PRESSURE REGULATOR INSTALLATION	RETROFIT <b>IRR-7</b>

## NEW RECYCLED WATER PARALLEL WITH DOMESTIC WATER



## NEW RECYCLED WATER MAIN CROSSING DOMESTIC WATER



### CONSTRUCTION REQUIREMENTS FOR RECYCLED WATER MAINS:

- ZONE A – SPECIAL PERMISSION REQUIRED. DO NOT LOCATE ANY PARALLEL RECYCLED WATER MAIN IN THIS AREA WITHOUT WEST BASIN'S AND LACDPH APPROVAL.
- ZONE B – THE NEW RECYCLED WATER MAIN SHALL BE PURPLE PVC PIPE (AWWA C900, DR-14) WITH PUSH-ON TYPE RUBBER JOINTS.
- ZONE C – SPECIAL PERMISSION REQUIRED. DO NOT LOCATE ANY CROSSING RECYCLED WATER MAIN IN THIS AREA WITHOUT WEST BASIN'S AND LACDPH APPROVAL.
- ZONE D – THE NEW RECYCLED WATER MAIN SHALL BE CONSTRUCTED AS DESCRIBED FOR ZONE B ABOVE, WITH THE EXCEPTION THAT THE WATER MAIN SHALL CONTAIN NO JOINTS IN ZONE D.
- ZONE P – PROHIBITED ZONE; NO RECYCLED WATER MAINS. SECTION 64572 CALIFORNIA CODE OF REGULATIONS, TITLE 22.

### EXCEPTIONS TO THE VERTICAL SEPARATION REQUIREMENTS:

- A. ON IRRIGATION SYSTEMS WHERE INTERMITTENTLY PRESSUREIZED RECYCLED WATER LINES (LATERALS) SERVE SPRINKLER HEADS, THE POTABLE WATER LINE MAY BE PLACED UNDER THE RECYCLED WATER LATERAL. NO SPECIAL CONSTRUCTION REQUIREMENTS ARE NECESSARY PROVIDED THAT ONE FOOT VERTICAL SEPARATION IS MAINTAINED.
- B. ON SITES USING PRESSURIZED IRRIGATION LATERALS WITH VALVE-IN-HEAD SPRINKLERS, THE POTABLE WATER LINE MAY BE PLACED UNDER THE RECYCLED WATER LATERALS IF ADDITIONAL PROTECTION IS PROVIDED FOR THE POTABLE WATER LINE. COMMON PRACTICES INCLUDE SLEEVING THE POTABLE WATER LINE WITH PVC PIPE A MINIMUM OF 4 FEET FROM EACH SIDE OF THE CROSSING.
- C. IF THE NEW POTABLE WATER LINE MUST BE INSTALLED BELOW AN EXISTING CONSTANT PRESSURE IRRIGATION/RECYCLED WATER LINE, THEN THE NEW POTABLE WATER LINE SHALL BE INSTALLED WITHIN A PROTECTIVE SLEEVE. THE SLEEVE SHALL EXTEND A MINIMUM OF 5 FEET FROM EACH SIDE OF THE CENTERLINE OF THE IRRIGATION/RECYCLED WATER LINE, FOR A TOTAL OF 10 FEET. THE SLEEVE SHALL BE IDENTIFIED AS POTABLE WATER (BLUE IDENTIFICATION TAPE).
- D. IF A CONSTANT PRESSURE RECYCLED WATER LINE MUST BE INSTALLED ABOVE A POTABLE WATER LINE OR LESS THAN 12-INCHES BELOW A POTABLE WATER LINE, THEN THE RECYCLED WATER LINE SHALL BE INSTALLED WITHIN A PROTECTIVE SLEEVE. THE SLEEVE SHALL EXTEND A MINIMUM OF 5 FEET FROM EACH SIDE OF THE CENTERLINE OF THE POTABLE WATER LINE, FOR A TOTAL OF 10 FEET. THE SLEEVE SHALL BE IDENTIFIED AS RECYCLED WATER (EITHER PURPLE PVC OR PURPLE WARNING TAPE).

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WEST BASIN MUNICIPAL WATER DISTRICT

RECYCLED WATER ON-SITE FACILITIES

RECYCLED WATER SEPARATION  
REQUIREMENTS

RETROFIT

IRR-8

# RECYCLED WATER LID BRANDING GUIDE

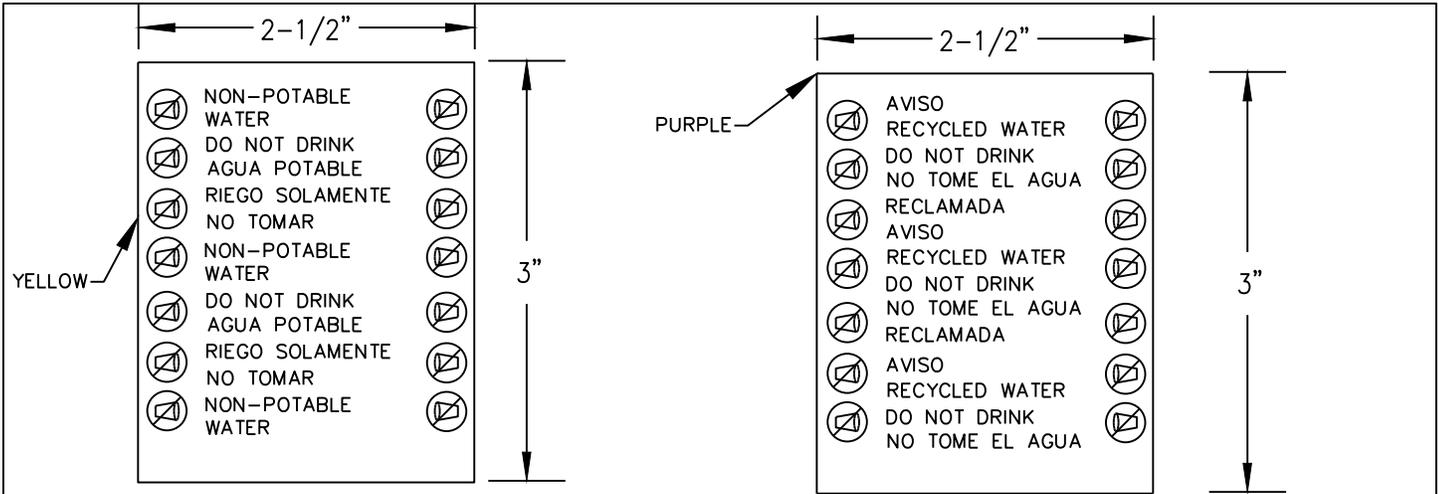
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PW	RW	A	GR	GROUNDING RODS
PW	RW	A	(STATION #)	REMOTE CONTROL VALVES
PW	RW	A	MV	MASTER VALVES
PW	RW	A	FS	FLOW SENSORS
PW	RW	A	GV	GATE VALVES
PW	RW	A	FI	FERTILIZER INJECTORS
PW	RW	A	BS	BASKET STRAINERS
PW	RW	A	MS	MOISTURE SENSORS
PW	RW	A	SB	WIRING PULL BOXES
PW	RW	A	QC	QUICK COUPLERS
PW	RW	A	FVA	FLUSH VALVE ASSEMBLY

