



Yucaipa Valley Water District

Notice and Agenda of a Board Workshop

Tuesday, March 8, 2016 at 4:00 p.m.

MEETING LOCATION: District Administration Building
12770 Second Street, Yucaipa

MEMBERS OF THE BOARD: Director Ken Munoz, Division 1
Director Bruce Granlund, Division 2
Director Jay Bogh, Division 3
Director Lonni Granlund, Division 4
Director Tom Shalhoub, Division 5

I. Call to Order

II. Public Comments At this time, members of the public may address the Board of Directors on matters within its jurisdiction; however, no action or significant discussion may take place on any item not on the meeting agenda.

III. Staff Report

IV. Presentations

- A. Overview of the California Drought and Yucaipa Valley Water District's Action Plan Related to the State Water Resources Control Board Mandatory Restrictions to Achieve a 36% Reduction in Potable Urban Water Use [[Workshop Memorandum No. 16-048 - Page 5 of 235](#)]

V. Operational Updates

- A. Review of Updated Standard Specifications for Drinking Water, Recycled Water, and Sewer Facilities [[Workshop Memorandum No. 16-049 - Page 23 of 235](#)]
- B. Operational Update of the Recycled Water Filling Station for Customers of the Yucaipa Valley Water District [[Workshop Memorandum No. 16-050 - Page 156 of 235](#)]
- C. Purchase of Inland Empire Brineline Pipeline and Treatment Capacity from the San Bernardino Valley Municipal Water District [[Workshop Memorandum No. 16-051 - Page 158 of 235](#)]

VI. Capital Improvement Projects

- A. Status Report on the Construction of a 6.0 Million Gallon Drinking Water Reservoir R-12.4 - Calimesa [[Workshop Memorandum No. 16-052 - Page 162 of 235](#)]
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Any person with a disability who requires accommodation in order to participate in this meeting should telephone Erin Anton at (909) 797-5117, at least 48 hours prior to the meeting in order to make a request for a disability-related modification or accommodation.

Materials related to an item on this agenda submitted to the Board of Directors after distribution of the workshop packet are available for public inspection during normal business hours at the District office located at 12770 Second Street, Yucaipa. Meeting material is also be available on the District's website at www.yvwd.dst.ca.us

- B. Status Report on the Digester Cleaning and Cover Replacement Project at the Wochholz Regional Water Recycling Facility [[Workshop Memorandum No. 16-053 - Page 165 of 235](#)]

VII. Policy Issues

- A. Consideration of Policies Regarding Procurement Methodologies and Emergency Procedures [[Workshop Memorandum No. 16-054 - Page 170 of 235](#)]
- B. Consideration of Policies Regarding Long-Term Implementation Plans Related to Smart Manhole Covers and Skydrop Irrigation Controllers [[Workshop Memorandum No. 16-055 - Page 173 of 235](#)]
- C. Consideration of Policies Regarding the Purchase of Supplemental Water Supplies for the Yucaipa Valley Water District [[Workshop Memorandum No. 16-056 - Page 174 of 235](#)]

VIII. Development Related

- A. Development Agreement No. 2016-03 to Provide Sewer Facilities and Service to the Private Development of Tract Map 36818, MBTK Homes, LLC (Assessor's Parcel Numbers 411-150-012, 411-160-006 and 411-160-032) [[Workshop Memorandum No. 16-057 - Page 177 of 235](#)]

IX. Administrative Issues

- A. Review of the Unaudited Financial Report for the Period Ending on February 29, 2016 [[Workshop Memorandum No. 16-058 - Page 195 of 235](#)]

X. Director Comments

XI. Adjournment

Staff Report



Yucaipa Valley Water District

Presentations



Yucaipa Valley Water District

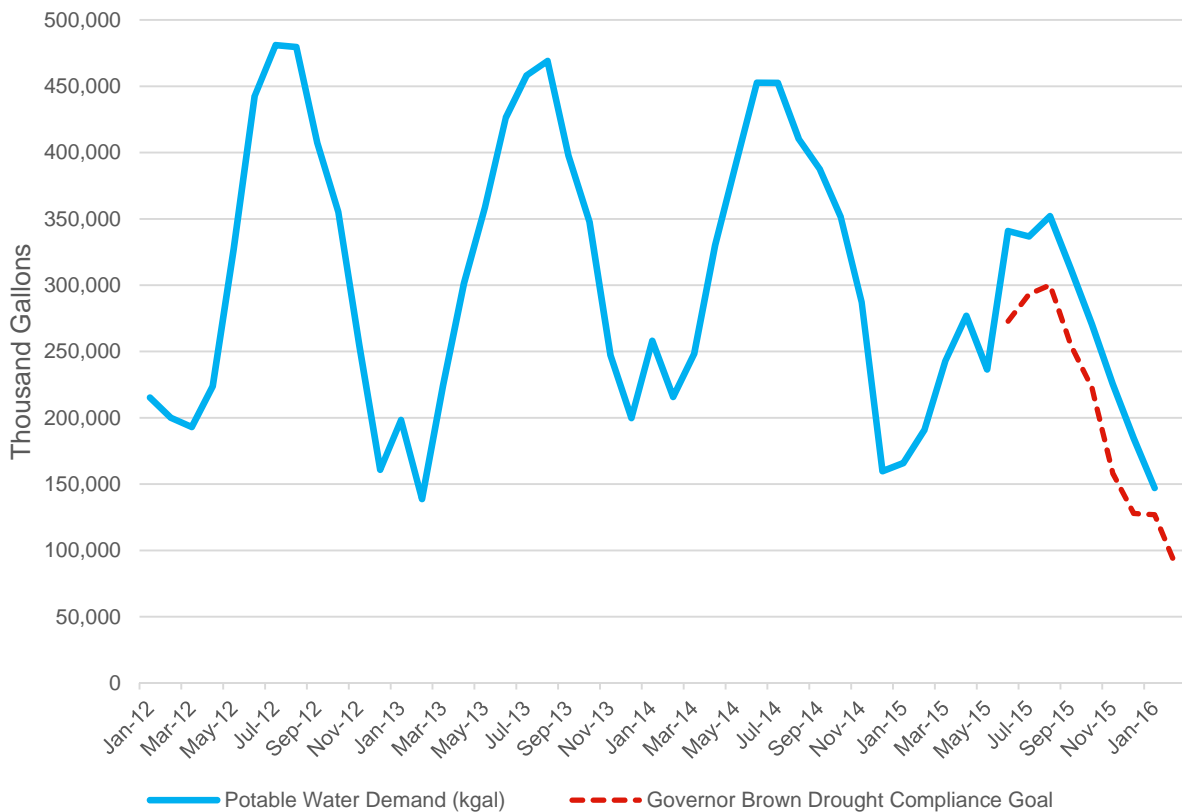


Date: March 8, 2016

Subject: Overview of the California Drought and Yucaipa Valley Water District’s Action Plan Related to the State Water Resources Control Board Mandatory Restrictions to Achieve a 36% Reduction in Potable Urban Water Use

On May 5, 2015, the State Water Resources Control Board (“SWRCB”) adopted emergency regulations to achieve a 25% statewide reduction in potable urban water use. These stringent water use regulations will require the Yucaipa Valley Water District to achieve a 36% reduction from the amount of drinking water produced in 2013. In order to achieve this level of water conservation, the Yucaipa Valley Water District will need to provide water based on the following water demand curve.

Actual Water Consumption and Drought Regulatory Requirements



The chart above illustrates the difference between Governor Brown’s Drought Compliance Goal in 2014 at a 25% reduction, and in 2015 at a 36% reduction in potable water use based on the 2013 baseline period.

To achieve Governor Brown’s Drought Compliance Goal of a 36% reduction in potable water use from the 2013 baseline period, the Yucaipa Valley Water District has initiated numerous drought conservation programs and conducted a series of monthly community workshops to provide information to our customers.

On February 2, 2016, the State Water Resources Control Board extended the water conservation regulations. While a great deal of press attention has been focusing on the relief provided by the State Water Resources Control Board, the following facts were developed prior to the adoption of the extended conservation regulations:

- Based on the proposed amended water conservation regulations, the statewide water conservation goal for the 412 regulated water agencies will change from an average of 24.7% to an average of 23.4%, or a combined overall reduction in water conservation of 1.3% statewide.

- The City of Redlands, Yucaipa Valley Water District and Beaumont Cherry Valley Water District will all remain at a 36% water conservation requirement with the proposed regulations.
 - The neighboring agencies of City of Banning, East Valley Water District, Eastern Municipal Water District, and City of San Bernardino are required to meet a water conservation requirement of 28%.
 - Mutual water companies with less than 3,000 service connections within the boundaries of the City of Redlands, Yucaipa Valley Water District and Beaumont Cherry Valley Water District are required to meet a water conservation requirement of 25%.

SWRCB Required Water Conservation Goal	Original Conservation Standard (Released 7/17/15)	DRAFT Adjusted Conservation Standard
Required 36% Reduction	67	25
Required 34% Reduction	0	8
Required 33% Reduction	0	25
Required 32% Reduction	62	28
Required 30% Reduction	0	10
Required 29% Reduction	0	18
Required 28% Reduction	81	52
Required 26% Reduction	0	10
Required 25% Reduction	1	23
Required 24% Reduction	45	36
Required 22% Reduction	0	1
Required 21% Reduction	0	11
Required 20% Reduction	61	58
Required 18% Reduction	0	2
Required 17% Reduction	0	5
Required 16% Reduction	42	40
Required 13% Reduction	0	5
Required 12% Reduction	22	24
Required 10% Reduction	0	1
Required 8% Reduction	27	26
Required 4% Reduction	4	4
	412	412

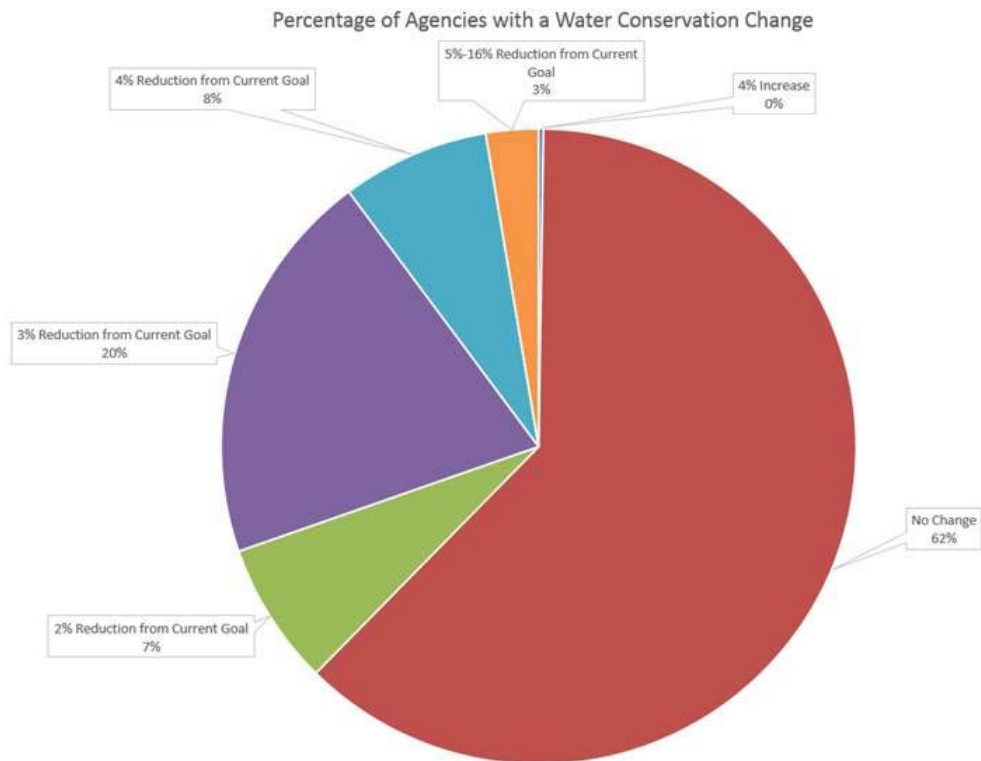
- The original emergency water conservation regulations required 67 water agencies statewide to meet a 36% water conservation reduction. The proposed water

conservation regulations will require only 25 water agencies statewide to meet a 36% reduction. The City of Redlands, Yucaipa Valley Water District and Beaumont Cherry Valley Water District are the three local water agencies that are still required to meet the 36% water conservation reduction.

- There are 412 water agencies that are directly impacted by the State Water Resources Control Board Emergency Water Conservation Regulations. Based on the proposed changes,
 - One water agency (City of Seal Beach) will experience an increase by 4% from their current water conservation goal of 8%;
 - The vast majority of water agencies (256 agencies, or 62.1%) will see no change to their water conservation regulations. This includes the City of Redlands and the Yucaipa Valley Water District, so both will remain at a 36% water conservation goal;
 - Thirty water agencies (or 7.3%) will see a 2% reduction in their water conservation regulations;
 - Eighty three water agencies (or 20.1%) will see a 3% reduction in their water conservation regulations;

Proposed Change by SWRCB	Number of Agencies that will See a Change in	Percentage of Agencies with a Water Conservatio
4% Increase	1	0.2%
No Change	256	62.1%
2% Reduction from Current Goal	30	7.3%
3% Reduction from Current Goal	83	20.1%
4% Reduction from Current Goal	31	7.5%
5%-16% Reduction from Current Goal	11	2.7%
	412	

- The distribution of changes to water agencies is shown below:



The purpose of this agenda item is to discuss the ongoing and evolving implementation strategy for our community.

Drought Status and Update

The U.S. Seasonal Drought Outlook shows predicted trends for areas experiencing drought, as well as indicating areas where new droughts may develop. The NOAA Climate Prediction Center issues this monthly product in conjunction with their long-lead temperature and precipitation outlooks on the first and third Thursday of each month and when weather events warrant an interim update. The general large-scale trends depicted are based on numerous indicators, including short and long-range forecasts. A discussion detailing the atmospheric, hydrologic, and climatic conditions affecting the drought trends is included.

Human factors, such as water demand and water management, can exacerbate the impact that drought has on a region. Because of the interplay between a natural drought event and various human factors, drought means different things to different people. In practice, drought is defined in a number of ways that reflect various perspectives and interests.

COMMON TYPES OF DROUGHT

Meteorological Drought

Meteorological Drought is based on the degree of dryness (rainfall deficit) and the length of the dry period.

Agricultural Drought

Agricultural Drought is based on the impacts to agriculture by factors such as rainfall deficits, soil water deficits, reduced ground water, or reservoir levels needed for irrigation.

Hydrological Drought

Hydrological Drought is based on the impact of rainfall deficits on the water supply such as stream flow, reservoir and lake levels, and ground water table decline.

Socioeconomic Drought

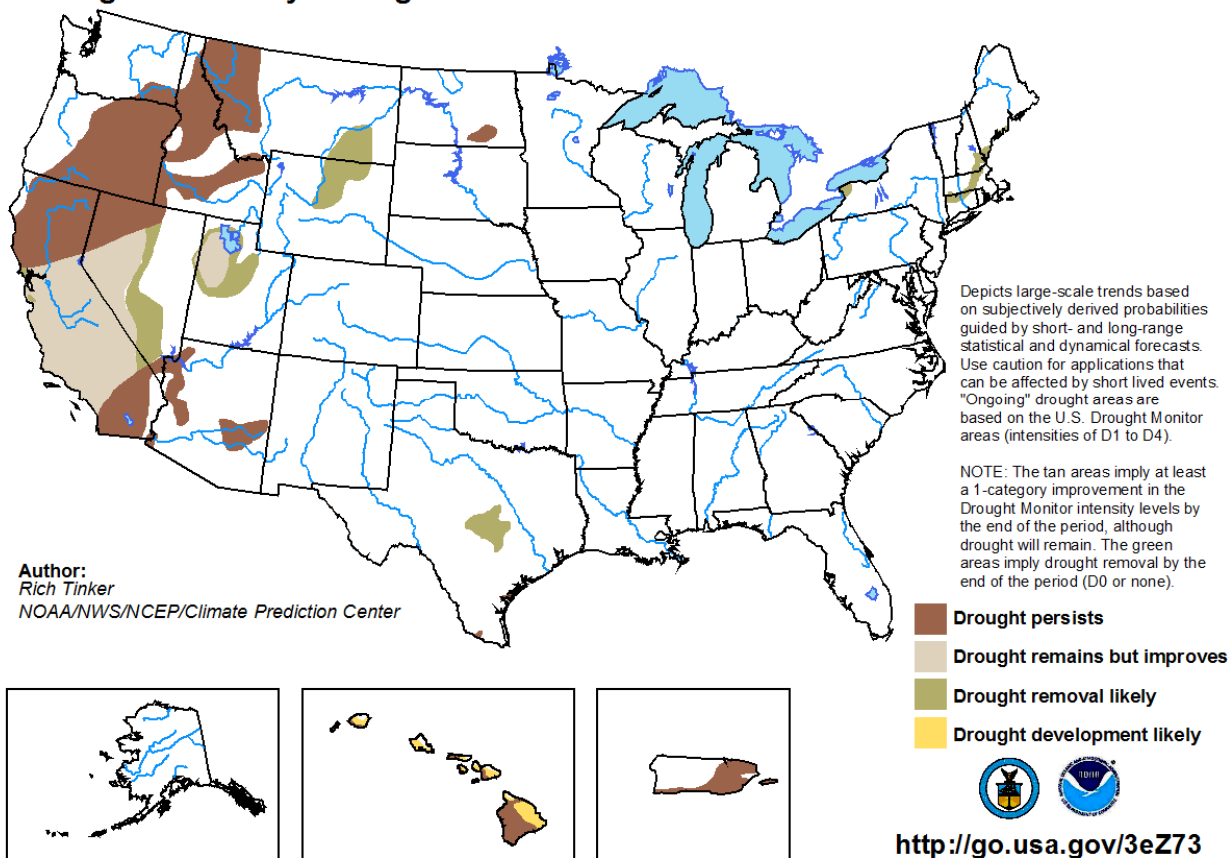
Socioeconomic drought is based on the impact of drought conditions (meteorological, agricultural, or hydrological drought) on supply and demand of some economic goods. Socioeconomic drought occurs when the demand for an economic good exceeds supply as a result of a weather-related deficit in water supply.

Additional information can be found at: www.drought.unl.edu/DroughtBasics/TypesofDrought.aspx

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for February 18 - May 31, 2016
Released February 18, 2016



Latest Seasonal Assessment - In the eastern half of the country, Mid-January through Mid-February 2016 brought above-normal precipitation to much of the Southeast and Mid-Atlantic states, but less than normal amounts to most of the South-Central States, lower Ohio Valley, and non-coastal Northeast. Conditions were dry enough to bring drought into western New York, but some drought was removed from parts of Connecticut, south of the area of 30-day dryness. Farther west, amounts were 2 to locally 4 inches below normal from the western half of the lower Mississippi Valley westward through eastern Texas and southeastern Oklahoma. Despite wet weather overall since October 2015, short-term deficits were significant enough to bring some dryness and a few areas of drought into parts of Texas. Precipitation was also unusually low in the southern High Plains and western Texas, but this is a climatologically dry time of year for the region, and totals were only an inch or so below normal there. Looking farther west, conditions were generally wetter than normal, and drought improved across northern California, Nevada, much of Utah, and scattered areas farther northwest. Only part of Wyoming saw deterioration, and drought remained unchanged in central and southern California, where extreme to exceptional drought (D3 to D4) is entrenched. Outside the contiguous states, generally dry weather affected most of Hawaii (prompting some drought expansion) and Puerto Rico (keeping drought intact). Regarding expected changes by the end of May, The Seasonal Drought Outlook calls for drought removal where it exists in the Northeast where the last half of February is expected to be somewhat wetter than normal. Drought should persist in southeast North Dakota, and in the small areas that recently developed in southern Texas,

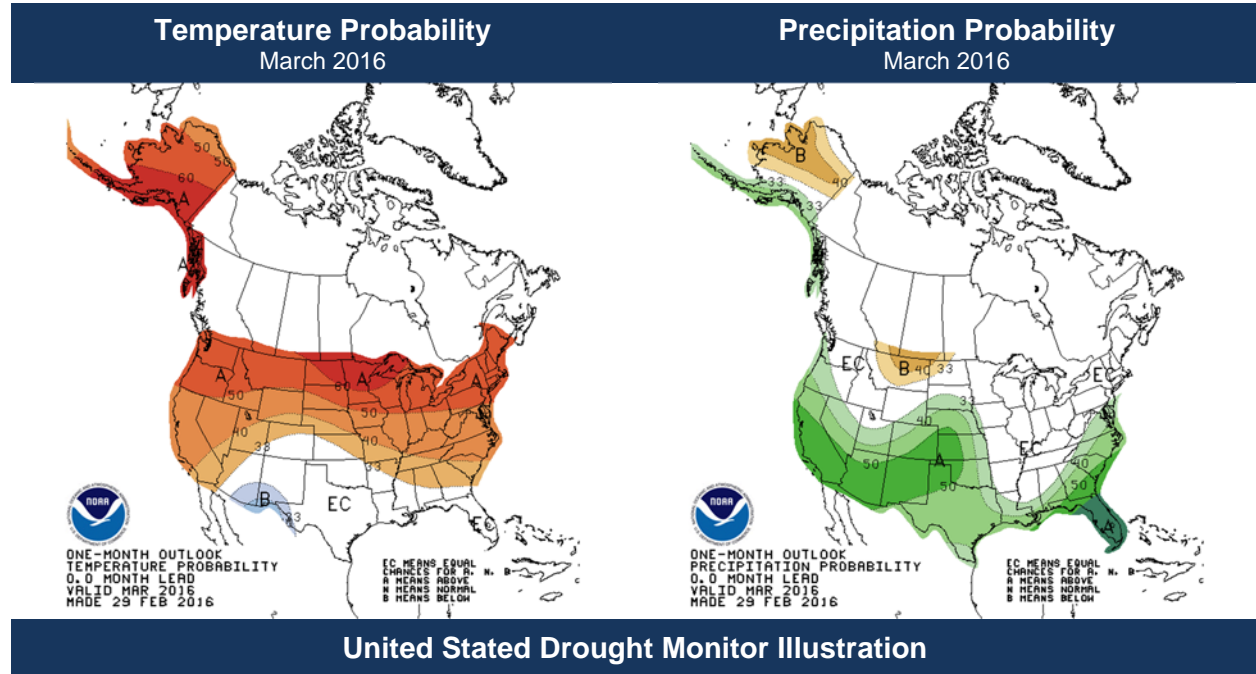
as spring is a relatively dry time of year. In central Texas, however, spring precipitation is more robust, and with odds tilting toward above-normal precipitation in the region for March-May, drought removal is expected there. Enhanced chances for above normal precipitation should bring at least some improvement in central and upper southern parts of California, all but northwestern Nevada, northern Utah, and the area extending from northern Wyoming into southern Montana. Climatologically increasing rainfall is the primary consideration in the latter area. In Arizona and southern California, March begins a drier time of year, and precipitation probably won't be sufficient to bring any improvement there despite odds favoring wetter than normal conditions. In the Northwest and west-central part of the country, forecasts on all time scales favor near- to below-normal precipitation, and persistence is expected there. Drought is expected to expand further through much of Hawaii, where a dry spring is anticipated, and dryness should worsen or intensify where it exists in Puerto Rico.

Forecaster: Rich Tinker

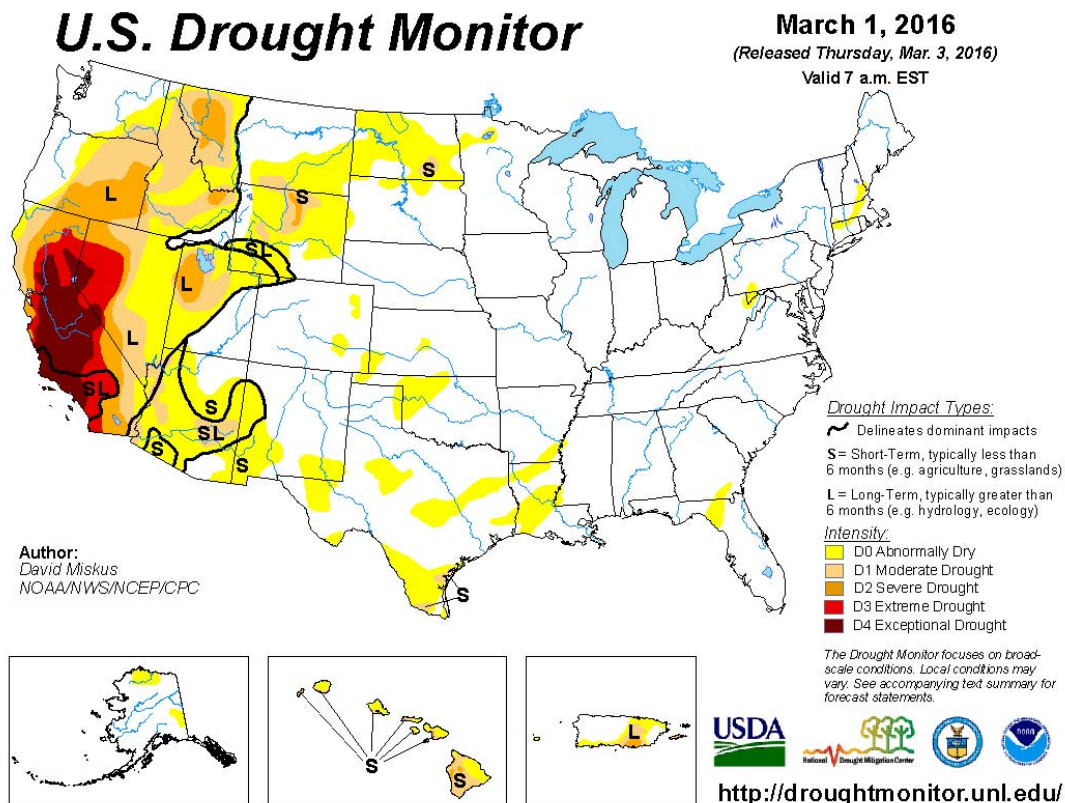
Next Seasonal Drought Outlook issued: March 17, 2016 at 8:30 AM EST

Source: http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php

The National Weather Service and the National Oceanic and Atmospheric Administration provides regular predictions for temperature and precipitation forecasts throughout the United States. The following charts show the temperature and precipitation probability for the next month, as well as a compilation of future forecasts for temperature and precipitation.

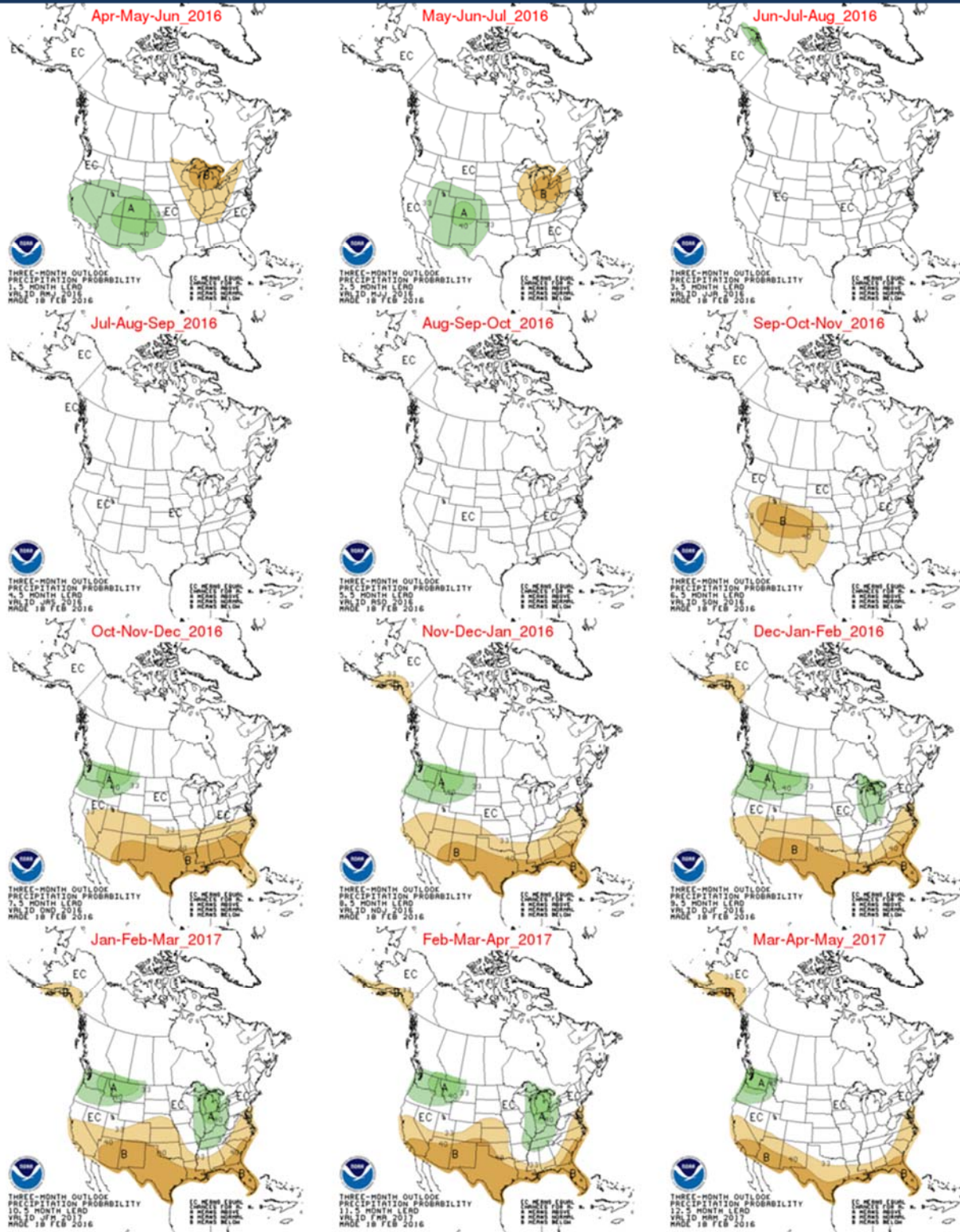


United States Drought Monitor Illustration



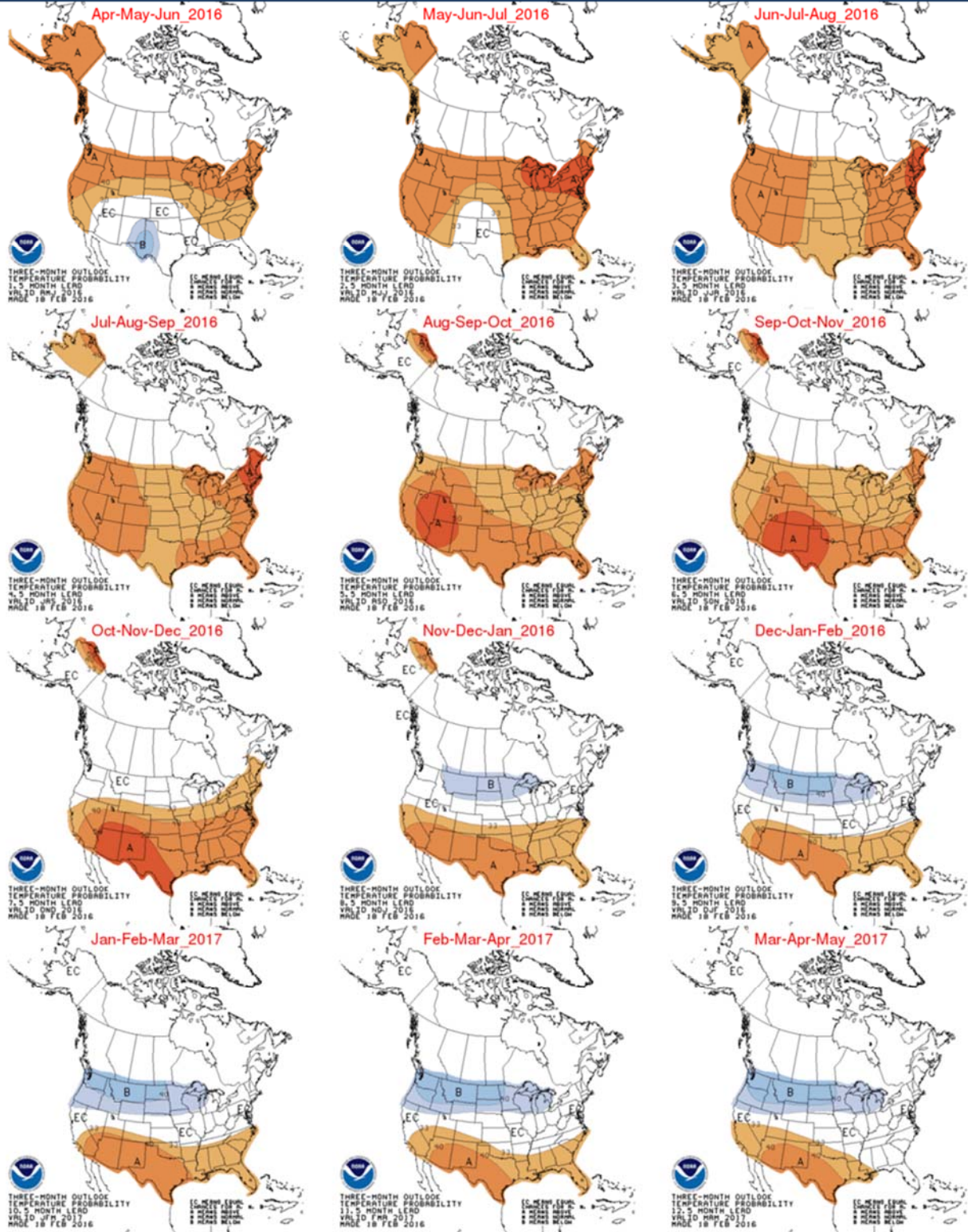
NOAA Multi-Season Precipitation Predictions - Three Month, Rolling Periods

http://www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/p.gif



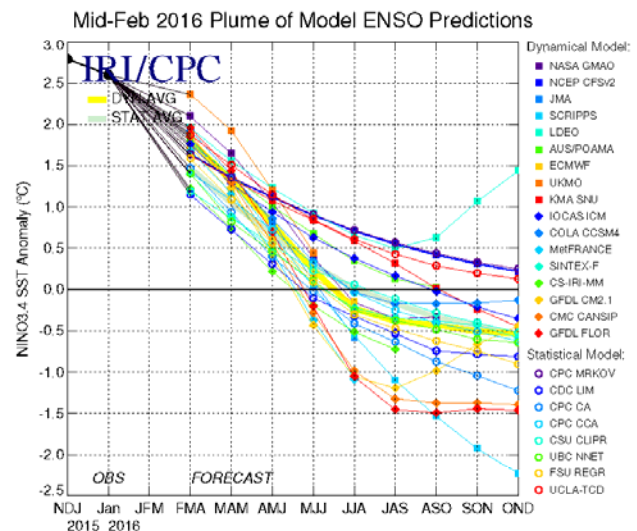
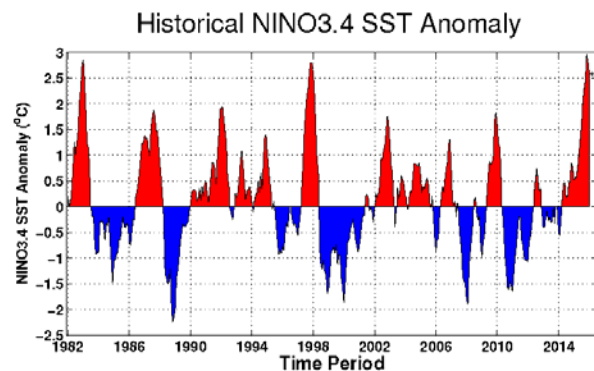
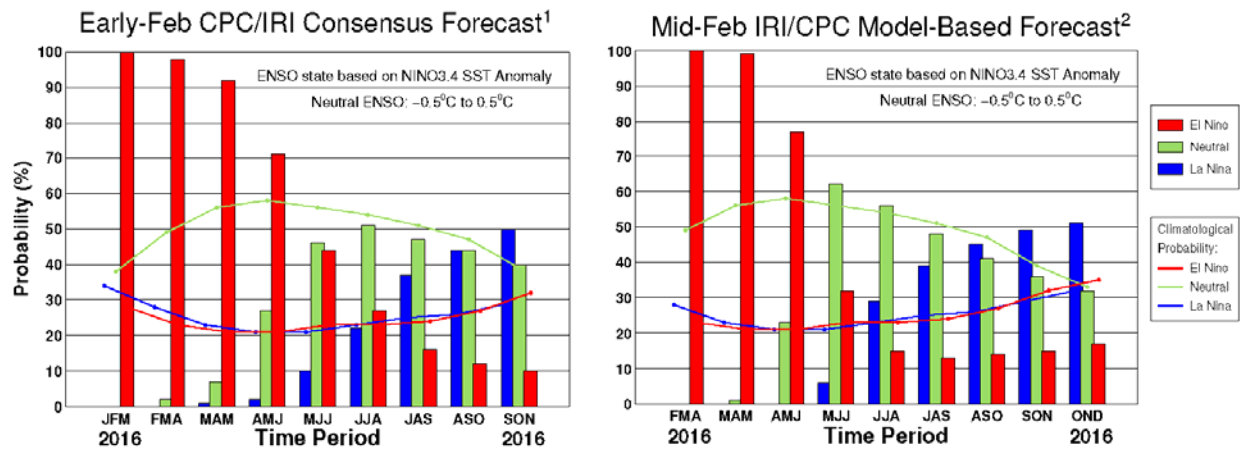
NOAA Multi-Season Temperature Predictions - Three Month, Rolling Periods

http://www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/t.gif



ENSO QUICK LOOK February 18, 2016 A monthly summary of the status of El Niño, La Niña and the Southern Oscillation, or “ENSO”, based on NINO3.4 index (120-170W, 5S-5N)

During mid-February 2016 the tropical Pacific SST was still at a very strong El Niño level, having peaked in November and December. All atmospheric variables continue to support the El Niño pattern, including weakened trade winds and excess rainfall in the east-central tropical Pacific. Most ENSO prediction models indicate slowly weakening El Niño conditions over the coming several months, returning to neutral by late spring or early summer 2016, with a chance for La Niña development during fall.



Historically Speaking

- El Niño and La Niña events tend to develop during the period Apr-Jun and they:*
- Tend to reach their maximum strength during Dec-Feb
 - Typically persist for 9-12 months, though occasionally persisting for up to 2 years
 - Typically recur every 2 to 7 years

¹Based on a consensus of CPC and IRI forecasters, in association with the official CPC/IRI ENSO Diagnostic Discussion.

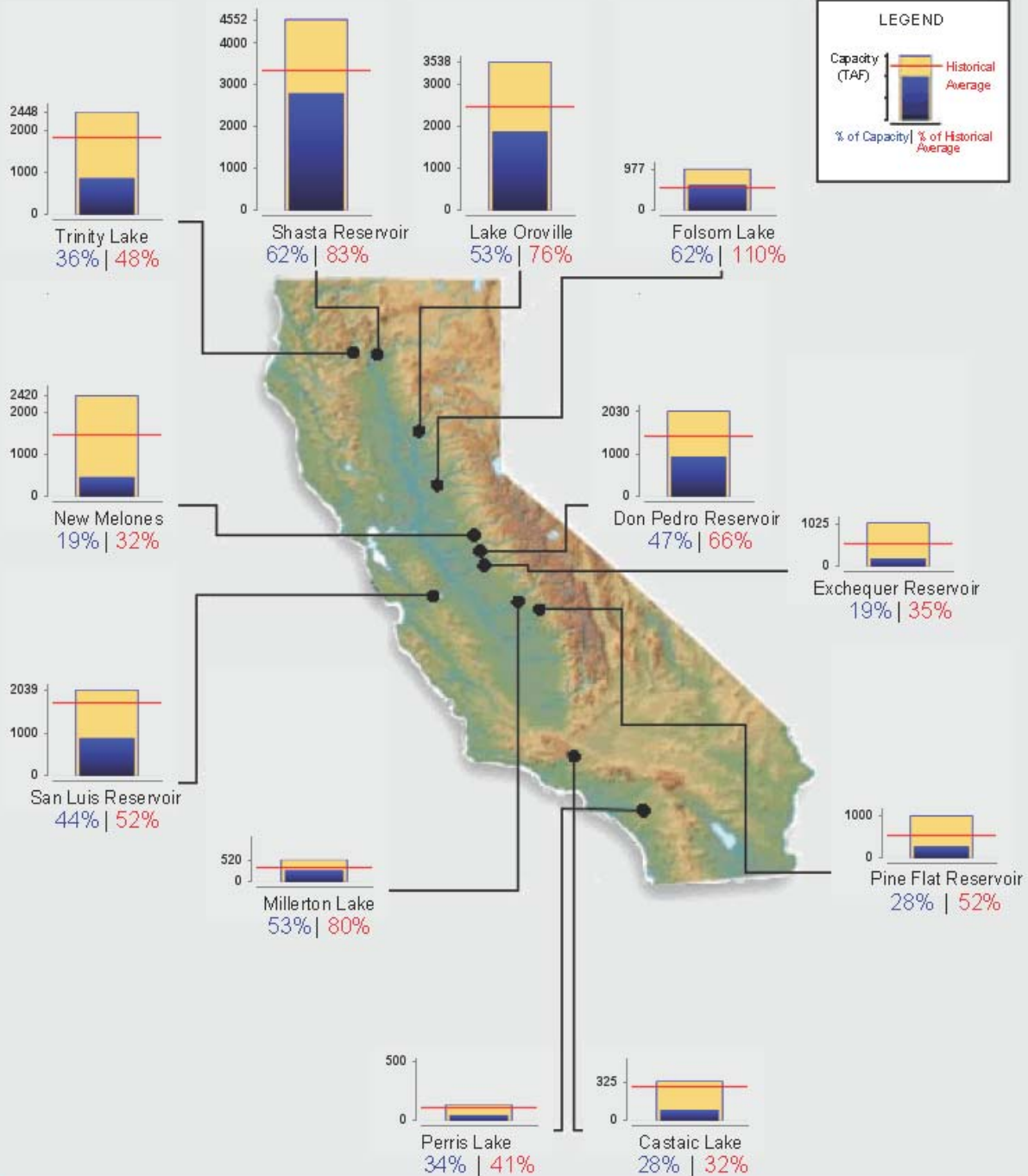
²Purely objective, based on regression, using equally weighted model predictions from the plume.



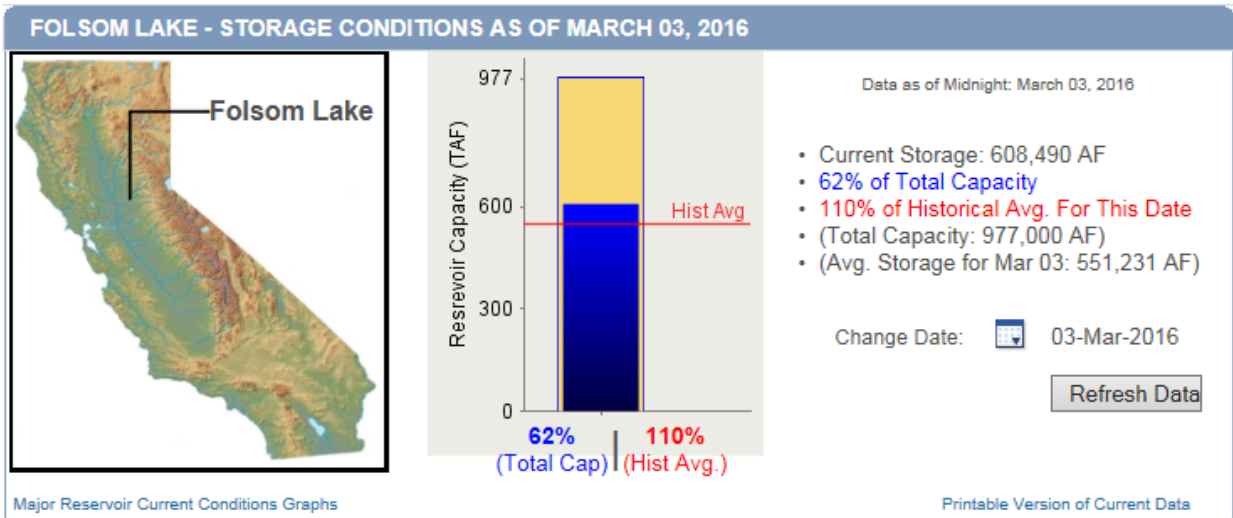
Reservoir Conditions

Ending At Midnight - March 3, 2016

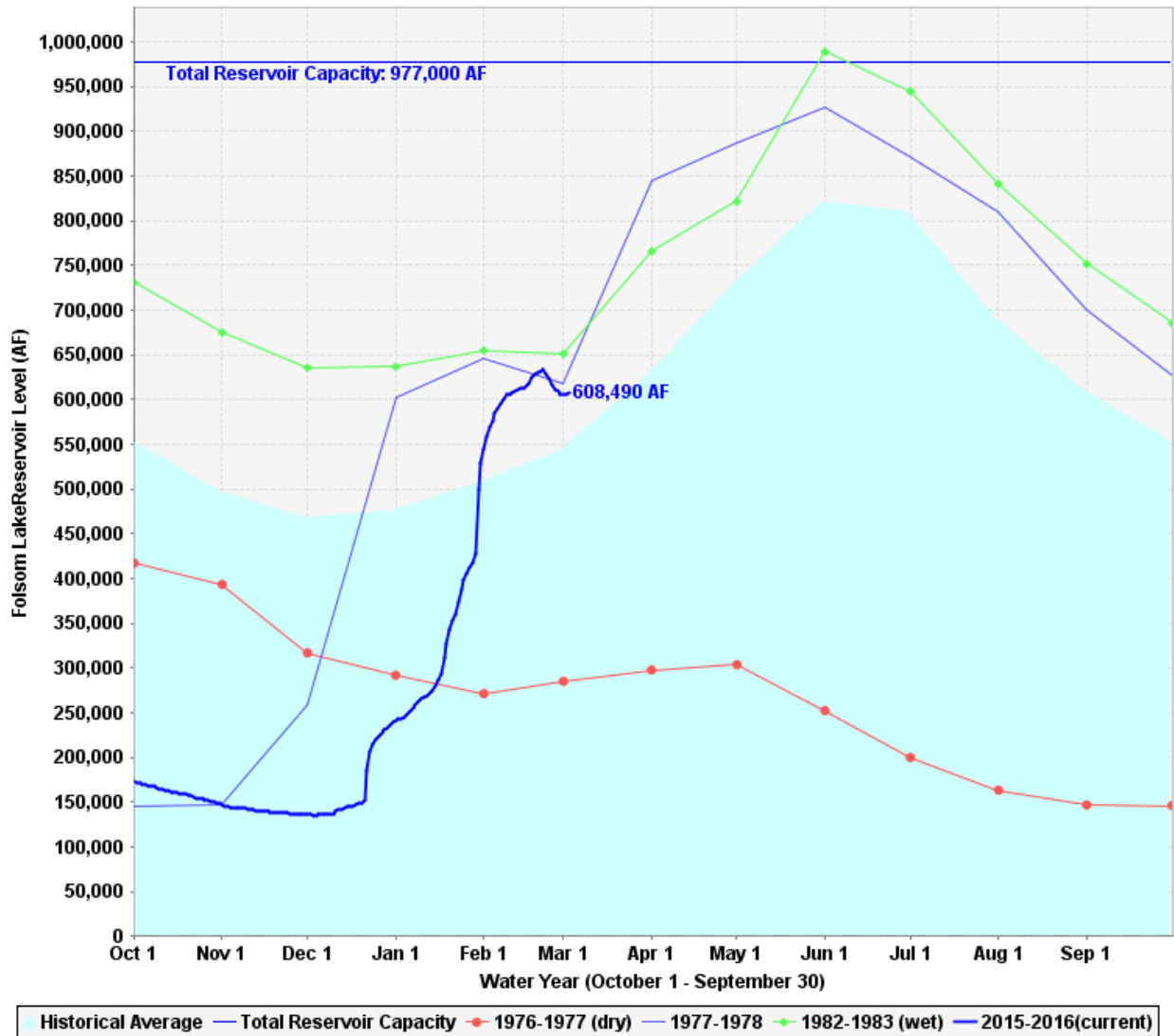
CURRENT RESERVOIR CONDITIONS



Graph Updated 03/04/2016 10:45 AM



Folsom Lake Storage Levels



KQED Science

California Reservoirs Are Dumping Water in a Drought, But Science Could Change That



By **Lauren Sommer**, KQED Science

FEBRUARY 29, 2016



There's a rule in California that may seem bizarre in a drought-stricken state: in the winter, reservoirs aren't allowed to fill up completely.

In fact, even as this post goes up, a handful of reservoirs are releasing water to maintain empty space.

The practice, which has long inflamed combatants in California's water wars, is due to a decades-old rule designed to protect public safety. If a major winter storm comes in, reservoirs need space to catch the runoff and prevent floods.

But with advances in weather forecasting, some say this preemptive strategy is outdated. A new, "smart" flood control system could save water in years when Californians need it most.

Hitting the 'Magic' Line

At one of the state's major reservoirs — Folsom Lake, east of Sacramento — the volume of water spilling from the dam has swollen eight-fold in the past few weeks, sending billions of gallons downstream, much of it into San Francisco Bay.

Early in February the reservoir reached a key threshold: 60 percent full, which is the highest water level allowed during the winter months, according to rules from the U.S. Army Corps of Engineers and the Sacramento Area Flood Control Agency.

Last year, most of the reservoir was a dry, dusty lakebed.

"What reservoir was left was confined to the old river channels before we built the dam," says Drew Lessard of the U.S. Bureau of Reclamation, the federal agency that manages the reservoir.

Just an average-size winter storm can send huge volumes of water down the American River into Folsom Reservoir, boosting the lake by 10 percent or more. A major storm can produce dramatically more than that.

"The watershed is pretty flashy and it responds pretty quickly to storm events," says Lessard. "That's why we need to reserve a space during those winter months in case that happens."

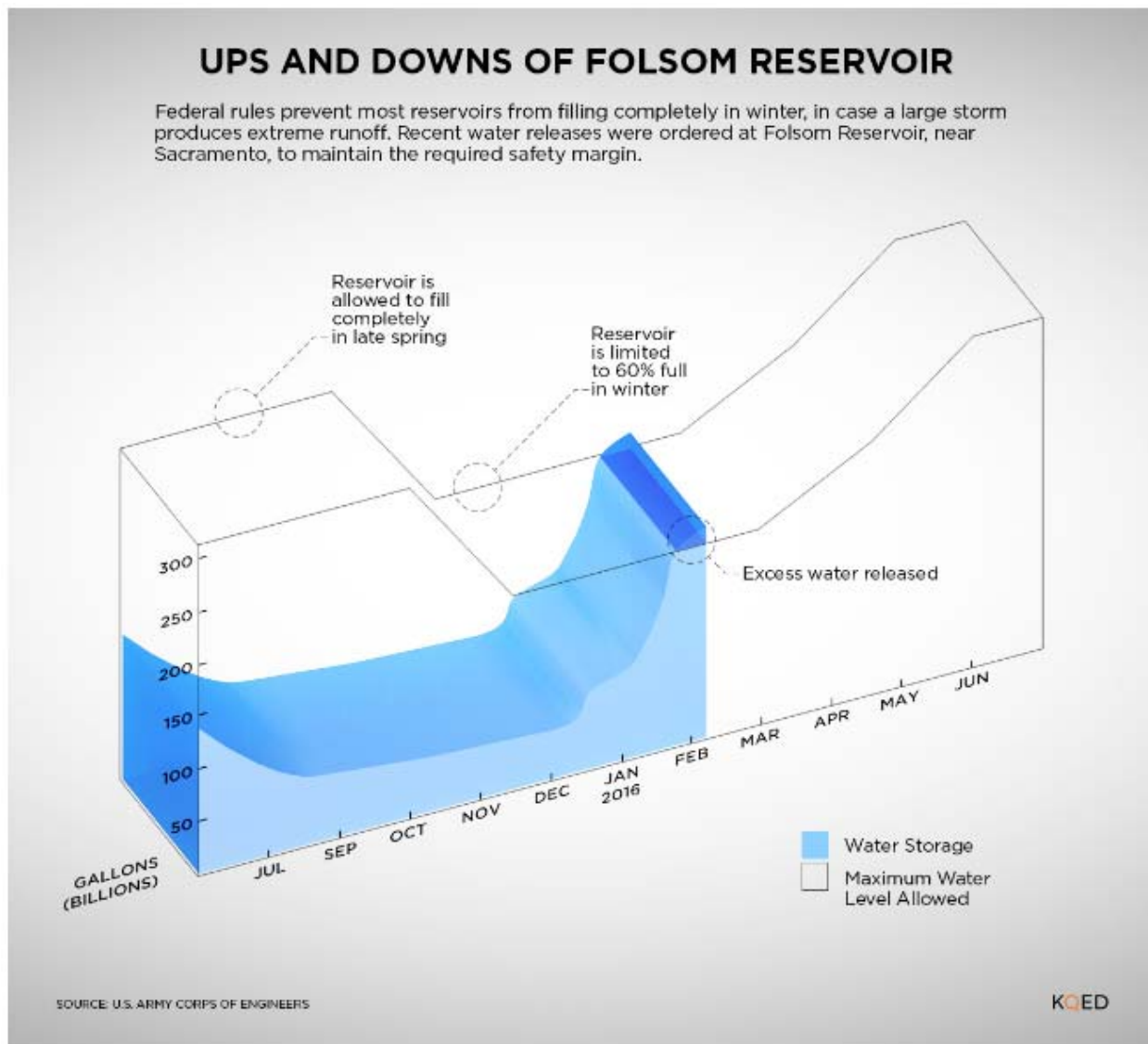
Sitting 40 percent empty allows the reservoir to act as a buffer against floods, gulping the runoff without overflowing. In years where the upstream reservoirs are fuller, Folsom Reservoir is required to remain 60 percent empty.

Releasing water downstream does produce benefits, supporting wildlife and endangered fish. It also prevents salt water from San Francisco Bay from backing up into the Sacramento-San Joaquin Delta, which is a drinking water supply for many in the Bay Area.

But preemptively releasing water has its own risks, especially if it doesn't rain again, as happened in 1997. The reservoir was lowered and, "it was dry the rest of the year and we never really rebounded," recalls Lessard.

As California enters a fifth year of drought, seeing operators deliberately dumping water can be disconcerting.

A few weeks ago, Shauna Lorance of the San Juan Water District near Sacramento went to state regulators with a message: when water is disappearing downriver, it's hard for water consumers to take the conservation message seriously.



"Anything they conserve right now is not held," said Lorange. "For me to explain to customers, after everything they've done, that they need to continue to conserve so it can be spilled is going to be a nightmare."

'Smart' Reservoirs

"The rules that govern water in the West were created in the 19th century," says Marty Ralph, who directs the Center for Western Weather and Water Extremes at UC San Diego. "And yet here we live in the 21st century with its special and new needs: greater population and a changing climate."

Ralph is piloting a more dynamic method of flood management at Lake Mendocino with the Sonoma County Water Agency.

Instead of maintaining firm limits on reservoir levels dictated by the calendar, managers would use cutting-edge weather forecasts to gauge how much flood space they need.

"Weather predictions have been improving over the last decades," said Ralph. "Particularly on the West Coast, we've learned about the phenomenon that produces most flood-producing storms. We call them atmospheric rivers."

Instead of emptying out a reservoir preemptively, managers would allow the reservoir to stay fuller, keeping an eye on the weather forecast.

If a big storm appears, "they'd have three, four, five days lead time, enough to release that extra water and get it out of the way safely," said Ralph.

If storms don't appear, the water would be saved for later in the year.

Ralph says "forecast-informed" operations are becoming possible thanks to major advances in weather research. New weather satellites and more precise forecast models are making predictions more accurate. Researchers are even flying planes into atmospheric rivers to gather information about how they behave.

Ralph says even with the improvements, there's more fine tuning to be done.

"We get down to three days' lead time and we're down to plus or minus 300 kilometers (186 mi.) in terms of the location of the storm's landfall," he explains. "That's the difference between San Francisco and the Oregon border. That's a big difference if you're operating a reservoir on a much smaller scale."

But he says potential is clear in a drought-prone state like California.

"Imagine we have the option to keep, say, ten percent extra water behind each dam in the winter," he muses. At Folsom Reservoir alone, that amount would supply 200,000 households for a year.

Changing the Rules

"We see potential," agrees Greg Kukas of the Army Corps of Engineers, the federal agency that sets flood rules for reservoirs. "What we're not clear on is what the risks associated with that potential might be. What are the trade offs?"

The Corps is considering using the new weather-based operations at Folsom as part of a major update to the reservoir operations plan.

'The rules that govern water in the West were created in the 19th century.'

— Marty Ralph, UCSD

The question is whether weather forecasts are precise enough — not just as to when a storm is coming, but how big it is.

“When it comes to forecasting the size of events that we’re most concerned about, they are about 20 percent off,” says Kukas.

Getting it wrong is not an option. If the dam overflows, it could flood Sacramento and hundreds of thousands of people downstream, and potentially put the dam itself at risk of failing.

“The consequences, you don’t even want to imagine them.”

Working with reservoir operators around the state, the Corps says it currently takes weather forecasts into consideration in making water release decisions, though in a minimal way.

“We don’t make our reservoir releases in a vacuum,” says Christy Jones, also with the Corps of Engineers. “We always are looking at the balance. We know water supply is incredibly important but we also know public safety is incredibly important.”

The Corps plans to decide whether to manage Folsom Reservoir using weather forecasts next year. Changing current flood rules for how much the reservoir can hold in the winter would require an act of Congress. But if it works at Folsom, Jones agrees that it would be a model for reservoirs across the Western U.S.

“This could have a huge impact on the West.”

Operational Updates



Yucaipa Valley Water District



Date: March 8, 2016

Subject: Review of Updated Standard Specifications for Drinking Water, Recycled Water, and Sewer Facilities

On August 20, 2014, the Board of Directors adopted Resolution No. 2014-08 related to updated Standard Specifications for drinking water, recycled water and sewer facilities. The District staff has made minor changes to the standard drawings and recommends the adoption of the entire packet. This item was originally presented on January 26, 2016 at Workshop Memorandum No. 16-016.

The drinking water standard drawings begin on page 3 of 133, the sewer standard drawings begin on page 71 of 133, and the recycled water standard drawings begin on page 107 of 133.

Following the approval of the standard drawings, the District's website will be updated to include the entire package of standard drawings as well as individual standards for use by consultants, engineers and contractors.

The screenshot shows the website's navigation menu and three columns of standard design drawings. Each column includes a title, a brief description, and a table of standards with their numbers and descriptions.

Drinking Water Standard Design Drawings		Sewer Standard Design Drawings		Recycled Water Standard Design Drawings	
Standard Number	Description	Standard Number	Description	Standard Number	Description
W-0	Water Standard Index - PDF	S-0	Sewer Standard Index - PDF	R-0	Recycled Water Standard Index - PDF
W-1	Standard Legend - PDF	S-1	Standard Legend - PDF	R-1	Standard Legend - PDF
W-2	Potable Water Pipeline Location - PDF	S-2	Sewer Mainline Location - PDF	R-2	Recycled Water Pipeline Location - PDF
W-3	Utility Locations - Sections - PDF	S-3	Manhole Detail - PDF	R-3	Recycled Water Notes for Non-Residential Sites - PDF
W-4	Dual Plumbed Residential Properties Requiring 1" Fire Sprinkler Service - PDF	S-4	Concrete Base and Joint Detail - PDF	R-4	Recycled Water Notes for Onsite Residential Use - PDF
W-5	Residential Properties Requiring 1" Fire Sprinkler Service - PDF	S-5	Adjust Existing Manhole to Grade - PDF	R-5	3/4" Dual Recycled Water Meter Assembly - PDF
W-6	Manifold Assembly for Four to Ten 3/4" and 1" Water Services - PDF	S-6	Manhole Shaft Location Details - PDF	R-6	1" Recycled Water Meter Assembly - PDF
W-7	1-1/2" and 2" Copper Water Service Installation - PDF	S-7	Traffic Manhole Frame and Cover - PDF	R-7	1-1/2" and 2" Recycled Water Service Installation - PDF
W-8	3" and 4" Water Meter Installation - PDF	S-8	Special Manhole (20' to 30' Deep) - PDF	R-8	Not In Use
		S-9	Special Manhole (30'+ Deep) - PDF	R-9	Not In Use
		S-10	Drop Manhole Detail (Special Acceptance Only) - PDF		

RESOLUTION NO. 2016-0x

**RESOLUTION OF THE YUCAIPA VALLEY WATER DISTRICT
ADOPTING THE STANDARD SPECIFICATIONS FOR THE DESIGN AND
PROCESSING, FURNISHING OF MATERIALS, AND CONSTRUCTION OF
DRINKING WATER, RECYCLED WATER AND SEWER FACILITIES**

Whereas, the Yucaipa Valley Water District’s Board of Directors desires to adopt revised and updated comprehensive drinking water, recycled water and sewer standard specifications that reflect technological advances, product and material availability, regulatory requirements, and District policies.

NOW, THEREFORE, BE IT HEREBY RESOLVED AND ORDERED, that the Board of Directors of the Yucaipa Valley Water District hereby adopts the drinking water, recycled water and sewer standard specifications attached hereto as Exhibit “A”.

PASSED, APPROVED and ADOPTED this ___ day of March 2016.

YUCAIPA VALLEY WATER DISTRICT

ATTEST:

Lonni Granlund, President Board of Directors

Joseph B. Zoba, General Manager



Yucaipa Valley Water District

12770 Second Street, Yucaipa, California 92399 Phone: (909) 797-5117

Standard Specifications for the Design and Processing, Furnishing of Materials, and Construction of Drinking Water Facilities

March __, 2016

YVWD WATER FACILITY STANDARDS
DRAWING INDEX (NUMERICAL)

W-1	STANDARD DESIGN REQUIREMENTS AND LEGEND
W-2	POTABLE WATER PIPELINE LOCATION
W-3	UTILITY LOCATIONS – SECTIONS
W-4	DUAL PLUMBED RESIDENTIAL PROPERTIES REQUIRING 1" FIRE SPRINKLER SERVICE
W-5	RESIDENTIAL PROPERTIES REQUIRING 1" SPRINKLER SERVICE
W-6	MANIFOLD ASSEMBLY FOR FOUR TO TEN 3/4" AND 1" SERVICES
W-7	1 1/2" AND 2" COPPER WATER SERVICE INSTALLATION
W-8	3" AND 4" WATER METER INSTALLATION
W-9	6" AND 8" WATER METER INSTALLATION
W-10	DOUBLE CHECK BACKFLOW ASSEMBLY
W-11	REDUCED PRESSURE BACKFLOW ASSEMBLY
W-12	REDUCED PRESSURE BACKFLOW ASSEMBLY WITH BYPASS
W-13	DOUBLE CHECK OR REDUCED PRESSURE DETECTOR ASSEMBLY ABOVE GROUND FIRE LINE
W-14	DOUBLE CHECK ASSEMBLY AND BELOW GROUND FIRE LINE
W-15	1" AND 2" AIR AND VACUUM VALVE ASSEMBLY
W-16	WATER QUALITY SAMPLING STATION
W-17	NOT IN USE
W-18	FIRE HYDRANT INSTALLATIONS
W-19	BLOW-OFF ASSEMBLY
W-20	VALVE AND VALVE BOX INSTALLATION
W-21	VALVE STEM EXTENSION
W-22	THRUST BLOCK DETAILS FOR RETROFIT ONLY
W-23	PRESSURE REDUCING STATION DETAILS
W-24	PREFABRICATED VAULT WITH LID AND VENT ASSEMBLY
W-25	ADJUSTABLE PIPE SUPPORT
W-26	STEEL CASING PIPE
W-27	MORTAR LINED AND COATED STEEL PIPE JOINT DETAILS
W-28	MORTAR LINED AND COATED STEEL PIPE CLOSURE DETAILS
W-29	NOT IN USE
W-30	TRENCH REPAIR DETAIL
W-31	PIPE BEDDING DETAIL
W-32	WATER PIPELINE PROTECTION DETAIL

WATER STANDARD INDEX

2016



Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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WATER STANDARD INDEX

2016



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STANDARD DESIGN REQUIREMENTS:

PLAN SCALE SIZES ARE REQUIRED TO BE DESIGNED AT 1:40. SPECIAL CONSTRUCTION DETAILS MAY BE ADJUSTED AS NECESSARY FOR DESIGN AND CONSTRUCTION PURPOSES.

ALL PLAN SHEETS SHALL BE ON 24-INCH BY 36-INCH ARCHITECTURAL SHEET SIZE D.

ALL PROJECTS SHALL BE SUBMITTED TO THE DISTRICT ON MYLAR PRIOR TO CONSTRUCTION.

ALL PROJECTS, UPON COMPLETION, SHALL UPDATE THE MYLAR PLANS AND PROVIDE AUTOCAD FILES FOR DISTRICT USE AND RECORDS UPON COMPLETION.

STANDARD LEGEND

	RIGHT OF WAY (R.O.W.)
	CENTERLINE
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING RECYCLED WATER LINE
	PROPOSED RECYCLED WATER LINE
	EXISTING SEWER LINE
	PROPOSED SEWER LINE
	EXISTING GAS LINE
	PROPOSED GAS LINE
	SERVICE LATERAL
	ENCASEMENT
	EXISTING ELECTRICAL CONDUIT
	PROPOSED ELECTRICAL CONDUIT
	EXISTING TELEPHONE CONDUIT
	PROPOSED TELEPHONE CONDUIT
	EXISTING FIBER OPTIC CABLE
	PROPOSED FIBER OPTIC CABLE
	PORTLAND CEMENT CONCRETE IN SECTION
	PORTLAND CEMENT CONCRETE IN PLAN

	POWER POLE AND GUY LINE		CLEAN-OUT
	TRAFFIC SIGNAL EXISTING		HOUSE CONNECTION SEWER
	WATER WELL		WYE BRANCH
	BUTTERFLY VALVE		CUT-OFF WALL
	GATE VALVE	C.O.	CLEAN-OUT
	FIRE HYDRANT	D.I.P.	DUCTILE IRON PIPE
	BLOW-OFF	D.M.H.	DROP MANHOLE
	AIR & VACUUM VALVE ASSEMBLY (SIZE PER PLAN)	J.M.H.	JUNCTION MANHOLE
	POTABLE WATER QUALITY SAMPLE STATION	M.H.	MANHOLE
	RECYCLED WATER QUALITY SAMPLE STATION	V.C.P.	VITRIFIED CLAY PIPE

STANDARD DESIGN REQUIREMENTS AND LEGEND

2016

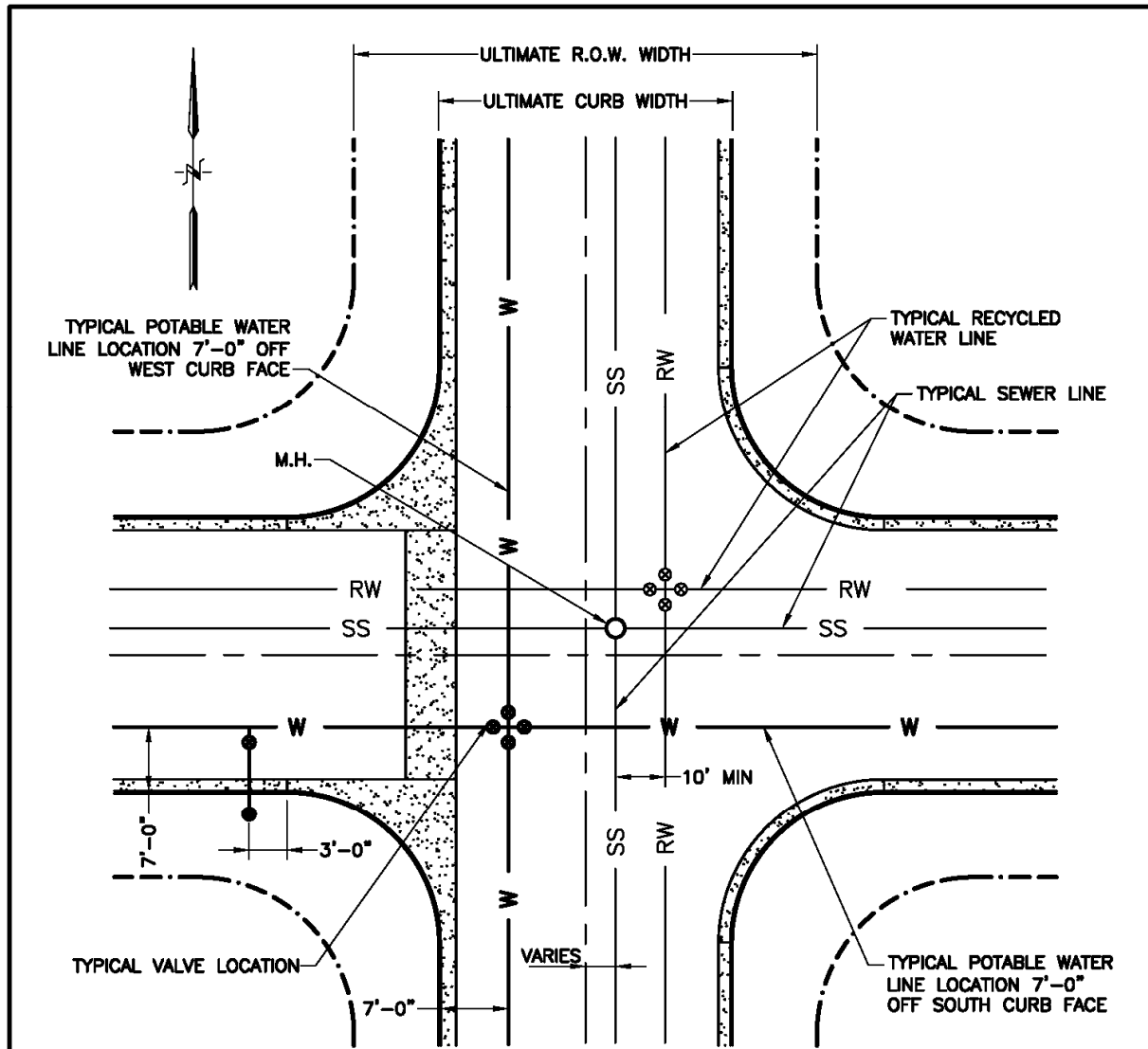


Yucaipa Valley Water District

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Sheet 1 of 1



NOTES:

POTABLE WATER LINE SIZE TO BE DETERMINED BY Y.V.W.D.

PLAN SCALE SIZES ARE REQUIRED TO BE DESIGNED AT 1:40. SPECIAL CONSTRUCTION DETAILS MAY BE ADJUSTED AS NECESSARY FOR DESIGN AND CONSTRUCTION PURPOSES.

ALL PLAN SHEETS SHALL BE ON 24-INCH BY 36-INCH ARCHITECTURAL SHEET SIZE D.

ALL PROJECTS SHALL BE SUBMITTED TO THE DISTRICT ON BOTH MYLAR AND AUTOCAD FORMATS FOR DISTRICT USE AND RECORDS.

POTABLE WATER PIPELINE LOCATION

2016

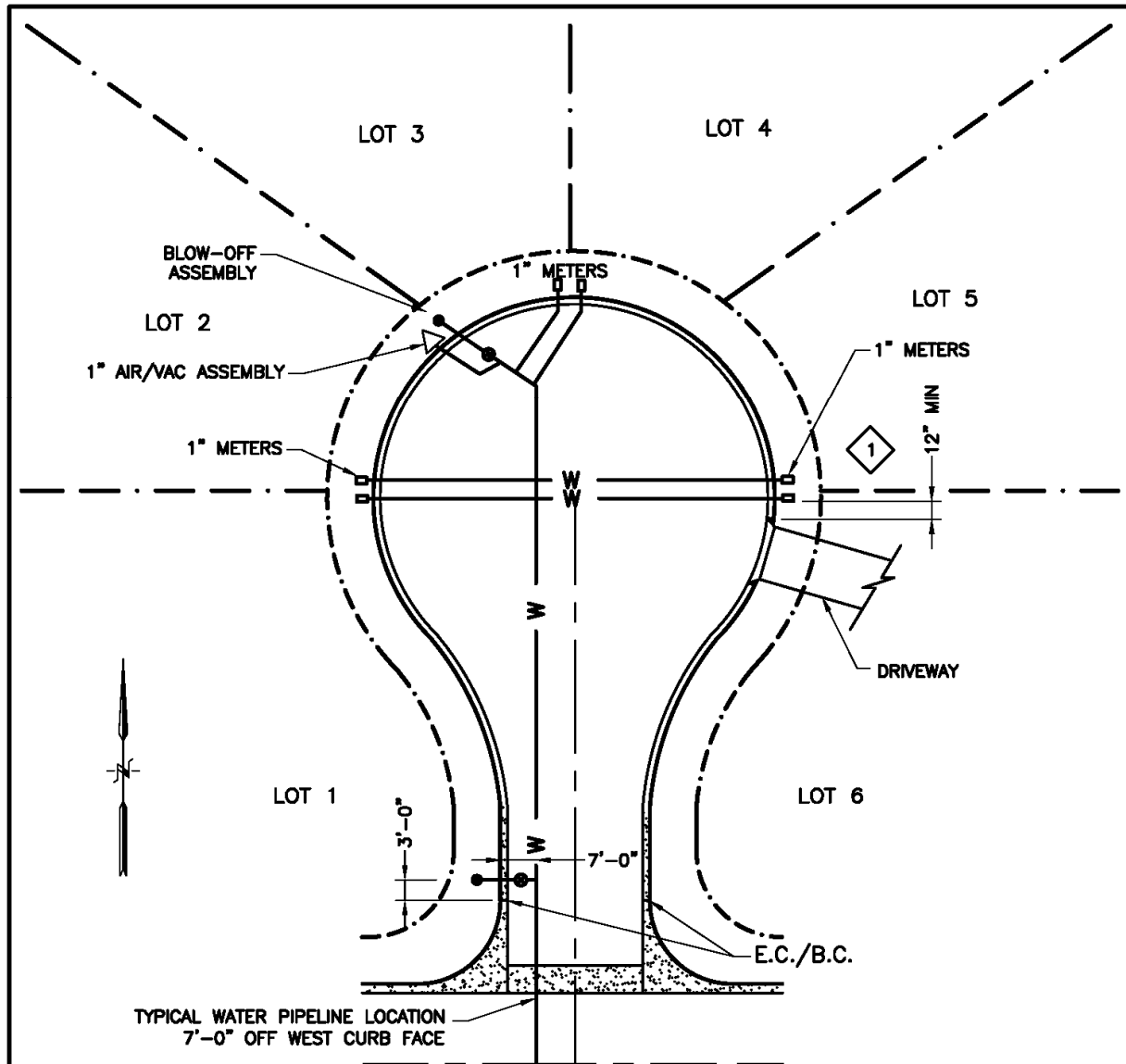


Yucaipa Valley Water District

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NOTE:

1 METERS, AIR/VAC ASSEMBLIES, FIRE HYDRANTS, AND BLOW OFFS SHALL NOT BE LOCATED WITHIN 12" OF DRIVEWAY APPROACH OR OTHER UTILITIES.

POTABLE WATER PIPELINE LOCATION

2016

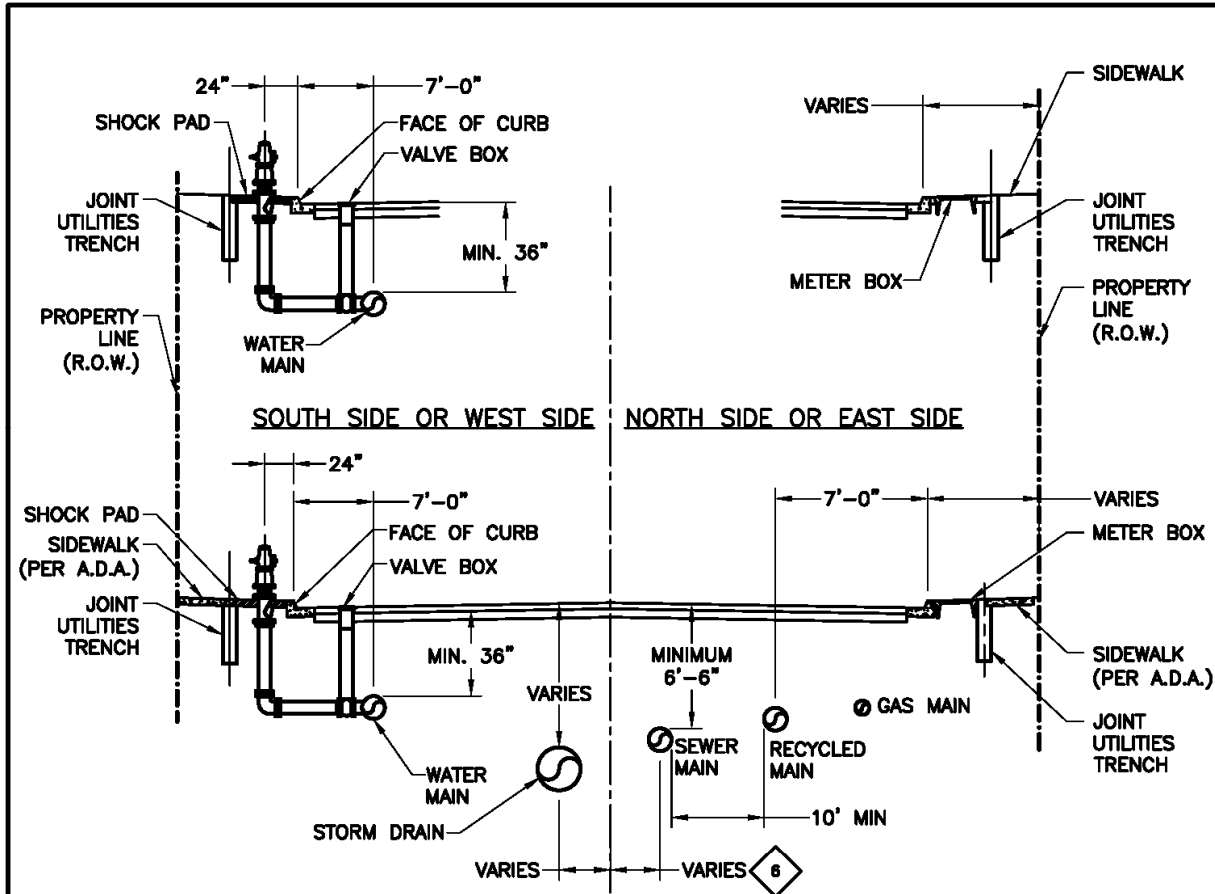


Yucaipa Valley Water District

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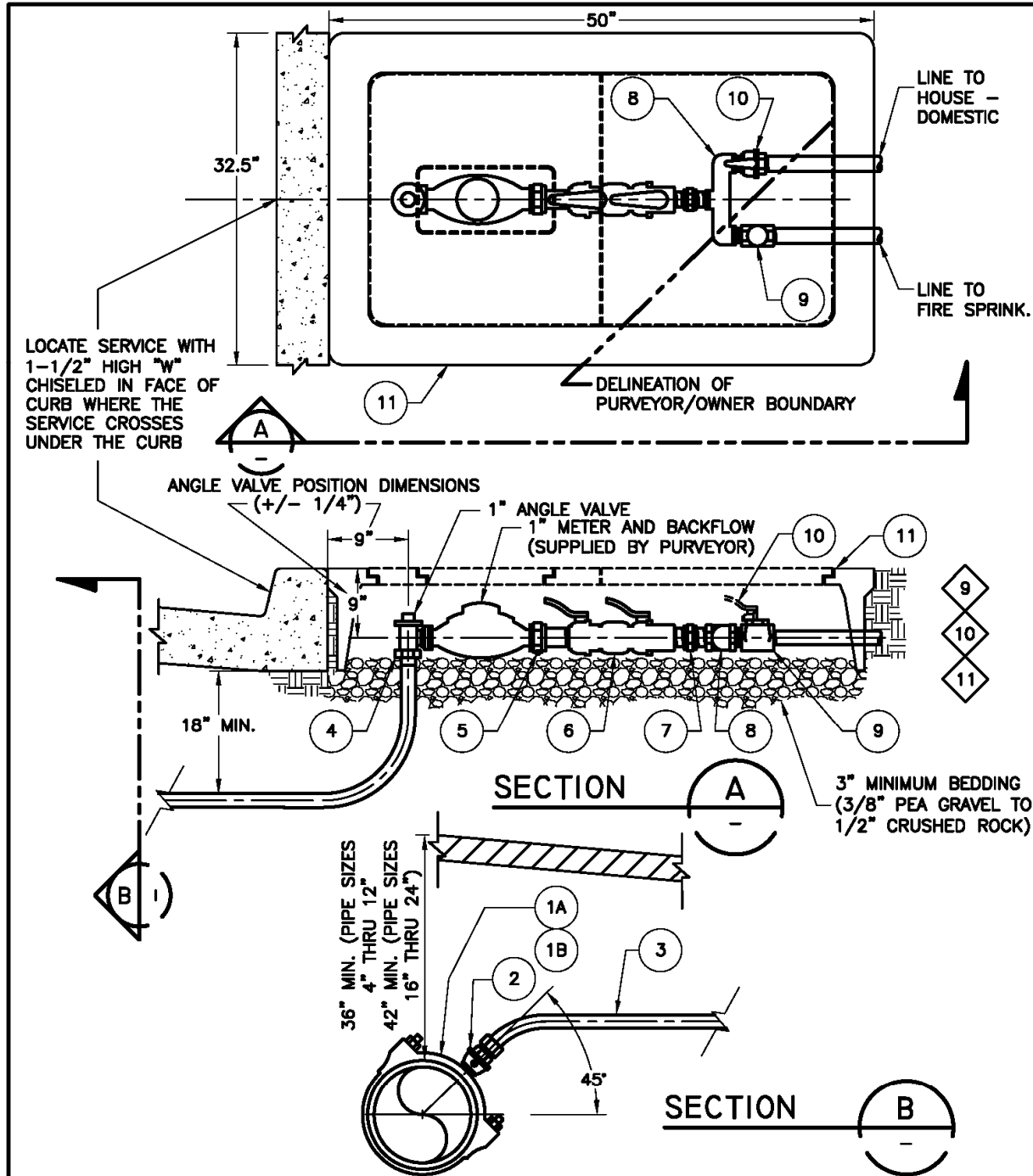
NOTES:

1. LOCATION AND DEPTH OF EXISTING AND PROPOSED UTILITIES MUST BE PROVIDED BY THE SUBDMIDER AND SHOWN ON ANY PLANS SUBMITTED TO Y.V.W.D. FOR APPROVAL.
2. FIRE HYDRANTS SHALL BE PLACED WITHIN THE SIDEWALK 2'-0" TO CENTER LINE OF BARREL BEHIND FACE OF CURB.
3. CHANGES MAY BE PERMITTED BY Y.V.W.D. IN CASES OF CONFLICTING FACILITIES.
4. CONFLICTS BETWEEN UTILITY COMPANIES FACILITIES, EXISTING AND PROPOSED, MUST BE MUTUALLY RESOLVED BY THE UTILITY COMPANIES.
5. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.

◊ PIPING SHOULD BE LOCATED 6'-0" TO ROAD CENTERLINE WHEN POSSIBLE, EXCEPT IN DIVIDED ROADWAYS.

UTILITY LOCATIONS – SECTIONS

2016	 <p>Yucaipa Valley Water District</p>	<p>Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	W-3
			Sheet 1 of 1



SEE SHEET 2 OF 3 FOR ADDITIONAL NOTES, SHEET 3 OF 3 FOR LIST OF MATERIALS

DUAL PLUMBED RESIDENTIAL PROPERTIES REQUIRING 1" FIRE SPRINKLER SERVICE

2016



Yucaipa Valley Water District

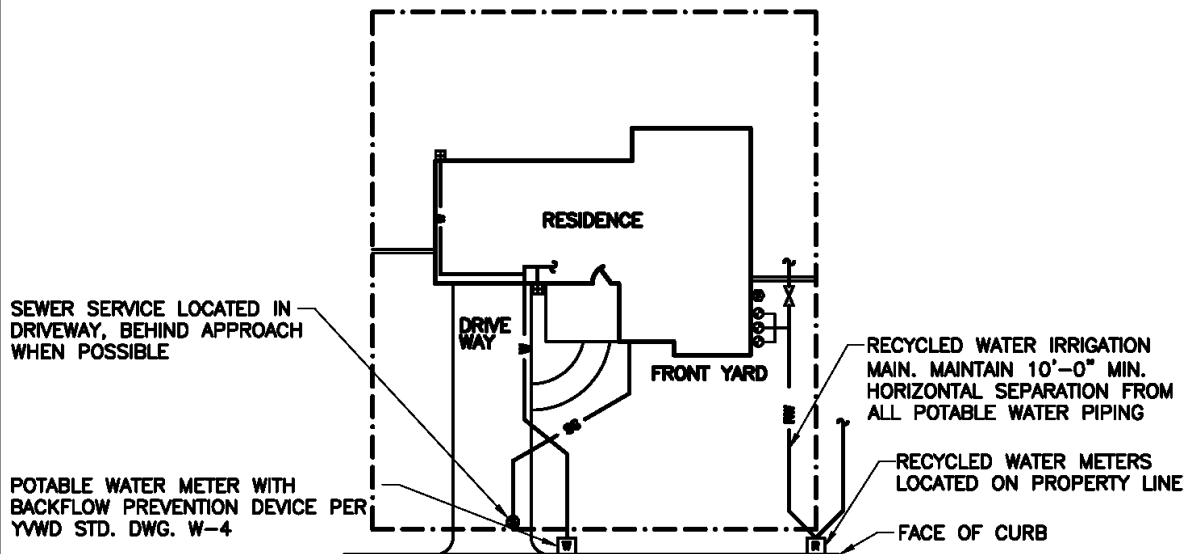
Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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NOTES:

1. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 12" OF VALVE, COUPLING, JOINT OR FITTING.
 2. BLUE POLY-SLEEVE SHALL BE SECURED AT THE CORP. AND THE ANGLE VALVE WITH 10 MIL. TAPE.
 3. SET TOP OF METER BOX FLUSH WITH DRIVEWAY, SIDEWALK OR CURB, AS SHOWN.
 4. THE CORPORATION STOP TAP SHALL BE MADE AT A 45° DEGREE ANGLE FROM THE TOP OF THE PIPE.
 5. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
 6. ALL CONNECTIONS TO COPPER TUBING SHALL BE COMPRESSION FITTINGS.
 7. RECYCLED SERVICES WILL BE LOCATED ON THE PROPERTY LINES IN PAIRS. MINIMUM SEPARATION FROM POTABLE TO RECYCLED SERVICES IS (10').
 8. METERS AND BACKFLOW BRANCH ASSEMBLY TO BE CENTERED IN METER BOXES TO ALLOW FOR ACCESS, TESTING, AND MAINTENANCE.
- 9 METER, METER COUPLINGS, BACKFLOW BRANCH ASSEMBLY LOCK ON/LOCK OFF BALL VALVES, AND SINGLE CHECK VALVE ARE TO BE PROVIDED BY THE PURVEYOR.
- 10 ALL DUAL PLUMBED SERVICES WITH A FIRE SERVICE ARE REQUIRED TO HAVE A DOUBLE CHECK BACKFLOW PREVENTION ASSEMBLY INSTALLED AND TESTED PRIOR TO SERVICES BEING TURNED ON.
- 11 SUBJECT TO PURVEYOR REVIEW AND APPROVAL, THE METER AND METER BOX INCLUDING THE BRANCH ASSEMBLY MAY BE INSTALLED PARALLEL TO THE CURB IF NECESSARY.



