



**CALL OF SPECIAL ENGINEERING WORKSHOP  
OF THE BEAUMONT-CHERRY VALLEY WATER DISTRICT  
BOARD OF DIRECTORS**

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The undersigned, Daniel Slawson, President of the Beaumont-Cherry Valley Water District, hereby calls a Special Engineering Workshop of the Board of Directors to be held Thursday, February 2<sup>nd</sup>, 2017 at 7:00 p.m. at the District's Administrative Offices located at 560 Magnolia Avenue, Beaumont, California 92223.

The agenda for said meeting is attached.

**Dated:** Monday, January 30<sup>th</sup>, 2017

Daniel Slawson, President of the  
Board of Directors of the  
Beaumont-Cherry Valley Water District



**BEAUMONT-CHERRY VALLEY WATER DISTRICT  
AGENDA  
ENGINEERING WORKSHOP OF BOARD OF DIRECTORS  
560 Magnolia Avenue, Beaumont, CA 92223  
Thursday, February 2<sup>nd</sup>, 2017  
Workshop Session at 7:00 p.m.**

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**Call to Order, President Slawson**

**Roll Call**

**Public Comment**

**PUBLIC COMMENT:** At this time, any person may address the Board of Directors on matters within its jurisdiction which are not on the agenda. However, any non-agenda matters that require action will be referred to Staff for a report and possible action at a subsequent meeting. To provide comments on specific agenda items, please complete a speaker's request form and provide the completed form to the Board Secretary prior to the Board meeting. Please limit your comments to three minutes. Sharing or passing time to another speaker is not permitted.

**ACTION ITEMS**

**1. Capital Improvement Plan**

Workshop to discuss the Capital Improvement Plan.

**2. Topics for Future Meetings**

**3. Adjournment**

\*\* Information included in the agenda packet

**AVAILABILITY OF AGENDA MATERIALS** - Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Beaumont-Cherry Valley Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, at 560 Magnolia Avenue, Beaumont, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during the meeting, they can be made available from the District Office in the Board Room of the District's Office.

**REVISIONS TO THE AGENDA** -In accordance with §54954.2(a) of the Government Code (Brown Act), revisions to this Agenda may be made up to 72 hours before the Board Meeting, if necessary, after mailings are completed. Interested persons wishing to receive a copy of the set Agenda may pick one up at the District's Main Office, located at 560 Magnolia Avenue, Beaumont, California, up to 72 hours prior to the Board Meeting.

**REQUIREMENTS RE: DISABLED ACCESS** - In accordance with §54954.2(a), requests for a disability related modification or accommodation, including auxiliary

aids or services, in order to attend or participate in a meeting, should be made to the District Office, at least 48 hours in advance of the meeting to ensure availability of the requested service or accommodation. The District Office may be contacted by telephone at (951) 845-9581, email at [info@bcvwd.org](mailto:info@bcvwd.org) or in writing at the Beaumont-Cherry Valley Water District, 560 Magnolia Avenue, Beaumont, California 92223.



**10 YEAR  
CAPITAL  
IMPROVEMENT  
PLAN  
(FY 2017-2026)**

**Draft**

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***BEAUMONT-CHERRY VALLEY  
WATER DISTRICT***

***JANUARY, 2017***

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Additional image pending

# **10-Year Capital Improvement Plan**

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## **Introduction**

The Capital Improvement Program (CIP) is a ten-year fiscal planning tool used to identify the future capital needs of the Beaumont-Cherry Valley Water District (BCVWD/District), as well as identify the timing and method of financing those capital needs. The District, like other water agencies across California, must deal with population growth, aging infrastructure, climate change and environmental mandates, and an influx of new technologies. The reality is that infrastructure cannot simply be replaced. Upgrades are essential and necessary in order to meet customer needs at affordable rates. Water meters, for example, must become intuitive, two-way communication devices and wells need to be built with next-generation computers in order to maximize pumping efficiencies and provide for added security. Many of these enhancements and upgrades are costly, but necessary.

Generally, projects included in the CIP are non-recurring projects that exceed \$5,000 in cost and have a useful life of a minimum of two years which qualifies them as capital assets per the District's capitalization policy. In fact, the larger capital projects in the CIP have costs exceeding \$1,000,000 and useful lives of ten to fifty years. The District's CIP Plan includes projects in five distinct improvement groups: Potable Water System facility projects, Non-Potable Water System facility projects, Pipeline Replacement projects, and Capital Acquisitions projects (IT replacements and upgrades and vehicle replacements). Projects in the CIP that have significant cost may require the use of reserves, low-interest loans or bond debt to finance their costs.

The projects included in the ten year CIP do not include Repair and Maintenance (R&M) activities. R&M activities are those that are generally performed by District field personnel, other District staff or local service vendors and are funded by the annual operating budget. These activities include repairs of line breaks, replacement or repair of small IT or office equipment, vehicle maintenance and repair, or minor upgrades to stations such as new control devices or valves. Some refer to these R&M projects as "pay-as-you-go projects."

## **Background**

The Beaumont-Cherry Valley Water District provides potable and non-potable water service to about 16,900 active accounts as of October, 2016 in the City of Beaumont and the unincorporated community of Cherry Valley located in the Counties of Riverside and San Bernardino in Southern California. The District is approximately 75 miles east of Los Angeles along Interstate 10.

The area started to develop in the late 1880s and in 1912 the community of Beaumont incorporated. The District was formed in 1919 as the Beaumont Irrigation District under California Irrigation District law, Water Code Section #20500 *et seq.* The name was changed to the Beaumont-Cherry Valley Water District in 1973.

## **Background cont'd**

Beaumont and Cherry Valley remained relatively small until the mid-1980s. The populations of Beaumont and Cherry Valley in 1980 were 6,818 and 5,012 respectively. The boom of the early 2000s saw Beaumont's population skyrocket to 36,837 by 2010; Cherry Valley showed only limited growth to 6,279 during that same time period. Current (2016) population served by the District is approximately 51,400. Meeting the water supply demands for this rapid growth in Beaumont was and continues to be challenging.

The population served by the District is expected to nearly double by 2035. The City of Beaumont's General Plan, adopted in 2007, had a projected build-out population of 87,200. The build-out population within the District's Sphere of Influence (SOI) is estimated to be about 112,300 based on the District's estimates of land use. It is for this reason that the development of a dynamic CIP is not only appropriate but necessary to meet customer demands.

The District's present service area covers approximately 28 square miles, virtually all of which is in Riverside County. The District owns 1,524 acres of watershed land in Edgar Canyon in San Bernardino County located just north of the Riverside-San Bernardino County line where the District operates a number of wells and several reservoirs.

The District's service area ranges in elevation from 2100 feet above mean sea level (MSL) in the Fairway Canyon area of Beaumont on the western boundary, to 3500 feet in Cherry Valley, and over 4,000 feet in the upper reaches of the SOI. The area serves primarily as a "bedroom" community for the Riverside/San Bernardino Area and the communities east of Los Angeles along the I-10 corridor.

## **System Overview**

BCVWD has both potable and non-potable water distribution systems. The potable system is described in detail in a separate document entitled "Potable Water System Master Plan – Final, adopted by the Board January 13, 2016. The non-potable system is described in detail and master planned in a separate document entitled "2016 Non-Potable Water System Master Plan" which is currently being finalized.

### **Potable Water System**

BCVWD's potable water system is supplied by wells in Little San Geronio Creek (Edgar Canyon) and the Beaumont Basin (sometimes called the Beaumont Storage Unit (BSU) or the Beaumont Management Zone). The District has a total of 24 wells. One of the wells, Well 26, can currently pump into either the potable or the non-potable water system. The Beaumont Basin is adjudicated and managed by the Beaumont Basin Watermaster. BCVWD augments its groundwater supply with imported State Project Water from the San Geronio Pass Water Agency (SGPWA) which is recharged at BCVWD's recharge facility at the intersection of Brookside Avenue and Beaumont Avenue.