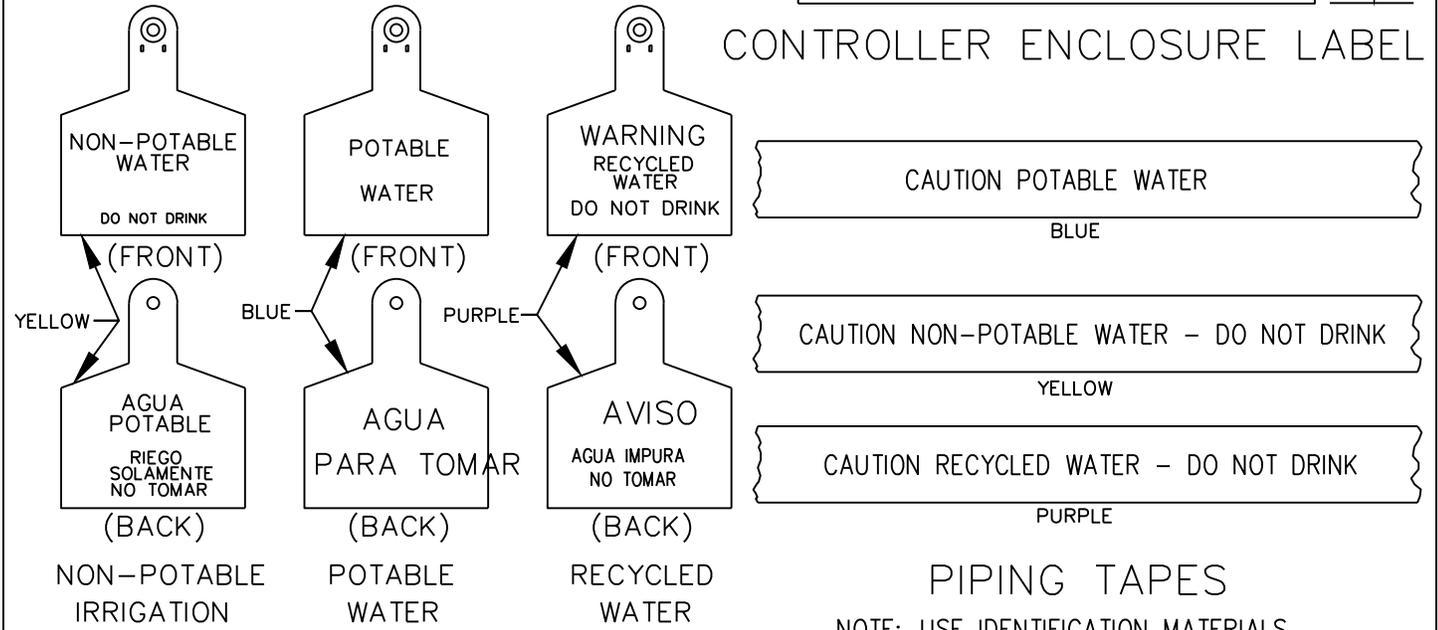
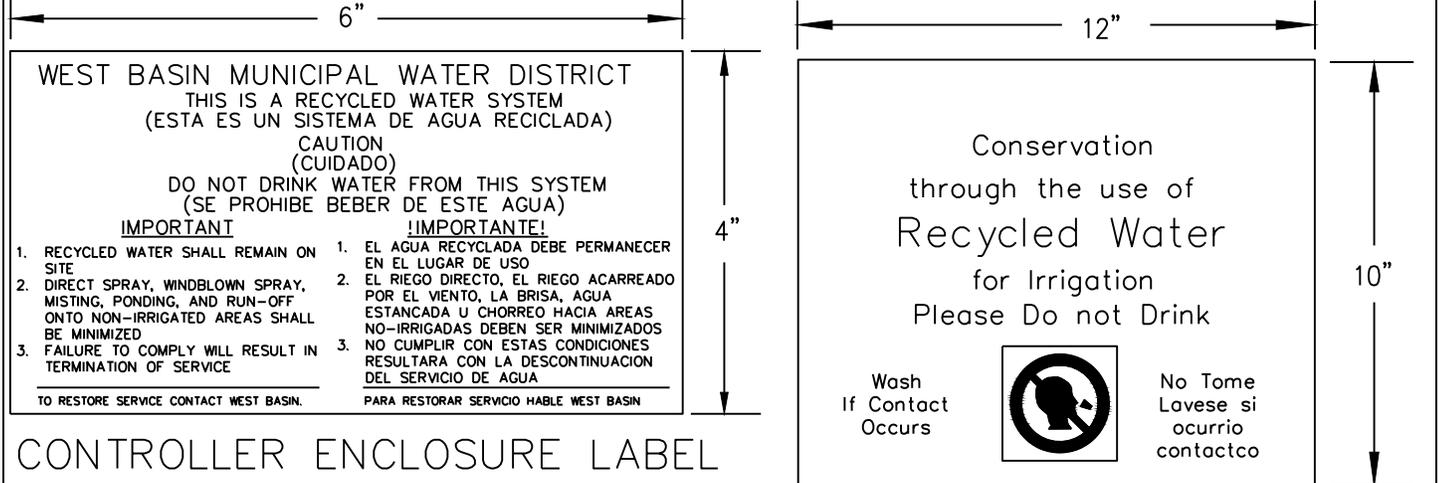
NOTES:

1. CONTACT WEST BASIN FOR INFORMATION ON ANY DEVICE IN A BOX NOT LISTED, OR OTHER TYPES OF WATER SOURCES, I.E. NON POTABLE WATER.
2. FOR RECYCLED WATER IDENTIFICATION, PURPLE VALVE BOXES AND COVER, ARE MANDATORY FOR RECYCLED WATER SYSTEMS.