*POTABLE WATER METER SHALL BE LOCATED A MINIMUM OF 10- FEET AWAY FROM THE RECYCLED WATER SERVICE AND SEWER LATERAL, AND 3- FEET AWAY FROM THE E.C./B.C. OF THE DRIVEWAY APPROACH. IF THESE SEPARATIONS ARE NOT POSSIBLE, THE POTABLE WATER METER MAY BE LOCATED WITHIN THE DRIVEWAY BEHIND THE APPROACH BY SPECIAL PERMISSION ONLY.

DUAL PLUMBED RESIDENTIAL PROPERTIES REQUIRING 1" FIRE SPRINKLER SERVICE

2016



Yucaipa Valley Water District

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Sheet 2 of 3

LIST OF MATERIALS			
ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1A	DOUBLE STRAP SERVICE SADDLE 1" I.P. OUTLET (FOR D.I.P. MAINS)	JONES ROMAC FORD MUELLER	J-979-PIPE O.D. -1" I.P. 202BS-PIPE O.D. -1" I.P. 202BS-PIPE O.D. -1" I.P. BR2B-PIPE O.D. -I.P. 100
1B	CAST SERVICE SADDLE WITH 1" I.P. OUTLET (FOR D.I.P. MAINS)	ROMAC FORD MUELLER	202S-PIPE O.D.-1" I.P. F-202-PIPE O.D.-1" I.P. DR2A-PIPE O.D.-I.P. 100
2	1" BRONZE BALL CORPORATION STOP (M.I.P.T. X COMPRESSION)	JONES MULLER McDONALD FORD	E-1935SG H-15028N 74704BQ
3	1" BLUE PLASTIC COATED COPPER TUBING		COPPER TYPE "K" SOFT
4	BRONZE BALL ANGLE METER STOP W/LOCKWING (1" COMPRESSION X METER)	JONES MUELLER McDONALD FORD	1963WSG H-14258N 74602BQ
5	1" METER x 3" "METER SPUD"	JONES	J-130
6	1" MINIMUM - DOUBLE CHECK BACKFLOW ASSEMBLY	AMES FEBCO WILKINS ARI	2000SS 850 950XL DC-500
7	1" BRASS UNION		
8	1" "U"-BRANCH (M.I.P.T. X M.I.P.T.)	McDONALD	AYM-708UMM
9	1" DOUBLE CHECK (INLINE DOUBLE CHECK)	McDONALD	711-4FE 44
10	BALL VALVE WITH LOCKWING (F.I.P. X F.I.P.)	JONES MUELLER McDONALD FORD	E-1900W B20283 N AYM76101W
11	METER BOX AND COVER WITH READING LID	ARMOR CAST	A6001430PCX12 W/ (1)-A6001470 - COVER (1)-A6001470DZ - COVER (1)-A6000482

DUAL PLUMBED RESIDENTIAL PROPERTIES REQUIRING
1" FIRE SPRINKLER SERVICE

2016

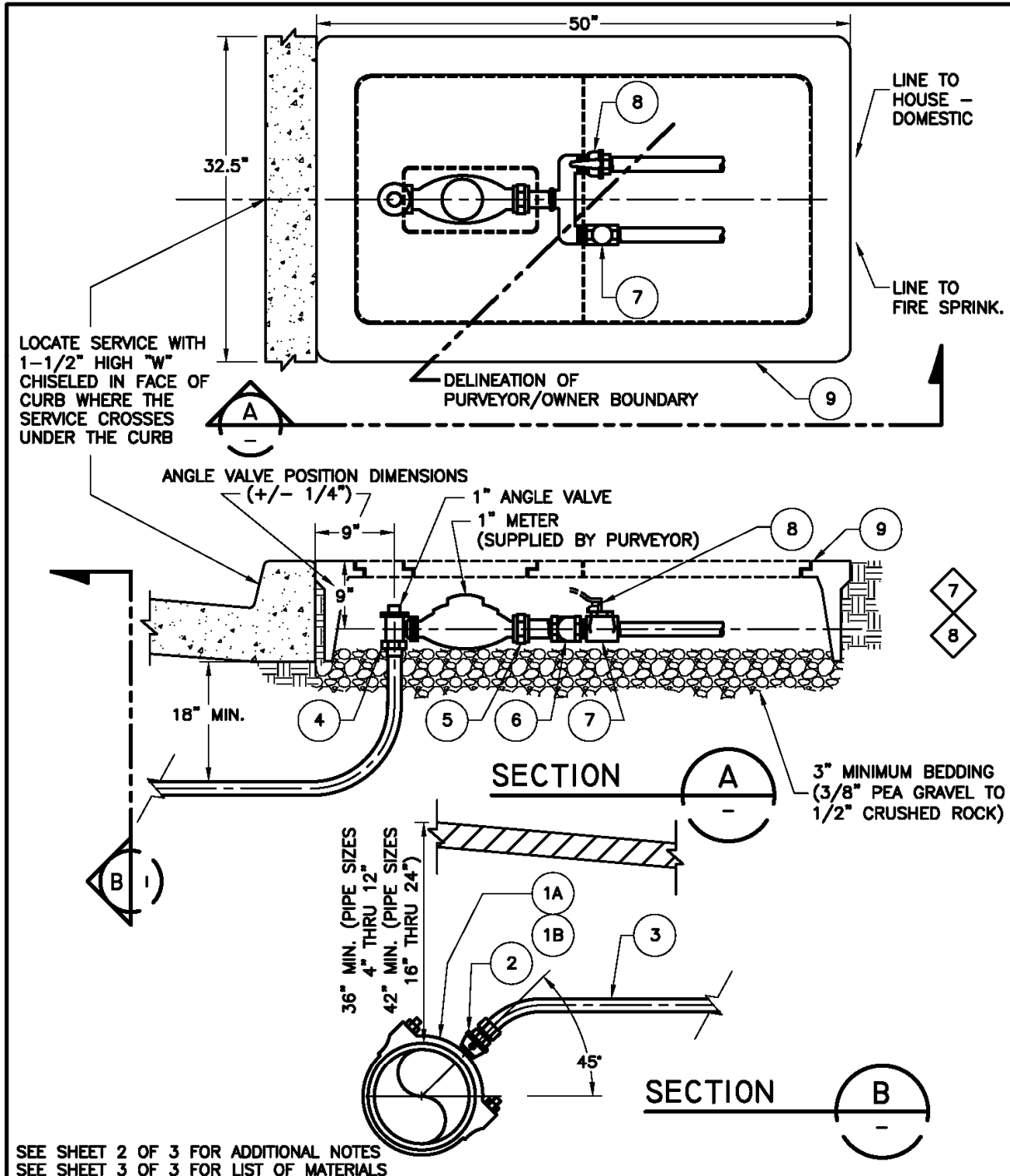


Yucaipa Valley Water District

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RESIDENTIAL PROPERTIES REQUIRING 1" FIRE SPRINKLER SERVICE

2016



Yucaipa Valley Water District

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Sheet 1 of 3

NOTES:

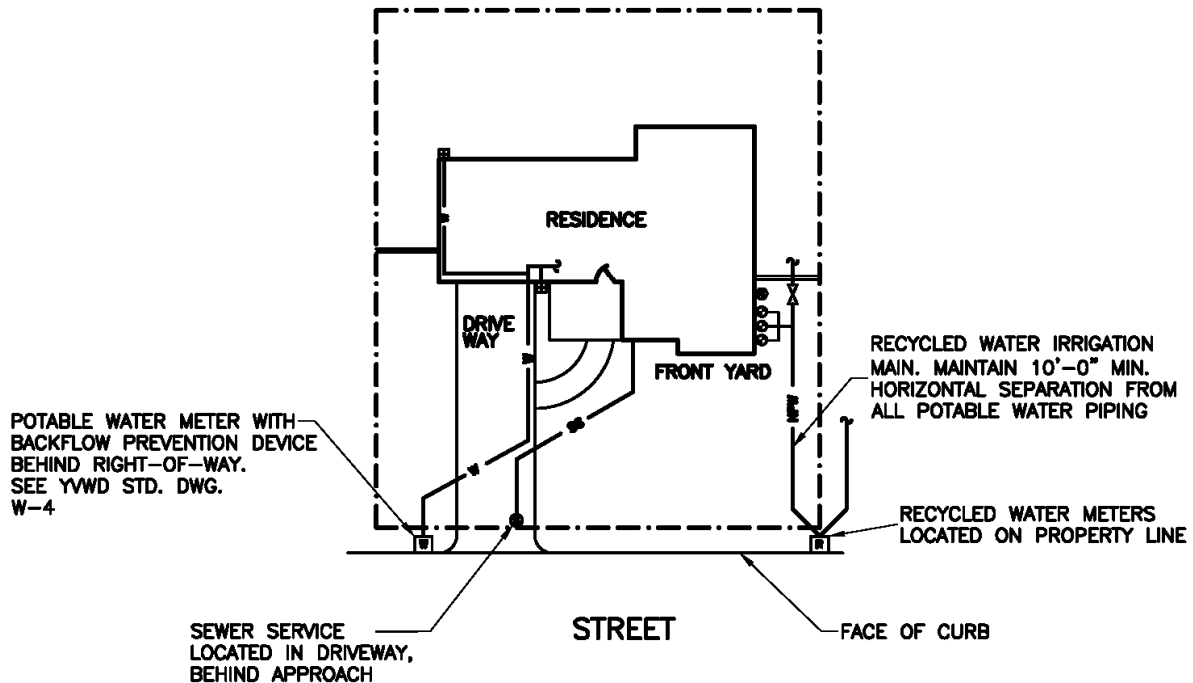
1. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 12" OF VALVE, COUPLING, JOINT OR FITTING.
2. SET TOP OF METER BOX FLUSH WITH DRIVEWAY, SIDEWALK OR CURB, AS SHOWN.
3. THE CORPORATION STOP TAP SHALL BE MADE AT A 45° DEGREE ANGLE FROM THE TOP OF THE PIPE.
4. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
5. ALL CONNECTIONS TO COPPER TUBING SHALL BE COMPRESSION FITTINGS.
6. METERS AND BRANCH ASSEMBLY TO BE CENTERED IN METER BOXES TO ALLOW FOR ACCESS AND MAINTENANCE



METER, CUSTOMER SHUT OFF VALVE, RANCH ASSEMBLY, LOCK OFF BALL VALVE, AND DUAL CHECK VALVE ARE TO BE PROVIDED BY THE PURVEYOR.



SUBJECT TO PURVEYOR REVIEW AND APPROVAL, THE METER AND METER BOX INCLUDING THE BRANCH ASSEMBLY MAY BE INSTALLED PARALLEL TO THE CURB IF NECESSARY.



**RESIDENTIAL PROPERTIES REQUIRING
1" FIRE SPRINKLER SERVICE**

2016



Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 2 of 3

LIST OF MATERIALS			
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1A	DOUBLE STRAP SERVICE SADDLE 1" I.P. OUTLET (FOR D.I.P. MAINS)	JONES ROMAC FORD MUELLER	J-979-PIPE O.D. -1" I.P. 202BS-PIPE O.D. -1" I.P. 202BS-PIPE O.D. -1" I.P. BR2B-PIPE O.D. -I.P. 100
1B	CAST SERVICE SADDLE WITH 1" I.P. OUTLET (FOR D.I.P. MAINS)	ROMAC FORD MUELLER	202S-PIPE O.D.-1" I.P. F-202-PIPE O.D.-1" I.P. DR2A-PIPE O.D.-I.P. 100
2	1" BRONZE BALL CORPORATION STOP (M.I.P.T. X COMPRESSION)	JONES MULLER McDONALD FORD	E-1935SG H1502BN 74704BQ
3	1" BLUE PLASTIC COATED COPPER TUBING		COPPER TYPE "K" SOFT
4	BRONZE BALL ANGLE METER STOP W/LOCKWING (1" COMPRESSION X METER)	JONES MUELLER McDONALD FORD	1963WSG H1425BN 74602BQ
5	1" METER x 3" "METER SPUD"	JONES	J-130
6	1" "U"-BRANCH (M.I.P.T. X M.I.P.T.)	McDONALD	AYM-708UMM
7	1" DOUBLE CHECK (INLINE DOUBLE CHECK)	McDONALD	711-4FE 44
8	BALL VALVE WITH LOCKWING (F.I.P. X F.I.P.)	JONES MUELLER McDONALD FORD	E-1900W B20283 N AYM76101W
9	METER BOX AND COVER WITH READING LID	ARMOR CAST	A6001430PCX12 W/ (1)-A6001470 - COVER (1)-A6001470DZ - COVER (1)-A6000482

**RESIDENTIAL PROPERTIES REQUIRING
1" FIRE SPRINKLER SERVICE**

2016

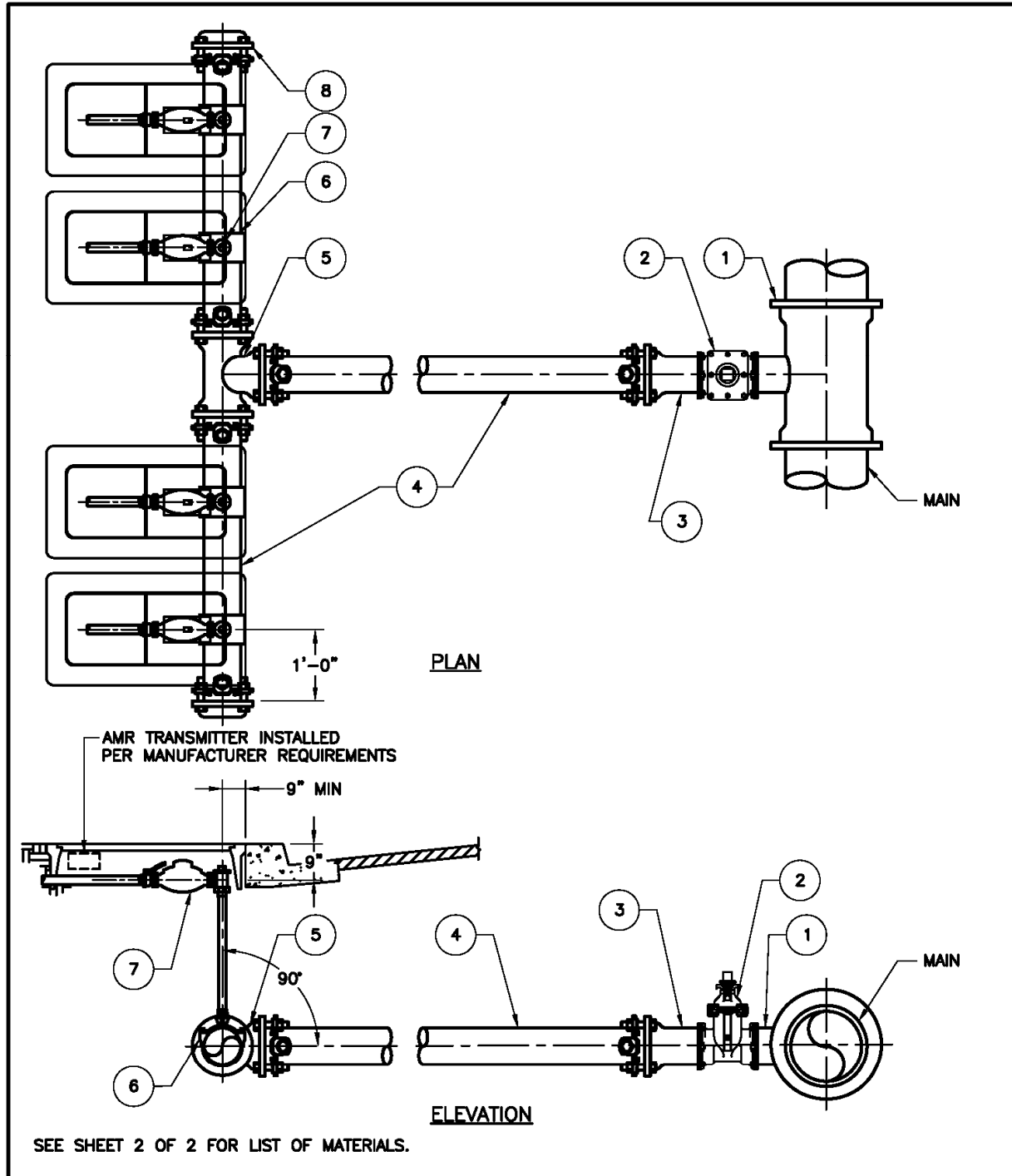


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MANIFOLD ASSEMBLY FOR FOUR TO TEN 3/4" AND 1" WATER SERVICES

2016



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Sheet 1 of 2

LIST OF MATERIALS	
ITEM NUMBER	DESCRIPTION
1	D.I. TEE, MJ X MJ X FLG, RESTRAINED
2	4" FLG X FLG VALVE
3	MJ X FLG ADAPTOR, RESTRAINED
4	4" D.I.P. RESTRAINED
5	D.I. TEE, MJ X MJ X MJ, RESTRAINED WITH MEGA LUGS (SHORT BODY MAY BE USED)
6	CAST SERVICE SADDLE WITH I.P. OUTLET
7	1" COPPER SERVICE INSTALLATION - SEE YVWD STD. DWG. W-5
8	RESTRAINED MECHANICAL JOINT END CAP WITH MEGA LUG RESTRAINT

NOTE:

1. BACKFILL UNDER EXISTING CURB WITHIN CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.

**MANIFOLD ASSEMBLY FOR FOUR TO TEN
3/4" AND 1" WATER SERVICES**

2016

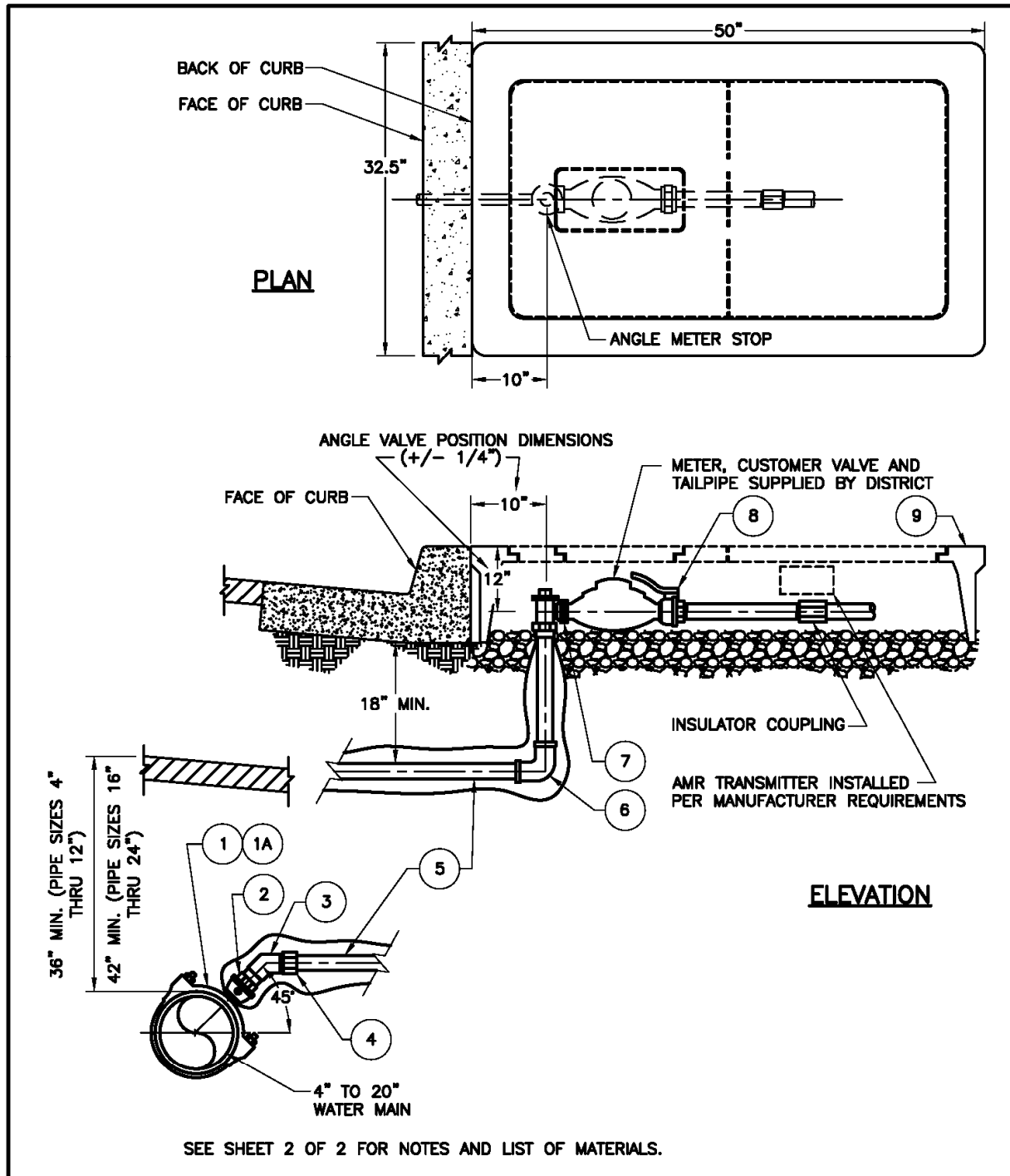


Yucaipa Valley Water District


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1-1/2" AND 2" COPPER WATER SERVICE INSTALLATION

2016	 <p style="font-size: 1.2em; margin: 0;">Yucaipa Valley Water District</p>	<p style="font-size: 0.8em; margin: 0;">Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	W-7
			Sheet 1 of 2

NOTES:

1. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 12" OF VALVE, COUPLING, JOINT OR FITTING.
2. POLY-SLEEVE (BLUE FOR POTABLE WATER, PURPLE FOR RECYCLED/IRRIGATION) SHALL BE SECURED AT THE CORP. AND THE ANGLE VALVE WITH 10 MIL. TAPE.
3. SET TOP OF METER BOX FLUSH WITH SIDEWALK OR CURB AS SHOWN.
4. THE CORPORATION STOP TAP SHALL BE MADE AT A 45° ANGLE FROM THE TOP OF THE PIPE.
5. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
6. METER BOX SHALL BE SET BEHIND CURB WHERE SIDEWALK IS ADJACENT TO CURB, OR IN PARKWAY BETWEEN CURB AND SIDEWALK.
7. METER BOX READING LID FOR ALL RECLAIMED WATER SERVICE SHALL BE PAINTED PER SPECIFICATIONS.
8. A 1" BYPASS LINE WITH LOCKING CURB STOP MAY BE REQUIRED FOR INSTALLATIONS NEEDING CONTINUOUS SERVICE.
9. METER, CUSTOMER VALVE AND TAILPIPE TO BE PROVIDED BY THE DISTRICT.
10. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.

LIST OF MATERIALS			
ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1	DOUBLE STRAP SERVICE SADDLE I.P. OUTLET (FOR D.I.P. MAINS)	JONES ROMAC FORD MUELLER	J-979-PIPE O.D.-2" I.P. 202BS-PIPE O.D.-2" I.P. 202B-PIPE O.D.-2" I.P. BR2B-PIPE O.D.-I.P. 200
1A	CAST SERVICE SADDLE WITH I.P. OUTLET (FOR D.I.P. MAINS)	ROMAC FORD MUELLER	202S-PIPE O.D.-2" I.P. F-202-PIPE O.D.-2" I.P. DR2A-PIPE O.D.-I.P. 200
2	BRONZE CORPORATION STOP MIPT X MIPT	JONES MUELLER FORD	J-1943 B-2969 FB500-7
3	BRASS 45° ELBOW 2" X 2" F.I.P.T. X F.I.P.T.	-	-
4	M.I.P.T. X COMPRESSION ADAPTOR	JONES MUELLER FORD	J-2605 H-15428 C84-77
5	2" COPPER PIPE/POLY SLEEVED	-	-
6	BRASS 90° ELBOW 2" X 2" COMPRESSION X COMPRESSION.	JONES MUELLER	J-2611 H-15526
7	BRONZE ANGLE METER STOP W/LOCKWING F.I.P. X FLANGE 1 1/2" THRU 2" COMBO ANGLE VALVE.	MUELLER	H14286N
8	BRONZE CUSTOMER SERVICE VALVE-METER FLANGE X F.I.P.	JONES FORD	J-1913 BF13-777 W/HH-67
9	METER BOX W/READING LID	ARMORCAST	A6001430PCX12 W/ (1)-A6001470 - COVER (1)-A6001470DZ - COVER (1)-A6000482

1-1/2" THRU 2" COPPER WATER SERVICE INSTALLATION

2016

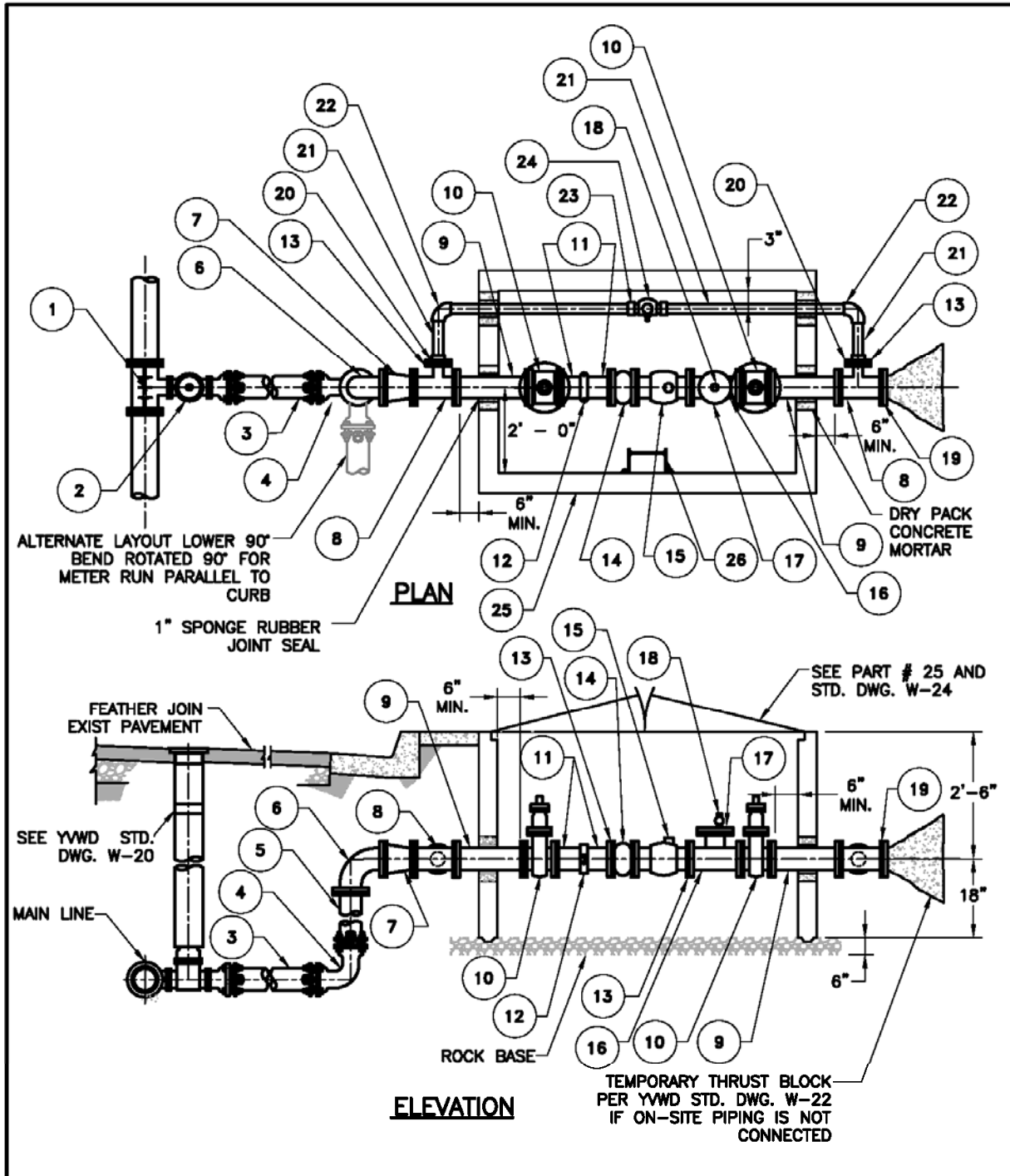


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3" AND 4" WATER METER INSTALLATION

2016



Yucaipa Valley Water District

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LIST OF MATERIALS		
ITEM	QUANTITY	DESCRIPTION
1	1 EA	SIZE X 4" TAPPING SLEEVE (USE MJ X FLG. TEE IF HOT TAP IS NOT REQUIRED).
2	1 EA	4" FLG. X FLG. TAPPING VALVE (USE RW OR GATE VALVE IF HOT TAP IS NOT REQUIRED).
3	AS REQ'D	4" D.I. PIPE LATERAL, RESTRAINED JOINTS
4	1 EA	4" D.I. 90° ELL, MJ. X MJ (IF REQUIRED).
5	2 EA	4" D.I. HALF SPOOL – FLG. X PLAIN END (IF REQUIRED)
6	1 EA	4" D.I. 90° ELL, FLG. X FLG (IF REQUIRED).
7	1 EA	4" X 3" D.I. REDUCER FLG. X FLG. (FOR 3" SERVICE ONLY)
8	2 EA	METER SIZE FLANGED D.I. TEE
9	2 EA	FLG x FLG. D.I. SPOOL – METER SIZE X 2'-6"
10	2 EA	RW OR GATE VALVE FLG. X FLG.
11	2 EA	D.I.P. HALF SPOOL, VICTAULIC X FLG., 6" LENGTH
12	1 EA	GROOVED-END COUPLING (VICTAULIC)
13	4 EA	BOLT AND FLANGE INSULATING KIT
14	1 EA	STRAINER (BY DISTRICT)
15	1 EA	METER (BY DISTRICT)
16	1 EA	METER SIZE D.I. TEE – FLANGED
17	2 EA	METER-SIZE D.I. COMPANION FLANGE TAPPED FOR 2" I.P.
18	1 EA	2" CORPORATION STOP – MIP X MIP
19	1 EA	D.I. BLIND FLANGE
20	2 EA	METER SIZE COMPANION FLANGE WITH 2" THREADED I.P. OUTLET
21	AS REQ'D	2" GALVANIZED PIPE
22	2 EA	2" 90° ELBOW
23	1 EA	2" UNION
24	1 EA	2" BALL VALVE WITH LOCKING WING – F.I.P. X F.I.P.
25	1 EACH	PRECAST CONCRETE VAULT WITH SPRING ASSIST HINGED DIAMOND PLATE ALUMINUM COVER AND RECESSED LOCKING HASP. PROVIDE 6" x 12" HINGED READING LID INSTALLED OVER METER REGISTER. (REFER TO YVWD STD. DWG. W-24)
26	1 EA	GALV. STEEL LADDER (ALHAMBRA FOUNDRY A3400) W/LADDER – UP AND S.S. ANCHOR BOLTS.

NOTES:

1. VAULT SHOWN IS FOR PARKWAY USE ONLY. FOR TRAFFIC LOADING AND OTHER REQUIREMENTS, CONTACT DISTRICT REPRESENTATIVE.
2. VAULT COVER TO BE SET TO CONFORM TO PARKWAY GRADE.
3. WHEN A BY-PASS LINE IS NOT REQUIRED, DO NOT INSTALL ITEMS 21 TO 24.
4. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.

3" AND 4" WATER METER INSTALLATION

2016

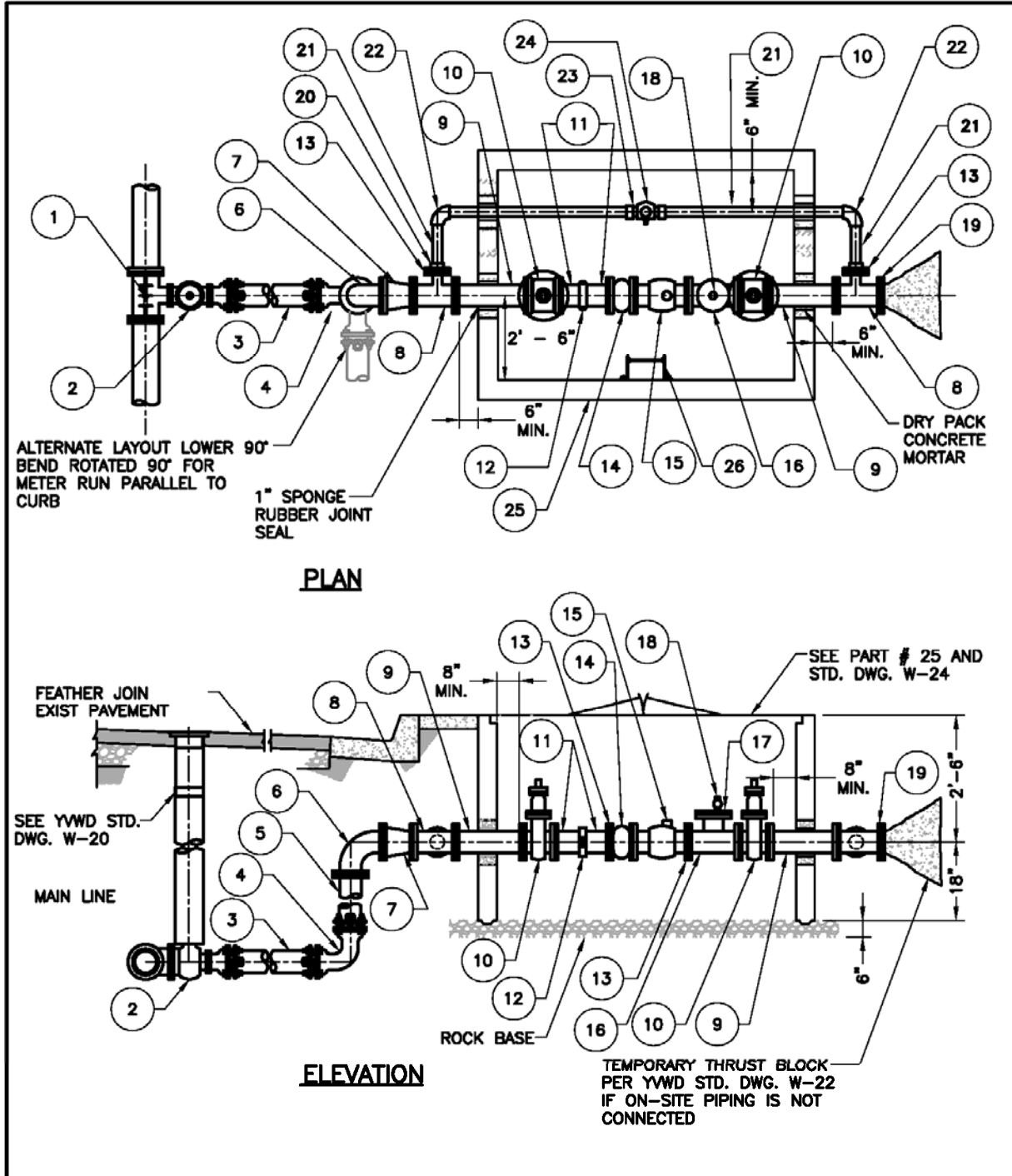


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6" AND 8" WATER METER INSTALLATION

2016



Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 1 of 2

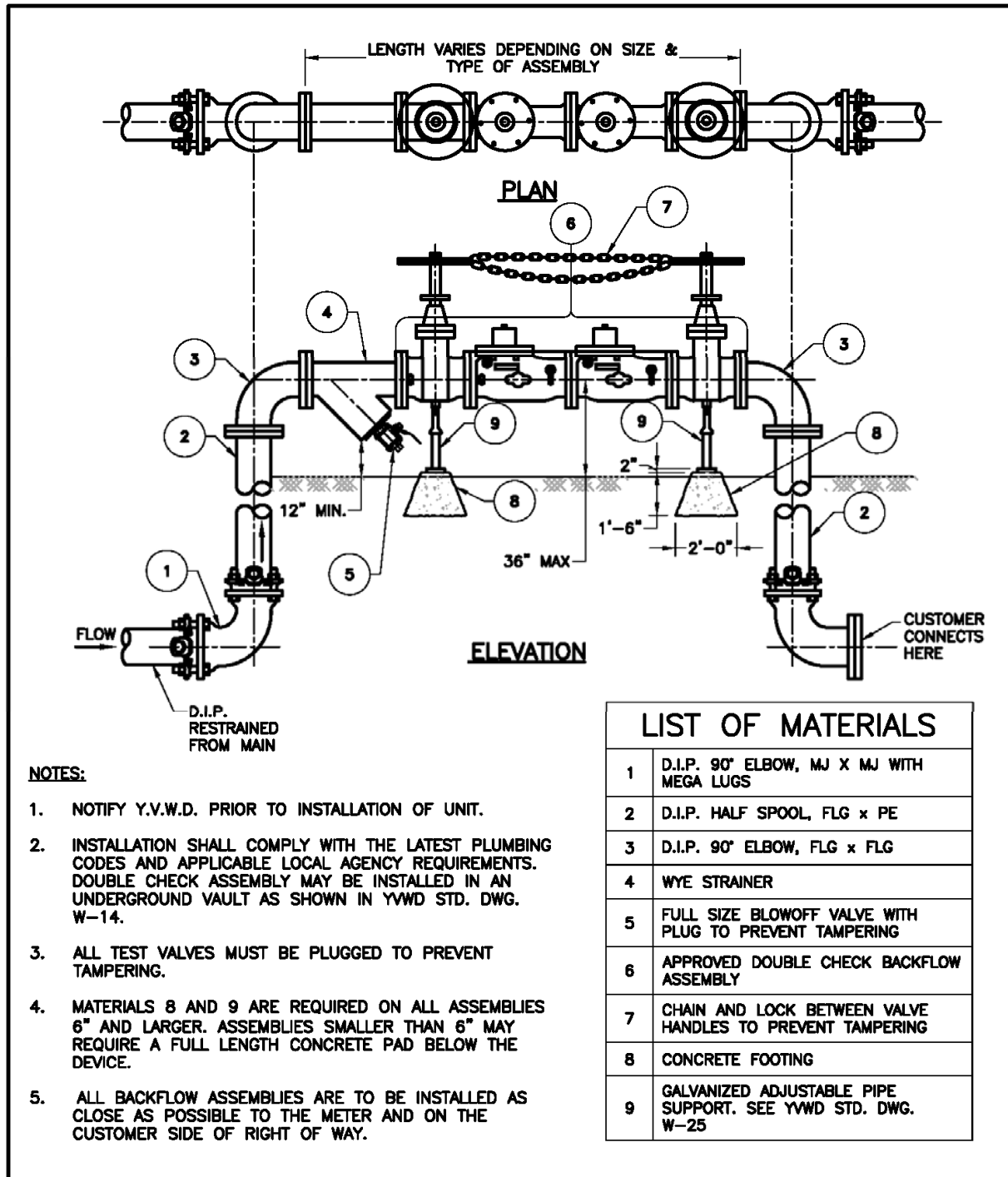
LIST OF MATERIALS		
ITEM	QUANTITY	DESCRIPTION
1	1 EA	SIZE X 8" TAPPING SLEEVE (USE MJ X FLG. TEE IF HOT TAP IS NOT REQUIRED).
2	1 EA	8" FLG. X FLG. TAPPING VALVE (USE RW OR GATE VALVE IF HOT TAP IS NOT REQUIRED).
3	AS REQ'D	8" D.I. PIPE LATERAL, RESTRAINED JOINTS
4	1 EA	8" D.I. 90° ELL, MJ. X MJ (IF REQUIRED).
5	2 EA	8" D.I. HALF SPOOL – FLG. X PLAIN END (IF REQUIRED)
6	1 EA	8" D.I. 90° ELL, FLG. X FLG (IF REQUIRED).
7	1 EA	8" X 6" D.I. REDUCER FLG. X FLG. (FOR 6" SERVICE ONLY)
8	2 EA	METER SIZE FLANGED D.I. TEE
9	2 EA	FLG x FLG. D.I. SPOOL – METER SIZE X 2'-6"
10	2 EA	RW OR GATE VALVE FLG. X FLG.
11	2 EA	D.I.P. HALF SPOOL, VICTAULIC X FLG., 6" LENGTH
12	1 EA	GROOVED-END COUPLING (VICTAULIC)
13	4 EA	BOLT AND FLANGE INSULATING KIT
14	1 EA	STRAINER (BY DISTRICT)
15	1 EA	METER (BY DISTRICT)
16	1 EA	METER SIZE D.I. TEE – FLANGED
17	2 EA	METER-SIZE D.I. COMPANION FLANGE TAPPED FOR 2" I.P.
18	1 EA	2" CORPORATION STOP – MIP X MIP
19	1 EA	D.I. BLIND FLANGE
20	2 EA	METER SIZE COMPANION FLANGE WITH 2" THREADED I.P. OUTLET
21	AS REQ'D	2" GALVANIZED PIPE
22	2 EA	2" 90° ELBOW
23	1 EA	2" UNION
24	1 EA	2" BALL VALVE WITH LOCKING WING – F.I.P. X F.I.P.
25	1 EACH	PRECAST CONCRETE VAULT WITH SPRING ASSIST HINGED DIAMOND PLATE ALUMINUM COVER AND RECESSED LOCKING HASP. PROVIDE 6" x 12" HINGED READING LID INSTALLED OVER METER REGISTER. (REFER TO YVWD STD. DWG. W-24)
26	1 EA	GALV. STEEL LADDER (ALHAMBRA FOUNDRY A3400) W/LADDER – UP AND S.S. ANCHOR BOLTS.

NOTES:

1. VAULT SHOWN IS FOR PARKWAY USE ONLY. FOR TRAFFIC LOADING AND OTHER REQUIREMENTS, CONTACT DISTRICT REPRESENTATIVE.
2. VAULT COVER TO BE SET TO CONFORM TO PARKWAY GRADE.
3. WHEN A BY-PASS LINE IS NOT REQUIRED, DO NOT INSTALL ITEMS 21 TO 24.
4. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.

6" AND 8" WATER METER INSTALLATION

2016	 <p>Yucaipa Valley Water District</p>	Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##	W-9
		Sheet 2 of 2	



NOTES:

1. NOTIFY Y.V.W.D. PRIOR TO INSTALLATION OF UNIT.
2. INSTALLATION SHALL COMPLY WITH THE LATEST PLUMBING CODES AND APPLICABLE LOCAL AGENCY REQUIREMENTS. DOUBLE CHECK ASSEMBLY MAY BE INSTALLED IN AN UNDERGROUND VAULT AS SHOWN IN YVWD STD. DWG. W-14.
3. ALL TEST VALVES MUST BE PLUGGED TO PREVENT TAMPERING.
4. MATERIALS 8 AND 9 ARE REQUIRED ON ALL ASSEMBLIES 6" AND LARGER. ASSEMBLIES SMALLER THAN 6" MAY REQUIRE A FULL LENGTH CONCRETE PAD BELOW THE DEVICE.
5. ALL BACKFLOW ASSEMBLIES ARE TO BE INSTALLED AS CLOSE AS POSSIBLE TO THE METER AND ON THE CUSTOMER SIDE OF RIGHT OF WAY.

LIST OF MATERIALS	
1	D.I.P. 90° ELBOW, MJ X MJ WITH MEGA LUGS
2	D.I.P. HALF SPOOL, FLG x PE
3	D.I.P. 90° ELBOW, FLG x FLG
4	WYE STRAINER
5	FULL SIZE BLOWOFF VALVE WITH PLUG TO PREVENT TAMPERING
6	APPROVED DOUBLE CHECK BACKFLOW ASSEMBLY
7	CHAIN AND LOCK BETWEEN VALVE HANDLES TO PREVENT TAMPERING
8	CONCRETE FOOTING
9	GALVANIZED ADJUSTABLE PIPE SUPPORT. SEE YVWD STD. DWG. W-25

DOUBLE CHECK BACKFLOW ASSEMBLY

2016

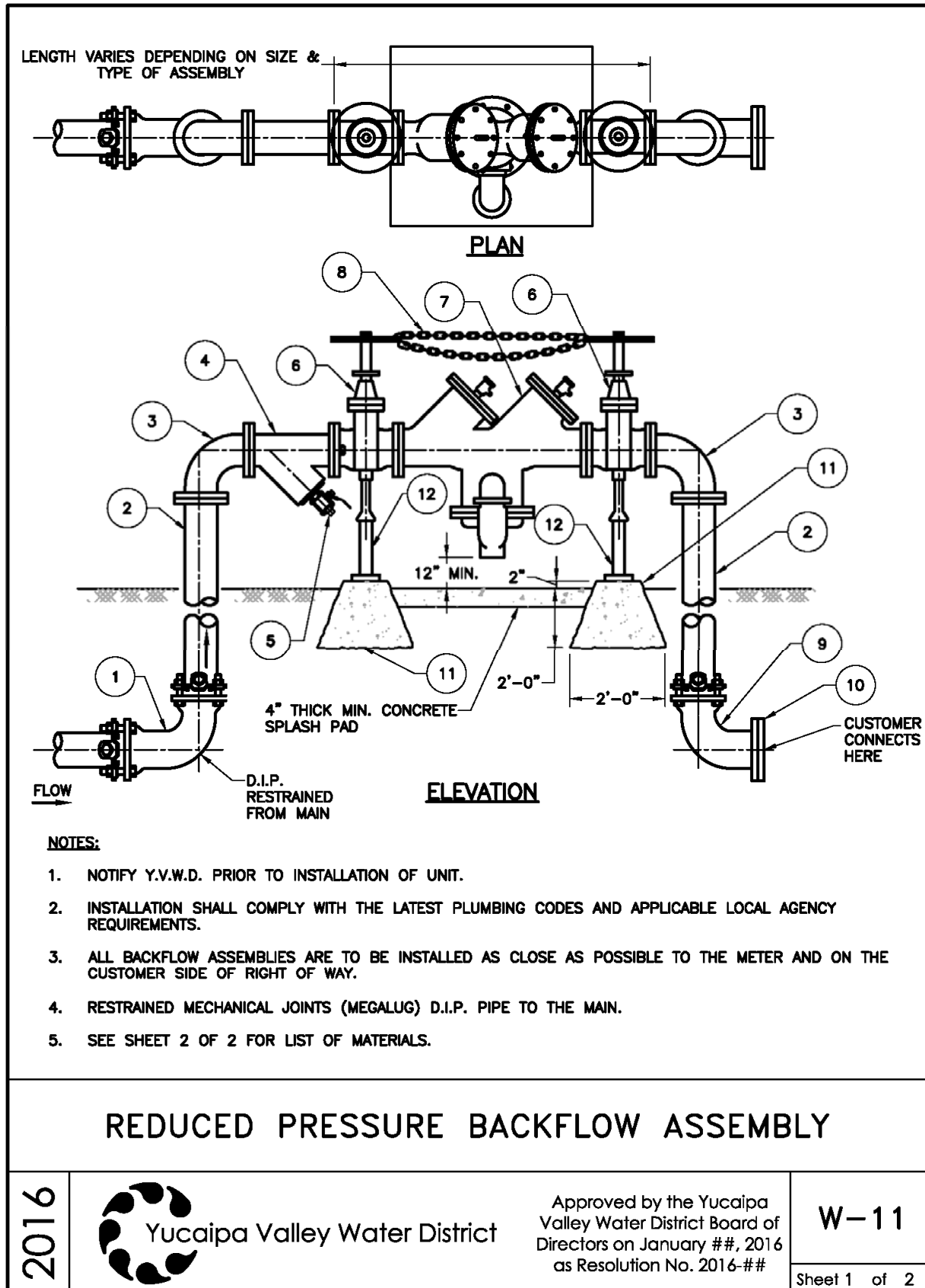


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 1 of 1



LIST OF MATERIALS	
1	D.I.P. 90° ELBOW, MJ X MJ WITH MEGA LUGS
2	D.I.P. HALF SPOOL, FLG X PE
3	D.I.P. 90° ELBOW, FLG x FLG
4	WYE STRAINER
5	FULL SIZE BLOWOFF VALVE WITH PLUG TO PREVENT TAMPERING
6	U.S.C.-APPROVED SHUT-OFF VALVES. SEE SPECIFICATIONS FOR ASSEMBLY
7	APPROVED REDUCED PRESSURE BACKFLOW ASSEMBLY (SIZE PER REQUIREMENT)
8	CHAIN AND LOCK BETWEEN VALVE HANDLES TO PREVENT TAMPERING
9	D.I.P. 90° ELBOW, MJ X FLG WITH MEGA LUG
10	BLIND FLANGE IF NOT CONNECTING IMMEDIATELY AFTER INSTALL OF DEVICE
11	CONCRETE FOOTING
12	GALVANIZED ADJUSTABLE PIPE SUPPORT. SEE YVWD STD. DWG. W-25

REDUCED PRESSURE BACKFLOW ASSEMBLY

2016

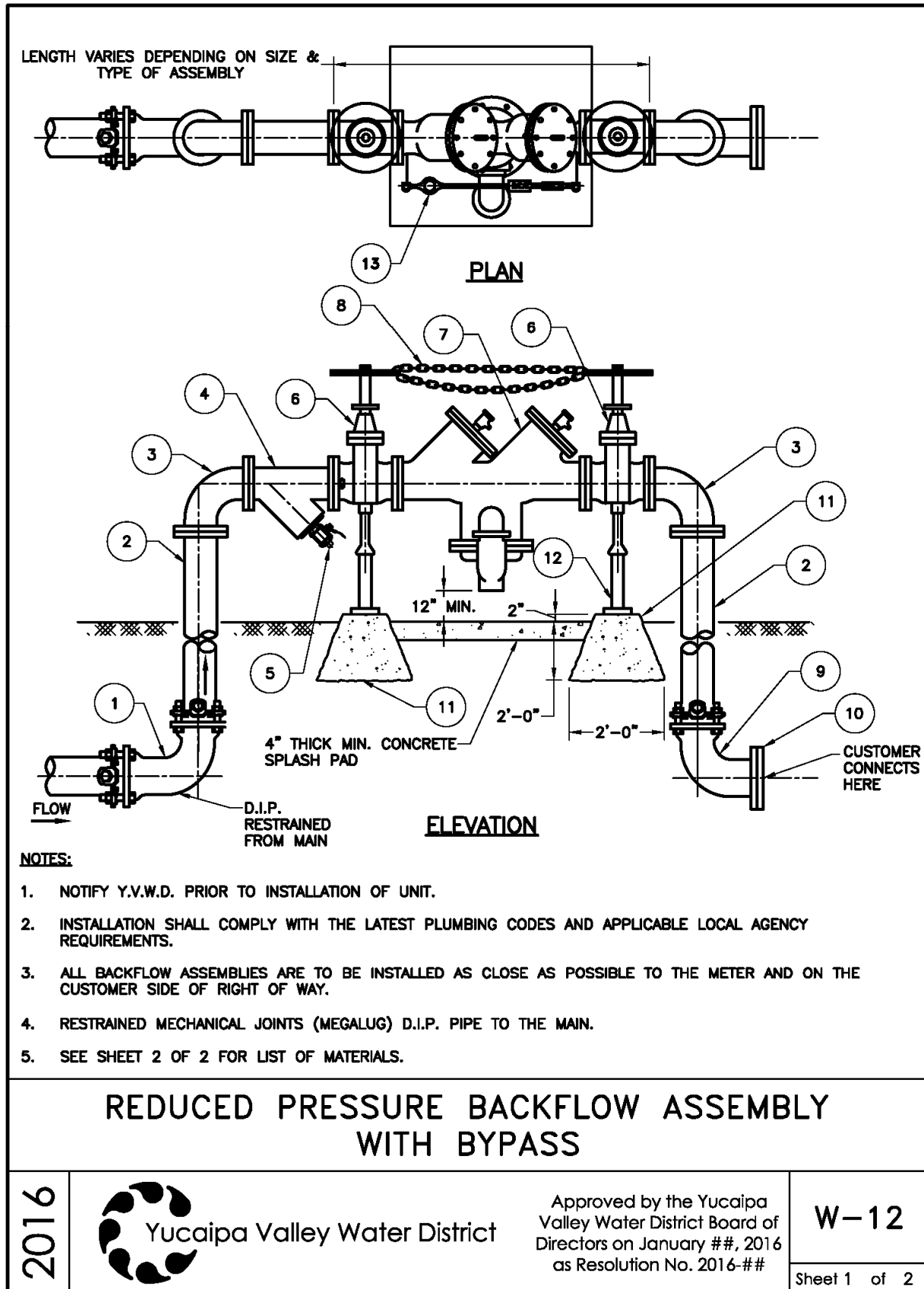


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 2 of 2



LIST OF MATERIALS	
1	D.I.P. 90° ELBOW, MJ X MJ WITH MEGA LUGS
2	D.I.P. HALF SPOOL, FLG X PE
3	D.I.P. 90° ELBOW, FLG x FLG
4	WYE STRAINER
5	FULL SIZE BLOWOFF VALVE WITH PLUG TO PREVENT TAMPERING
6	U.S.C.-APPROVED SHUT-OFF VALVES. SEE SPECIFICATIONS FOR ASSEMBLY
7	APPROVED REDUCED PRESSURE BACKFLOW ASSEMBLY (SIZE PER REQUIREMENT)
8	CHAIN AND LOCK BETWEEN VALVE HANDLES TO PREVENT TAMPERING
9	D.I.P. 90° ELBOW, MJ X FLG WITH MEGA LUG
10	BLIND FLANGE IF NOT CONNECTING IMMEDIATELY AFTER INSTALL OF DEVICE
11	CONCRETE FOOTING
12	GALVANIZED ADJUSTABLE PIPE SUPPORT. SEE YVWD STD. DWG. W-25
13	FACTORY INSTALLED BY-PASS METER ASSEMBLY CONSISTING OF APPRIVED POSITIVE DISPLACEMENT METER, DOUBLE CHECK VALVE AND ASSOCIATED PIPING. BY-PASS METER TO BE SUPPLIED BY THE DISTRICT.

REDUCED PRESSURE BACKFLOW ASSEMBLY WITH BYPASS

2016

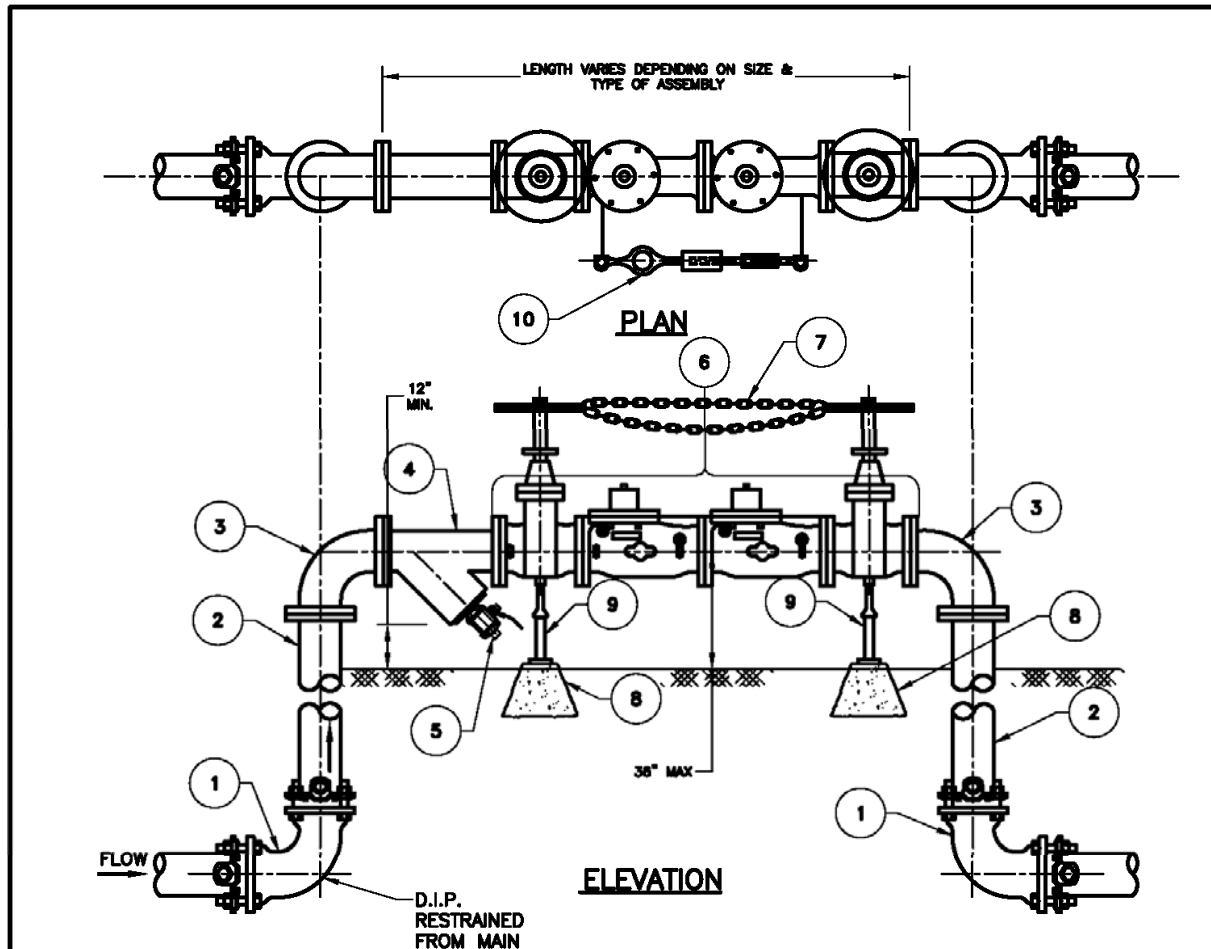


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 2 of 2



NOTES:

1. NOTIFY Y.V.W.D. PRIOR TO INSTALLATION OF UNIT.
2. INSTALLATION SHALL COMPLY WITH THE LATEST PLUMBING CODES AND APPLICABLE LOCAL AGENCY REQUIREMENTS.
3. DOUBLE CHECK ASSEMBLIES MAY BE INSTALLED UNDERGROUND AS SHOWN IN STANDARD DRAWING W-14. RP ASSEMBLIES MAY NOT BE INSTALLED WITHIN A VAULT. ABOVE GROUND ONLY.
4. ALL TEST VALVES MUST BE PLUGGED TO PREVENT TAMPERING.
5. MATERIALS 8 AND 9 ARE REQUIRED ON ALL ASSEMBLIES 6" AND LARGER. ASSEMBLIES SMALLER THAN 6" MAY REQUIRE A FULL LENGTH CONCRETE PAD BELOW THE DEVICE.
6. ALL BACKFLOW ASSEMBLIES ARE TO BE INSTALLED AS CLOSE AS POSSIBLE TO THE METER AND ON THE CUSTOMER SIDE OF RIGHT OF WAY.
7. SEE SHEET 2 OF 2 FOR LIST OF MATERIALS.

DOUBLE CHECK OR REDUCED PRESSURE DETECTOR ASSEMBLY ABOVE GROUND FIRE LINE

2016



Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 1 of 2

LIST OF MATERIALS	
1	D.I.P. 90° ELBOW, MJ X MJ WITH MEGA LUGS
2	D.I.P. HALF SPOOL, FLG x PE
3	D.I.P. 90° ELBOW, FLG x FLG
4	WYE STRAINER
5	FULL SIZE BLOWOFF VALVE WITH PLUG TO PREVENT TAMPERING
6	APPROVED DOUBLE CHECK BACKFLOW ASSEMBLY
7	CHAIN AND LOCK BETWEEN VALVE HANDLES TO PREVENT TAMPERING
8	CONCRETE FOOTING
9	GALVANIZED ADJUSTABLE PIPE SUPPORT. SEE YWD STD. DWG. W-25.
10	FACTORY INSTALLED BY-PASS METER ASSEMBLY CONSISTING OF APPROVED POSITIVE DISPLACEMENT METER, DOUBLE CHECK VALVE AND ASSOCIATED PIPING. BY-PASS METER TO BE SUPPLIED BY THE DISTRICT.

DOUBLE CHECK OR REDUCED PRESSURE DETECTOR ASSEMBLY ABOVE GROUND FIRE LINE

2016

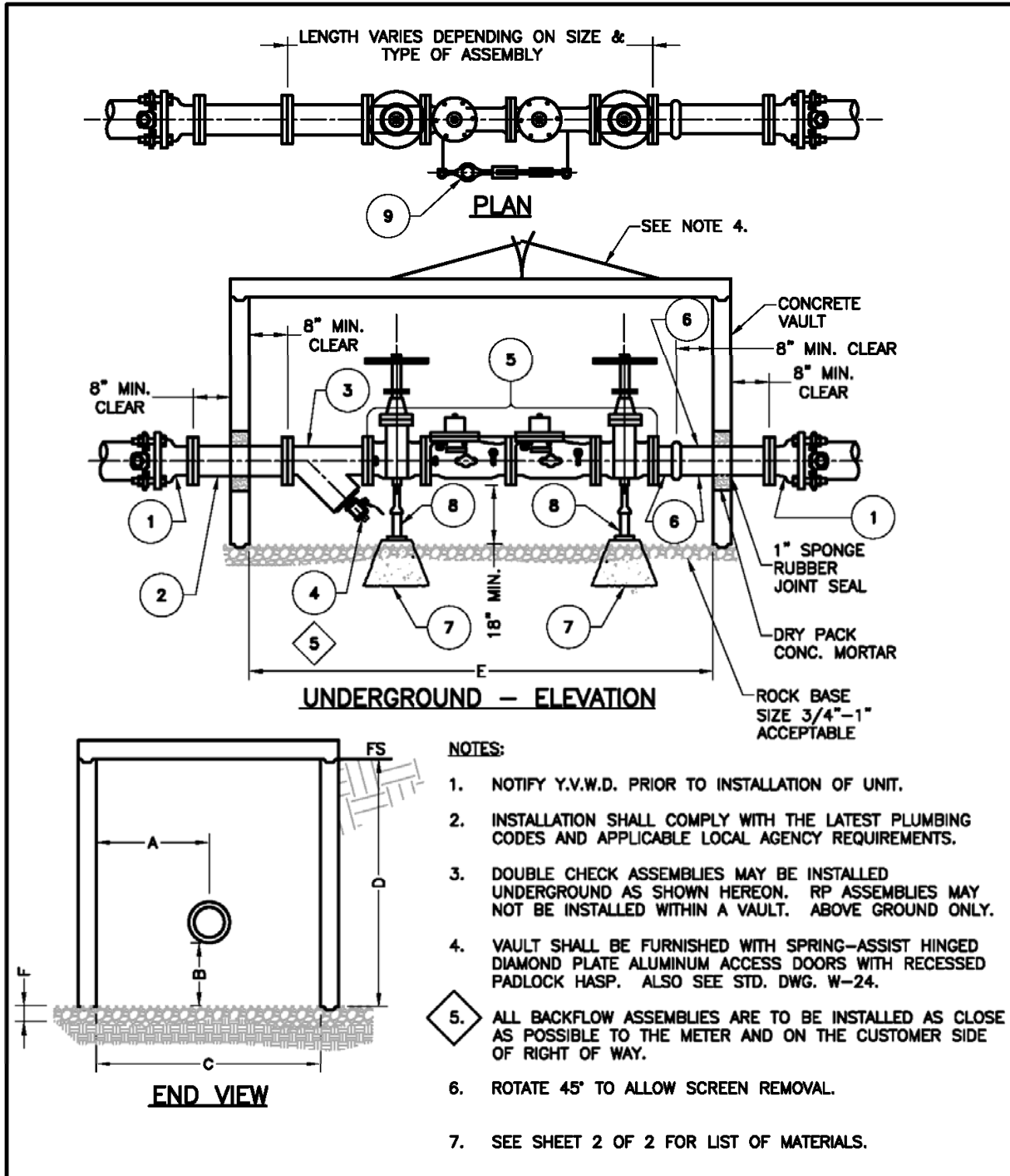


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DOUBLE CHECK ASSEMBLY AND BELOW GROUND FIRE LINE

2016



Yucaipa Valley Water District

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Sheet 1 of 2

LIST OF MATERIALS	
1	MJ X FLG ADAPTOR WITH MEGA LUG
2	D.I.P. SPOOL, FLG X FLG
3	WYE STRAINER
4	FULL SIZE BLOWOFF VALVE WITH PLUG TO PREVENT TAMPERING
5	APPROVED DOUBLE CHECK BACKFLOW ASSEMBLY
6	D.I.P. HALF SPOOL, VICTAULIC X FLG
7	CONCRETE FOOTING
8	GALVANIZED ADJUSTABLE PIPE SUPPORT, SEE YVWD STD. DWG. W-25
9	FACTORY INSTALLED BY-PASS METER ASSEMBLY CONSISTING OF APPROVED POSITIVE DISPLACEMENT METER, DOUBLE CHECK VALVE AND ASSOCIATED PIPING. BY-PASS METER TO BE SUPPLIED BY THE DISTRICT

UNDERGROUND INSTALLATIONS							
PIPE SIZE	A	B	C	D	E	F	VAULT DIM
2"	24"	18"	4'	5'	4'	6"	4'x4'
4"	24"	18"	4'	5'	6'	6"	4'x6'
6"	24"	18"	4'	5'	8'	6"	4'x8'
8"	24"	18"	4'	5'	12'	6"	4'x12'
10"	24"	8"	4'	5'	12'	6"	4'x12'

**DOUBLE CHECK ASSEMBLY AND
BELOW GROUND FIRE LINE**

2016

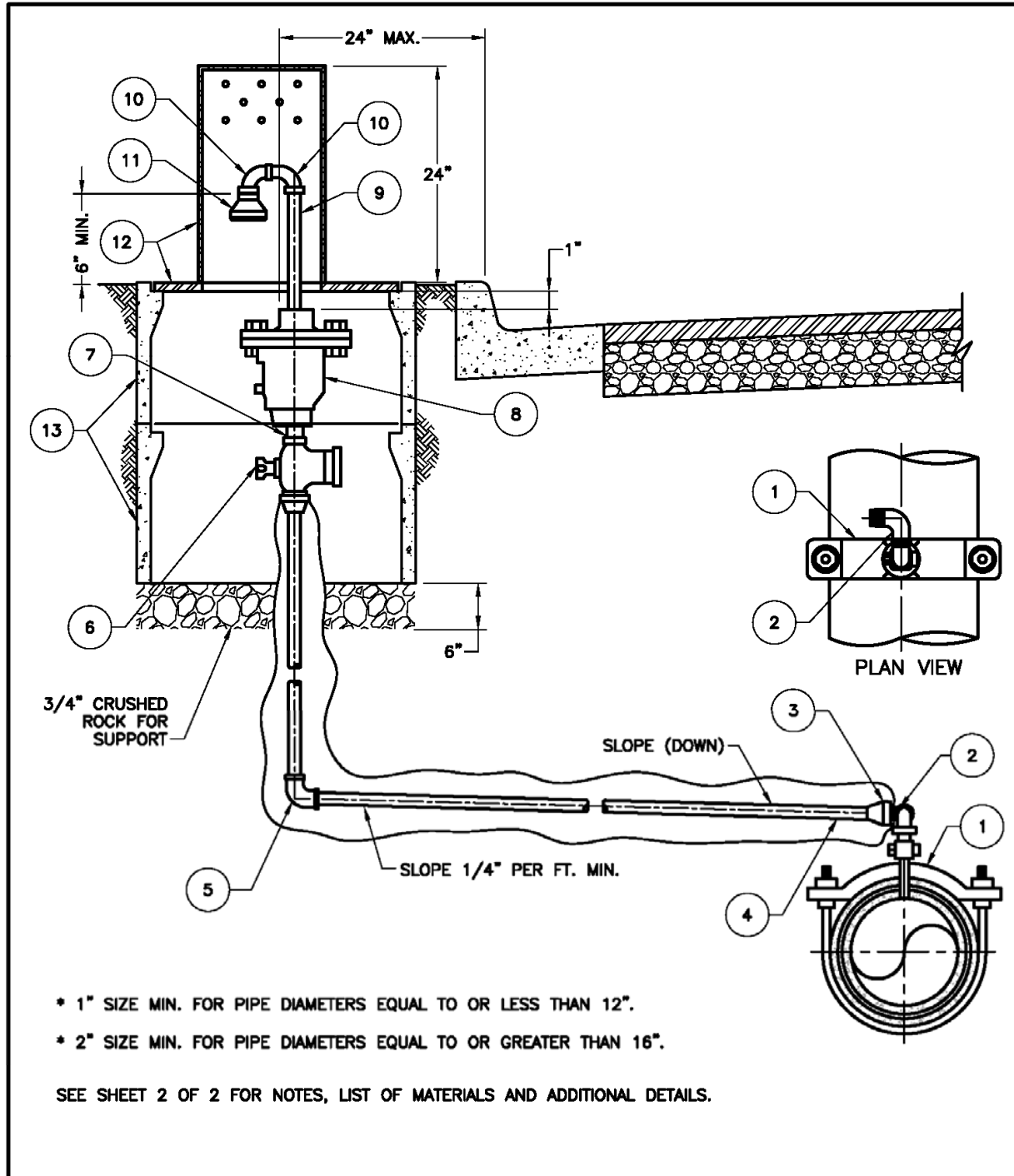


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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1" AND 2" AIR AND VACUUM VALVE ASSEMBLY

2016

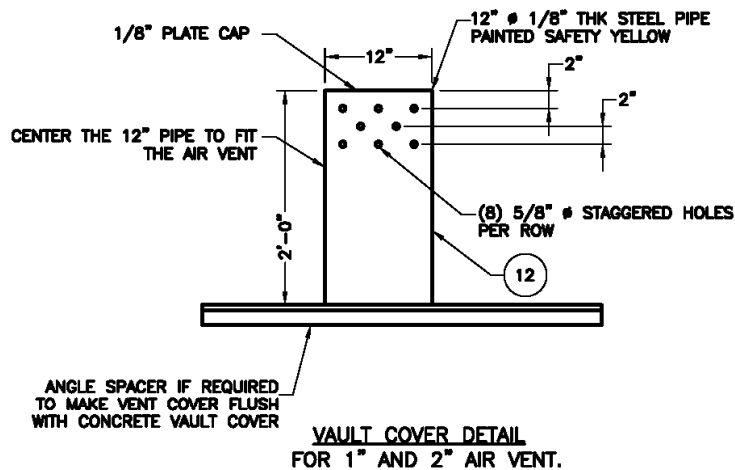


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 1 of 4



LIST OF MATERIAL

ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1	CONNECTION PER YVWD STD. DWG W-5 OR DWG. W-7 OFF THE TOP	-	-
2	CORPORATION STOP WITH 2-90° ELBOW SWING JOINTS, BRASS	-	-
3	F.I.P. X COMPRESSION ADAPTOR	FORD JONES MUELLER	C14-44 J-2807 H-15451
4	TYPE "K" COPPER TUBING, POLY SLEEVED		
5	COMPRESSION X COMPRESSION 90° ELBOW	JONES MUELLER	J-2811 H-15526
6	CURB VALVE-SHUT OFF PARALLEL WITH CURB	FORD JONES MUELLER	B41-444 J-1921 B-25172
7	3" X SIZE NIPPLE, BRASS	-	-
8	CRISPIN STAINLESS STEEL TRIM, NPT OUTLET, COMBINATION, AIR & VACUUM VALVE, 1" MIN. VAULT SIZE PER PLAN	-	-
9	1/8" X SIZE NIPPLE, G.I.P.	-	-
10	90° STREET ELL, G.I.P.	-	-
11	BUG SCREEN	-	-
12	VAULT COVER (SEE DETAIL, ABOVE)	-	-
13	2-DOUBLE STACKED #6 CONCRETE METER VAULTS	-	-

NOTE:

1. ALL CONNECTIONS TO COPPER TUBING SHALL BE COMPRESSION FITTINGS.
2. THE AIR VAC BOX IS TO BE SET PERPENDICULAR TO THE BACK OF THE CURB.
3. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.

1" AND 2" AIR AND VACUUM VALVE ASSEMBLY

2016

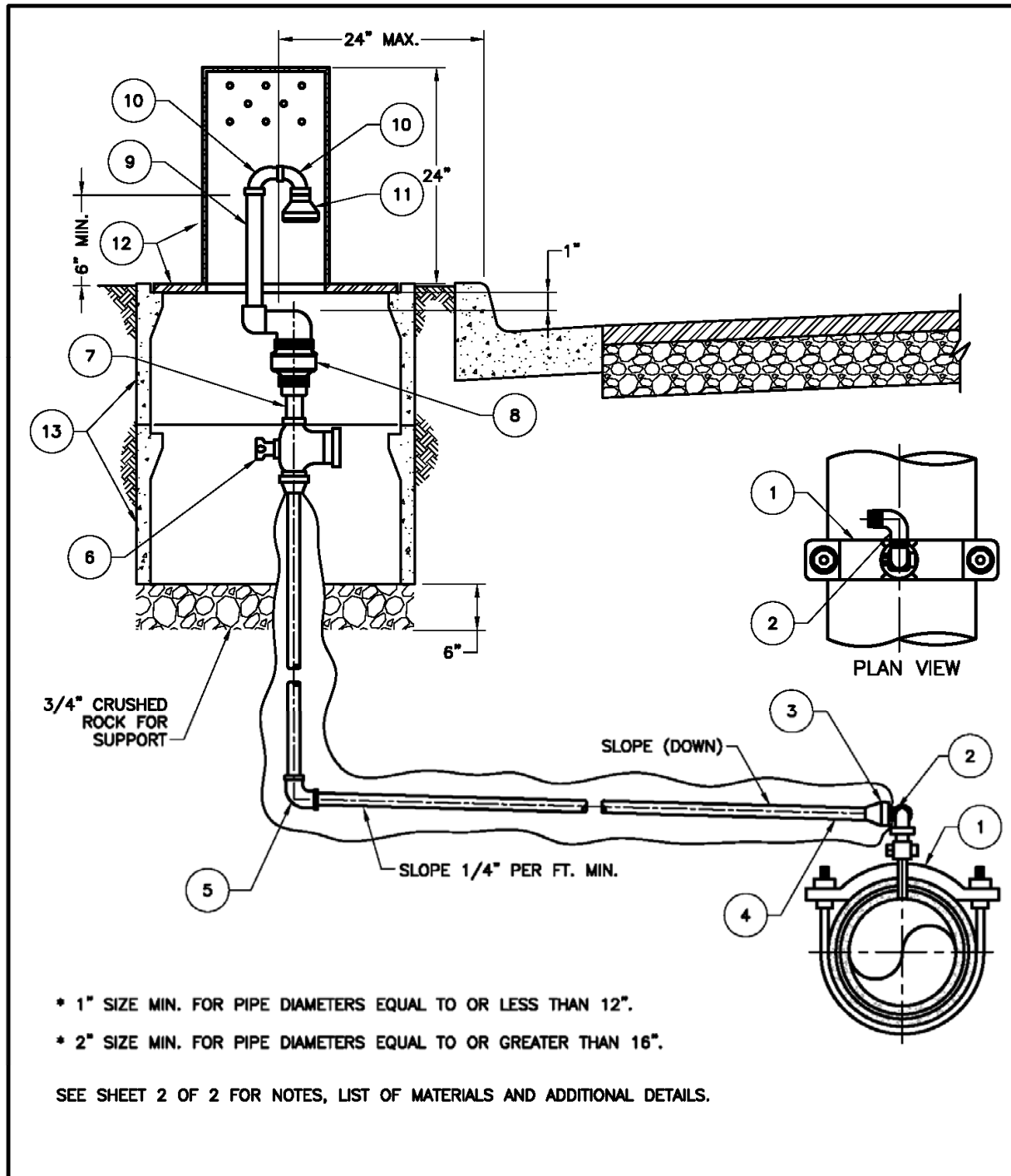


Yucaipa Valley Water District

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1" AND 2" AIR AND VACUUM VALVE ASSEMBLY

2016

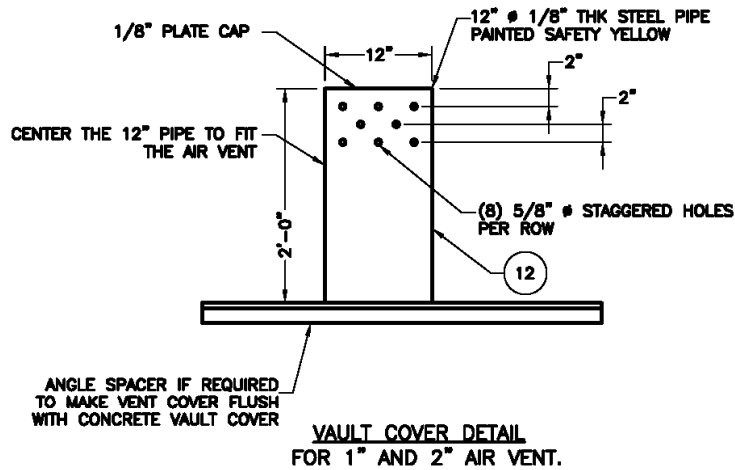


Yucaipa Valley Water District

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Sheet 3 of 4



LIST OF MATERIAL

ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1	CONNECTION PER YVWD STD. DWG W-5 OR DWG. W-7 OFF THE TOP	-	-
2	CORPORATION STOP WITH 2-90° ELBOW SWING JOINTS, BRASS	-	-
3	F.I.P. X COMPRESSION ADAPTOR	FORD JONES MUELLER	C14-44 J-2807 H-15451
4	TYPE "K" COPPER TUBING, POLY SLEEVED		
5	COMPRESSION X COMPRESSION 90° ELBOW	JONES MUELLER	J-2811 H-15526
6	CURB VALVE-SHUT OFF PARALLEL WITH CURB	FORD JONES MUELLER	B41-444 J-1921 B-25172
7	3" X SIZE NIPPLE, BRASS	-	-
8	A.R.I. NPT OUTLET, COMBINATION, AIR & VACUUM VALVE, 1" MIN. VAULT SIZE PER PLAN	A.R.I.	D-040
9	1/8" X SIZE NIPPLE	-	-
10	90° STREET ELL	-	-
11	BUG SCREEN	-	-
12	VAULT COVER (SEE DETAIL, ABOVE)	-	-
13	2-DOUBLE STACKED #6 CONCRETE METER VAULTS		

NOTE:

1. ALL CONNECTIONS TO COPPER TUBING SHALL BE COMPRESSION FITTINGS.
2. THE AIR VAC BOX IS TO BE SET PERPENDICULAR TO THE BACK OF THE CURB.
3. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.

1" AND 2" AIR AND VACUUM VALVE ASSEMBLY

2016

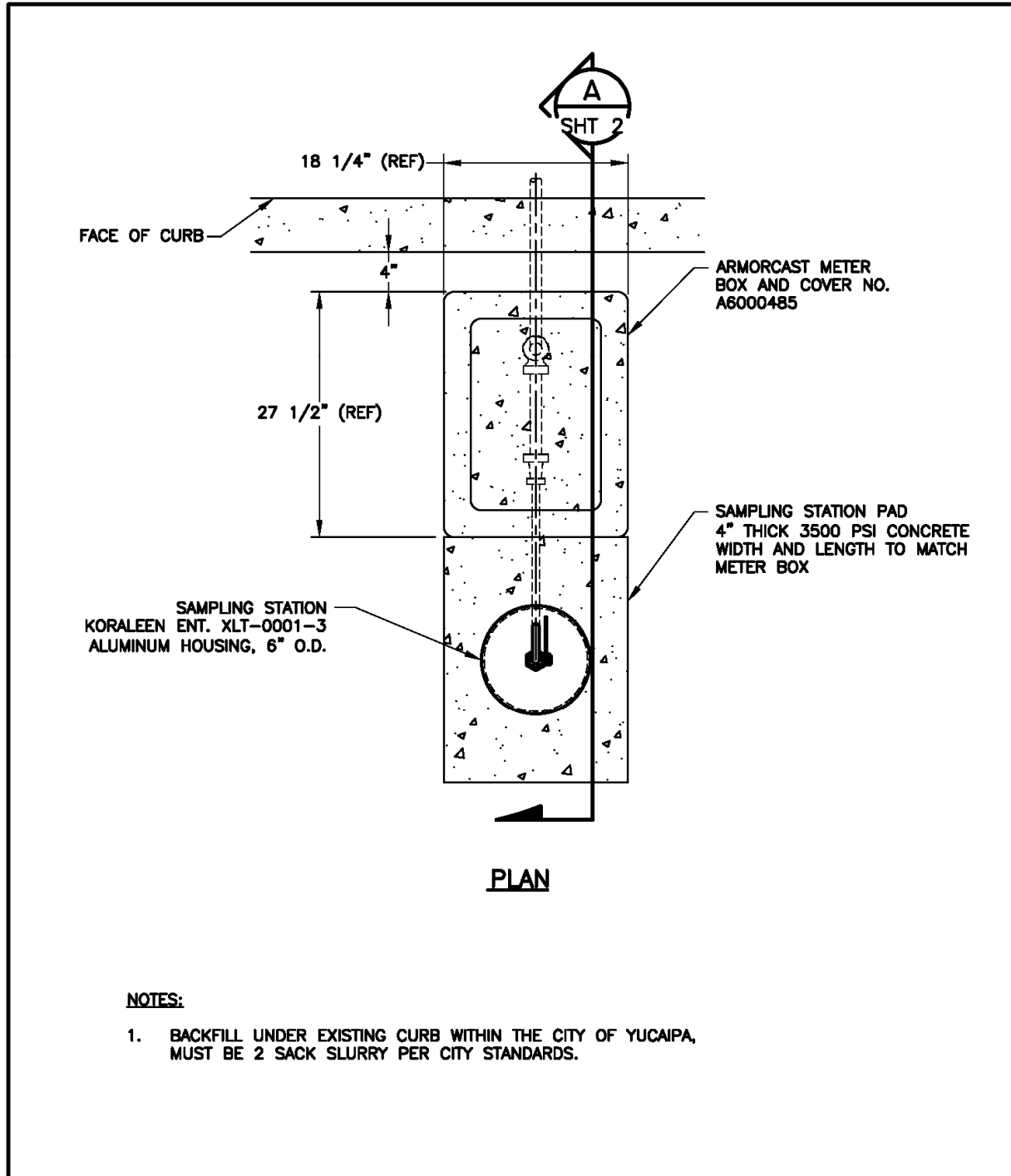


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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PLAN

NOTES:

1. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.