## **System Overview – Potable Water System cont'd**

Wells in Edgar Canyon have limited yield, particularly in dry years, and take water from shallow alluvial and bedrock aquifers. Wells in the Beaumont Basin are large capacity and pump from deep aquifers, some as deep as 1500 ft below the ground surface. The Edgar Canyon wells are very inexpensive to operate and are the District's preferred sources. These wells, however, are not able to meet the current average day demand. Water from the Edgar Canyon wells which is not used in the developed areas adjacent to Edgar Canyon or Cherry Valley is transferred to lower pressure zones serving the City of Beaumont. The Edgar Canyon wells provide 15 to 20 percent of the total annual supply; the rest is pumped from wells in the Beaumont Basin.

BCVWD's total well capacity (Edgar Canyon and Beaumont Basin) is about 27.5 million gallons per day (mgd) with the largest well out of service. This capacity is much greater than the current 20 mgd maximum day demand, however, three existing District wells are out of service to the domestic water system due to impacts related to Chromium VI levels which are above the Maximum Contaminant Levels (MCL) prescribed by California health standards.

The District has 11 pressure zones and 14 reservoirs (tanks) ranging in size from 0.5 million gallons (MG) to 5 MG. Total storage is approximately 22 MG; slightly more than two average days or one maximum day. The reservoirs provide gravity supply to their respective pressure zones. The BCVWD system is constructed such that any higher zone reservoir can supply water on an emergency basis to any lower zone reservoir. Also there are booster pumps in the system to pump water up from a lower pressure zone to a higher pressure zone.

The transmission system in the main pressure zones is 24-inch diameter although there are some 30-inch diameter pipelines at some reservoirs. The bulk of the pipe is ductile iron pipe with cement mortar lining and was installed in the last 10 to 15 years. There are a number of small distribution lines, 4-inch and smaller, that are gradually being replaced over time with minimum 8-inch ductile iron pipe. All developments since the early 1980s have installed mortar lined, ductile iron pipe. The distribution system is capable of providing over 4,000 gallons per minute (gpm) fire flow in the industrial/commercial sections of the service area.

For a simplified schematic of the District's potable water system, see Figure 2.

**System Overview – Potable Water System cont’d**

BCVWD’s service area extends from 3500 ft mean sea level (MSL) to 2100 ft MSL. In fact, BCVWD property actually extends to 4200 ft MSL, but there are no service areas between 4200 ft and 3500 ft MSL except for the District-owned properties. Because of the large variation in service area elevation, the District’s potable water system is currently divided into the 8 major pressure zones identified below to provide reasonable operating pressures for customers in the major service areas:

- 3620 Pressure Zone (Upper Mesa)
- 3330 Pressure Zone (Mesa)
- 3040 Pressure Zone (Noble)
- 2850 Pressure Zone (Intermediate)
- 2750 Pressure Zone (Beaumont)
- 2650 Pressure Zone
- 2520 Pressure Zone
- 2370 Pressure Zone

In addition to these eight zones, there are several smaller pressure zones serving small areas in Cherry Valley, including:

- 3140 Pressure Zone (Highland Springs Hydro-pneumatic System)
- 3150 Pressure Zone (Lower Mesa and Bonita Vista)
- 3900 Pressure Zone (Ultimately serves Oak Glen Road and District Middle Houses)

The general location of these pressure zones is shown in Figure 3. Individual pressure zone maps are shown in Figures 4 through 8. More detail information regarding these Pressure Zones can be found in the District’s 2015 Potable Water Master Plan, Section 2 which is available on the District’s website.

**System Overview – Potable Water System cont’d**

The inventory of the District’s major existing facilities is as follows:

## Potable Water System

Reservoirs		14
Pump Stations		5
Pressure Reducing Stations		12
Pipelines (16” & larger)		xxx miles
Pipelines (12” & smaller)		xxx miles
SGPWA EBX Turnout		1
Production Wells:		24
Edgar Canyon Wells	13	
Beaumont Basin wells	11	

## Non-Potable Water System

Reservoirs		1
Pump Stations		0
Pipelines (20” & larger)		27 miles
Pipelines (16” & smaller)		35 miles
Production Wells	0	

## Raw Water System Surface Diversions

SGPWA EBX Turnouts		1
Ground Water Recharge Basins		1

## Other Facilities

Headquarters Building		1
Operations Facilities		1
Rental Houses		3
Equipment Storage Buildings		1

## **System Overview cont'd**

### **Non-Potable (Recycled) Water System**

Currently BCVWD has about 27 miles of non-potable water transmission pipelines in place which is supplemented by an extensive network of smaller distribution lines installed by developers as part of the tract development that has occurred since 2002. The transmission pipeline system forms a loop around the city of Beaumont and is comprised primarily of 24-in diameter ductile iron pipe. The system includes a 2 MG recycled (non-potable) water reservoir which provides gravity storage and pressurization for the system. The 2MG non-potable water reservoir is configured to receive potable water or untreated State Project Water (SPW) through air gap connections (see Definitions). The non-potable water system can have a blend of recycled water, imported water and potable water. The 2 MG reservoir is located at the District's groundwater recharge facility at Beaumont Avenue between Brookside Ave. and Cherry Valley Blvd. There are about 300 existing landscape connections to the recycled water system receiving about 1,800 acre-ft of water based on 2014 meter records.

A large part of the non-potable water system is currently supplied from Well 26, with Chromium VI levels above MCL, supplemented with potable water which is introduced into the 2 MG non-potable water tank through an air gap connection. The non-potable water system in the Tournament Hills and Fairway Canyon area is currently supplied with potable water through several interconnections between the potable and non-potable water systems.

BCVWD was awarded a facilities planning grant from the State Water Resources Control Board (SWRCB) to develop a regional facilities plan for the recycled water connection with the Yucaipa Valley Water District (YVWD). That plan also includes an analysis of recycled water from the City of Beaumont.

For a closer look at the Non-Potable Water System layout, see Figure 9 for a detail map of existing facilities.

### **Water Resources and Recharge Facilities**

In order to ensure adequate water supplies for the District, it is essential that the District implement a recycled water connection and supply from Yucaipa Valley Water District (YVWD) and continue discussions with the City of Beaumont for use of the City's recycled water as soon as it is available. Any recycled water brought in and used will immediately reduce the demand on the potable water system and reduce BCVWDs extractions from the Beaumont Basin.

The current state-wide drought has limited water availability from the State Water Project (SWP) to the San Geronio Pass Water Agency (SGPWA). At some point it is expected that normal or "wet" conditions will occur. The District should continue purchasing as much imported water as is made available by the SGPWA and direct SGPWA to purchase as much Article 21 water as is available.

The District should continue the efforts to maximize the capture and recharge of local storm water.

## **System Overview cont'd**

### **Water Resources and Recharge Facilities cont'd**

Around 2001, BCVWD began investigating an 80-acre site on the east side of Beaumont Avenue between Brookside Ave. and Cherry Valley Blvd. as a location for a facility to recharge captured storm flow and imported water. After extensive investigations, the District purchased the site; known as the Oda Property, and developed Phase 1 of the recharge facility on the westerly half of the site. The Phase I facilities were completed and went on-line in 2006. Phase 2 was completed in 2014. This site has excellent recharge capabilities with historic long-term percolation rates, based on Phase I operations, of around 7 to 10 acre-ft per acre per day assuming proper maintenance.