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DISTRICT ENGINEER	RCE	DATE			



ABOVE GROUND PIPING LABELS



TAGS

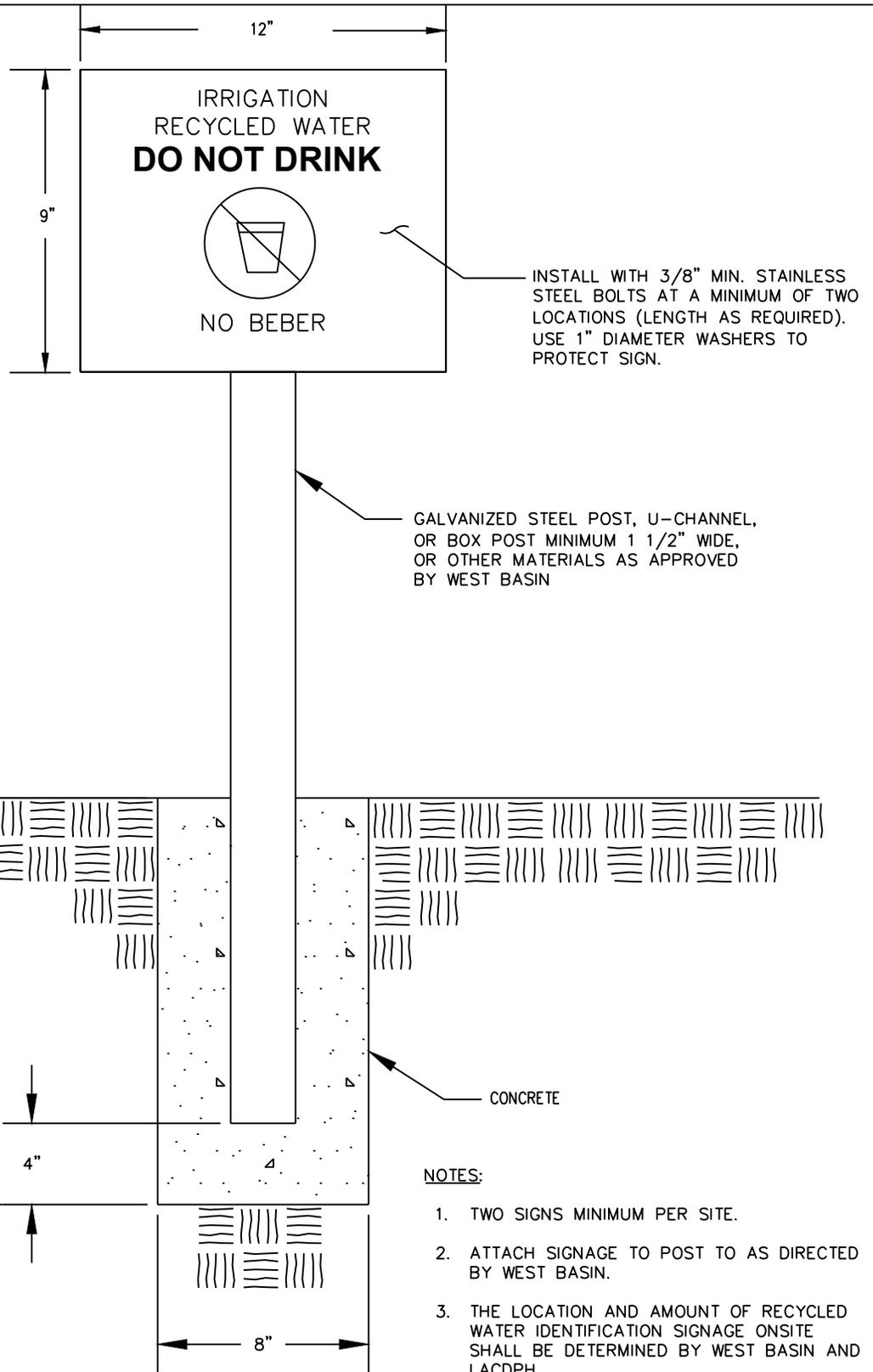
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WEST BASIN MUNICIPAL WATER DISTRICT  
 RECYCLED WATER ON-SITE FACILITIES  
 IDENTIFICATION/WARNING TAGS AND LABELS

IRR-10

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**NOTES:**

1. TWO SIGNS MINIMUM PER SITE.
2. ATTACH SIGNAGE TO POST TO AS DIRECTED BY WEST BASIN.
3. THE LOCATION AND AMOUNT OF RECYCLED WATER IDENTIFICATION SIGNAGE ONSITE SHALL BE DETERMINED BY WEST BASIN AND LACDPH.
4. DEPTH OF CONCRETE FOUNDATION DEPENDS ON HEIGHT OF SIGN

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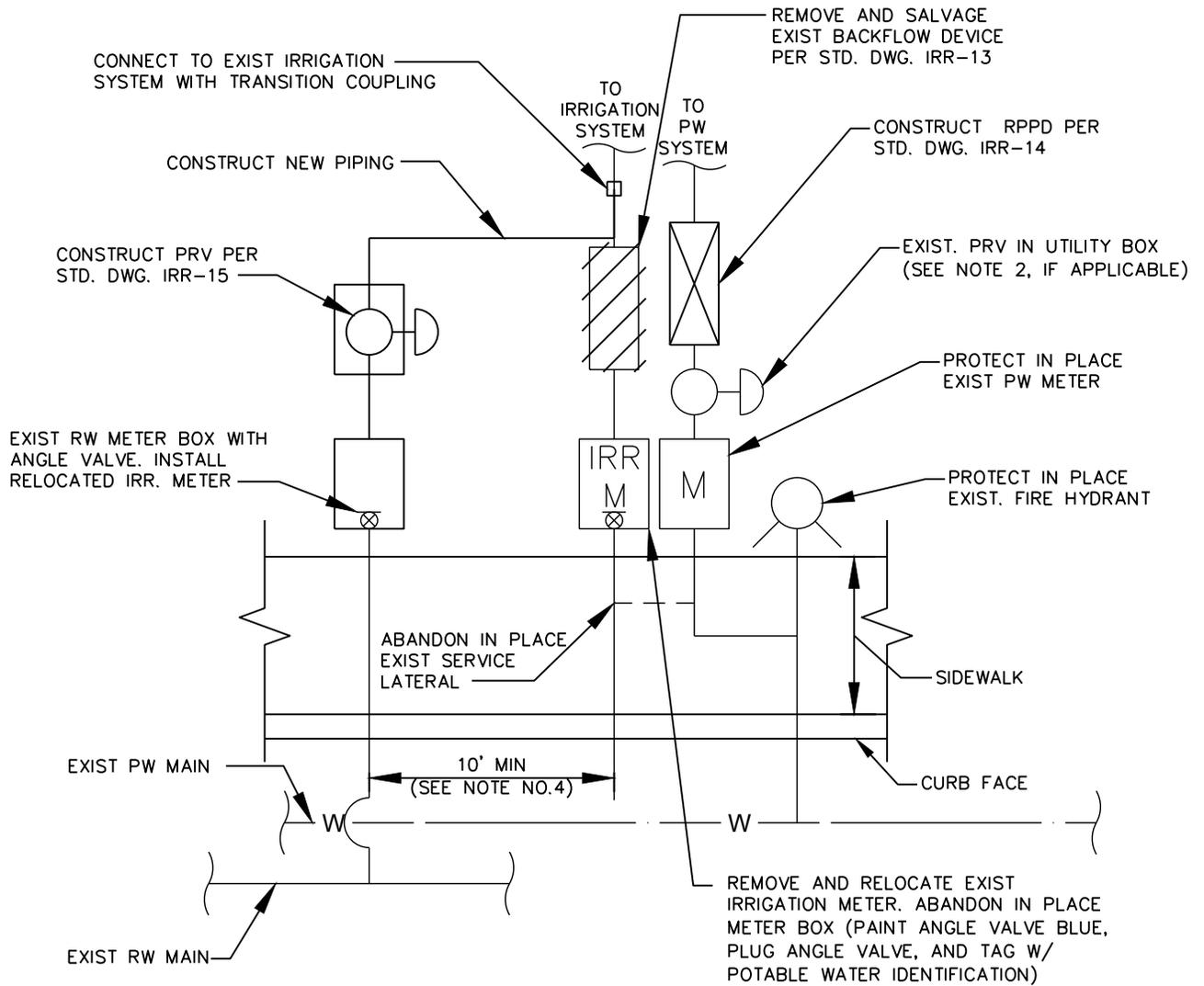
**WEST BASIN MUNICIPAL WATER DISTRICT**