WATER QUALITY SAMPLING STATION

2016

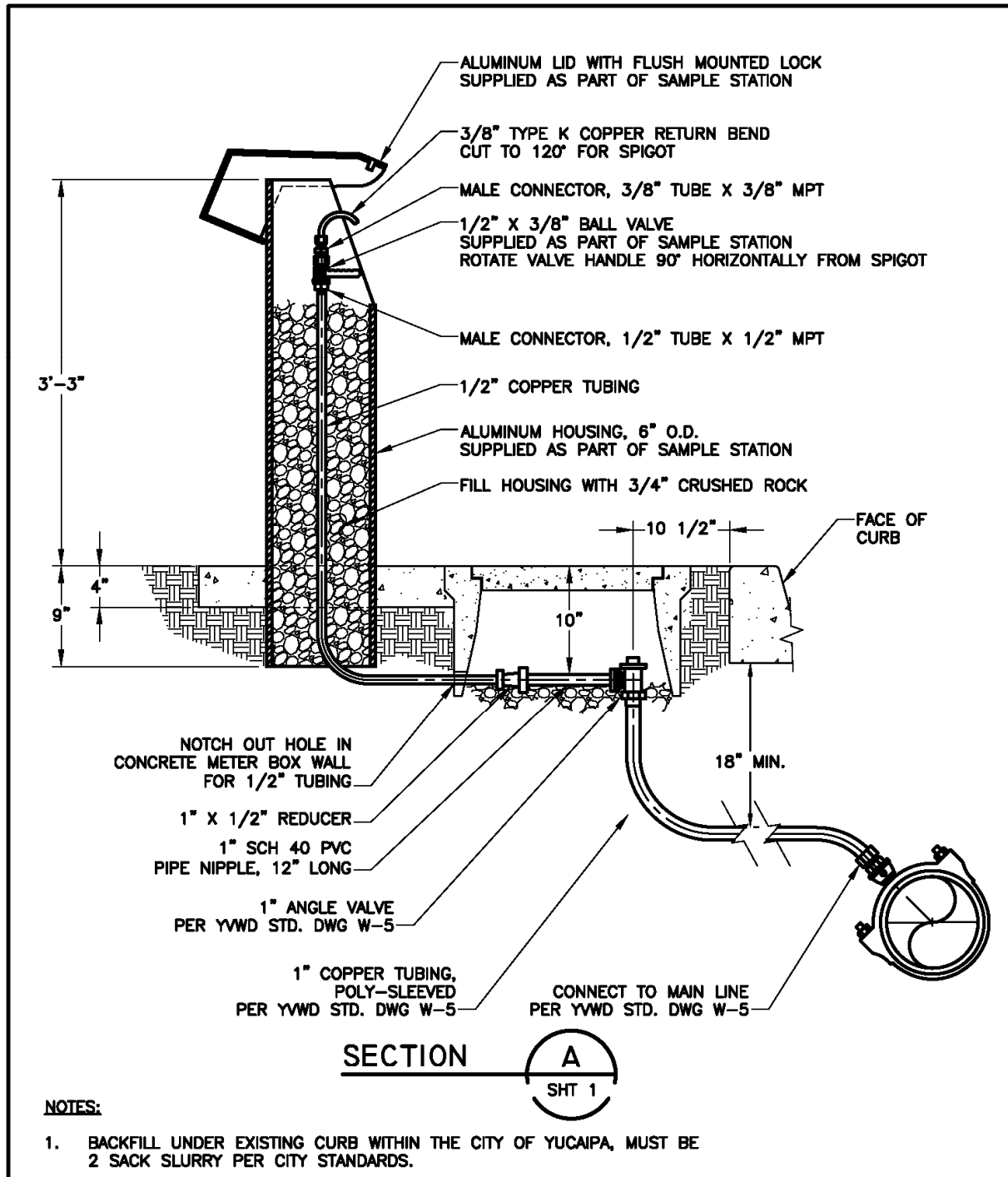


Yucaipa Valley Water District

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WATER QUALITY SAMPLING STATION

2016

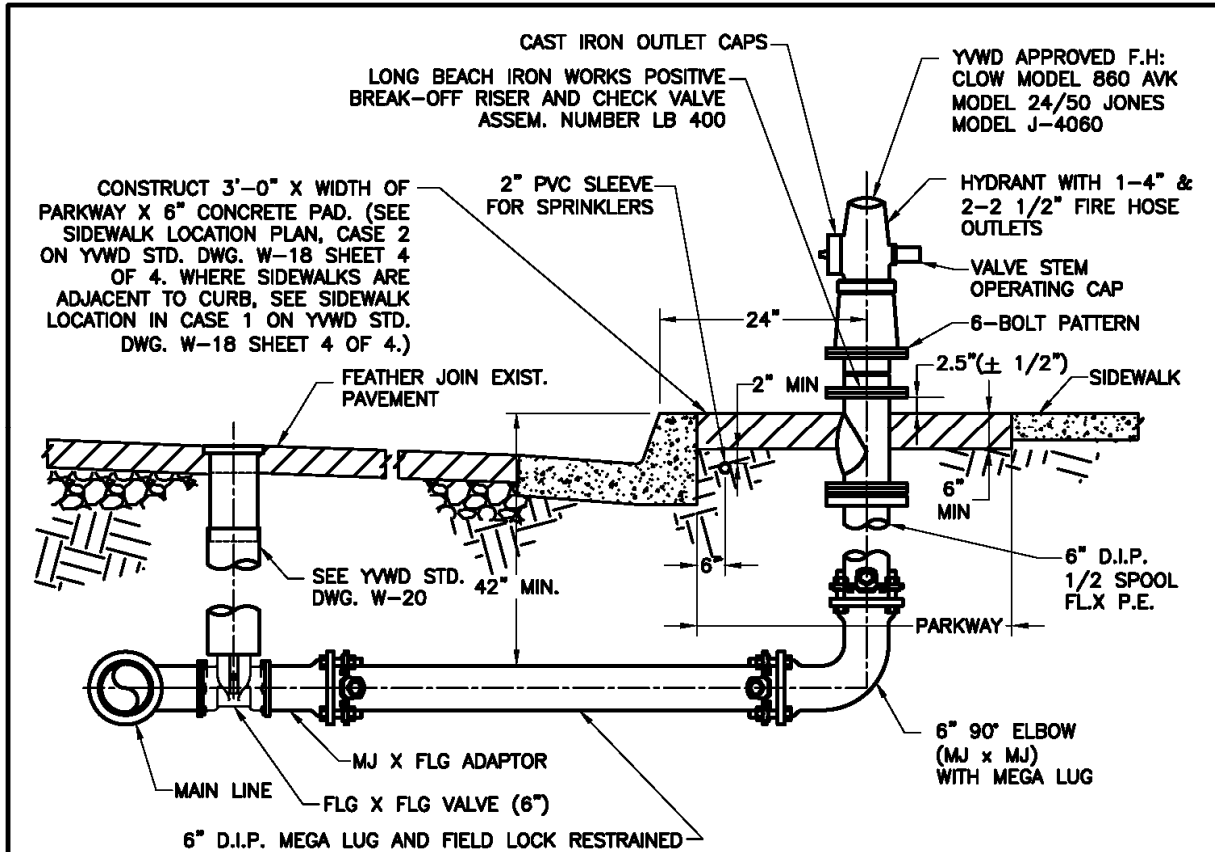


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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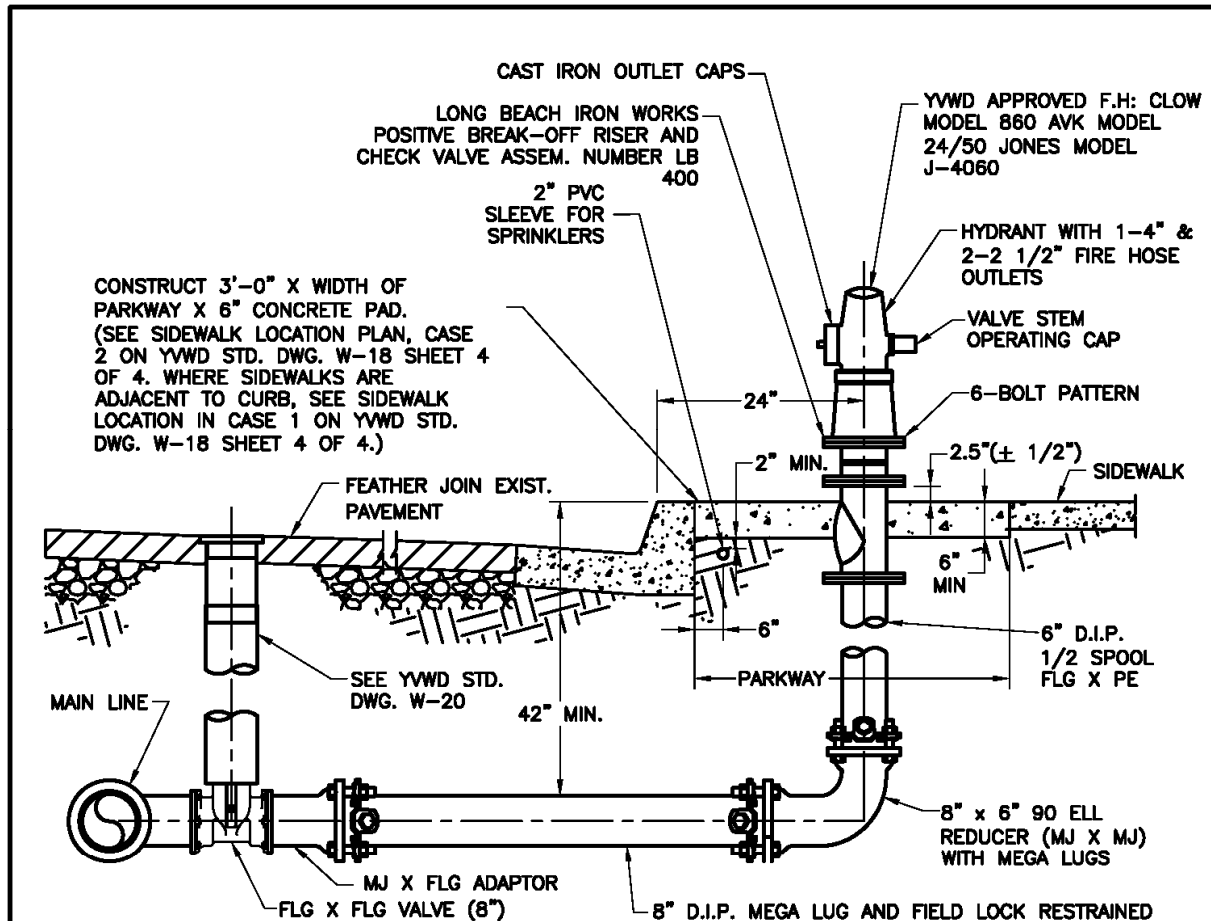
ELEVATION

NOTES:

1. IF A RESIDENTIAL FIRE HYDRANT IS INSTALLED AS A LONG SIDE HYDRANT, THEN IT MUST BE INSTALLED PER SPECIFICATION W-18 SHEET 2 OF 4.
2. PRIOR TO PAINTING, FIRE HYDRANTS SHALL BE PREPARED PER SSPC-SP5. PAINT WITH 2 COATS, 3 TO 5 MILS EACH, OF RUST-OLEUM 7543 SAFETY YELLOW 025F.
3. PROVIDE "BREAK-OFF" RISER AT HYDRANT FLANGE. BOLTS FROM THE "BREAK-OFF" SPOOL TO THE CHECK VALVE ASSEMBLY MUST BE INSTALLED FROM TOP TO BOTTOM.
4. HYDRANT FLANGE GASKET SHALL BE "FULL FACE" AND OF RUBBER COMPOSITION 1/8" THICK.
5. DRY BARREL HYDRANTS ARE REQUIRED AT ELEVATIONS ABOVE 3,500 FT.
6. ALL HYDRANT FLANGE BOLTS ARE TO BE INSTALLED WITH THE CAP OF THE BOLT ON TOP AND THE NUT ON THE BOTTOM.
7. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.
8. SEE SHEET 4 OF 4 FOR HYDRANT FLOW COLOR CODING.
9. ALL HYDRANTS AND BLOW-OFFS SHALL BE LOCATED A MINIMUM OF 3- FEET AWAY FROM THE E.C./B.C. OF DRIVEWAY APPROACHES AND CURB RETURNS FROM INTERSECTIONS.

RESIDENTIAL FIRE HYDRANT INSTALLATION

2016	 <p style="font-size: 1.2em; font-weight: bold;">Yucaipa Valley Water District</p>	<p style="font-size: 0.9em;">Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	W-18
Sheet 1 of 4			



NOTES:

1. PRIOR TO PAINTING, FIRE HYDRANTS SHALL BE PREPARED PER SSPC-SP5. PAINT WITH 2 COATS, 3 TO 5 MILS EACH, OF RUST-OLEUM 7543 SAFETY YELLOW 025F.
2. PROVIDE "BREAK-OFF" RISER AT HYDRANT FLANGE. BOLTS FROM THE "BREAK-OFF" TO THE CHECK VALVE ASSEMBLY MUST BE INSTALLED FROM TOP TO BOTTOM.
3. HYDRANT FLANGE GASKET SHALL BE "FULL FACE" AND OF RUBBER COMPOSITION 1/8" THICK.
4. DRY BARREL HYDRANTS ARE REQUIRED AT ELEVATIONS ABOVE 3,500 FT.
5. ALL HYDRANT FLANGE BOLTS ARE TO BE INSTALLED WITH THE CAP OF THE BOLT ON TOP AND THE NUT ON THE BOTTOM.
6. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.
7. SEE SHEET 4 OF 4 FOR HYDRANT FLOW COLOR CODING.
8. ALL HYDRANTS AND BLOW-OFFS SHALL BE LOCATED A MINIMUM OF 3- FEET AWAY FROM THE E.C./B.C. OF DRIVEWAY APPROACHES AND CURB RETURNS FROM INTERSECTIONS.

COMMERCIAL FIRE HYDRANT INSTALLATION

2016

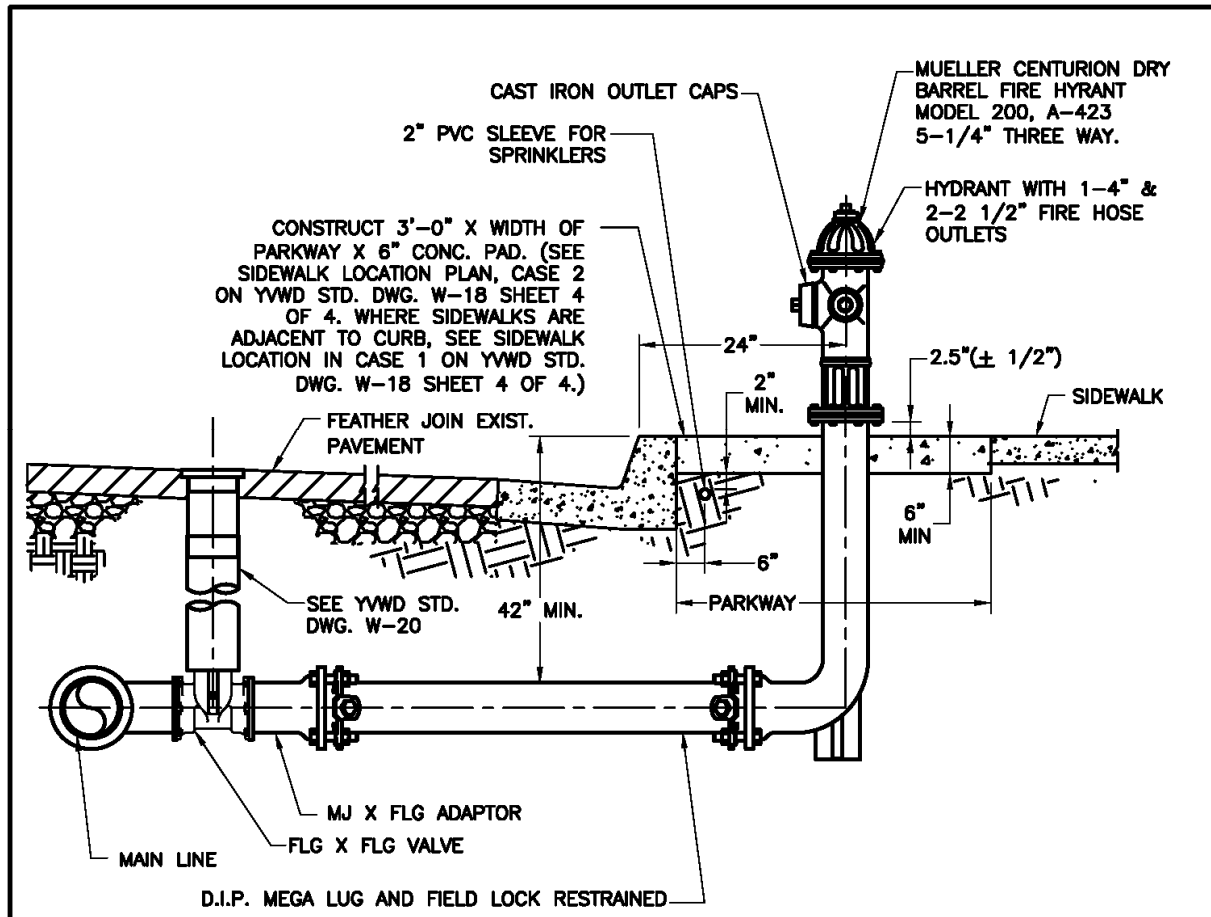


Yucaipa Valley Water District

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Sheet 2 of 4



NOTES:

1. PRIOR TO PAINTING, FIRE HYDRANTS SHALL BE PREPARED PER SSPC-SP5. PAINT WITH 2 COATS, 3 TO 5 MILS EACH, OF RUST-OLEUM 7543 SAFETY YELLOW 025F.
2. HYDRANT FLANGE GASKET SHALL BE "FULL FACE" AND OF RUBBER COMPOSITION 1/8" THICK.
3. DRY BARREL HYDRANTS ARE REQUIRED AT ELEVATIONS ABOVE 3,500 FT.
4. ALL HYDRANT FLANGE BOLTS ARE TO BE INSTALLED WITH THE CAP OF THE BOLT ON TOP AND THE NUT ON THE BOTTOM.
5. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.
6. SEE SHEET 4 OF 4 FOR HYDRANT FLOW COLOR CODING.
7. ALL HYDRANTS AND BLOW-OFFS SHALL BE LOCATED A MINIMUM OF 3-FEET AWAY FROM THE E.C./B.C. OF DRIVEWAY APPROACHES AND CURB RETURNS FROM INTERSECTIONS.

DRY BARREL FIRE HYDRANT INSTALLATION

2016



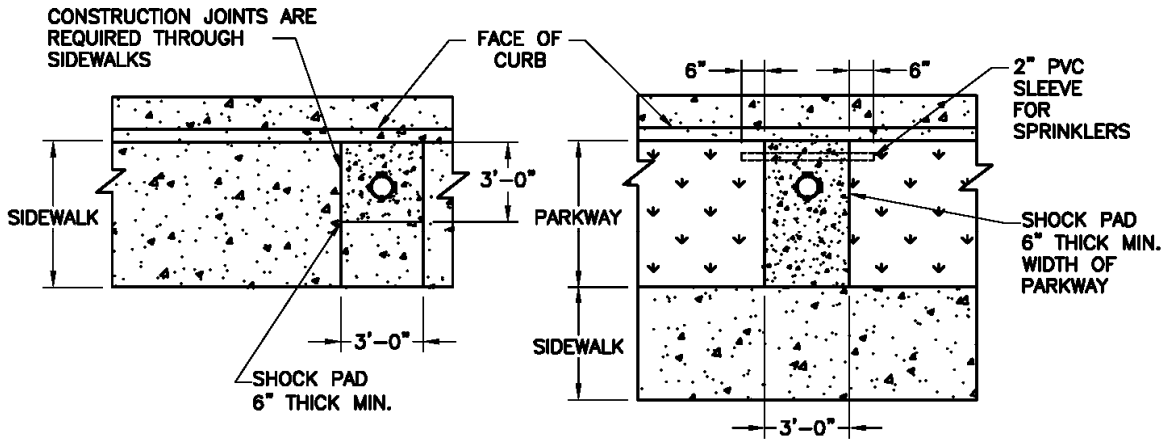
Yucaipa Valley Water District

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SIDEWALK LOCATION PLANS



CASE 1
SIDEWALK ADJACENT TO CURB

CASE 2
SIDEWALK NOT ADJACENT TO CURB

NOTES:

1. PRIOR TO PAINTING, FIRE HYDRANTS SHALL BE PREPARED PER SSPC-SP5. PAINT WITH 2 COATS, 3 TO 5 MILS EACH, OF RUST-OLEUM 7543 SAFETY YELLOW 025F.
2. PROVIDE "BREAK-OFF" RISER AT HYDRANT FLANGE.
3. HYDRANT FLANGE GASKET SHALL BE "FULL FACE" AND OF RUBBER COMPOSITION 1/8" THICK.
4. ALL HYDRANT FLANGE BOLTS ARE TO BE INSTALLED WITH THE CAP OF THE BOLT ON TOP AND THE NUT ON THE BOTTOM.
5. DRY BARREL HYDRANTS ARE REQUIRED AT ELEVATIONS ABOVE 3,500 FT.
6. ALL HYDRANTS AND BLOW-OFFS SHALL BE LOCATED A MINIMUM OF 3- FEET AWAY FROM THE E.C./B.C. OF DRIVEWAY APPROACHES AND CURB RETURNS FROM INTERSECTIONS.
7. HYDRANT FLOW COLOR CODING;
 - 1,500 + GPM = BLUE CAPS
 - 1,000 + GPM = GREEN CAPS
 - 500 to 1,000 GPM = ORANGE CAPS
 - LESS THAN 500 GPM = RED CAPS

FIRE HYDRANT SHOCK PAD DESIGN

2016

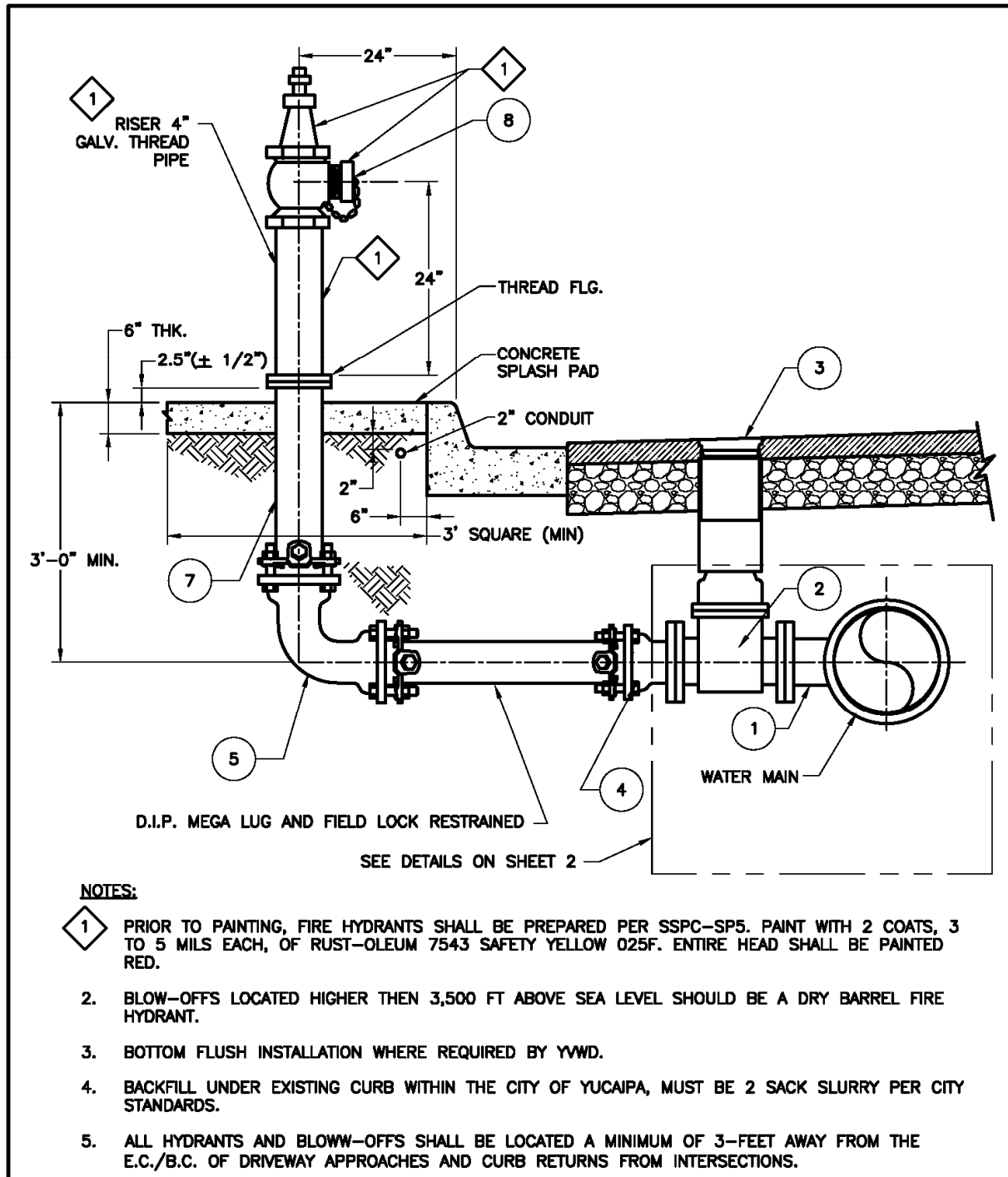


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BLOW-OFF ASSEMBLY

2016

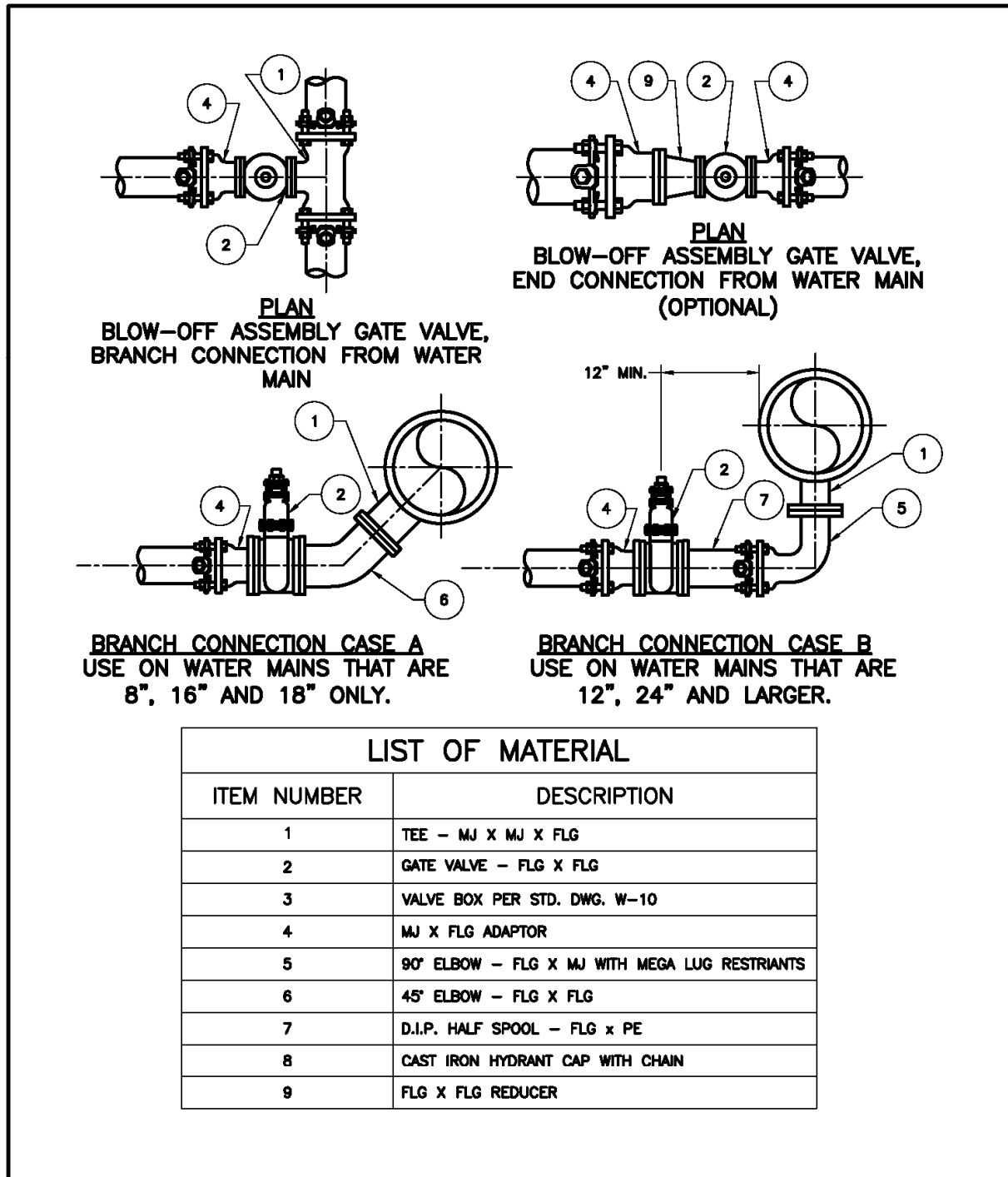


Yucaipa Valley Water District

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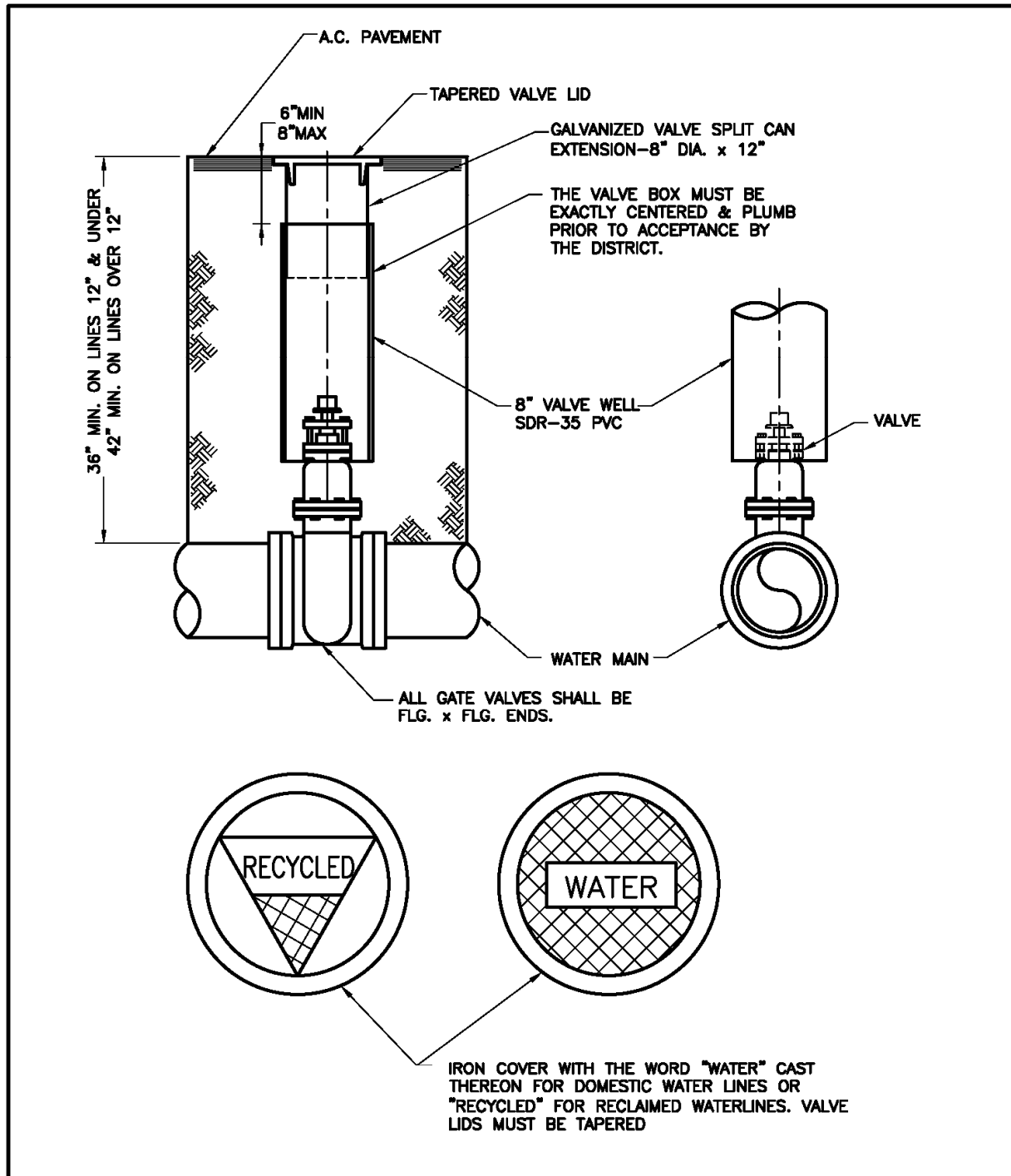
Sheet 1 of 2



LIST OF MATERIAL	
ITEM NUMBER	DESCRIPTION
1	TEE - MJ X MJ X FLG
2	GATE VALVE - FLG X FLG
3	VALVE BOX PER STD. DWG. W-10
4	MJ X FLG ADAPTOR
5	90° ELBOW - FLG X MJ WITH MEGA LUG RESTRIANTS
6	45° ELBOW - FLG X FLG
7	D.I.P. HALF SPOOL - FLG x PE
8	CAST IRON HYDRANT CAP WITH CHAIN
9	FLG X FLG REDUCER

BLOW OFF ASSEMBLY

2016	 Yucaipa Valley Water District	Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##	W-19
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VALVE AND VALVE BOX INSTALLATION

2016

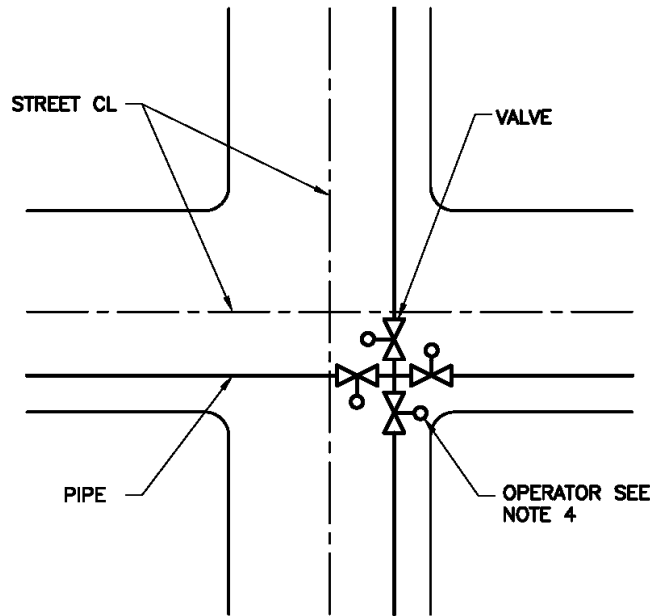


Yucaipa Valley Water District

Approved by the Yucaipa
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Directors on January ##, 2016
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**TYPICAL BUTTERFLY
VALVE OPERATOR
POSITION**

NOTES:

1. PROVIDE VALVE STEM EXTENSION IF DEPTH TO VALVE NUT EXCEEDS 4 FEET. SEE YVWD STD. DWG. W-21.
2. IN NEW TRACT DEVELOPMENTS EXTEND VALVE WELL PIPE 2' ABOVE GROUND ON "KEY VALVES" FOR EMERGENCY SHUTOFFS.
3. BUTTERFLY VALVE OPERATORS SHALL BE LOCATED ON THE LEFT-HAND SIDE OF THE VALVE (AT THE TEE OR CROSS), LOOKING THROUGH THE VALVE TOWARD THE PIPE END.
4. WHERE CONCRETE CROSS GUTTERS AT STREET INTERSECTIONS WILL INTERFERE WITH VALVE BOXES, THE PIPELINE SHALL BE MOVED TO A POSITION 7 FEET OFF THE CURB FACE TO CLEAR THE CROSS GUTTER.
5. VALVES TO BE LOCATED ADJACENT TO FITTINGS WHEREVER POSSIBLE.
6. VALVES BOLTED TO FITTINGS WILL NOT REQUIRE ANCHOR BLOCKS.
7. ALL GATE VALVES SHALL BE MUELLER, RESILIENT WEDGE, EPOXY COATED, FLG. X FLG. ENDS.
8. ALL BURRIED METALIC SURFACES SHALL BE PROTECTED BY AN ASPHALTIC OR BITUMINUOS COATING IN ACCORDANCE WITH AWWA C151 (ANSI A21.51).

VALVE AND VALVE BOX INSTALLATION

2016

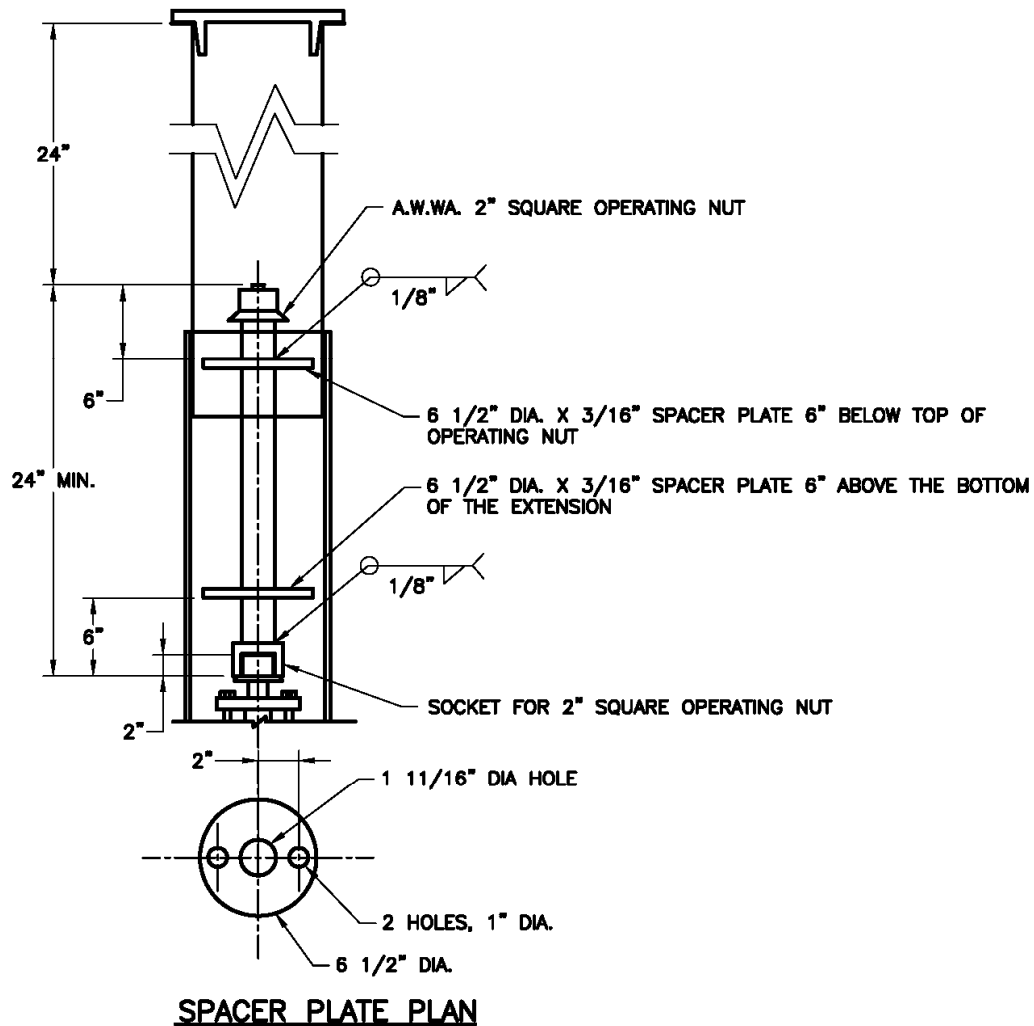


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SPACER PLATE PLAN

NOTES:

1. PROVIDE VALVE STEM EXTENSION WHEN DEPTH TO OPERATING NUT EXCEEDS 48" (FABRICATE EXTENSION TO FIELD MEASUREMENT - SEE NOTE 2)
2. NO VALVE STEM EXTENSION SHALL BE LESS THAN 2 FEET IN LENGTH UNLESS APPROVED BY DISTRICT ENGINEER.
3. PROVIDE TWO SPACER PLATES. FIRST PLATE IS 6" DOWN FROM TOP OF EXTENSION. SECOND PLATE IS 6" UP FROM BOTTOM OF EXTENSION

VALVE STEM EXTENSION

2016

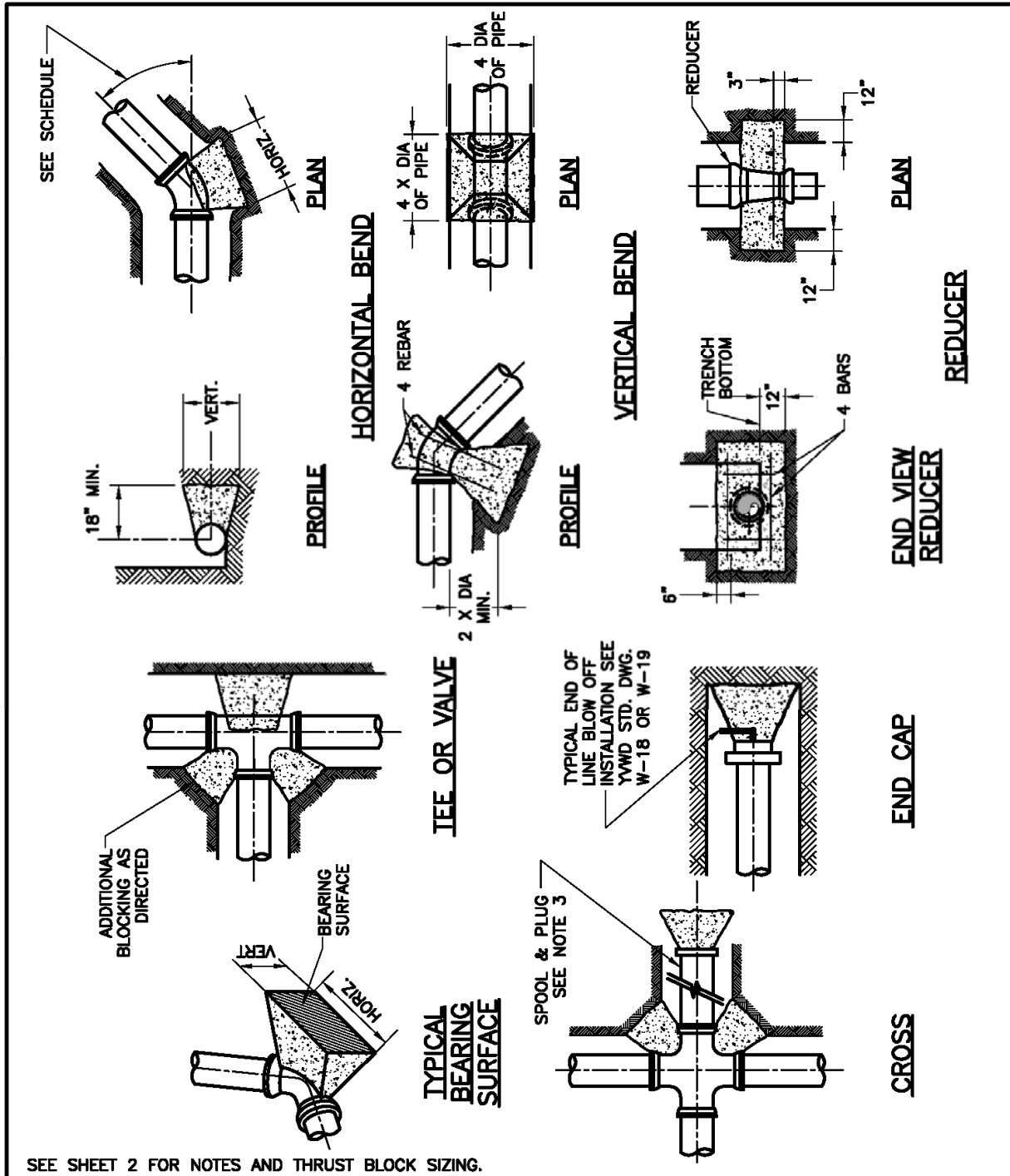


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THRUST BLOCK DETAILS FOR RETROFIT ONLY

2016



Yucaipa Valley Water District

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MINIMUM SIZE OF THRUST BLOCK BEARING SURFACE						
PIPE SIZE	END CAP.	TEE	90° BEND	45° BEND	22 1/2" BEND	11 1/4" BEND
	HORIZ. VERT.	HORIZ. VERT.	HORIZ. VERT.	HORIZ. VERT.	HORIZ. VERT.	HORIZ. VERT.
4"	1'-6" 1'-6"	1'-6" 1'-0"	2'-3" 1'-3"	1'-6" 1'-0"	1'-6" 0'-9"	1'-6" 0'-9"
6"	2'-6" 1'-9"	4'-0" 2'-0"	4'-6" 2'-3"	3'-6" 1'-6"	2'-6" 1'-0"	2'-6" 1'-0"
8"	3'-9" 2'-0"	5'-0" 2'-6"	5'-6" 3'-0"	4'-3" 2'-3"	3'-0" 1'-6"	3'-0" 1'-6"
10"	4'-6" 2'-6"	5'-6" 3'-3"	7'-0" 3'-6"	5'-0" 2'-9"	3'-9" 1'-9"	3'-9" 1'-9"
12"	5'-3" 3'-0"	7'-0" 3'-6"	8'-3" 4'-0"	5'-6" 3'-6"	4'-3" 2'-3"	4'-3" 2'-3"

NOTES:

1. THRUST BLOCK BEARING AREA BASED ON ALLOWABLE SOIL BEARING VALUE OF 1500 psf PRESSURE AND 225 psi LINE PRESSURE WITH 3'-0" COVER MINIMUM.
FOR BEARING = 1000 psf, 1.5 X AREA SHOWN
FOR BEARING = 500 psf, 3.0 X AREA SHOWN
2. ALL THRUST BLOCKS SHALL BE 3,250 PSI CONCRETE AND PLACED AGAINST UNDISTURBED SOIL. DESIGN ENGINEER SHALL DETERMINE SIZES NOT SHOWN.
3. THRUST BLOCKS ON CROSSES SHALL BE USED ONLY WHEN THERE IS A STUB-OUT ON ONE OR MORE SIDES.
4. REINFORCING STEEL SHALL CONFORM TO ASTM A15 AND A305 INTERMEDIATE GRADE.
5. CONCRETE SHALL NOT EXTEND ONTO FLANGE OR ADJOINING PIPE.
6. ALL FITTINGS SHALL BE WRAPPED WITH 10 MIL PLASTIC.
7. ALL FITTINGS SHALL BE MECHANICALLY RESTRAINED UNLESS APPROVED BY YWWD.

THRUST BLOCK DETAILS FOR RETROFIT ONLY

2016

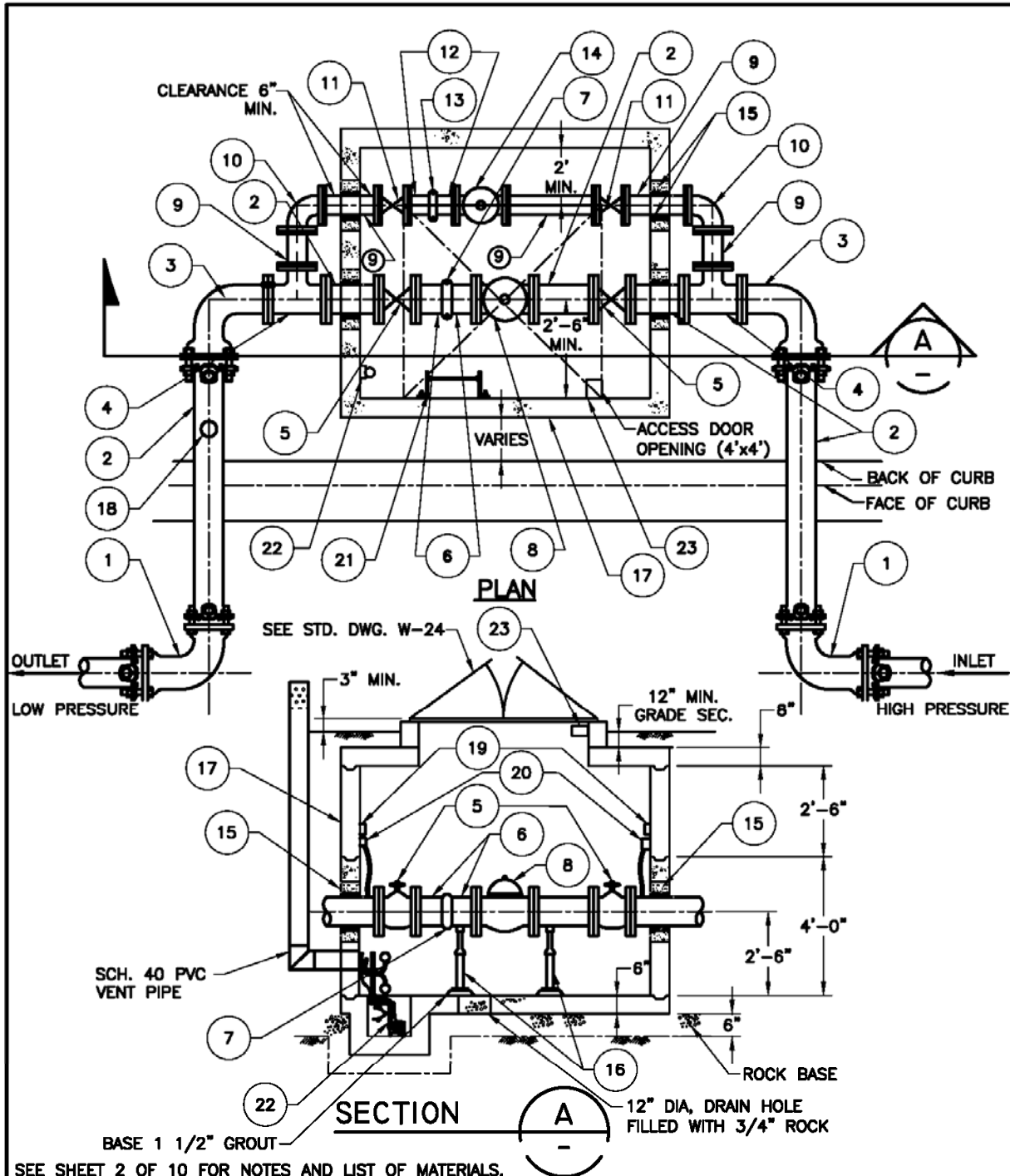


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PRESSURE REDUCING STATION TYPICAL ASSEMBLY – FINAL DESIGN BY ENGINEER

2016



Yucaipa Valley Water District

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Sheet 1 of 10

LIST OF MATERIALS		
ITEM	QUANTITY	DESCRIPTION
MAIN LINE		
1	2 EA	D.I.P. 90° ELBOW, MJ X MJ, RESTRAINED
2	5 EA	D.I.P. SPOOL, LENGTH AS REQUIRED, RESTRAINED
3	2 EA	D.I.P. 90° ELBOW, MJ X FLG
4	2 EA	FLANGED TEE D.I.
5	2 EA	RESILIENT SEAT GATE VALVE
6	2 EA	FLG x GROOVED-END SPOOL, VICTAULIC
7	1 EA	GROOVED-END COUPLING, VICTAULIC
8	1 EA	PRESSURE REDUCING VALVE, W/FULL CLOSED POSITION SWITCH. MANUFACTURED BY CLA-VAL COMPANY ONLY.
15	4 EA	1" SPONGE RUBBER SEAL AROUND PIPE. DRYPACK WITH CONCRETE MORTAR
16	4 EA	ADJUSTABLE PIPE SUPPORT. SEE YVWD STD. DWG. W-25
BY-PASS LINE		
9	5 EA	D.I. SPOOL, LENGTH AS REQUIRED, FLG'D ENDS
10	2 EA	FLG x FLG D.I. 90° ELL
11	2 EA	RESILIENT SEATED GATE VALVE
12	2 EA	FLG x GROOVED-END SPOOL, VICTAULIC
13	1 EA	GROOVED-END COUPLING, VICTAULIC
14	1 EA	PRESSURE REDUCING VALVE, W/FULL CLOSED POSITION SWITCH.
MISCELLANEOUS		
17	1 EA	PRECAST CONCRETE VAULT 6'-0"x8'-0" OR 6'-0"x10'-0" WITH 4'x4" HATCH. PROVIDE DIAMOND PLATE ALUMINUM ACCESS DOORS WITH RECESSED PADLOCK HASP.
18	1 EA	1" AIR VAC DOWNSTREAM OR LOW PRESSURE SIDE OF CLAY-VAL STATION PER YVWD STD. DWG. W-15
19	2 EA	PRESSURE GAUGE (ASHCROFT 0-150 PSI)
20	2 EA	PRESSURE TRANSMITTER, PER W-23 SHEET 10 OF 10
21	1 EA	GALV. STEEL LADDER (ALHAMBRA FOUNDRY) W/LADDER UP AND SS ANCHOR BOLTS
22	1 EA	FLOOD LEVEL SWITCH & SUMP PUMP. NO SUMP PUMP REQUIRED IF A POSITIVE CONNECTION TO STORM DRAIN IS PROVIDED.
23	1 EA	DOOR ENTRY SWITCH, PER W-23 SHEET 9 OF 10

NOTES:

1. THESE DRAWINGS ARE GENERAL IN NATURE AND MAY NEED TO BE MODIFIED TO FIT SPECIFIC SITE REQUIREMENTS.

**PRESSURE REDUCING STATION
TYPICAL ASSEMBLY – FINAL DESIGN BY ENGINEER**

2016

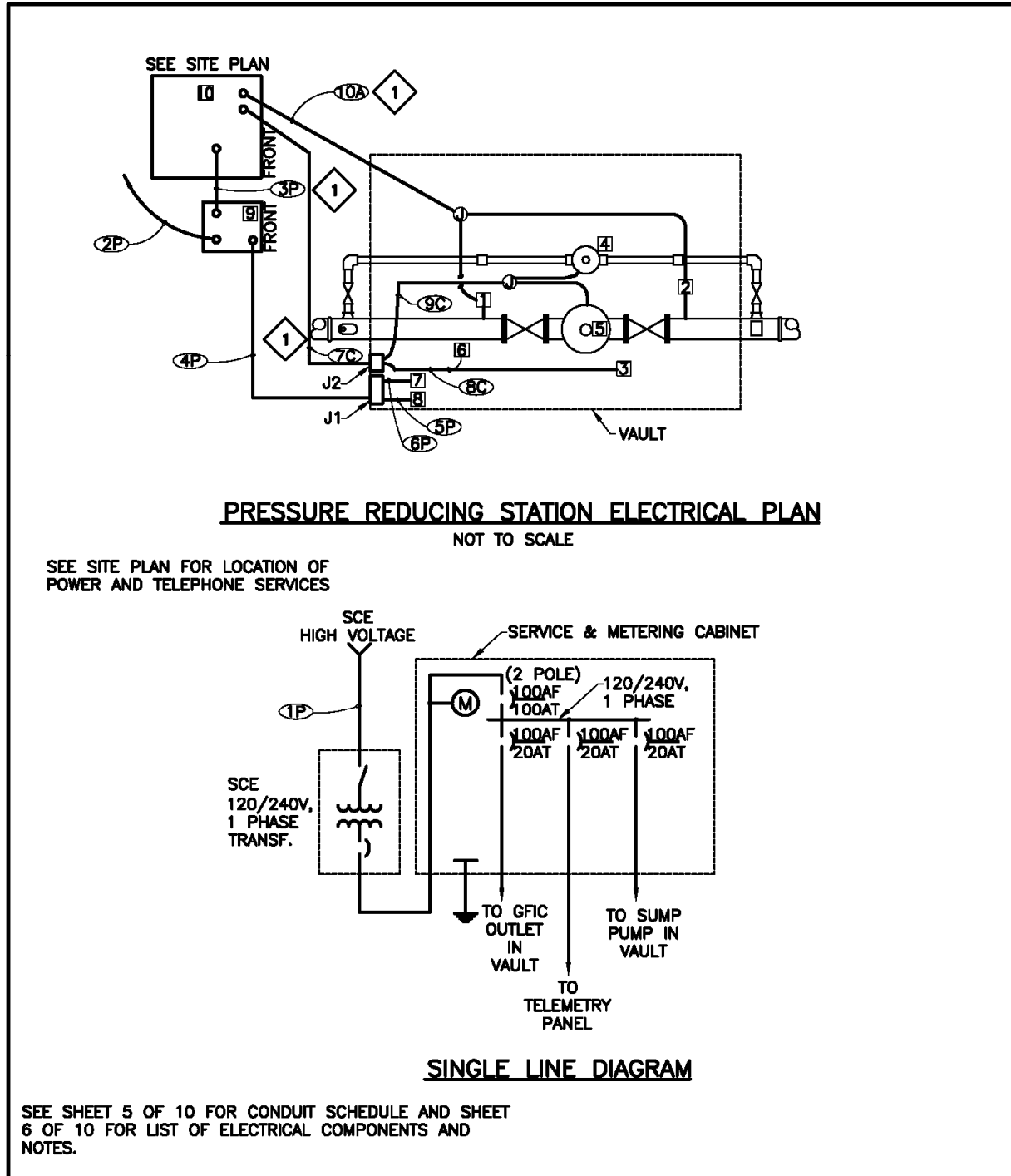


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PRESSURE REDUCING STATION ELECTRICAL DIAGRAM AND DETAILS

2016

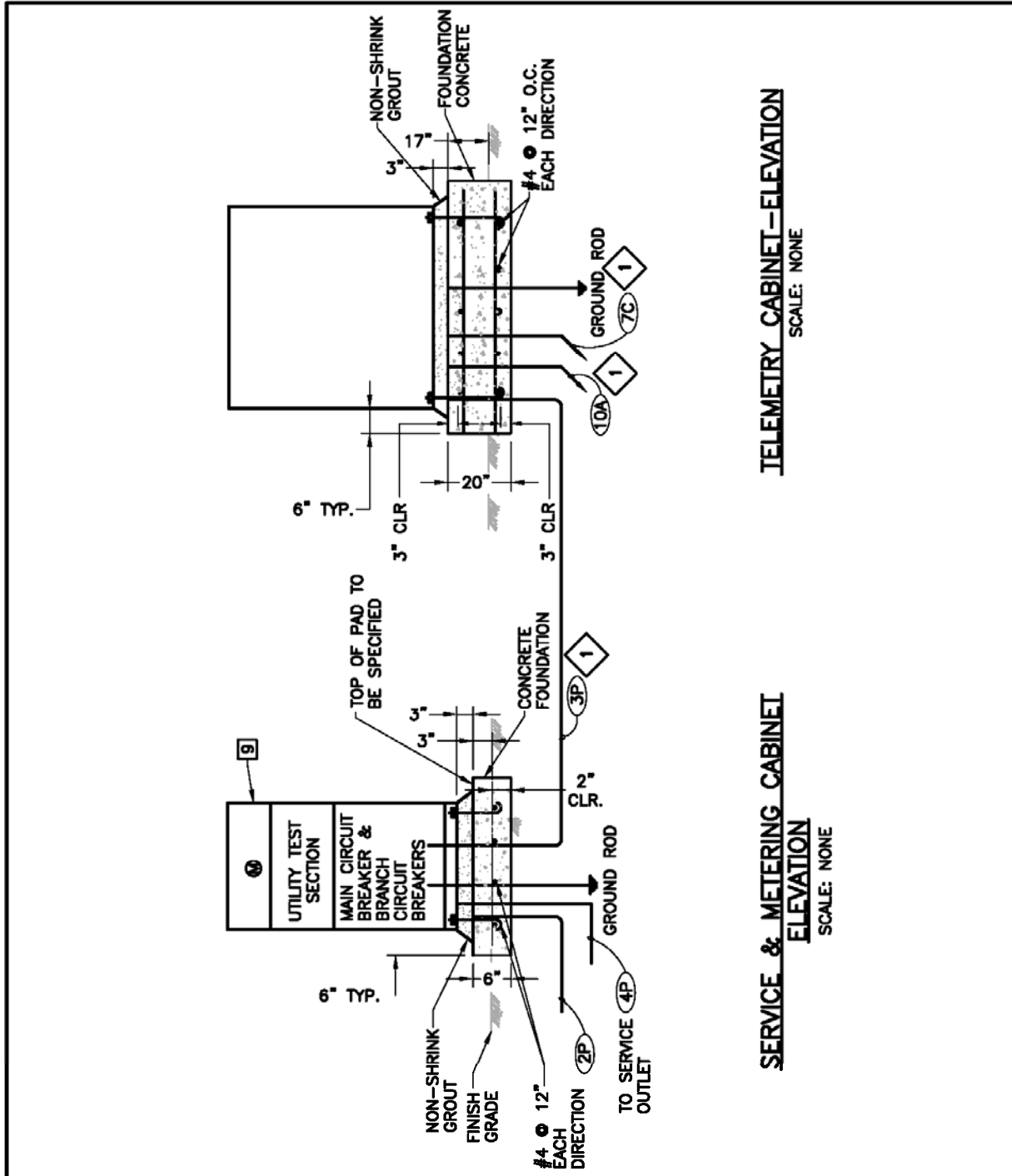


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**PRESSURE REDUCING STATION
ELECTRICAL DIAGRAM AND DETAILS**

2016



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CONDUIT SCHEDULE									
SYMBOL	CONDUIT	WIRE	DESCRIPTION	LOCATION		REMARKS			
				FROM	TO				
#	QTY. SIZE	QTY. SIZE	USE	SCE XFMR	EXISTING SCE POWER	IF REQ'D			
(1P)	1 4"	C.O.	POWER	SCE XFMR	EXISTING SCE POWER				
(2P)	1 2"	C.O.	POWER	SCE XFMR	SVS & MTR CAB	120/240 SVS FDR			
(3P)	1 3/4"	2#12&1#12 GND	POWER	SVS & MTR CAB	TELEMETRY CAB	SEE NOTE			
(4P)	1 3/4"	4#12&1#12 GND	POWER	SVS & MTR CAB	PULL BOX J1	SUMP PUMP & OUTLET			
(5P)	1 3/4"	2#12&1#12 GND	POWER	PULL BOX J1	OUTLET W/GFI				
(6P)	1 3/4"	2#12&1#12 GND	POWER	PULL BOX J1	SUMP PUMP & CONTROLS				
(7C)	1 1"	8#14&1#12 GND	CONTROL	TELEMETRY CAB	PULL BOX J2	SEE NOTE			
(8C)	1 3/4"	4#14&1#12 GND	CONTROL	PULL BOX J2	XS-1,LS-1				
(9C)	1 3/4"	4#14&1#12 GND	CONTROL	PULL BOX J2	XS-2,XS-3				
(10A)	1 1"	2,2/C#18 SH.&1#12GND	CONTROL	TELEMETRY CAB	PT-1,PT-2	SEE NOTE			

**PRESSURE REDUCING STATION
ELECTRICAL DIAGRAM AND DETAILS**

2016



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ELECTRICAL COMPONENTS					
ITEM NO.	DEVICE ID.	DESCRIPTION	MANUFACTURE	MODEL NUMBER	REMARKS
1	PT-1	DOWNSTREAM PRESS. XMTR	ROSE MOUNT	#3051CG-X-A22 AJJ-M6210-S-140	150/250 PSI
2	PT-2	UPSTREAM PRESS. XMTR	ROSE MOUNT	#3051CG-X-A22 AJJ-M6210-S-140	150/250 PSI
3	XS-1	HATCH ENTRY SWITCH	ALLEN BRADLEY	E50DRI	W/CUTLER HAMMER ROLLER #E50KL546
4	XS-2	STEM POS. SWITCH (CLOSED)			SUP. W/VALVE
5	XS-3	STEM POS. SWITCH (CLOSED)			SUP. W/VALVE
6	LS-1	VAULT FLOODED SWITCH	GEMS	LS270	
7	P-1	SUMP PUMP AND CONTROLS	ZOELLER	GRANGER CAT. #2P547	
8	NA	SERVICE OUTLET WITH GFI	NA		20A
9	NA	SERVICE AND METERING CAB	MEYERS	MEUGQ100	120/240 V, 100A
10	NA	TELEMETRY CABINET			SEE YVWD SDT DWG W-23D, DETAIL A

NOTE:

1 COIL 3" OF CONDUCTORS 3P, 7C, AND 10A IN TELEMETRY PANEL.

PRESSURE REDUCING STATION ELECTRICAL DIAGRAM AND DETAILS

2016

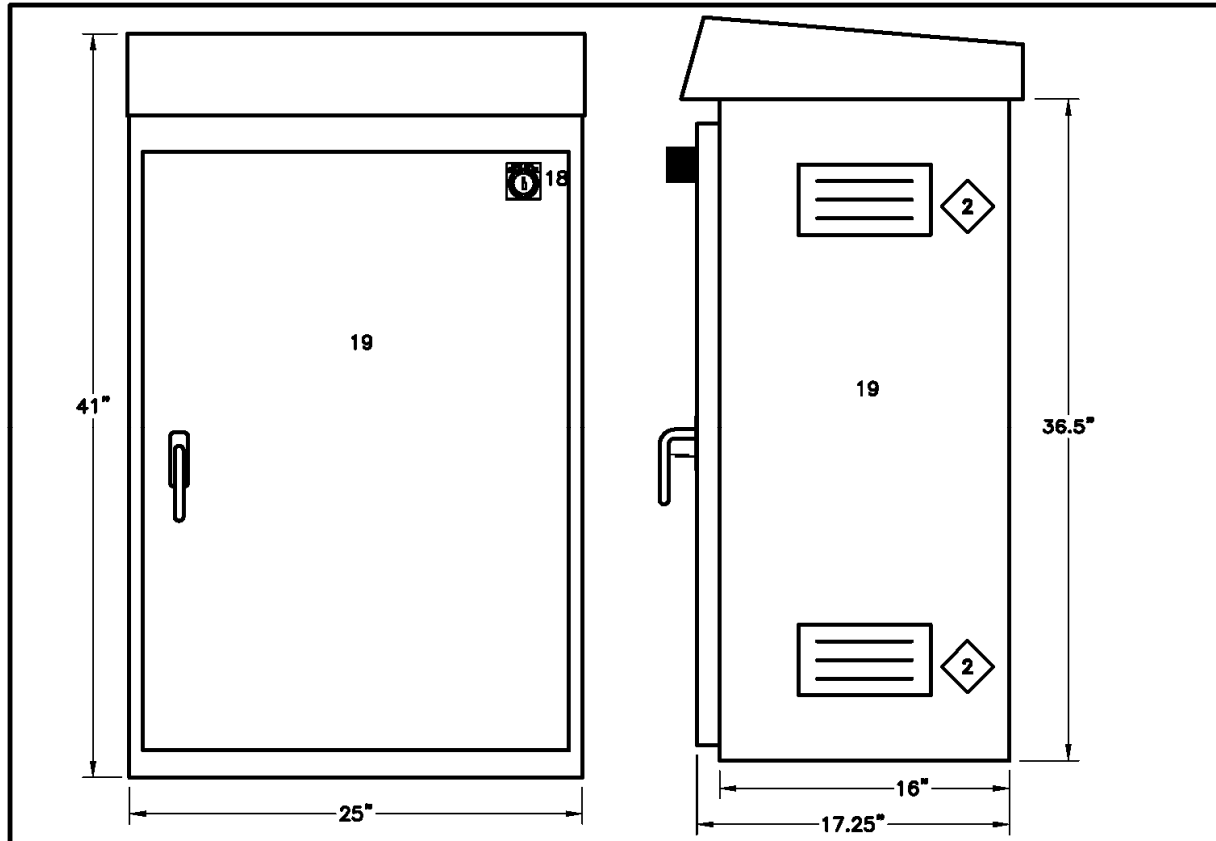


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NOTES:

- 1 PROVIDE CABINET WITH SUB BACK PANEL.
- 2 PROVIDE VENTILATION WITH LOUVERS TOP AND BOTTOM.
- 3 CREATE POSITIVE PRESSURE WITH SUPPLY FAN ON THERMOSTAT.

**PRESSURE REDUCING STATION
TELEMETRY DETAILS**

2016



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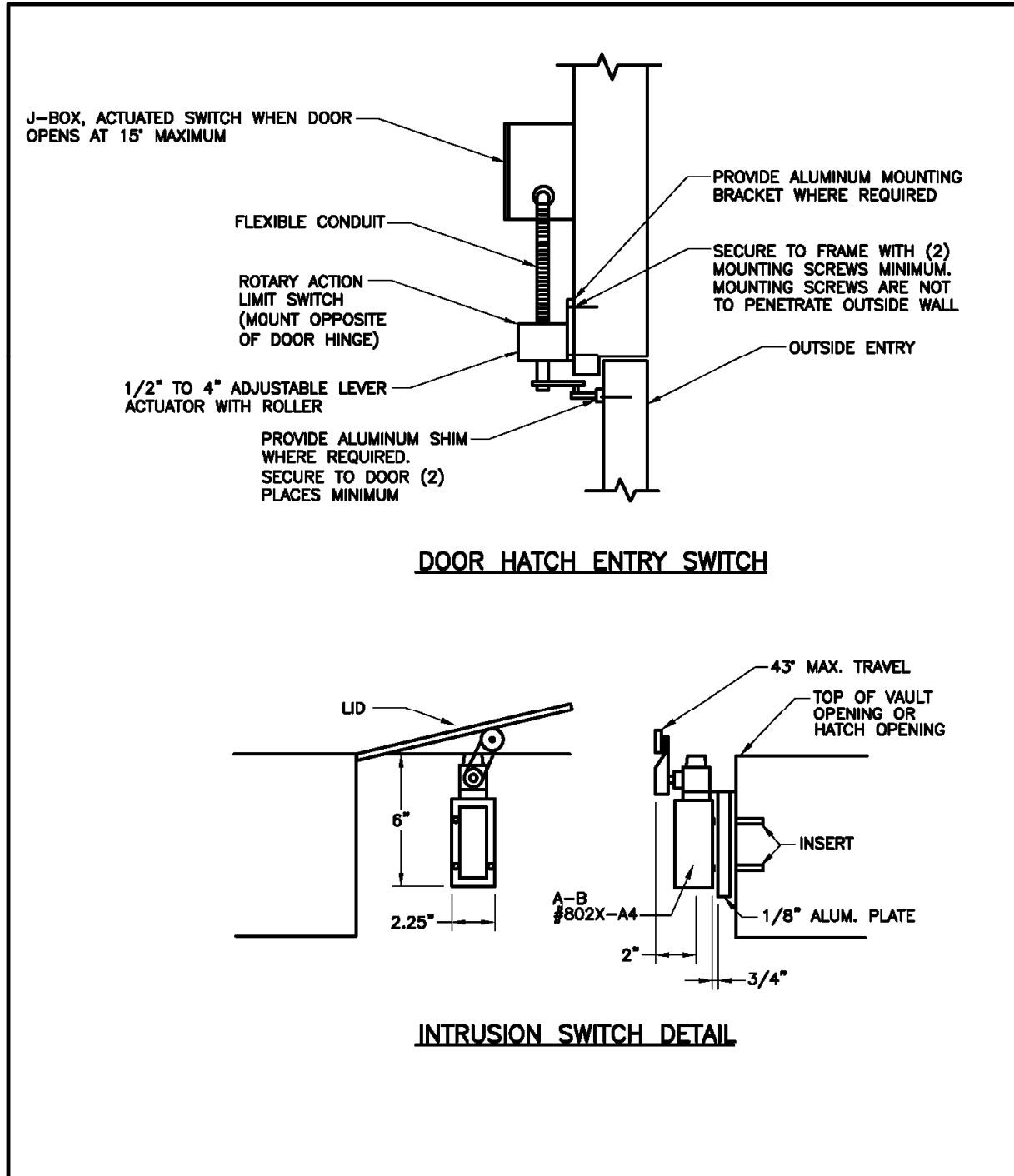
W-23

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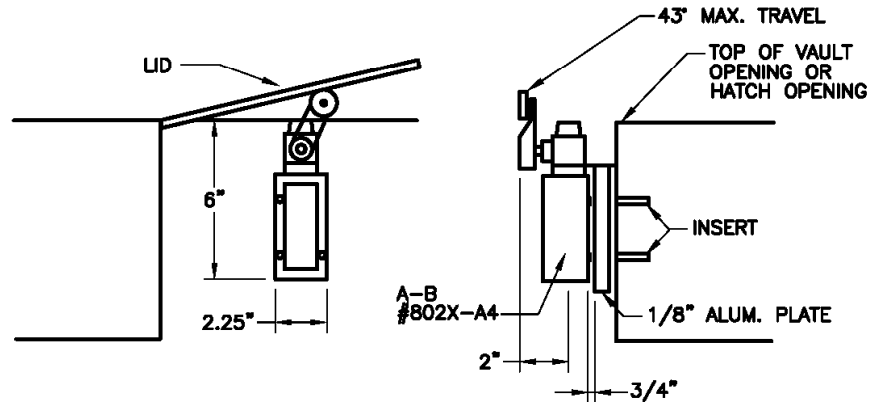
LIST OF TELEMETRY CABINET COMPONENTS					
ITEM NO.	QTY.	DESCRIPTION	PART NUMBER	MANUFACTURER	TYPE
1	1				
1	2	MULTIPLEXER	245-19	BIF/AQUA	FREQ. T.B.D.
1	1	TRANSMITTER	245-05	BIF/AQUA	FREQ. T.B.D.
1	1	RECEIVER	245-09	BIF/AQUA	FREQ. T.B.D.
1	1	DEMULTIPLEXER	245-20	BIF/AQUA	FREQ. T.B.D.
2	1	DC POWER SUPPLY	HC-28-2-A	POWER-ONE	28VDC, 2A
3	3	CONTROL RELAYS	RR2P-UL-120	IDEC	2PDT
4	1	TIME DELAY RELAY	TCB-115-2-10	R-K	ON DELAY
4	2	TIME DELAY RELAY	TFB-115-2-180	R-K	OFF DELAY
5	1	LOW VOLTAGE PROTECTOR	258-40	BIF/AQUA	ELECTRONIC
6	8	POWER/SIGNAL TERM.	1492-CA1	ALLEN-BRADLEY	600V, 55A
7	1	LINE SURGE PROTECTOR	245-23	BIF/AQUA	ELECTRONIC
8	1	POWER TRANSFER UNIT	258-36	BIF/AQUA	ELECTRONIC
9	8	POWER/SIGNAL TERM.	1492-CA1	ALLEN-BRADLEY	600V, 55A
10	48	TELEMETRY TERMINALS	UK4	PHOENIX	600V, 20A
11	1	UTILITY RECEPTACLE	1591FI	PASS & SEYMOUR	GFI 15A
12	1	TELEPHONE CO. RECPT.	GE5251-2	G.E.	SIMPLEX 15A
13	1	SPACE HEATER	D-AH4001B	HOFFMAN	400 WATT
14	4	GELL CELL BATTERY	NP24-12	YUASA-EXIDE	12V 24AH
15	1	PLYWOOD BAT. SUPPORT	N/A		
16	1	FLUORESCENT LIGHT	2V687/1V173	GRAINGER	15 WATT
17	1	INTRUSION LIGHT SWITCH	10316H2042	CUTLER-HAMMER	LIMIT SWITCH
18	1	INTRUSION AL. OVERRIDE	10250T15113	CUTLER-HAMMER	2 POS. SEL SW.
19	1	TELEMETRY CABINET. THREE POINT PAD LOCKABLE DOOR HANDLE. SOLID BOTTOM.	LS412516AL	HENNESSY	NEMA 4X 5052-H32 ALUMINUM ALLOY 0.125" THICK
20	1	CIRCUIT BREAKER	1492-CB1H20	ALLEN-BRADLEY	20A ONE POLE

**PRESSURE REDUCING STATION
TELEMETRY DETAILS**

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DOOR HATCH ENTRY SWITCH



INTRUSION SWITCH DETAIL

**PRESSURE REDUCING STATION
ENTRY SWITCH DETAILS**

2016

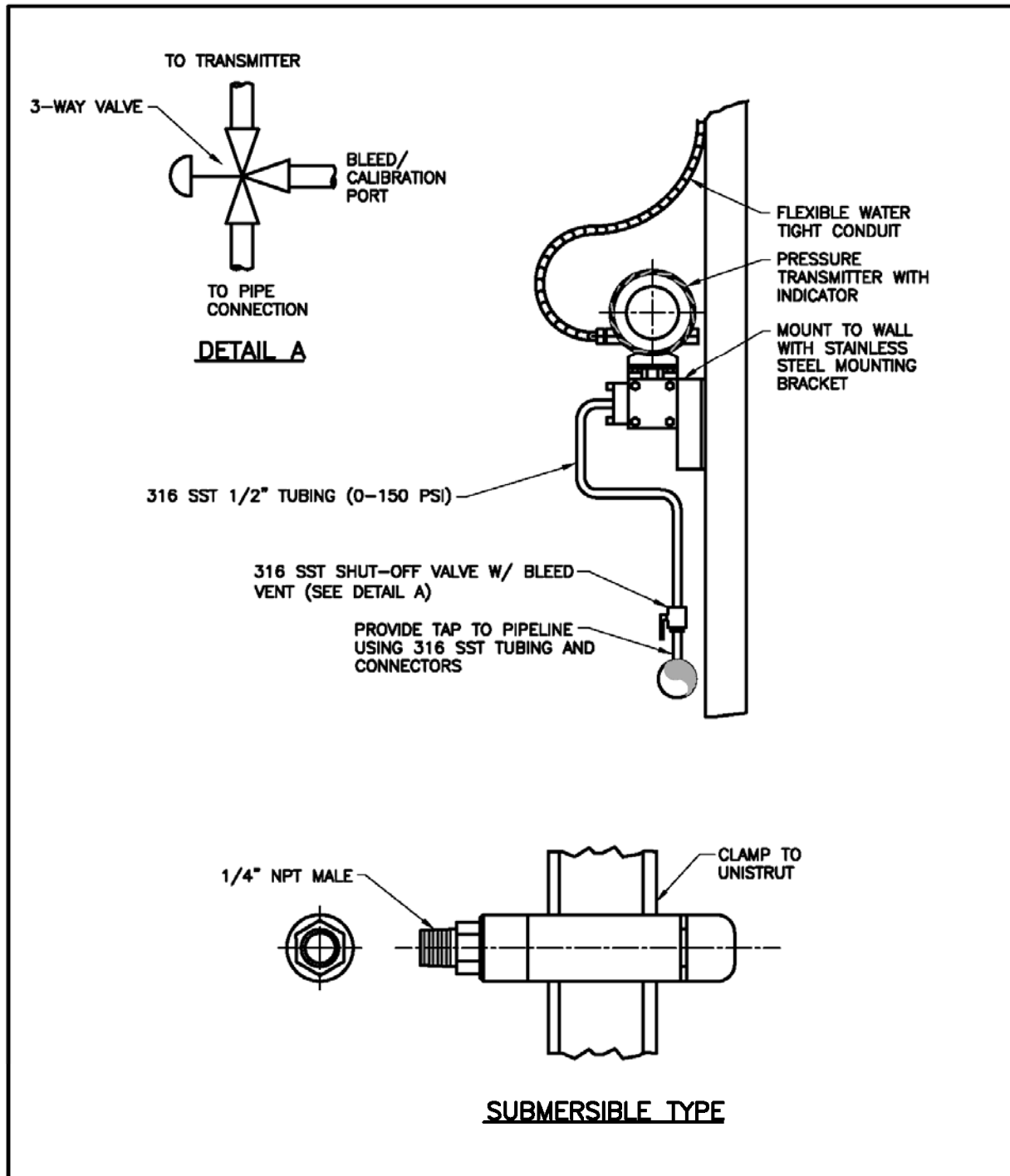


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**PRESSURE REDUCING STATION
PRESSURE TRANSMITTER INSTALLATION DETAILS**

2016

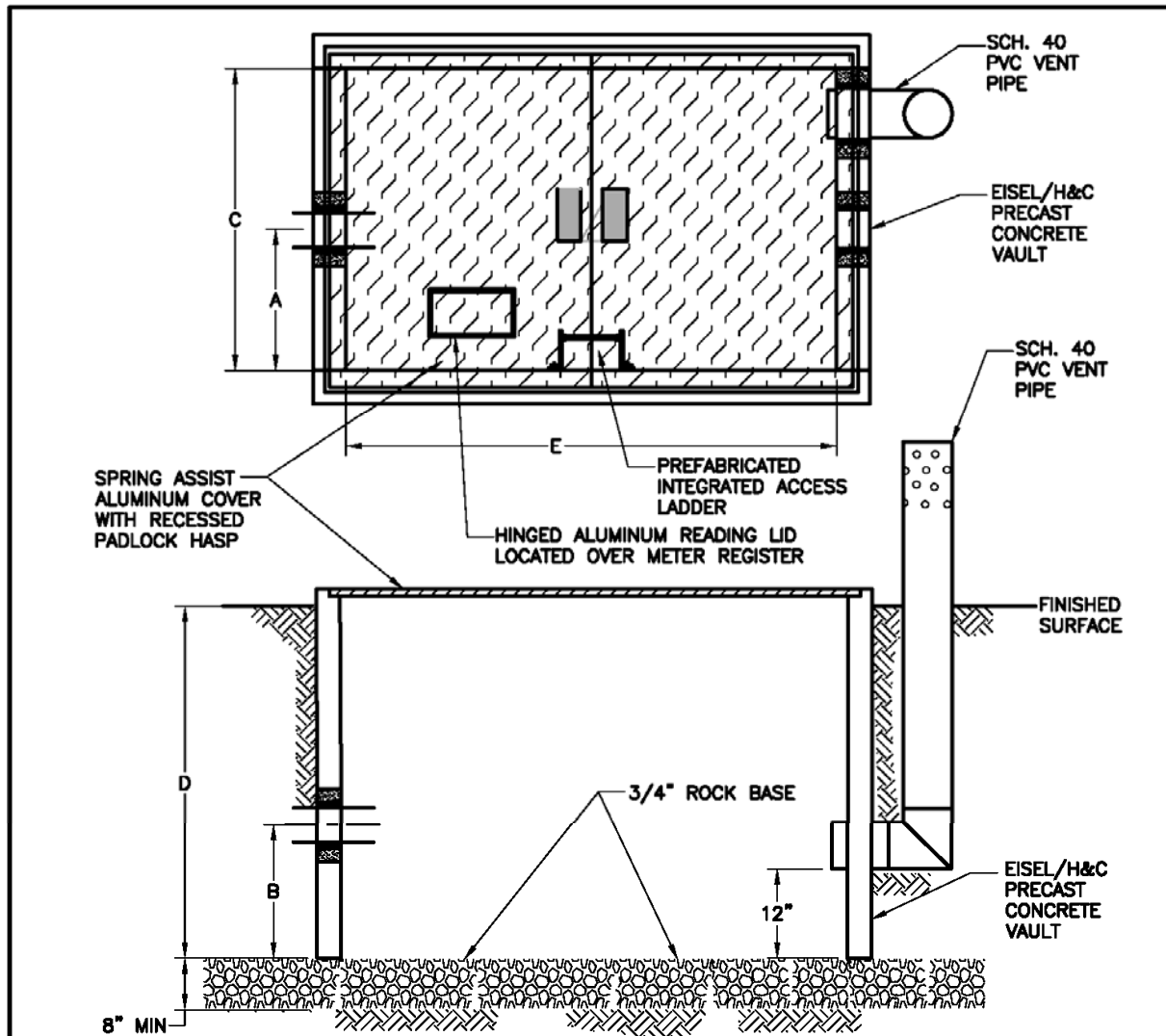


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UNDERGROUND INSTALLATIONS						
PIPE SIZE	A	B	C	D	E	VAULT DIM
3"	24"	18"	4'	5'	6'	4'x6'
4"	24"	18"	4'	5'	6'	4'x6'
6"	24"	18"	4'	5'	8'	4'x8'
8"	24"	18"	4'	5'	12'	4'x12'
12"	36"	18"	6'	5'	12'	6'x12'

PREFABRICATED VAULT WITH LID AND VENT ASSEMBLY

2016

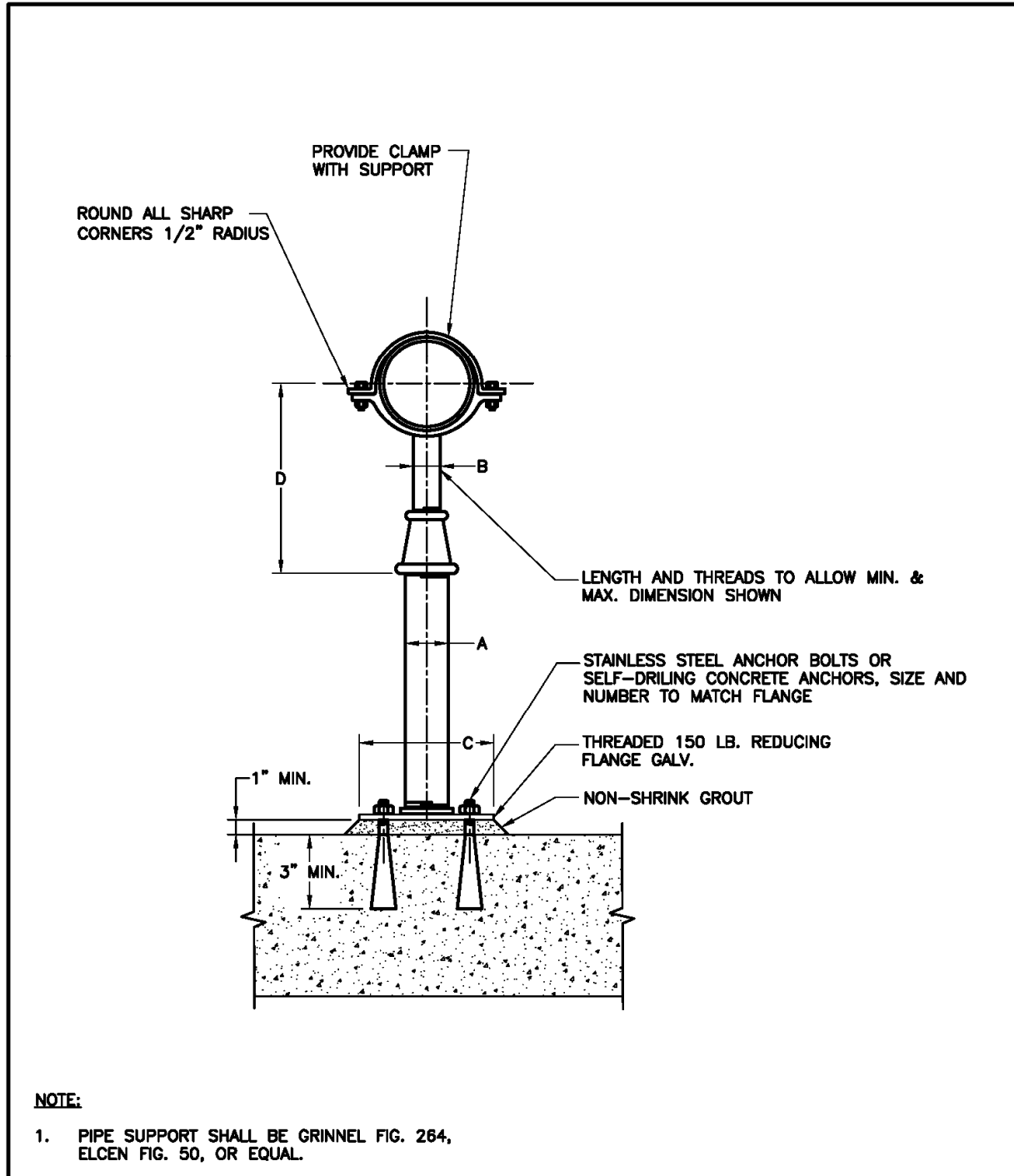


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ADJUSTABLE PIPE SUPPORT

2016



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ADJUSTABLE PIPE SADDLE SUPPORT SCHEDULE DIMENSIONS IN INCHES

PIPE SIZE	A	B	C	D	
				MINIMUM	MINIMUM
2 1/2	2 1/2	1 1/2	9	8	13
3	2 1/2	1 1/2	9	8 1/2	13 1/2
3 1/2	2 1/2	1 1/2	9	8 1/2	13 1/2
4	3	2 1/2	9	9 1/2	14
6	3	2 1/2	9	10 1/2	15 1/2
8	3	2 1/2	9	11 1/2	16 1/2
10	3	2 1/2	9	13 1/2	18 1/2
12	3	2 1/2	9	15	19 1/2
14	4	3	11	16 1/2	20 1/2
16	4	3	11	17 1/2	22 1/2
18	6	3 1/2	13 1/2	19 1/2	24
20	6	3 1/2	13 1/2	21	25 1/2
24	6	4	13 1/2	23 1/2	28 1/2
30	6	4	13 1/2	27	31 1/2
32	6	4	13 1/2	28 1/2	32 1/2
36	6	4	13 1/2	30 1/2	34 1/2

ADJUSTABLE PIPE SUPPORT

2016



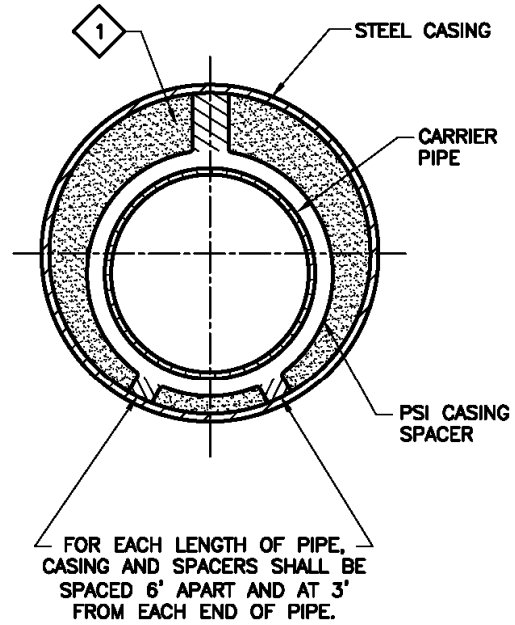
Yucaipa Valley Water District

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SCHEDULE STEEL CASING		
NOMINAL CARRIER PIPE SIZE	MINIMUM CASING SIZE	MIN. WALL THICK.
4"	10 3/4 O.D.	1/4"
6"	12 3/4 O.D.	1/4"
8"	16" O.D.	5/16"
12"	24" O.D.	3/8"
16"	30" O.D.	3/8"
20"	36" O.D.	3/8"
24"	36" O.D.	3/8"
30"	48" O.D.	3/8"



NOTES:

1. THE ANNULAR SPACE BETWEEN THE CASING AND THE CARRIER PIPE SHALL BE FILLED WITH AIR-BLOWN SAND.
2. CASING SHALL BE INSTALLED BY THE BORE, JACK AND/OR TUNNEL METHOD.
3. SIZE AND THICKNESS OF CASING SHALL BE AS SHOWN IN SCHEDULE. FOR LONG BORES OR SPECIAL SITUATIONS, GREATER WALL THICKNESS THAN SHOWN IN THE SCHEDULE MAY BE REQUIRED.
4. ALL STEEL CASING PIPE FIELD JOINTS SHALL BE WELDED FULL-CIRCUMFERENCE.
5. PSI CASING SPACERS SHALL BE PROVIDED PER DETAIL ABOVE.
6. CARRIER PIPE SHALL BE PRESSURE TESTED PRIOR TO FILLING CASING.
7. EACH END OF CASING SHALL BE SEALED WITH CONCRETE.
8. CONTRACTOR SHALL FURNISH ALL NECESSARY THRUST RESTRAINT DEVICES.
9. BACK FILL FOR CASING IN OPEN CUT SHALL BE IN ACCORDANCE WITH YVWD STD. DWG. W-30.
10. PSI CASING SPACERS REQUIRED, SIZE PER PLAN.