The District completed construction of a 24-in pipeline from the turnout on East Branch Extension (EBX) of the State Water Project and Phase I of the Noble Creek Recharge Facility (NCRF-Ph I) in 2006. A metering station was installed at the turnout at Noble Creek and Vineland Avenue and BCVWD began taking imported water deliveries from SGPWA in September, 2006.

### **Pipelines**

District policy is that new transmission lines to accommodate growth in demand, i.e. those 16-in in diameter and larger, will either be built by and donated by developers or built by the District and funded by the development community from Capacity (Facilities) Fees paid by developers. Specifically, developers are responsible for the size of the piping necessary to supply their development or 12" diameter whichever is greater. The District is responsible for funding the portion of the piping above the development needs from Capacity (Facilities) Fees.

BCVWD like many other water agencies in California and the U.S. has aging pipeline infrastructure. The District has a number of old, leaky pipelines, previously identified in the 2011 CIP, that need replacement. Due to recent budget restraints and the lack of both a potable water and a non-potable water master plan, replacements were deferred. Therefore much work needs to be done on these pipelines, especially those with a high frequency and high probability of leaks. For the most part, these pipelines are 4-in and 6-in diameter and will be replaced with 8-in diameter since this is the District's standard minimum size.

There is a second group of existing pipelines, mainly in the 2750 Pressure Zone in the older sections of Beaumont that should be replaced because the pipelines are undersized.

There are also a number of older pipelines in the 3620 and 3330 Pressure Zones on the Mesa between Little San Gorgonio Creek and Noble Creek that are in easements through private property. Ideally these pipelines should be replaced with pipelines in streets.

As part of the existing pipeline replacement projects, the associated water service connections will need to be replaced and possibly reconfigured.

## **Purpose of the CIP**

The Capital Improvement Plan (CIP) serves as the District's multi-year planning instrument used to identify needs and financing sources for public infrastructure improvements as well as capital acquisition needs. The purpose of a CIP is to facilitate the orderly planning of infrastructure improvements; to maintain, preserve, and protect the District's existing infrastructure system; and to provide for the acquisition or scheduled replacement of equipment to ensure the efficient delivery of services that the community desires..

## **Goal of the CIP**

The goal is to use the CIP as a tool to implement the District's Potable and Non-Potable Water System Master Plans, its objective of staying abreast of technology needs and trends, its operating goals, objectives and policies, and to assist in the District's financial planning

More specifically, the District's Capital Improvement Program (CIP) for 2017-2026 identifies the capital finance requirements for the anticipated projects for the next ten years. These projects include the construction of new facilities to support development, new facilities to improve existing conditions or in response to the changing needs of the District and the replacement of those capital facilities and other assets that have reached the end of their useful lives. Adjustments are made to the CIP in response to changing economic conditions, land development activity, completion of new facilities or related changes to replacement projects. The District's Ten Year CIP is planned to be updated annually for consideration and approval by the District's Board of Directors.

The 10 year CIP also provides an analysis of current needs based on local area development rates in each pressure zone. Certain items identified in the 10 year CIP have been deferred at this time due to a lack of development progress at any particular development.

The majority of the Improvement Projects identified in this CIP Program are associated with new development in the Sundance Development, K. Hovnanian Homes Development, and Fairway Canyon Development as these communities have been identified by staff to be the larger, active developments within the District's SOI. In addition to growth related activities there are other projects that are planned to occur in the next ten years.

The Potable and Non-Potable Water System Master Plans provide a twenty-year framework for developing, analyzing and evaluating changes to the CIP and include projects currently in the 10-year CIP as well as proposed projects projected to either be included or begin after completion of the current ten-year planning period. It describes current conditions and presents a vision of the needs for the potable and non-potable water systems and the actions required to meet those needs.

Because of periodic revisions, the CIP is considered a "dynamic" document. Of the ten year period covered in the CIP, the upcoming fiscal year is the most detailed and accurate since it is based on the most current plans as well as ongoing projects. Typically the first year of the CIP plan is presented and recommended to be adopted as the District's capital budget for the upcoming fiscal year.

**Table-1** summarizes the proposed CIP budgets for the next ten years by fiscal year (FY).

**Table – 1  
Summarized CIP Budgets**

	Potable Infrastructure Projects	Pipeline Replacement Projects	Non-Potable Infrastructure Projects	Capital Acquisitions IT	Capital Acquisitions Vehicles & Equipment	Total
<b>2017</b>	12,425,124	1,175,655	2,191,060	1,078,711	172,576	17,043,126
<b>2018</b>	4,603,257	1,065,826	3,194,916	1,061,518	75,466	10,000,983
<b>2019</b>	11,634,364	1,103,297	6,111,948	909,357	91,697	19,850,663
<b>2020</b>	7,617,078	1,048,566	4,174,519	823,216	133,525	13,796,904
<b>2021</b>	4,624,220	1,306,795	5,160,273	846,398	266,645	12,204,331
<b>2022</b>	6,838,281	862,986	3,608,027	19,689	382,570	11,711,553
<b>2023</b>	3,645,594	1,419,968	2,917,197	20,243	-	8,003,002
<b>2024</b>	6,805,361	1,037,495	5,577,537	20,813	-	13,441,206
<b>2025</b>	12,257,177	1,093,952	4,036,644	21,399	-	17,409,172
<b>2026</b>	11,651,340	1,124,757	2,030,079	22,002	-	14,828,178
<b>Total</b>	<b>82,101,796</b>	<b>11,239,297</b>	<b>39,002,200</b>	<b>4,823,346</b>	<b>1,122,479</b>	<b>138,289,118</b>

### **Project Ranking**

Projects have been evaluated against the following criteria:

- Provides capacity to meet current and future demand
- Mitigates risk to public safety or health
- Improves water quality
- Systematic replacement of existing infrastructure
- Improves operational efficiency
- Coordinates with other projects and requirements
- Promotes economic development

## **Project Ranking cont'd**

Projects were reviewed and evaluated as to how they meet the following requirements:

- Extent of the evaluation criteria they met
- Compliance with project objectives
- Priorities and urgencies assigned to them by District staff and the District's management team
- Risks of deferring the project

The District General Manager, District Engineer and the District Director of Operations, as well as department staff, have been actively involved in the development of the District's CIP. From this process, the District General Manager provides the Directors a comprehensive recommendation on the most critical capital needs.

## **Assumptions**

Data for new facilities, improvements, replacements and capital acquisitions have been compiled into project-specific line items that are associated with needs. The line items comprise the best assessment of projects that are anticipated to be constructed, modified and acquired during the next ten years. The following is an overview of the major uses of the CIP, basic assumptions and the rationale for making them:

- A primary use of the CIP is the cash flow projection function. This estimates the annual funding requirements for the next ten calendar years. Cash flow estimating is based on similar historical projects to develop the anticipated expenditures.
- The CIP assumes development related improvements will continue to occur within the District e.g. those facilities needed to serve the continuing phases of the Sundance Specific Plan. This development is the highest elevation, large development and therefore, facilities constructed in this development area will allow for service to lower developments e.g. K Hovnanian's Four Seasons at Beaumont and Fairway Canyon should the area develop on an interim basis). A portion of the Specific Plan is anticipated to begin construction in the next calendar year. The facilities required to support later stages of that development are projected based on a District prepared 2016 Master Plan Update (2016 MP). Home construction in the Pardee North Sundance Development is anticipated to continue for three to four years (completion on 2020 or 2021); 200 to 250 homes are currently being sold on an annual basis
- Funding for a project line item is identified if it is currently available. The CIP does not, by design, attempt to establish the source of funds for future projects but in some instances identifies possible funding sources.