RECYCLED WATER ON-SITE FACILITIES

RECYCLED WATER SITE IDENTIFICATION SIGN

**IRR-11**

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**NOTES:**

1. COORDINATE WITH WEST BASIN FOR RELOCATION OF EXISTING IRRIGATION (IRR) METER.
2. WHERE EXISTING POTABLE WATER PRESSURE REDUCING VALVE (PRV) IS ENCOUNTERED, CONTRACTOR SHALL PROTECT IN PLACE, AND IDENTIFY PER POTABLE WATER ONSITE IDENTIFICATION REQUIREMENTS.
3. FIELD VERIFY THE EXISTING LOCATION (HORIZONTAL AND VERTICAL), LINE SIZE, AND PIPE MATERIAL PRIOR TO ORDERING REPAIR CLAMP.
4. MAINTAIN MINIMUM 5 FOOT CLEARANCE CENTERLINE TO CENTERLINE. FOR LARGER SERVICES, THE CLEARANCE FROM OUTSIDE PIPE O.D. TO PIPE O.D. SHALL NOT BE LESS THAN FOUR (4) FEET.

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**WEST BASIN MUNICIPAL WATER DISTRICT**

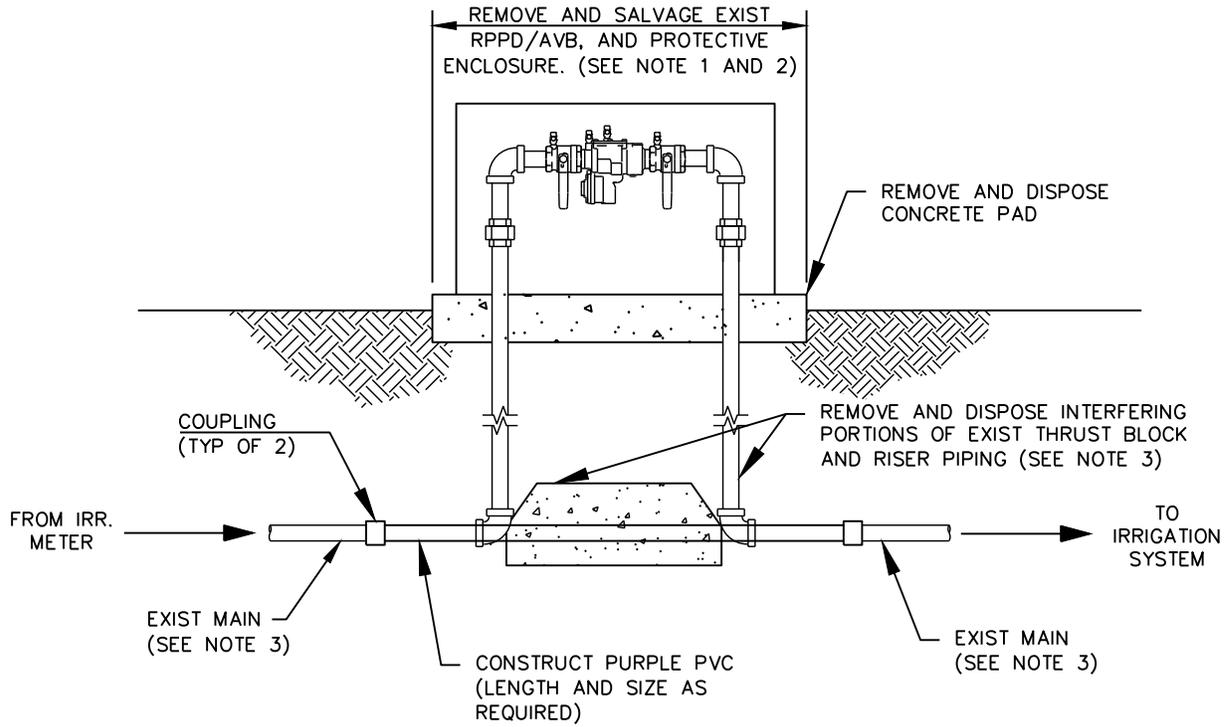
RECYCLED WATER ON-SITE FACILITIES

STANDARD METER AND SERVICE CONNECTIONS

RETROFIT

**IRR-12**

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**NOTES**

1. REPLACE ANY LANDSCAPE, HARDSCAPE, OR PORTIONS OF THE EXISTING IRRIGATION SYSTEM DAMAGED DURING CONSTRUCTION ACTIVITIES TO THE SATISFACTION OF THE SITE OWNER. CONTRACTOR SHALL REPAIR ANY BROKEN IRRIGATION LINES, SPRINKLERS, CONTROL WIRES, AND CONTROL BOXES WITHIN THE AREA OF WORK AS A RESULT OF CONSTRUCTION ACTIVITIES.
2. EXIST. BACKFLOW DEVICE AND PROTECTIVE ENCLOSURE SHALL BE SALVAGED TO SITE OWNER.
3. EXPOSE EXISTING PIPE TO VERIFY PIPE LOCATION, MATERIAL AND SIZE PRIOR TO BEGINNING CONSTRUCTION.

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**WEST BASIN MUNICIPAL WATER DISTRICT**