STEEL CASING PIPE

2016

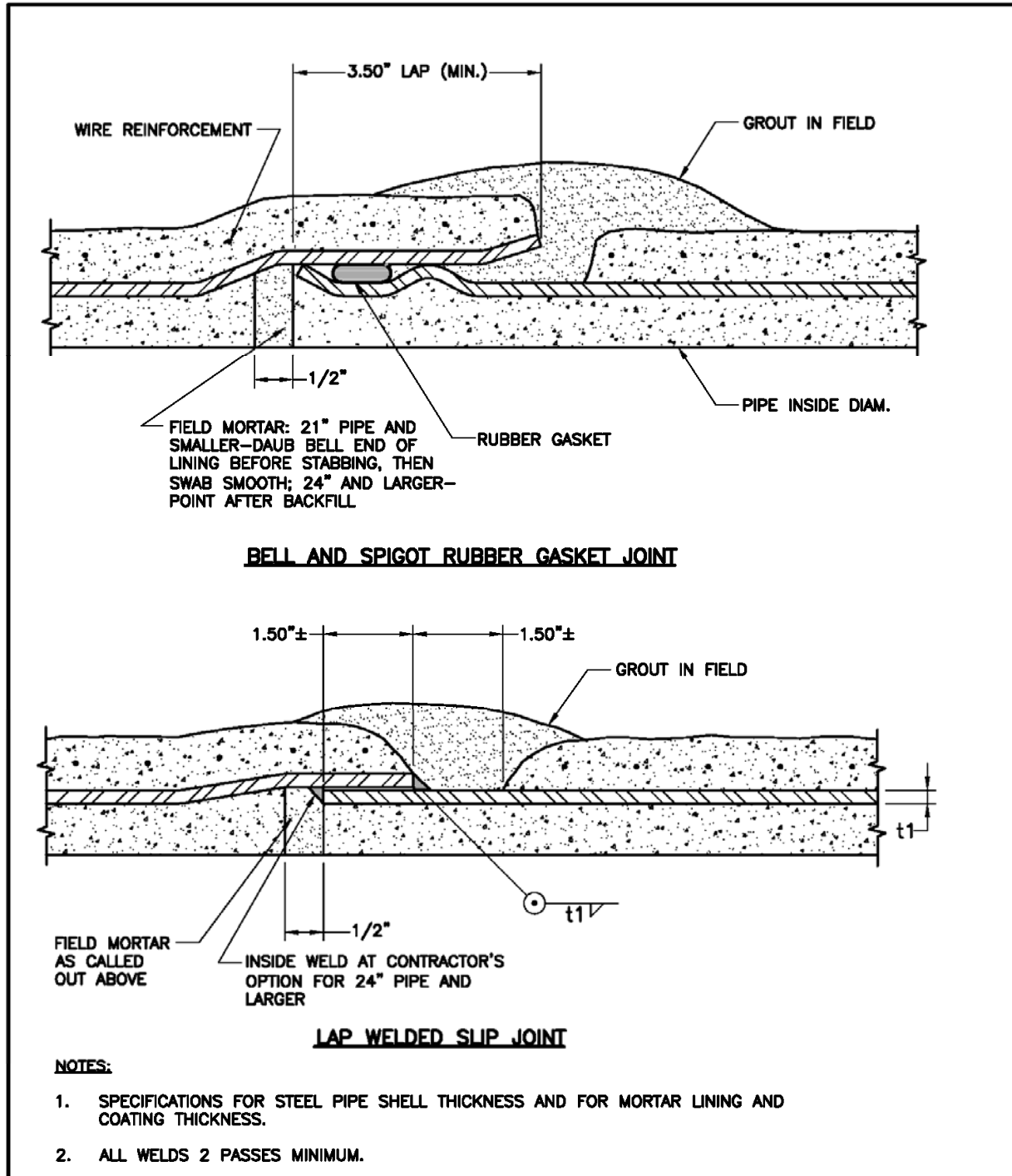


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MORTAR LINED AND COATED STEEL PIPE JOINT DETAILS

2016

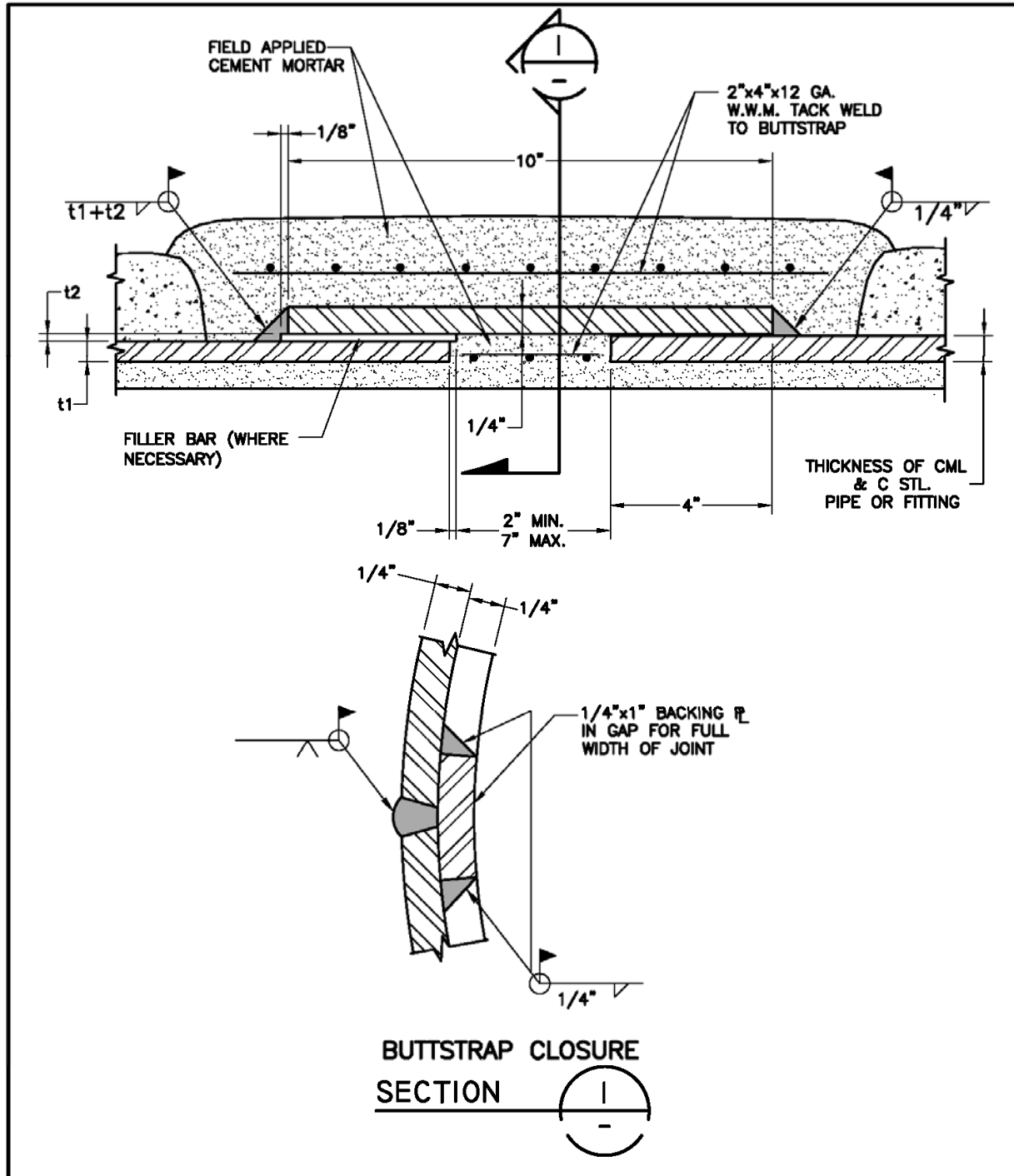


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MORTAR LINED AND COATED STEEL PIPE CLOSURE DETAILS

2016

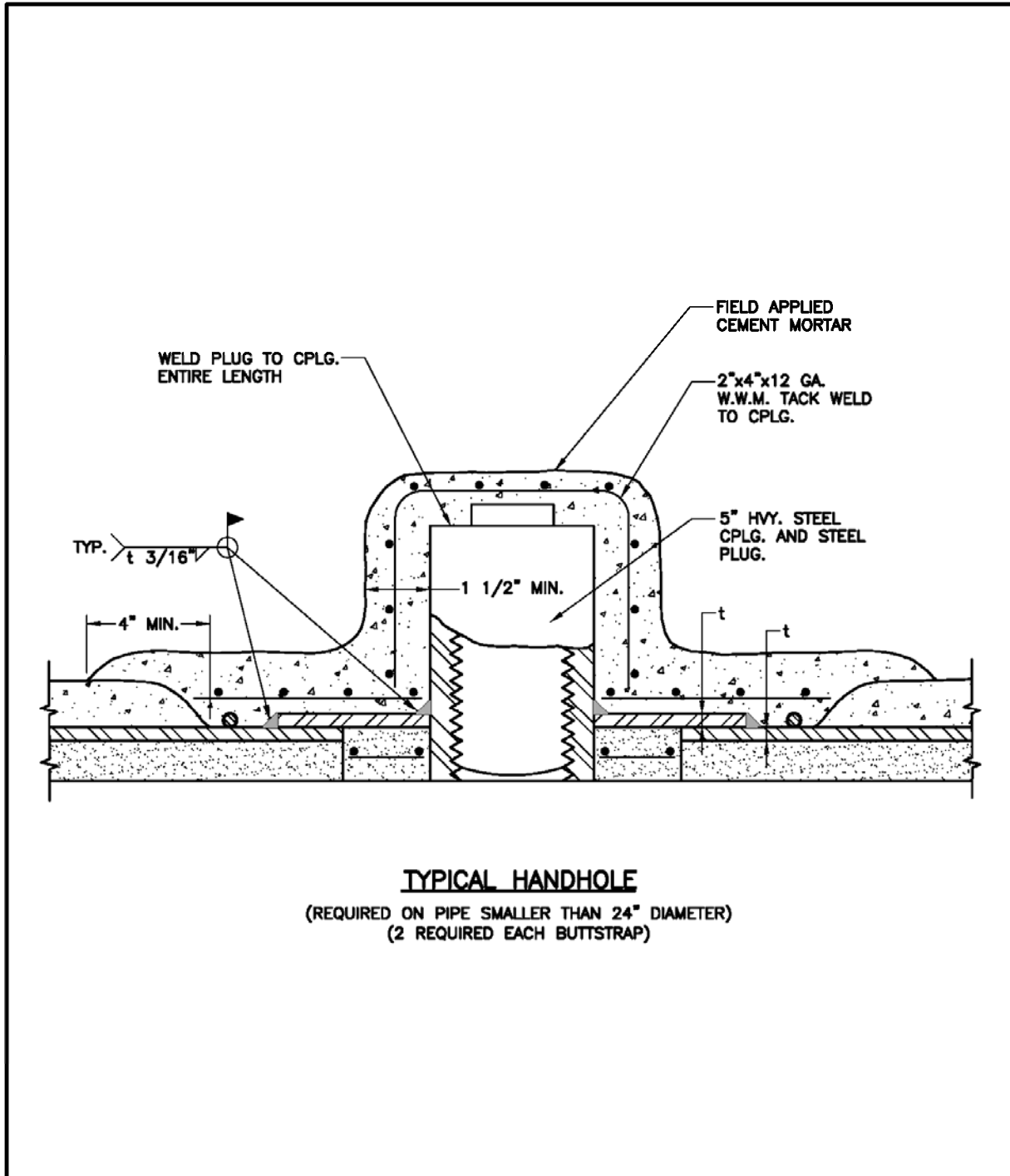


Yucaipa Valley Water District

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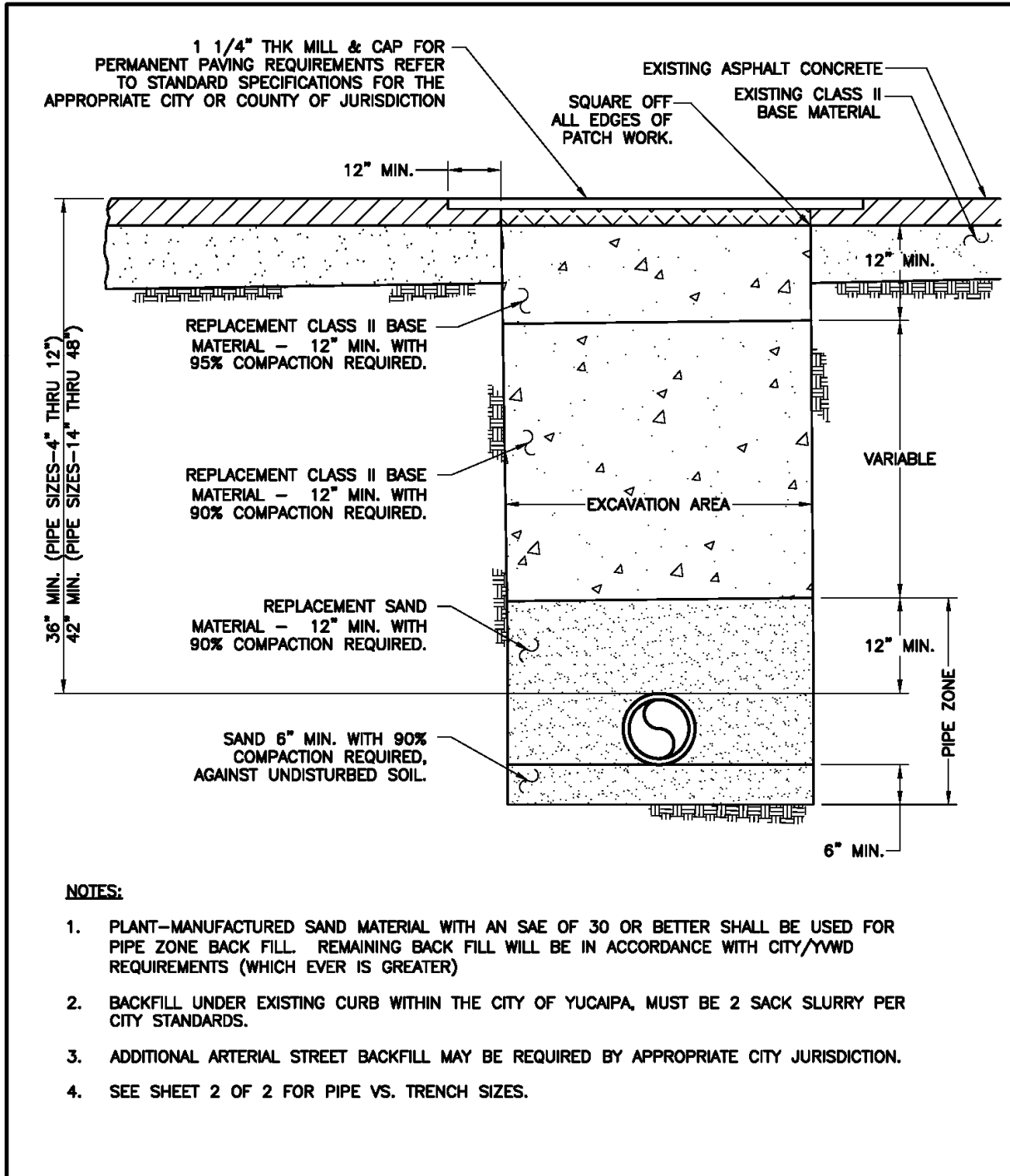
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TYPICAL HANDHOLE
 (REQUIRED ON PIPE SMALLER THAN 24" DIAMETER)
 (2 REQUIRED EACH BUTTSTRAP)

**MORTAR LINED AND COATED STEEL
 PIPE CLOSURE DETAILS**

<p>2016</p>	 <p>Yucaipa Valley Water District</p>	<p>Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	<p>W-28</p>
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TRENCH REPAIR DETAIL

2016



Yucaipa Valley Water District

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TRENCH REPAIR—PIPE SIZE VS TRENCH SIZE		
PIPE SIZE—INCHES (INSIDE DIAMETER)	TRENCH WIDTH—INCHES	
	MINIMUM	MAXIMUM
4	18	24
6	20	30
8	24	32
10	24	36
12	30	36
14	32	42
16	34	42
24	38	46
29	42	46
30	46	48
36	—	—
48	—	—

TRENCH REPAIR DETAIL

2016

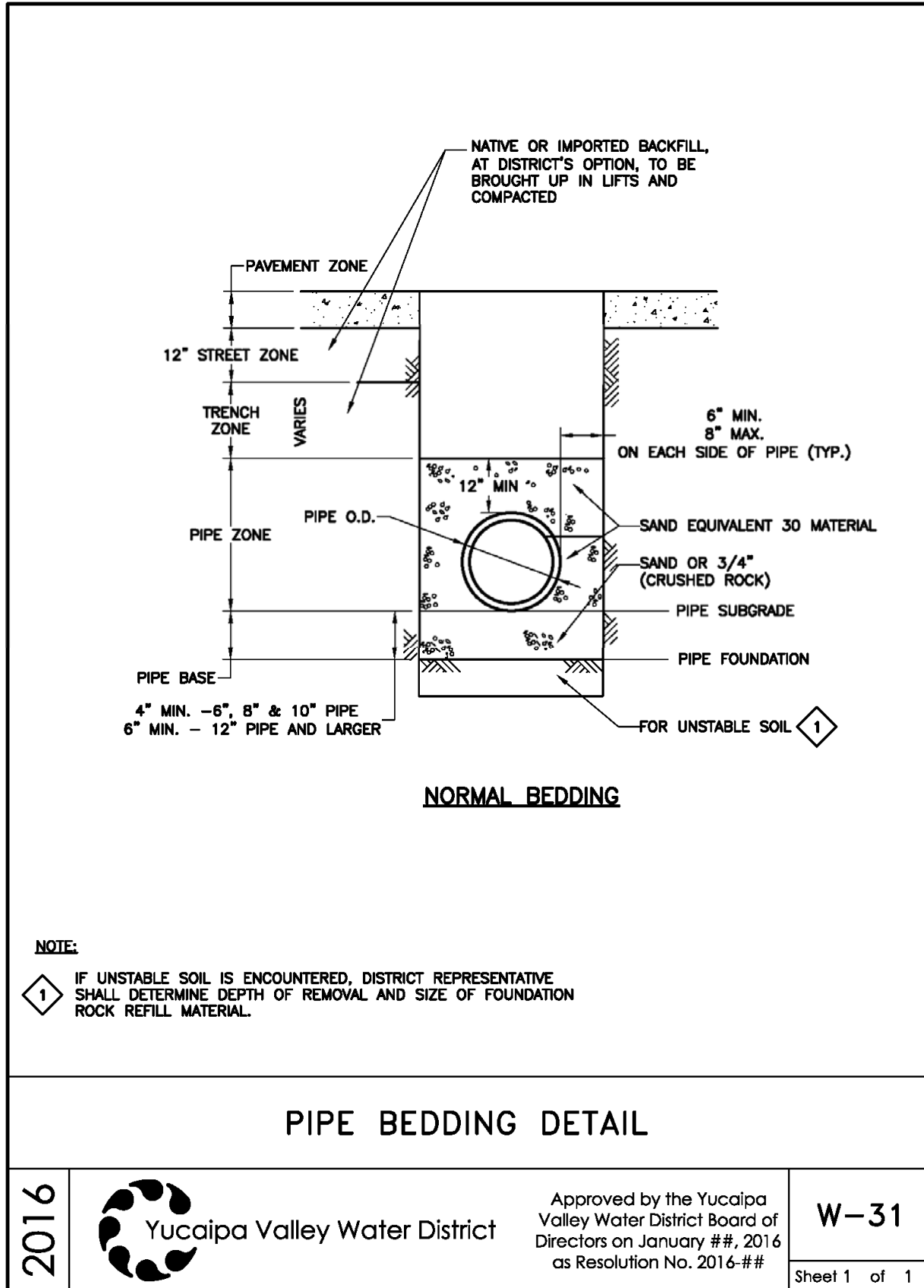


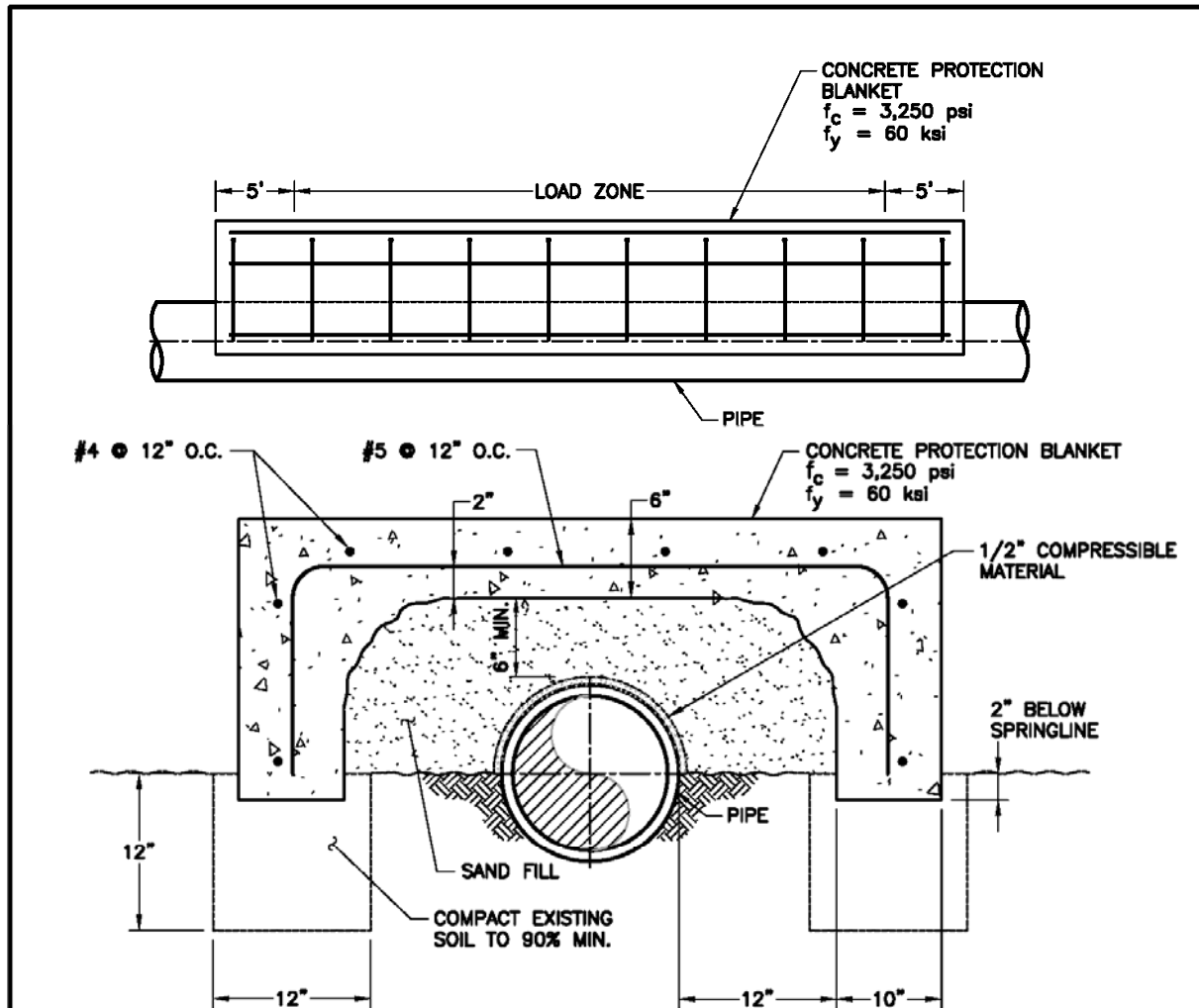
Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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NOTES:

1. CONCRETE ENCASEMENT SHALL BE USED WHEN COVER IS LESS THAN 36".
2. ENCASEMENT TO BE PLACED AGAINST UNDISTURBED NATURAL GROUND OR FILL COMPACTED TO 90% RELATIVE DENSITY.
3. NO.4 AND NO.5 STEEL REINFORCING BARS SHALL BE USED AS SPECIFIED.
4. TYPE OF CONCRETE ENCASEMENT TO BE USED WILL BE SHOWN ON PLANS OR AS SPECIFIED BY DISTRICT REPRESENTATIVE TO MEET UNFORESEEN FIELD CONDITIONS. UNLESS NOTED OTHERWISE, ENCASEMENT SHALL BE 3,250 PSI CONCRETE.
5. WHERE SLOPED TRENCHES ARE USED, WALLS WILL NOT BEGIN TO SLOPE CLOSER THAN 12" FROM THE TOP OF THE PIPE.

WATER PIPELINE PROTECTION DETAIL

2016



Yucaipa Valley Water District

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Yucaipa Valley Water District

12770 Second Street, Yucaipa, California 92399 Phone: (909) 797-5117

Standard Specifications for the Design and Processing, Furnishing of Materials, and Construction of Sewer Facilities

March __, 2016

YVWD SEWER FACILITY STANDARDS
DRAWING INDEX (NUMERICAL)

S-1	STANDARD LEGEND
S-2	SEWER MAINLINE LOCATION
S-3	MANHOLE DETAIL
S-4	CONCRETE BASE AND JOINT DETAIL
S-5	ADJUSTING EXISTING MANHOLE TO GRADE
S-6	MANHOLE SHAFT LOCATION DETAILS
S-7	TRAFFIC MANHOLE FRAME AND COVER
S-8	SPECIAL MANHOLE (20'-0" TO 30'-0" DEEP)
S-9	SPECIAL MANHOLE (30'+ DEEP)
S-10	DROP MANHOLE DETAIL (SPECIAL ACCEPTANCE ONLY)
S-11	GUARD POST DETAIL (EASEMENT AND OUTSIDE OF PAVING MANHOLE)
S-12	TERMINAL OR MAINLINE CLEANOUT DETAIL (SPECIAL ACCEPTANCE ONLY)
S-13	TERMINUS (CUL-DE-SAC) MANHOLE
S-14	NOT IN USE
S-15	VITRIFIED CLAY PIPELINE BEDDING DETAIL
S-16	PIPELINE BEDDING AND SPECIAL DETAILS
S-17	TRENCH REPAIR DETAIL
S-18	SEWER MAINLINE PROTECTION DETAIL
S-19	CONCRETE SLOPE ANCHORS
S-20	STEEL CASING PIPE
S-21	4" AND 6" SEWER SADDLE CONNECTION TO EXISTING MAINLINE
S-22	TYPICAL SEWER LATERAL
S-23	DEEP SEWER LATERAL DETAIL
S-24	BACKWATER VALVE DETAIL
S-25	BACKWATER VALVE INSTALLATION DETAIL
S-26	SEWER SAMPLING BOX
S-27	SEWER LATERAL CUTOFF WALL DETAIL
S-28	EROSION CONTROL CUTOFF WALL DETAIL

SEWER STANDARD INDEX

2016



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YVWD SEWER FACILITY STANDARDS
DRAWING INDEX (SUBJECT)

STANDARDS

- S-1 STANDARD LEGEND
- S-2 SEWER MAINLINE LOCATION

MANHOLES

- S-3 MANHOLE DETAIL
- S-4 CONCRETE BASE AND JOINT DETAIL
- S-5 ADJUSTING EXISTING MANHOLE TO GRADE
- S-6 MANHOLE SHAFT LOCATION DETAILS
- S-7 TRAFFIC MANHOLE FRAME AND COVER
- S-8 SPECIAL MANHOLE (20'-0" TO 30'-0" DEEP)
- S-9 SPECIAL MANHOLE (30'+ DEEP)
- S-10 DROP MANHOLE DETAIL (SPECIAL ACCEPTANCE ONLY)
- S-11 GUARD POST DETAIL (EASEMENT AND OUTSIDE OF PAVING MANHOLE)
- S-12 TERMINAL OR MAIN CLEANOUT DETAIL (SPECIAL ACCEPTANCE ONLY)
- S-13 TERMINUS (CUL-DE-SAC) MANHOLE

PIPE AND CASING DETAILS

- S-15 VITRIFIED CLAY PIPELINE BEDDING DETAIL
- S-16 PIPELINE BEDDING AND SPECIAL DETAILS
- S-17 TRENCH REPAIR DETAIL
- S-18 SEWER MAINLINE PROTECTION DETAIL
- S-19 CONCRETE SLOPE ANCHORS
- S-20 STEEL CASING PIPE

LATERALS

- S-21 4" AND 6" SEWER SADDLE CONNECTION TO EXISTING MAINLINE
- S-22 TYPICAL SEWER LATERAL
- S-23 DEEP SEWER LATERAL DETAIL
- S-24 BACKWATER VALVE DETAIL
- S-25 BACKWATER VALVE INSTALLATION DETAIL
- S-26 SEWER SAMPLING BOX
- S-27 SEWER LATERAL CUTOFF WALL DETAIL
- S-28 EROSION CONTROL CUTOFF WALL DETAIL

SEWER STANDARD INDEX

2016



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STANDARD DESIGN REQUIREMENTS:





















PLAN SCALE SIZES ARE REQUIRED TO BE DESIGNED AT 1:40. SPECIAL CONSTRUCTION DETAILS MAY BE ADJUSTED AS NECESSARY FOR DESIGN AND CONSTRUCTION PURPOSES.

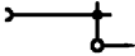



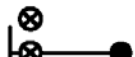



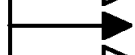
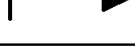

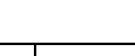


ALL PLAN SHEETS SHALL BE ON 24-INCH BY 36-INCH ARCHITECTURAL SHEET SIZE D.

ALL PROJECTS SHALL BE SUBMITTED TO THE DISTRICT ON MYLAR PRIOR TO CONSTRUCTION.

ALL PROJECTS, UPON COMPLETION, SHALL UPDATE THE MYLAR PLANS AND PROVIDE AUTOCAD FILES FOR DISTRICT USE AND RECORDS UPON COMPLETION.

STANDARD LEGEND

	RIGHT OF WAY (R.O.W.)
	CENTERLINE
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING RECYCLED WATER LINE
	PROPOSED RECYCLED WATER LINE
	EXISTING SEWER LINE
	PROPOSED SEWER LINE
	EXISTING GAS LINE
	PROPOSED GAS LINE
	SERVICE LATERAL
	ENCASEMENT
	EXISTING ELECTRICAL CONDUIT
	PROPOSED ELECTRICAL CONDUIT
	EXISTING TELEPHONE CONDUIT
	PROPOSED TELEPHONE CONDUIT
	EXISTING FIBER OPTIC CABLE
	PROPOSED FIBER OPTIC CABLE
	PORTLAND CEMENT CONCRETE IN SECTION
	PORTLAND CEMENT CONCRETE IN PLAN

	POWER POLE AND GUY LINE		CLEAN-OUT
	TRAFFIC SIGNAL EXISTING		HOUSE CONNECTION SEWER
	WATER WELL		WYE BRANCH
	BUTTERFLY VALVE		CUT-OFF WALL
	GATE VALVE	C.O.	CLEAN-OUT
	FIRE HYDRANT	D.I.P.	DUCTILE IRON PIPE
	BLOW-OFF	D.M.H.	DROP MANHOLE
	AIR & VACUUM VALVE ASSEMBLY (SIZE PER PLAN)	J.M.H.	JUNCTION MANHOLE
	POTABLE WATER QUALITY SAMPLE STATION	M.H.	MANHOLE
	RECYCLED WATER QUALITY SAMPLE STATION	V.C.P.	VITRIFIED CLAY PIPE

STANDARD DESIGN REQUIREMENTS AND LEGEND

2016

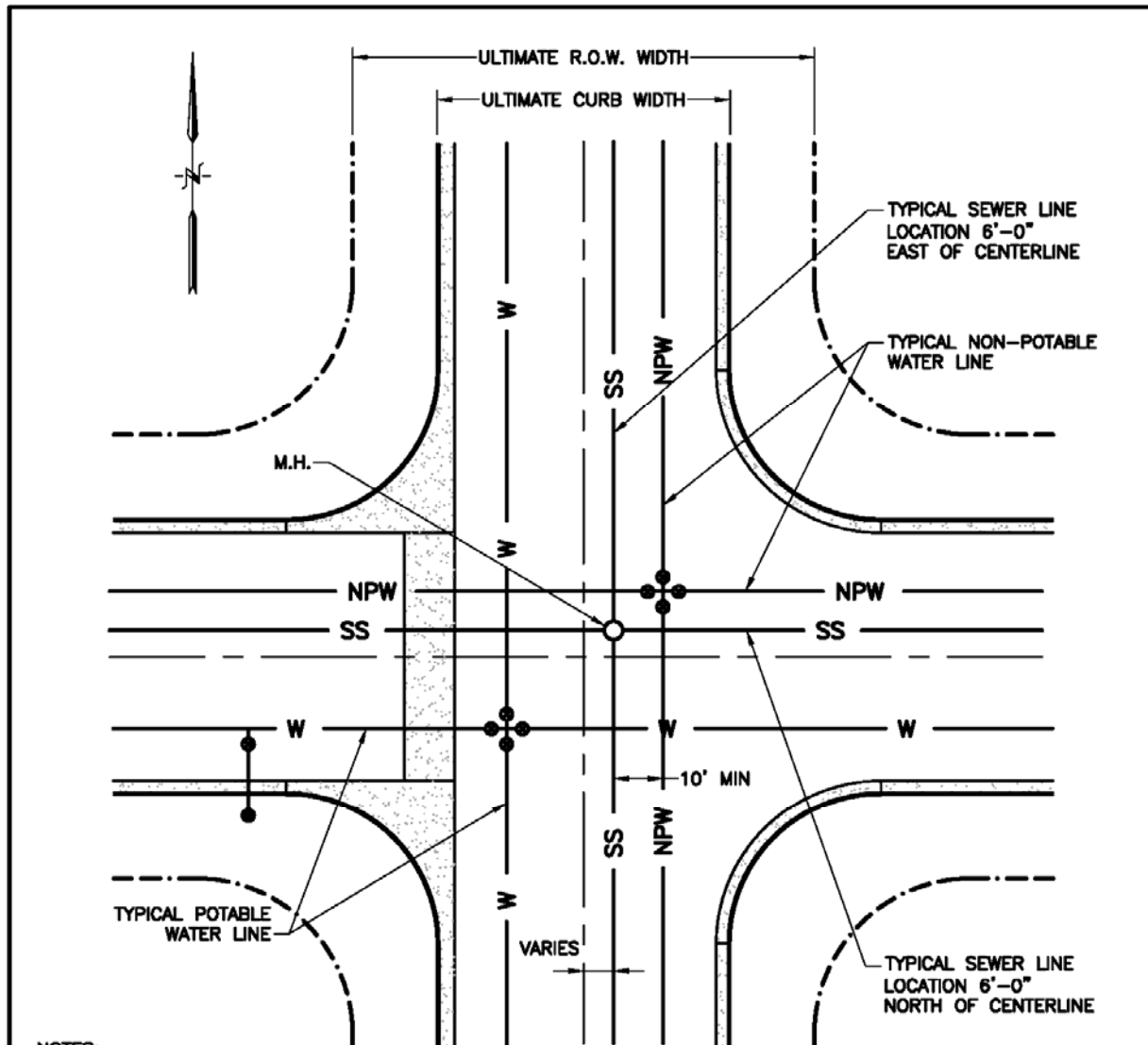


Yucaipa Valley Water District

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NOTES:

SEWER PIPELINE SIZE TO BE DETERMINED BY Y.V.W.D.

PLAN SCALE SIZES ARE REQUIRED TO BE DESIGNED AT 1:40. SPECIAL CONSTRUCTION DETAILS MAY BE ADJUSTED AS NECESSARY FOR DESIGN AND CONSTRUCTION PURPOSES.

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ALL PROJECTS, UPON COMPLETION, SHALL UPDATE THE MYLAR PLANS AND PROVIDE AUTOCAD FILES FOR DISTRICT USE AND RECORDS UPON COMPLETION.

SEWER MAINLINE LOCATION

2016

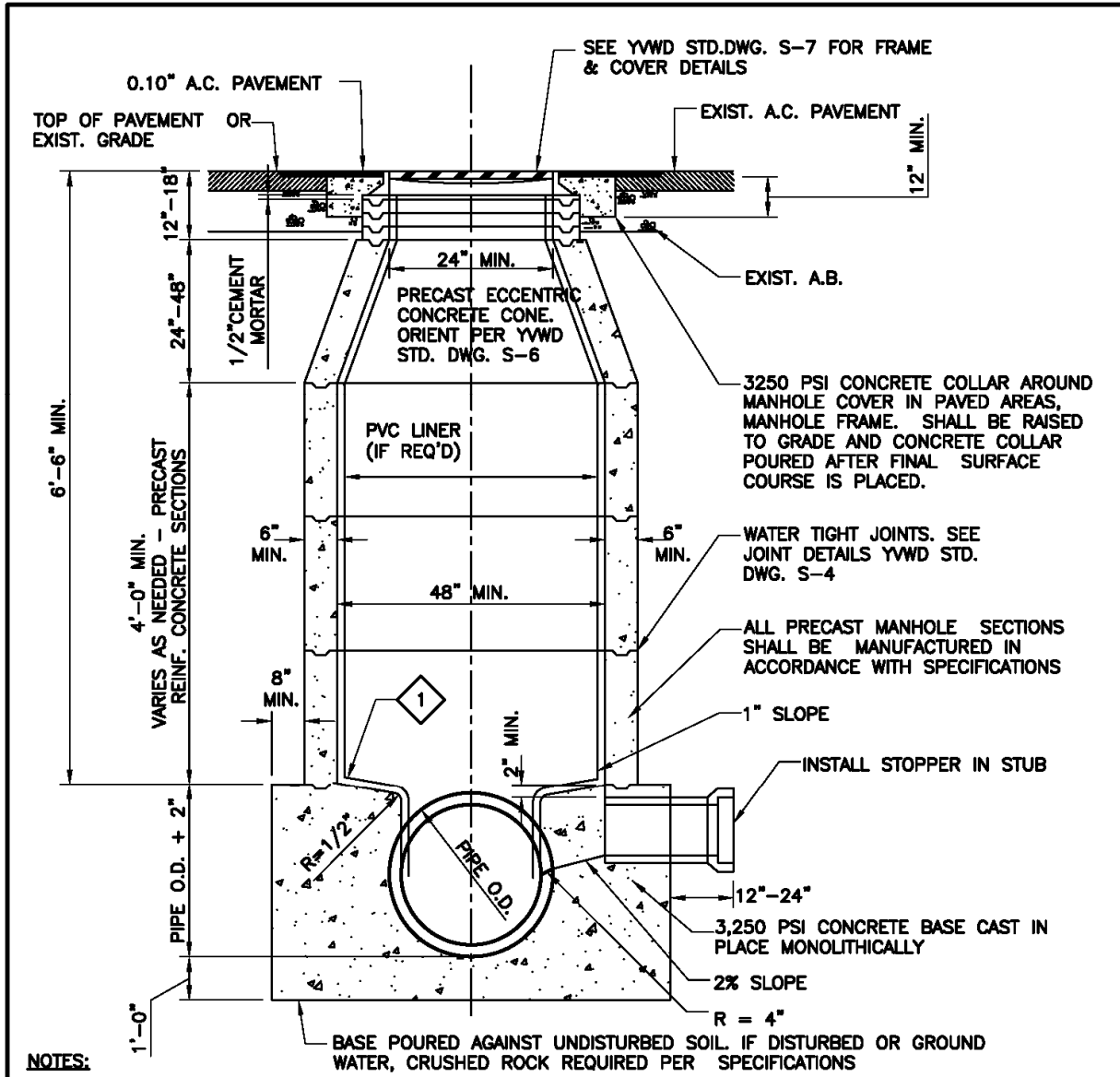


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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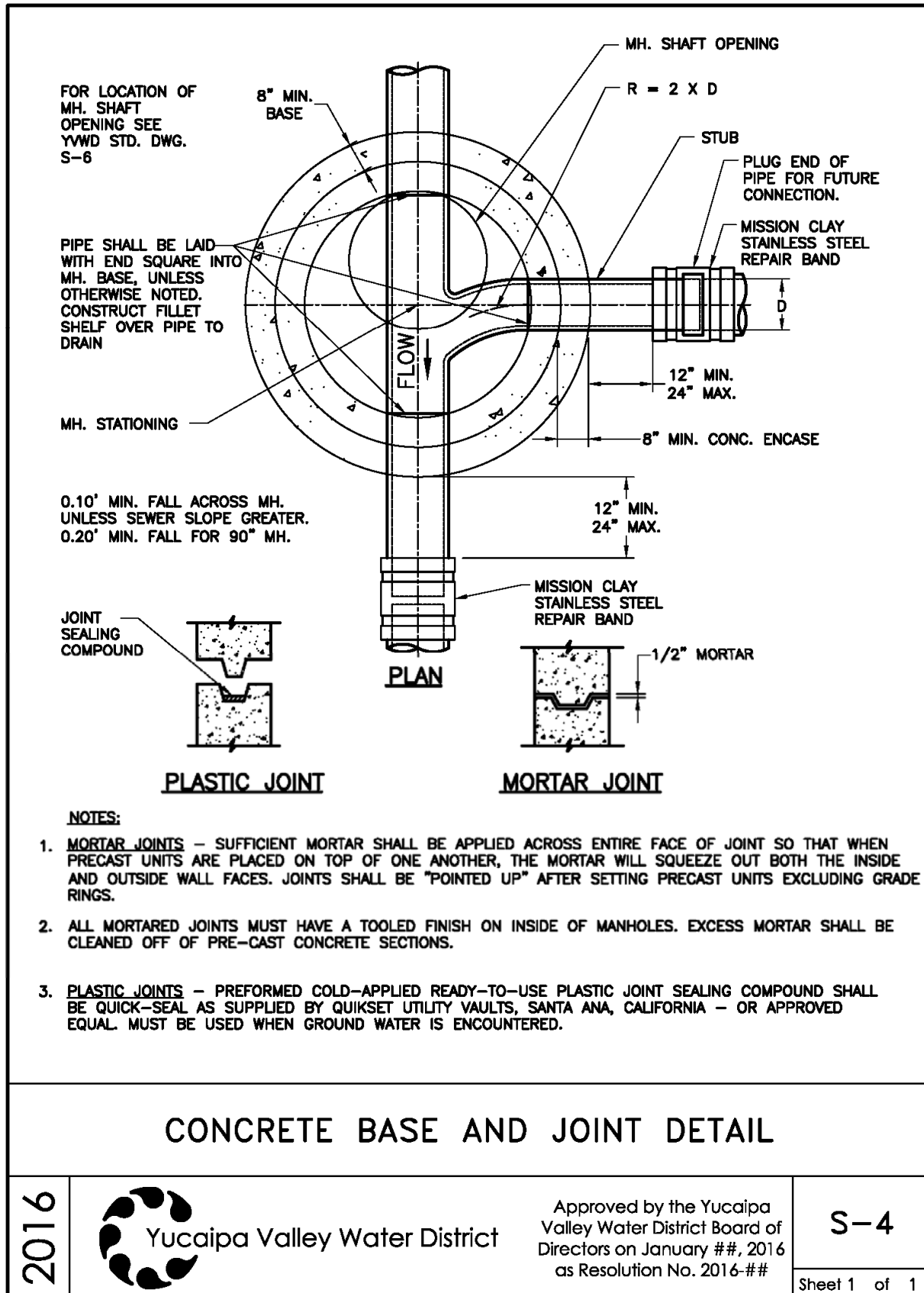


NOTES:

- 1. PLACE TWO HALF MOON SHAPED PLYWOOD COVERS (5/8" THICK MINIMUM) IN BOTTOM OF MANHOLE AFTER SHAFTS HAVE BEEN SET TO KEEP DEBRIS FROM ENTERING SEWER.
- 2. FOR DROP MANHOLE DETAIL SEE YWD STD. DWG. S-10. (SPECIAL ACCEPTANCE BY DISTRICT ENGINEER ONLY).
- 3. FOR MANHOLES LOCATED OUTSIDE PAVED AREAS THE FRAME AND COVER SHOULD BE SET A MINIMUM OF 0.1 FT. ABOVE FINISH GRADE IN SHOULDER AREAS, UNPAVED ROADS OR LANDSCAPED AREAS, AND 18" IN UNFINISHED AREAS.
- 4. ALL INLETS AND OUTLETS SHALL BE SUPPORTED WITH CONCRETE SUPPORTS PRIOR TO POURING MANHOLE BASE.

MANHOLE DETAIL

2016	 <p style="font-size: 1.2em; font-weight: bold;">Yucaipa Valley Water District</p>	<p style="font-size: 0.9em;">Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	S-3
			Sheet 1 of 1



2016

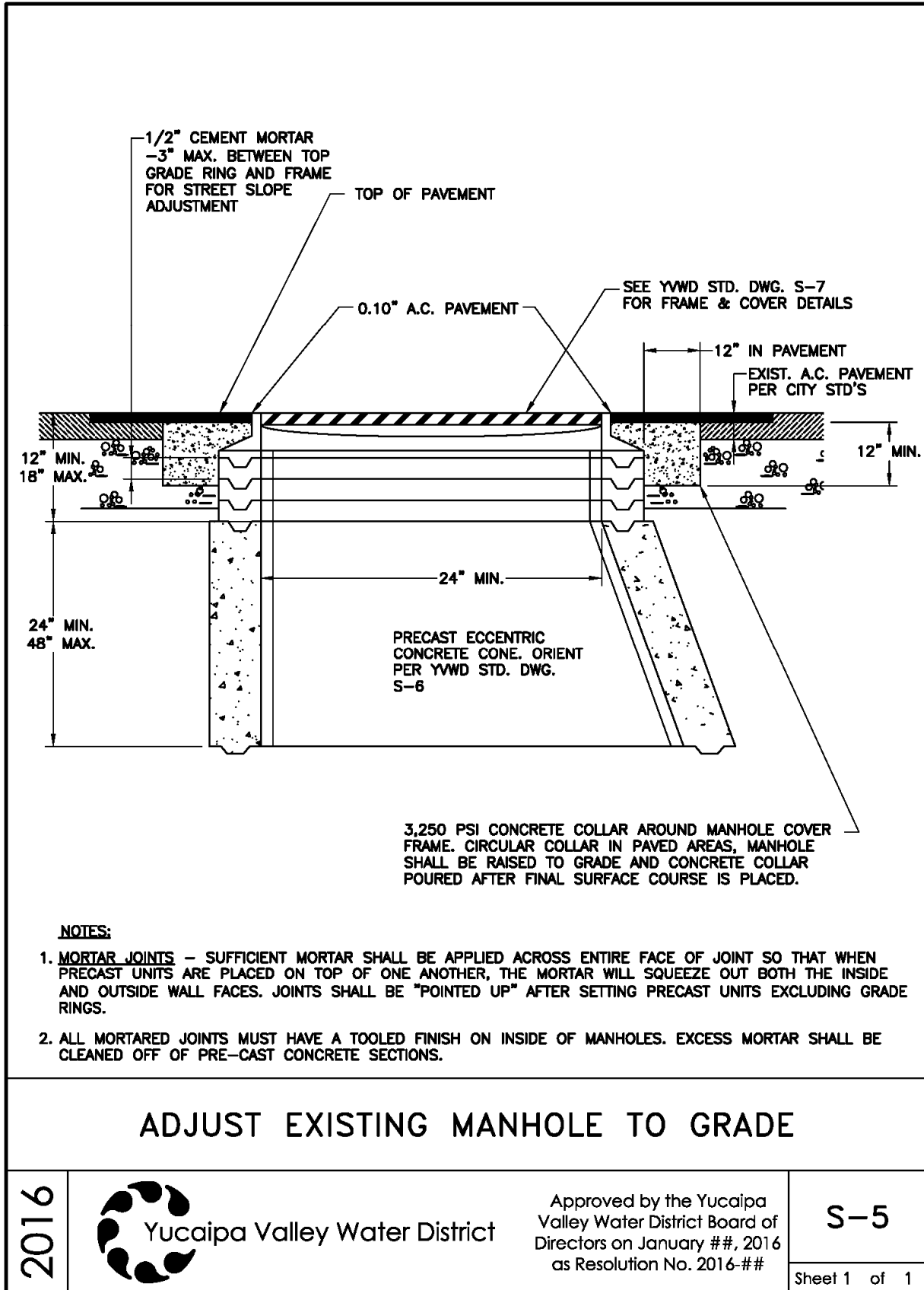


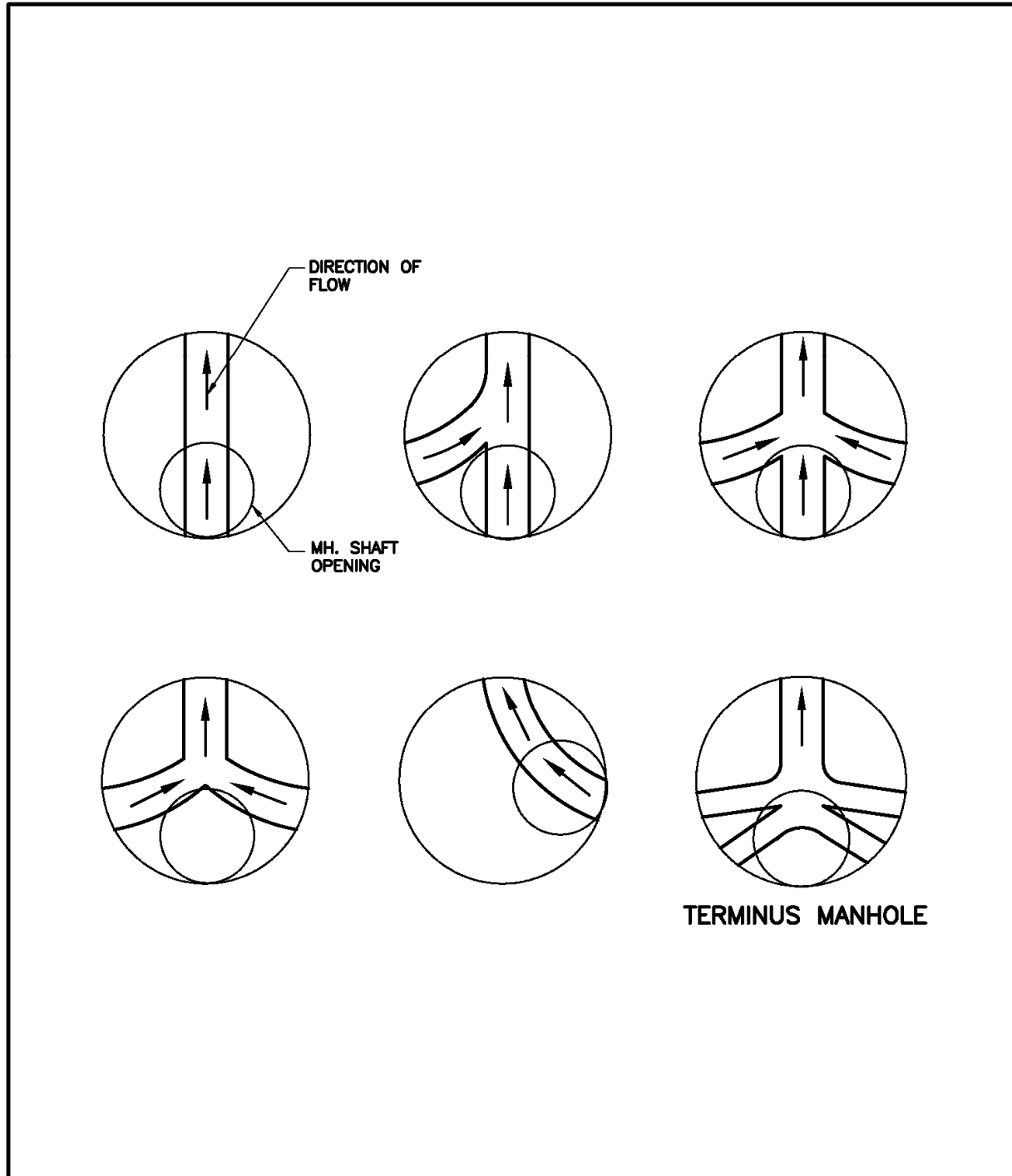
Yucaipa Valley Water District

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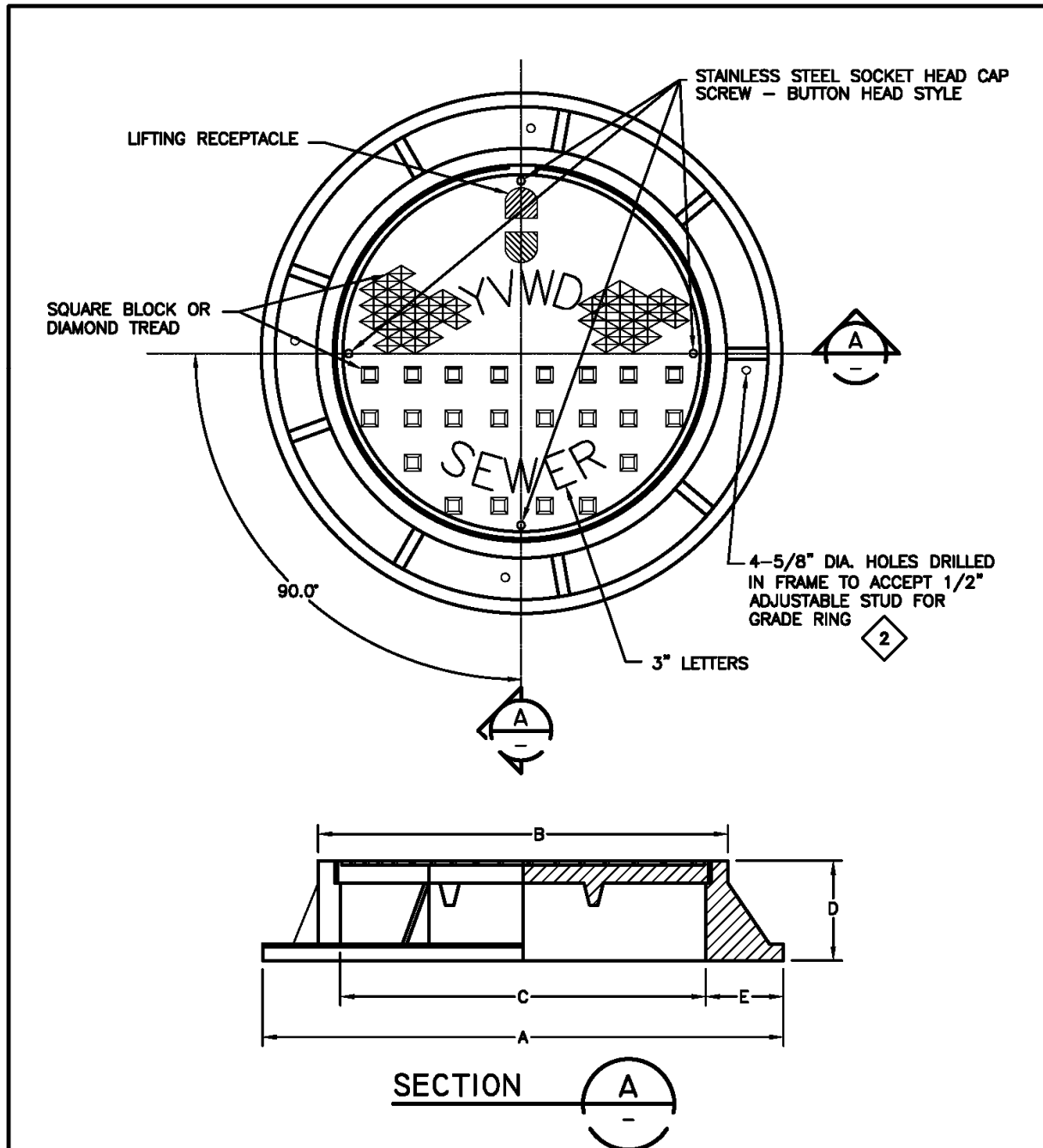
DIRECTION OF FLOW

MH. SHAFT OPENING

TERMINUS MANHOLE

MANHOLE SHAFT LOCATION DETAILS

2016	 Yucaipa Valley Water District	Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##	S-6
			Sheet 1 of 1



SEE S-7 SHEET 2 OF 2 FOR NOTES, MANHOLE DIMENSION SCHEDULE, AND MANHOLE SIZE SCHEDULE.

TRAFFIC MANHOLE FRAME AND COVER

2016



Yucaipa Valley Water District

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Sheet 1 of 2

NOTES:

1. 48" AND 60" MANHOLES SHALL HAVE 24" COVERS. 72" MANHOLES SHALL HAVE 30" COVERS.
2. WHERE FRAME AND COVER ARE SET 18" ABOVE GRADE, 4 1/2" DIA. INSERTS FOR ADJUSTABLE STUDS SHALL BE CAST IN TOP GRADE RING, ALIGNED AS DETAILED ON SHEET 1 OF 2. FRAME SHALL BE BOLTED TO GRADE RING.
3. WHERE MANHOLE IS LOCATED WITHIN AN EASEMENT, BOLT DOWN FRAME AND COVER SHALL BE REQUIRED.

MANHOLE DIMENSIONS		
SIZE	24"	30"
A	32"	38"
B	27 1/4"	33"
C	24"	30"
D	3.5"	6"
E	4"	4"

MANHOLE SIZES			
SEWER MAIN	MAX BRANCH SIZE	MANHOLE SIZE	FRAME AND COVER
8" - 15"	10"	48"	24"
18" - 21"	12"	60"	24"
24" - 36"	15"	72"	30"

TRAFFIC MANHOLE FRAME AND COVER

2016

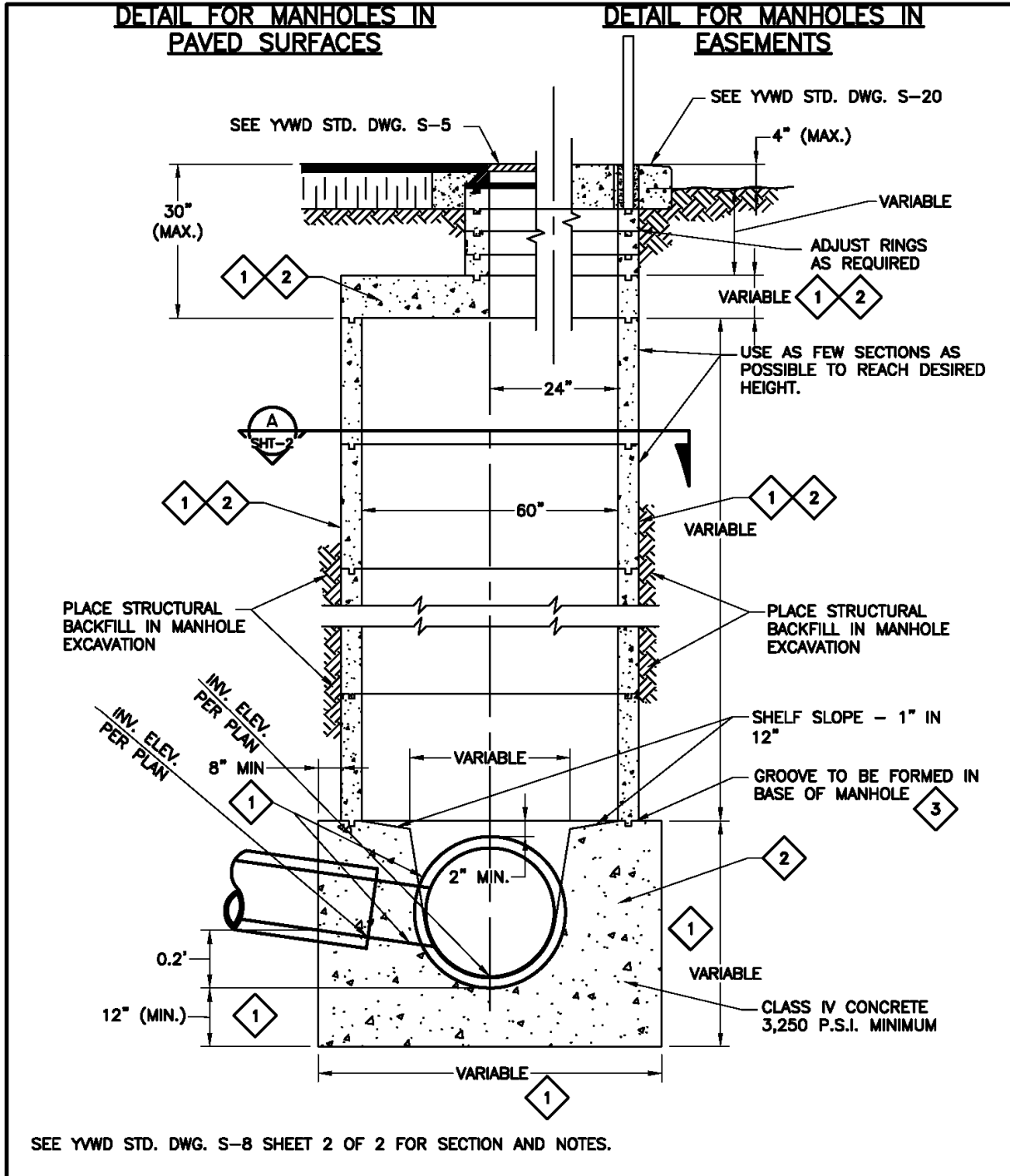


Yucaipa Valley Water District

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SPECIAL MANHOLE (20' TO 30' DEEP)

2016

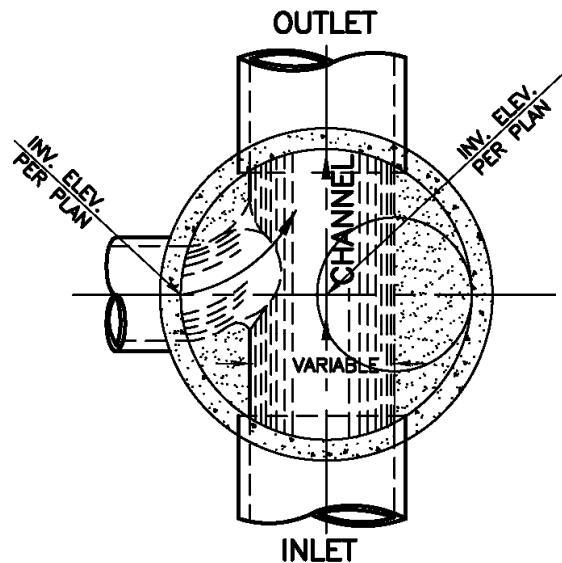


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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SECTION A
SHT-1

NOTES:

1. DIMENSIONS PER MANHOLE MANUFACTURER'S SPEC.
2. STEEL REINFORCEMENT PER MANHOLE MANUFACTURER'S SPECIFICATIONS.
3. INVERT CHANNELS, SHELF AND GROOVE SHALL BE FORMED MONOLITHICALLY WITH THE MANHOLE BASE, NO REWORKING OF CONCRETE WHICH HAS PARTIALLY HARDENED.
4. ALL SECTIONS TO BE WASHED, TO REMOVE ANY LOOSE MATERIAL AND WHILE STILL WET, THEY ARE TO BE SET IN 1:3 MORTAR TRIMMED SMOOTH INSIDE AND OUTSIDE AT TIME OF SETTING, INCLUDING FRAME. INSIDE MORTARED JOINTS MUST HAVE A TOOLED FINISH. EXCESS MORTAR SHALL BE CLEANED OFF PRE-CAST CONCRETE SECTIONS.
5. CONCRETE FOR MANHOLE SECTION 3,250 P.S.I. MIN.
6. PROVIDE FLEXIBLE JOINT IN ALL SEWER PIPES OUTSIDE MANHOLE BUT WITHIN 12"-24" OF CONCRETE BASE. NO BELLS, USE MISSION CLAY STAINLESS STEEL BAND REPAIR COUPLINGS OR EQUAL.
7. ADJUSTMENT OF FRAME AND COVER AFTER FINAL PAVING OPERATIONS. FRAME AND COVER SHALL BE SET 1/4" BELOW PAVING TO ALLOW FOR PAVING SETTLEMENT.
8. PRECAST MANHOLE SUPPLIER TO SUBMIT STRUCTURAL CALCULATION TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
 USE: SOIL ACTIVE PRESSURE = 49 P.C.F.
 SOIL BEARING PRESSURE = 1,500 P.S.F. (OR VALUES PER APPROVED SOIL REPORT)

SPECIAL MANHOLE (20' TO 30' DEEP)

2016

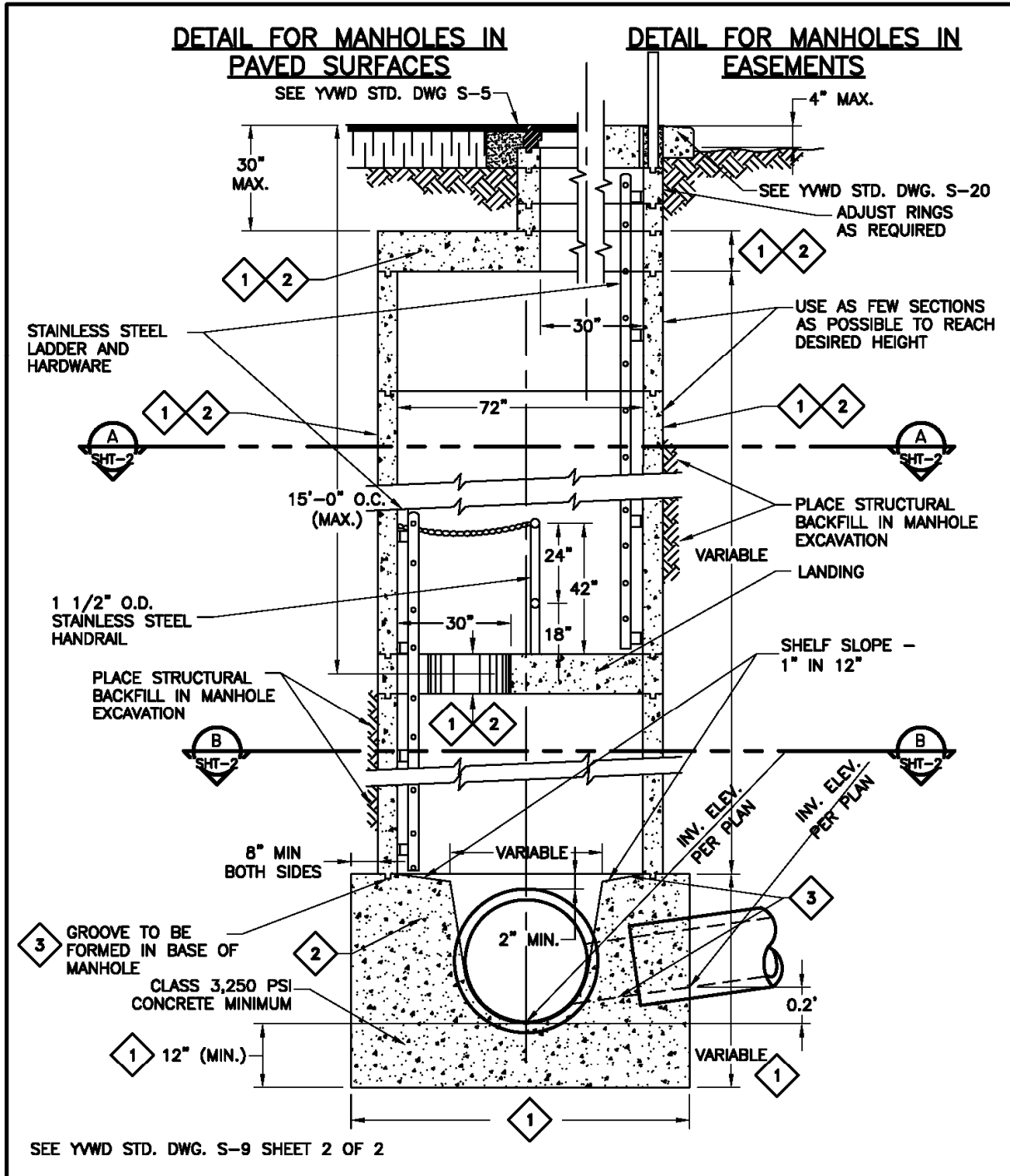


Yucaipa Valley Water District

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SPECIAL MANHOLE (30'+ DEEP)

2016

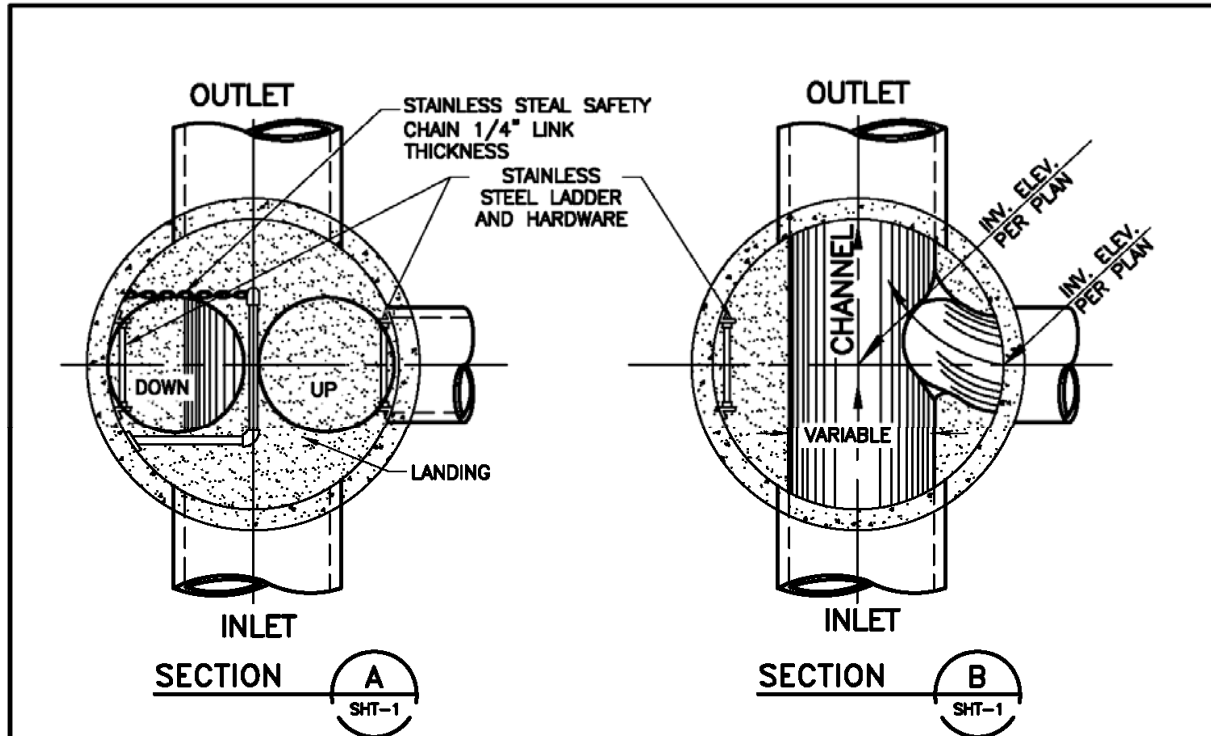


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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NOTES:

SEE YVWD STD. DWG. S-9 SHEET 1 OF 2

1. DIMENSIONS PER MANHOLE MANUFACTURER'S SPEC.
2. STEEL REINFORCEMENT PER MANHOLE MANUFACTURER'S SPECIFICATIONS.
3. INVERT CHANNELS, SHELF AND GROOVE SHALL BE FORMED MONOLITHICALLY WITH THE MANHOLE BASE, NO REWORKING OF CONCRETE WHICH HAS PARTIALLY HARDENED.
4. ALL SECTIONS TO BE WASHED, TO REMOVE ANY LOOSE MATERIAL AND WHILE STILL WET, THEY ARE TO BE SET IN 1:3 MORTAR TRIMMED SMOOTH INSIDE AND OUTSIDE AT TIME OF SETTING, INCLUDING FRAME. INSIDE MORTARED JOINTS MUST HAVE A TOOLED FINISH. EXCESS MORTAR SHALL BE CLEANED OFF PRE-CAST CONCRETE SECTIONS.
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8. PRECAST MANHOLE SUPPLIER TO SUBMIT STRUCTURAL CALCULATION TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
 USE: SOIL ACTIVE PRESSURE = 49 P.C.F.
 SOIL BEARING PRESSURE = 1,500 P.S.F. (OR VALUES PER APPROVED SOIL REPORT)

SPECIAL MANHOLE (30'+ DEEP)

2016

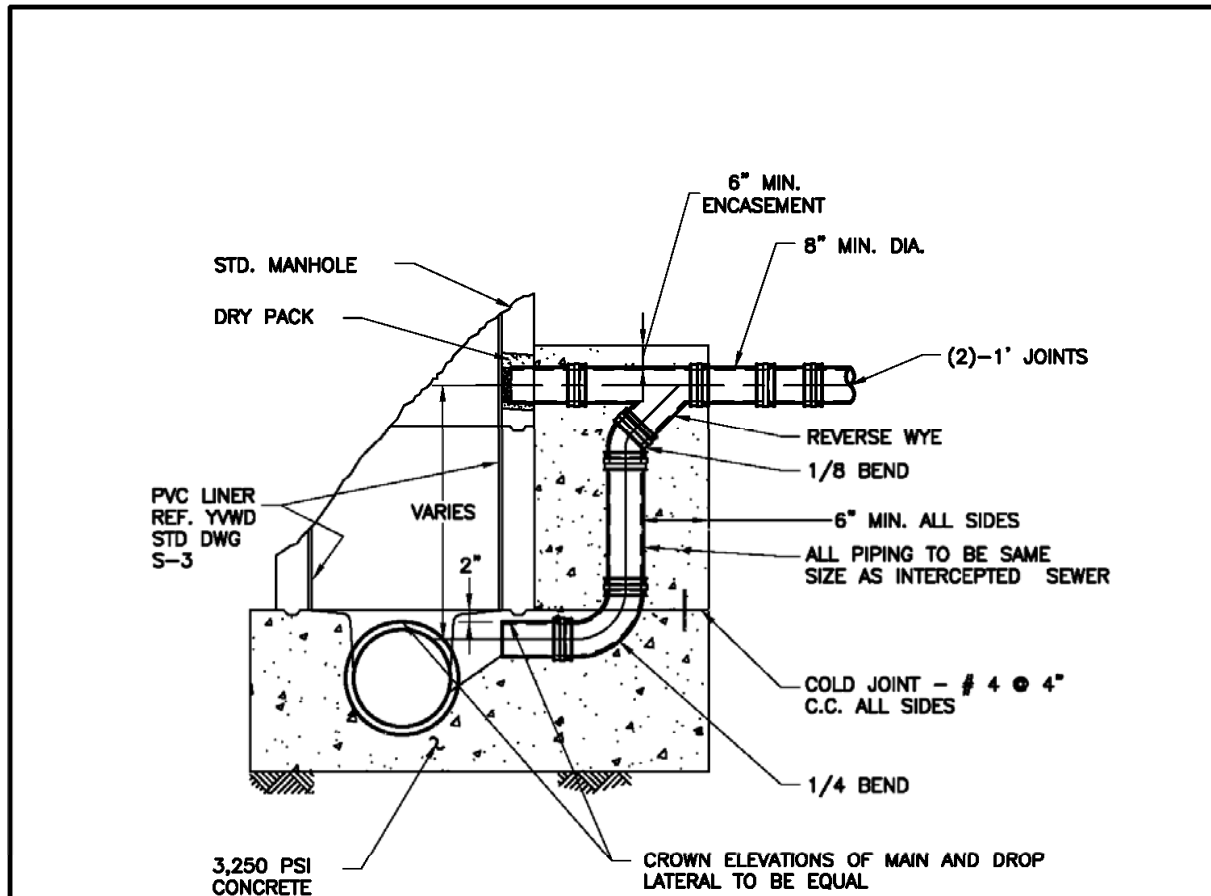


Yucaipa Valley Water District

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SECTION

NOTES:

1. DROP MANHOLE ONLY TO BE USED FOR SPECIAL SITUATIONS, AND SHALL NOT BE CONSTRUCTED WITHOUT PRIOR APPROVAL.
2. ALL NEW OPENINGS CONSTRUCTED INTO MANHOLE SHALL BE DONE BY CORE DRILLING.
3. INTERIOR WALL OF MANHOLE TO BE LINED WITH PVC LINER PER SPECIFICATIONS.

**DROP MANHOLE DETAIL
(SPECIAL ACCEPTANCE ONLY)**

2016

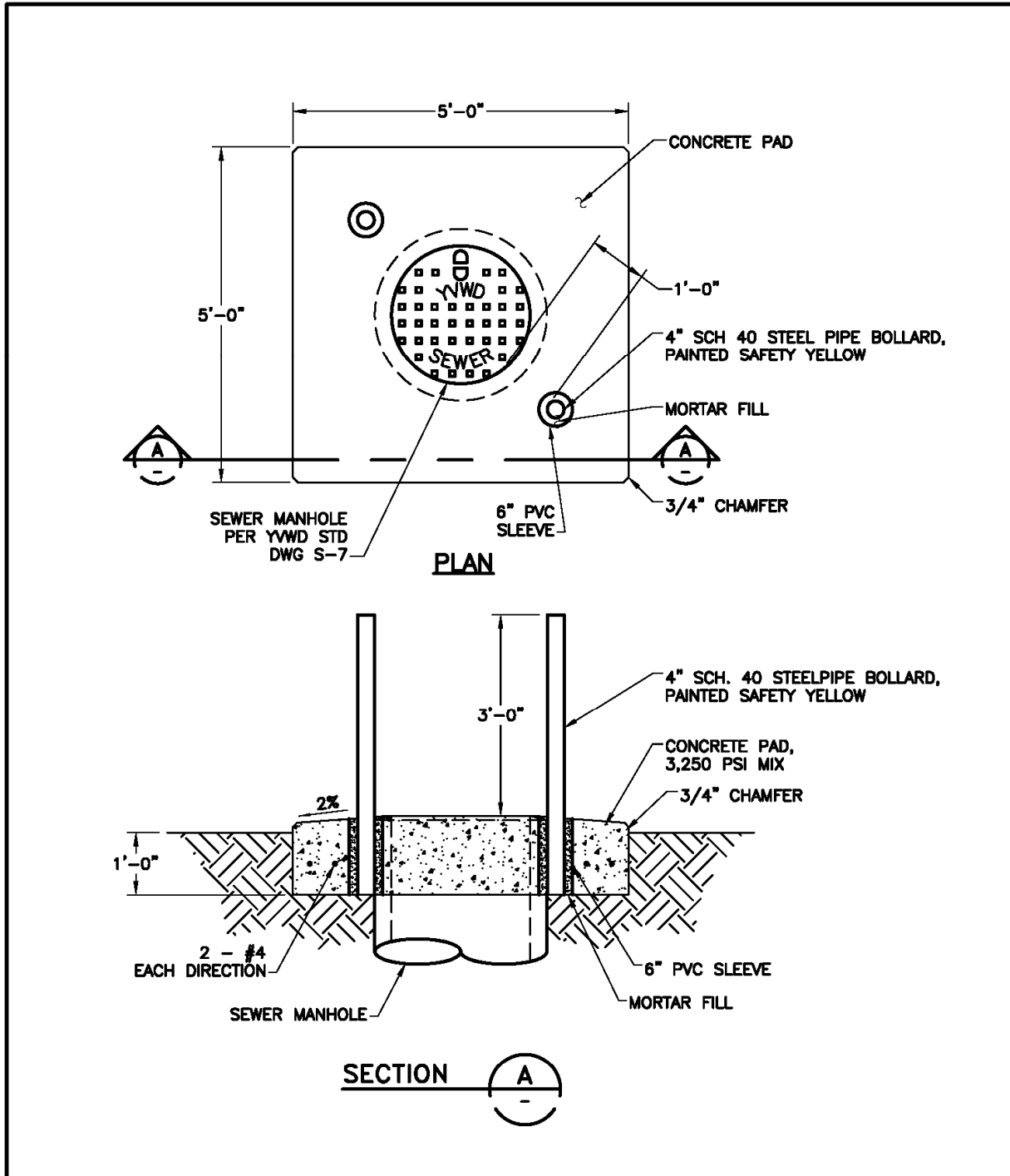


Yucaipa Valley Water District

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Sheet 1 of 1



**GUARD POST DETAIL
(EASEMENT AND OUTSIDE OF PAVING MANHOLE)**

2016

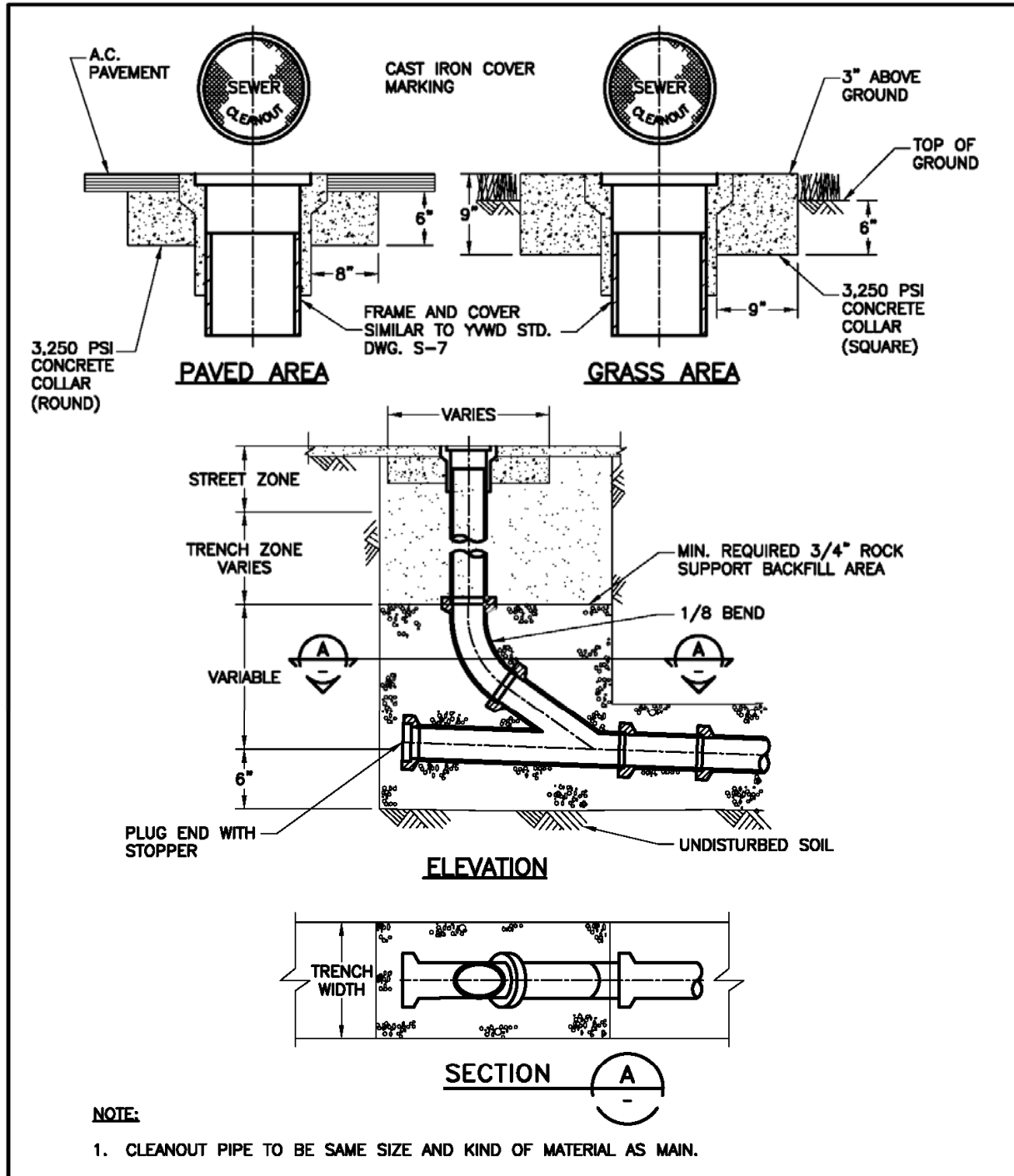


Yucaipa Valley Water District

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**TERMINAL OR MAINLINE CLEANOUT DETAIL
 (SPECIAL ACCEPTANCE ONLY)**

2016

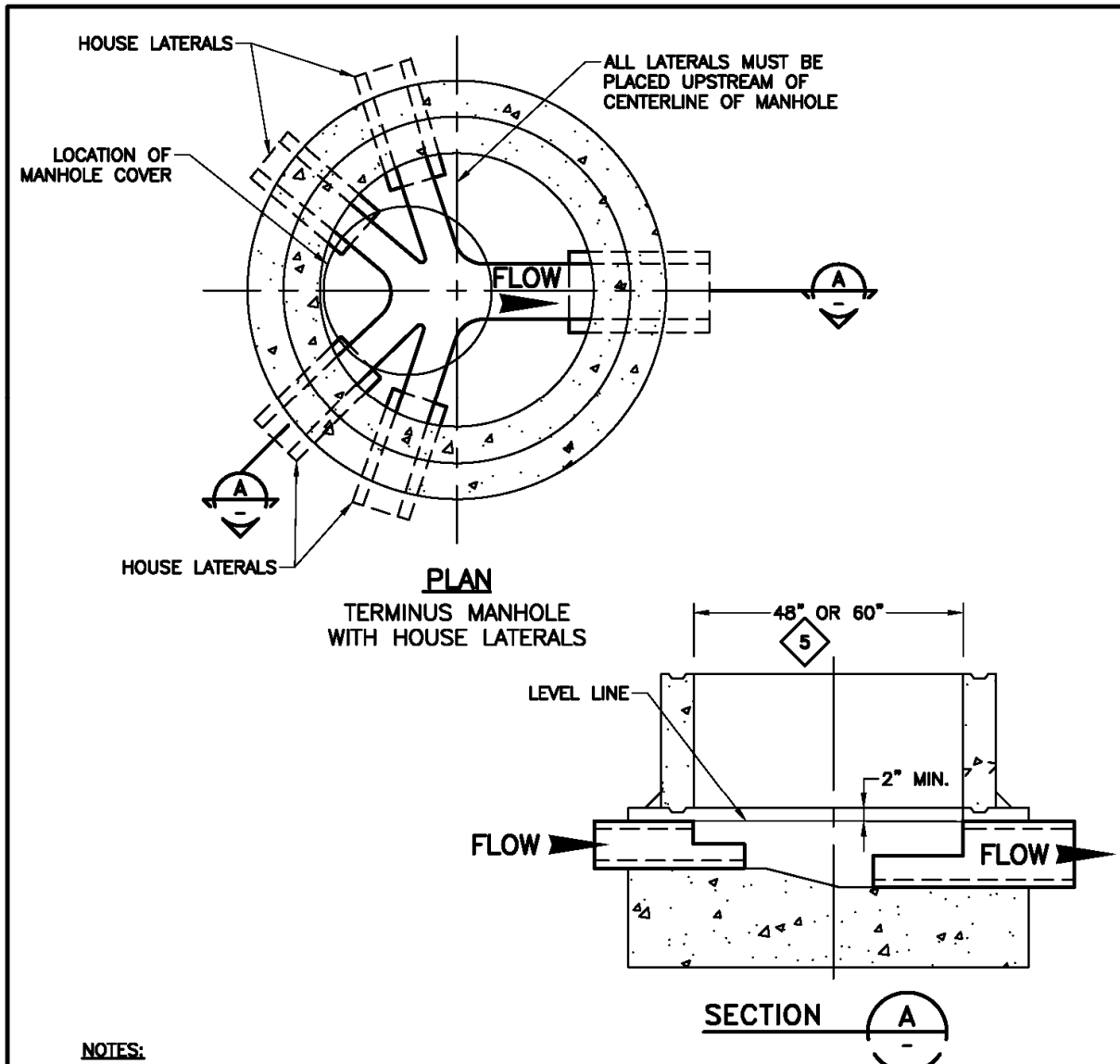


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NOTES:

1. REFER TO STANDARD DRAWINGS OF MANHOLES FOR DETAILS PERTAINING TO MANHOLES ONLY.
2. THE TOP 1/2 DIAMETER OF THE PIPE IS TO BE BROKEN OUT TO A NEAT LINE. BROKEN EDGES SHALL BE PLASTERED SMOOTH WITH CEMENT MORTAR.
3. THE MAXIMUM NUMBER OF LATERALS INTO A TERMINUS MANHOLE SHALL BE FOUR.
4. THE MAXIMUM NUMBER OF LATERALS INTO A KNUCKLE MANHOLE SHALL BE THREE.
5. ALL MANHOLES WITH THREE OR MORE CONNECTING LATERALS SHALL BE 5'-0" DIAMETER.