**Assumptions cont'd**

- Cost estimates for all projects in this program are initially expressed in CY 2016 dollars. In general, the Potable and Non-Potable Master Plan costs are developed using CY 2014 cost estimates. Changes in ENR Construction Cost Indexes (1.05553) have been used to convert the CY 2014 cost estimates to CY 2016 dollars.
- The District calculated the average change in the ENR Construction Cost Index over the last five years (2011-2016) to be 2.816%. This average is applied as an annual inflation factor for CIP projects in 2017 and for each of the following fiscal years. The CIP will continue to be monitored for labor and materials price increases and adjustments will be made as warranted.
- Budget adjustments will be typically introduced in the annual update of the CIP at the beginning of each calendar year (other than year 2017).
- The District's January 2016 Master Plan Update (2016 MP) document that evaluated facilities to serve future district development needs was submitted for District Board acceptance in January 2016. Relying on the 2016 Master Plan Update, the CY 2017/26 CIP Update tables, provided in Appendices A through F, list major facility descriptions and budget information.
- The District's 2016 Master Plan Update was also based on a Non-Potable Water (NPW) system supply which includes recycled water supplies being obtained from the City of Beaumont and the Yucaipa Valley Water District. And supplemental water being provided by raw filtered surface water and high Chromium VI groundwater. The Non-Potable Water System consists of three proposed pressure zones which have a maximum water level of 2,800-foot elevation (above mean sea level) which is established by an existing 2 million gallon non-potable water reservoir.
- Project budget estimates for linear projects such as water pipelines in the CIP are based on conservative construction cost estimating values and typically include all appurtenant facilities. Construction cost estimates are determined using recent historical values, inflation estimates, discussion with contractors and suppliers, and general engineering economy principles. Once the anticipated installation cost is established, appurtenances, engineering design and construction support services, staff time, contingency costs, overhead burden and administration costs are included to form a project budget. No allowance for capital interest accruing over the course of the project life is included in the budget amounts.
- Listing of a project on the CIP does not constitute an authority to award an engineering project. The award will be subject to the District's purchasing policy and may require review and approval by the Board of Directors.

## **Funding Sources**

There are a number of funding sources available for the CIP projects. They are described briefly below.

### **Capital Replacement Reserve Funds**

BCVWD sets aside funds to refurbish, rehabilitate and replace aging facilities, vehicles and equipment as part of its water rate structure. These funds can be used to replace aging pipelines up to their existing size (oversizing could be funded from facility fees); rehabilitating, reconditioning, redevelopment of water wells; painting and refurbishment of tanks; and replacing and rehabilitating pumps, i.e. any project that either extends the useful life or increases the capacity or efficiency of the existing capital asset. The same funds can also be used to replace and/or upgrade District vehicles and Information Technology (IT) infrastructure and capabilities.

### **Direct Loans**

BCVWD could initiate a conventional loan for specific projects that are either not funded from other sources or where other sources are inadequate to complete a project on a timely basis. Interest rates on this type of loan are generally higher and therefore direct loans should only be used when short term funding is necessary to complete a project or should an emergency arise.

### **Restricted Cash Funds from Capacity Fees and Front Footage Fees**

Capacity fees, sometimes referred to as facility fees or impact fees, are paid by residential, industrial, commercial and institutional developers to fund the cost of water system additions and enhancements to support growth resulting from their developments. Capacity fees fund new wells, tanks, booster stations, pressure reducing stations, oversizing of pipelines and transmission mains needed to serve new development.

### **Federal and State Grants and Loans**

There are a number of State and federal grant and loan programs for potable water, groundwater protection, storm water capture and recycled water projects. For example, Safe Drinking Water State Revolving Fund (DWSRF) assists water system agencies in financing the cost of drinking water infrastructure projects needed to achieve or maintain compliance with SDWA requirements and to further the public health objectives of the Safe Drinking Water Act (SDWA). DWSRF funds do not provide funding for growth.

There are also grants and low interest loans available from the Water Recycling Funding Program (WRFP) for recycle projects.

Proposition 1, the Water Quality, Supply and Infrastructure Improvement Act of 2014, has funding available for drinking water, storm water, groundwater and recycled water projects. Funding is administered by the State Water Resources Control Board (SWRCB).

## **Funding Sources cont'd**

### Bonds

There are several types of bond funding available to the District:

#### General Obligation Bonds

General Obligation Bonds are repaid with taxes, usually property tax, and require a two-thirds voter approval. This type of funding is probably not viable for the District.

#### Revenue Bonds

Revenue Bonds are repaid from revenue generated from water sales. Revenue bonds only require a simple majority voter approval. Since revenue bonds are backed by water revenues, Prop 218 procedures are likely to be followed. BCVWD could issue revenue bonds to fund water facility replacement and rehabilitation projects.

## **Board Policies**

The 10-year CIP is prepared in compliance with the following District financial policies:

- Investment Policy
- Reserve Policy

## **Definitions, Abbreviations and Acronyms**

A variety of short notations, project-identifying codes, and other references not commonly found in daily usage are contained in the tables within the CIP document. **Appendix E** is a list of definitions, abbreviations and acronyms to help explain what the notations and terms in the CIP tables or elsewhere mean.

**Highlights of the 2017-26 CIP**

Pending Workshop discussions.

**BCVWD CHART I  
10-Year Distribution of CIP Improvement Groups**

**Highlights of the 2017 Capital Budget**

Pending Workshop discussions.