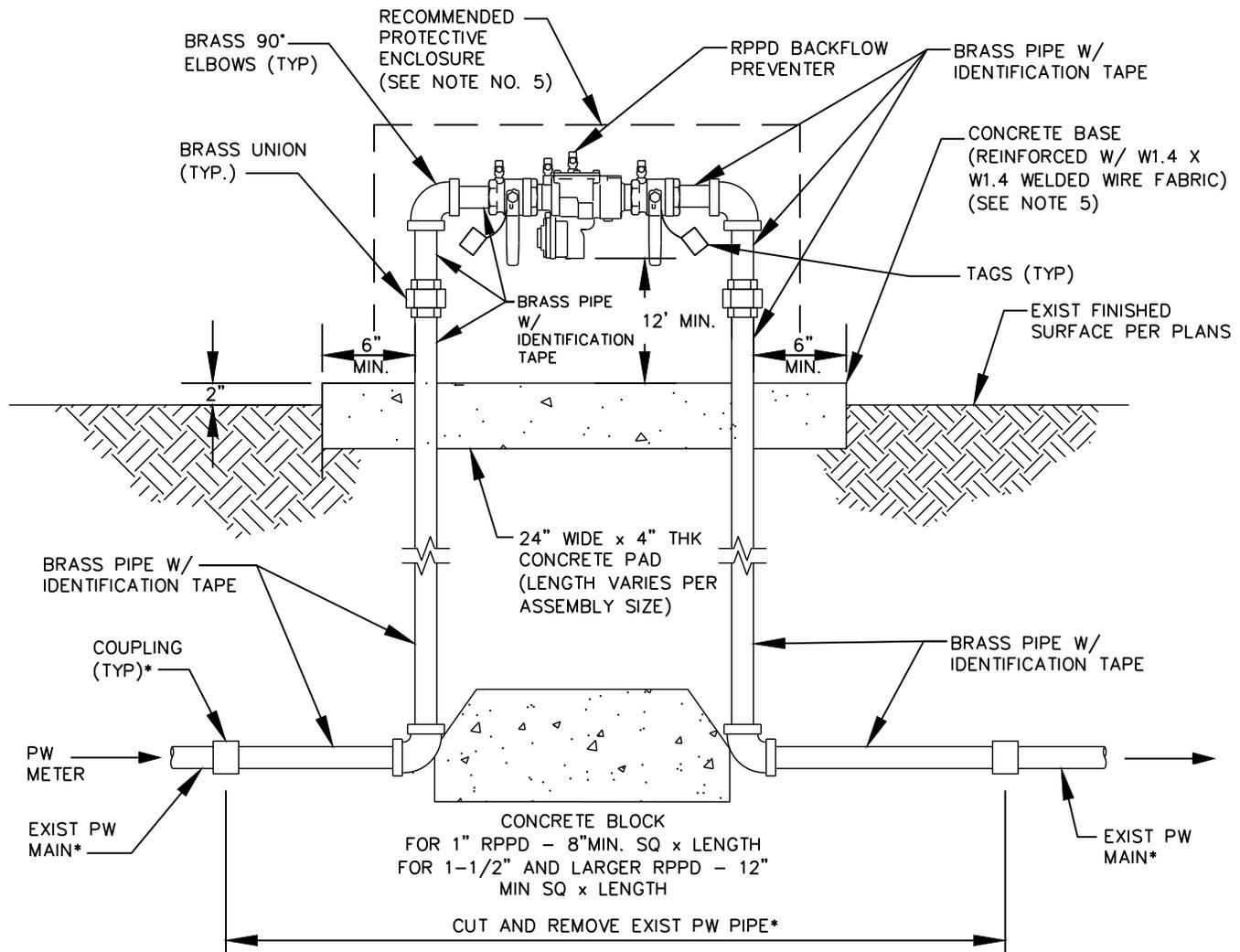
RECYCLED WATER ON-SITE FACILITIES

BACKFLOW REMOVAL

RETROFIT

**IRR-13**

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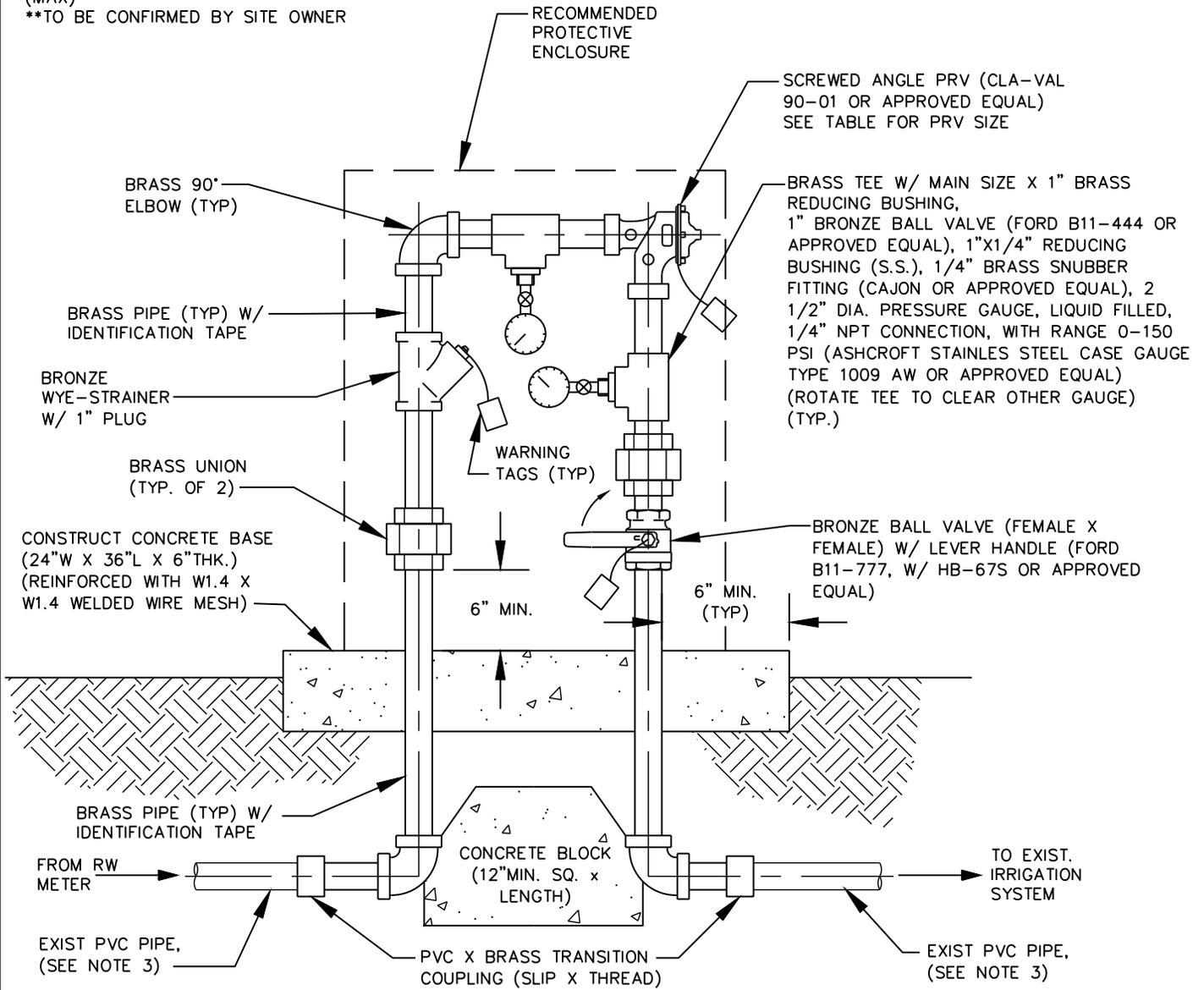
\* EXPOSE EXISTING PIPE TO VERIFY PIPE LOCATION, MATERIAL AND SIZE PRIOR TO BEGINNING CONSTRUCTION

**NOTES:**

1. REPLACE IN KIND EXISTING LANDSCAPING AND IRRIGATION DAMAGED DURING CONSTRUCTION ACTIVITIES.
2. PERMANENTLY MARK ABOVE GROUND RPPD BACKFLOW PIPING WITH POTABLE WATER IDENTIFICATION LABELS AND TAGS.
3. REDUCED PRESSURE PRINCIPLE BACKFLOW PROTECTION DEVICES SHALL BE INSTALLED AT LEAST TWELVE INCHES (12") ABOVE GRADE, READILY ACCESSIBLE FOR FIELD TEST AND MAINTENANCE, AND AS CLOSE TO THE POTABLE WATER METER AS PRACTICAL. IF THE BACKFLOW PROTECTION DEVICE CANNOT BE PLACED WITHIN 5' OF THE EXISTING POTABLE WATER METER ALL PIPING BETWEEN THE METER AND BACKFLOW PROTECTION DEVICE SHALL HAVE 1-SACK SLURRY BACKFILL, AND INSPECTED BY WEST BASIN AND/OR LACDPH REPRESENTATIVE.
4. LAYOUT ABOVE GROUND PIPING TO ASSURE PROTECTIVE ENCLOSURE WILL CLEAR. (PROTECTIVE ENCLOSURE IS RECOMMENDED.)
5. PROTECTIVE ENCLOSURE IS RECOMMENDED. MANUFACTURER: BPGI; GUARDIAN ENCLOSURES; ATLAS BACKFLOW OR APPROVED EQUAL.