TERMINUS (CUL-DE-SAC) MANHOLE

2016

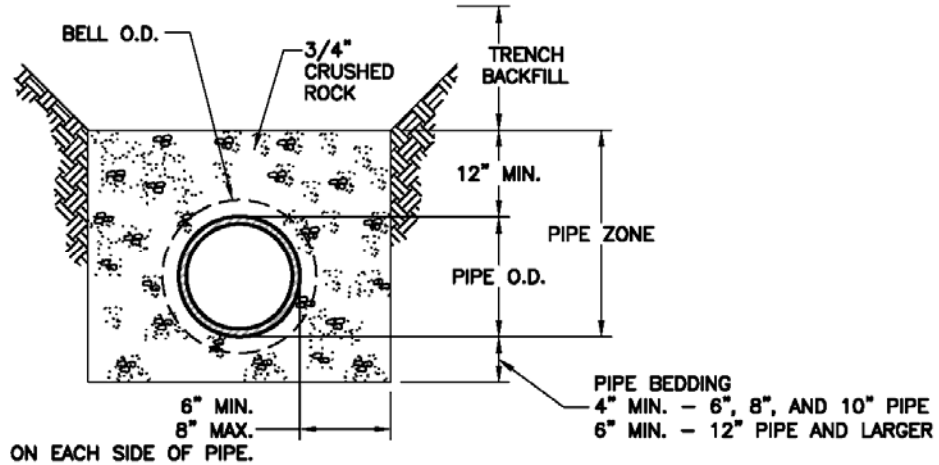


Yucaipa Valley Water District

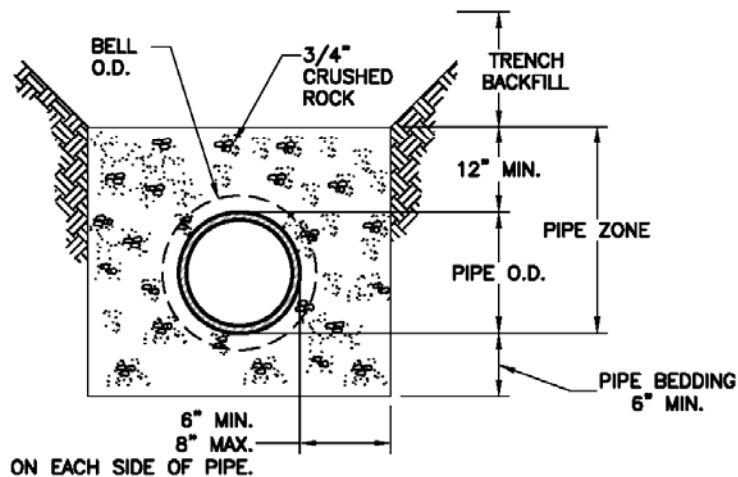
Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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LOAD FACTOR=1.1



LOAD FACTOR=2.2

NOTES:

1. IF UNSTABLE SOIL IS ENCOUNTERED, DISTRICT REPRESENTATIVE SHALL DETERMINE DEPTH OF REMOVAL AND SIZE OF FOUNDATION ROCK REFILL MATERIAL.

VITRIFIED CLAY PIPELINE BEDDING DETAIL

2016



Yucaipa Valley Water District

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Sheet 1 of 2

MINIMUM LOAD FACTOR – UNLIMITED TRENCH WIDTH							
SEWER DIAMETER	DEPTH OF COVER						
	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
8"	1.1	1.1	1.1	2.2	2.2	2.2	2.2
10"	1.1	1.1	2.2	2.2	2.2	2.2	-
12"	1.1	2.2	2.2	2.2	2.2	-	-
15"	1.1	2.2	2.2	2.2	-	-	-

NOTES:

- 3/4" CRUSHED ROCK SHALL BE PER STANDARD SPECIFICATIONS, WITH THE FOLLOWING GRADATIONS:

SIEVE	% PASSING
1"	100 %
3/4"	90 - 100%
1/2"	20 - 55%
3/8"	0 - 15%
NO. 4	0 - 5%

- FOR SEWER DIAMETERS DIFFERENT THAN SHOWN AND FOR DEPTHS OF COVER DIFFERENT THAN SHOWN, DISTRICT SHALL APPROVE PIPE BEDDING AND PIPE ZONE BACKFILL PRIOR TO CONSTRUCTION.
- WHEN DEPTH REACHES 10'-0", ALL PIPE ZONE BEDDING SHALL BE 3/4" CRUSHED ROCK WITH A MINIMUM DEPTH OF 6" BELOW PIPE UNLESS OTHERWISE NOTED ON PLANS.

VITRIFIED CLAY PIPELINE BEDDING DETAIL

2016

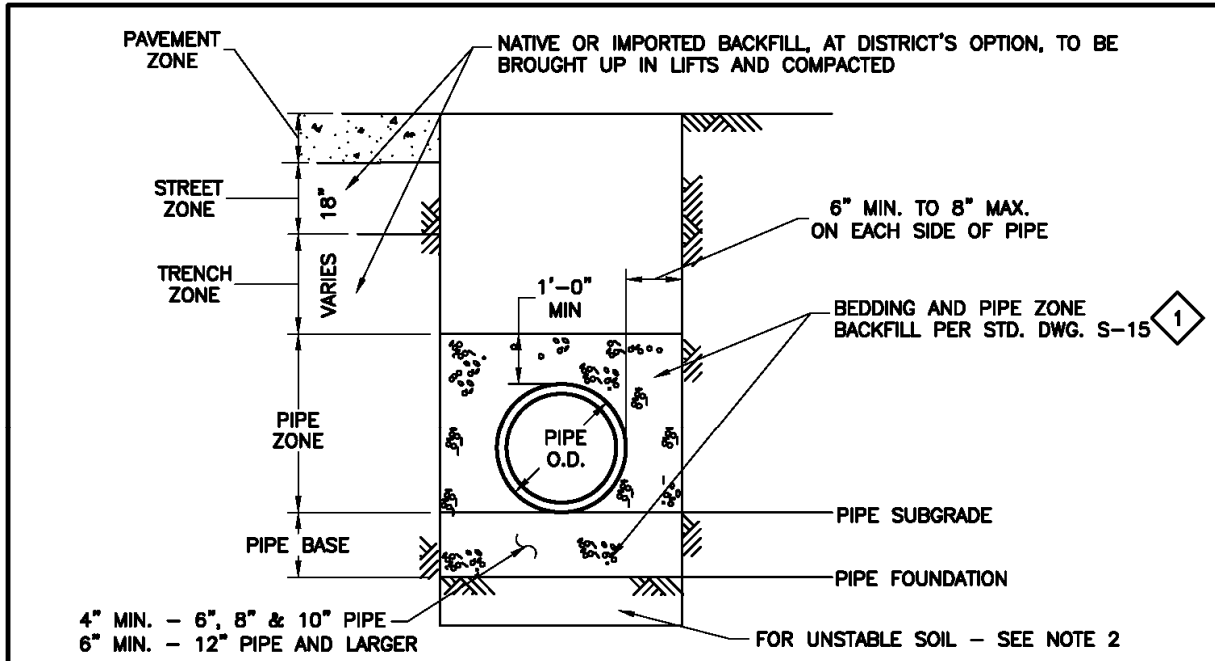


Yucaipa Valley Water District

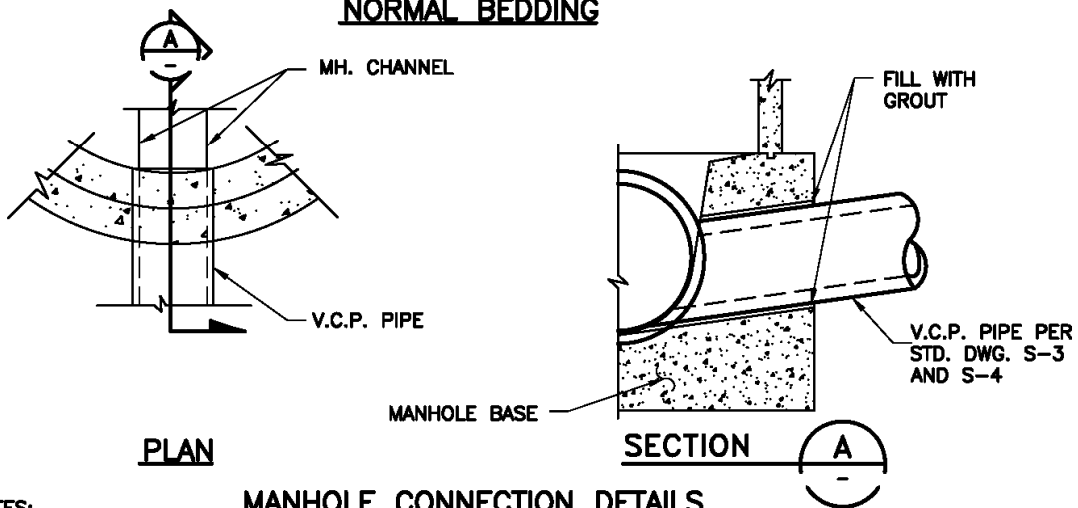
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NORMAL BEDDING



MANHOLE CONNECTION DETAILS

NOTES:

1. CONCRETE ENCASEMENT PER YVWD STD. DWG. S-18 SHALL BE USED WHERE THE TRENCH WIDTH AT THE UPPER LIMIT OF THE PIPE ZONE EXCEEDS THE MAX. WIDTH SPECIFIED ABOVE.
2. IF UNSTABLE SOIL IS ENCOUNTERED, DISTRICT REPRESENTATIVE SHALL DETERMINE DEPTH OF REMOVAL AND SIZE OF FOUNDATION ROCK REFILL MATERIAL.
3. SEE YVWD STD. DWGS. S-3, S-4, AND S-5 FOR MANHOLE DETAILS.

PIPELINE BEDDING AND SPECIAL DETAILS

2016

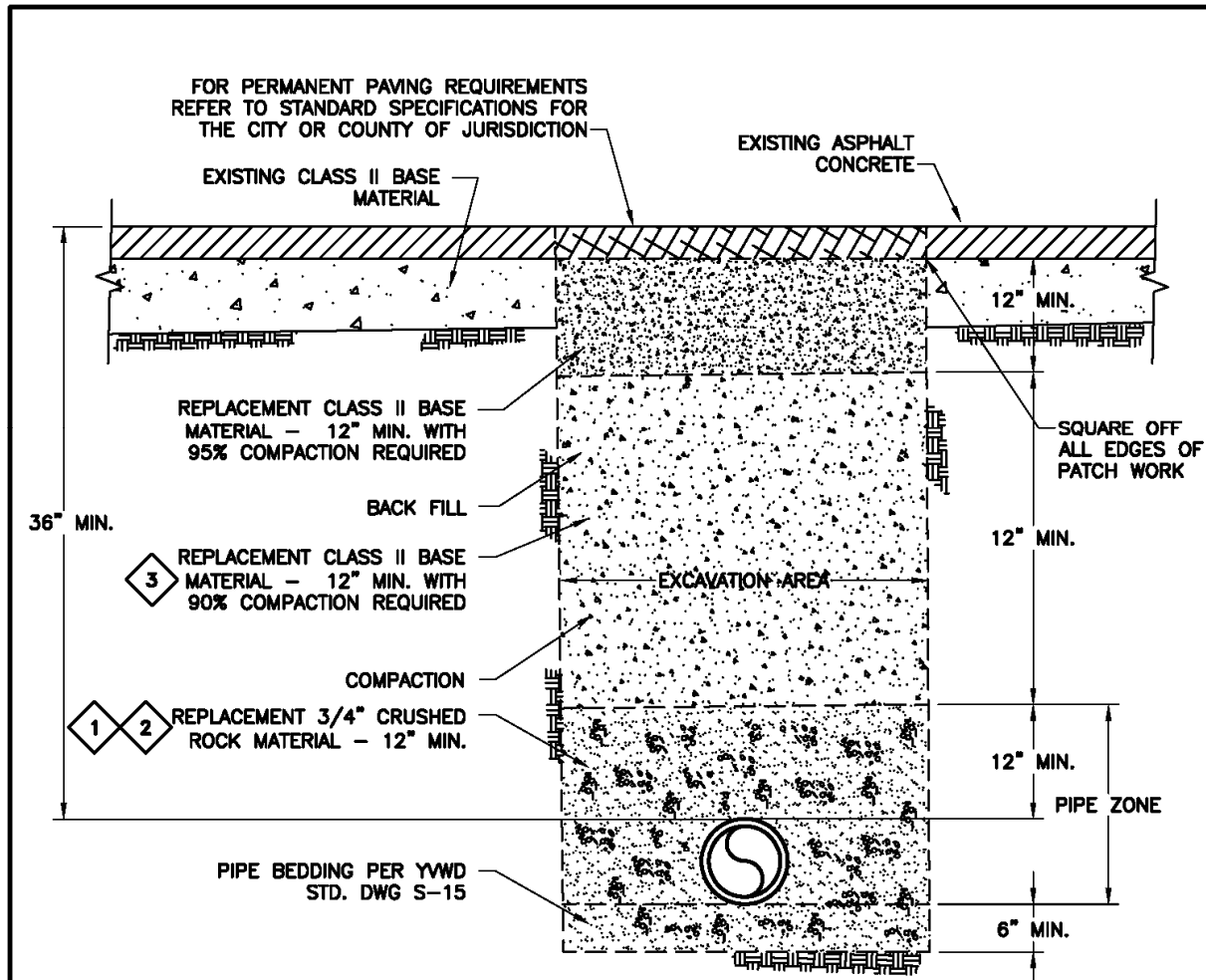


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NOTES:

1. 3/4" CRUSHED ROCK MATERIAL SHALL BE USED FOR PIPE ZONE BACK FILL. REMAINING BACK FILL WILL BE IN ACCORDANCE WITH DISTRICT REQUIREMENTS.
2. WHEN DEPTH REACHES 10'-0", ALL PIPE ZONE BEDDING SHALL BE 3/4" CRUSHED ROCK WITH A MINIMUM DEPTH OF 6" BELOW PIPE UNLESS OTHERWISE NOTED ON PLANS.
3. OUTSIDE OF STREET RIGHT OF WAY, COMPACTION SHALL BE 90%.
 4. ADDITIONAL ARTERIAL STREET BACKFILL MAY BE REQUIRED BY APPROPRIATE CITY JURISDICTION.
 4. SEE SHEET 2 OF 2 FOR PIPE VS. TRENCH SIZES.

TRENCH REPAIR DETAIL

2016



Yucaipa Valley Water District

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TRENCH REPAIR—PIPE SIZE VS TRENCH SIZE		
PIPE SIZE—INCHES (INSIDE DIAMETER)	TRENCH WIDTH—INCHES	
	MINIMUM	MAXIMUM
4	20	28
6	22	32
8	24	32
10	26	36
12	30	36
14	32	42
16	34	42

TRENCH REPAIR DETAIL

2016

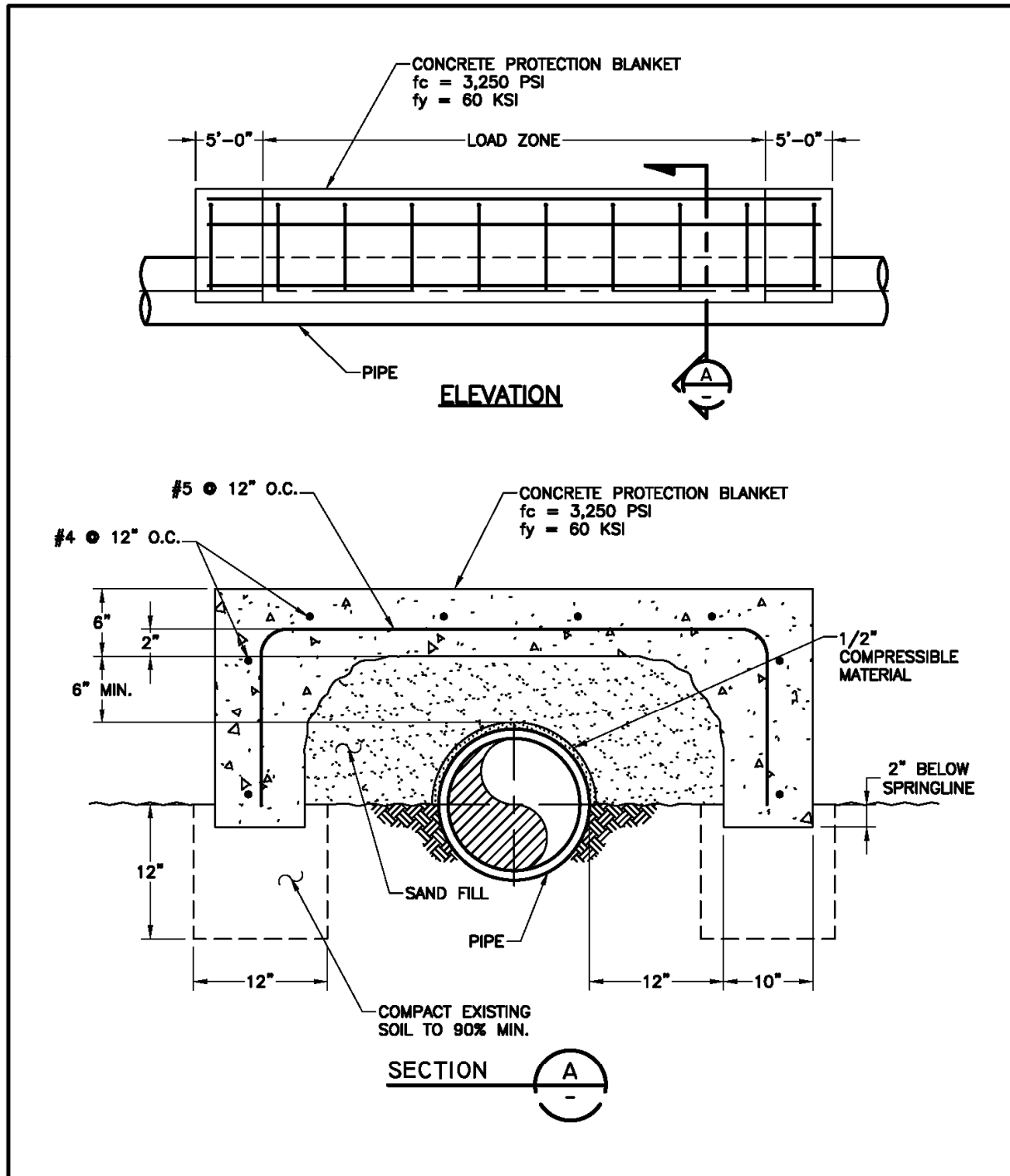


Yucaipa Valley Water District

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SEWER MAINLINE PROTECTION DETAIL

2016

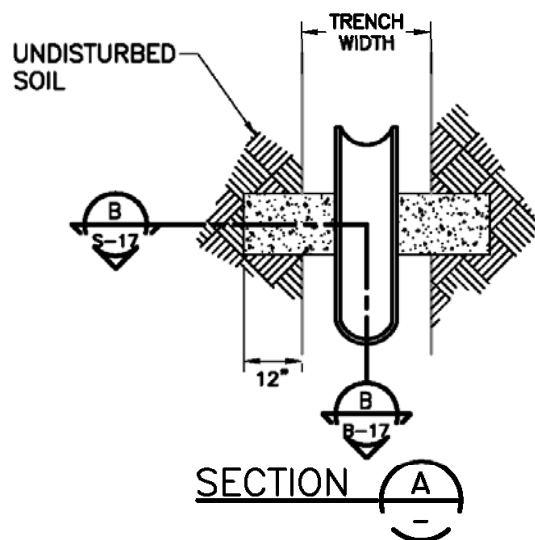
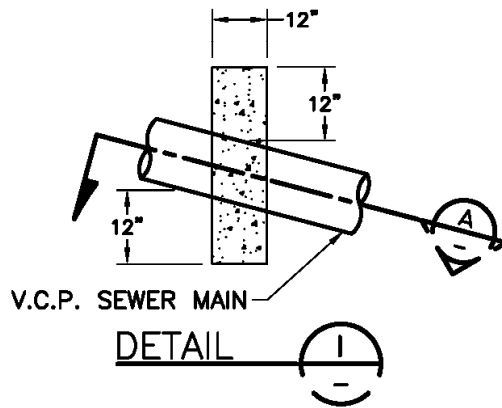
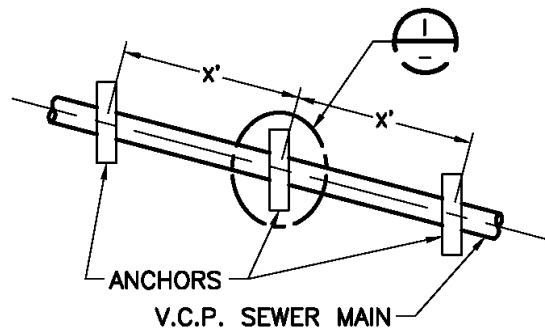


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SEE YVWD. STD. DWG. S-17 SHEET 2 OF 2 FOR SECTION B, REINFORCING STEEL PATTERN, PIPE SLOPE SCHEDULE, AND NOTES.

CONCRETE SLOPE ANCHORS

2016

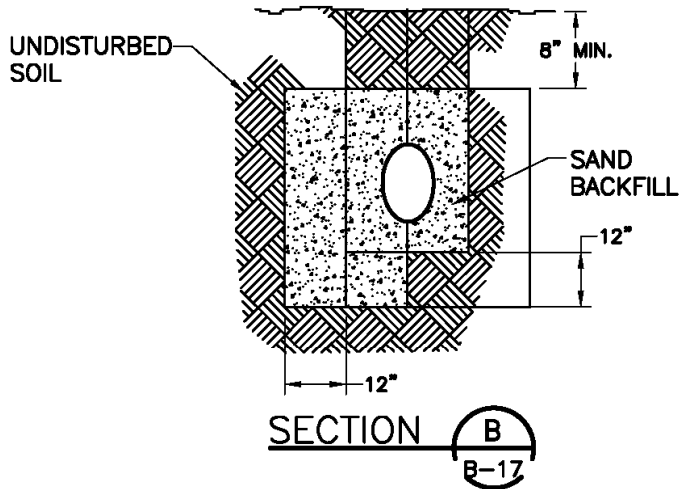


Yucaipa Valley Water District

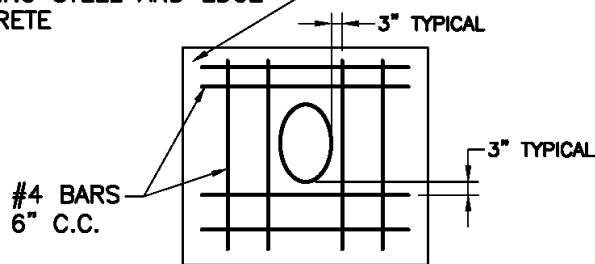
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3" MIN. CLEARANCE BETWEEN REINFORCING STEEL AND EDGE OF CONCRETE



REINFORCING STEEL PATTERN

PIPE SLOPE	PIPE SLOPE	X DISTANCE
100%	1:1	12'-0"
66.6%	1-1/2:1	14'-0"
50%	2:1	16'-0"
40%	2-1/2:1	18'-0"
33.3%	3:1	20'-0"

NOTES:

1. PIPE ANCHORS REQUIRED ON ALL SLOPES OF 3:1 OR STEEPER.
2. ANCHOR SHALL EXTEND 12" INTO NATURAL UNDISTURBED SOIL.
3. CONCRETE SHALL BE 3250 PSI MINIMUM.
4. ANCHORS FOR TRAPEZOIDAL TRENCH SECTIONS WILL CONFORM TO TRENCH CROSS SECTION AND EXTEND 12" INTO UNDISTURBED SOIL.

CONCRETE SLOPE ANCHORS

2016

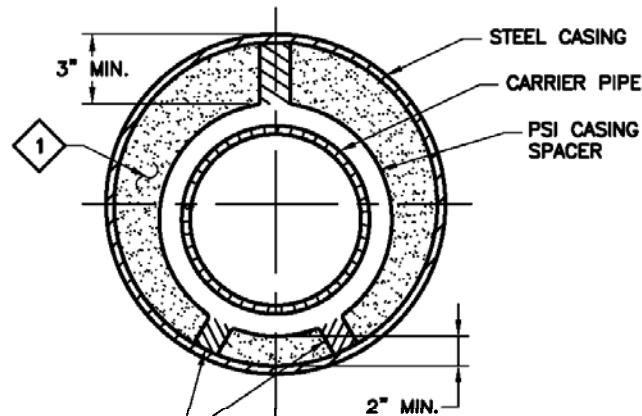


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FOR EACH LENGTH OF DUCTILE IRON PIPE, CASING SPACERS SHALL BE LOCATED 6'-0" APART AND 3'-0" FROM EACH END OF PIPE. FOR VCP, SPACERS SHALL LOCATED 1' FROM EACH END OF PIPE.

STEEL CASING SCHEDULE

V.C.P. SIZE	MINIMUM CASING SIZE	MIN. WALL THICK.
6"	16" I.D.	1/4"
8"	18" I.D.	1/4"
10"	21" I.D.	5/16"
12"	24" I.D.	5/16"

NOTES:

1. THE ANNULAR SPACE BETWEEN THE CASING AND THE CARRIER PIPE SHALL BE FILLED WITH AIR BLOWN SAND.
2. UNLESS OTHERWISE NOTED, CASING SHALL BE INSTALLED BY THE BORE, JACK AND/OR TUNNEL METHOD. IF OPEN-CUT INSTALLATION OF CASING IS ALLOWED, BACKFILL SHALL BE IN ACCORDANCE WITH YVWD STD. DWG S-17.
3. SIZE AND THICKNESS OF CASING SHALL BE AS SHOWN IN SCHEDULE.
4. ALL STEEL CASING PIPE FIELD JOINTS SHALL BE WELDED FULL-CIRCUMFERENCE.
5. PSI CASING SPACERS SHALL BE PROVIDED PER DETAIL ABOVE.
6. CARRIER PIPE SHALL BE AIR PRESSURE TESTED PRIOR TO FILLING CASING AND AGAIN WITH ENTIRE ENTIER PIPLINE
7. UPSTREAM AND DOWNSTREAM ELEVATIONS OF CARRIER PIPE TO BE VERIFIED PRIOR TO FILLING.
8. EACH END OF CASING SHALL BE SEALED WITH CONCRETE MORTAR.

STEEL CASING PIPE

2016

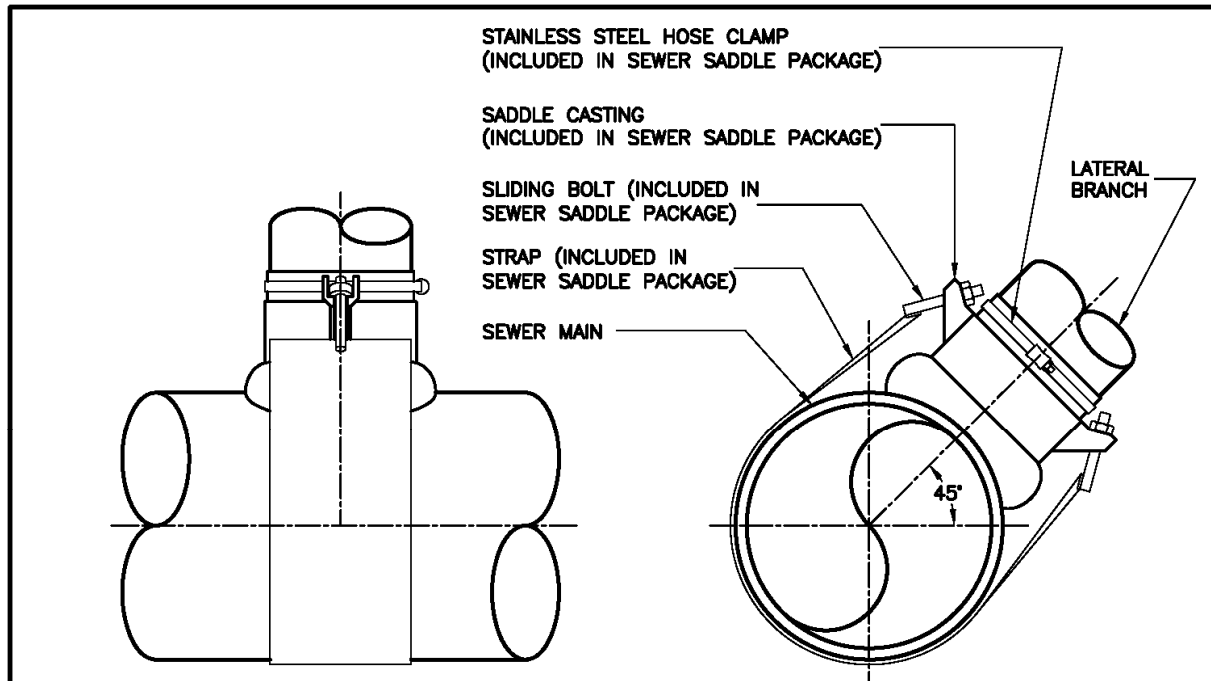


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SEWER SADDLE FOR 4" – 6" CLAY PIPE LATERAL CONNECTION

SEWER DIAMETER	ROMAC INDUSTRIES, INC. PART NUMBER	
	4" LATERAL BRANCH	6" LATERAL BRANCH
8" – 12"	CB-5.38	CB-7.56
14" – 24"	CB-5.38LS	CB-7.56LS
24" – 48"	CB-5.38XLS	CB-7.56XLS

NOTES:

1. LATERAL CONNECTION BY SADDLE METHOD SHALL BE USED ON PIPES 8" IN DIAMETER AND LARGER.
2. THE HOLE FOR THE COLLAR WYE FITTING FOR A SEWER SADDLE SHALL BE MADE WITH A TAPPING MACHINE. THE HOLE SHALL BE CLEANLY MACHINED, AND IF NECESSARY, WORKED BY HAND WITH A RASP OR SANDED TO ACCOMPLISH A TRUE AND NEAT OPENING FOR THE COLLAR WYE.
3. THE COLLAR WYE SADDLE SHALL BE SECURED TO THE SEWER MECHANICALLY.
4. DAMAGED PIPE SHALL BE REPAIRED AS DIRECTED BY THE DISTRICT REPRESENTATIVE.

4" AND 6" SEWER SADDLE CONNECTION TO EXISTING MAINLINE

2016

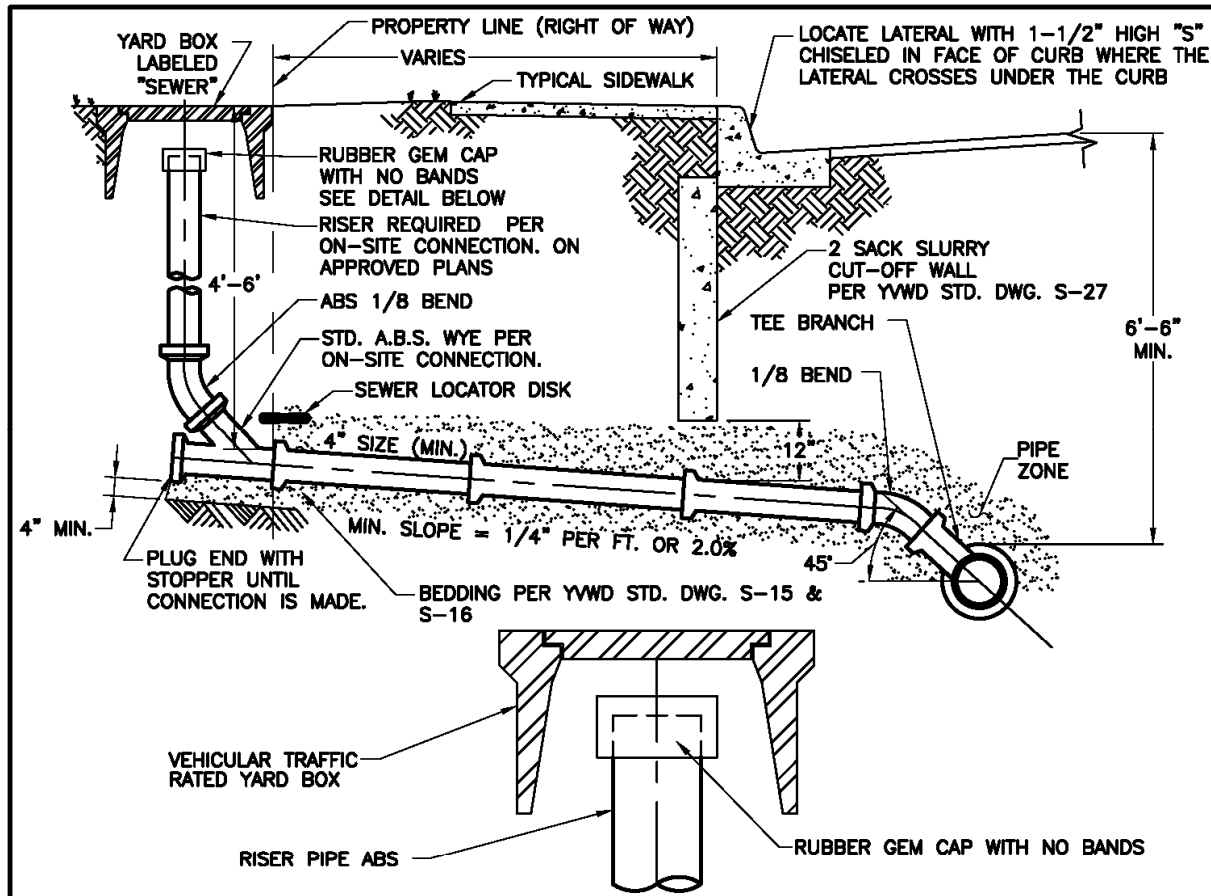


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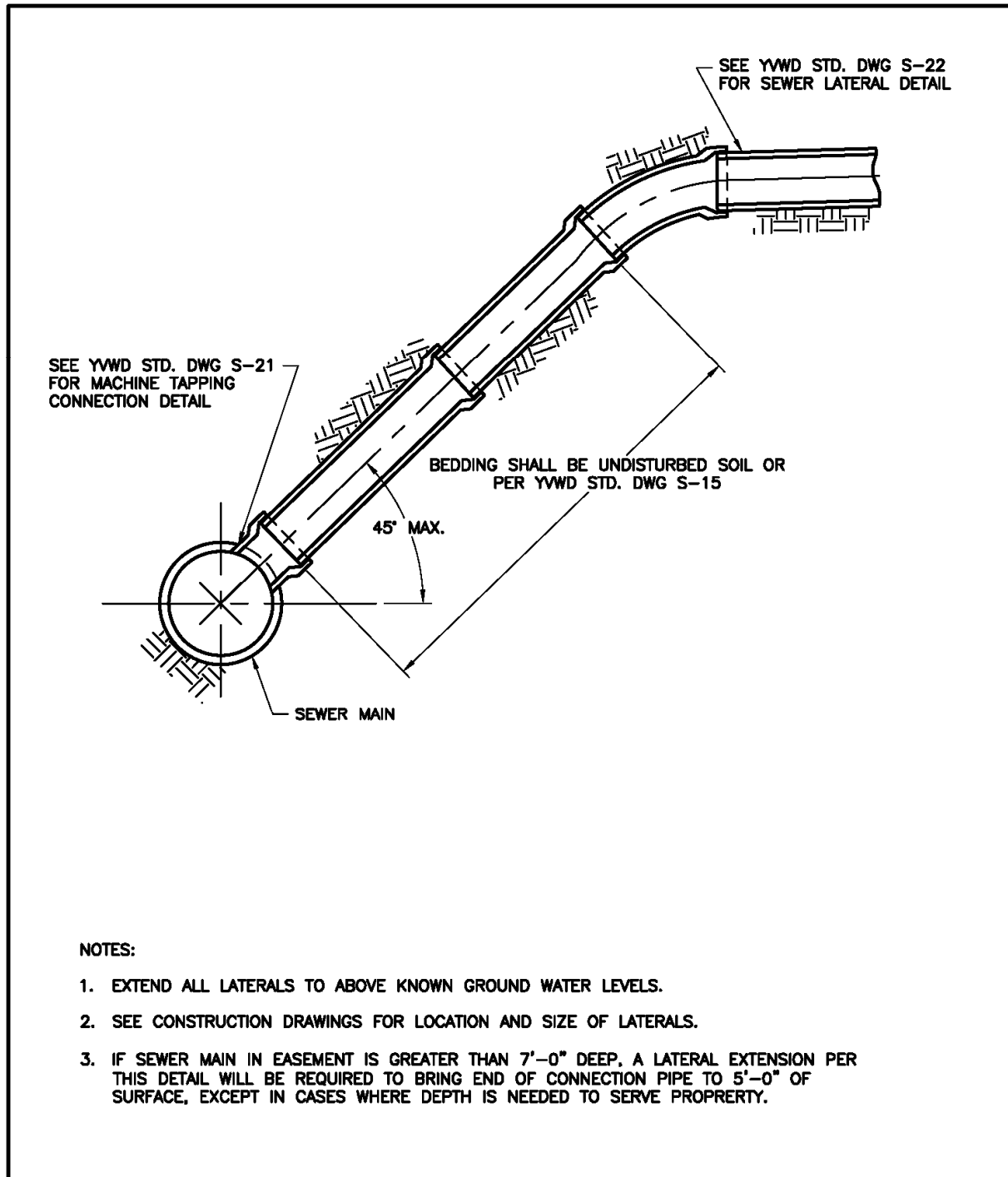
STOPPER DETAIL

NOTES:

1. LATERAL SIZE TO BE DETERMINED ON THE BASIS OF TOTAL NUMBER OF FIXTURE UNITS DRAINED, BUT IN NO CASE SHALL THE LATERAL DIAMETER BE LESS THAN FOUR INCHES FOR SINGLE OR MULTIPLE FAMILY RESIDENTIAL AND SIX INCHES FOR COMMERCIAL OR INDUSTRIAL. RISERS SHALL BE THE SAME SIZE AS THE LATERAL.
2. LATERAL TO BE INSTALLED TO PROPERTY LINE. ALL LATERALS ARE TO BE CONSTRUCTED OF EXTRA STRENGTH VITRIFIED CLAY PIPE. MUST BE INSTALLED WITH A MINIMUM HORIZONTAL OFFSET OF 36" FROM ALL OTHER UTILITIES.
3. PLACE 3/4" CRUSHED ROCK A MINIMUM OF 4" BELOW THE PIPE AND 1' ABOVE THE TEE OR WYE, AND LATERAL
4. IF RISER IS NOT BUILT, PLUG WYE BRANCH WITH STOPPER.
5. INSTALL A SEWER LOCATOR DISK AT THE END OF ALL LATERAL RUNS AT RIGHT OF WAY.
6. ONLY LATERAL RUNS ARE PERMITTED TO BE EITHER "BELL AND SPIGOT", OR "BAND SEAL".
7. WHERE LATERALS ARE INSTALLED IN DRIVEWAYS, A TRAFFIC RATED BOX IS REQUIRED.
8. IF THE LATERAL IS INSTALLED UNDER A PERMANENT HARDSCAPE SUCH AS A CONCRETE DRIVEWAY ALL THE WAY TO THE STRUCTURE, THEN A CUT OFF WALL IS NOT REQUIRED.

TYPICAL SEWER LATERAL


<p style="writing-mode: vertical-rl; transform: rotate(180deg);">2016</p>  <p>Yucaipa Valley Water District</p>	<p>Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	<p>S-22</p>
	<p>Sheet 1 of 1</p>	

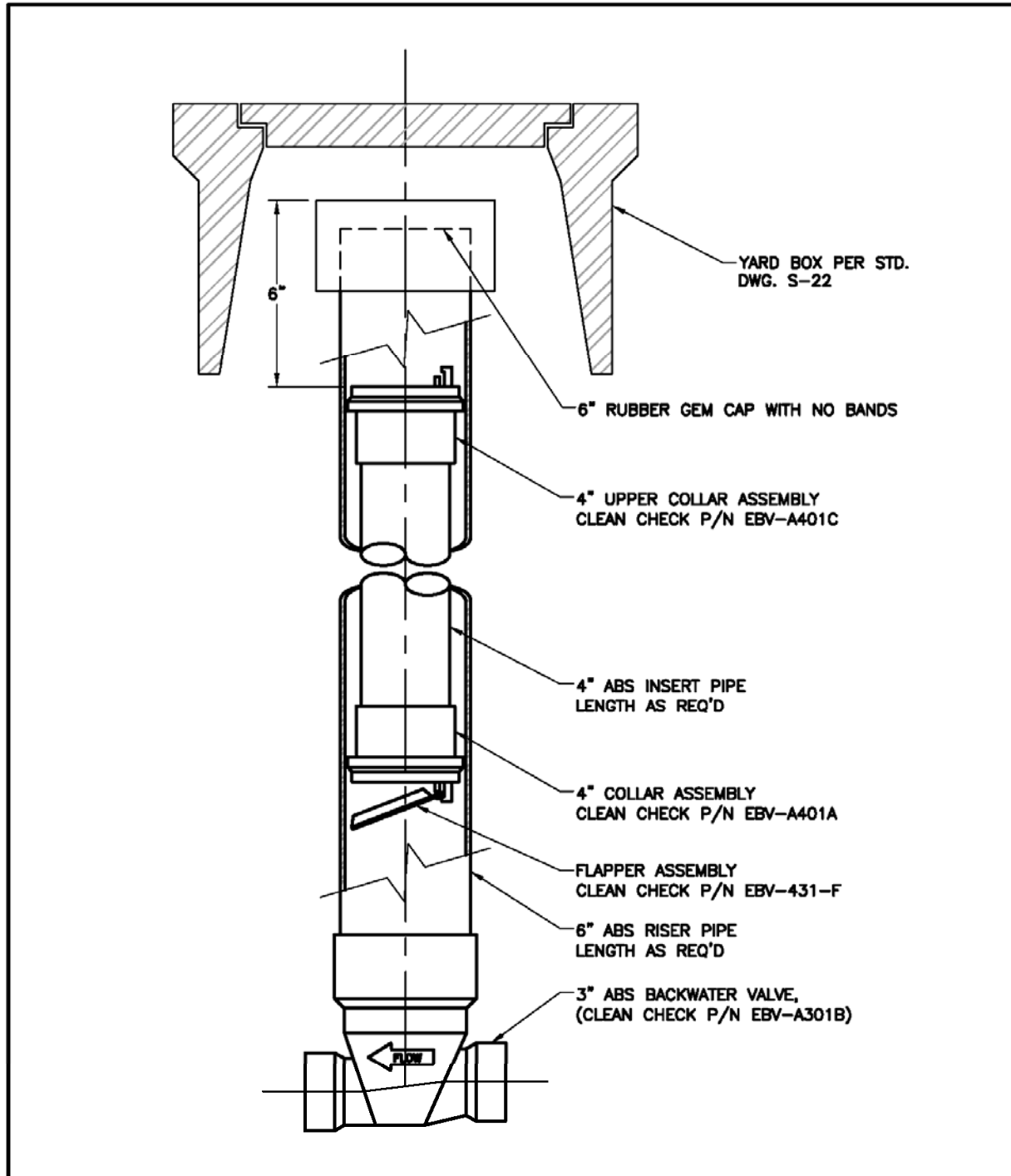


NOTES:

1. EXTEND ALL LATERALS TO ABOVE KNOWN GROUND WATER LEVELS.
2. SEE CONSTRUCTION DRAWINGS FOR LOCATION AND SIZE OF LATERALS.
3. IF SEWER MAIN IN EASEMENT IS GREATER THAN 7'-0" DEEP, A LATERAL EXTENSION PER THIS DETAIL WILL BE REQUIRED TO BRING END OF CONNECTION PIPE TO 5'-0" OF SURFACE, EXCEPT IN CASES WHERE DEPTH IS NEEDED TO SERVE PROPERTY.

DEEP SEWER LATERAL DETAIL

2016	 <p style="font-size: 1.2em; font-weight: bold;">Yucaipa Valley Water District</p>	<p style="font-size: 0.9em;">Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	S-23
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BACKWATER VALVE DETAIL

2016

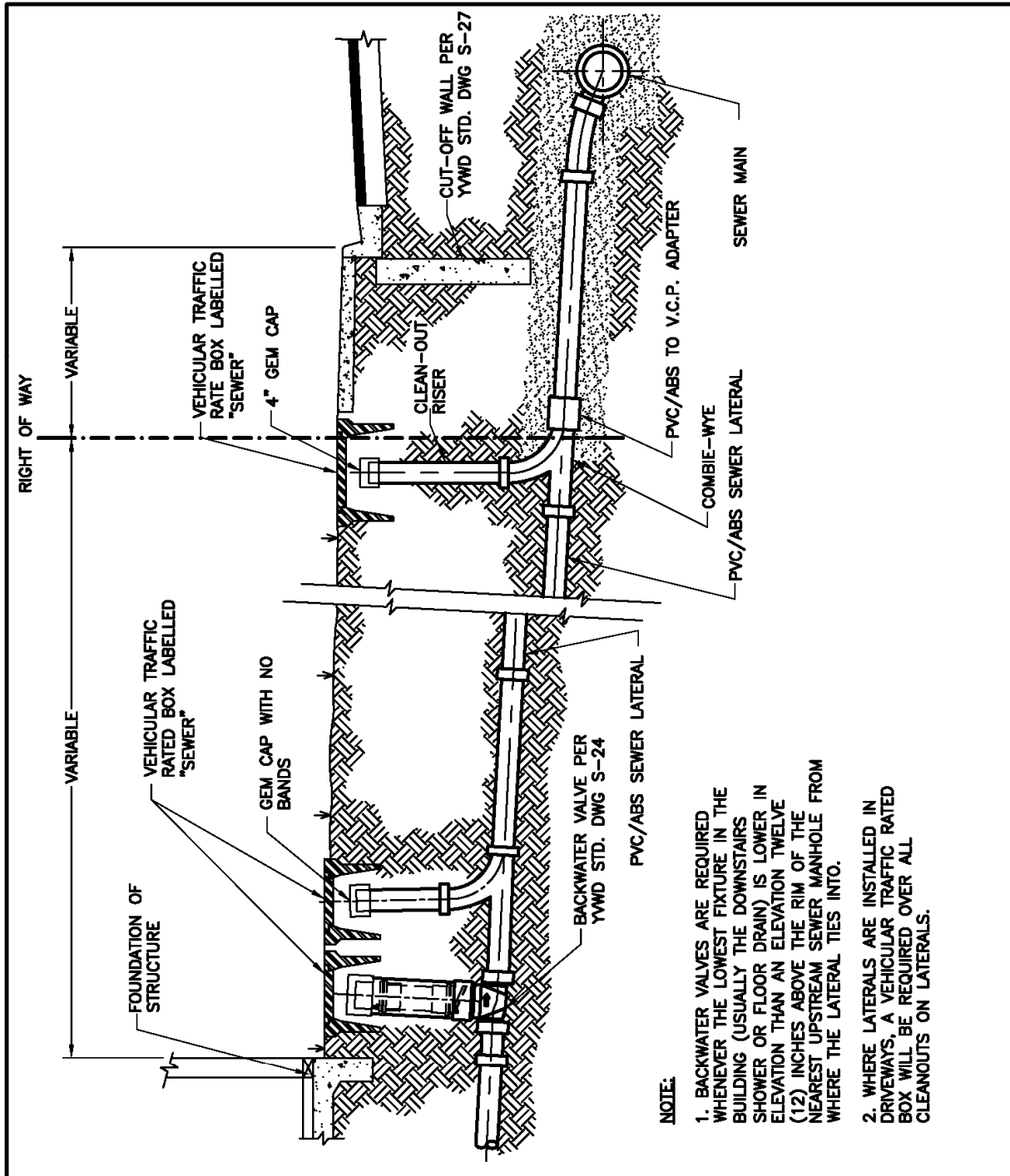


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NOTE:

1. BACKWATER VALVES ARE REQUIRED WHENEVER THE LOWEST FIXTURE IN THE BUILDING (USUALLY THE DOWNSTAIRS SHOWER OR FLOOR DRAIN) IS LOWER IN ELEVATION THAN AN ELEVATION TWELVE (12) INCHES ABOVE THE RIM OF THE NEAREST UPSTREAM SEWER MANHOLE FROM WHERE THE LATERAL TIES INTO.
2. WHERE LATERALS ARE INSTALLED IN DRIVEWAYS, A VEHICULAR TRAFFIC RATED BOX WILL BE REQUIRED OVER ALL CLEANOUTS ON LATERALS.

BACKWATER VALVE INSTALLATION DETAIL

2016

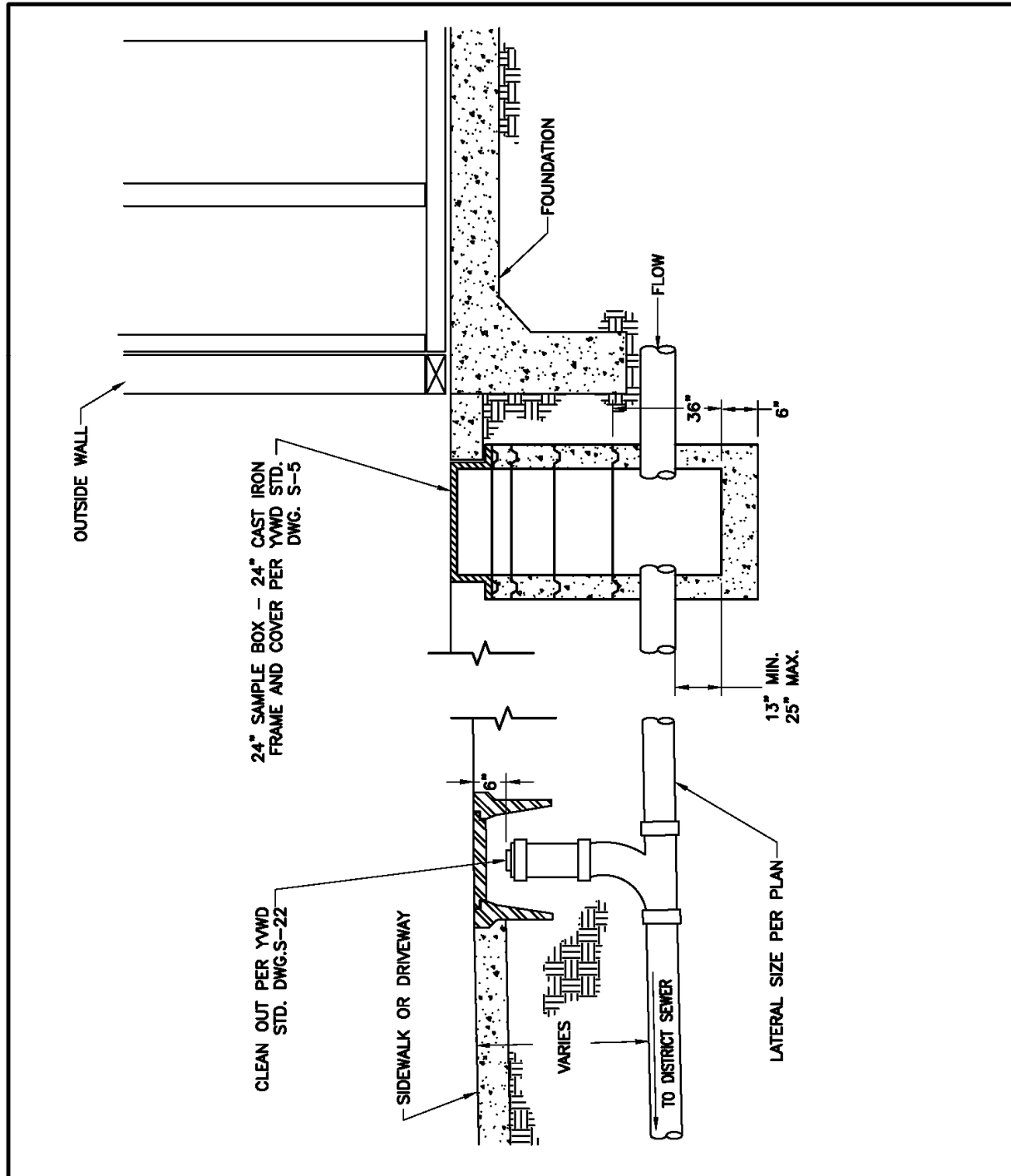


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SEWER SAMPLING BOX

2016

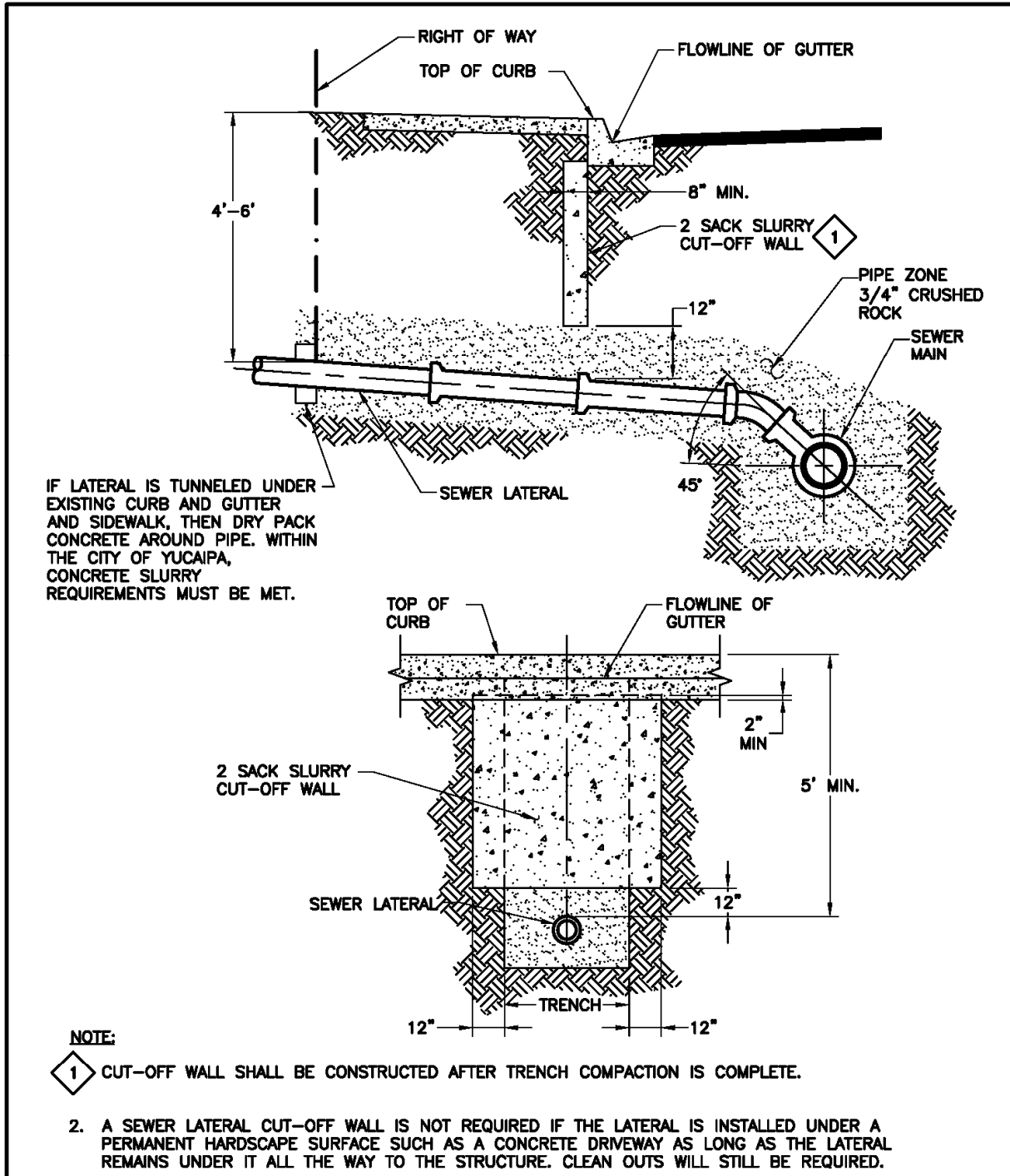


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SEWER LATERAL CUTOFF WALL DETAIL

2016

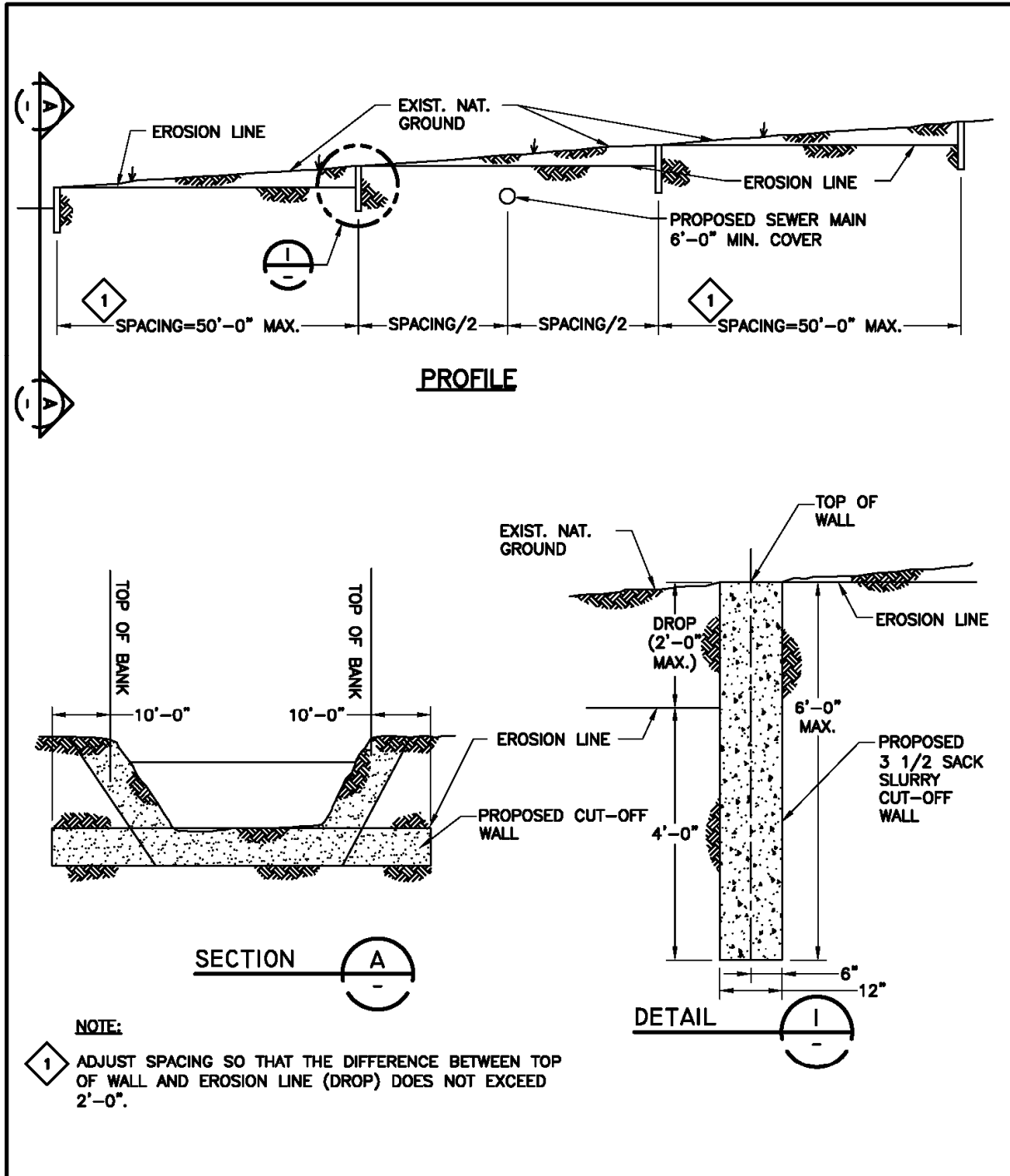


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EROSION CONTROL CUTOFF WALL DETAIL

2016



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12770 Second Street, Yucaipa, California 92399 Phone: (909) 797-5117

Standard Specifications for the Design and Processing, Furnishing of Materials, and Construction of Recycled Water Facilities

March __, 2016

YVWD RECYCLED WATER FACILITY STANDARDS
DRAWING INDEX (NUMERICAL)

- R-1 STANDARD LEGEND
- R-2 RECYCLED WATER PIPELINE LOCATION
- R-3 RECYCLED WATER NOTES FOR NON-RESIDENTIAL SITES
- R-4 RECYCLED WATER NOTES – FOR ONSITE RESIDENTIAL USE
- R-5 3/4" DUAL RECYCLED WATER METER ASSEMBLY
- R-6 1" RECYCLED WATER METER ASSEMBLY
- R-7 1 1/2" AND 2" RECYCLED WATER SERVICE INSTALLATION
- R-15 1" AND 2" RECYCLED WATER AIR AND VACUUM VALVE ASSEMBLIES
- R-19 4" RECYCLED WATER BLOW-OFF ASSEMBLY
- R-20 RESIDENTIAL DUAL PLUMBED SERVICE SCHEMATIC
- R-21 RESIDENTIAL LOT IRRIGATION LAYOUT PLAN SUBMITAL EXAMPLE
- R-22 ONSITE IRRIGATION PIPELINE TRENCHING DETAIL FOR PLANNED RECYCLED WATER USE
- R-23 NON-RESIDENTIAL RECYCLED WATER CROSS-CONNECTION CONTROL TEST STATION DETAIL
- R-24 ONSITE IRRIGATION AUTOMATIC CONTROLLER – WALL MOUNT
- R-25 ONSITE IRRIGATION BURIED ELECTRIC REMOTE CONTROL VALVE

NOTE: – DRAWINGS R-8 THRU R-14 ARE NOT IN USE
 – (W) DRAWINGS LISTED BELOW ARE YVWD WATER STANDARD DRAWINGS APPLICABLE TO RECYCLED FACILITIES.

- W-1 STANDARD LEGEND
- W-3 UTILITY LOCATIONS – SECTIONS
- W-6 MANIFOLD ASSEMBLY FOR FOUR TO TEN 3/4" AND 1" SERVICES
- W-8 3" AND 4" WATER METER INSTALLATION
- W-9 6" AND 8" WATER METER INSTALLATION
- W-10 DOUBLE CHECK BACKFLOW ASSEMBLY
- W-11 REDUCED PRESSURE BACKFLOW ASSEMBLY
- W-16 WATER QUALITY SAMPLING STATION
- W-18 RESIDENTIAL FIRE HYDRANT INSTALLATION
- W-20 VALVE AND VALVE BOX INSTALLATION
- W-21 VALVE STEM EXTENSION
- W-22 THRUST BLOCK DETAILS FOR RETROFIT ONLY
- W-23 PRESSURE REDUCING STATION DETAILS
- W-24 PREFABRICATED VAULT AND LID WITH VENT ASSEMBLY
- W-25 ADJUSTABLE PIPE SUPPORT
- W-26 STEEL CASING PIPE
- W-30 TRENCH REPAIR DETAIL
- W-31 PIPE BEDDING DETAIL
- W-32 WATER PIPELINE PROTECTION DETAIL

RECYCLED WATER STANDARD INDEX

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YVWD RECYCLED WATER FACILITY STANDARDS
DRAWING INDEX (SUBJECT)

STANDARDS

- R-1 STANDARD LEGEND
- R-2 RECYCLED WATER PIPELINE LOCATION
- R-3 RECYCLED WATER NOTES FOR NON-RESIDENTIAL SITES
- R-4 RECYCLED WATER NOTES – FOR ONSITE RESIDENTIAL USE

- W-1 STANDARD LEGEND
- W-3 UTILITY LOCATIONS – SECTIONS
- W-30 TRENCH REPAIR DETAIL
- W-31 PIPE BEDDING DETAIL

SERVICES

- R-5 3/4" DUAL RECYCLED WATER METER ASSEMBLY
- R-6 1" RECYCLED WATER METER ASSEMBLY
- R-7 1 1/2" AND 2" RECYCLED WATER SERVICE INSTALLATION
- R-15 1" AND 2" RECYCLED WATER AIR AND VACUUM VALVE ASSEMBLY

- W-6 MANIFOLD ASSEMBLY FOR FOUR TO TEN 3/4" AND 1" SERVICES
- W-8 3" AND 4" WATER METER INSTALLATION
- W-9 6" AND 8" WATER METER INSTALLATION
- W-16 WATER QUALITY SAMPLING STATION
- W-24 PREFABRICATED VAULT AND LID WITH VENT ASSEMBLY

SERVICE PROTECTION

- W-10 DOUBLE CHECK BACKFLOW ASSEMBLY
- W-11 REDUCED PRESSURE BACKFLOW ASSEMBLY

BLOW-OFF AND VALVES

- R-19 4" RECYCLED WATER BLOW-OFF ASSEMBLY

- W-18 RESIDENTIAL FIRE HYDRANT INSTALLATION
- W-20 VALVE AND VALVE BOX INSTALLATION
- W-21 VALVE STEM EXTENSION

NOTE: W- DWGS LISTED ARE YVWD WATER STANDARD DRAWINGS APPLICABLE TO RECYCLED FACILITIES.

RECYCLED WATER STANDARD INDEX

2016



Yucaipa Valley Water District

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YVWD RECYCLED WATER FACILITY STANDARDS
DRAWING INDEX (SUBJECT)

PIPE AND CASING DETAILS

- W-22 THRUST BLOCK DETAILS FOR RETROFIT ONLY
- W-26 STEEL CASING PIPE
- W-32 WATER PIPELINE PROTECTION DETAIL

PRESSURE REDUCING STATION AND VAULT DETAILS

- W-23 PRESSURE REDUCING STATION DETAILS
- W-24 PREFABRICATED VAULT AND LID WITH VENT ASSEMBLY
- W-25 ADJUSTABLE PIPE SUPPORT

IRRIGATION DESIGN REQUIREMENT DETAILS











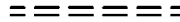


- R-20 RESIDENTIAL DUAL PLUMBED SERVICE SCHEMATIC
- R-21 HOUSE IRRIGATION LAYOUT PLAN SUBMITAL EXAMPLE
- R-22 ONSITE IRRIGATION PIPELINE TRENCHING DETAIL FOR PLANNED RECYCLED WATER USE
- R-23 NON-RESIDENTIAL RECYCLED WATER CROSS-CONNECTION CONTROL TEST STATION DETAIL
- R-24 ONSITE IRRIGATION AUTOMATIC CONTROLLER – WALL MOUNT
- R-25 ONSITE IRRIGATION BURIED ELECTRIC REMOTE CONTROL VALVE

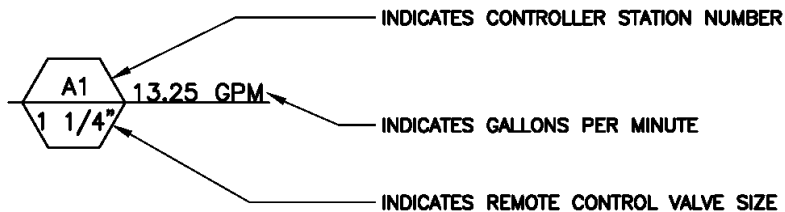
NOTE: W- DWGS LISTED ARE YVWD WATER STANDARD DRAWINGS APPLICABLE TO DUAL PLUMBED FACILITIES.

RECYCLED WATER STANDARD INDEX

2016	 <p>Yucaipa Valley Water District</p>	<p>Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	R-0
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IRRIGATION LEGEND

	REMOTE CONTROL VALVE	ELECTRIC CONTROL VALVE WITH RECYCLED ID TAGS
	PRESSURE REGULATING VALVE	WILKINS 70 SERIES, 3/4" SIZE
	ISOLATION VALVE	WITH RECYCLED ID TAGS
	IRRIGATION CONTROLLER	EXTERIOR MOUNT WITH RECYCLED WATER LABEL
	POTABLE WATER HOSE BIB	
	VALVE	
	BACKFLOW PREVENTER	
	RECYCLED WATER MAINLINE	SCH. 40 PURPLE PVC PIPE, SIZE PER PLAN
	POTABLE WATER MAINLINE	SCH 40 WHITE PVC WITH 3" WARNING TAPE
	RECYCLED WATER LATERAL	CLASS 200 PURPLE PVC PIPE, SIZE PER PLAN FOR NON-CONSTANT PRESSURE PIPE.
	RECYCLED WATER SLEEVING	2" MIN. SCHEDULE 40 PURPLE PVC PIPE
	POTABLE WATER FEATURE FILL LINE	COPPER TUBING, TYPE K
	POINT OF CONNECTION (P.O.C.)	LOCKED VALVE TO BACK YARD

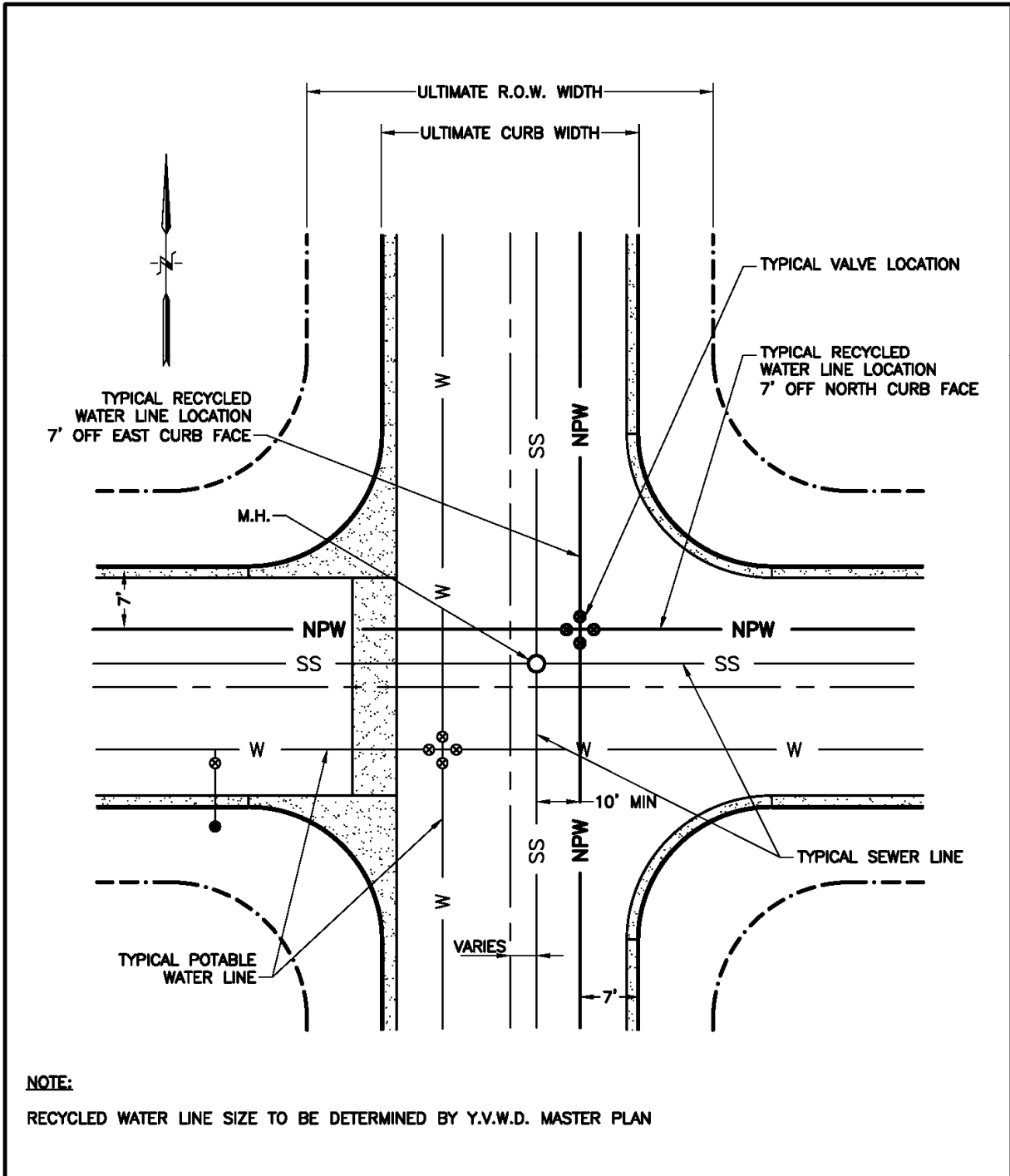


NOTE:

1. INSTALLATION OF RECYCLED WATER IRRIGATION SYSTEM SHALL BE IN CONFORMANCE WITH YVWD ON-SITE DESIGN AND CONSTRUCTION STANDARDS.

STANDARD LEGEND

2016	 <p style="font-size: 1.2em;">Yucaipa Valley Water District</p>	<p style="font-size: 0.8em;">Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	R-1
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NOTE:

RECYCLED WATER LINE SIZE TO BE DETERMINED BY Y.V.W.D. MASTER PLAN

RECYCLED WATER PIPELINE LOCATION

2016



Yucaipa Valley Water District

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1. THE INSTALLATION OF THE RECYCLED WATER SYSTEM SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION, AND TO THE SATISFACTION OF THE YUCAIPA VALLEY WATER DISTRICT (YVWD).
2. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH YVWD AT (909)797-5117 TWO (2) WORKING DAYS IN ADVANCE OF STARTING WORK. CONSTRUCTION SHALL BEGIN NO LATER THEN FIVE (5) DAYS AFTER THE PRE-CONSTRUCTION MEETING. YVWD SHALL BE NOTIFIED OF EACH WORKDAY THEREAFTER UNTIL COMPLETION OF THE PROJECT.
3. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR PROVIDING ACCESS TO AND COOPERATION WITH THE DISTRICT INSPECTOR TO PERFORM ALL INSPECTIONS AND TESTING.
4. CONNECTIONS TO THE EXISTING RECYCLED WATER FACILITIES SHALL BE DONE BY A LICENSED CONTRACTOR PER THE YVWD RECYCLED WATER ON-SITE DESIGN AND CONSTRUCTION STANDARDS.
5. THERE SHALL NEVER BE DIRECT CONNECTIONS BETWEEN THE POTABLE AND RECYCLED WATER SYSTEMS.
6. RECYCLED WATER SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN LANDSCAPE IRRIGATION AND APPROVED USES SUCH AS INDUSTRIAL USE OR IMPOUNDMENTS.
7. HOSE BIBS ARE PROHIBITED ON RECYCLED WATER SYSTEMS.
8. WATER USED IN HOSE BIBS SHALL BE POTABLE WATER AND ALL HOSE BIBS SHALL BE AFFIXED TO THE BUILDING.
9. THE POTABLE WATER SYSTEM SHALL BE PROTECTED BY AN APPROVED BACKFLOW PREVENTION DEVICE. THE RECYCLED WATER SERVICE WILL NORMALLY NOT REQUIRE BACKFLOW PROTECTION (AT YVWD DISCRETION).
10. A MINIMUM OF TEN (10) FEET HORIZONTAL SEPARATION MUST BE MAINTAINED AT ALL TIMES BETWEEN THE CONSTANT PRESSURE POTABLE AND RECYCLED WATER LINES. A MINIMUM OF ONE (1) FOOT VERTICAL SEPARATION MUST BE MAINTAINED AT ALL TIMES BETWEEN THE POTABLE AND RECYCLED WATER LINES WITH THE RECYCLED WATERLINE BELOW THE POTABLE.
11. ALL CROSSINGS BETWEEN POTABLE AND RECYCLED WATER LINES SHALL BE AS NEAR TO PERPENDICULAR AS POSSIBLE AND THE RECYCLED WATER LINES SHALL BE SLEEVED A MINIMUM OF FIVE (5) FEET ON BOTH SIDES OF THE POTABLE WATER LINE.
12. HE USE OF CONTINUOUS LETTERING ON 3-INCH MINIMUM WIDTH BLUE TAPE WITH 1-INCH BLACK OR WHITE CONTRASTING LETTERING BEARING THE CONTINUOUS WORDING "POTABLE WATER" PERMANENTLY AFFIXED AT 10-FOOT INTERVALS ATOP ALL HORIZONTAL PIPING, LATERALS, AND MAINS. REFER TO T. CHRISTY'S OR APPROVED EQUAL. IDENTIFICATION TAPE IS NOT NECESSARY FOR EXTRUDED BLUE-COLORED PVC WITH CONTINUOUS WORDING "POTABLE WATER" PRINTED IN CONTRASTING LETTERING ON OPPOSITE SIDES OF THE PIPE.
13. THE USE OF CONTINUOUS LETTERING ON 3-INCH MINIMUM WIDTH PURPLE TAPE WITH 1-INCH BLACK OR WHITE CONTRASTING LETTERING BEARING THE CONTINUOUS WORDING "CAUTION- RECYCLED WATER" PERMANENTLY AFFIXED AT 10-FOOT INTERVALS ATOP ALL HORIZONTAL PIPING, LATERALS, AND MAINS. REFER TO T. CHRISTY'S OR APPROVED EQUAL. IDENTIFICATION TAPE IS NOT NECESSARY FOR EXTRUDED PURPLE-COLORED PVC WITH CONTINUOUS WORDING "CAUTION - RECYCLED WATER" PRINTED IN CONTRASTING LETTERING ON OPPOSITE SIDES OF THE PIPE.

(CONTINUED ON SHEET 2 OF 2)

RECYCLED WATER NOTES FOR NON-RESIDENTIAL SITES

2016	 <p style="font-size: 1.2em;">Yucaipa Valley Water District</p>	<p style="font-size: 0.9em;">Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	R-3
			Sheet 1 of 2

(CONTINUED FROM SHEET 1 OF 2)

14. ALL NEW BURIED RECYCLED WATER LINES (PRESSURE/NON-PRESSURE) MUST BE PURPLE-COLORED SCHEDULE 40 (MINIMUM) PVC PIPE WITH CONTINUOUS WORDING "CAUTION - RECYCLED WATER" PRINTED ON OPPOSITE SIDES OF THE PIPE.
15. RECYCLED WATER ISOLATION AND CONTROL VALVE BOXES SHALL BE WEATHERPROOF PURPLE PLASTIC AND MARKED "RECYCLED WATER". *NOTE-ALL CONTROL VALVES SHALL BE BURIED BELOW GRADE AUTOMATIC CONTROL VALVES OPERATED BY A PROGRAMMABLE CONTROLLER. ABOVE GROUND ANTI-SIPHON CONTROL VALVES ARE NOT ALLOWED.
16. ALL RECYCLED WATER IRRIGATION SYSTEM CONTROL VALVES, ISOLATION VALVES, QUICK COUPLERS, REGULATORS, AND APPURTENANCES SHALL BE TAGGED. IDENTIFICATION SHALL BE WEATHERPROOF PURPLE PLASTIC, 3-INCHES BY 4-INCHES AND IMPRINTED WITH "WARNING RECYCLED WATER - DO NOT DRINK" IN BOTH ENGLISH AND SPANISH. REFER TO T. CHRISTY'S OR APPROVED EQUAL.
17. ALL AREAS WHERE RECYCLED WATER IS USED SHALL BE POSTED WITH APPROVED SIGNAGE. EACH SIGN SHALL STATE "RECYCLED WATER - DO NOT DRINK" AND DISPLAY THE INTERNATIONAL "DO NOT DRINK" SYMBOL.
18. BEFORE ACTIVATION OF THE POTABLE WATER SERVICE THE BACKFLOW DEVICE SHALL BE TESTED AND APPROVED BY A LICENSED BACKFLOW TESTER. ARRANGEMENTS WITH YVWD MUST BE MADE AT LEAST TWO (2) WORKING DAYS IN ADVANCE TO TURN ON THE POTABLE SERVICE TO ALLOW TESTING OF THE DEVICE. POTABLE WATER SERVICE WILL NOT BE ACTIVATED UNTIL THE BACKFLOW DEVICE PASSES INSPECTION.
19. BEFORE ACTIVATION OF THE RECYCLED WATER SERVICE, A CROSS CONNECTION TEST AND FINAL INSPECTION AND APPROVAL OF THE IRRIGATION SYSTEM SHALL BE PERFORMED. THE PROPERTY OWNER OR CONTRACTOR SHALL ARRANGE WITH THE DISTRICT FOR AN IRRIGATION COVERAGE TEST AND MAKE ANY MODIFICATIONS OR ADJUSTMENTS DEEMED REQUIRED BEFORE FINAL APPROVAL.
20. ALL SPRAY HEADS SHALL BE ADJUSTED TO ELIMINATE OVERSPRAY AND RUNOFF ONTO ADJACENT HARDSCAPES, DRINKING FOUNTAINS OR WATER FEATURES, AND OUTDOOR FURNITURE SUCH AS PICNIC TABLES, ETC.
21. RECYCLED WATER IRRIGATION SYSTEMS SHALL ONLY BE OPERATED BETWEEN THE HOURS OF 9:00 PM AND 6:00 AM.
22. FAILURE TO COMPLY WITH ANY OF THE YUCAIPA VALLEY WATER DISTRICT STANDARDS MAY RESULT IN TERMINATION OF RECYCLED WATER AND/OR POTABLE WATER SERVICE.