**10-Year Distribution of CIP Improvement Groups**

**BCVWD CHART II**

Figure 1

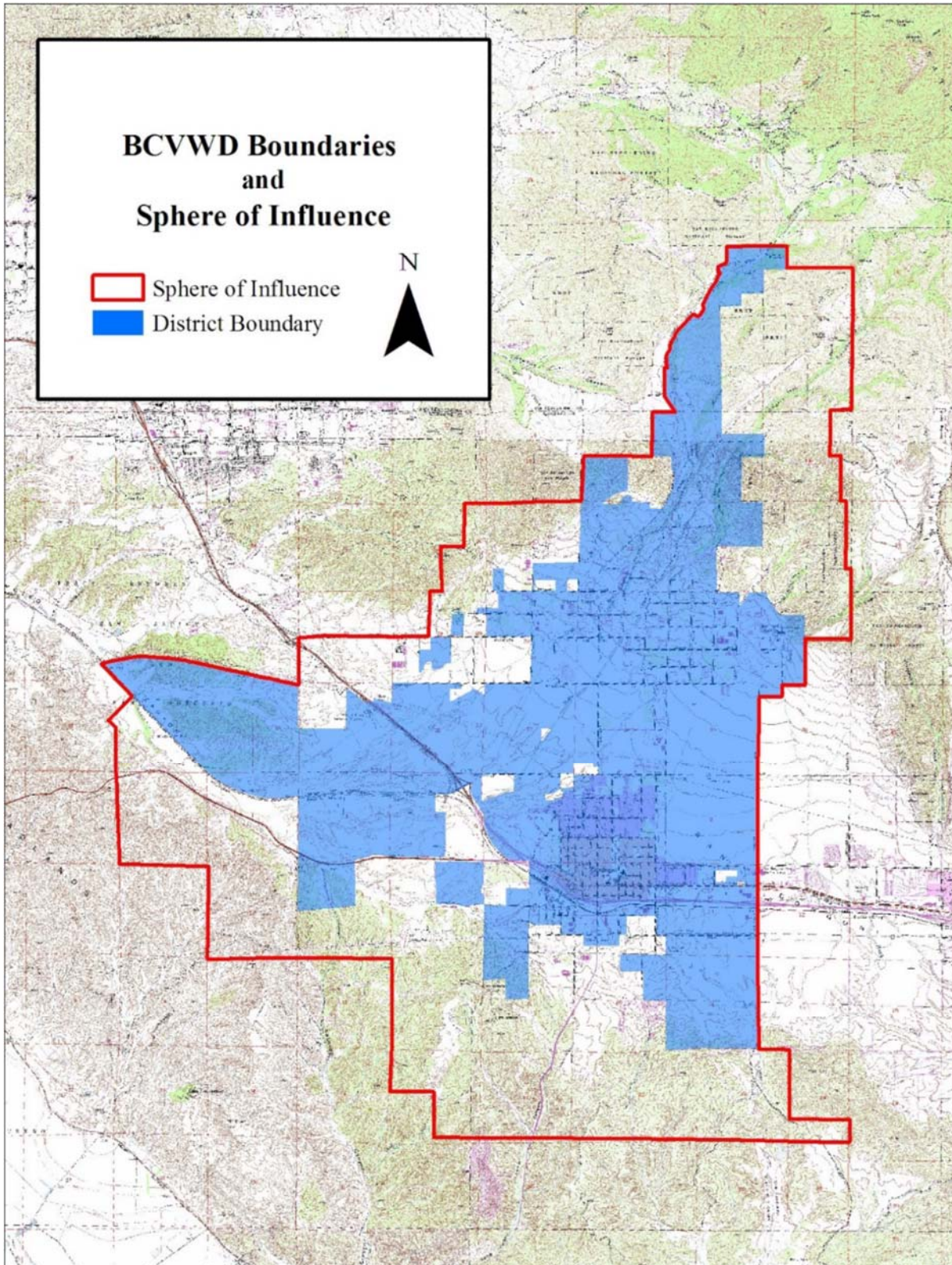
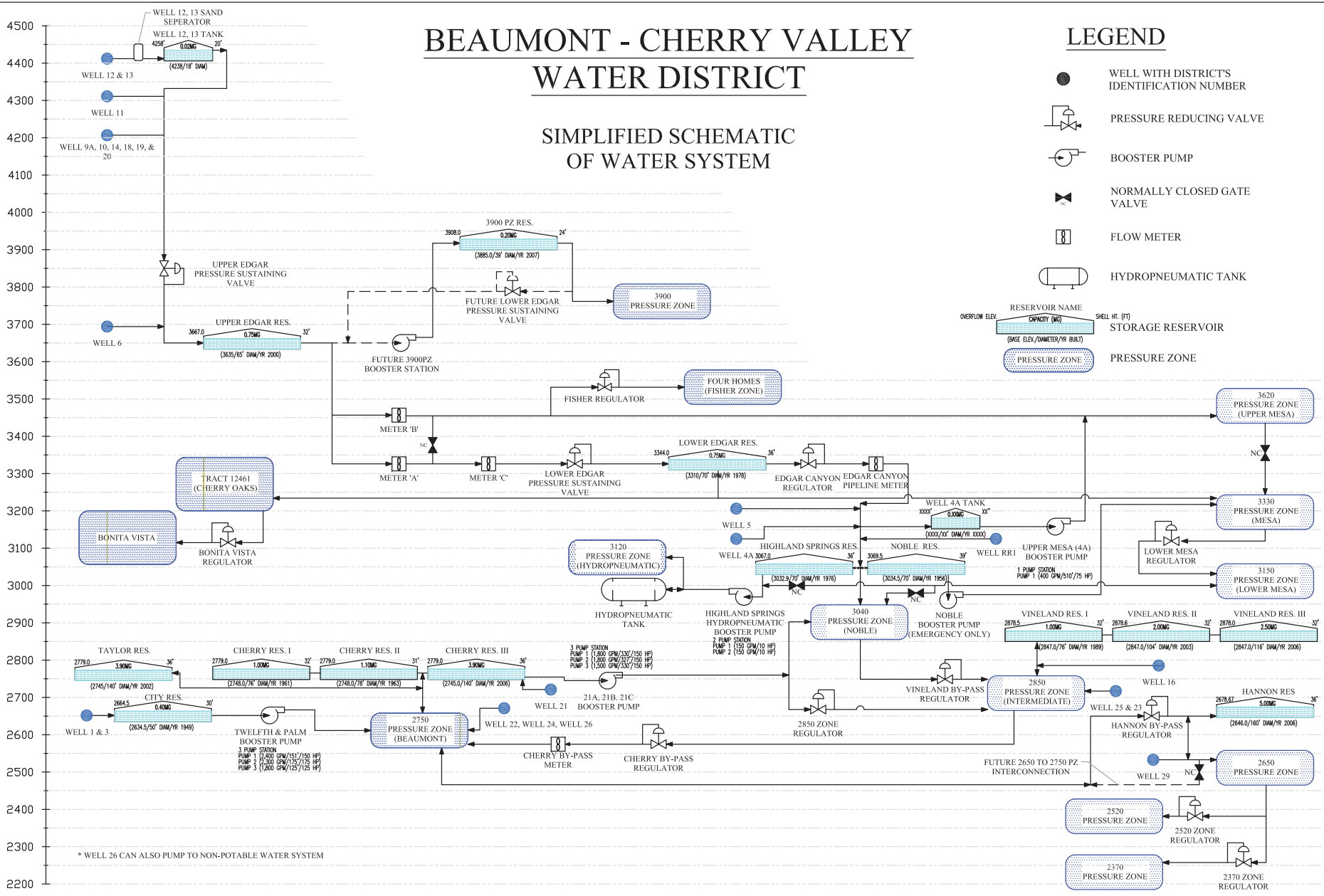


Figure 2

# BEAUMONT - CHERRY VALLEY WATER DISTRICT

## SIMPLIFIED SCHEMATIC OF WATER SYSTEM



### LEGEND

- WELL WITH DISTRICT'S IDENTIFICATION NUMBER
  - PRESSURE REDUCING VALVE
  - BOOSTER PUMP
  - NORMALLY CLOSED GATE VALVE
  - FLOW METER
  - HYDROPNEUMATIC TANK
- | RESERVOIR NAME                 | SHELL HT. (FT) | STORAGE RESERVOIR |
|--------------------------------|----------------|-------------------|
| OVERFLOW ELEV.                 |                |                   |
| CAPACITY (MG)                  |                |                   |
| (BASE ELEV./DIAMETER/HR BUILT) |                |                   |
- PRESSURE ZONE