REVISION	DRAWN	APP'D.	DATE	WEST BASIN MUNICIPAL WATER DISTRICT	
				RECYCLED WATER ON-SITE FACILITIES	
APPROVED				RETROFIT	
DISTRICT ENGINEER      RCE      DATE				TYPICAL 2" AND SMALLER RPPD INSTALLATION	
				IRR-14	

PRV SET POINT:  
 DOWNSTREAM PRESSURE = 80PSI  
 (MAX)  
 \*\*TO BE CONFIRMED BY SITE OWNER



**PRV CONSTRUCTION NOTES:**

1. TAG NEW ABOVE GROUND PRV, Y-STRAINER AND VALVES WITH RECYCLED WATER WARNING TAGS.
2. FINAL LOCATION OF PRV ASSEMBLY TO BE DETERMINED IN THE FIELD BY THE SITE OWNER.
3. FIELD VERIFY EXIST. PIPE SIZE AND MATERIAL.
4. PROTECTIVE ENCLOSURE IS RECOMMENDED.

MAIN SIZE	PRV SIZE
2"	2"
1-1/2"	1-1/2"
1"	1"

REVISION	DRAWN	APP'D.	DATE
APPROVED			
DISTRICT ENGINEER		RCE	DATE

**WEST BASIN MUNICIPAL WATER DISTRICT**

RECYCLED WATER ON-SITE FACILITIES

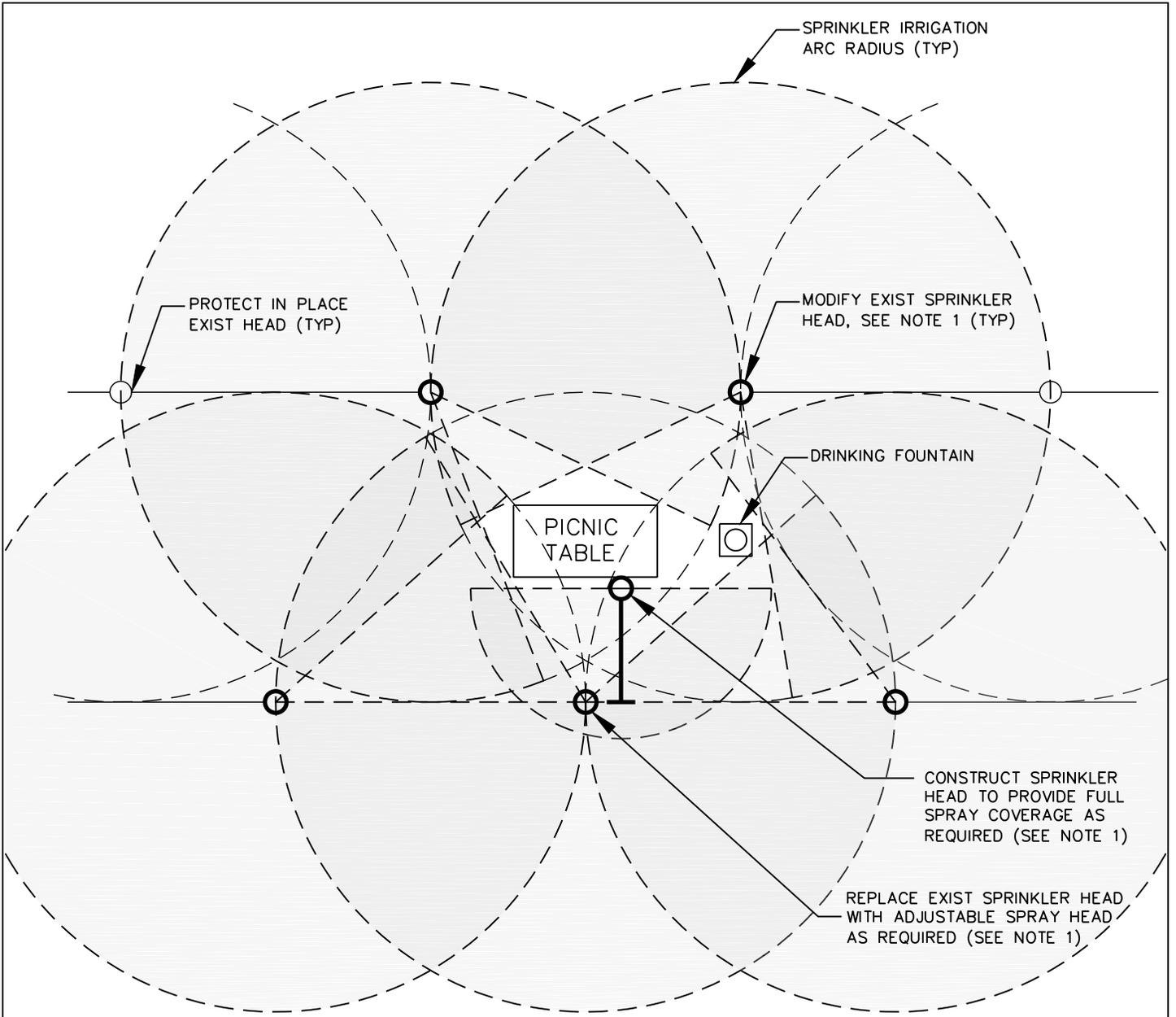
TYPICAL 2" AND SMALLER  
 PRV INSTALLATION