RECYCLED WATER NOTES FOR NON-RESIDENTIAL SITES

2016	 <p style="font-size: 18pt; margin: 0;">Yucaipa Valley Water District</p>	<p style="font-size: 10pt; margin: 0;">Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	R-3
			Sheet 2 of 2

1. THE INSTALLATION OF THE RECYCLED WATER SYSTEM SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION, AND TO THE SATISFACTION OF THE YUCAIPA VALLEY WATER DISTRICT (YVWD).
2. THE HOMEOWNER OR CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH YVWD AT (909)797-5118 TWO (2) WORKING DAYS IN ADVANCE OF STARTING WORK. CONSTRUCTION SHALL BEGIN NO LATER THEN FIVE (5) DAYS AFTER THE PRE-CONSTRUCTION MEETING. YVWD SHALL BE NOTIFIED OF EACH WORKDAY THEREAFTER UNTIL COMPLETION OF THE PROJECT.
3. THE HOMEOWNER SHALL BE RESPONSIBLE FOR PROVIDING ACCESS TO AND COOPERATION WITH THE DISTRICT INSPECTOR TO PERFORM ALL INSPECTIONS AND TESTING.
4. CONNECTIONS TO THE EXISTING RECYCLED WATER FACILITIES SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN ACCORDANCE WITH THE YVWD RECYCLED ON-SITE DESIGN AND CONSTRUCTION STANDARDS.
5. THERE SHALL NEVER BE ANY DIRECT CONNECTIONS BETWEEN THE POTABLE AND RECYCLED WATER SYSTEMS.
6. RECYCLED WATER SHALL NOT BE USED FOR ANY PURPOSE OTHER THAN LANDSCAPE IRRIGATION.
7. HOSE BIBS ARE PROHIBITED ON RECYCLED WATER SYSTEMS.
8. WATER USED IN HOSE BIBS SHALL BE POTABLE WATER AND ALL HOSE BIBS SHALL BE AFFIXED TO THE HOUSE.
9. THE POTABLE WATER SYSTEM SHALL BE PROTECTED BY AN APPROVED BACKFLOW PREVENTION DEVICE. THE RECYCLED WATER SERVICE WILL NORMALLY NOT REQUIRE BACKFLOW PROTECTION (AT YVWD DISCRETION).
10. A MINIMUM OF TEN (10) FEET HORIZONTAL SEPARATION MUST BE MAINTAINED AT ALL TIMES BETWEEN THE CONSTANT PRESSURE POTABLE AND RECYCLED WATER LINES. A MINIMUM OF ONE (1) FOOT VERTICAL SEPARATION MUST BE MAINTAINED AT ALL TIMES BETWEEN THE POTABLE AND RECYCLED WATER LINES WITH THE RECYCLED WATER LINE BELOW THE POTABLE.
11. ALL CROSSINGS BETWEEN POTABLE AND RECYCLED WATER LINES SHALL BE AS NEAR TO PERPENDICULAR AS POSSIBLE AND THE RECYCLED WATER LINES SHALL BE SLEEVED A MINIMUM OF FIVE (5) FEET ON BOTH SIDES OF THE POTABLE WATER LINE.
12. THE USE OF CONTINUOUS LETTERING ON 3-INCH MINIMUM WIDTH BLUE TAPE WITH 1-INCH BLACK OR WHITE CONTRASTING LETTERING BEARING THE CONTINUOUS WORDING "POTABLE WATER" PERMANENTLY AFFIXED AT 10-FOOT INTERVALS ATOP ALL HORIZONTAL PIPING, LATERALS, AND MAINS, REFER TO T. CHRISTY'S OR APPROVED EQUAL. IDENTIFICATION TAPE IS NOT NECESSARY FOR EXTRUDED BLUE-COLORED PVC WITH CONTINUOUS WORDING "POTABLE WATER" PRINTED IN CONTRASTING LETTERING ON OPPOSITE SIDES OF THE PIPE.
13. THE USE OF CONTINUOUS LETTERING ON 3-INCH MINIMUM WIDTH PURPLE TAPE WITH 1-INCH BLACK OR WHITE CONTRASTING LETTERING BEARING THE CONTINUOUS WORDING "CAUTION - RECYCLED WATER" PERMANENTLY AFFIXED AT 10-FOOT INTERVALS ATOP ALL HORIZONTAL PIPING, LATERALS, AND MAINS. REFER TO T. CHRISTY'S OR APPROVED EQUAL. IDENTIFICATION TAPE IS NOT NECESSARY FOR EXTRUDED PURPLE-COLORED PVC WITH CONTINUOUS WORDING "CAUTION - RECYCLED WATER" PRINTED IN CONTRASTING LETTERING ON OPPOSITE SIDES OF THE PIPE.

(CONTINUED ON SHEET 2 OF 2)

RECYCLED WATER NOTES FOR ONSITE RESIDENTIAL USE

2016



Yucaipa Valley Water District

Approved by the Yucaipa
Valley Water District Board of
Directors on January ##, 2016
as Resolution No. 2016-##

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Sheet 1 of 2

(CONTINUED FROM SHEET 1 OF 2)

14. RECYCLED WATER PIPING SHALL BE PURPLE AND IDENTIFIED AS RECYCLED WATER PIPE BY CONTINUOUS MARKING ON BOTH SIDES. THE MARKINGS SHALL INCLUDE THE FOLLOWING: "WARNING RECYCLED WATER – DO NOT DRINK", NOMINAL PIPE SIZE, PRESSURE RATING, AND ASTM DESIGNATIONS.
15. RECYCLED WATER ISOLATION AND CONTROL VALVE BOXES SHALL BE WEATHERPROOF PURPLE PLASTIC AND MARKED "RECYCLED WATER". *NOTE – ALL CONTROL VALVES SHALL BE BURIED BELOW GRADE AUTOMATIC CONTROL VALVES OPERATED BY A PROGRAMMABLE CONTROLLER. ABOVE GROUND ANIT-SIPHON CONTROL VALVES ARE NOT ALLOWED.
16. ALL RECYCLED WATER IRRIGATION SYSTEM CONTROL VALVES, ISOLATION VALVES, QUICK COUPLERS, REGULATORS, AND APPURTENANCES SHALL BE TAGGED. IDENTIFICATION SHALL BE WEATHERPROOF PURPLE PLASTIC, 3-INCHES BY 4-INCHES AND IMPRINTED WITH "WARNING RECYCLED WATER – DO NOT DRINK". REFER TO T. CHRISTY'S OR APPROVED EQUAL.
17. ALL AREAS WHERE RECYCLED WATER IS USED SHALL BE POSTED WITH APPROVED SIGNAGE. EACH SIGN SHALL STATE "RECYCLED WATER – DO NOT DRINK" AND DISPLAY THE INTERNATIONAL "DO NOT DRINK" SYMBOL.
18. BEFORE ACTIVATION OF THE POTABLE WATER SERVICE THE BACKFLOW DEVICE SHALL BE TESTED AND APPROVED BY A LICENSED BACKFLOW TESTER. ARRANGEMENTS WITH YVWD MUST BE MADE AT LEAST TWO (2) WORKING DAYS IN ADVANCE TO TURN ON THE POTABLE SERVICE TO ALLOW TESTING OF THE DEVICE. POTABLE WATER SERVICE WILL NOT BE ACTIVATED UNTIL THE BACKFLOW DEVICE PASSES INSPECTION.
19. BEFORE ACTIVATION OF THE RECYCLED WATER SERVICE, A CROSS CONNECTION TEST AND FINAL INSPECTION AND APPROVAL OF THE IRRIGATION SYSTEM SHALL BE PERFORMED. THE PROPERTY OWNER OR CONTRACTOR SHALL ARRANGE WITH THE DISTRICT FOR AN IRRIGATION COVERAGE TEST AND MAKE ANY MODIFICATIONS OR ADJUSTMENTS DEEMED REQUIRED BEFORE FINAL APPROVAL.
20. ALL SPRAY HEADS SHALL BE ADJUSTED TO ELIMINATE OVERSPRAY AND RUNOFF ONTO ADJACENT HARDSCAPES, DRINKING FOUNTAINS OR WATER FEATURES, AND OUTDOOR FURNITURE SUCH AS PICNIC TABLES, ETC.
21. RECYCLED WATER IRRIGATION SYSTEMS SHALL ONLY BE OPERATED BETWEEN THE HOURS OF 9:00 PM AND 6:00 AM.
22. FAILURE TO COMPLY WITH ANY OF THE YUCAIPA VALLEY WATER DISTRICT STANDARDS MAY RESULT IN TERMINATION OF RECYCLED WATER AND/OR POTABLE WATER SERVICE.

RECYCLED WATER NOTES FOR ONSITE RESIDENTIAL USE

2016

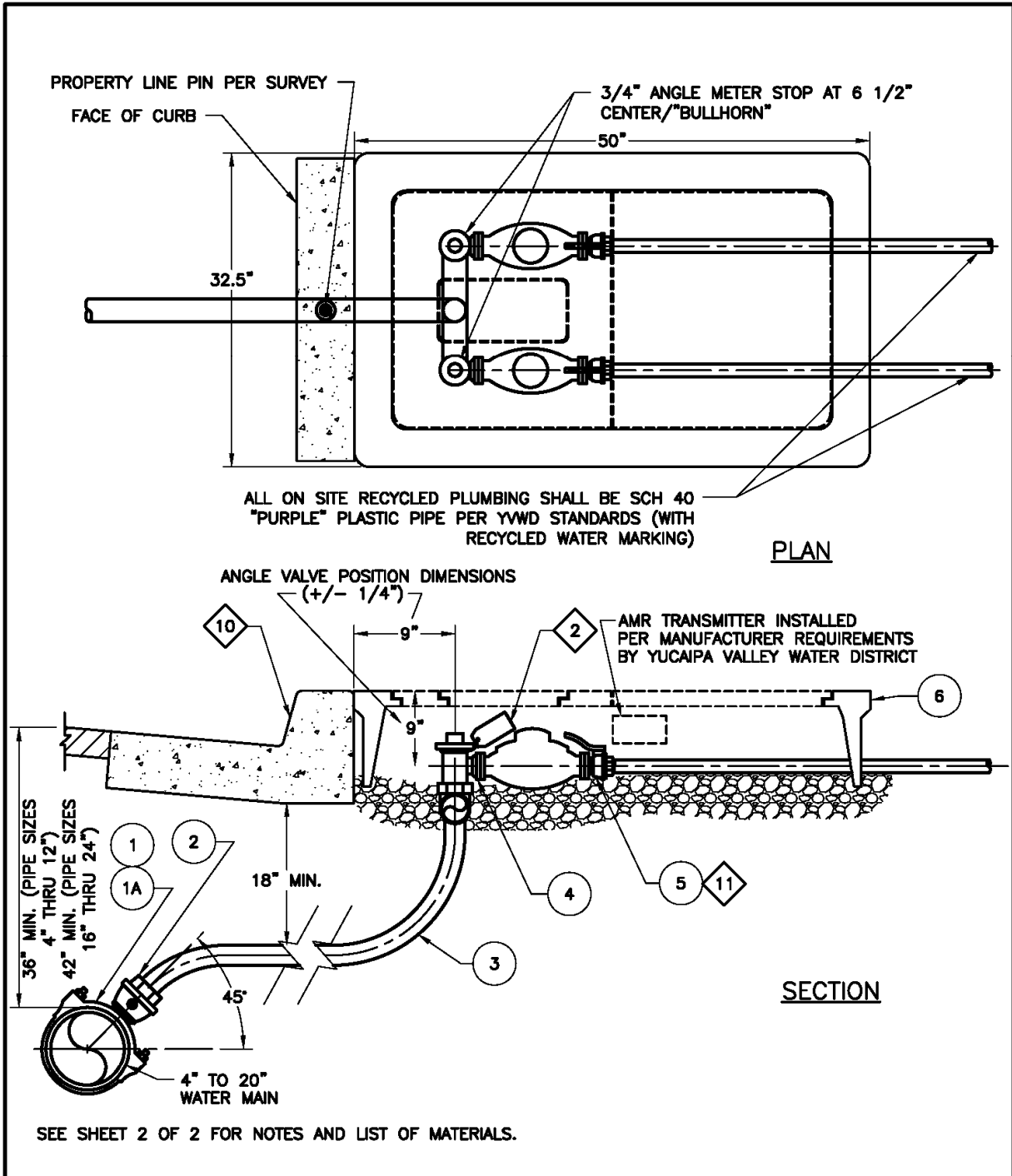


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 2 of 2



3/4" DUAL RECYCLED WATER METER ASSEMBLY

2016



Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

R-5

Sheet 1 of 2

NOTES:

1. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 12-INCHES OF VALVE, COUPLING, JOINT OR FITTING.
2. METERS SHALL BE TAGGED. IDENTIFICATION SHALL BE WEATHERPROOF PURPLE PLASTIC, 3-INCHES BY 4-INCHES WITH THE WORDS "WARNING RECYCLED WATER - DO NOT DRINK". IMPRINTING SHALL BE PERMANENT AND BLACK IN COLOR. USE TAGS MANUFACTURED BY T. CHRISTY ENTERPRISES OR APPROVED EQUAL.
3. SET TOP OF METER BOX FLUSH WITH SIDEWALK OR TOP OF CURB AS SHOWN.
4. THE CORPORATION STOP TAP SHALL BE MADE AT A 45° DEGREE ANGLE FROM THE TOP OF PIPE.
5. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO CENTERLINE OF STREET FROM THE WATER MAIN TO THE STOP.
6. METER BOX SHALL BE SET BEHIND CURB WHERE SIDEWALK IS ADJACENT TO CURB, OR IN PARKWAY BETWEEN CURB AND SIDEWALK.
7. ALL CONNECTIONS TO "PURPLE P.E." TUBING SHALL BE 1-INCH CTS (COPPER TUBE SIZE) COMPRESSION FITTINGS.
8. METER BOX COVER AND READING LID FOR ALL RECLAIMED WATER SERVICES SHALL BE PAINTED OR CAST/FORMED "PURPLE".
9. ALL SERVICE LATERALS WILL BE LOCATED AT PROPERTY LINES.
10. LOCATE SERVICE WITH 1-1/2-INCH HIGH "RW" CHISELED IN FACE OF CURB WHERE THE SERVICE CROSSES UNDER THE CURB.
11. CUSTOMER SERVICE VALVE REQUIRED ON CUSTOMER SIDE OF METER. METER, CUSTOMER SERVICE VALVE & TAIL PIPE TO BE PROVIDED BY THE DISTRICT.

LIST OF MATERIALS

ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1	DOUBLE STRAP SERVICE SADDLE I.P. OUTLET (FOR DUCTILE IRON PIPE MAINS)	JONES MUELLER ROMAC ROCKWELL	J-979 I.P. H-16102 TO H-16116 202B-SIZE 1.P.7 323-SIZE-14
1A	CAST SERVICE SADDLE WITH I.P. OUTLET	JONES ROMAC FORD	J-995 101S S91-SIZE 04
2	BRONZE CORPORATION STOP (MIP) THREAD X COMPRESSION (CTS)	JONES MUELLER FORD	J-41 H-10013 F500-04
3	1" PURPLE POLYETHYLENE TUBING-CTS	WESFLEX	1" SDR 9 LAVENDER
4	BRONZE ANGLE METER STOP BRANCH ASSEMBLY 6 1/2" CENTER TO CENTER, 1" CTS X 3/4" M (2)	JONES FORD McDONALD	J-2201 UVB43-42W-65 09U2AW
5	BRONZE CUSTOMER SERVICE VALVE-METER NUT X F.I.P.	JONES FORD	J-1908 B13-342 W/H-34
6	METER BOX AND COVER WITH READING LID	ARMOR CAST	A6001430PCX12 W/ (1)-A6001470 - COVER (1)-A6001470DZ - COVER (1)-A6000482

3/4" DUAL RECYCLED WATER METER ASSEMBLY

2016

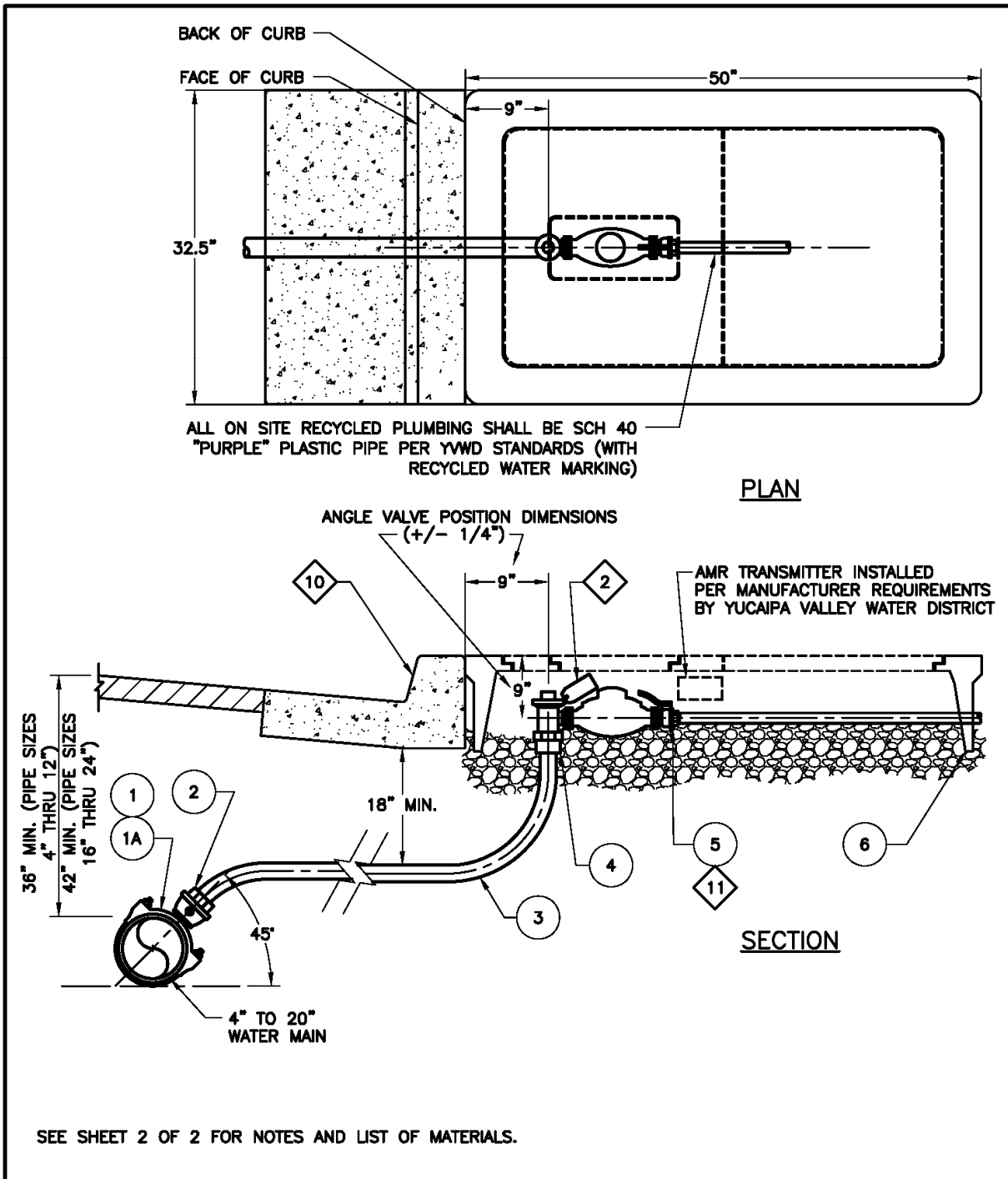


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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1" RECYCLED WATER METER ASSEMBLY

2016



Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 1 of 2

NOTES:

1. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 12-INCHES OF VALVE, COUPLING, JOINT OR FITTING.
2. METERS SHALL BE TAGGED. IDENTIFICATION SHALL BE WEATHERPROOF PURPLE PLASTIC, 3-INCHES BY 4-INCHES WITH THE WORDS "WARNING RECYCLED WATER - DO NOT DRINK". IMPRINTING SHALL BE PERMANENT AND BLACK IN COLOR. USE TAGS MANUFACTURED BY T. CHRISTY ENTERPRISES OR APPROVED EQUAL.
3. SET TOP OF METER BOX FLUSH WITH SIDEWALK OR TOP OF CURB AS SHOWN.
4. THE CORPORATION STOP TAP SHALL BE MADE AT A 45° DEGREE ANGLE FROM THE TOP OF PIPE.
5. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO CENTERLINE OF STREET FROM THE WATER MAIN TO THE STOP.
6. METER BOX SHALL BE SET BEHIND CURB WHERE SIDEWALK IS ADJACENT TO CURB, OR IN PARKWAY BETWEEN CURB AND SIDEWALK.
7. ALL CONNECTIONS TO "PURPLE P.E." TUBING SHALL BE 1-INCH CTS (COPPER TUBE SIZE) COMPRESSION FITTINGS.
8. METER BOX COVER AND READING LID FOR ALL RECLAIMED WATER SERVICES SHALL BE PAINTED OR CAST/FORMED "PURPLE".
9. ALL SERVICE LATERALS WILL BE LOCATED AT PROPERTY LINES.
10. LOCATE SERVICE WITH 1-1/2-INCH HIGH "RW" CHISELED IN FACE OF CURB WHERE THE SERVICE CROSSES UNDER THE CURB.
11. CUSTOMER SERVICE VALVE REQUIRED ON CUSTOMER SIDE OF METER. METER, CUSTOMER SERVICE VALVE & TAIL PIPE TO BE PROVIDED BY THE DISTRICT.

LIST OF MATERIALS

ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1	DOUBLE STRAP SERVICE SADDLE I.P. OUTLET (FOR DUCTILE IRON PIPE MAINS)	JONES MUELLER ROMAC ROCKWELL	J-979 I.P. H-16102 TO H-16116 202B-SIZE 1.P.7 323-SIZE-14
1A	CAST SERVICE SADDLE WITH I.P. OUTLET	JONES ROMAC FORD	J-995 101S S91-SIZE 04
2	BRONZE CORPORATION STOP (MIP) THREAD X COMPRESSION (CTS)	JONES MUELLER FORD	J-41 H-10013 F500-04
3	1" PURPLE POLYETHYLENE TUBING-CTS	WESFLEX	1" SDR 9 LAVENDER
4	BRONZE ANGLE METER STOP BRANCH ASSEMBLY 6 1/2" CENTER TO CENTER, 1" CTS X 3/4" M (2)	JONES FORD McDONALD	J-2201 UVB43-42W-65 09U2AW
5	BRONZE CUSTOMER SERVICE VALVE-METER NUT X F.I.P.	JONES FORD	J-1908 B13-342 W/H-34
6	METER BOX AND COVER WITH READING LID	ARMOR CAST	A6001430PCX12 W/ (1)-A6001470 - COVER (1)-A6001470DZ - COVER (1)-A6000482

1" RECYCLED WATER METER ASSEMBLY

2016

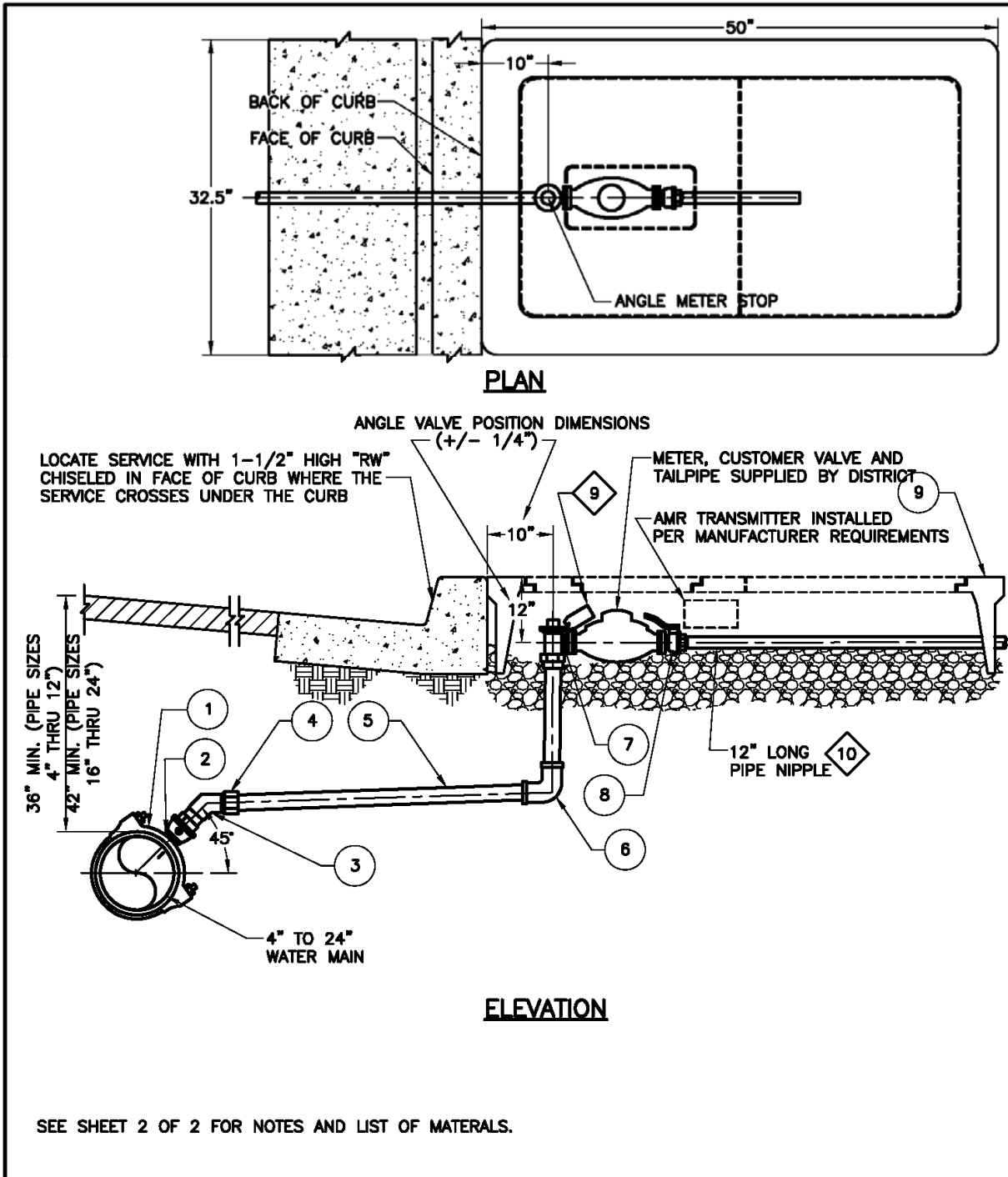


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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1-1/2" AND 2" RECYCLED WATER SERVICE INSTALLATION

2016



Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 1 of 2

NOTES:

1. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 12-INCHES OF VALVE, COUPLING, JOINT OR FITTING.
2. IF PURPLE PE TUBING CAN NOT BE USED, PURPLE POLY-SLEEVE SHALL BE USED AND SECURED AT THE CORP. AND THE ANGLE VALVE WITH 10 MIL. TAPE.
3. SET TOP OF METER BOX FLUSH WITH SIDEWALK OR CURB AS SHOWN.
4. THE CORPORATION STOP TAP SHALL BE MADE AT A 45° DEGREE ANGLE FROM THE TOP OF THE PIPE.
5. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
6. METER BOX SHALL BE SET BEHIND CURB WHERE SIDEWALK IS ADJACENT TO CURB, OR IN PARKWAY BETWEEN CURB AND SIDEWALK.
7. METER BOX COVER AND READING LID FOR ALL RECLAIMED WATER SERVICE SHALL BE PAINTED PURPLE AND STAMPED WITH "RECYCLED WATER" LOGO.
8. METER BOX COVER AND READING LID FOR ALL RECLAIMED WATER SERVICES SHALL BE PAINTED OR CAST/FORMED "PURPLE".



METERS SHALL BE TAGGED. IDENTIFICATION SHALL BE WEATHERPROOF PURPLE PLASTIC, 3-INCHES BY 4-INCHES WITH THE WORDS "WARNING RECYCLED WATER - DO NOT DRINK". IMPRINTING SHALL BE PERMANENT AND BLACK IN COLOR. USE TAGS MANUFACTURED BY T. CHRISTY ENTERPRISES OR APPROVED EQUAL.



ALL ONSITE PIPING IS PURPLE SCH 40 PVC PER YVWD RECYCLED DESIGN AND CONSTRUCTION STANDARDS.

LIST OF MATERIALS

ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1	DOUBLE STRAP SERVICE SADDLE I.P. OUTLET (FOR DUCTILE IRON PIPE MAINS)	JONES MUELLER FORD ROCKWELL	J-979 I.P. H-16102 TO H-16116 202B-SIZE 1.P.7 323-SIZE-14
2	BRONZE CORPORATION STOP MIPT X MIPT	JONES FORD MUELLER	J-1943 FB500-7 B-2969
3	45° DEGREE BRASS ELBOW	-	-
4	M.I.P. X COMPRESSION ADAPTOR	MUELLER FORD JONES	H-15428 C84-77 J-2605
5	2" POLYETHYLENE TUBING - CTS - PURPLE OR WITH PURPLE POLY SLEEVE	-	-
6	BRASS 90° ELBOW, 2" X 2" COMPRESSION X COMPRESSION	JONES MUELLER	J-2611 H-15526
7	BRONZE ANGLE METER STOP W/LOCKWING COMPRESSION CTS X FLANGE 1 1/2" THRU 2" COMBO ANGLE VALVE.	JONES MUELLER FORD	J-4205 P-14277 FV43-777W
8	BRONZE CUSTOMER SERVICE VALVE-METER FLANGE X F.I.P.	JONES FORD	J-1913 BF13-777 W/HH-67
9	METER BOX AND COVER WITH READING LID	ARMOR CAST	A6001430PCX12 W/ (1)-A6001470 - COVER (1)-A6001470DZ - COVER (1)-A6000482

1-1/2" AND 2" RECYCLED WATER SERVICE INSTALLATION

2016

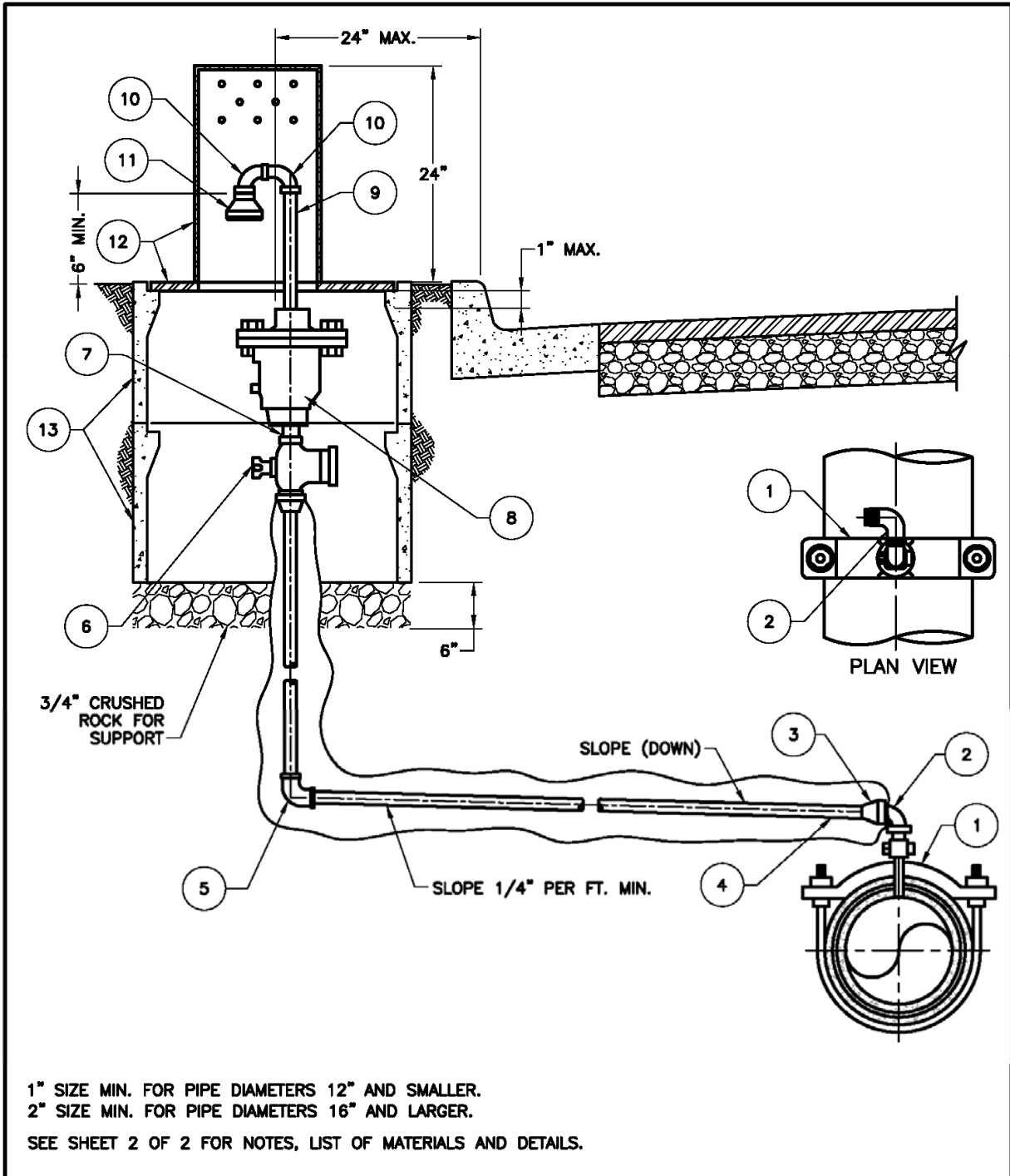


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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1" AND 2" RECYCLED WATER AIR AND VACUUM VALVE ASSEMBLIES

2016



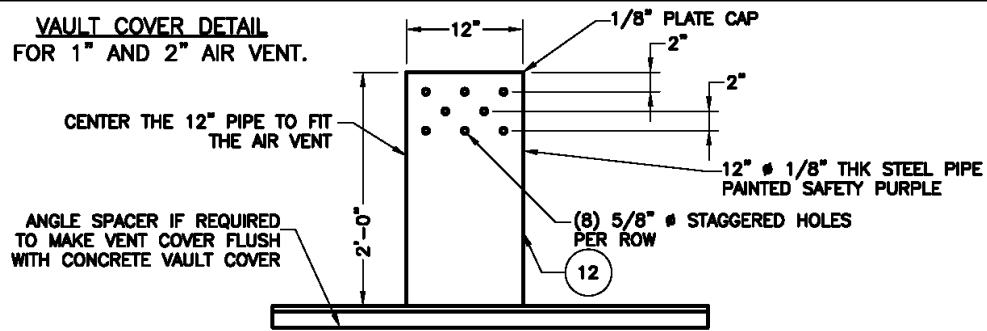
Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 1 of 4

**VAULT COVER DETAIL
FOR 1" AND 2" AIR VENT.**



LIST OF MATERIAL

ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1	CONNECTION PER YWD STD. DWG. R-5 OR DWG. R-7 OFF THE TOP OF PIPE	-	-
2	CORPORATION STOP WITH (2)-90° ELBOW SWING JOINTS, BRASS	-	-
3	F.I.P. X COMPRESSION ADAPTOR	FORD JONES MUELLER	C14-44 J-2607 H-15451
4	P.E. TUBING, CTS, PURPLE OR WITH PURPLE POLY SLEEVE.		
5	COMPRESSION X COMPRESSION 90° ELBOW	JONES MUELLER	J-2611 H-15526
6	CURB VALVE-SHUT OFF PARALLEL WITH CURB	FORD JONES MUELLER	B41-444 J-1921 B-25172
7	3" NIPPLE, BRASS	-	-
8	COMBINATION, AIR & VACUUM VALVE, 1" MINIMUM VAULT SIZE PER PLAN	A.R.I. CRISPIN	D-040 S.S. TRIM, N.P.T. OUTLET
9	18" +/- G.I.P.	-	-
10	90° DEGREE STREET ELL G.I.P.	-	-
11	BUG SCREEN	-	-
12	VAULT COVER (SEE DETAIL, ABOVE)	-	-
13	2-DOUBLE STACKED #6 CONCRETE METER VAULTS		

NOTE:

1. THE AIR VAC BOX IS TO BE SET PERPENDICULAR TO THE BACK OF THE CURB.
2. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.
3. IF AN A.R.I. COMBINATION AIR VAC IS USED THEN ITEMS 9 AND 10 NOT REQUIRED, AND ITEM 13 ONLY REQUIRES 1 METER VAULT.

**1" AND 2" RECYCLED WATER
AIR AND VACUUM VALVE ASSEMBLIES**

2016

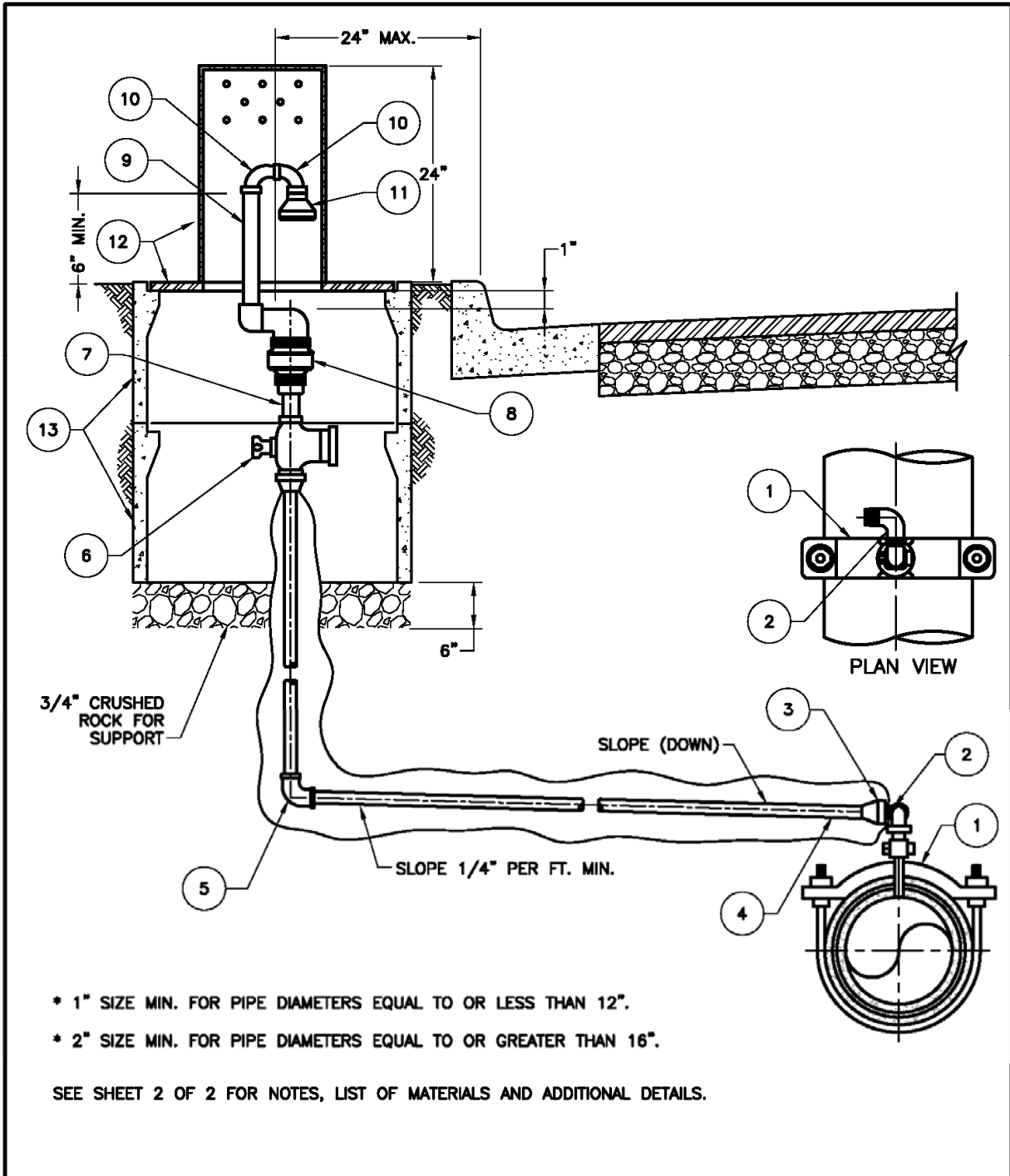


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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1" AND 2" RECYCLED WATER AIR AND VACUUM VALVE ASSEMBLIES

2016

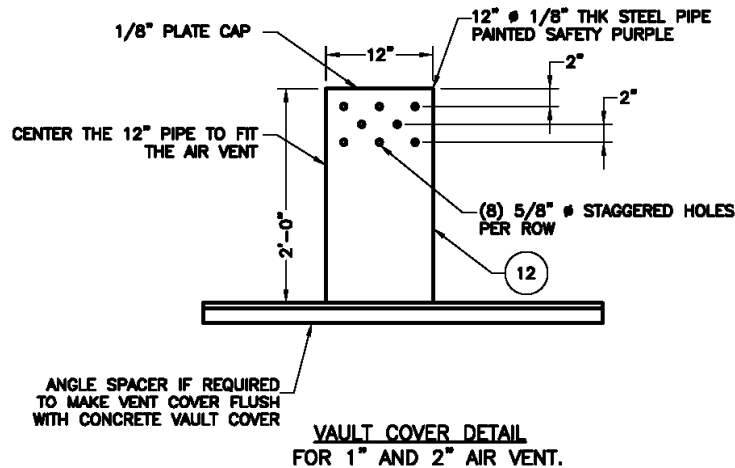


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

R-15

Sheet 3 of 4



LIST OF MATERIAL

ITEM NO.	SIZE & DESCRIPTION	MANUFACTURER	SPEC. NO.
1	CONNECTION PER YVWD STD. DWG W-5 OR DWG. W-7 OFF THE TOP	-	-
2	CORPORATION STOP WITH 2-90° ELBOW SWING JOINTS, BRASS	-	-
3	F.I.P. X COMPRESSION ADAPTOR	FORD JONES MUELLER	C14-44 J-2807 H-15451
4	P.E. TUBING, CTS, PURPLE OR WITH PURPLE POLY SLEEVE		
5	COMPRESSION X COMPRESSION 90° ELBOW	JONES MUELLER	J-2611 H-15526
6	CURB VALVE-SHUT OFF PARALLEL WITH CURB	FORD JONES MUELLER	B41-444 J-1921 B-25172
7	3" X SIZE NIPPLE, BRASS	-	-
8	A.R.I., NPT OUTLET, COMBINATION, AIR & VACUUM VALVE, 1" MIN. VAULT SIZE PER PLAN	A.R.I.	D-040
9	1/8" X SIZE NIPPLE	-	-
10	90° STREET ELL	-	-
11	BUG SCREEN	-	-
12	VAULT COVER (SEE DETAIL, ABOVE)	-	-
13	2-DOUBLE STACKED #8 CONCRETE METER VAULTS		

NOTE:

1. ALL CONNECTIONS TO COPPER TUBING SHALL BE COMPRESSION FITTINGS.
2. THE AIR VAC BOX IS TO BE SET PERPENDICULAR TO THE BACK OF THE CURB.
3. BACKFILL UNDER EXISTING CURB WITHIN THE CITY OF YUCAIPA, MUST BE 2 SACK SLURRY PER CITY STANDARDS.

1" AND 2" AIR AND VACUUM VALVE ASSEMBLY

2016

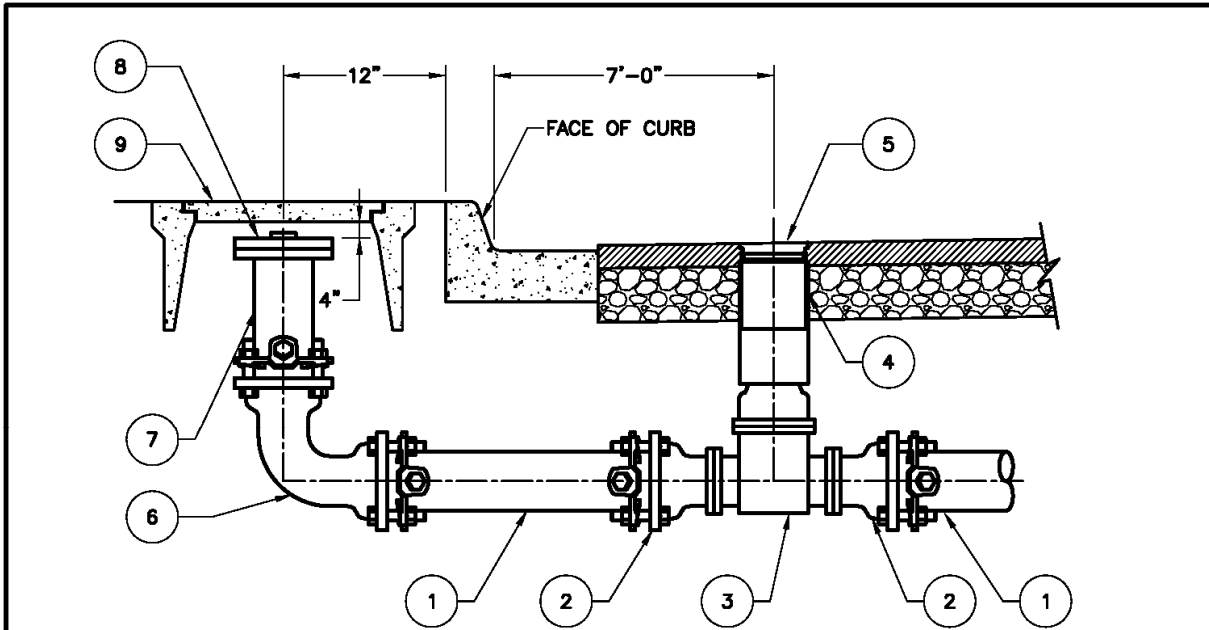


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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NOTE:

1. ALL RECYCLED WATER LINES BELOW GROUND ARE TO BE FULLY BAGGED USING PURPLE POLY SLEEVE.

LIST OF MATERIAL			
ITEM NUMBER	DESCRIPTION	MANUFACTURER	PART NUMBER
1	4" DIP, RESTRAINED		
2	4" MJ X FLG ADAPTER WITH MEGALUG RESTRAINTS		
3	4" GATE VALVE, FLG X FLG, RESILIENT WEDGE, EPOXY COATED	MUELLER	
4	VALVE BOX PER YVWD STD. W-20		
5	VALVE CAN LID, LABELED "RECYCLED" PER YVWD STD. W-20		
6	4" DIP 90° ELBOW, MJ X MJ WITH MEGALUG RESTRAINTS		
7	4" DIP, FLG X PLAIN END (HALF SPOOL)		
8	4" X 2" FIP THD X COMPANION FLG W/2" BRASS PLUG		
9	METER BOX W/SOLID LID, PURPLE IN COLOR W/ "RECYCLED" LOGO	ARMORCAST	BOX - A6000485 LID - A6000484

4" RECYCLED WATER BLOW-OFF ASSEMBLY

2016

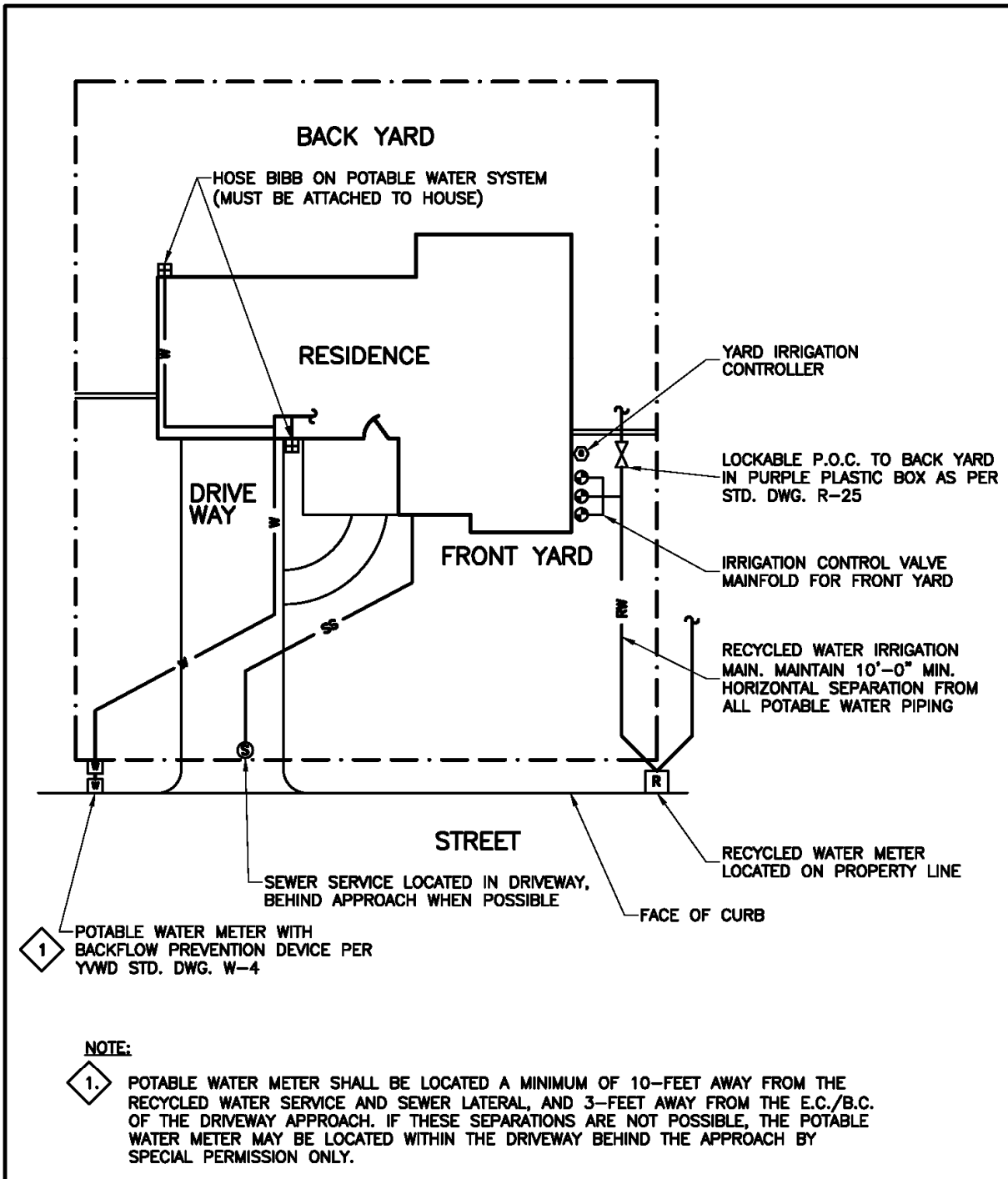


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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RESIDENTIAL DUAL PLUMBED SERVICE SCHEMATIC

2016

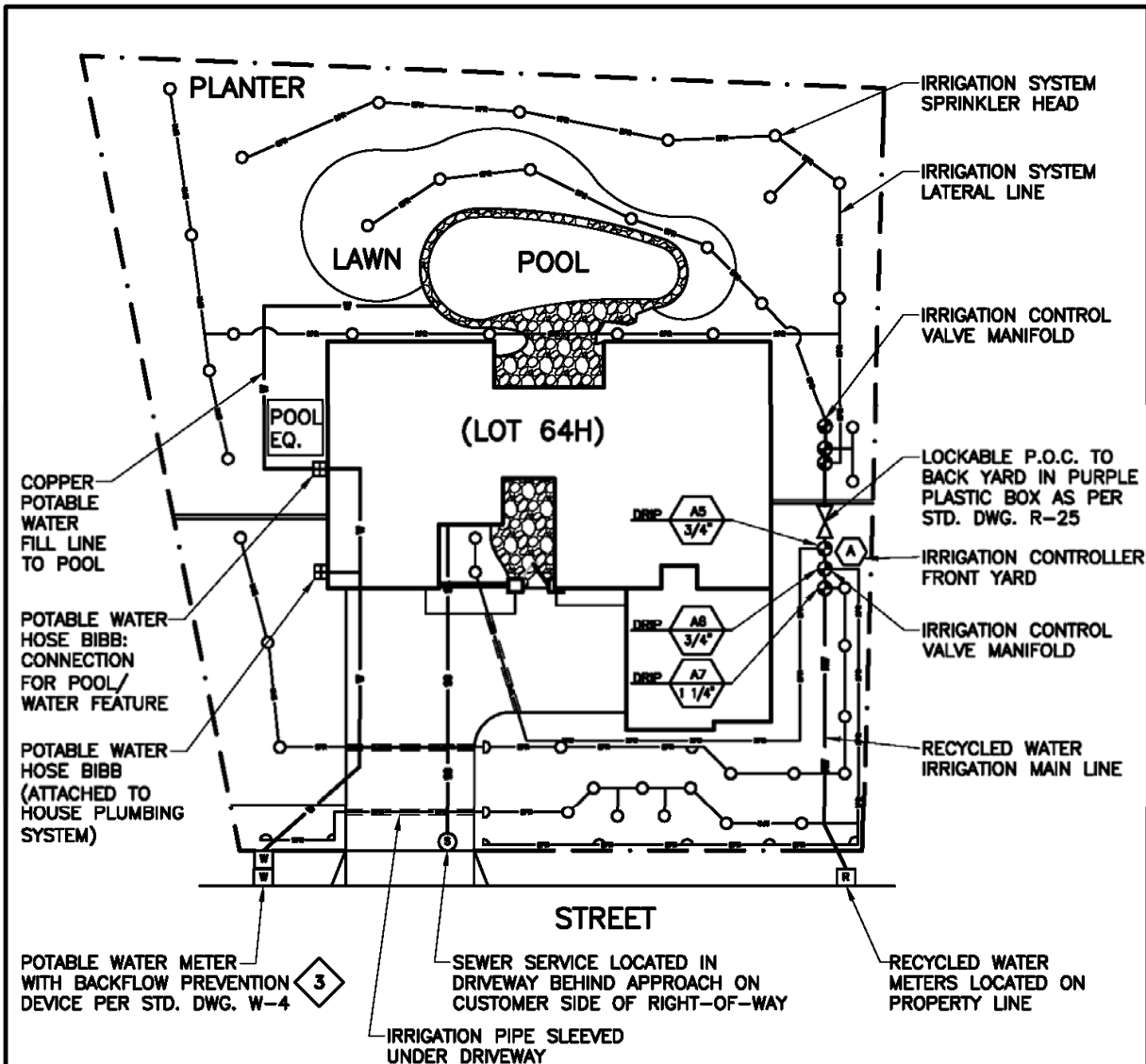


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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Sheet 1 of 1



NOTES:

1. THIS EXAMPLE OF AN IRRIGATION PLAN SUBMITTAL REPRESENTS THE MINIMUM PLAN SUBMITTAL REQUIREMENT.
2. IRRIGATION LEGEND SHALL BE INCLUDED ON THE PLAN. SEE YVWD STD. DWG. R-1 FOR EXAMPLE OF IRRIGATION PLAN LEGEND.
3. POTABLE WATER METER SHALL BE LOCATED A MINIMUM OF 10- FEET AWAY FROM THE RECYCLED WATER SERVICE AND SEWER LATERAL, AND 3- FEET AWAY FROM THE E.C./B.C. OF THE DRIVEWAY APPROACH. IF THESE SEPARATIONS ARE NOT POSSIBLE, THE POTABLE WATER METER MAY BE LOCATED WITHIN THE DRIVEWAY BEHIND THE APPROACH BY SPECIAL PERMISSION ONLY.

RESIDENTIAL LOT IRRIGATION LAYOUT PLAN SUBMITTAL EXAMPLE

2016

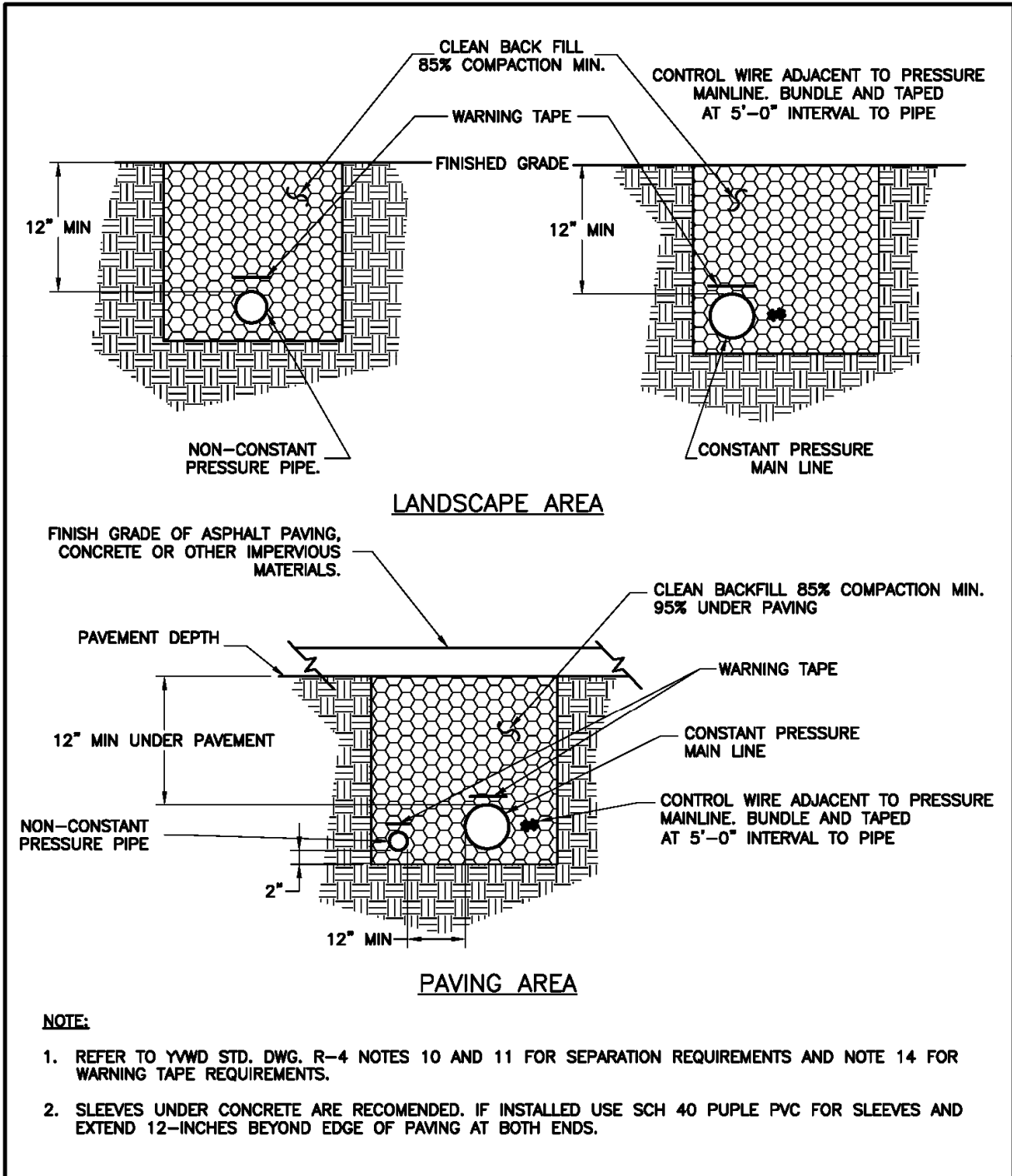


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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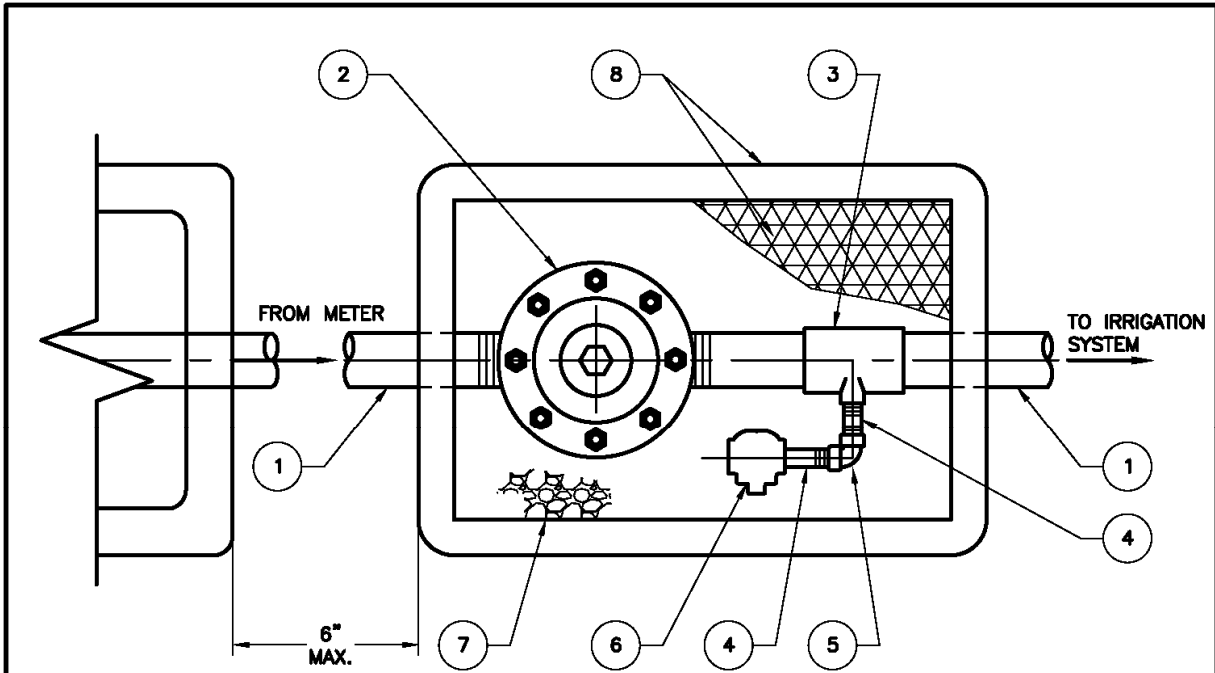


NOTE:

1. REFER TO YVWD STD. DWG. R-4 NOTES 10 AND 11 FOR SEPARATION REQUIREMENTS AND NOTE 14 FOR WARNING TAPE REQUIREMENTS.
2. SLEEVES UNDER CONCRETE ARE RECOMENDED. IF INSTALLED USE SCH 40 PUPLE PVC FOR SLEEVES AND EXTEND 12-INCHES BEYOND EDGE OF PAVING AT BOTH ENDS.

ONSITE IRRIGATION PIPELINE TRENCHING DETAIL FOR PLANNED RECYCLED WATER USE

2016	 <p>Yucaipa Valley Water District</p>	<p>Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##</p>	R-22
			Sheet 1 of 1



LIST OF MATERIALS	
ITEM NO.	DESCRIPTION
1	SCH 80 MAINLINE
2	PRESSURE REDUCING REGULATOR AS REQUIRED
3	LINE SIZE X LINE SIZE X 3/4" SCH 80 TEE (SOC X SOC X THD)
4	3/4" SCH 80 NIPPLE
5	3/4" SCH 80 ELBOW (THD X THD)
6	1/4" BRONZE BALL VALVE (FIP X FIP)
7	3/8" DIA. PEA GRAVEL SUMP (MIN. 1 CUBIC FT.)
8	PURPLE COLOR JUMBO VALVE BOX AND LID

**NON-RESIDENTIAL RECYCLED WATER
CROSS CONNECTION CONTROL TEST STATION DETAIL**

2016

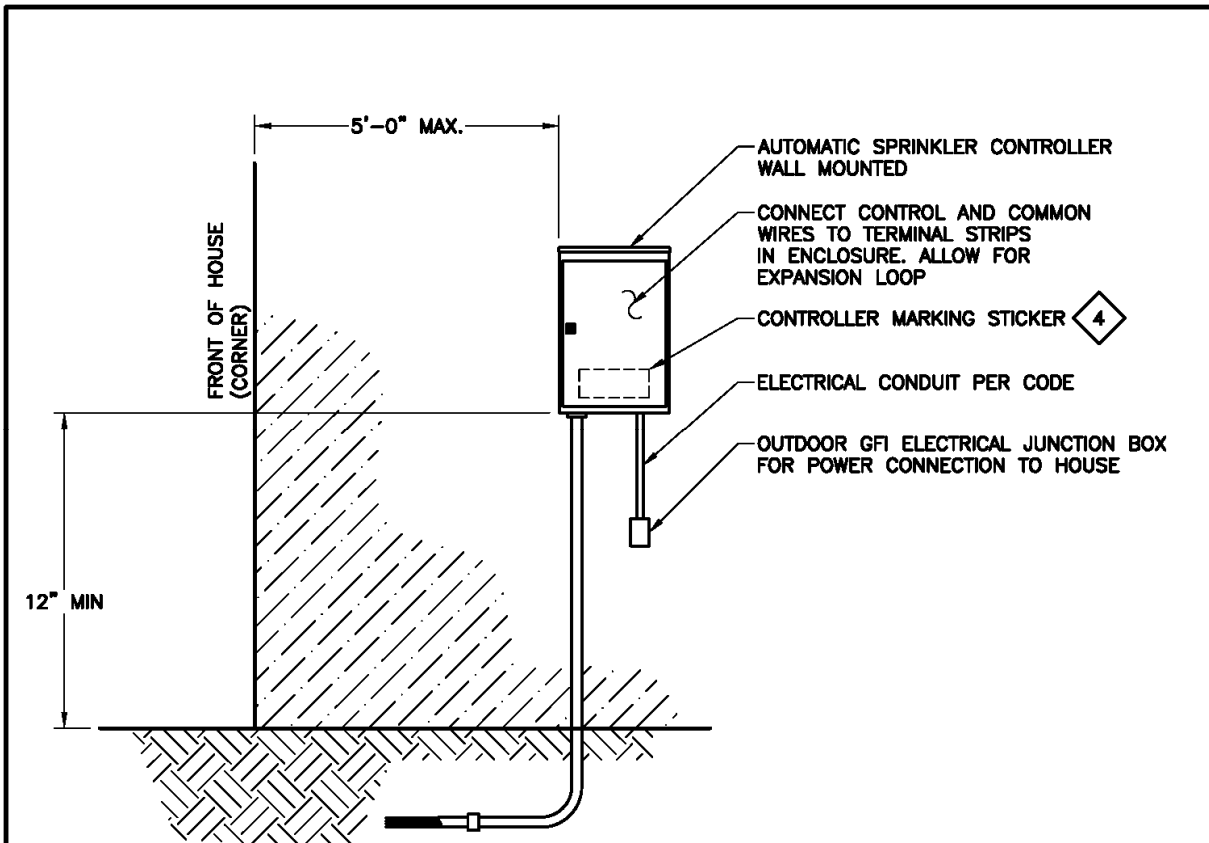


Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

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NOTES:

1. CONTROL WIRING (AWG. UF #14.). SECURE TO TERMINAL STRIP PROVIDED IN ENCLOSURE.
2. COMMON WIRE TO BE WHITE AND CONTROL WIRE TO BE RED. BUNDLE AND TAPE WIRING AT INTERVALS OF 5'-0" O.C.
3. INSTALL ON/OFF SWITCH FOR ELECTRICAL SUPPLY INSIDE OF CONTROLLER.
4. INSTALL CONTROLLER MARKING STICKER: "ATTENTION - CONTROLLER UNIT FOR RECYCLED WATER" ATTACH STICKER INSIDE CONTROLLER CABINET DOOR.

ONSITE IRRIGATION AUTOMATIC CONTROLLER – WALL MOUNT

2016

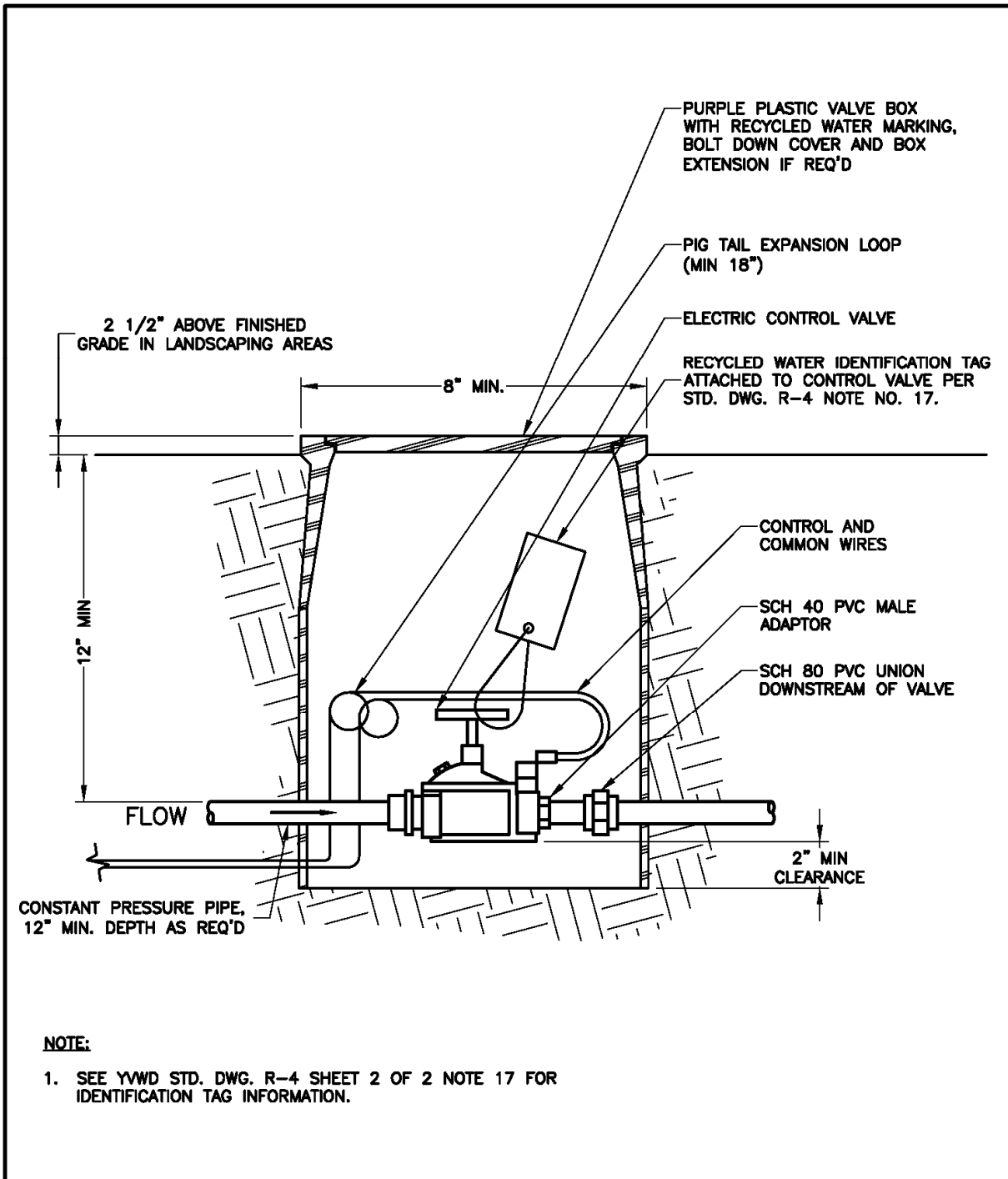


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**ONSITE IRRIGATION
BURIED ELECTRIC REMOTE CONTROL VALVE**

2016



Yucaipa Valley Water District

Approved by the Yucaipa Valley Water District Board of Directors on January ##, 2016 as Resolution No. 2016-##

R-25

Sheet 1 of 1



Date: March 8, 2016

Subject: Operational Update of the Recycled Water Filling Station for Customers of the Yucaipa Valley Water District

The Yucaipa Valley Water District staff has been investigating the implementation of a recycled water filling station to meet the needs of customers interested in using recycled water for irrigation use at their homes.

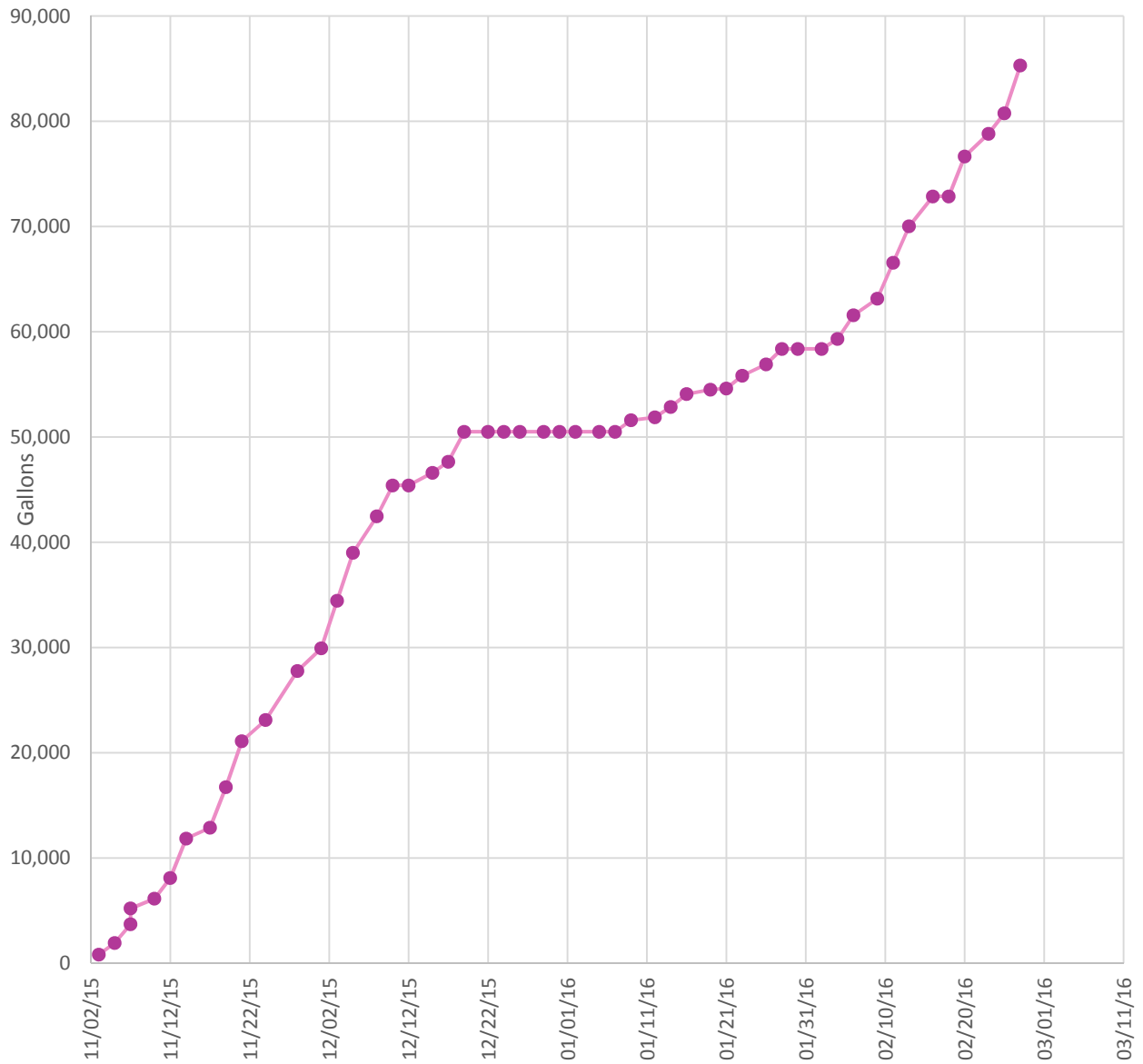
On August 5, 2015, the Board of Directors authorized the District staff to proceed with the implementation of a recycled water filling station. On November 2, 2015, the District received a permit to operate the system from the State Water Resources Control Board, Division of Drinking Water.



Over the past several months, the District has hosted a series of meetings to train residential customers interested in receiving the recycled water from this facility. The purpose of this workshop item is to provide an update on the operation of the facility.

Over the first four months of operation, customers of the Yucaipa Valley Water District have picked up 85,302 gallons of recycled water for use on at their homes.

Accumulated Quantity of Recycled Water - Fill Station



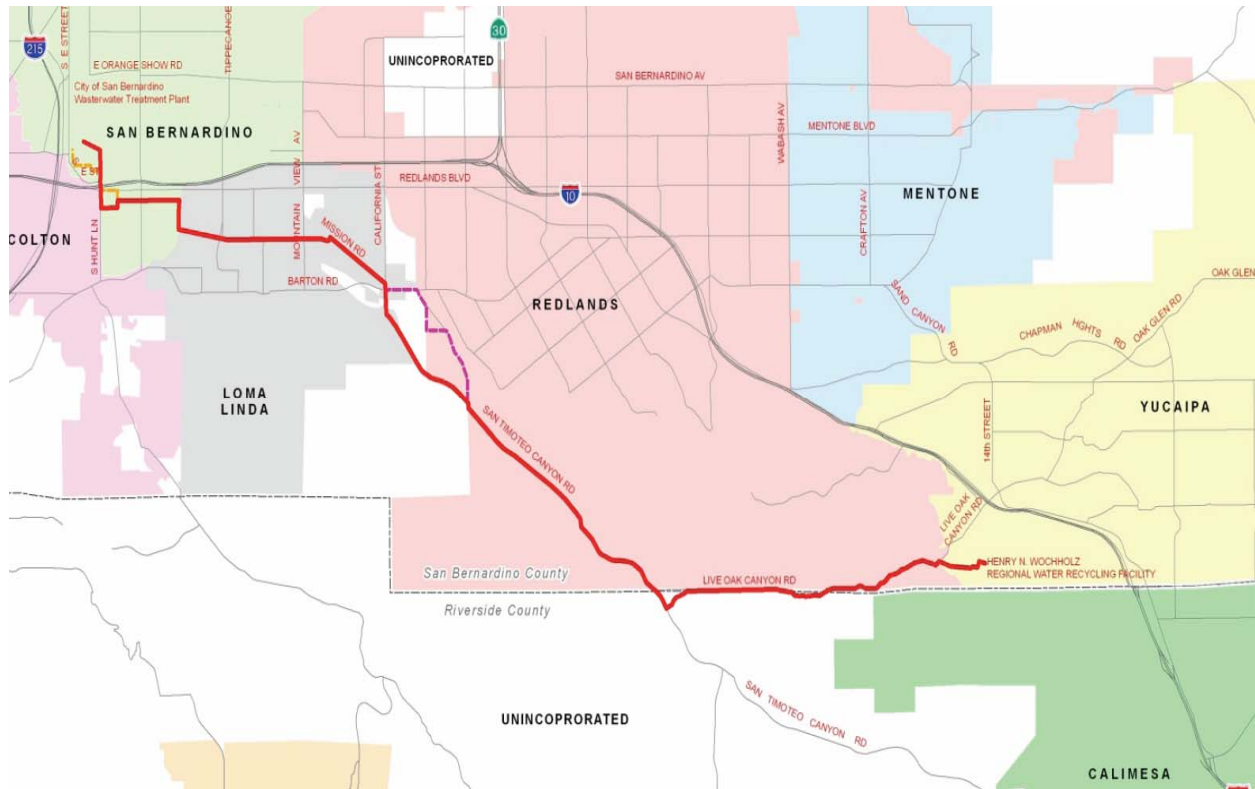


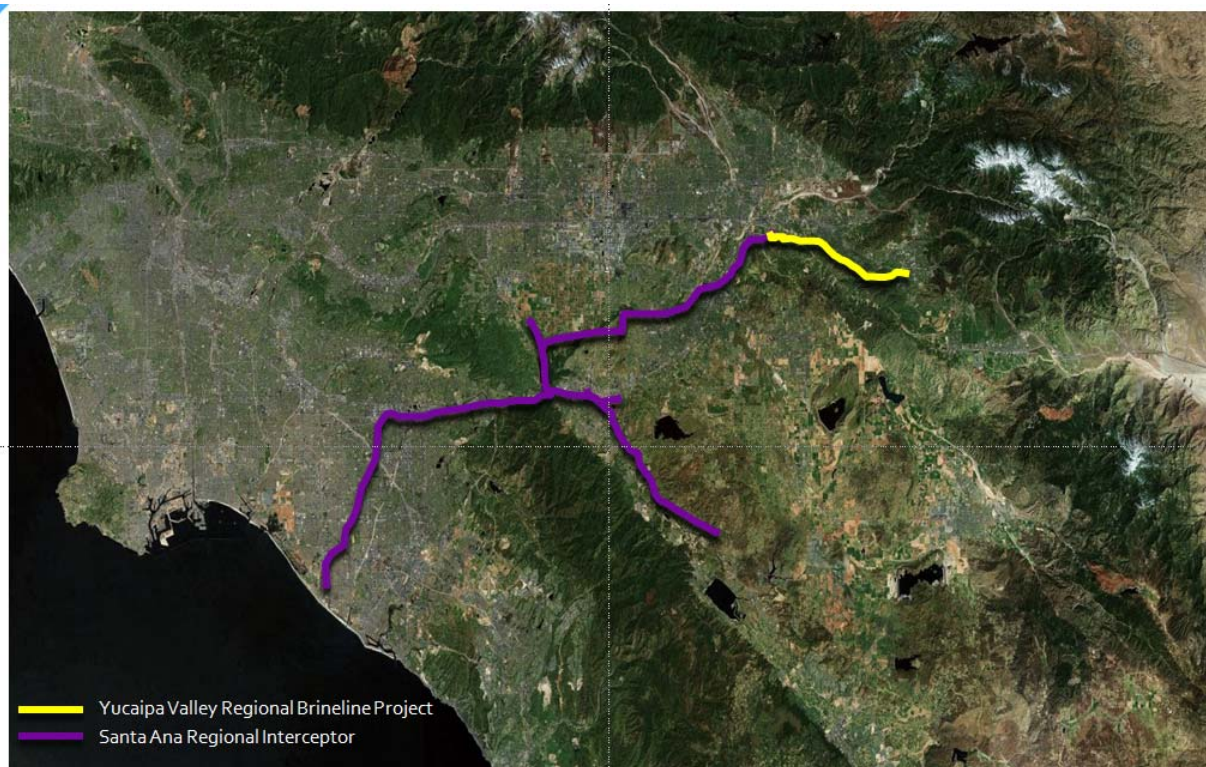
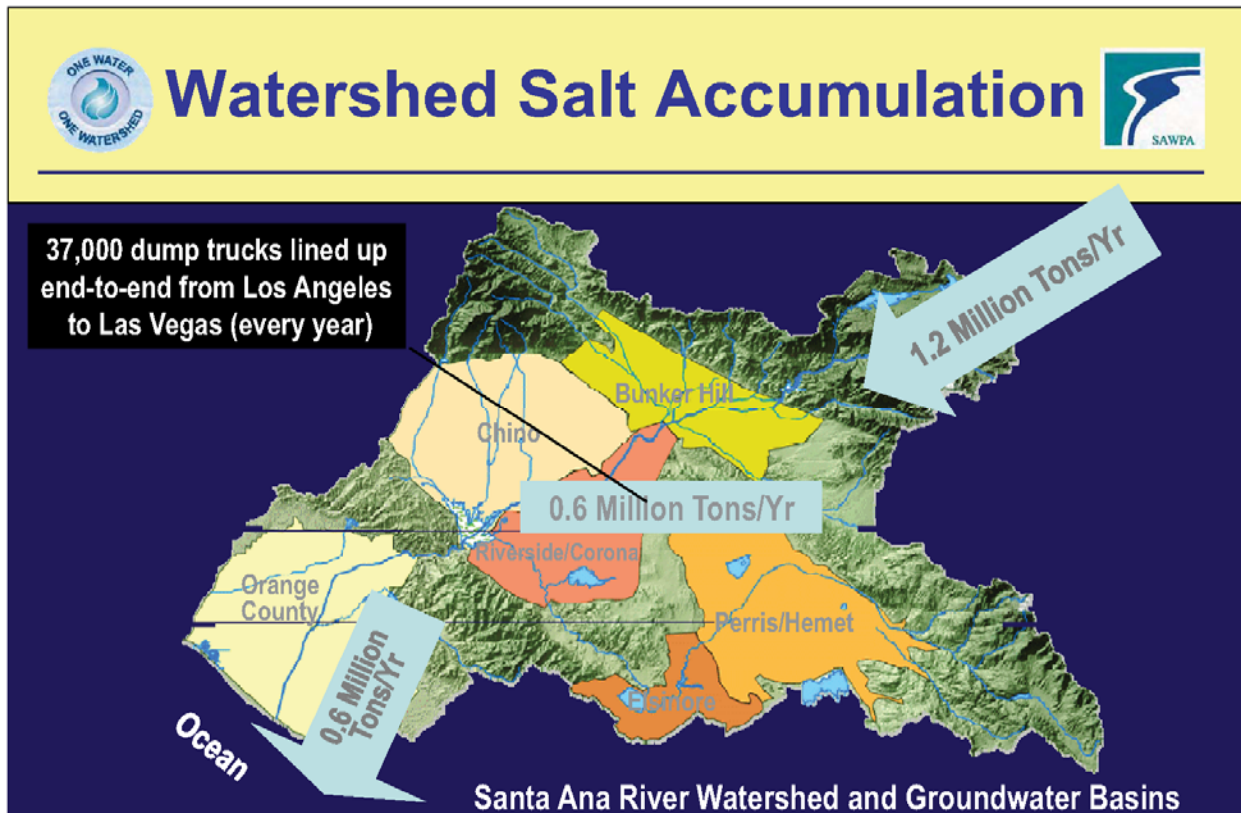
Date: March 8, 2016

Subject: Purchase of Inland Empire Brinline Pipeline and Treatment Capacity from the San Bernardino Valley Municipal Water District

The Yucaipa Valley Water District has constructed a reverse osmosis treatment process at the wastewater treatment plant to comply with the water quality objectives set by the Santa Ana Regional Water Quality Control Board (“Regional Board”). The reverse osmosis treatment process enables the District to remove salts and minerals from the recycled water supply which results in an exceptionally pure quality recycled water source. The salt water waste produced from the reverse osmosis system, referred to as brine or reverse osmosis concentrate, must be conveyed in a pipeline to lower portions of the Santa Ana Watershed so it does not impact fresh water supplies.

In 2013, the Yucaipa Valley Water District completed the construction of the Yucaipa Valley Regional Brinline which extends from Yucaipa to San Bernardino. This pipeline is essential for the disposal of brine generated from the production of recycled water that meets the water quality requirements of the Regional Board.