FIGURE 2-7 HYDRAULIC SCHEMATIC

Figure 3

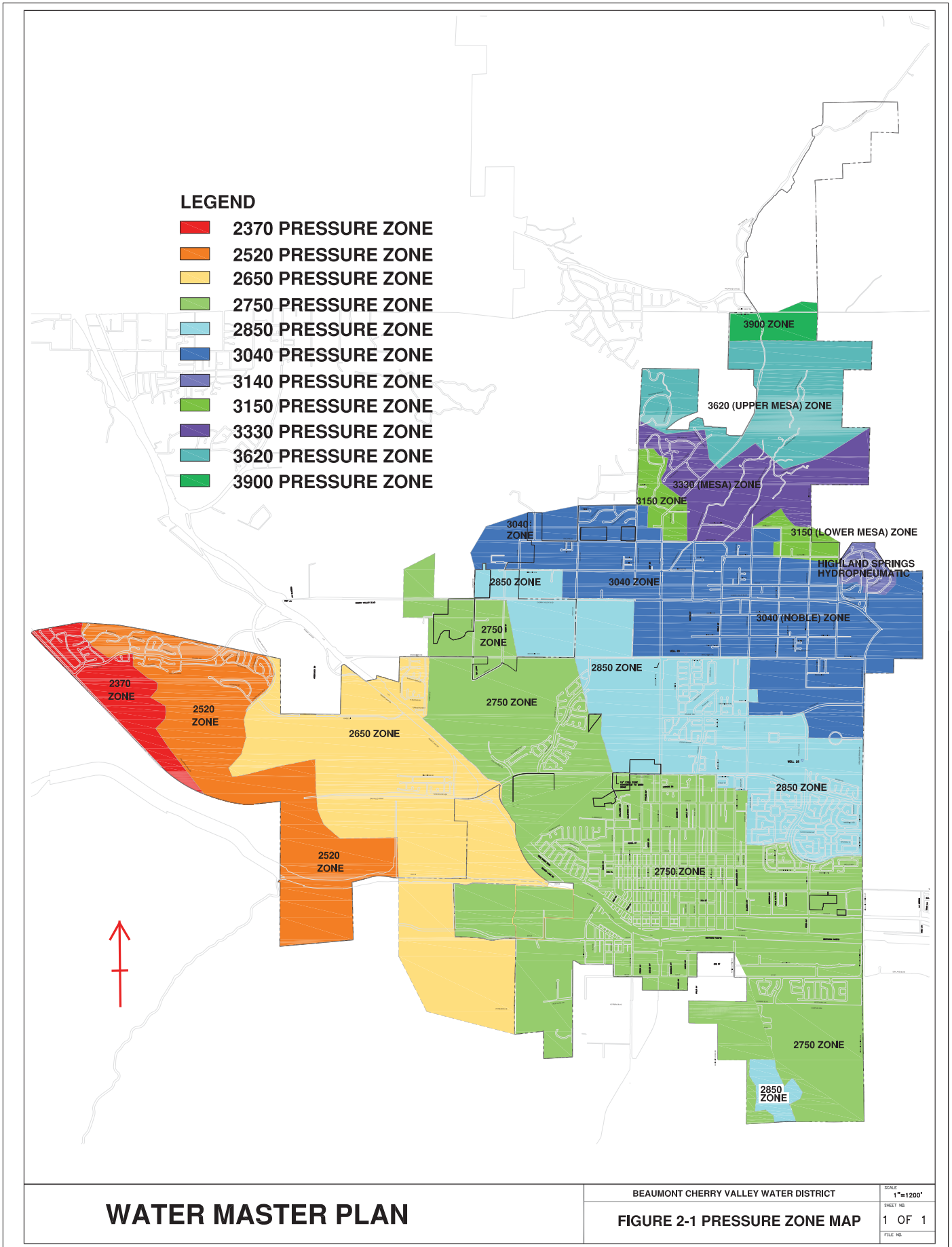
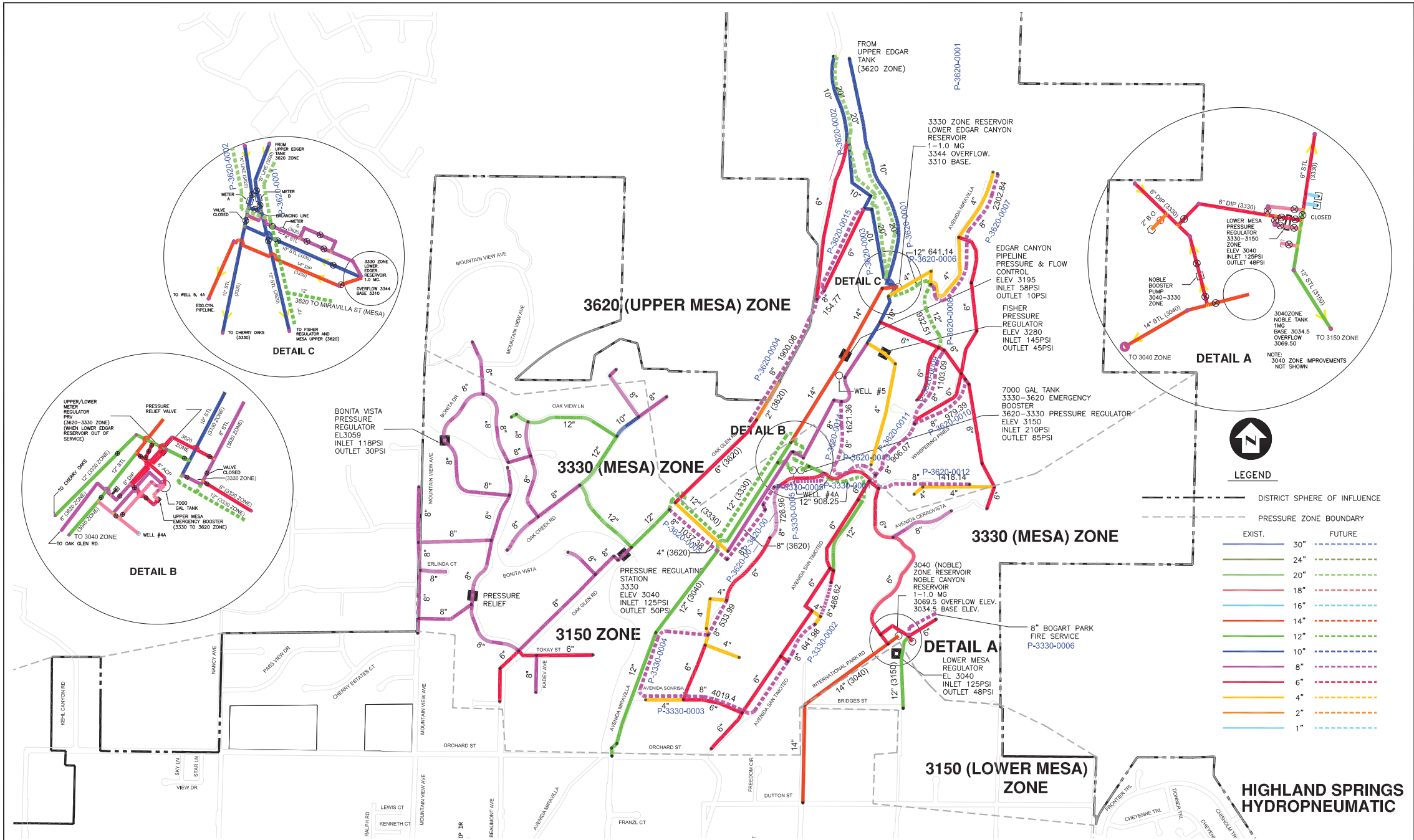