RETROFIT

**IRR-15**

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**NOTES:**

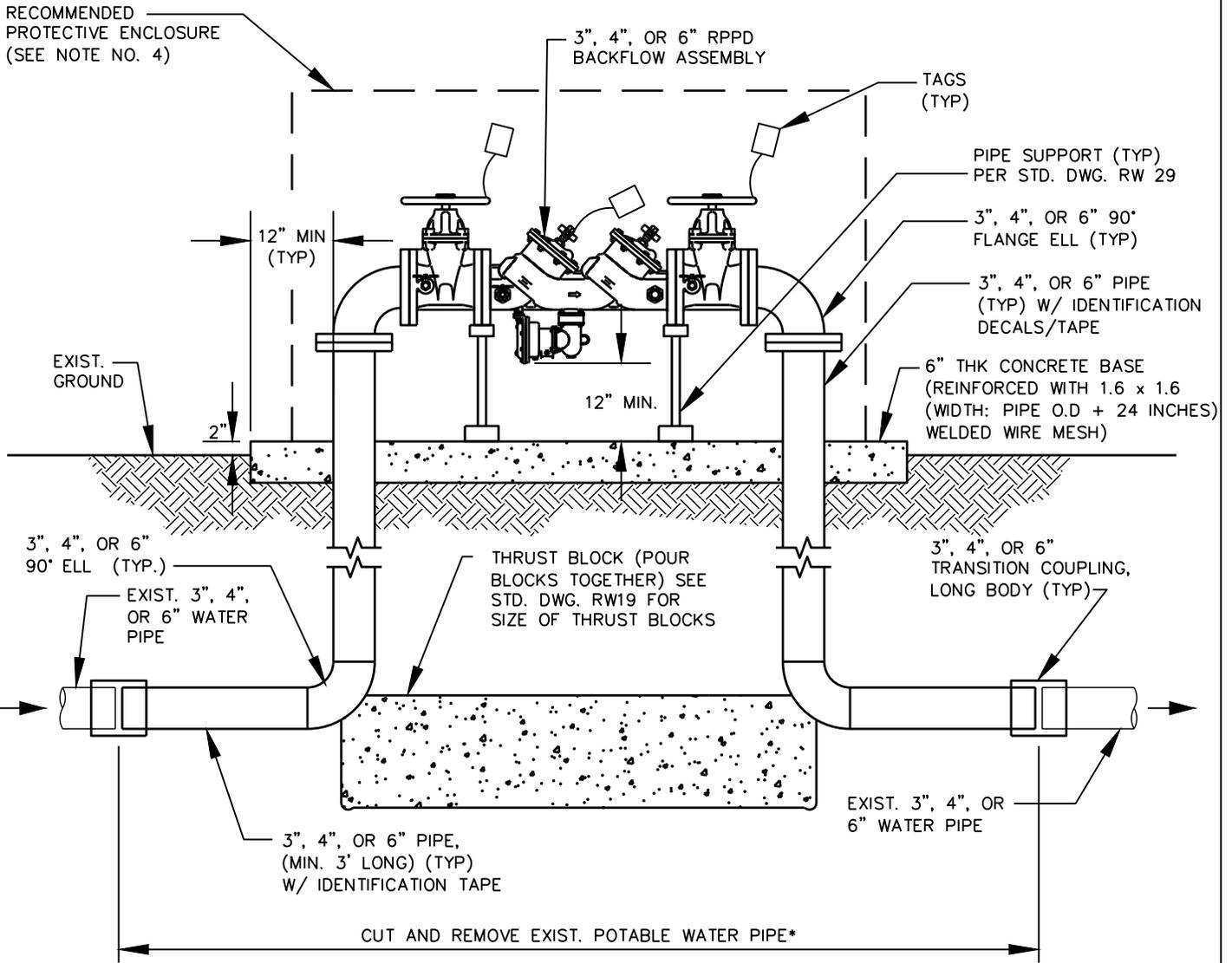
1. LACDPH DOES NOT ALLOW THE RECYCLED WATER IRRIGATION SYSTEM TO SPRAY DESIGNATED EATING AREAS, TABLE TOPS OR DRINKING FOUNTAIN BUBBLERS. ALL SPRINKLER HEADS THAT SPRAY EATING AREAS, TABLE TOPS OR DRINKING FOUNTAIN BUBBLERS SHALL BE REMOVED, REPLACED WITH ADJUSTABLE PATTERN ROTOR HEADS WITH LOW ARC SPRAY NOZZLES, OR RELOCATED AND REPLACED TO ELIMINATE OVER-SPRAY OF THESE AREAS. ALL MODIFICATIONS TO EXISTING IRRIGATION SYSTEM SHALL PROVIDE FULL SPRAY COVERAGE TO THE SATISFACTION OF THE SITE OWNER.
2. REPLACE IN KIND ALL LANDSCAPING DAMAGED DURING CONSTRUCTION.

**LEGEND:**

SHADED AREA: IRRIGATED/SPRAY AREA  
 WHITE AREA: NON-IRRIGATED/NOT SPRAYED

REVISION	DRAWN	APP'D.	DATE	WEST BASIN MUNICIPAL WATER DISTRICT	
				RECYCLED WATER ON-SITE FACILITIES	
APPROVED				RETROFIT	
DISTRICT ENGINEER      RCE      DATE				TYPICAL SPRINKLER HEAD MODIFICATION	
				IRR-16	

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\* CONTRACTOR SHALL EXPOSE EXISTING PIPE TO VERIFY PIPE MATERIAL AND SIZE PRIOR TO BEGINNING CONSTRUCTION

**NOTES:**

1. REPLACE IN KIND EXISTING LANDSCAPING AND IRRIGATION DAMAGED DURING CONSTRUCTION ACTIVITIES.
2. PERMANENTLY MARK ABOVE GROUND RPPD BACKFLOW PIPING WITH POTABLE WATER IDENTIFICATION LABELS AND TAGS.
3. REDUCED PRESSURE PRINCIPLE BACKFLOW PROTECTION DEVICES SHALL BE INSTALLED AT LEAST TWELVE INCHES (12") ABOVE GRADE, READILY ACCESSIBLE FOR FIELD TEST AND MAINTENANCE, AND AS CLOSE TO THE POTABLE WATER METER AS PRACTICAL. IF THE BACKFLOW PROTECTION DEVICE CANNOT BE PLACED WITHIN 5' OF THE EXISTING POTABLE WATER METER ALL PIPING BETWEEN THE METER AND BACKFLOW PROTECTION DEVICE SHALL HAVE 1-SACK SLURRY BACKFILL, AND INSPECTED BY WEST BASIN AND/OR LACDPH REPRESENTATIVE.
4. PROTECTIVE ENCLOSURE IS RECOMMENDED.