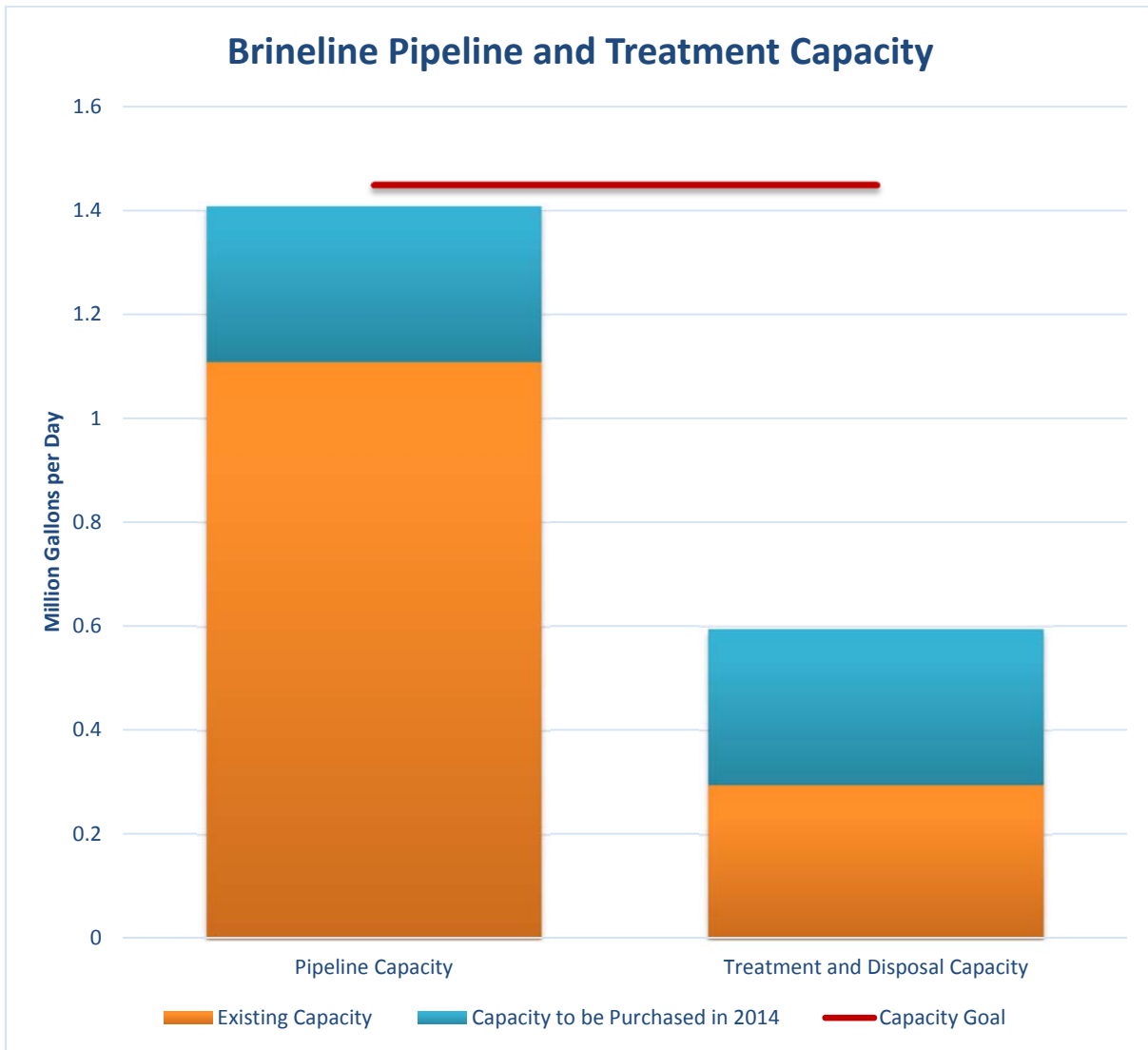




Yucaipa Valley Regional Water Supply Renewal Project

The Yucaipa Valley Water District currently owns 1.108 million gallons per day of brine pipeline capacity in the Inland Empire Brine Pipeline, formally referred to as the Santa Ana Regional Interceptor (SARI). The District purchased 0.108 million gallons per day of pipeline capacity in 1993 and made a second purchase of pipeline capacity of 1.0 million gallons per day in 2006.

In 2013, the Yucaipa Valley Water District purchased 0.295 million gallons per day of treatment and disposal capacity at the Orange County Sanitation District’s facilities.



The Yucaipa Valley Water District has been working with the San Bernardino Valley Municipal Water District for the purchase of an additional 300,000 gallons per day of pipeline and treatment capacity for brine disposal. The purpose of this workshop item is to provide an update on the status of the purchase arrangement.

Capital Improvement Projects



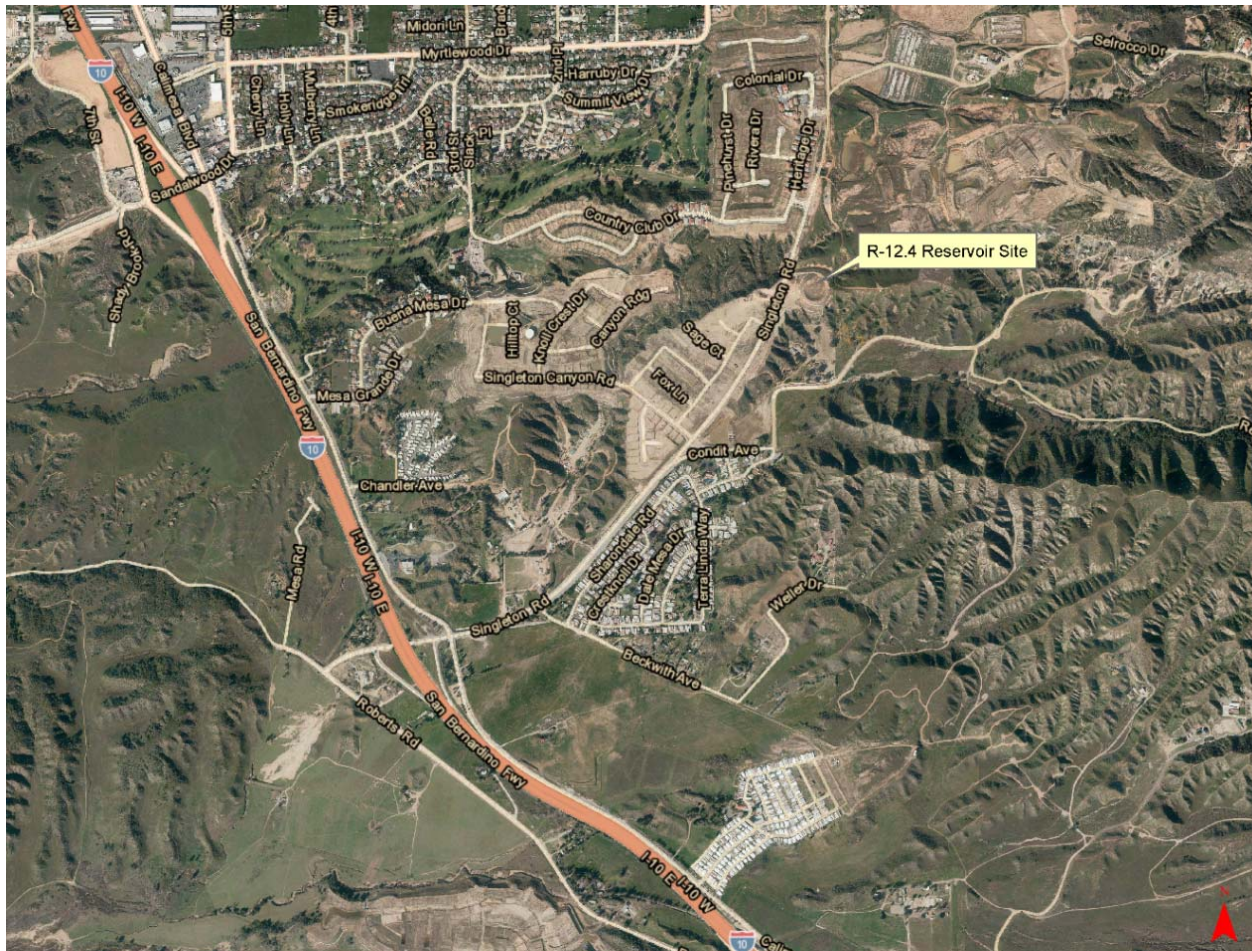
Yucaipa Valley Water District



Date: March 8, 2016

Subject: Status Report on the Construction of a 6.0 Million Gallon Drinking Water Reservoir R-12.4 - Calimesa

At the regular meeting on July 16, 2014, the Board authorized the solicitation of bids for the construction of a 6.0 Million Gallon R-12.4 Reservoir located on Singleton Road in Calimesa [Director Memorandum No. 14-060]. On November 19, 2014, the Board of Directors awarded the construction contract for the reservoir facility to Gateway Pacific Contractors [Director Memorandum No. 14-091].



The purpose of this agenda item is to provide an update on the progress of the reservoir construction project.







Date: March 8, 2016

Subject: Status Report on the Digester Cleaning and Cover Replacement Project at the Wochholz Regional Water Recycling Facility

The Yucaipa Valley Water District operates and maintains four anaerobic digesters for sludge conditioning, each with a diameter of 45 feet and a side water depth of 22 feet, yielding a working capacity of approximately 262,000 gallons per digester. The digesters treat sludge drawn from both the primary clarifiers and from the dissolved air flotation thickeners. Digested sludge flows by gravity and can be stored temporarily in a sludge holding tank before being conveyed to the belt presses for dewatering. To keep the digesters functioning properly they should be cleaned every 8-10 years in order to remove the accumulated build-up of sand, grit, and other debris.

Projects	Construction Timeline	Summary of Work
Wastewater Treatment Plant	1976-design 1984-constr	<ul style="list-style-type: none"> Construction of Digester Nos. 1 and 2 and appurtenant equipment, (e.g. heaters) Digester No. 1 equipped with a fixed cover and Digester No. 2 equipped with a floating cover
Stage I Expansion Project	1992	<ul style="list-style-type: none"> Construction of Digester Nos. 3 and 4 Both Digester No. 3 and Digester No. 4 equipped with fixed covers
Digester No. 2 Cover Modifications	1994	<ul style="list-style-type: none"> Digester No. 2 cover converted from floating to fixed configuration
Digester Cleaning	2004	<ul style="list-style-type: none"> Digester Nos. 1-4 Cleaning
Digester Coating	2005	<ul style="list-style-type: none"> Digester Nos. 1-4 Coating of Cover
Digester and Sludge Holding Tank Modifications Project	2005	<ul style="list-style-type: none"> Digester Nos. 1-4 and Digester Holding Tank Pump Mix System installation

When the digesters were cleaned in 2005, the District staff assessed the condition of the digesters and related equipment. Based on corrosion identified at this time, the District made a decision to replace at least two covers the next time the digesters were scheduled to be cleaned.

In 2015, the District staff worked with RMC to develop a construction bid schedule that included a series of construction alternatives for cleaning and/or replacement of the digester covers. After carefully evaluating the cleaning/construction bids received for this project, the Board of Directors decided to award a construction contract to Pascal & Ludwig for the cleaning and replacement of four digester covers for a sum not to exceed \$2,175,000. [DM 15-041]

The purpose of this agenda item is to provide an update on the status of the construction project.







Policy Issues



Yucaipa Valley Water District



Date: March 8, 2016

Subject: Consideration of Policies Regarding Procurement Methodologies and Emergency Procedures

As discussed at the regular board meeting on January 20, 2016 [Director Memorandum No. 16-011], the District staff has implemented a new procurement system that has been used to solicit bids for the demolition of the Cedar Avenue facilities [Workshop Memorandum No. 16-019]. This system will be used by the Public Works Department for the solicitation of paving costs associated with District construction projects.

The screenshot shows the website for Yucaipa Valley Water District. The header includes the logo and the text "Yucaipa Valley Water District An independent special district proudly serving Yucaipa and Calimesa". A navigation menu contains links for HOME, ABOUT US, CALENDAR, PROGRAMS, PUBLICATIONS, SERVICES, HOW DO I..., and CONTACT US. A search bar is located in the top right corner.

The main content area is titled "Request For Proposals" and includes a "Services" link. Below the title are options for Font Size, Share & Bookmark, Feedback, and Print. There are three dropdown menus for "All Categories", "All Bids", and "All Years".

RFP NUMBER	TITLE	STARTING	CLOSING	STATUS
151201	Demolition of Cedar Avenue Structures	12/16/2015 5:00 PM	01/20/2016 2:00 PM	Open

Below the table, there is a text block: "The Yucaipa Valley Water District invites interested parties to register to receive email notifications when new opportunities are posted to this page. Use the button below to be added to our email notification system." A button labeled "Receive RFPs by Email" is positioned below the text.

Over the past twenty years, the Board of Directors and the District staff responded to three significant emergency facility repairs that were beyond the capability of the District staff to repair in an efficient and effective manner. Two of the emergencies involved sewer force mainline failures near Lift Station No. 1, and the third involved the sewer bridge south of Interstate 10. While these issues do not occur on a regular basis, the Board of Directors requested the preparation of a policy that outlines the process and procedure used to respond to emergency situations. The attached resolution has been prepared as a draft document for discussion by the Board of Directors and was continued from the board workshop on January 26, 2016 as Workshop Memorandum No. 16-020.

DRAFT RESOLUTION

RESOLUTION NO. 2016-0x

RESOLUTION OF THE YUCAIPA VALLEY WATER DISTRICT ADOPTING EXCEPTIONS TO STANDARD PROCUREMENT PRACTICES TO AVOID POTENTIAL EMERGENCIES AND TO RESPOND TO EMERGENCY SITUATIONS

Whereas, the Yucaipa Valley Water District maintains and operates drinking water, sewer, recycled water and brineline related infrastructure that is necessary to protect public health, safety and property in the region; and

Whereas, the Yucaipa Valley Water District Board of Directors recognize that there will be times when the District staff must use vendors, contractors and consultants to meet the needs of emergency situations for the immediate supplies, services, or construction that otherwise cannot be met through traditional procurement methods.

NOW, THEREFORE, BE IT HEREBY RESOLVED AND ORDERED, that the Board of Directors of the Yucaipa Valley Water District hereby adopts the following process for the procurement of services in advance of a disaster or in response to an emergency situation.

Emergency Procurement - Award of a Contract without Competition

An emergency procurement involves a specialized situation or event whereby the District staff, through the General Manager or his/her designee, is pre-authorized to procure services, supplies or construction repairs without the use of a competitive procurement process.

An emergency procurement may only be used when circumstances create potential harm or risk of harm to public health, welfare, safety, or property. Circumstances that may create harm or risk to health, welfare, safety, or property are defined by the General Manager and include, but are not limited to:

- A. Damage or potential damage to a facility or infrastructure resulting from flood, fire, earthquake, storm, explosion or other conditions;
- B. Failure or potential failure of a public building, equipment, road, bridge, utility, pipeline, reservoir, pump/lift station, treatment plant, treatment process, or similar situation that may impact an ancillary service provider to the District;

- C. Terrorist activity;
- D. Epidemics;
- E. Civil unrest;
- F. Events that impair the ability of the District to function or perform required services;
- G. Situations that may cause harm or injury to life or property; or
- H. Other conditions as determined by the General Manager.

Emergency procurements are those procurements necessary to mitigate an emergency situation or the reasonable potential of an emergency.

While a standard procurement process is not required under an emergency procurement, when practicable, the District should seek to obtain as much competition as possible through use of phone quotes, Internet quotes, limited invitations to bid, or other selection methods while avoiding harm, or risk of harm, to the public health, safety, welfare, property, or impairing the ability of a public entity to function or perform required services.

The District staff shall provide information about the emergency procurement of supplies, services or construction activity in the form of a written memorandum or presentation at a publicly noticed board meeting or board workshop.

PASSED, APPROVED and ADOPTED this ___ day of March 2016.

YUCAIPA VALLEY WATER DISTRICT

ATTEST:

Lonni Granlund, President Board of Directors

Joseph B. Zoba, General Manager



Date: March 8, 2016

Subject: **Consideration of Policies Regarding Long-Term Implementation Plans Related to Smart Manhole Covers and Skydrop Irrigation Controllers**

In 2015, the Board of Directors authorized the procurement and implementation of Skydrop Irrigation Controllers and Smart Covers for manholes. These two devices have significantly improved the overall operation, efficiency, and effectiveness of the Yucaipa Valley Water District's water and sewer operations.

- On May 6, 2015, the Board of Directors approved the purchase of \$250,000 worth of Skydrop Irrigation Controllers [Director Memorandum No. 15-043].
- On November 4, 2015, the Board of Directors approved the purchase of nine SmartCover systems for monitoring the sewer collection system [Director Memorandum No. 15-101].

While the District has made large financial commitments for these devices, the Board of Directors may desire to consider establishing policies that provide direction to the District staff to develop an ongoing program of financial support for both existing customers as well as new customers for the gradual expansion and maintenance of these water and sewer tools.



Date: March 8, 2016

Subject: Consideration of Policies Regarding the Purchase of Supplemental Water Supplies for the Yucaipa Valley Water District

On August 17, 2011, the Board of Directors adopted Resolution No. 18-2011 setting rates, fees and charges for drinking water, sewer and recycled water. Section 4.2 of Resolution No. 18-2011 is currently being analyzed for compliance with the San Juan Capistrano tiered rate case. Based on this case, the District may need to consolidate the current tiered rate structure into a flat unit rate for drinking water service.

4.2 Potable Water Commodity Charge. The water commodity charge rate is the charge per one thousand gallons (kgal) for all water registered by the customer's water meter in a monthly billing cycle and is herein established as follows:

Potable Water Consumption (kgal)	Commodity Rate (\$/kgal)
1 – 15 Billing Units	\$1.429
16 – 60 Billing Units	\$1.919
61 – 100 Billing Units	\$2.099
101 and greater Billing Units	\$2.429

Resolution No. 18-2011 also established a calculation methodology for the purchase of imported water as a pass-through rate structure from water wholesale agencies. This calculation adjusts automatically to keep current with the imported water rates charged by the San Bernardino Valley Municipal Water District and the San Gorgonio Pass Water Agency.

The formula included in Section 4.4.2 is based on the purchase of imported water at a ratio of 70% of the drinking water consumed by our customers. Applying this methodology to the imported water rates set by wholesale agencies, customers in Yucaipa pay \$0.27/kgal and customers in Calimesa pay \$0.66/kgal. The disparity in rates is not unusual given the fact that the two wholesale agencies have different rate factors, priorities and methodologies used to set their imported water rates.

4.4.2 Calculation Methodology. The calculation definitions and methodology is applicable to the Imported Water Rates charged by both the San Bernardino Valley Municipal Water District and the San Gorgonio Pass Water Agency as follows.

Imported Water Commodity Charge = (0.7) x (Imported Water Rate) x (0.00307)

Definitions:

- Imported Water Commodity Charge (expressed in units of \$/kgal) represents the calculated charge implemented by the Yucaipa Valley Water District and applied to customer utility bills within the respective service area of the San Bernardino Valley Municipal Water District and the San Gorgonio Pass Water Agency.
Imported Water Rate (expressed in units of \$/acre-foot) represents the rate charged by the San Bernardino Valley Municipal Water District and the San Gorgonio Pass Water Agency for water delivered to the Yucaipa Valley Regional Water Filtration Facility.

In order to provide the necessary funding for the storage of imported water in the Bunker Hill, Yucaipa and Beaumont basins under the adjudicated rules and conjunctive use projects, the Board of Directors should discuss and consider setting policies that provide a slow and steady change from the current 70% factor to a 100% factor (or 115% considering the District's sustainability policy) to ensure that sufficient water is purchased and stored to supply water to the community for long-term stress of water systems, outages of the State Water Project, and future droughts. This factor may also be re-established to include the necessary funding for the recharge of recycled water at the Wilson Creek Spreading basins.

Development Projects



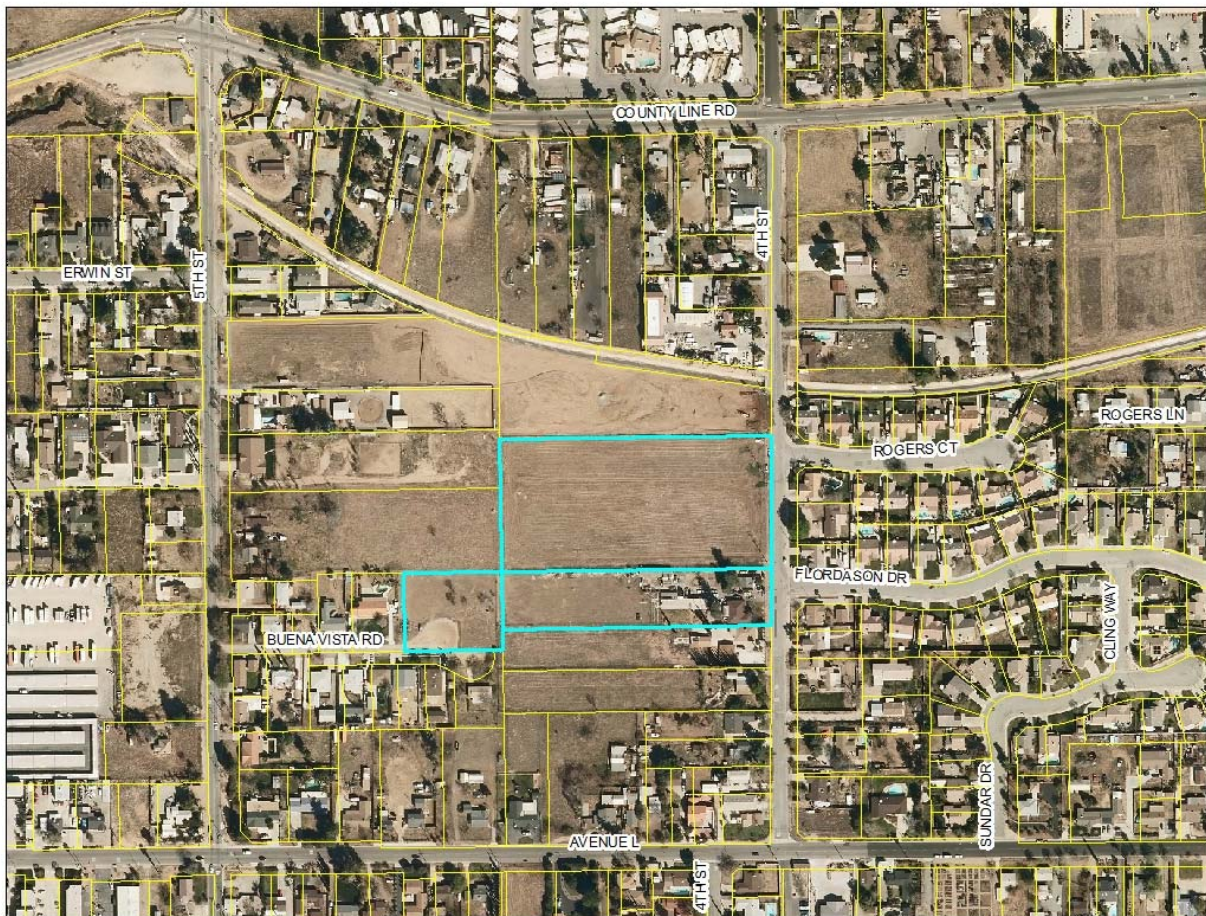
Yucaipa Valley Water District



Date: March 8, 2016

Subject: Development Agreement No. 2016-03 to Provide Sewer Facilities and Service to the Private Development of Tract Map 36818, MBTK Homes, LLC (Assessor's Parcel Numbers 411-150-012, 411-160-006 and 411-160-032)

The proposed development of Tract Map No. 36818 consists of 27 single family residential units on approximately 7.33 acres, located on the west side of 4th Street between Flordason Drive and Rogers Court, north of Avenue L in the City of Calimesa.



The District staff has been working with the developers for the preparation of a development agreement. The specific conditions of service for this project are included in Part G: Special Conditions of the attached agreement.

YVWD AGREEMENT NO. 2016-03

**AGREEMENT TO PROVIDE SEWER FACILITIES AND SERVICE
TO THE
PRIVATE DEVELOPMENT OF TRACT MAP 36818**

This Agreement is made and effective this 16th day of March, 2016, by and between the YUCAIPA VALLEY WATER DISTRICT, a public agency ("DISTRICT") and MBTK Homes, LLC, ("DEVELOPER"). Each is sometimes referred to herein as a "Party" and jointly as the "Parties".

Contact information for the parties is as follows:

DISTRICT:

Yucaipa Valley Water District
12770 Second Street
Post Office Box 730
Yucaipa, California 92399-0730
Attn: Joseph B. Zoba, General Manager
Telephone: (909) 797-5119
Facsimile (909) 797-6381

DEVELOPER:

MBTK Homes, LLC
11154 Walnut Avenue
Redlands, California 92374
Attn: Mark Buoye
Telephone: (909) 499-8353
Facsimile:

PROJECT OVERVIEW

This "Sewer Only" development consists of 27 single family residential units on approximately 7.33 acres. The project consists of APNs 411-150-012, 411-160-006 and 411-160-032 which are located on the west side of 4th Street between Flordason Drive and Rogers Court, north of Avenue L in the City of Calimesa, Riverside County. The proposed development of the Property will not include phased construction. (see "Attachment A – Project Overview Map")

The Yucaipa Valley Water District has been involved in the review process for this project and has established the following development related project files: P-65-305 Work Order 65-20857

RECITALS

WHEREAS, DEVELOPER desires to develop its Property situated within the service area of the DISTRICT, and

WHEREAS, DEVELOPER proposes to develop the DEVELOPER's Property in the manner generally proposed and in accordance with the currently approved maps and construction drawings reviewed by the Yucaipa Valley Water District at this time, and

WHEREAS, DEVELOPER desires to obtain water (as used herein, "water" includes, but is not limited to, recycled water where applicable) and sewer service from the DISTRICT for its development in accordance with the DISTRICT's Rules, Regulations and Policies; and

WHEREAS, it is the purpose of this Agreement to set forth the terms and conditions by which the DISTRICT will provide water and sewer service to the DEVELOPER's Property.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the DEVELOPER and the DISTRICT agree as follows:

PART A: THE FACILITIES

1. General Description.

a. The DEVELOPER proposes to develop its Property as provided on the approved development construction drawings approved by the DISTRICT (the "Approved Plans" as defined in Paragraph 3(a) of this Agreement) which includes water and sewer facilities ("Facilities" or "Facility") necessary to serve the Property.

b. Ownership; Operation and Maintenance: Once constructed and accepted by the DISTRICT, title to the facilities (and associated right-of-way) shall be conveyed by the DEVELOPER to the DISTRICT, and the DISTRICT shall operate and maintain the facilities and shall provide water and sewer service to the DEVELOPER's Property in accordance with the DISTRICT's Rules, Regulations and Policies and the provisions of this Agreement.

PART B: DESIGN AND CONSTRUCTION

2. Licensed Professionals. All work, labor and services performed and provided in connection with (for example) the preparation of surveys and descriptions of real property and right-of-ways, the preparation of construction specifications, plans and drawings, and the construction of all Facilities, shall be performed by, or under the direction of, professionals appropriately licensed by the State of California and in good standing. In the event the

DISTRICT reasonably determines after conferring with the DEVELOPER that other licensed professionals are required in order to satisfy the obligations of the DEVELOPER hereunder, the DEVELOPER shall promptly retain such professionals at its sole cost and expense.

3. Plan Acceptance; Facility Acceptance.

a. The DISTRICT shall within 30 calendar days of receipt respond to all plans and specifications ("Plans") related to the construction of the Facilities. Upon its final review and approval of the Plans, the DISTRICT shall sign the construction drawings ("Approved Plans") indicating such approval ("Plan Acceptance"). Plans are subject to an annual review by the District and modifications may be required by the DISTRICT to conform to revised construction standards.

b. The DEVELOPER shall not permit, or suffer to permit, the construction of any Facility without having first obtained Plan Acceptance. In the event the DEVELOPER fails or refuses to obtain the DISTRICT's Plan Acceptance, the DISTRICT may refuse, in its sole discretion and without liability to the DEVELOPER, to issue its Facility Acceptance (as that term is defined below) as to such Facility when completed.

c. The DEVELOPER shall not deviate from any Approved Plans and/or specifications without the DISTRICT's prior written approval.

d. All construction work shall be inspected on a timely basis by DISTRICT personnel and/or by DISTRICT's consultants at the sole cost of the DEVELOPER. The DEVELOPER acknowledges that the inspector(s) shall have the authority to require that any and all unacceptable materials, workmanship, construction and/or installation not in conformance with either (i) the Approved Plans, or (ii) standard practices, qualities and standards in the industry, as reasonably determined by the DISTRICT, shall be replaced, repaired or corrected at DEVELOPER's sole cost and expense.

e. In the event the DEVELOPER's contractor proposes to work overtime and beyond normal business hours, the DEVELOPER shall obtain the DISTRICT's approval at least 24 hours in advance so that inspection services may be appropriately scheduled. The DEVELOPER shall be solely responsible for paying all costs and expenses associated with such inspection services.

f. The DISTRICT shall promptly upon request of DEVELOPER cause the final inspection of a Facility which DEVELOPER indicates is completed. If the DISTRICT finds such Facilities to have been completed in conformance with the Approved Plans for which a Plan Acceptance has been issued, then DISTRICT shall issue to DEVELOPER its letter ("Facility Acceptance") indicating satisfactory completion of the Facility and DISTRICT's acceptance thereof. Neither inspection nor issuance of the Facility Acceptance shall constitute a waiver by DISTRICT of any claims it might have against DEVELOPER for any defects in the work performed, the materials provided, or the Facility constructed arising during the one year warranty period provided for under Paragraph 8 of this Agreement.

4. Project Coordination and Designation of DEVELOPER's Representative.

a. The DEVELOPER shall be solely responsible for coordinating the provision of all work, labor, material and services associated with the planning, design and construction of the water and sewer Facilities required for the DEVELOPER's Property. The DEVELOPER shall be solely responsible for compliance with all applicable federal, state and local safety rules and regulations, and shall conduct periodic safety conferences as required by law and common sense.

b. Prior to proceeding with any Facility construction, the DEVELOPER shall schedule and conduct a preconstruction conference with the DISTRICT's General Manager and the DISTRICT Engineer and/or their designees or agents. In the event the DEVELOPER fails or refuses to conduct any such conference, the DISTRICT may refuse, in its sole discretion, to accept the Facilities constructed by the DEVELOPER.

c. The DISTRICT and the DEVELOPER hereby designate the individual identified on page 1 of this Agreement as the person who shall have the authority to represent the DISTRICT and DEVELOPER in matters concerning this Agreement. In order to ensure maximum continuity and coordination, the DISTRICT and DEVELOPER agree not to arbitrarily remove or replace the authorized representative, but in the event of a substitution, the substituting Party shall promptly advise the other Party of such substitution, in writing.

5. DISTRICT's Right to Complete Facilities. The DISTRICT is hereby granted the unqualified right to complete, construct or repair all or any portion of the water and/or sewer Facilities, at DEVELOPER's sole cost and expense in the event there is a threat to the public's health, safety or welfare.

6. Construction of Connections to DISTRICT Facilities. Unless otherwise agreed to in writing by the DISTRICT, the DISTRICT shall furnish all labor, materials and equipment necessary to construct and install connections between the DEVELOPER's Facilities and the DISTRICT's water, recycled water, and sewer systems. All costs and expenses associated therewith shall be paid by the DEVELOPER.

7. Compliance With Law and DISTRICT Regulations. The DEVELOPER hereby agrees that all Facilities shall be planned, designed and constructed in accordance with all applicable laws, and the DISTRICT'S Rules, Regulations and Policies in effect at the time of construction. The DEVELOPER shall strictly comply with all applicable law, rules and regulations, concerning the provision of services, materials and the payment of wages. The DEVELOPER shall keep fully informed of and obey all laws, rules and regulations, and shall indemnify the DISTRICT against any liability arising from DEVELOPER's violation of any such law, rule or regulation.

8. DEVELOPER's Warranties. The DEVELOPER shall unconditionally guaranty, for a period of one year following the DISTRICT's Facility Acceptance thereof, any and all materials and workmanship, at the DEVELOPER's sole cost and expense. The provision of temporary water service through any of the DEVELOPER's Facilities, prior to DISTRICT's acceptance of same, shall not nullify nor diminish the DEVELOPER's warranty obligation, nor shall the DEVELOPER's warranty obligation be voided if the DISTRICT determines, in its sole discretion,

to make any emergency repairs necessary to protect the public's health, safety or welfare or to ensure continuity of water or sewer service. The DISTRICT shall notify DEVELOPER of such emergency repairs.

9. Testing and Disinfection. Upon approval by the DISTRICT, the DEVELOPER, at its sole cost and expense, shall undertake and satisfactorily complete a testing program, including without limitation, compaction, cleaning, video and air testing, and pressurized and disinfection testing, for all Facilities prior to acceptance by the DISTRICT, and to disinfect all water Facilities in accordance with the DISTRICT's procedures and other applicable laws, rules and regulations.

10. Bond Requirements. The DEVELOPER shall provide to the DISTRICT, in a form satisfactory to the DISTRICT, the following bonds:

a. A Performance and Warranty Bond. A performance bond issued by a corporate surety or sureties licensed and permitted to do business by and within the State of California in an amount representing not less than one hundred percent (100%) of any and all construction work to be conducted or performed under this Agreement. A warranty bond issued by a corporate surety or sureties licensed and permitted to do business by and within the State of California in an amount representing not less than fifty percent (50%) of the total cost of any and all construction performed hereunder, insuring against any and all defects in the Facilities constructed hereunder, for a period of not less than one full year after the date of acceptance thereof by the DISTRICT.

b. A Labor and Materials Payment Bond issued by a corporate surety or sureties licensed and permitted to do business by and within the State of California in an amount representing not less than one hundred percent (100%) of the total cost of any and all construction performed hereunder per California Civil Code Sections 9550 and following.

c. Miscellaneous Bond Requirements. All bonds required by this Section 10 shall be provided to the DISTRICT within sixty (60) days of the date that this Agreement was approved by the DISTRICT's Board of Directors. All bonds required by this section are subject to the approval as to form and content by the General Manager and DISTRICT's Legal Counsel. All bonds required by this section shall be provided by a surety that is an "admitted" surety insurer authorized to transact surety insurance in California, with assets exceeding its liabilities in the amount equal to or in excess of the amount of the bonds, and each bond shall not be in excess of ten percent (10%) of the surety insurer's assets. The bond shall be duly executed and shall meet all of the requirements of Section 995.660 of the Code of Civil Procedure.

PART C: TITLE TO FACILITIES; OPERATION

11. Title to Facilities and Right-of-Way.

a. Provided that the DEVELOPER's Facilities are designed and constructed as required hereunder and the DISTRICT proposes to issue its Facility Acceptance, the DEVELOPER shall, concurrently with the DISTRICT's Facility Acceptance, convey ownership title to all Facilities (and right-of-way, if applicable) to the DISTRICT, free and clear of any and

all liens and encumbrances except those that are expressly agreed to by the DISTRICT. The DISTRICT may require fee title or an easement, depending upon the location of the Facility through action by the Board of Directors. Upon conveyance of title, the DISTRICT shall assume the responsibility of operating and maintaining the Facilities, subject to the DEVELOPER's warranty as provided herein. The DEVELOPER acknowledges and agrees that the DISTRICT shall not be obligated to operate and maintain the Facilities and to provide service to and through them until all applicable conditions imposed by this Agreement hereunder are satisfied and title to the Facilities has been conveyed and delivered to the DISTRICT in recordable form.

b. A form for the *Grant of Easement and Rights-of-Way* and *Bill of Sale of the Facilities* is available from the District upon request.

12. Risk of Loss. Until such time as acceptance thereof by the DISTRICT, and until good and marketable title to the easements, rights-of-way and Facilities are conveyed and delivered to the DISTRICT in recordable form, the DEVELOPER shall be solely and completely responsible for any and all losses and/or damage of every kind or nature to the easements, rights-of-way and Facilities. In the event DEVELOPER believes the loss and/or damages arose from or are related to acts performed by the DISTRICT, this provision does not preclude DEVELOPER's insurance carrier from seeking indemnity and/or reimbursement from the DISTRICT.

13. Conditions Precedent to the Provision of Water and Sewer Service. Unless the DISTRICT otherwise agrees in writing, the DISTRICT shall not be obligated to provide any water and/or sewer service to the DEVELOPER's Property or any part thereof, including model homes, until Facility Acceptance by the DISTRICT and DEVELOPER conveys to the DISTRICT the right-of-way and Facilities associated with the requested service. Upon acceptance of the right-of-way and appurtenant Facilities, the DISTRICT shall provide the service requested and assume the responsibility for operating and maintaining the affected Facilities. Service provided by the DISTRICT shall be in accordance with its Rules, Regulations and Policies and shall be comparable in quality of service to that provided all similarly situated customers.

PART D: FEES AND CREDITS

14. DEVELOPER's Fees, Charges, Costs and Expenses. The DEVELOPER shall be solely responsible for the payment to the DISTRICT of all fees, charges, costs and expenses related to this development.

a. DEVELOPER Cash Account Deposit: The DEVELOPER shall deposit with the DISTRICT, to be held in a Cash Account administered by the DISTRICT, the sum of 10% of the construction costs as an initial deposit within 10 business days following the DISTRICT's approval of this Agreement. The DEVELOPER acknowledges and hereby agrees that the DISTRICT is authorized, from time-to-time, to reimburse itself from the funds on deposit. The District shall provide a monthly accounting of how funds were disbursed. The DEVELOPER further agrees to periodically replenish within 30 calendar days upon the date an invoice is issued by the DISTRICT, the Cash Account in order to maintain a minimum amount as specified by the DISTRICT. The DISTRICT will not release any buildings for occupancy unless there is a balance

of at least \$1,000 in the Cash Account. Should any unexpended funds remain in the Cash Account upon termination of this Agreement, then such funds shall be reimbursed to the DEVELOPER within 90 days.

b. Current Fees and Charges: In the event of a change in the DISTRICT's schedule of fees and charges as stated in DISTRICT's existing Resolution 07-2007 adopted on March 8, 2007, such change shall automatically be incorporated into this Agreement as though set forth in full. Unless otherwise agreed to in writing by the DISTRICT, the DEVELOPER shall pay, when due, the then-current amount of the applicable fee or charge.

i. The DEVELOPER shall pay for the purchase of a quantity of imported water pursuant to the Sustainability Policy adopted by the Board of Directors as a Resolution No. 11-2008 on August 20, 2008. The imported water rate shall be the rate in effect at the time water is secured from the San Geronio Pass Water Agency. Imported water for compliance with the Yucaipa Valley Water District's Sustainability Policy may be pre-paid to lock in the Development Sustainability fee or purchased prior to the issuance of building permits and pay the fee in effect at that time.

15. DISTRICT Financial Participation; Credits. The DISTRICT may agree to participate in certain facilities for this Project. Any participation or financial contribution to construct the water and wastewater infrastructure associated with this project is contained in Part G - Special Conditions of this Agreement.

PART E: PERMITS AND DOCUMENTATION

16. Permits, Licenses and CEQA Documentation. The DEVELOPER shall be solely responsible for securing and paying for all permits and licenses necessary to develop its project. The DEVELOPER shall be solely responsible for complying with the California Environmental Quality Act under the auspices of the City and/or County within which the Property is situated. However, upon request, the DEVELOPER shall furnish to the DISTRICT all relevant environmental documentation and information. The DEVELOPER, at its sole cost and expense, shall be solely responsible for defending against any and all legal challenges to the DEVELOPERS entitlements including permits, licenses and CEQA documents.

17. Documents Furnished by the DEVELOPER. The DEVELOPER shall furnish to the DISTRICT project documentation as required by the District specified below, within the time periods specified. Each and every document submittal shall consist of a fully executed original or certified copy (in recordable form, if applicable) and four copies.

Document(s)	Due Date
Certification of Streets to Rough Grade	Prior to Construction
Field Engineering Surveys ("Cut Sheets")	Prior to Construction
Liability Insurance Certificate(s)	Prior to Construction
Performance Bond	Prior to Construction
Labor and Materials Bond	Prior to Construction
City/County Encroachment Permits and Conditions	Prior to Construction

Soil Compaction Tests	Prior to Acceptance
Grant of Easements and Rights-of-Way	Prior to Acceptance
Warranty Bond	Prior to Acceptance and Recording
Bill of Sale	Prior to Acceptance
List of Approved Street Addresses and Assessor Parcel Numbers	Prior to Setting Meter
Notice of High/Low Water Pressure	Prior to Setting Meter
Notice of Water Pumping Facility	Prior to Construction
Mechanic's Lien Releases	Upon Request of District

NOT APPLICABLE

NOTE: The DEVELOPER hereby acknowledges and agrees that the foregoing list is not intended to be exclusive; therefore, the DISTRICT reserves the right to request, from time-to-time, additional documents or documentation.

PART F: INSURANCE AND INDEMNIFICATION

18. Indemnification and Hold Harmless. The DEVELOPER and the DISTRICT agree that the DISTRICT should, to the extent permitted by law, be fully protected from any loss, injury, damage, claim, lawsuit, cost, expense, attorneys' fees, litigation costs, defense costs, court costs or any other costs arising out of or in any way related to the performance by DEVELOPER of this Agreement. Accordingly, the provisions of this indemnity provision are intended by the Parties to be interpreted and construed to provide the fullest protection possible under the law to the DISTRICT, except for liability attributable to the DISTRICT's intentional and/or negligent acts. DEVELOPER acknowledges that the DISTRICT would not enter into this Agreement in the absence of this commitment from the DEVELOPER to indemnify and protect the DISTRICT as set forth here.

Therefore, the DEVELOPER shall defend, indemnify and hold harmless the DISTRICT, its employees, agents and officials, from any liability, claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, actual attorneys' fees incurred by the DISTRICT, court costs, interest, defense costs including expert witness fees and any other costs or expenses of any kind whatsoever without restriction or limitation incurred in relation to, as a consequence of or arising out of or in any way attributable actually, allegedly or impliedly, in whole or in part in the performance by DEVELOPER of this Agreement. All obligations under this provision are to be paid by the DEVELOPER as incurred by the DISTRICT. Notwithstanding the foregoing, the DEVELOPER shall have no obligation to defend, indemnify or hold harmless the DISTRICT, its employees, agents or officials from any liability arising, in whole or in part, from the DISTRICT'S intentional and/or negligent acts.

19. Insurance. The DEVELOPER agrees to provide insurance in accordance with the requirements set forth here throughout the term of this Agreement. If the DEVELOPER uses existing coverage to comply with these requirements and that coverage does not meet the requirements set forth herein, the DEVELOPER agrees to amend, supplement or endorse the existing coverage to do so. The following coverages will be provided by the DEVELOPER and maintained on behalf of the DISTRICT and in accordance with the requirements set forth herein.

a. Commercial General Liability Insurance (Primary) shall be provided on ISO-CGL Form No. CG 00 01 10 93. Policy limits shall be no less than \$1,000,000 per occurrence for all

coverages and \$2,000,000 general aggregate. The DISTRICT and its officials, employees and agents shall be added as additional insureds using ISO Form CG 20 10 10 93. Coverage shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance, primary or excess, available to the DISTRICT or any employee or agent of the DISTRICT. Coverage shall not be limited to the vicarious liability or supervisory role of any additional insured. Coverage shall contain no contractors' limitation endorsement. There shall be no endorsement or modification limiting the scope of coverage for liability arising from explosion, collapse, or underground property damage.

b. Umbrella Liability Insurance (over Primary) shall apply to bodily injury/property damage, personal injury/advertising injury, at a minimum, and shall include a "drop down" provision providing primary coverage above a maximum \$25,000 self-insured retention for liability not covered by primary policies but covered by the umbrella policy. Coverage shall be following form to any underlying coverage. Coverage shall be provided on a "pay on behalf" basis, with defense costs payable in addition to policy limits. There shall be no cross-liability exclusion and no contractor's limitation endorsement. Policy limits shall be not less than \$1,000,000 per occurrence and \$1,000,000 in the aggregate, above any limits required in the underlying policies. The policy shall have starting and ending dates concurrent with the underlying coverages.

c. Workers' Compensation/Employer's Liability shall provide workers' compensation statutory benefits as required by law. Employer's liability limits shall be no less than \$1,000,000 per accident or disease. Employer's liability coverage shall be scheduled under any umbrella policy described above. Unless otherwise agreed, this policy shall be endorsed to waive any right of subrogation as respects the DISTRICT, its employees or agents.

d. The DEVELOPER and the DISTRICT further agree as follows:

i. All insurance coverage provided pursuant to this Agreement shall not prohibit the DEVELOPER, and the DEVELOPER's employees or agents, from waiving the right of subrogation prior to a loss. The DEVELOPER waives its right of subrogation against the DISTRICT.

ii. Unless otherwise approved by the DISTRICT in writing, the DEVELOPER's insurance shall be written by insurers authorized to do business in the State of California and with a minimum "Best's" Insurance Guide rating of "A:VII". Self-insurance will not be considered to comply with these insurance specifications.

iii. The DEVELOPER agrees to provide evidence of the insurance required herein, satisfactory to the DISTRICT, consisting of certificate(s) of insurance evidencing all of the coverages required and an additional insured endorsement to the DEVELOPER's general liability and umbrella liability policies. Certificate(s) are to reflect that the insurer will provide 30 days' notice of any cancellation of coverage. The DEVELOPER agrees to require its insurer to modify such certificate(s) to delete any exculpatory wording stating that failure of the insurer to mail written notice of cancellation imposes no obligation, and to delete the word "endeavor" with

regard to any notice provisions. The DEVELOPER agrees to provide complete certified copies of policies to the DISTRICT within 10 days of the DISTRICT's request for such copies.

iv. In the event of any loss that is not insured due to the failure of the DEVELOPER to comply with these requirements, the DEVELOPER agrees to be responsible for any all losses, claims, suits, damages, defense obligations and liability of any kind attributed to the DISTRICT, or the DISTRICT's officials, employees and agents as a result of such failure.

v. The DEVELOPER agrees not to attempt to avoid its defense and indemnity obligations to the DISTRICT and its employees, agents and officials by using as defense the DEVELOPER's statutory immunity under workers' compensation and similar statutes.

PART G: SPECIAL CONDITIONS

20. The following conditions, being contained herein, will be required by the District in order to receive water, recycled water and sewer service for the Project.

a. Potable Water Related Facilities: This project is within the South Mesa Water Company service boundary. This project will not be required to construct potable water facilities for the Yucaipa Valley Water District.

b. Recycled Water Related Facilities: This project is within the South Mesa Water Company service boundary. This project will not be required to construct recycled water facilities for the Yucaipa Valley Water District.

c. Wastewater Related Facilities: The DEVELOPER shall bring the existing DISTRICT A.D.-11 Easement 14-P up to current DISTRICT standards of 20-feet in width and provide an all-weather drivable surface over the existing sewer mainline along the western property line of Tract Map 36818. The DEVELOPER shall also construct a new sewer mainline into and through Tract Map 36818 sufficient to serve the proposed project from the existing DISTRICT sewer system from DISTRICT A.D.-11 Easement 14-P. The DEVELOPER shall also provide new sewer easements as necessary for service.

i. The DEVELOPER shall provide adequate vehicular access across each new parcel, including the north and south property lines of Tract Map 36818, proposed along DISTRICT A.D.-11 Easement 14-P.

ii. The DEVELOPER shall provide either a removable panel or lockable gate for access at each proposed parcel line across DISTRICT A.D.-11 Easement 14-P, to provide for adequate access of DISTRICT vehicles and equipment.

iii. The DEVELOPER shall construct new sewer laterals for Lots 1, 2 and 3 off of the existing public sewer main within Buena Vista Court to provide for sewer service. The DEVELOPER shall also construct new sewer laterals for Lots 14, 15 and 16 off of the existing public

sewer main within 4th Street to provide for sewer service.

iv. The DISTRICT has identified sewer mainline deficiencies downstream of the Project in the City of Calimesa. To secure the appropriate funding for the upgrade of these sewer mainline facilities, the DEVELOPER shall pay to the DISTRICT a fee of \$1,500 per Equivalent Dwelling Unit for the construction of upgraded sewer mainline facilities. This fee shall be paid prior to the issuance of building permits.

d. Previously Constructed Facilities: The DEVELOPER shall protect the existing sewer mainline in place at all times. If, at any time, there is an actual or potential conflict with the proposed development of Tract Map 36818, including but not limited to site drainage and storm water flow control, the DEVELOPER shall be required to show and provide adequate protection or adjustment of the existing sewer facilities to be approved by the DISTRICT prior to construction of the proposed remediation.

e. The DISTRICT shall require all outstanding invoices related to the Project to be paid prior to releasing each lot for occupancy.

PART H: MISCELLANEOUS

21. Term and Termination of Agreement.

a. Unless extended by mutual agreement of the parties in writing, this Agreement shall terminate at 5:00 p.m., on the day before the sixth (6th) anniversary date of this Agreement; provided, however, that this Agreement shall automatically terminate, without further liability to either party, as follows:

i. Within 10 business days of the effective date of this Agreement if the DEVELOPER fails or refuses to make the Cash Account deposit, or if the Cash Account is not replenished to a positive balance after the issuance of an invoice by the DISTRICT for a period of 75 calendar days; or

ii. Within 12 months of the effective date of this Agreement, if the initial construction contemplated hereunder has not commenced within such time; or

iii. Immediately, upon abandonment by the DEVELOPER of the DEVELOPER's Property and/or the work hereunder. "Abandonment" is defined as the act of bankruptcy or to fail to improve the Property in a manner consistent with the proposed development plan; and/or

iv. Within 45 days of the date of the issuance of a Notice of Default by the DISTRICT to the DEVELOPER in the event the DEVELOPER fails or refuses to perform, keep or observe any of the terms, conditions or covenants set forth in this Agreement.

b. Any termination of this Agreement shall not be construed as a waiver of any claim the DISTRICT may have against the DEVELOPER or that the DEVELOPER may have against the DISTRICT.

c. In the event of termination, and in order to counteract any threat to the public's health, safety or welfare, the DISTRICT shall have the right, without liability to complete, at the DEVELOPER's non-reimbursable expense, all or a portion of the Facilities constructed pursuant to this Agreement on the condition that a claim has been made against the performance bond issued by the DEVELOPER for this Property.

d. Notwithstanding the foregoing, the Indemnification clauses contained herein shall survive the termination of this Agreement.

22. Status of the Parties. This Agreement is not intended to create, and nothing herein contained shall be construed to create, an association, a trust, a joint venture, a partnership or other entity of any kind, or to constitute either party as the agent, employee or partner of the other.

23. Amendment; Assignment.

a. Amendment. This Agreement may be amended, from time-to-time, by mutual agreement of the DISTRICT and the DEVELOPER, in writing signed by both Parties. The DISTRICT and the DEVELOPER further agree that to the extent this Agreement does not address all aspects of the DEVELOPER's Property, the Parties shall meet and confer and negotiate in good faith, and execute a written amendment or supplement to this Agreement.

b. Assignment. This Agreement shall not be assigned, whether in whole or in part.

24. Force Majeure. If either the DISTRICT or the DEVELOPER is delayed, hindered or prevented from performing any term of this Agreement by any cause beyond either party's control including, without limitation, any strike, walkout, prohibitions imposed by law, rules or regulations, riot, war, act of God or the default of the other party, then such performance may be excused or the time of performance tolled during the period of delay.

25. Incorporation of Prior Agreements. This Agreement contains all of the agreements of the parties with respect to any matter covered or mentioned in this Agreement, and no prior agreement or understanding pertaining to any such matter shall be effective for any purpose.

26. Waiver. No waiver by either Party of any provisions of this Agreement shall be deemed to be a waiver of any other provision hereof or of any subsequent breach by either Party of the same or any other provisions.

27. Severance. If any provision of this Agreement is determined to be void by any court of competent jurisdiction then such determination shall not affect any other provision of this Agreement provided that the purpose of this Agreement is not frustrated.

28. DISTRICT's Disclaimer. Utilizing fees and Facilities provided to the DISTRICT by the DEVELOPER, the DISTRICT will supply potable water, recycled (non-potable) water, and wastewater collection and treatment services to the DEVELOPER's Property and development thereon. However, the DISTRICT shall not be obligated to utilize public funds to subsidize the DEVELOPER's Project. The DISTRICT shall not be required to authorize the issuance of grading, building or occupancy permits during the period of time that the Board of Directors have declared a 20% reduction or greater of overall water use for a portion or all of the DISTRICT's service area. The DISTRICT agrees, however, to make every effort to minimize drought impacts.

29. Preparation of This Agreement. This Agreement shall not be construed against the Party preparing it, but shall be construed as if both Parties prepared it.

30. Alternative Dispute Resolution.

a. Any dispute as to the construction, interpretation or implementation of this Agreement, or any rights or obligations hereunder, shall be submitted to mediation. Unless the Parties enter into a written stipulation to the contrary, prior to the filing of any complaint to initiate legal action, all disputes shall first be submitted to non-binding mediation, conducted by the Judicial Arbitration and Mediation Services, Inc./Endispute, or its successor, or any other neutral, impartial mediation service that the Parties mutually agree upon in accordance with its rules for such mediation. Mediation fees shall be shared equally by the DEVELOPER and the DISTRICT.

IN WITNESS WHEREOF, the parties have executed is Agreement to be effective on the day and year first above written.

YUCAIPA VALLEY WATER DISTRICT

Dated: _____

By: _____
Lonni Granlund, Board President

DEVELOPER:

Dated: _____

By: _____

Print Name

Print Title

Administrative Issues



Yucaipa Valley Water District

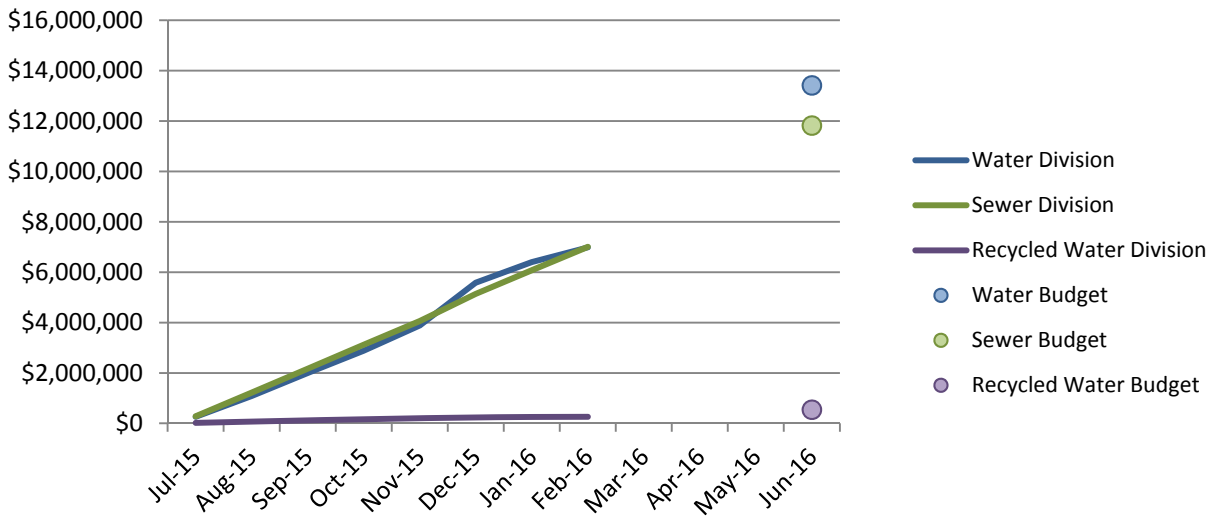


Date: March 8, 2016

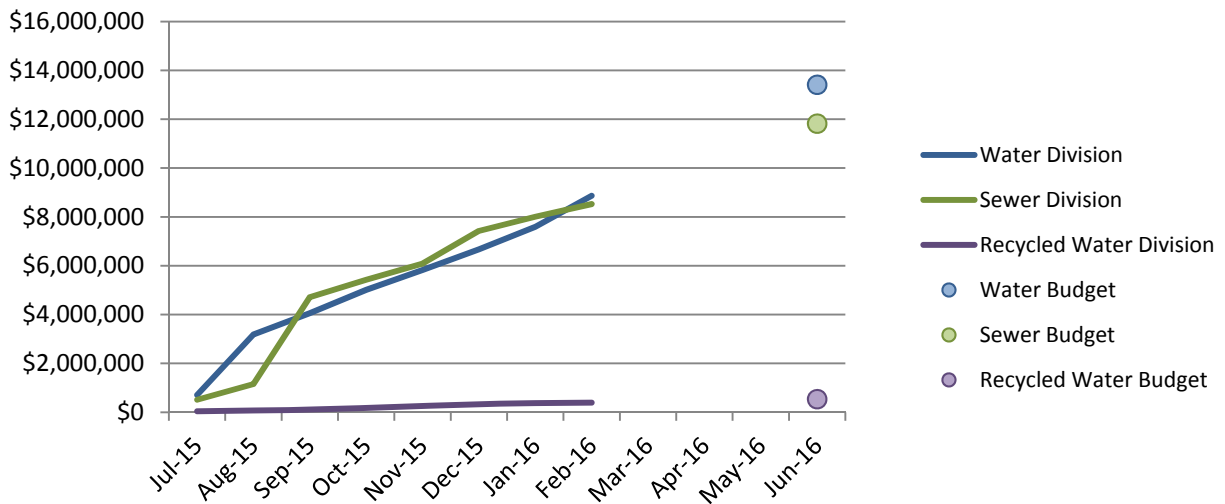
Subject: Review of the Unaudited Financial Report for the Period Ending on February 29, 2016

The District staff has prepared the attached Unaudited Financial Report for the period ending on December 31, 2015. A graphical summary of the current operating budget is provided below and detailed information follows as part of the monthly unaudited financial report.

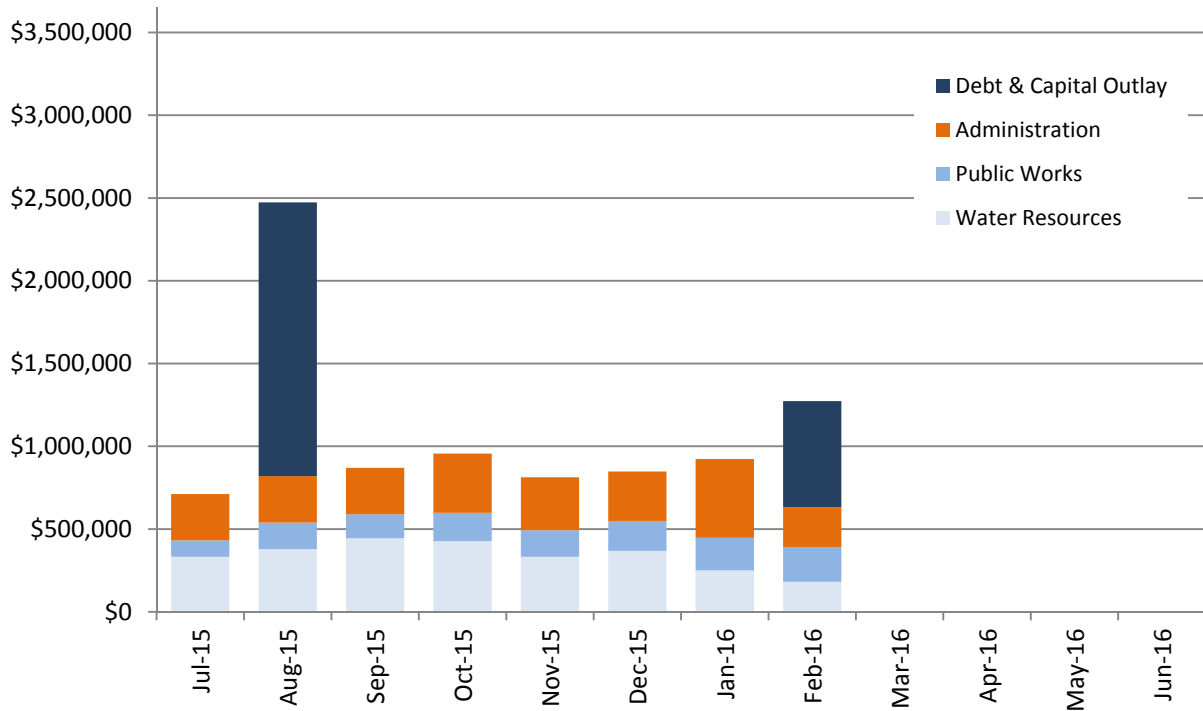
Fiscal Year 2016 YTD Revenues & Budget Targets



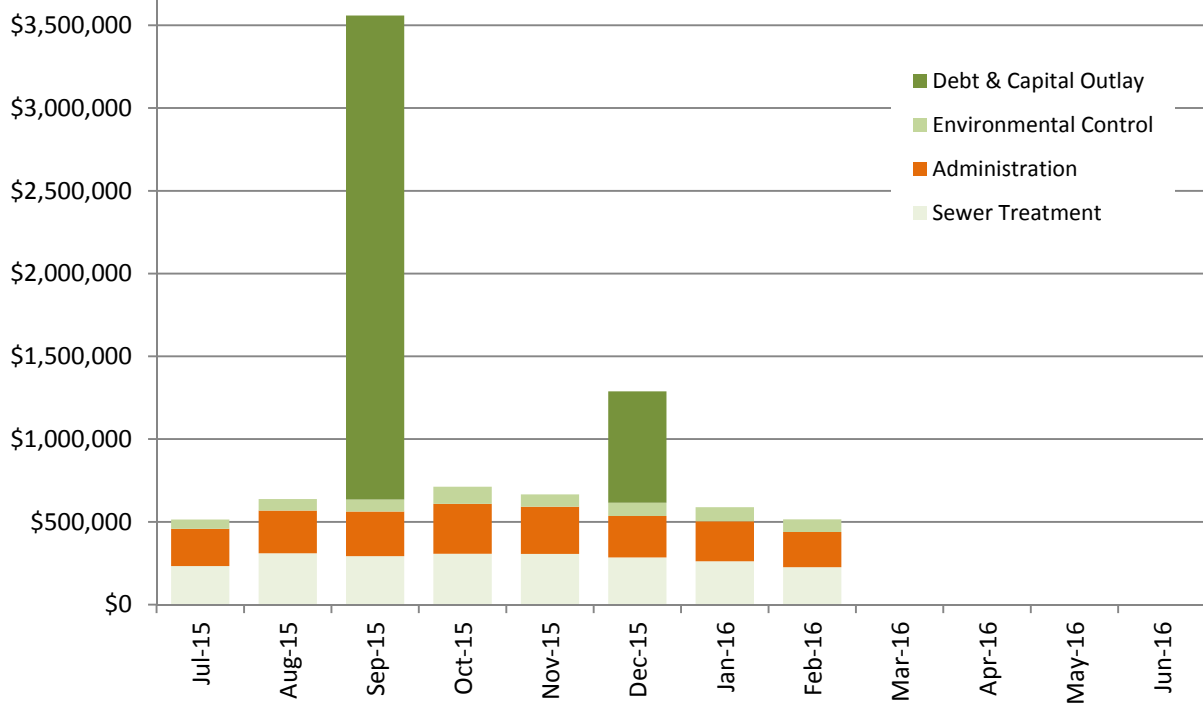
Fiscal Year 2016 YTD Expenses & Budget Targets



Water Division Monthly Expense Summary - FY 2016



Sewer Division Monthly Expense Summary - FY 2016





Yucaipa Valley Water District

Director Memorandum 16-xxx

Date: March 16, 2016

Prepared By: Vicky Elisalda, Controller
Peggy Little, Administrative Supervisor

Subject: Unaudited Financial Report for the Period Ending on February 29, 2016

Recommendation: That the Board receives and files the unaudited financial report as presented.

The following unaudited financial report has been prepared by the Administrative Department for your review. The report has been divided into six sections to clearly disseminate information pertaining to the financial status of the District. Please remember that the following financial information has not been audited.

Cash Fund Balance Report

[Detailed information can be found on page 5 to 6 of 29]

The Cash Fund Balance Report provides a summary of how the total amount of funds maintained by financial institutions is distributed throughout the enterprise and non-enterprise funds of the District. A summary of the report is as follows:

Fund Source	Operating Funds	Restricted Funds	Total Funds
Water Division	\$6,612,801.05	\$1,469,392.56	\$8,082,193.61
Sewer Division	\$12,559,934.45	(\$5,194,202.61)	\$7,365,731.84
Recycled Water Division	<u>\$2,554,182.07</u>	<u>\$318,632.32</u>	<u>\$2,872,814.39</u>
Total	\$21,726,917.57	(\$3,406,177.73)	\$18,320,739.84

Most of the funds reflected in the Cash Fund Balance Report are designated for specific purposes and are therefore restricted, either by law or by District policy.

Check Register

[Detailed information can be found on pages 7 to 11 of 29]

The check register lists each check processed during the month of February 2016. The District processed 217 checks during the month of February for a total sum of \$2,008,111.02. All checks are reviewed by District staff for accuracy and completeness, and usually signed by the General Manager and one Director, but may be signed by two Directors.

The Controller will make any check, invoice or supporting documentation available for review to any board member upon request.

Financial Account Information

[Detailed information can be found on pages 12 to 15 of 29]

The District currently deposits all revenue received into the Deposit Checking account. The General Checking account is used as a sole processing account for all District checks and electronic payroll. The Investment Checking account is used for the purchase and redemption of US treasury notes and bills and for the transfer of LAIF funds. The US treasury notes and bills are booked at cost.

The LAIF investment account is a pooled money account administered by the State of California. Additional information on the LAIF account is provided below in the investment summary report.

Investment Summary

[Detailed information can be found on pages 16 to 17 of 29]

The investment summary report illustrates the District's investments in US treasury notes and bills in addition to the investments held by the Local Agency Investment Fund or LAIF. The yields for the treasury notes and bills are provided for each individual transaction. The historical annual yield for funds invested with LAIF is also provided.

Separate pooled money investment reports prepared by the State of California are maintained by the District and available for review.

Monthly Revenue Allocation

[Detailed information can be found on pages 18 to 19 of 29]

During the month of February 2016 the District's deposit checking account received a sum total of \$1,878,203.90 in revenues from the following categories:

- A total of \$1,431,616.82 was received from 14,491 customers for utility bill payments. This is the total amount of utility bill payments received from water, sewer and recycled services.
- A total of \$1,927.75 was received for construction meter deposits, customer deposits and internet fee payments.
- A total of \$304,722.33 was received from miscellaneous water related activities (other than utility bill charges).
- A total of \$139,937.00 was received from miscellaneous sewer related activities (other than utility bill charges).
- A total of \$0.00 was received from miscellaneous recycled related activities (other than utility bill charges).
- The District's general checking account (pages 12 & 14 of 30) received one ACH deposit for San Bernardino Property Taxes in the amount of \$59,877.15. The District has received \$1,668,861.71 (59%) of the allocated \$2,843,308.96 property taxes for FY 2016.

Fiscal Year 2016 Budget Status

[Detailed information can be found on pages 20 to 29 of 29]

The revenue and expense budget status for the 2016 Fiscal Year is provided for your review.

**Summary of Revenue Budget
As of February 29, 2016 (62% of Budget Cycle)**

<u>Division</u>	<u>Budget Amount</u>	<u>Current Month</u>	<u>Year-To-Date</u>	<u>Percentage</u>
Water	13,412,500	578,901	6,983,072	52.06%
Sewer	11,820,000	927,015	7,007,131	59.28%
Recycled Water	537,250	9,026	260,191	48.43%
District Revenue	25,769,750	1,514,942	14,250,394	55.30%

**Summary of Water Budget
As of February 29, 2016 (62% of Budget Cycle)**

<u>Department</u>	<u>Budget Amount</u>	<u>Current Month</u>	<u>Year-To-Date</u>	<u>Percentage</u>
Water Resources	5,050,200	181,302	2,714,462	53.75%
Public works	2,385,800	209,851	1,325,764	55.57%
Administration	3,682,486	241,110	2,532,535	68.77%
Long Term Debt	2,294,014	640,556	2,294,014	100.00%
Asset Acquisition	0	0	0	0.00%
TOTAL	13,412,500	1,272,819	8,866,775	66.11%

**Summary of Sewer Budget
As of February 29, 2016 (62% of Budget Cycle)**

<u>Department</u>	<u>Budget Amount</u>	<u>Current Month</u>	<u>Year-To-Date</u>	<u>Percentage</u>
Treatment	3,789,816	226,491	2,223,517	58.67%
Administration	3,151,840	212,731	2,044,181	64.86%
Environmental Control	982,300	75,834	617,947	62.91%
Long Term Debt	3,896,044	649,274	3,572,942	91.71%
Asset Acquisition-Palmer	0	0	66,409	0.00%
TOTAL	11,820,000	1,164,330	8,524,996	72.12%

**Summary of Recycled Water Budget
As of February 29, 2016 (62% of Budget Cycle)**

<u>Department</u>	<u>Budget Amount</u>	<u>Current Month</u>	<u>Year-To-Date</u>	<u>Percentage</u>
Administration	537,250	24,215	397,069	73.91%
TOTAL	537,250	28,006	198,923	37.03%
District Expenses	25,769,750	2,465,155	17,590,694	68.26%

Investment Policy Disclosure

The District is currently compliant with the portfolio of its Investment Policy and State Law.

The District is using Sandy Gage with Merrill Lynch Wealth Management (Bank of America Corporation) for Treasury investments. The District expects to meet its expenditure requirements for the next six months.

Questions or Comments

If you have any questions about a particular budget account, please do not hesitate to contact the Controller directly. If you need additional information, the members of the Administrative Department would be happy to provide you with any detailed information you may desire.

Cash Fund Balance Report - February 2016

Water Division	GL#	Balance
*ID 1 Construcion Funds	02-10216	\$ 293,145.85
*ID 2 Construction Funds	02-10217	\$ 80,409.31
*FCC - Debt Service YVRWFF Phase I	02-10401	\$ (161,207.64)
*FCC - Future YVRWFF Phase II & III	02-10403	\$ 320,667.50
*FCC - Recycled System	02-10410	\$ (1,018,372.58)
*FCC - Booster Pumping Plants	02-10411	\$ 524,457.67
*FCC - Pipeline Facilities	02-10412	\$ (423,206.74)
*FCC - Water Storage Reservoirs	02-10413	\$ 1,853,499.19
Depreciation Reserves	02-10310	\$ 1,228,838.82
Infrastructure Reserves	02-10311	\$ 2,541,271.00
Sustainability Fund	02-10313	\$ 716,955.96
Rate Stabilization Fund	02-10314	\$ 500,209.14
Imported Water Fund - MUNI	02-10315	\$ (426,582.27)
Imported Water Fund - SGPWA	02-10316	\$ 800,927.56
Operating Funds:		\$ 1,251,180.84
Total Water Division		\$ 8,082,193.61

Sewer Division	GL#	Balance
*SRF Reserve Fund - Brineline	03-10218	\$ 637,449.00
*SRF Reserve Fund - WISE	03-10219	\$ 184,928.00
*SRF Reserve Fund - R 10.3	03-10220	\$ 51,531.00
*SRF Reserve Fund - Crow St	03-10221	\$ -
*FCC - Debt Service WWTP Expansion & Upgrade	03-10405	\$ 1,139,354.04
*FCC - Future WWTP Expansion	03-10407	\$ 986,633.97
*FCC - Sewer Interceptors	03-10415	\$ (1,012,530.10)
*FCC - Lift Stations	03-10416	\$ 243,232.45
*FCC - Effluent Disposal Facilities	03-10417	\$ (1,742,305.21)
*FCC - Salt Mitigation Facilities	03-10418	\$ (5,682,495.76)
Project Fund - Encumbered	03-10215	\$ 189,000.00
Depreciation Reserves	03-10310	\$ 2,936,289.31
Infrastructure Reserves	03-10311	\$ 3,719,620.00
Rate Stabilization Fund	03-10314	\$ 1,464,394.90
Operating Funds:		\$ 4,250,630.24
Total Wastewater Division		\$ 7,365,731.84

Recycled Water Division	GL#	Balance
*FCC - Recycled System	04-10410	\$ 39,688.47
*FCC - Booster Pumping Plants	04-10411	\$ 42,371.40
*FCC - Pipeline Facilities	04-10412	\$ 116,831.64
*FCC - Water Storage Reservoirs	04-10413	\$ 119,740.81
Project Fund - Encumbered	04-10215	\$ 200,000.00
Depreciation Reserves	04-10310	\$ 73,221.00
Infrastructure Reserves	04-10311	\$ 244,588.00
Operating Funds:		\$ 2,036,373.07
Total Recycled Water Division		\$ 2,872,814.39

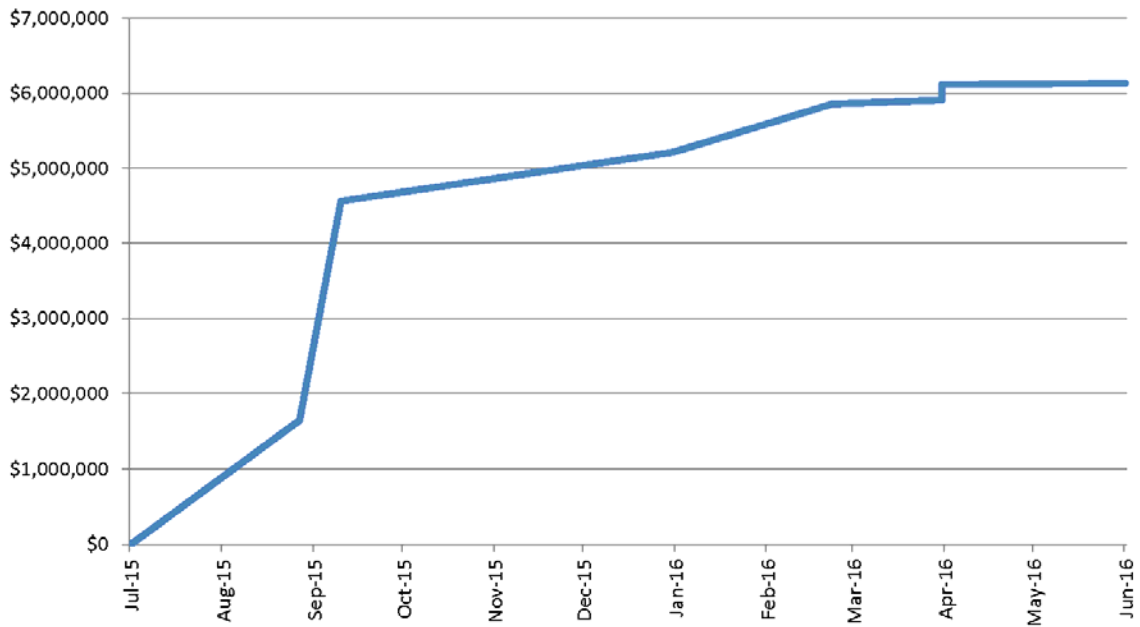
DISTRICT TOTAL **\$ 18,320,739.84**

*=Restricted Funds

Cash Fund Balance Report - February 2016

Pending Financial Obligations for Fiscal Year 2015/16				
Due Date	Fund	Description	Term of Obligation	Amount
08/27/2015	Water	2015A Bond Payment - YVRWFF	2015-2034	\$ 1,646,177.19
09/10/2015	Sewer	SRF Payment - WRWRF	2009-2028	\$ 2,923,688.75
12/31/2015	Sewer	SRF Payment - Yucaipa Regional Brineline	2013-2032	\$ 649,273.50
02/23/2016	Water	2015A Bond Payment - YVRWFF	2015-2034	\$ 640,556.25
03/31/2016	Sewer	SRF Payment - Recycled Reservoir R-10.3	2014-2033	\$ 54,277.31
03/31/2016	Sewer	SRF Payment - Desalinization at WRWRF	2014-2033	\$ 185,251.30
03/31/2016	Sewer	SRF Payment - Crow Street/Recycled Booster B-12.1	2016-2035	\$ 19,254.37
06/01/2016	Sewer	SBVMWD - Inland Empire Brineline Payment	2013-2016	\$ 20,000.00
Total				\$ 6,138,478.67

**Payment Schedule and Cash Flow Requirements
for Fiscal Year 2015-2016**



Check Register - February 2016

<u>Check Date</u>	<u>Check Number</u>	<u>Name</u>	<u>Check Amount</u>
02/01/2016	25248	ADS, LLC	3,951.00
02/01/2016	25249	Ameripride Uniform Services	492.68
02/01/2016	25250	Redlands Employment Services	758.72
02/01/2016	25251	Bay Alarm Company	1,602.23
02/01/2016	25252	Fedex	52.08
02/01/2016	25253	Raiset R. Santana and Adriana	77.00
02/01/2016	25254	Kelly Services, Inc.	1,069.20
02/01/2016	25255	Konica Minolta Business Soluti	1,204.01
02/01/2016	25256	Krieger & Stewart	84,736.78
02/01/2016	25257	Leroy's Landscape Services	2,955.00
02/01/2016	25258	U.S. Telepacific Corp	3,878.87
02/01/2016	25259	Verizon	145.06
02/01/2016	25260	Anthony Joseph Sobral	26.74
02/01/2016	25261	Calolympic Glove & Safety Co.,	488.12
02/01/2016	25262	Cemex Inc. USA	1,295.46
02/01/2016	25263	Fastenal Company	129.57
02/01/2016	25264	Grainger	2,597.62
02/01/2016	25265	Hach Company	441.29
02/01/2016	25266	Jerry Herbert Roofing Inc.	200.00
02/01/2016	25267	Inland Water Works Supply Co.	3,572.00
02/01/2016	25268	Innerline Engineering	1,750.00
02/01/2016	25269	JB Paving & Engineering, Inc.	25,052.25
02/01/2016	25270	Nuckles Oil Company, Inc.	1,446.40
02/01/2016	25271	Microflex Corp #774353	1,333.59
02/01/2016	25272	Nagem, Inc.	112.50
02/01/2016	25273	Office Solutions Business Prod	298.80
02/01/2016	25274	The Sherwin-Williams Co.	264.55
02/01/2016	25275	Smart & Final Stores, LLC	220.69
02/05/2016	25276	BLACK, ERICA	8.86
02/05/2016	25277	BAI, XUE	70.25
02/05/2016	25278	PAYROLL CHECK	2,046.24
02/05/2016	25279	PAYROLL CHECK	319.93
02/05/2016	25280	CA-PERS Supplemental Income 45	21,651.38
02/05/2016	25281	WageWorks, Inc.	1,462.27
02/05/2016	25282	Public Employees' Retirement S	22,515.84
02/05/2016	25283	Hong Nelson	125.00
02/05/2016	25284	IBEW Local 1436	252.00
02/05/2016	25285	California State Disbursement	115.38
02/05/2016	25286	California State Disbursement	476.30
02/05/2016	25287	Department of the Treasury - I	125.00
02/05/2016	25288	American Family Life Assurance	2,505.43
02/05/2016	25289	Rodd Greene	601.00
02/05/2016	25290	Robert Hines	601.00
02/05/2016	25291	Aetna Health of California	60,229.00
02/08/2016	25292	GENARO, FRANK	413.72
02/08/2016	25293	MURALI GOPAL INVESTM	156.71
02/08/2016	25294	AWWA CA-NV (Rancho Cucamonga)	55.00

Check Register - February 2016

<u>Check Date</u>	<u>Check Number</u>	<u>Name</u>	<u>Check Amount</u>
02/08/2016	25295	California Water Environment A	164.00
02/08/2016	25296	Incode Division-Tyler Technolo	3,333.00
02/08/2016	25297	Dept of Consumer Affairs	115.00
02/08/2016	25298	Ameripride Uniform Services	482.23
02/08/2016	25299	Redlands Employment Services	948.40
02/08/2016	25300	Beaumont Basin Watermaster	20,170.00
02/08/2016	25301	Central Communications	327.11
02/08/2016	25302	Charles Wayne Hippenstiel	3,300.00
02/08/2016	25303	Cobb's Printing, LLC	42.93
02/08/2016	25304	Corelogic, Inc.	330.00
02/08/2016	25305	Coverall North America, Inc.	1,021.00
02/08/2016	25306	First American Data Tree, LLC	50.00
02/08/2016	25307	InfoSend, Inc.	5,317.75
02/08/2016	25308	Kelly Services, Inc.	855.36
02/08/2016	25309	NetComp Technologies, Inc.	1,400.00
02/08/2016	25310	Oily's Automotive Service & Re	30.00
02/08/2016	25311	Praxair Inc.	26.32
02/08/2016	25312	Pro-Pipe & Supply, Inc.	64.61
02/08/2016	25313	SCCI, Inc.	350.00
02/08/2016	25314	Separation Processes, Inc.	1,112.00
02/08/2016	25315	Association of San Bernardino	63.00
02/08/2016	25316	The Gas Company	2,185.87
02/08/2016	25317	Underground Service Alert Of S	216.00
02/08/2016	25318	Wells Fargo Bank-Corporate Tru	628,836.60
02/08/2016	25319	Yucaipa Auto Collision, LLC	753.10
02/08/2016	25320	Ampak Chemicals, Inc.	4,001.40
02/08/2016	25321	Brenntag Pacific, Inc	7,324.34
02/08/2016	25322	Victor James Valenti	4,043.80
02/08/2016	25323	Crown Ace Hardware - Yucaipa	2,711.16
02/08/2016	25324	Jan Brinkman Jr.	1,317.20
02/08/2016	25325	Dickson	328.00
02/08/2016	25326	Eurofins Eaton Analytical, Inc	1,300.00
02/08/2016	25327	Evans-Hydro Inc.	15,482.16
02/08/2016	25328	Evoqua Water Technologies LLC	248.92
02/08/2016	25329	G&G Environmental Compliance,I	3,140.06
02/08/2016	25330	Gonzales Environmental Consult	20,033.93
02/08/2016	25331	Grainger	1,248.71
02/08/2016	25332	Hach Company	544.22
02/08/2016	25333	House Of Quality, Parts Plus	2,205.70
02/08/2016	25334	Inland Water Works Supply Co.	5,048.55
02/08/2016	25335	Innerline Engineering	3,500.00
02/08/2016	25336	Johnson Power Systems	712.65
02/08/2016	25337	Main's Lock Supply Inc.	16.20
02/08/2016	25338	Nagem, Inc.	2,812.96
02/08/2016	25339	NCL Of Wisconsin Inc	290.11
02/08/2016	25340	Office Solutions Business Prod	40.73
02/08/2016	25341	Red Alert Special Couriers	714.44

Check Register - February 2016

<u>Check Date</u>	<u>Check Number</u>	<u>Name</u>	<u>Check Amount</u>
02/08/2016	25342	Laura Valdivieso	135.00
02/08/2016	25343	Sterling Water Technologies LL	17,568.46
02/08/2016	25344	UPS Store#1504/ Mail Boxes Etc	64.54
02/08/2016	25345	Calmat Company	2,474.97
02/08/2016	25346	YSI Incorporated	139.41
02/08/2016	25347	ZEP Manufacturing Company	126.86
02/08/2016	25348	Boot Barn #4	200.00
02/08/2016	25349	CWEA/SSCSC	45.00
02/08/2016	25350	East Valley Water District	300.00
02/08/2016	25351	YVWD-Petty Cash	360.96
02/08/2016	25352	Gregory N. Godwin	194.19
02/08/2016	25353	Standard Insurance Company	3,185.48
02/08/2016	25354	Bob Wall	147.04
02/08/2016	25355	Western Dental Services, Inc.	302.27
02/08/2016	25356	Cypress Insurance Company	1,445.00
02/08/2016	25357	Anthem Blue Cross L and H	379.90
02/08/2016	25358	Standard Insurance Company	3,169.57
02/08/2016	25359	Standard Insurance Vision Plan	672.56
02/08/2016	25360	MetLife Small Business Center	586.82
02/08/2016	25361	Courtyard Santa Rosa	376.84
02/08/2016	25362	Courtyard Santa Rosa	376.84
02/08/2016	25363	WageWorks, Inc.	191.75
02/16/2016	25364	Aklufi & Wysocki	5,062.50
02/16/2016	25365	Citizens Business Bank	6,875.00
02/16/2016	25366	DDB Engineering Inc.	4,509.12
02/16/2016	25367	Delta Partners, LLC	7,500.00
02/16/2016	25368	Dudek & Associates, Inc	6,504.95
02/16/2016	25369	Harper & Associates Eng., Inc.	5,757.50
02/16/2016	25370	Krieger & Stewart	21,924.15
02/16/2016	25371	One Stop Landscape Supply Inc	25,486.50
02/16/2016	25372	Pacific Hydrotech Corporation	356,915.00
02/16/2016	25373	Pascal & Ludwig Constructors I	130,625.00
02/16/2016	25374	Platinum Advisors, LLC	5,000.00
02/16/2016	25375	RMC Water and Environment	39,104.44
02/16/2016	25376	Separation Processes, Inc.	13,870.25
02/16/2016	25377	Skydrop Holdings, LLC	113,400.00
02/16/2016	25378	Hadronex, Inc.	42,952.12
02/16/2016	25379	VOID CHECK	0.00
02/16/2016	25380	Dinosaur Tire Inc.	126.60
02/16/2016	25381	Kelly Services, Inc.	1,069.20
02/16/2016	25382	Sara Onate	7.54
02/16/2016	25383	San Bdn. Valley Muni. Water D	7,000.00
02/16/2016	25384	Sims Welding & Supply Co., Inc	202.99
02/16/2016	25385	Wells Fargo Bank-Corporate Tru	5,000.00
02/16/2016	25386	Ameripride Uniform Services	502.67
02/16/2016	25387	AmeriGas Propane LP	2,019.75
02/16/2016	25388	Ampak Chemicals, Inc.	4,212.00