Figure 4

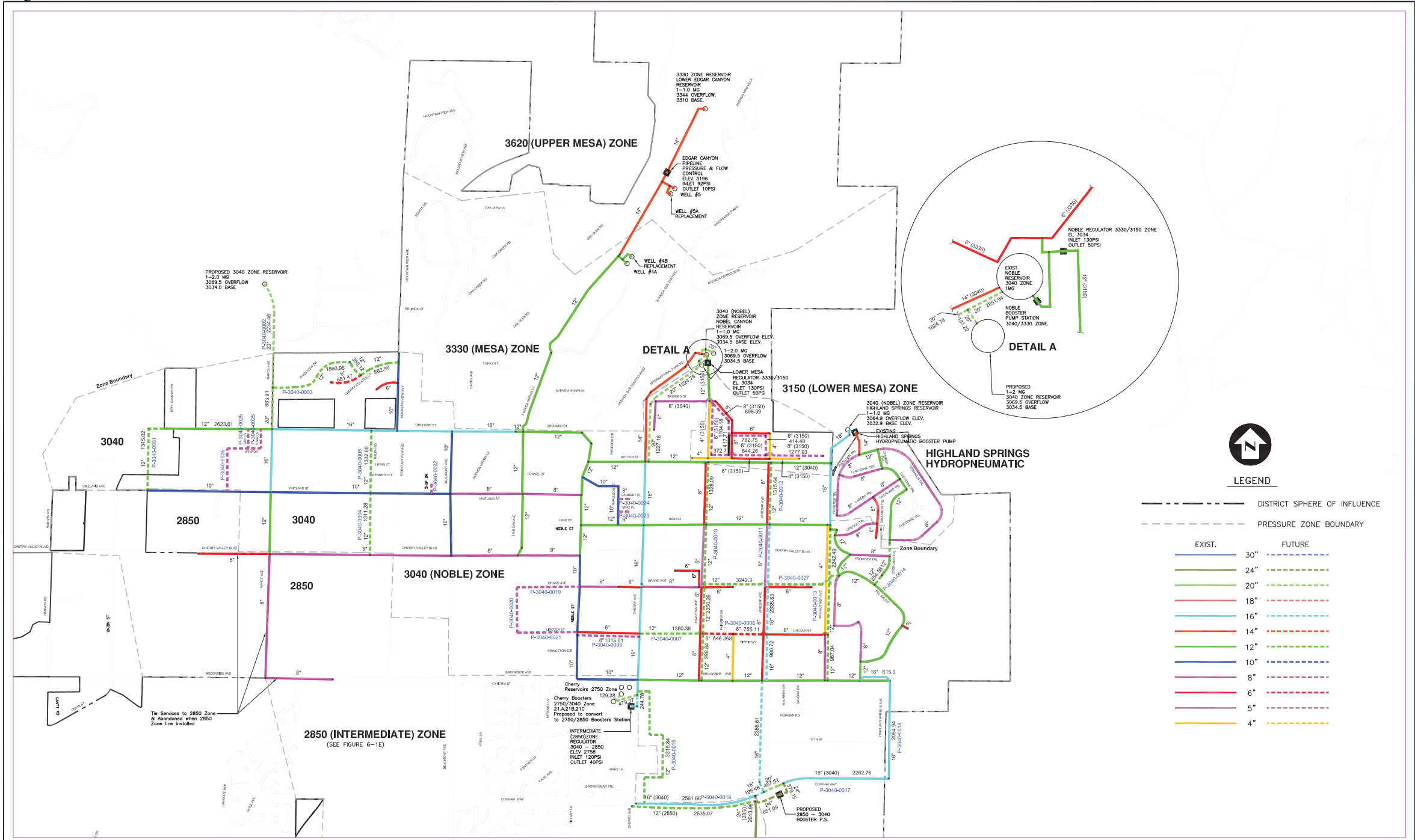


436 E. VANDERBILT WAY, SAN BERNARDINO, CALIFORNIA 92408  
 Phone 1-909-890-5611

# WATER MASTER PLAN

BEAUMONT CHERRY VALLEY WATER DISTRICT		SCALE 1"=500'
3620 (NOBLE) & 3330 (MESA) ZONES		SHEET NO. 1 OF 1
		FILE NO.

Figure 5



LEGEND

- DISTRICT SPHERE OF INFLUENCE
- - - PRESSURE ZONE BOUNDARY
- EXIST. FUTURE
- 30"
- 24"
- 20"
- 18"
- 16"
- 14"
- 12"
- 10"
- 8"
- 6"
- 5"
- 4"

**NOBEL SYSTEMS**  
 436 E. VANDERBILT WAY, SAN BERNARDINO, CALIFORNIA 92408  
 Phone 1-909-890-5611

WATER MASTER PLAN

BEAUMONT CHERRY VALLEY WATER DISTRICT

3040 (NOBLE) ZONE

SCALE 1"=1000'  
 SHEET NO. 1 OF 1  
 FILE NO.