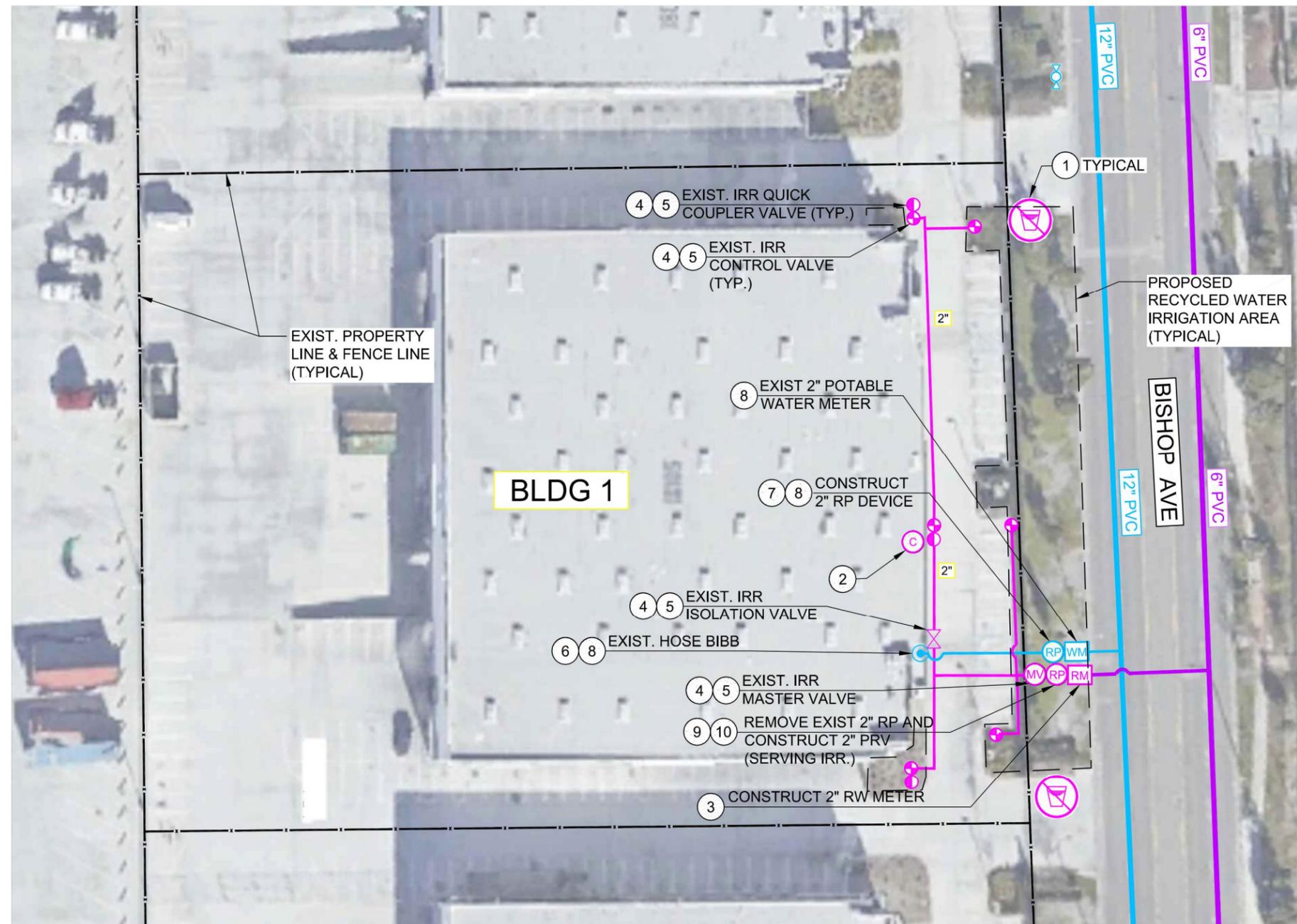
REVISION	DRAWN	APP'D.	DATE
APPROVED			
DISTRICT ENGINEER		RCE	DATE

**WEST BASIN MUNICIPAL WATER DISTRICT**  
 RECYCLED WATER ON-SITE FACILITIES  
**TYPICAL 3", 4" & 6" RPPD**  
**INSTALLATION**

RETROFIT  
**IRR-17**



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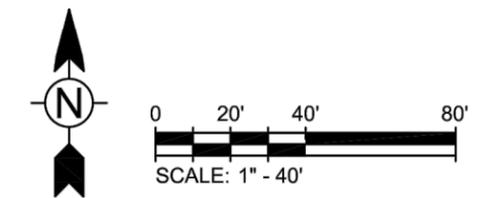


**SIGNING AND TAGGING NOTES:**

1. INSTALL RECYCLED WATER IDENTIFICATION SIGNS AT LOCATIONS AGREEABLE TO THE SITE OWNER AND DPH. SIGNS MAY BE MOUNTED ON POLES, ATTACHED TO EXISTING FENCES, BUILDINGS, OR EXISTING POLE MOUNTED SIGNS. FINAL LOCATION AND STYLE OF SIGN SHALL BE DETERMINED BY THE OWNER AND AS APPROVED BY LACDPH. SEE WBMWD STD. DWG. IRR-11 FOR SIGN REQUIREMENTS.
2. INSTALL RECYCLED WATER WARNING LABELS ON EXISTING IRRIGATION CONTROLLERS.
3. INSTALL RECYCLED WATER WARNING TAGS ON ALL RECYCLED WATER METERS AND PAINT ANGLE VALVE OR SHUT OFF VALVE PURPLE (PANTONE 512).
4. ATTACH RECYCLED WATER VALVE BOX NAMEPLATE (CHRISTY'S MODEL #3800 OR EQUAL) OR BRAND ALL EXISTING VALVE BOXES FOUND ON THE RECYCLED WATER IRRIGATION SYSTEM IN THE CENTER OF THE COVER WITH THE LETTERS 'RECYCLED WATER.' MISSING OR DAMAGED VALVE BOX LIDS SHALL BE REPLACED WITH NEW PURPLE RW BOX LIDS.
5. INSTALL RECYCLED WATER WARNING TAGS ON ALL EXISTING RECYCLED WATER APPURTENANCES INCLUDING THE IRRIGATION VALVE BOXES (GATE VALVES, MANUAL CONTROL VALVES, AND ELECTRIC CONTROL VALVES).
6. REMOVE ALL HOSE BIBS ON THE EXISTING IRRIGATION SYSTEM AND REPLACE WITH RECYCLED WATER QUICK COUPLERS.
7. INSTALL RPPD AT EXISTING POTABLE WATER METER PER WBMWD STD. DWG. IRR-14 AND INSTALL POTABLE WATER IDENTIFICATION TAG.
8. INSTALL POTABLE WATER IDENTIFICATION TAGS ON ALL POTABLE WATER METERS, BACKFLOW DEVICES, AND APPURTENANCES.
9. REMOVE AND SALVAGE EXISTING BACKFLOW PER WBMWD STD. DWG. IRR-13.
10. CONSTRUCT PRV PER WBMWD STD. DWG. IRR-15 AND INSTALL RECYCLED WATER WARNING TAG.
11. INSTALL NEW HOSE-BIB VACUUM BREAKERS ON ALL EXISTING POTABLE WATER HOSE BIBS IF NOT ALREADY IN PLACE. TAG ALL HOSE BIBS WITH POTABLE WATER IDENTIFICATION TAG.
12. ABANDON EXIST POTABLE WATER SERVICE PER WBMWD STD. DWG. IRR-12 AND TAG WITH POTABLE WATER IDENTIFICATION.

**NOTES:**

1. SEQUENCE CONSTRUCTION IN ACCORDANCE WITH WEST BASIN ON-SITE STANDARD SPECIFICATIONS.
2. TRENCHING, BEDDING, AND BACKFILL SHALL BE CONSTRUCTED PER LOCAL JURISDICTIONAL AGENCY REQUIREMENTS.
3. MAINTAIN MINIMUM SEPARATION (OD TO OD) BETWEEN POTABLE WATER AND RECYCLED WATER PIPELINES PER WBMWD STD. DRAWING RW 21.
4. CONSTRUCT RP DEVICES AND RETAINING WALLS (IF NEEDED) ON PRIVATE PROPERTY.



COMPANY NAME CITY STATE ZIP PHONE: #### FAX: ####	OWNER PLANS SUBMITTED FOR	Project No.:
	PROJECT DESCRIPTION	Date:
	23400 "B" STREET (APN: 123-456-01) RETROFIT SITE PLAN	Designed By:
		SHEET C-1

REVISION	DRAWN	APP'D.	DATE
APPROVED			
DISTRICT ENGINEER		RCE	DATE

**WEST BASIN MUNICIPAL WATER DISTRICT**  
 RECYCLED WATER ON-SITE FACILITIES  
 TYPICAL RETROFIT PLAN

RETROFIT  
**IRR-19**