Check Register - February 2016

<u>Check Date</u>	<u>Check Number</u>	<u>Name</u>	<u>Check Amount</u>
02/16/2016	25389	Calolympic Glove & Safety Co.,	355.63
02/16/2016	25390	Evoqua Water Technologies LLC	918.60
02/16/2016	25391	Grainger	735.65
02/16/2016	25392	Hach Company	1,066.58
02/16/2016	25393	Hasa, Inc.	3,561.09
02/16/2016	25394	Inland Water Works Supply Co.	15,471.64
02/16/2016	25395	Johnson Machinery Co.	1,983.74
02/16/2016	25396	Main's Lock Supply Inc.	32.40
02/16/2016	25397	Nuckles Oil Company, Inc.	3,944.40
02/16/2016	25398	Myron L Company	696.19
02/16/2016	25399	Nagem, Inc.	75.30
02/16/2016	25400	NCL Of Wisconsin Inc	188.59
02/16/2016	25401	Office Solutions Business Prod	45.19
02/16/2016	25402	P & R Paper Supply Co., Inc.	140.03
02/16/2016	25403	Q Versa, LLC	12,753.56
02/16/2016	25404	Riverside Winnelson Company	2,918.04
02/16/2016	25405	The Sherwin-Williams Co.	204.22
02/16/2016	25406	State Water Resources Control	335.00
02/16/2016	25407	WESTON, ROBERT B	114.75
02/16/2016	25408	DARBYSHIRE, RONALD A	56.43
02/16/2016	25409	MARABLE, MIKE	39.56
02/16/2016	25410	DOBSON, JENNIFER & M	52.62
02/16/2016	25411	MOSHER, GORDON W	41.39
02/16/2016	25412	WES HANKINS INC	58.13
02/16/2016	25413	MARQUEZ, ANGELA	77.98
02/16/2016	25414	LEAL, JOSEPH & ERICA	46.67
02/16/2016	25415	YUCAIPA VALLEY REAL	42.43
02/16/2016	25416	SMITH, JOSHUA	42.43
02/19/2016	25417	PAYROLL CHECK	2,066.55
02/19/2016	25418	CA-PERS Supplemental Income 45	18,683.44
02/19/2016	25419	WageWorks, Inc.	1,462.27
02/19/2016	25420	Public Employees' Retirement S	22,515.84
02/19/2016	25421	Hong Nelson	125.00
02/19/2016	25422	California State Disbursement	115.38
02/19/2016	25423	California State Disbursement	476.30
02/19/2016	25424	Department of the Treasury - I	125.00
02/19/2016	25425	Cypress Insurance Company	15,735.86
02/19/2016	25426	WageWorks, Inc.	212.75
02/22/2016	25427	Ralph C. Casas	58.00
02/22/2016	25428	Ameripride Uniform Services	499.09
02/22/2016	25429	Redlands Employment Services	948.40
02/22/2016	25430	AT&T Mobility	1,699.49
02/22/2016	25431	Cobb's Printing, LLC	306.72
02/22/2016	25432	Fedex	47.54
02/22/2016	25433	Hershey Business Products	243.00
02/22/2016	25434	Incode Division-Tyler Technolo	2,583.50
02/22/2016	25435	Inland Empire Resource Conserv	411.43

Check Register - February 2016

<u>Check Date</u>	<u>Check Number</u>	<u>Name</u>	<u>Check Amount</u>
02/22/2016	25436	Kelly Services, Inc.	855.36
02/22/2016	25437	NetComp Technologies, Inc.	1,050.00
02/22/2016	25438	The Counseling Team Internatio	240.00
02/22/2016	25439	Verizon	140.17
02/22/2016	25440	All American Sewer Tools	1,428.13
02/22/2016	25441	Aqua-Metric Sales Company	9,339.84
02/22/2016	25442	Bernell Hydraulics, Inc.	1,274.12
02/22/2016	25443	Evoqua Water Technologies LLC	974.44
02/22/2016	25444	Inland Water Works Supply Co.	1,305.72
02/22/2016	25445	J. Colon Coatings, Inc.	16,800.00
02/22/2016	25446	JB Paving & Engineering, Inc.	15,002.25
02/22/2016	25447	Lowe's Companies, Inc.	135.50
02/22/2016	25448	Nuckles Oil Company, Inc.	1,471.24
02/22/2016	25449	Office Solutions Business Prod	156.68
02/22/2016	25450	Pro-Pipe & Supply, Inc.	93.57
02/22/2016	25451	Riverside Winnelson Company	149.54
02/22/2016	25452	Safety Kleen Systems, Inc.	145.00
02/22/2016	25453	JR Simplot Company	302.40
02/22/2016	25454	Smart & Final Stores, LLC	143.01
02/22/2016	25455	Steven Enterprises, Inc	1,083.46
02/22/2016	25456	UPS Store#1504/ Mail Boxes Etc	10.28
02/22/2016	25457	CWEA-TCP (OAKPORT ST.)	91.00
02/22/2016	25458	Kyle Westerlin	170.00
02/22/2016	25459	Gilbert A. Santaacruz	164.00
02/22/2016	25460	Courtland R. Gear	164.00
02/22/2016	25461	Aaron Blose	164.00
02/22/2016	25462	Joseph Zoba	110.21
02/22/2016	25463	Matthew Porras	229.12
02/22/2016	25464	Kyle C. Mitchell	91.40
February 2016 Check Register Total			2,008,111.02

Financial Account Information - February 2016

DATE	DESCRIPTION	Deposit Checking	General Checking	Investment Checking	Treasuries at cost	LAIF Invest. Fund	TOTAL ACTIVITY
01/31/2016	bal forward	884,405.99	30,000.00	24,782.97	501,504.82	17,313,426.79	18,754,120.57
1/31	rev retained in MM				(2,019.50)		(2,019.50)
02/01/2016	Deposit	32,444.41					32,444.41
	Deposit - Riv tax	3,240.51					3,240.51
	Credit Card-1/29	464.26					464.26
	Credit Card-2/1	4,641.24					4,641.24
	Electronic	12,978.21					12,978.21
	Website-2/1	4,817.14					4,817.14
	Website-2/2	145.14					145.14
	Website-2/2	486.87					486.87
02/02/2016	Deposit	38,948.56					38,948.56
	Deposit - MC	3,200.00					3,200.00
	Credit Card-2/1	533.37					533.37
	Credit Card-2/2	2,075.56					2,075.56
	Electronic	27,066.63					27,066.63
	Website-2/2	4,161.01					4,161.01
	Website-2/3	140.28					140.28
	Website-2/3	414.19					414.19
	ETS Fees	(1,537.85)					(1,537.85)
	ETS Fees	(1,364.96)					(1,364.96)
02/03/2016	Deposit	37,524.89					37,524.89
	Deposit - MC	367,673.60					367,673.60
	Credit Card-2/2	516.74					516.74
	Credit Card-2/3	6,724.72					6,724.72
	Electronic	19,202.97					19,202.97
	Website-2/3	4,358.40					4,358.40
	Website-2/4	218.32					218.32
	Website-2/4	462.25					462.25
	ACH pmts	43,187.40					43,187.40
02/04/2016	Deposit	34,409.15					34,409.15
	Credit Card-2/3	2,104.27					2,104.27
	Credit Card-2/4	1,659.16					1,659.16
	Electronic	11,361.28					11,361.28
	Website-2/4	3,722.69					3,722.69
	Website-2/5	80.00					80.00
	Website-2/5	962.47					962.47
02/05/16-PR	Federal Taxes		(49,643.91)				(49,643.91)
02/05/16-PR	State Taxes		(7,836.43)				(7,836.43)
02/05/16-PR	PR Direct Deposit		(115,782.95)				(115,782.95)
02/05/16-PR	VOYA 457		(8,270.90)				(8,270.90)
	Cks. #25248-25291		(253,257.09)				(253,257.09)
	TRF#1400- AP & PR	(434,791.28)	434,791.28				0.00
02/05/2016	Deposit	26,876.47					26,876.47
	Credit Card-2/4	893.63					893.63
	Credit Card-2/5	2,309.00					2,309.00
	Electronic	12,207.76					12,207.76
	Website-2/5	2,768.25					2,768.25
	Website-2/6	73.42					73.42
	Website-2/6	1,410.07					1,410.07
	Website-2/7	75.15					75.15
	Website-2/7	2,280.08					2,280.08
	Website-2/8	64.93					64.93
	Website-2/8	3,079.61					3,079.61

Financial Account Information - February 2016

DATE	DESCRIPTION	Deposit Checking	General Checking	Investment Checking	Treasuries at cost	LAIF Invest. Fund	TOTAL ACTIVITY
01/31/2016	bal forward	884,405.99	30,000.00	24,782.97	501,504.82	17,313,426.79	18,754,120.57
02/08/2016	Deposit	64,133.01					64,133.01
	Credit Card-2/5	1,242.52					1,242.52
	Credit Card-2/8	5,322.93					5,322.93
	Electronic	11,930.01					11,930.01
	Website-2/8	3,130.56					3,130.56
	Website-2/9	596.13					596.13
02/09/2016	Deposit	11,581.31					11,581.31
	Deposit-M/C	12,097.62					12,097.62
	Credit Card-2/8	1,371.77					1,371.77
	Credit Card-2/9	1,950.75					1,950.75
	Electronic	23,544.19					23,544.19
	Website-2/9	2,620.77					2,620.77
	Website-2/10	312.65					312.65
	Website-2/10	424.27					424.27
	Void Ck#23451, 5/29/15		156.71				156.71
	Cks. #25292-25363		(781,628.41)				(781,628.41)
	TRF#1401- AP	(781,471.70)	781,471.70				0.00
02/10/2016	Deposit	64,531.57					64,531.57
	Credit Card-2/9	618.60					618.60
	Credit Card-2/10	4,967.44					4,967.44
	Electronic	13,598.22					13,598.22
	Website-2/10	6,393.74					6,393.74
	Website-2/11	54.39					54.39
	Website-2/11	543.53					543.53
	ACH pmts	45,122.30					45,122.30
02/11/2016	Deposit	54,991.90					54,991.90
	Deposit-M/C	25,984.60					25,984.60
	Credit Card-2/10	1,036.05					1,036.05
	Credit Card-2/11	2,140.27					2,140.27
	Electronic	12,083.44					12,083.44
	Website-2/11	2,529.70					2,529.70
	Website-2/12	942.08					942.08
02/12/2016	Deposit	38,490.90					38,490.90
	Deposit - MC	3,200.00					3,200.00
	Credit Card-2/11	483.07					483.07
	Credit Card-2/12	2,058.14					2,058.14
	Electronic	13,994.24					13,994.24
	Website-2/12	3,698.54					3,698.54
	Website-2/13	141.97					141.97
	Website-2/13	2,776.08					2,776.08
	Website-2/14	64.93					64.93
	Website-2/14	1,687.92					1,687.92
	Website-2/15	63.23					63.23
	Website-2/15	3,095.63					3,095.63
	Website-2/16	117.43					117.43
	Website-2/16	563.16					563.16
02/16/2016	Deposit	74,947.79					74,947.79
	Credit Card-2/12	405.95					405.95
	Credit Card-2/16	5,169.67					5,169.67
	Electronic	12,835.20					12,835.20
	Website-2/16	3,079.47					3,079.47
	Website-2/17	71.27					71.27
	Website-2/17	720.12					720.12

Financial Account Information - February 2016

DATE	DESCRIPTION	Deposit Checking	General Checking	Investment Checking	Treasuries at cost	LAIF Invest. Fund	TOTAL ACTIVITY
01/31/2016	bal forward	884,405.99	30,000.00	24,782.97	501,504.82	17,313,426.79	18,754,120.57
2/16	ACH pmts	50,282.38					50,282.38
2/16	ACH pmts	66.62					66.62
02/17/2016	Deposit	11,296.75					11,296.75
	Credit Card-2/16	1,025.25					1,025.25
	Credit Card-2/17	5,766.62					5,766.62
	Electronic	23,016.00					23,016.00
	Website-2/17	4,083.42					4,083.42
	Website-2/18	408.29					408.29
	Cks. #25364-25416		(852,128.19)				(852,128.19)
	TRF#1402- AP	(852,128.19)	852,128.19				0.00
02/18/2016	Deposit	29,313.22					29,313.22
	Credit Card-2/17	1,693.60					1,693.60
	Credit Card-2/18	16,868.37					16,868.37
	Electronic	11,661.75					11,661.75
	Website2/18	2,542.71					2,542.71
	Website2/19	252.22					252.22
02/19/2016	Deposit	52,806.69					52,806.69
	Credit Card-2/19	3,023.34					3,023.34
	Electronic	15,413.87					15,413.87
	Website-2/19	3,057.97					3,057.97
	Website-2/20	1,530.18					1,530.18
	Website-2/21	175.73					175.73
	Website-2/21	2,655.04					2,655.04
	Website-2/22	359.25					359.25
02/22/2016	Deposit	55,852.91					55,852.91
	Deposit-M/C	24,873.25					24,873.25
	Deposit-M/C	4,389.75					4,389.75
	Credit Card-2/19	762.67					762.67
	Credit Card-2/22	3,506.51					3,506.51
	Electronic	19,270.32					19,270.32
	Website-2/22	1,904.01					1,904.01
	Website-2/23	193.57					193.57
	Website-2/23	444.58					444.58
	ACH pmts	27,244.31					27,244.31
2/19/16-PR	Federal Taxes		(48,829.08)				(48,829.08)
2/19/16-PR	State Taxes		(7,917.12)				(7,917.12)
2/19/16-PR	PR Direct Deposit		(114,327.31)				(114,327.31)
2/19/16-PR	VOYA 457		(7,663.93)				(7,663.93)
	Cks. #25417-25426		(61,518.39)				(61,518.39)
	TRF#1403- AP & PR	(240,255.83)	240,255.83				0.00
	Deposit - SBC Tax		59,877.15				59,877.15
	TRF#1404 - to Dep Cking	59,877.15	(59,877.15)				0.00
02/23/2016	Deposit	6,941.68					6,941.68
	Credit Card-2/22	871.80					871.80
	Credit Card-2/23	1,743.25					1,743.25
	Electronic	16,221.18					16,221.18
	Website-2/23	1,764.74					1,764.74
	Website-2/24	155.32					155.32
	Website-2/24	150.36					150.36
	Void Ck#25379, 2/16		502.67				502.67
	Cks. #25427-25464		(60,081.61)				(60,081.61)
	TRF#1405 - AP	(59,578.94)	59,578.94				0.00

Financial Account Information - February 2016

DATE	DESCRIPTION	Deposit Checking	General Checking	Investment Checking	Treasuries at cost	LAIF Invest. Fund	TOTAL ACTIVITY
01/31/2016	bal forward	884,405.99	30,000.00	24,782.97	501,504.82	17,313,426.79	18,754,120.57
02/24/2016	Deposit	28,785.20					28,785.20
	Credit Card-2/23	1,237.65					1,237.65
	Credit Card-2/24	1,597.50					1,597.50
	Electronic	7,415.22					7,415.22
	Website-2/24	1,492.14					1,492.14
	Website-2/25	154.18					154.18
	Website-2/25	658.42					658.42
02/25/2016	Deposit	14,885.30					14,885.30
	Credit Card-2/24	504.38					504.38
	Credit Card-2/25	925.24					925.24
	Electronic	5,451.66					5,451.66
	Website-2/25	3,968.36					3,968.36
	Website-2/26	47.91					47.91
	Website-2/26	451.17					451.17
	ACH pmts	54,871.13					54,871.13
	ACH pmts	726.67					726.67
02/26/2016	Deposit	14,743.50					14,743.50
	Credit Card-2/25	4,758.60					4,758.60
	Credit Card-2/26	1,775.83					1,775.83
	Electronic	6,625.06					6,625.06
	Website-2/26	4,537.43					4,537.43
	Website-2/27	1,542.51					1,542.51
	Website-2/28	1,987.02					1,987.02
	Website-2/29	702.88					702.88
	Website-2/29	493.86					493.86
02/29/2016	Deposit	34,442.86					34,442.86
	Bank adj	20.00					20.00
	Credit Card-2/26	1,042.25					1,042.25
	Credit Card-2/29	1,370.26					1,370.26
	Electronic	8,094.41					8,094.41
	Website-2/29	3,804.52					3,804.52
	Website-3/1	852.36					852.36
	February '16 NSF's	(1,109.20)					(1,109.20)
1/31	retained in MM				2,019.52		2,019.52
TOTALS		451,025.24	30,000.00	24,782.97	501,504.84	17,313,426.79	18,320,739.84

Investment Summary - January 2016

U.S. TREASURIES

Quantity	Description	Cusip	Maturity Date	Yield	Cost of Purchase	Market Value
500,000	US Treasury Bill	912796HT9	June 2, 2016	0.020%	499,485.32	499,590.00
Total Values					499,485.32	499,590.00

Money Market Account Activity-Beginning Balance	2,019.50
1/31/16 - Dividend/Interest	0.02
Income	0.02
Intra-Bank Transfers to/from Investment Checking	0.00
Fund Transfers	0.00
Cusip Maturity	0.00
Redemptions	0.00
Cusip Purchase	0.00
Purchases	0.00
 Ending Balance - Money Market	 2,019.52
 US Treasury Securities Investment Principal	 499,485.32
 Total Assets	 501,504.84

Investment Summary - February 2016

LOCAL AGENCY INVESTMENT FUND

PERIOD	TOTAL WITHDRAWAL AMOUNT	TOTAL DEPOSIT AMOUNT	ACCRUED INTEREST (QUARTERLY)	ENDING BALANCE
July 31, 2015	(\$525,000.00)	\$0.00	\$12,375.46	\$19,103,970.94
August 31, 2015	(\$3,000,000.00)	\$0.00	\$0.00	\$16,103,970.94
September 30, 2015	\$0.00	\$0.00	\$0.00	\$16,103,970.94
October 31, 2015	\$0.00	\$0.00	\$14,537.81	\$16,118,508.75
November 30, 2015	\$0.00	\$0.00	\$0.00	\$16,118,508.75
December 31, 2015	\$0.00	\$0.00	\$0.00	\$16,118,508.75
January 31, 2016	\$0.00	\$1,180,000.00	\$14,918.04	\$17,313,426.79
February 28, 2016	\$0.00	\$0.00	\$0.00	\$17,313,426.79
March 31, 2016	\$0.00	\$0.00	\$0.00	\$17,313,426.79
April 30, 2016	\$0.00	\$0.00	\$0.00	\$17,313,426.79
May 31, 2016	\$0.00	\$0.00	\$0.00	\$17,313,426.79
June 30, 2016	\$0.00	\$0.00	\$0.00	\$17,313,426.79

L.A.I.F. INCOME SUMMARY

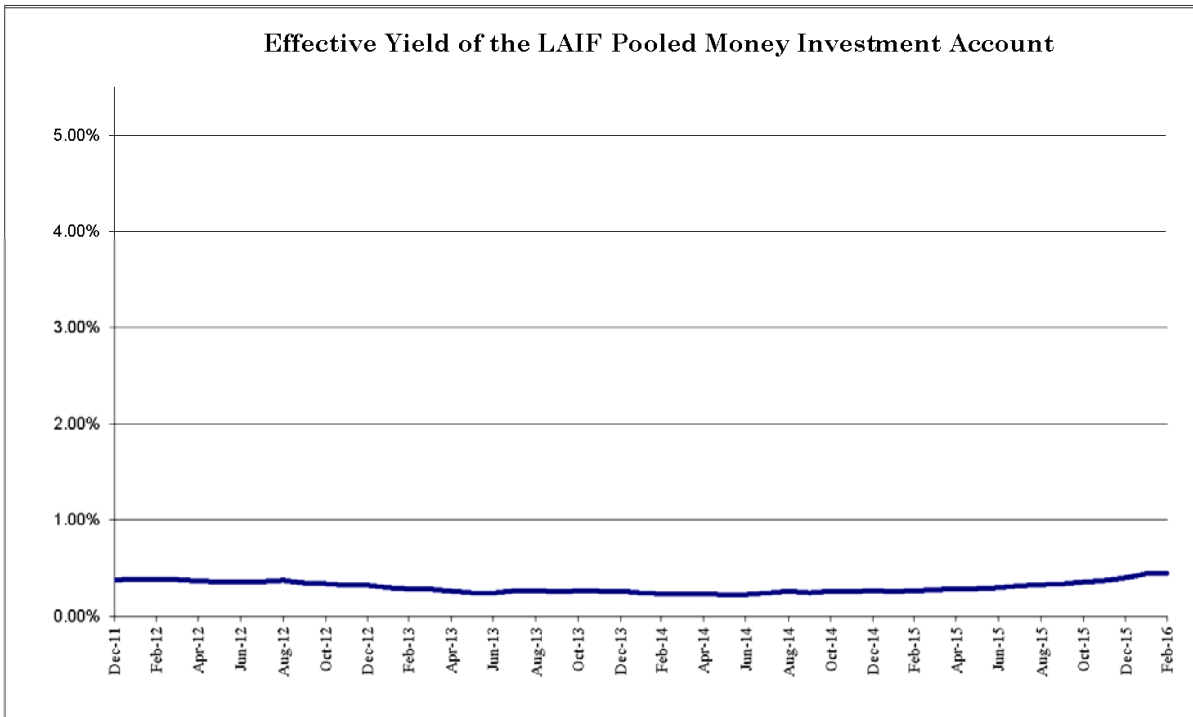
CURRENT QUARTER

FY YEAR-TO-DATE

INCOME RECEIVED

\$14,918.04

\$41,831.31



Daily Deposit Allocation - February 2016

DATE	DESCRIPTION	QTY	DEPOSIT CHECKING DEPOSITS	AR Mail & Counter	AR Payment Centers	AR Credit Card	AR Electronic Rapid Pay	AR Web Site	AR ACH Auto Pay	AR TOTAL	AR Water Fees & Deposits	Water Allocation	Sewer Allocation	Recycled Allocation	RECAP TOTAL
02/01/2016	Mail & Counter	377	32,444.41	32,324.41						32,324.41	120.00	3,240.51			32,444.41
	Deposit-Riv Tax		3,240.51							0.00					3,240.51
	Credit Cards	51	5,105.50			5,105.50				5,105.50					5,105.50
	Electronic	174	12,978.21				12,978.21			12,978.21					12,978.21
	Website-58 fees	59	5,448.15					5,347.65		5,347.65	101.50				5,449.15
02/02/2016	Mail & Counter	285	38,948.56	38,948.56						38,948.56					38,948.56
	Deposit-M/C		3,200.00							0.00		3,200.00			3,200.00
	Credit Cards	31	2,608.93			2,608.93				2,608.93					2,608.93
	Electronic	385	27,066.63				27,066.63			27,066.63					27,066.63
	Website-51 fees	52	4,715.48					4,626.23		4,626.23	89.25				4,715.48
02/03/2016	Mail & Counter	347	37,524.89	37,524.89						37,524.89					37,524.89
	Deposit-Wm Lyons		367,673.60							0.00		236,137.60	131,536.00		367,673.60
	Credit Cards	54	7,241.46			7,241.46				7,241.46					7,241.46
	Electronic	277	19,202.97				19,202.97			19,202.97					19,202.97
	Website-46 fees	48	5,038.97					4,958.47		4,958.47	80.50				5,038.97
	ACH payment	497	43,187.40						43,187.40	43,187.40					43,187.40
02/04/2016	Mail & Counter	312	34,409.15	34,409.15						34,409.15					34,409.15
	Credit Cards	30	3,763.43			3,763.43				3,763.43					3,763.43
	Electronic	179	11,361.28				11,361.28			11,361.28					11,361.28
	Website - 50 fees	51	4,765.16					4,677.66		4,677.66	87.50				4,765.16
02/05/2016	Mail & Counter	269	26,876.47	26,876.47						26,876.47					26,876.47
	Credit Cards	30	3,202.63			3,202.63				3,202.63					3,202.63
	Electronic	182	12,207.76				12,207.76			12,207.76					12,207.76
	Website-82 fees	83	9,751.51					9,608.01		9,608.01	143.50				9,751.51
02/08/2016	Mail & Counter	610	64,133.01	64,133.01						64,133.01					64,133.01
	Credit Cards	50	6,565.45			6,565.45				6,565.45					6,565.45
	Electronic	168	11,930.01				11,930.01			11,930.01					11,930.01
	Website-39 fees	40	3,726.69					3,658.44		3,658.44	68.25				3,726.69
02/09/2016	Mail & Counter	146	11,581.31	11,581.31						11,581.31					11,581.31
	Deposit-M/C		12,097.62							0.00		12,097.62			12,097.62
	Credit Cards	32	3,322.52			3,322.52				3,322.52					3,322.52
	Electronic	297	23,544.19				23,544.19			23,544.19					23,544.19
	Website-37 fees	38	3,357.69					3,292.84		3,292.84	64.75				3,357.69
02/10/2016	Mail & Counter	325	64,531.57	64,531.57						64,531.57					64,531.57
	Credit Cards	49	5,586.04			5,586.04				5,586.04					5,586.04
	Electronic	184	13,598.22				13,598.22			13,598.22					13,598.22
	Website-50 fees	54	6,991.66					6,904.16		6,904.16	87.50				6,991.66
	ACH payment	570	45,122.30						45,122.30	45,122.30					45,122.30
02/11/2016	Mail & Counter	260	54,991.90	54,991.90						54,991.90					54,991.90
	Deposit-M/C		25,984.60							0.00		17,583.60	8,401.00		25,984.60
	Credit Cards	32	3,176.32			3,176.32				3,176.32					3,176.32
	Electronic	157	12,083.44				12,083.44			12,083.44					12,083.44
	Website	36	3,471.78					3,408.78		3,408.78	63.00				3,471.78
02/12/2016	Mail & Counter	223	38,490.90	38,490.90						38,490.90					38,490.90
	Deposit-M/C		3,200.00							0.00		3,200.00			3,200.00
	Credit Cards	26	2,541.21			2,541.21				2,541.21					2,541.21
	Electronic	213	13,994.24				13,994.24			13,994.24					13,994.24
	Website	134	12,208.89					11,974.39		11,974.39	234.50				12,208.89
02/16/2016	Mail & Counter	593	74,947.79	74,947.79						74,947.79					74,947.79
	Credit Cards	56	5,575.62			5,575.62				5,575.62					5,575.62
	Electronic	203	12,835.20				12,835.20			12,835.20					12,835.20
	Website	45	3,870.86					3,792.11		3,792.11	78.75				3,870.86
	ACH payment	643	50,349.00						50,349.00	50,349.00					50,349.00

Daily Deposit Allocation - February 2016

DATE	Description	Qty	DEPOSIT CHECKING DEPOSITS	AR Mail & Counter	AR Payment Centers	AR Credit Card	AR Electronic Rapid Pay	AR Web Site	AR ACH Auto Pay	AR TOTAL	AR Water Fees & Deposits	Water Allocation	Sewer Allocation	Recycled Allocation	RECAP TOTAL
02/17/2016	Mail & Counter	121	11,296.75	11,296.75						11,296.75					11,296.75
	Credit Cards	60	6,791.87			6,791.87				6,791.87					6,791.87
	Electronic	331	23,016.00				23,016.00			23,016.00					23,016.00
	Website	40	4,421.71					4,421.71		4,421.71	70.00				4,491.71
02/18/2016	Mail & Counter	365	29,313.22	29,313.22						29,313.22					29,313.22
	Credit Cards	34	18,561.97			18,561.97				18,561.97					18,561.97
	Electronic	172	11,661.75				11,661.75			11,661.75					11,661.75
	Website-35 fees	37	2,794.93					2,793.68		2,793.68	61.25				2,794.93
02/19/2016	Mail & Counter	294	52,806.69	52,806.69						52,806.69					52,806.69
	Credit Cards	29	3,023.34			3,023.34				3,023.34					3,023.34
	Electronic	222	15,413.87				15,413.87			15,413.87					15,413.87
	Website-93 fees	95	7,778.17					7,615.42		7,615.42	162.75				7,778.17
02/22/2016	Mail & Counter	481	55,852.91	55,852.91						55,852.91					55,852.91
	Dep - M/C		24,873.25							0.00		24,873.25			24,873.25
	Dep - M/C		4,389.75							0.00		4,389.75			4,389.75
	Credit Cards	51	4,269.18			4,269.18				4,269.18					4,269.18
	Electronic	245	19,270.32				19,270.32			19,270.32					19,270.32
	Website	35	2,542.16					2,480.91		2,480.91	61.25				2,542.16
	ACH payment	520	27,244.31						27,244.31	27,244.31					27,244.31
02/23/2016	Mail & Counter	111	6,941.68	6,941.68						6,941.68					6,941.68
	Credit Cards	24	2,615.05			2,615.05				2,615.05					2,615.05
	Electronic	233	16,221.18				16,221.18			16,221.18					16,221.18
	Website	23	2,070.42					2,030.17		2,030.17	40.25				2,070.42
02/24/2016	Mail & Counter	253	28,785.20	28,785.20						28,785.20					28,785.20
	YOUSD pmt corr		353.05							353.05					353.05
	Credit Cards	22	2,835.15			2,835.15				2,835.15					2,835.15
	Electronic	109	7,415.22				7,415.22			7,415.22					7,415.22
	Website	24	2,304.74					2,262.74		2,262.74	42.00				2,304.74
02/25/2016	Mail & Counter	130	14,885.30	14,885.30						14,885.30					14,885.30
	Credit Cards	14	1,429.62			1,429.62				1,429.62					1,429.62
	Electronic	79	5,451.66				5,451.66			5,451.66					5,451.66
	Website-27 fees	28	4,467.44					4,420.19		4,420.19	47.25				4,467.44
	ACH payment	602	55,597.80						55,597.80	55,597.80					55,597.80
02/26/2016	Mail & Counter	171	14,743.50	14,743.50						14,743.50					14,743.50
	Credit Cards	28	6,534.43			6,534.43				6,534.43					6,534.43
	Electronic	82	6,625.06				6,625.06			6,625.06					6,625.06
	Website-80 fees	84	9,263.70					9,123.70		9,123.70	140.00				9,263.70
02/29/2016	Mail & Counter	262	34,442.86	34,442.86						34,442.86					34,442.86
	Credit Cards	24	2,412.51			2,412.51				2,412.51					2,412.51
	Electronic	111	8,094.41				8,094.41			8,094.41					8,094.41
	Website	48	4,656.88					4,572.88		4,572.88	84.00				4,656.88
Feb-16	Utility Pmt Cntr-290			(19,891.70)						0.00					0.00
	Feb '16 NSP's			(1,109.20)						(1,109.20)					(1,109.20)
	SB fax-ach									0.00					0.00
TOTALS			14,491	1,878,203.90	707,180.22	19,891.70	283,971.62	101,910.24	221,500.81	1,431,616.82	1,927.75	304,722.33	139,937.00	0.00	1,878,203.90

TOTAL # AR PAYMENTS 14,491
 PERCENT OF TOTAL RECEIVED 100%

FY 2016 - Water Revenue

ACCOUNT#	DESCRIPTION	BUDGET	Qtr 1 Totals	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Year to Date	Percentage YTD
02-40010	Sales - Water	6,165,000	1,109,101	496,039	361,517	364,040	205,429	196,850	2,732,976	44.33%
02-40011	Sales - Construction Water	20,000	2,524	1,116	1,055	726	370	9	5,801	29.00%
02-40012	Sales - Imported Water (SGPWA)	250,000	55,743	16,567	13,722	11,909	7,645	7,645	113,231	45.29%
02-40013	Sales - Imported Water (MUNI)	850,000	138,543	69,464	51,720	52,484	30,695	28,948	371,856	43.75%
02-40014	Sales Disc-Multi Units Usage Chrg.	(130,000)	(22,065)	(10,054)	(8,245)	(9,449)	(6,846)	(6,873)	(63,332)	48.72%
02-40015	Water Wholesale Revenue	70,000	13,653	4,419	4,247	4,402	101,521	0	128,242	183.20%
02-40016	Service Establishment Fee	3,000	1,475	575	25	425	25	425	2,950	98.33%
02-41000	Service Demand Charges	3,000,000	564,332	255,502	255,700	256,013	256,287	256,307	1,844,141	61.47%
02-41001	Fire Service Standby Fees	25,000	5,186	2,578	2,387	2,939	3,155	3,001	19,246	76.98%
02-41003	Construction Service Charge	14,000	2,433	1,235	1,152	1,325	1,090	902	8,137	58.12%
02-41005	Sales Disc-Multi Units Service Chrg.	(120,000)	(25,302)	(11,376)	(11,376)	(11,376)	(11,376)	(11,376)	(82,184)	68.49%
02-41010	Unauthorized Use of Water Charge	2,000	0	0	0	0	0	0	0	0.00%
02-41110	Meter/Lateral installation	35,000	21,050	8,625	0	5,625	0	6,375	41,675	119.07%
02-41112	Fire Flow Test Fees	3,500	900	525	225	450	450	225	2,775	79.29%
02-41113	Disconnect/Reconnect Fees	130,000	31,365	9,185	8,575	12,390	11,515	7,915	80,945	62.27%
02-41121	Penalty - Late Charges	150,000	32,104	10,053	12,295	8,852	10,577	8,600	82,482	54.99%
02-42123	Management & Accounting Fees	160,000	39,994	13,334	13,334	13,334	13,334	13,334	106,664	66.67%
02-41124	Bad Debt	(20,000)	0	0	0	0	0	0	0	0.00%
02-43010	Interest Earned	15,000	4,066	8,668	28	0	6,588	0	19,351	129.01%
02-43110	Property Tax - Unsecured	110,000	6,630	0	103,227	(10,541)	(2,060)	89	97,345	88.50%
02-43120	Property Tax - Secured	2,400,000	0	0	168,567	983,767	98,121	62,276	1,312,731	54.70%
02-43130	Tax Collection - Prior	15,000	0	3,330	10,922	(9,280)	3,717	553	9,242	61.61%
02-43140	Other Taxes	185,000	(17)	(9)	3,804	9,994	71,072	199	85,044	45.97%
02-49150	Revenue - Misc. Non-Operating	80,000	19,002	3,582	5,712	9,741	22,422	3,297	63,755	79.69%
	WATER OPERATING REVENUE	13,412,500	2,000,718	883,359	998,593	1,697,769	823,732	578,901	6,983,072	52.06%
	Grants	0	0	41,089	0	0	0	0	41,089	
02-89901	Facility Capacity Charges	0	657,307	309,994	21,156	322,693	0	229,126	1,540,276	
02-89902	Sustainability	0	75,517	49,749	3,924	50,762	881	14,970	195,803	
	TOTAL WATER REVENUE	13,412,500	2,733,543	1,284,191	1,023,673	2,071,224	824,613	822,997	8,760,240	

FY 2016 - Sewer Revenue

ACCOUNT#	DESCRIPTION	BUDGET	Qtr 1 Totals	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Year to Date	Percentage YTD
03-40016	Sales - Establish Service Fee	500	0	0	0	0	25	0	25	5.00%
03-41000	Sales - Sewer Charges	11,675,000	2,170,394	953,641	942,143	947,505	938,575	932,687	6,884,945	58.97%
03-41005	Sales Disc-Multi Units Service Chrg.	(200,000)	(42,030)	(18,246)	(18,235)	(18,252)	(18,239)	(18,221)	(133,222)	66.61%
03-41110	Meter/Lateral Installation	1,000	0	0	0	0	950	0	950	95.00%
03-41121	Penalty - Late Charges	150,000	30,703	9,484	11,987	9,757	11,102	12,369	85,402	56.93%
03-41124	Bad Debt	(20,000)	0	0	0	0	0	0	0	0.00%
03-42122	Revenue - Other Operating	2,000	465	0	0	180	360	180	1,185	59.25%
03-43010	Interest Earned	15,000	4,062	8,668	28	0	6,713	0	19,471	129.81%
03-43110	Property Tax - Unsecured	10,000	0	0	0	10,000	0	0	10,000	100.00%
03-43120	Property Tax - Secured	125,000	0	0	0	125,000	0	0	125,000	100.00%
03-43130	Tax Collection - Prior	10,000	0	0	0	10,000	0	0	10,000	100.00%
03-43140	Other Taxes	1,500	0	0	0	1,500	0	0	1,500	100.00%
03-49150	Misc. Non-Oper Revenue	50,000	1,875	0	0	0	0	0	1,875	3.75%
	SEWER OPERATING REVENUE	11,820,000	2,165,469	953,547	935,924	1,085,689	939,487	927,015	7,007,131	59.28%
	Grants	0	0	0	0	0	0	0	0	
03-89901	Facility Capacity Charges	0	480,333	189,083	8,221	285,137	3,979	139,757	1,106,510	
03-89903	Contrib Capital-Front Footage Fees	0	0	0	0	0	12,841	0	12,841	
03-89905	Contrib Capital-Infrastructure	0	0	34,500	0	0	0	0	34,500	
	TOTAL SEWER REVENUE	11,820,000	2,645,802	1,177,130	944,145	1,370,826	956,307	1,066,772	8,160,983	

FY 2016 - Recycled Revenue

ACCOUNT#	DESCRIPTION	BUDGET	Qtr 1 Totals	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Year to Date	Percentage YTD
04-40010	Sales - Recycled Water	450,000	108,101	41,986	26,911	23,271	4,477	5,545	210,291	46.73%
04-40011	Sales - Construction Water	10,000	1,270	472	600	587	373	26	3,328	33.28%
04-41000	Sales - Service Demand Chrg.	42,500	7,403	3,176	3,145	3,237	3,231	3,249	23,440	55.15%
04-41003	Const. Water Minimum Chrg.	5,000	428	221	214	221	214	193	1,490	29.81%
04-41110	Meter/Lateral installation	1,500	0	0	0	325	0	0	325	21.67%
04-41121	Penalty - Late Charges	500	254	39	44	7	8	13	365	72.95%
04-41122	Revenue - Other Operating	250	0	0	0	0	0	0	0	0.00%
04-43010	Interest Earned	8,000	0	1,454	6	0	1,492	0	2,952	36.90%
04-43110	Property Tax - Unsecured	1,000	0	0	0	1,000	0	0	1,000	100.00%
04-43120	Property Tax - Secured	15,000	0	0	0	15,000	0	0	15,000	100.00%
04-43130	Property Tax - Prior	1,000	0	0	0	1,000	0	0	1,000	100.00%
04-43140	Property Tax - Other	1,000	0	0	0	1,000	0	0	1,000	100.00%
04-49150	Misc. Non-Operating Revenue	1,500	0	0	0	0	0	0	0	0.00%
RECYCLED OPERATING REVENUE		537,250	117,454	47,348	30,921	45,648	9,794	9,026	260,191	48.43%
	Grants	0	0						0	
04-89901	Facility Capacity Charges	0	5,800	0	5,800	10,634	9,667	0	31,901	
TOTAL RECYCLED REVENUE		537,250	123,254	47,348	36,721	56,282	19,461	9,026	292,092	

FY 2016 - Water Expenses

ACCOUNT#	DESCRIPTION	BUDGET	Qtr 1 Totals	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Year to Date	Percentage YTD
02-5-01-50010	Labor-Water Resources	884,000	172,040	91,592	65,105	63,390	63,221	61,226	516,574	58.44%
02-5-01-50011	Labor Credit	0	0	0	0	0	0	0	0	
02-5-01-50013	Benefits-Fica	63,000	14,123	7,517	5,345	5,044	5,234	5,080	42,342	67.21%
02-5-01-50014	Benefits-Life Insurance	3,200	845	278	286	277	297	287	2,270	70.93%
02-5-01-50016	Benefits-Health\Defrld Comp	145,000	43,006	15,223	14,508	14,533	14,533	14,327	116,129	80.09%
02-5-01-50017	Benefits-Disability Insurance	11,000	2,521	1,166	855	769	899	880	7,089	64.44%
02-5-01-50019	Benefits-Workers Compensation	42,000	7,989	781	4,084	4,084	4,013	5,646	26,598	63.33%
02-5-01-50021	Benefits-PERS	47,000	10,205	5,747	3,868	3,831	3,831	3,831	31,315	66.63%
02-5-01-50022	Benefits-PERS-Employer	100,000	10,954	6,136	4,091	4,091	4,091	4,091	33,453	33.45%
02-5-01-50023	Benefits-Uniforms	3,500	765	402	1,516	425	231	215	3,554	101.55%
02-5-01-50024	Benefits-Vacation & Sick Pay	7,500	1,577	892	459	595	821	821	5,164	68.85%
02-5-01-50025	Benefits-Boot Allowance	2,000	594	0	200	0	0	194	988	49.42%
02-5-01-51003	R&M - Structures	275,000	26,103	24,272	13,392	39,191	7,357	3,263	113,578	41.30%
02-5-01-51011	R&M - CLA Valves	10,000	0	0	0	1,885	205	305	2,395	23.95%
02-5-01-51140	General Supplies & Expenses	2,000	234	136	31	55	0	0	455	22.75%
02-5-01-51210	Utilities - Power Purchases	1,650,000	425,299	115,268	44,080	84,658	105,479	66,085	840,870	50.96%
02-5-01-51211	Utilities - Electricity & Fuel	5,000	1,199	480	419	433	504	408	3,442	68.84%
02-5-01-51316	Imported Water Purchases	1,100,000	261,701	93,414	91,779	81,897	1,786	0	550,578	48.23%
02-5-01-54019	Licenses & Permits	25,000	3,133	0	1,404	1,404	708	0	6,649	26.59%
02-5-01-54110	Laboratory Services	75,000	7,873	16,798	13,234	3,030	4,999	4,192	50,125	66.83%
02-5-01-57040	YVRWFF Operating Expense	600,000	166,177	46,890	67,366	58,344	31,665	10,453	380,895	63.48%
	WATER RESOURCE TOTALS	5,050,200	1,156,338	426,991	332,021	367,935	249,874	181,302	2,714,462	53.75%
02-5-03-50010	Labor-Public Works	1,042,800	141,364	74,970	81,368	86,707	78,510	80,049	542,967	52.07%
02-5-03-50011	Labor Credit	0	(1,076)	(2,524)	(4,114)	(2,169)	0	(1,623)	(11,506)	
02-5-03-50013	Benefits-Fica	92,000	11,609	6,193	6,649	6,929	6,528	6,642	44,550	48.42%
02-5-03-50014	Benefits-Life Insurance	7,000	1,117	366	367	436	367	596	3,750	53.57%
02-5-03-50016	Benefits-Health\Defrld Comp	300,000	60,987	21,469	22,615	32,430	35,279	26,482	199,262	66.42%
02-5-03-50017	Benefits-Disability Insurance	16,500	2,427	1,077	1,086	1,062	1,516	1,294	8,463	51.29%
02-5-03-50019	Benefits-Workers Compensation	45,000	7,989	781	4,084	4,084	4,013	5,646	26,598	59.11%
02-5-03-50021	Benefits-PERS	73,000	10,109	5,152	3,051	3,027	3,371	3,281	27,991	38.34%
02-5-03-50022	Benefits-PERS Employer	160,000	10,344	5,352	5,374	5,750	5,341	5,243	37,404	23.38%
02-5-03-50023	Benefits-Uniforms	6,000	808	322	4,144	542	441	397	6,654	110.89%
02-5-03-50024	Benefits-Vacation & Sick Pay	4,000	729	542	420	299	243	243	2,476	61.89%
02-5-03-50025	Benefits-Boot Allowance	3,500	330	1,378	949	686	175	0	3,519	100.54%
02-5-03-51001	R & M - Vehicles & Equipment	150,000	59,574	6,192	9,657	11,898	15,935	40,551	143,807	95.87%
02-5-03-51011	R&M - Valves	10,000	0	0	0	0	1,319	901	2,220	22.20%
02-5-03-51020	R&M - Pipelines	275,000	51,027	29,012	7,743	18,152	20,996	15,943	142,873	51.95%
02-5-03-51021	R&M - Service Lines	100,000	20,528	12,242	1,449	12,323	5,791	5,791	57,614	57.61%
02-5-03-51022	R&M - Fire Hydrants	25,000	1,294	(2,518)	2,401	5,086	7,686	8,690	22,639	90.56%
02-5-03-51030	R&M - Water Meters	75,000	25,996	11,927	16,233	2,946	3,397	11,563	72,061	96.08%
02-5-03-51092	Equipment Credits	0	(417)	(1,071)	(2,919)	(1,939)	0	(1,890)	(8,235)	
02-5-03-51140	General Supplies & Expenses	1,000	115	57	390	43	0	53	659	65.86%
	PUBLIC WORKS TOTALS	2,385,800	404,855	170,918	160,949	181,249	197,942	209,851	1,325,764	55.57%

FY 2016 - Water Expenses

ACCOUNT#	DESCRIPTION	BUDGET	Qtr 1 Totals	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Year to Date	Percentage YTD
02-5-06-50010	Labor-Administration	705,000	131,473	72,408	48,727	39,442	47,076	47,066	386,193	54.78%
02-5-06-50011	Labor Credit	0	2,252	0	2,925	0	0	0	5,177	
02-5-06-50012	Director Fees	19,000	3,216	2,144	1,742	492	871	1,900	10,366	54.56%
02-5-06-50013	Benefits-Fica	47,500	10,307	5,545	3,298	2,792	4,246	4,295	30,483	64.18%
02-5-06-50014	Benefits-Life Insurance	3,200	662	215	220	255	232	225	1,808	56.52%
02-5-06-50016	Benefits-HealthDefrd Comp	165,000	37,111	15,288	13,548	13,451	13,571	12,795	105,764	64.10%
02-5-06-50017	Benefits-Disability Insurance	7,500	1,626	655	387	355	647	638	4,307	57.43%
02-5-06-50019	Benefits-Workers Compensation	15,750	2,000	781	1,000	1,000	1,000	2,000	7,781	49.41%
02-5-06-50021	Benefits-PERS	40,236	8,944	5,006	3,337	3,337	3,337	3,337	27,299	67.76%
02-5-06-50022	Benefits PERS Employer	85,000	9,152	5,123	3,415	3,415	3,415	3,415	27,935	32.86%
02-5-06-50023	Uniforms	2,000	293	110	408	86	93	87	1,077	53.86%
02-5-06-50024	Benefits-Vacation & Sick Pay	10,000	3,009	1,534	888	943	1,090	715	8,178	81.78%
02-5-06-50025	Benefits-Boots	1,000	0	0	0	0	0	0	0	0.00%
02-5-06-51003	R&M - Structures	20,000	1,068	11,117	7,020	824	13,062	2,318	35,410	177.05%
02-5-06-51091	Expense Credits (overhead)	0	(236)	(1,207)	(1,972)	(494)	0	(918)	(4,827)	
02-5-06-51120	Safety Equipment/Supplies	25,000	6,668	1,501	1,651	2,267	2,472	356	14,914	59.66%
02-5-06-51125	Petroleum Products	125,000	23,609	5,894	6,597	7,148	5,166	2,037	50,449	40.36%
02-5-06-51130	Office Supplies & Expenses	30,000	7,581	883	4,584	1,372	1,775	1,912	18,107	60.36%
02-5-06-51140	General Supplies & Expenses	30,000	2,241	7,291	2,378	2,434	5,927	1,537	21,809	72.70%
02-5-06-51199	Disaster Incidences	0	0	0	0	0	0	0	0	
02-5-06-51211	Utilities - Electricity	28,000	9,190	2,742	1,962	1,858	1,889	1,669	19,310	68.96%
02-5-06-51213	Utilities - Natural Gas	3,000	83	28	148	455	455	0	1,169	38.95%
02-5-06-54002	Dues & Subscriptions	10,000	1,346	3,045	4,500	2,704	3,080	492	15,166	151.66%
02-5-06-54005	Computer Expenses	65,000	16,704	14,879	1,860	14,293	1,439	300	49,475	76.11%
02-5-06-54010	Postage	6,000	1,769	(493)	2,023	24	161	1,563	5,036	83.94%
02-5-06-54011	Printing & Publications	7,500	446	0	0	0	0	0	446	5.95%
02-5-06-54012	Education & Training	15,000	1,754	158	158	272	2,530	284	5,156	34.37%
02-5-06-54013	Utility Billing Expenses	180,000	35,943	11,972	12,097	10,198	13,509	6,771	90,491	50.27%
02-5-06-54014	Public Relations	9,000	467	853	0	236	249	0	1,807	20.07%
02-5-06-54016	Travel Related Expenses	10,000	411	500	42	42	494	561	2,048	20.48%
02-5-06-54017	Certifications & Renewals	6,000	730	215	1,780	212	470	445	3,852	64.19%
02-5-06-54020	Meeting Related Expenses	6,000	667	600	60	1,076	435	188	3,027	50.44%
02-5-06-54024	Utilities - Waste Disposal	2,750	530	177	241	177	177	145	1,446	52.58%
02-5-06-54025	Utilities - Telephone	42,000	10,117	3,503	3,362	3,396	3,406	0	23,784	56.63%
02-5-06-54099	Conservation & Rebates	0	32,162	7,270	38,628	42,083	177,346	(24,186)	273,302	
02-5-06-54104	Contractual Services	65,000	27,284	10,652	4,645	15,995	12,749	3,493	74,817	115.10%
02-5-06-54107	Legal	45,000	8,523	1,838	3,959	1,853	1,575	0	17,747	39.44%
02-5-06-54108	Audit & Accounting	16,000	8,775	1,710	0	0	0	0	10,485	65.53%
02-5-06-54109	Professional Fees	150,000	38,660	7,789	13,020	6,775	7,161	14,500	87,904	58.60%
02-5-06-55500	Depreciation Reserves	200,000	49,997	16,667	16,667	16,667	16,667	16,667	133,332	66.67%
02-5-06-56001	Infrastructure Replacement	1,265,000	316,249	105,416	105,416	105,416	105,416	105,416	843,329	66.67%
02-5-06-57030	Insurance	105,000	24,981	8,328	8,328	8,328	8,328	8,328	66,621	63.45%
02-5-06-57090	Regulatory Compliance	55,000	2,561	263	535	275	700	600	4,934	8.97%
02-5-06-57096	Election Related Expenses	0	0	0	0	0	0	0	0	
02-5-06-57096	Beaumont Basin Watermaster	60,000	0	25,451	0	0	0	20,170	45,621	76.03%
02-5-06-57199	Suspense	0	0	0	0	(12,755)	12,755	0	0	
ADMINISTRATION TOTALS		3,682,486	840,324	357,847	319,584	298,700	474,970	241,110	2,532,535	68.77%

FY 2016 - Water Expenses

ACCOUNT#	DESCRIPTION	BUDGET	Qtr 1 Totals	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Year to Date	Percentage YTD
02-5-40-57201	Debt Srv-Series 2015A Princ.(25009)	980,000	980,000	0	0	0	0	0	980,000	100.00%
02-5-40-57402	Interest-Long-Term Debt Bonds	1,314,014	673,457	0	0	0	0	640,556	1,314,014	100.00%
	40 - Debt	2,294,014	1,653,457	0	0	0	0	640,556	2,294,014	100.00%
02-5-40-57001	Asset Acq. - Water Resources	0	0	0	0	0	0	0	0	--
02-5-40-57003	Asset Acq. - Public works	0	0	0	0	0	0	0	0	--
02-5-40-57006	Asset Acq. - Administration	0	0	0	0	0	0	0	0	--
	40 - Capital Outlay	0	0	0	0	0	0	0	0	--
			4,054,974						8,866,774	
	TOTAL WATER EXPENSES	13,412,500	4,054,974	955,756	812,555	847,984	922,787	1,272,819	8,866,774	66.11%

FY 2016 - Sewer Expenses

ACCOUNT#	DESCRIPTION	BUDGET	Qtr 1 Totals	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Year to Date	Percentage YTD
03-5-02-50010	Labor-S Treatment	985,300	158,574	91,656	65,988	60,926	66,092	60,831	504,066	51.16%
03-5-02-50013	Benefits-Fica	75,000	12,943	7,482	5,385	4,990	5,394	4,988	41,182	54.91%
03-5-02-50014	Benefits-Life Insurance	5,000	942	302	310	309	313	310	2,486	49.72%
03-5-02-50016	Benefits-Health/Defrd Comp	200,000	47,536	17,176	9,701	15,010	15,010	14,722	119,154	59.58%
03-5-02-50017	Benefits-Disability Insurance	15,000	2,472	1,189	864	731	949	897	7,102	47.35%
03-5-02-50019	Benefits-Workers Compensation	45,000	7,989	781	4,084	4,084	4,013	5,646	26,598	59.11%
03-5-02-50021	Benefits-PERS	60,000	10,655	5,903	3,954	3,954	3,935	3,749	32,149	53.58%
03-5-02-50022	Benefits-PERS Employer	130,000	11,483	6,295	4,197	4,197	4,197	4,197	34,565	26.59%
03-5-02-50023	Benefits-Uniforms	4,500	968	325	1,753	353	261	226	3,887	86.37%
03-5-02-50024	Benefits-Vacation & Sick Pay	5,000	897	484	323	323	323	323	2,671	53.43%
03-5-02-50025	Benefits-Boot Allowance	2,400	714	200	0	524	0	0	1,437	59.89%
03-5-02-51003	R&M - Structures	225,000	137,313	40,879	56,021	45,509	17,068	1,948	298,740	132.77%
03-5-02-51010	R&M - Automation Control	65,000	3,298	5,361	5,177	390	5,320	9,115	28,661	44.09%
03-5-02-51106	Chemicals	490,000	81,393	21,102	26,864	27,615	34,905	19,966	211,845	43.23%
03-5-02-51111	Propane	5,000	2,357	0	3,940	16,127	0	2,020	24,443	488.87%
03-5-02-51115	Laboratory Supplies	30,000	8,856	939	277	4,236	2,051	915	17,274	57.58%
03-5-02-51140	General Supplies & Expenses	1,000	88	31	321	0	0	65	504	50.41%
03-5-02-51210	Utilities - Power Purchases	830,000	266,263	79,486	56,816	57,501	66,105	59,372	585,543	70.55%
03-5-02-54110	Laboratory Services	115,000	13,357	4,277	9,086	13,057	10,496	9,631	59,905	52.09%
03-5-02-57031	Sludge Disposal	300,000	68,598	21,823	23,579	24,148	25,487	0	163,634	54.54%
03-5-02-57034	Brine Operating Expenses	201,616	133	1,202	27,852	786	128	27,571	57,673	28.61%
	TREATMENT TOTALS	3,789,816	836,828	306,894	305,492	284,767	262,045	226,491	2,223,517	58.67%

FY 2016 Sewer Expenses

ACCOUNT#	DESCRIPTION	BUDGET	Qtr 1 Totals	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Year to Date	Percentage YTD
03-5-06-50010	Labor-Administration	680,000	121,015	67,179	45,241	35,520	43,591	43,580	356,127	53.96%
03-5-06-50011	Labor Credit	0	2,252	0	2,925	0	0	0	5,177	
03-5-06-50012	Directors Fees	19,000	3,216	2,144	1,742	492	871	1,900	10,366	54.56%
03-5-06-50013	Benefits-Fica	43,000	9,417	5,101	3,004	2,643	3,949	3,998	28,111	65.38%
03-5-06-50014	Benefits-Life Insurance	3,600	650	211	217	182	222	214	1,695	47.08%
03-5-06-50016	Benefits-HealthDefrd Comp	145,000	33,900	14,049	12,495	12,398	12,119	11,602	96,564	66.60%
03-5-06-50017	Benefits-Disability Insurance	7,500	1,504	608	387	355	611	603	4,069	54.25%
03-5-06-50019	Benefits-Workers Compensation	27,500	2,000	781	1,000	1,000	1,000	2,000	7,781	28.30%
03-5-06-50021	Benefits-PERS	36,000	8,290	4,640	3,093	3,093	3,093	3,093	25,302	70.28%
03-5-06-50022	Benefits PERS Employer	75,000	8,483	4,748	3,165	3,165	3,165	3,165	25,892	34.52%
03-5-06-50023	Benefits-Uniforms	2,000	205	84	246	113	70	61	778	38.90%
03-5-06-50024	Benefits-Vacation & Sick Pay	10,000	3,009	1,534	888	943	1,090	715	8,179	81.79%
03-5-06-50025	Benefits-Boot Allowance	1,740	0	0	0	0	0	0	0	0.00%
03-5-06-51120	Safety Equipment/Supplies	10,000	1,706	0	1,197	1,060	2,959	0	6,922	69.22%
03-5-06-51125	Petroleum Products	22,500	4,621	1,000	1,000	1,000	1,268	3,413	12,301	54.67%
03-5-06-51130	Office Supplies	4,000	2,282	211	338	329	19	29	3,209	80.22%
03-5-06-51140	General Supplies & Expenses	17,500	851	6,367	1,450	1,262	5,780	56	15,786	90.21%
03-5-06-51199	Disaster Repairs (lift station 2)	0	33,643	0	3,307	0	0	0	36,949	
03-5-06-54002	Dues & Subscriptions	10,000	1,240	3,045	656	1,115	3,544	164	9,763	97.63%
03-5-06-54003	Management & Admin Services	160,000	39,994	13,334	13,334	13,334	13,334	13,334	106,664	66.67%
03-5-06-54005	Computer Expenses	95,000	20,363	15,120	1,460	13,698	2,442	600	53,684	56.51%
03-5-06-54011	Printing & Publications	1,500	413	81	0	0	0	0	494	32.93%
03-5-06-54012	Education & Training	7,000	917	158	158	158	2,508	232	4,129	58.99%
03-5-06-54014	Public Relations	7,500	467	825	0	0	0	0	1,293	17.24%
03-5-06-54016	Travel Related Expenses	5,000	1,217	816	42	42	494	622	3,231	64.62%
03-5-06-54017	Certifications & Renewals	5,000	406	340	1,658	480	496	321	3,701	74.02%
03-5-06-54019	Licenses & Permits	50,000	10,929	0	40,242	3,776	0	1,315	56,262	112.52%
03-5-06-54020	Meeting Related Expenses	5,000	538	605	30	953	59	124	2,310	46.19%
03-5-06-54024	Utilities - Waste Disposal	12,500	3,161	1,054	1,054	1,054	1,054	144	7,520	60.16%
03-5-06-54025	Utilities - Telephone	20,000	4,032	1,489	1,389	1,417	1,432	0	9,758	48.79%
03-5-06-54030	Drinking Water	1,000	297	58	51	102	65	58	631	63.08%
03-5-06-54104	Contractual Services	30,000	16,251	4,791	993	13,710	7,126	2,224	45,095	150.32%
03-5-06-54107	Legal	45,000	3,760	1,275	1,784	2,266	3,300	0	12,385	27.52%
03-5-06-54108	Audit & Accounting	16,000	8,775	1,710	0	0	0	0	10,485	65.53%
03-5-06-54109	Professional Fees	150,000	50,662	31,912	23,639	18,300	8,867	2,500	135,879	90.59%
03-5-06-55500	Depreciation Reserves	500,000	124,997	41,667	41,667	41,667	41,667	41,667	333,332	66.67%
	Infrastructure Replacement	800,000	200,007	66,670	66,670	66,670	66,670	66,670	533,357	66.67%
03-5-06-56001	Insurance	105,000	24,981	8,328	8,328	8,916	8,328	8,328	67,210	64.01%
03-5-06-57030	Regulatory Compliance	42,000	1,790	0	0	0	0	0	1,790	4.26%
	ADMINISTRATION TOTALS	3,151,840	752,240	301,955	284,848	251,213	241,195	212,731	2,044,181	64.86%

FY 2016 - Sewer Expenses

ACCOUNT#	DESCRIPTION	BUDGET	Qtr 1 Totals	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Year to Date	Percentage YTD
03-5-07-50010	Labor-Environmental Control	310,000	82,457	43,991	31,864	30,771	37,119	36,410	262,612	84.71%
03-5-07-50011	Labor Credit	0	(310)	0	(916)	0	0	0	(1,225)	
03-5-07-50013	Benefits-Fica	28,000	6,482	3,498	2,503	2,415	2,889	2,834	20,622	73.65%
03-5-07-50014	Benefits-Life Insurance	2,000	426	139	142	142	297	203	1,349	67.43%
03-5-07-50016	Benefits-Health/Defrd Comp	75,000	26,352	9,851	8,978	8,978	12,449	12,733	79,341	105.79%
03-5-07-50017	Benefits-Disability Insurance	4,500	1,175	561	437	379	613	513	3,679	81.75%
03-5-07-50019	Benefits-Workers Compensation	30,000	2,394	781	1,286	1,286	1,500	4,332	11,580	38.60%
03-5-07-50021	Benefits-PERS	20,000	4,823	2,749	1,832	1,832	1,495	1,823	14,555	72.77%
03-5-07-50022	Benefits-PERS Employer	45,000	4,935	2,813	1,875	1,875	2,284	2,279	16,062	35.69%
03-5-07-50023	Benefits-Uniforms	2,000	320	105	1,386	190	132	128	2,261	113.06%
03-5-07-50024	Benefits-Vacation & Sick Pay	2,000	463	253	169	169	365	365	1,784	89.18%
03-5-07-50025	Benefits-Boot Allowance	800	157	0	199	0	0	0	356	44.52%
03-5-07-51003	R&M - Structures	270,000	31,041	20,728	8,153	13,897	13,816	7,114	94,749	35.09%
03-5-07-51140	General Supplies & Expenses	1,000	34	172	147	6	497	0	857	85.67%
03-5-07-51241	Lift Station #1	85,000	17,711	6,839	5,517	3,309	3,299	3,249	39,924	46.97%
03-5-07-51242	Lift Station #2	15,000	4,874	2,826	1,770	749	1,076	985	12,281	81.87%
03-5-07-51243	Lift Station #3	5,000	780	1,154	214	210	221	183	2,760	55.21%
03-5-07-51244	Lift Station #4	20,000	7,700	4,046	468	10,493	4,386	590	27,684	138.42%
03-5-07-51248	Lift Station #8	3,000	145	58	49	48	52	45	395	13.18%
03-5-07-54109	Professional Fees	60,000	6,662	3,287	7,038	2,795	2,871	2,048	24,700	41.17%
03-5-07-54110	Laboratory Services	4,000	0	0	1,185	438	0	0	1,623	40.58%
	ENVIRONMENTAL CONTROL TOTAL	982,300	198,623	103,851	74,297	79,981	85,360	75,834	617,947	62.91%
03-5-40-57202	Debt Service - Principal - WRWRF	2,097,629	2,097,629	0	0	0	0	0	2,097,629	100.00%
03-5-40-57203	Debt Service - Principal - Brineline	401,939	0	0	0	401,939	0	0	401,939	100.00%
03-5-40-57204	Debt Service - Principal - WISE	125,600	0	0	0	0	0	0	0	0.00%
03-5-40-57205	Debt Service - Principal - R 10.3	36,663	0	0	0	0	0	0	0	0.00%
03-5-40-57206	Debt Service - Principal - Crow & B12-1	18,357	0	0	0	0	0	0	0	0.00%
03-5-40-57403	Debt Service - Interest	1,215,856	826,039	0	0	247,335	0	0	1,073,374	88.28%
	40 - Debt	3,896,044	2,923,669	0	0	649,274	0	0	3,572,942	91.71%
03-5-40-57002	Asset Acq. - Treatment	0	0	0	0	0	0	0	0	
03-5-40-57006	Asset Acq. - Administration	0	0	0	0	0	0	0	0	
03-5-40-57007	Asset Acq. - EC (ADS flow monitors & smart covers)	0	0	0	0	66,409	0	0	66,409	
	40 - Capital Outlay	0	0	0	0	66,409	0	0	66,409	
	TOTAL SEWER EXPENSES	11,820,000	4,711,360	712,700	665,637	1,331,644	588,600	515,055	8,524,997	72.12%

FY 2016 - Recycled Expenses

ACCOUNT#	DESCRIPTION	BUDGET	Qtr 1 Totals	Oct '15	Nov '15	Dec '15	Jan '16	Feb '16	Year to Date	Percentage YTD
04-5-06-50010	Labor-Recycled Water	226,630	45,474	21,977	15,398	15,948	13,862	15,883	128,541	56.72%
04-5-06-50012	Director Fees	2,500	0	0	0	2,500	0	0	2,500	100.00%
04-5-06-50013	Benefits-FICA	5,000	3,609	1,695	1,128	942	1,169	1,337	9,880	197.61%
04-5-06-50014	Benefits-Life Insurance	250	(6)	(4)	(2)	(2)	(2)	(2)	(17)	-6.96%
04-5-06-50016	Benefits-Health & Def Comp	15,000	6,356	2,563	2,136	2,136	2,105	2,263	17,559	117.06%
04-5-06-50017	Benefits-Disability Insurance	500	409	179	81	64	138	157	1,028	205.59%
04-5-06-50019	Benefits-Workers Compensation	3,000	394	781	197	197	197	500	2,266	75.52%
04-5-06-50021	Benefits-PERS Employee	2,200	327	183	122	122	122	56	932	42.36%
04-5-06-50022	Benefits-PERS Employer	5,000	335	187	125	125	125	228	1,124	22.49%
04-5-06-50023	Benefits-Uniforms	200	178	75	775	75	62	58	1,222	611.07%
04-5-06-50024	Benefits-Vacation & Sick Pay	500	81	60	47	33	84	84	388	77.67%
04-5-06-50025	Benefits-Boots	250	0	0	0	0	0	0	0	0.00%
04-5-06-51003	R & M-Structures	50,000	3,377	396	0	15,796	0	87	19,656	39.31%
04-5-06-51020	R & M-Pipelines	7,500	0	0	335	1,506	1,087	24	2,951	39.35%
04-5-06-51021	R & M-Service Lines	15,000	701	147	3	348	0	0	1,199	7.99%
04-5-06-51022	R & M-Fire Hydrants	5,000	0	0	0	0	0	0	0	0.00%
04-5-06-51030	R & M-Meters	1,500	5,701	12,010	2,084	4,824	924	68	25,611	1707.40%
04-5-06-51140	General Supplies & Expenses	250	58	0	262	235	1,275	0	1,829	731.60%
04-5-06-51210	Utilities-Power Purchases	77,720	586	288	288	288	288	268	2,007	2.58%
04-5-06-54002	Dues & Subscriptions	4,000	40	0	0	412	3,104	0	3,556	88.90%
04-5-06-54005	Computer Expense	5,000	355	3,084	0	2,781	0	0	6,220	124.39%
04-5-06-54011	Printing & Publications	1,000	122	0	0	0	0	0	122	12.25%
04-5-06-54012	Education & Training	3,500	185	35	1,225	35	465	12	1,957	55.91%
04-5-06-54014	Public Relations	3,500	104	724	0	46	0	0	873	24.95%
04-5-06-54016	Travel Related Expenses	2,000	0	250	1,664	0	110	1,524	3,548	177.42%
04-5-06-54017	Certifications & Renewals	250	0	0	0	0	0	800	800	320.00%
04-5-06-54019	Licenses & Permits	2,500	0	8,185	23,378	0	0	0	31,564	1262.55%
04-5-06-54020	Meeting Related Expenses	250	30	0	0	184	0	63	277	110.98%
04-5-06-54025	Telephone	750	419	140	140	140	140	0	978	130.40%
04-5-06-54010	Contractual Services	1,500	2,718	19	14	18	824	0	3,594	239.59%
04-5-06-54107	Legal	1,000	788	563	750	1,200	188	0	3,488	348.75%
04-5-06-54108	Audit & Accounting	0	1,950	380	0	0	0	0	2,330	
04-5-06-54109	Professional Fees	25,000	32,090	4,606	15,427	32,051	9,403	0	93,576	374.30%
04-5-06-54110	Laboratory Services	1,000	0	0	0	0	0	0	0	0.00%
04-5-06-55500	Depreciation	8,000	1,970	670	670	670	670	670	5,320	66.50%
04-5-06-57030	Infrastructure Replacement	25,000	6,249	2,083	2,083	2,083	2,083	0	14,581	58.33%
04-5-06-57040	Regulatory Compliance	25,000	27	154	4,735	557	0	136	5,608	22.43%
04-5-06-57040	Environmental Compliance	10,000	0	0	0	0	0	0	0	0.00%
			114,624						397,069	
	TOTAL RECYCLED EXPENSES	537,250	114,624	61,432	73,064	85,313	38,421	24,215	397,069	73.91%

Director Comments



Yucaipa Valley Water District

Adjournment



Yucaipa Valley Water District



FACTS ABOUT THE YUCAIPA VALLEY WATER DISTRICT

Service Area Size: 40 square miles (sphere of influence is 68 square miles)

Elevation Change: 3,140 foot elevation change (from 2,044 to 5,184 feet)

Number of Employees: 5 elected board members
62 full time employees

Operating Budget: Water Division - \$13,397,500
Sewer Division - \$11,820,000
Recycled Water Division - \$537,250
Total Annual Budget - \$25,754,750

Number of Services: 12,434 water connections serving 17,179 units
13,559 sewer connections serving 20,519 units
64 recycled water connections

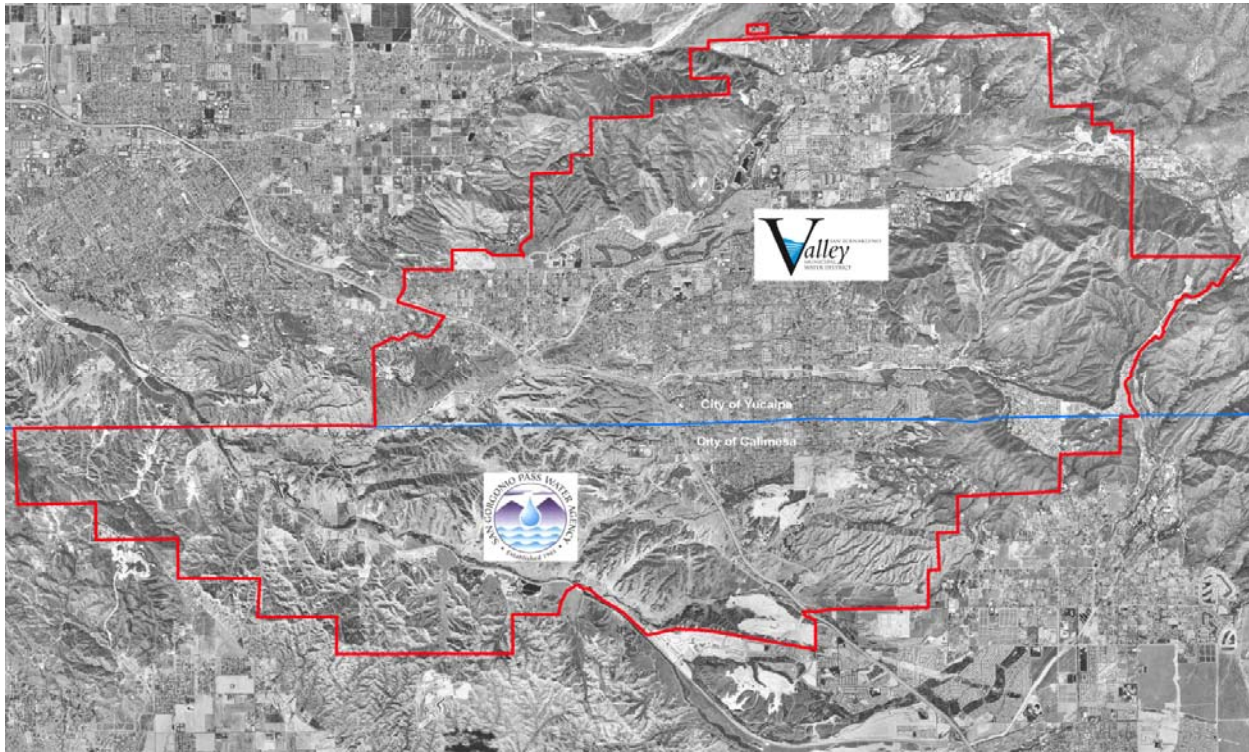
Water System: 215 miles of drinking water pipelines
27 reservoirs - 34 million gallons of storage capacity
18 pressure zones
12,000 ac-ft annual water demand (3.9 billion gallons)
Two water filtration facilities:
- 1 mgd at Oak Glen Surface Water Filtration Facility
- 12 mgd at Yucaipa Valley Regional Water Filtration Facility

Sewer System: 8.0 million gallon treatment capacity - current flow at 4.0 mgd
205 miles of sewer mainlines
5 sewer lift stations
4,500 ac-ft annual recycled water prod. (1.46 billion gallons)

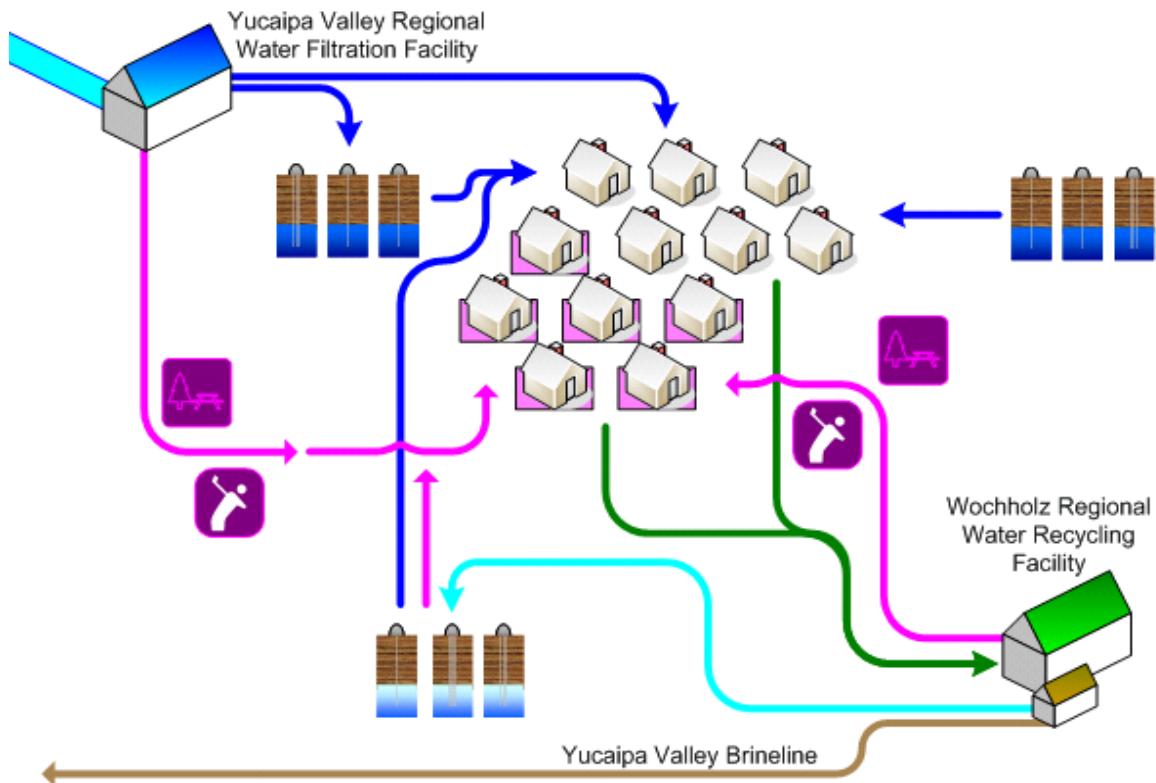
Recycled Water: 22 miles of recycled water pipelines
5 reservoirs - 12 million gallons of storage
1,200 ac-ft annual recycled demand (0.4 billion gallons)

Brine Disposal: 2.2 million gallon desalination facility at sewer treatment plant
1.108 million gallons of Inland Empire Brine Line capacity
0.295 million gallons of treatment capacity in Orange County

State Water Contractors: San Bernardino Valley Municipal Water District
San Geronimo Pass Water Agency



Sustainability Plan: A Strategic Plan for a Sustainable Future: The Integration and Preservation of Resources, adopted on August 20, 2008.





THE MEASUREMENT OF WATER PURITY

One part per hundred is generally represented by the percent (%).
This is equivalent to about fifteen minutes out of one day.

One part per thousand denotes one part per 1000 parts.
This is equivalent to about one and a half minutes out of one day.

One part per million (ppm) denotes one part per 1,000,000 parts.
This is equivalent to about 32 seconds out of a year.

One part per billion (ppb) denotes one part per 1,000,000,000 parts.
This is equivalent to about three seconds out of a century.

One part per trillion (ppt) denotes one part per 1,000,000,000,000 parts.
This is equivalent to about three seconds out of every hundred thousand years.

One part per quadrillion (ppq) denotes one part per 1,000,000,000,000,000 parts.
This is equivalent to about two and a half minutes out of the age of the Earth (4.5 billion years).





GLOSSARY OF COMMONLY USED TERMS

Every profession has specialized terms which generally evolve to facilitate communication between individuals. The routine use of these terms tends to exclude those who are unfamiliar with the particular specialized language of the group. Sometimes jargon can create communication cause difficulties where professionals in related fields use different terms for the same phenomena.

Below are commonly used water terms and abbreviations with commonly used definitions. If there is any discrepancy in definitions, the District's Regulations Governing Water Service is the final and binding definition.

Acre Foot of Water - The volume of water (325,850 gallons, or 43,560 cubic feet) that would cover an area of one acre to a depth of 1 foot.

Activated Sludge Process – A secondary biological sewer treatment process where bacteria reproduce at a high rate with the introduction of excess air or oxygen, and consume dissolved nutrients in the wastewater.

Annual Water Quality Report - The document is prepared annually and provides information on water quality, constituents in the water, compliance with drinking water standards and educational material on tap water. It is also referred to as a Consumer Confidence Report (CCR).

Aquifer - The natural underground area with layers of porous, water-bearing materials (sand, gravel) capable of yielding a supply of water; see Groundwater basin.

Backflow - The reversal of water's normal direction of flow. When water passes through a water meter into a home or business it should not reverse flow back into the water mainline.

Best Management Practices (BMPs) - Methods or techniques found to be the most effective and practical means in achieving an objective. Often used in the context of water conservation.

Biochemical Oxygen Demand (BOD) – The amount of oxygen used when organic matter undergoes decomposition by microorganisms. Testing for BOD is done to assess the amount of organic matter in water.

Biosolids – Biosolids are nutrient rich organic and highly treated solid materials produced by the sewer treatment process. This high-quality product can be used as a soil amendment on farm land or further processed as an earth-like product for commercial and home gardens to improve and maintain fertile soil and stimulate plant growth.

Catch Basin – A chamber usually built at the curb line of a street, which conveys surface water for discharge into a storm sewer.

Capital Improvement Program (CIP) – Projects for repair, rehabilitation, and replacement of assets. Also includes treatment improvements, additional capacity, and projects for the support facilities.

Collector Sewer – The first element of a wastewater collection system used to collect and carry wastewater from one or more building sewer laterals to a main sewer.

Coliform Bacteria – A group of bacteria found in the intestines of humans and other animals, but also occasionally found elsewhere and is generally used as an indicator of sewage pollution.

Combined Sewer Overflow – The portion of flow from a combined sewer system, which discharges into a water body from an outfall located upstream of a wastewater treatment plant, usually during wet weather conditions.

Combined Sewer System– Generally older sewer systems designed to convey both sewage and storm water into one pipe to a wastewater treatment plant.

Conjunctive Use - The coordinated management of surface water and groundwater supplies to maximize the yield of the overall water resource. Active conjunctive use uses artificial recharge, where surface water is intentionally percolated or injected into aquifers for later use. Passive conjunctive use is to simply rely on surface water in wet years and use groundwater in dry years.

Consumer Confidence Report (CCR) - see Annual Water Quality Report.

Cross-Connection - The actual or potential connection between a potable water supply and a non-potable source, where it is possible for a contaminant to enter the drinking water supply.

Disinfection By-Products (DBPs) - The category of compounds formed when disinfectants in water systems react with natural organic matter present in the source water supplies. Different disinfectants produce different types or amounts of disinfection byproducts. Disinfection byproducts for which regulations have been established have been identified in drinking water, including trihalomethanes, haloacetic acids, bromate, and chlorite

Drought - a period of below average rainfall causing water supply shortages.

Dry Weather Flow – Flow in a sanitary sewer during periods of dry weather in which the sanitary sewer is under minimum influence of inflow and infiltration.

Fire Flow - The ability to have a sufficient quantity of water available to the distribution system to be delivered through fire hydrants or private fire sprinkler systems.

Gallons per Capita per Day (GPCD) - A measurement of the average number of gallons of water use by the number of people served each day in a water system. The calculation is made by dividing the total gallons of water used each day by the total number of people using the water system.

Groundwater Basin - An underground body of water or aquifer defined by physical boundaries.

Groundwater Recharge - The process of placing water in an aquifer. Can be a naturally occurring process or artificially enhanced.

Hard Water - Water having a high concentration of minerals, typically calcium and magnesium ions.

Hydrologic Cycle - The process of evaporation of water into the air and its return to earth in the form of precipitation (rain or snow). This process also includes transpiration from plants, percolation into the ground, groundwater movement, and runoff into rivers, streams and the ocean; see Water cycle.

Infiltration – Water other than sewage that enters a sewer system and/or building laterals from the ground through defective pipes, pipe joints, connections, or manholes. Infiltration does not include inflow. See *Inflow*.

Inflow - Water other than sewage that enters a sewer system and building sewer from sources such as roof vents, yard drains, area drains, foundation drains, drains from springs and swampy areas, manhole covers, cross connections between storm drains and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include infiltration. See *Infiltration*.

Inflow / Infiltration (I/I) – The total quantity of water from both inflow and infiltration.

Mains, Distribution - A network of pipelines that delivers water (drinking water or recycled water) from transmission mains to residential and commercial properties, usually pipe diameters of 4" to 16".

Mains, Transmission - A system of pipelines that deliver water (drinking water or recycled water) from a source of supply the distribution mains, usually pipe diameters of greater than 16".

Meter - A device capable of measuring, in either gallons or cubic feet, a quantity of water delivered by the District to a service connection.

Overdraft - The pumping of water from a groundwater basin or aquifer in excess of the supply flowing into the basin. This pumping results in a depletion of the groundwater in the basin which has a net effect of lowering the levels of water in the aquifer.

Peak Flow – The maximum flow that occurs over a specific length of time (e.g., daily, hourly, instantaneously).

Pipeline - Connected piping that carries water, oil or other liquids. See Mains, Distribution and Mains, Transmission.

Point of Responsibility, Metered Service - The connection point at the outlet side of a water meter where a landowner's responsibility for all conditions, maintenance, repairs, use and replacement of water service facilities begins, and the District's responsibility ends.

Potable Water - Water that is used for human consumption and regulated by the California Department of Public Health.

Pressure Reducing Valve - A device used to reduce the pressure in a domestic water system when the water pressure exceeds desirable levels.

Pump Station - A drinking water or recycled water facility where pumps are used to push water up to a higher elevation or different location.

Reservoir - A water storage facility where water is stored to be used at a later time for peak demands or emergencies such as fire suppression. Drinking water and recycled water systems will typically use concrete or steel reservoirs. The State Water Project system considers lakes, such as Shasta Lake and Folsom Lake to be water storage reservoirs.

Runoff - Water that travels downward over the earth's surface due to the force of gravity. It includes water running in streams as well as over land.

Sanitary Sewer System - Sewer collection system designed to carry sewage, consisting of domestic, commercial, and industrial wastewater. This type of system is not designed nor intended to carry water from rainfall, snowmelt, or groundwater sources. See *Combined Sewer System*.

Sanitary Sewer Overflow – Overflow from a sanitary sewer system caused when total wastewater flow exceeds the capacity of the system. See *Combined Sewer Overflow*.

Santa Ana River Interceptor (SARI) Line – A regional brine line designed to convey 30 million gallons per day of non-reclaimable wastewater from the upper Santa Ana River basin to the sewer treatment plant operated by Orange County Sanitation District.

Secondary Treatment – Biological sewer treatment, particularly the activated-sludge process, where bacteria and other microorganisms consume dissolved nutrients in wastewater.

Supervisory Control and Data Acquisition (SCADA) - A computerized system which provides the ability to remotely monitor and control water system facilities such as reservoirs, pumps and other elements of water delivery.

Service Connection - The water piping system connecting a customer's system with a District water main beginning at the outlet side of the point of responsibility, including all plumbing and equipment located on a parcel required for the District's provision of water service to that parcel.

Sludge – Untreated solid material created by the treatment of sewage.

Smart Irrigation Controller - A device that automatically adjusts the time and frequency which water is applied to landscaping based on real-time weather such as rainfall, wind, temperature and humidity.

Special District - A political subdivision of a state established to provide a public services, such as water supply or sanitation, within a specific geographic area.

Surface Water - Water found in lakes, streams, rivers, oceans or reservoirs behind dams.

Total Suspended Solids (TSS) – The amount of solids floating and in suspension in water or sewage.

Transpiration - The process by which water vapor is released into the atmosphere by living plants.

Trickling Filter – A biological secondary treatment process in which bacteria and other microorganisms, growing as slime on the surface of rocks or plastic media, consume nutrients in primary treated sewage as it trickles over them.

Underground Service Alert (USA) - A free service that notifies utilities such as water, telephone, cable and sewer companies of pending excavations within the area (dial 8-1-1 at least 2 working days before you dig).

Urban Runoff - Water from city streets and domestic properties that typically carries pollutants into the storm drains, rivers, lakes, and oceans.

Valve - A device that regulates, directs or controls the flow of water by opening, closing or partially obstructing various passageways.

Wastewater – Any water that enters the sanitary sewer.

Water Banking - The practice of actively storing or exchanging in-lieu surface water supplies in available groundwater basin storage space for later extraction and use by the storing party or for sale or exchange to a third party. Water may be banked as an independent operation or as part of a conjunctive use program.

Water cycle - The continuous movement water from the earth's surface to the atmosphere and back again; see Hydrologic cycle.

Water Pressure - Pressure created by the weight and elevation of water and/or generated by pumps that deliver water to the tap.

Water Service Line - The pipeline that delivers potable water to a residence or business from the District's water system. Typically the water service line is a 1" to 1½" diameter pipe for residential properties.

Watershed - A region or land area that contributes to the drainage or catchment area above a specific point on a stream or river.

Water Table - The upper surface of the zone of saturation of groundwater in an unconfined aquifer.

Water Transfer - A transaction, in which a holder of a water right or entitlement voluntarily sells/exchanges to a willing buyer the right to use all or a portion of the water under that water right or entitlement.

Water Well - A hole drilled into the ground to tap an underground water aquifer.

Wetlands - Lands which are fully saturated or under water at least part of the year, like seasonal vernal pools or swamps.

Wet Weather Flow – Dry weather flow combined with stormwater introduced into a combined sewer system, and dry weather flow combined with infiltration/inflow into a separate sewer system.





COMMONLY USED ABBREVIATIONS

AQMD	Air Quality Management District
BOD	Biochemical Oxygen Demand
CARB	California Air Resources Board
CCTV	Closed Circuit Television
CWA	Clean Water Act
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FOG	Fats, Oils, and Grease
GPD	Gallons per day
MGD	Million gallons per day
O & M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
POTW	Publicly Owned Treatment Works
PPM	Parts per million
RWQCB	Regional Water Quality Control Board
SARI	Santa Ana River Inceptor
SAWPA	Santa Ana Watershed Project Authority
SBVMWD	San Bernardino Valley Municipal Water District
SCADA	Supervisory Control and Data Acquisition system
SSMP	Sanitary Sewer Management Plan
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
WDR	Waste Discharge Requirements
YVWD	Yucaipa Valley Water District