Figure 6

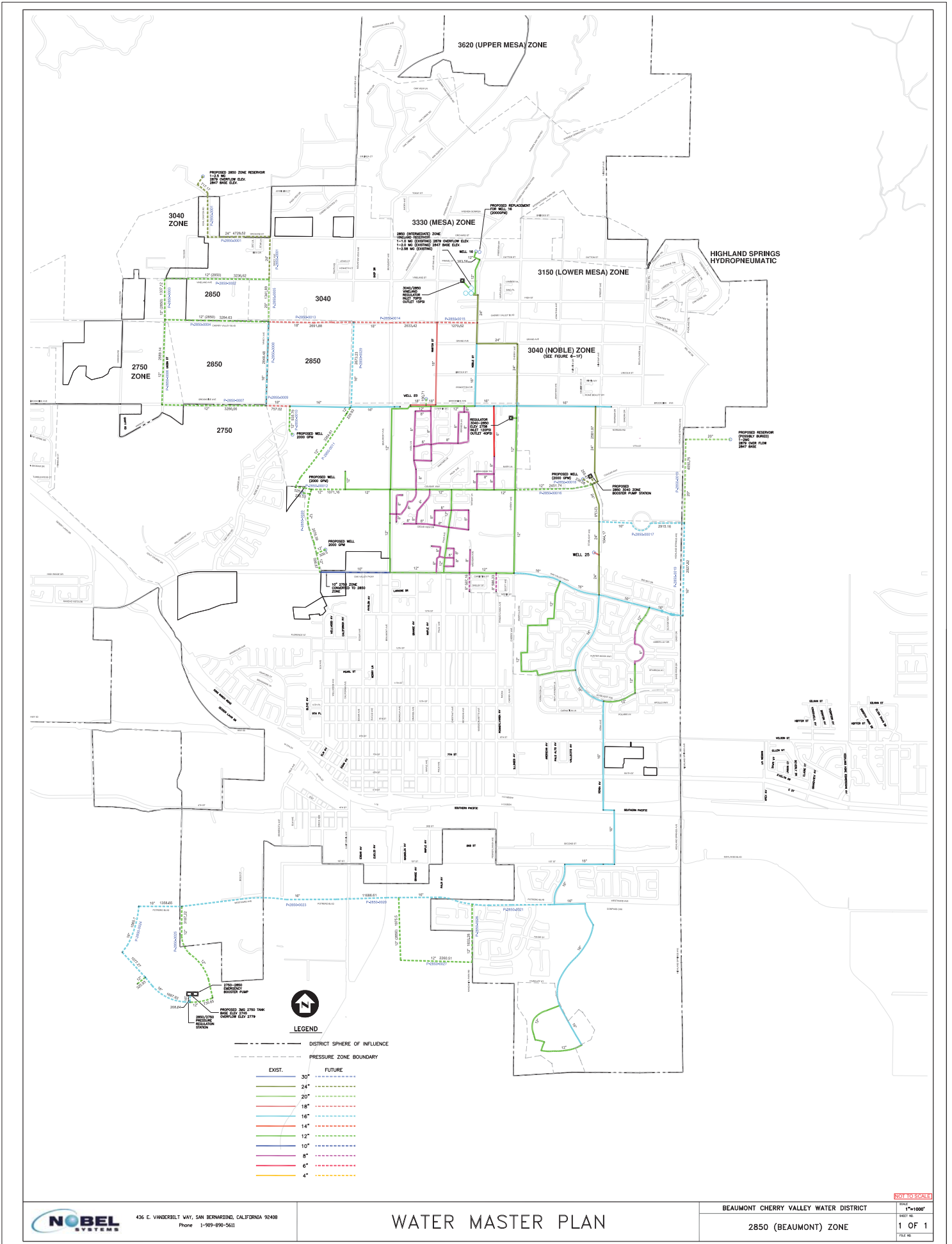


Figure 7

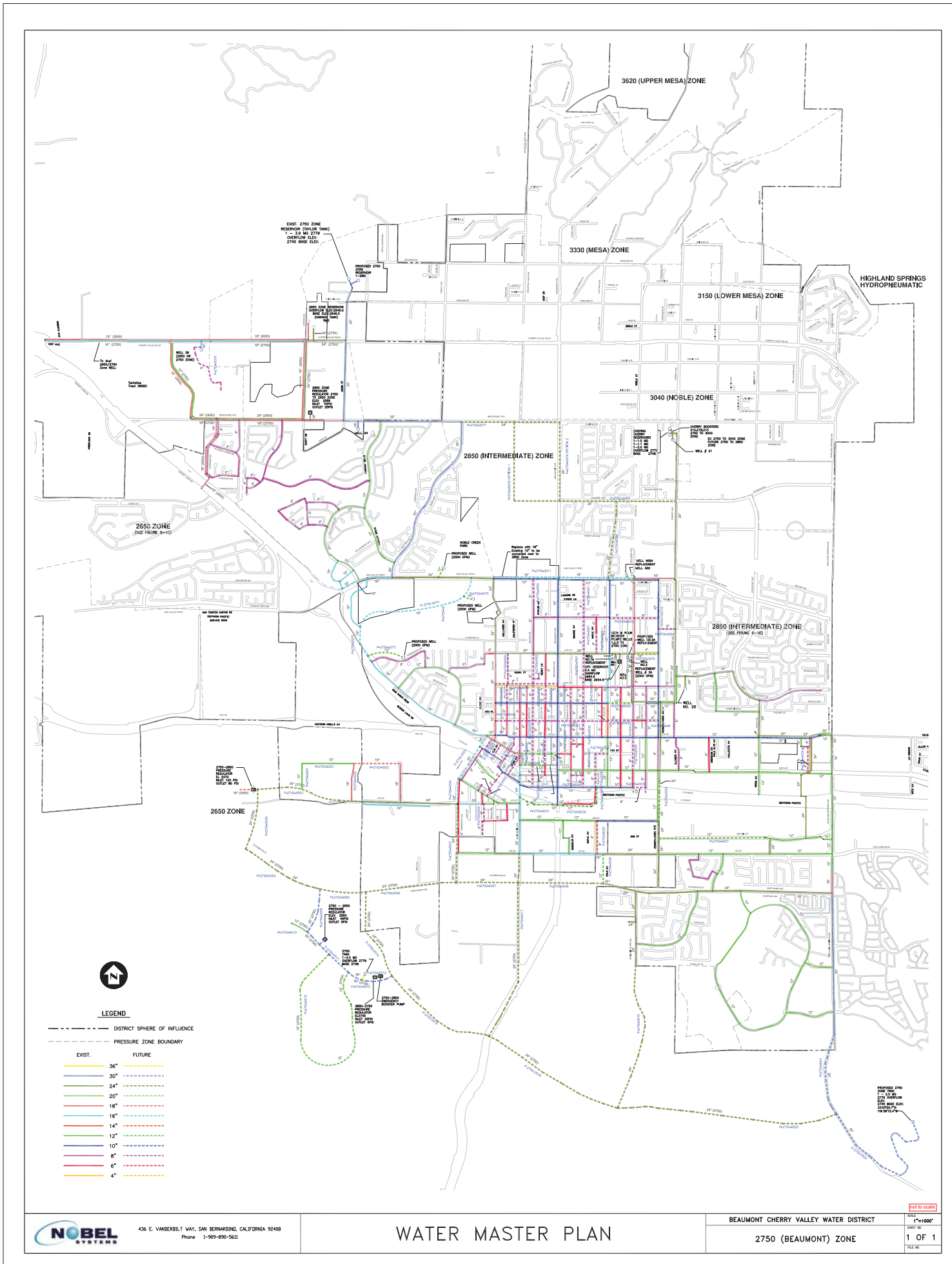


Figure 8

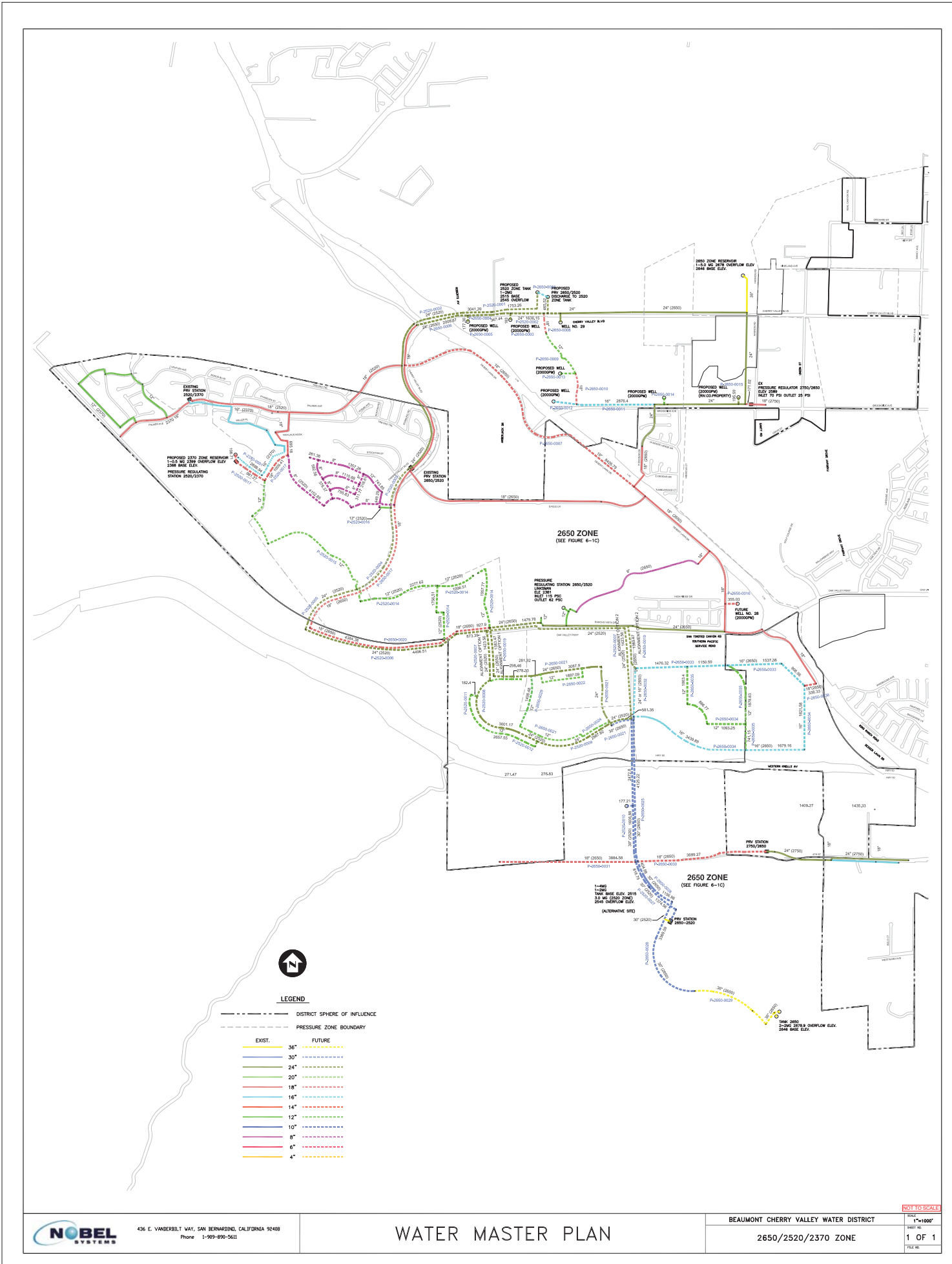
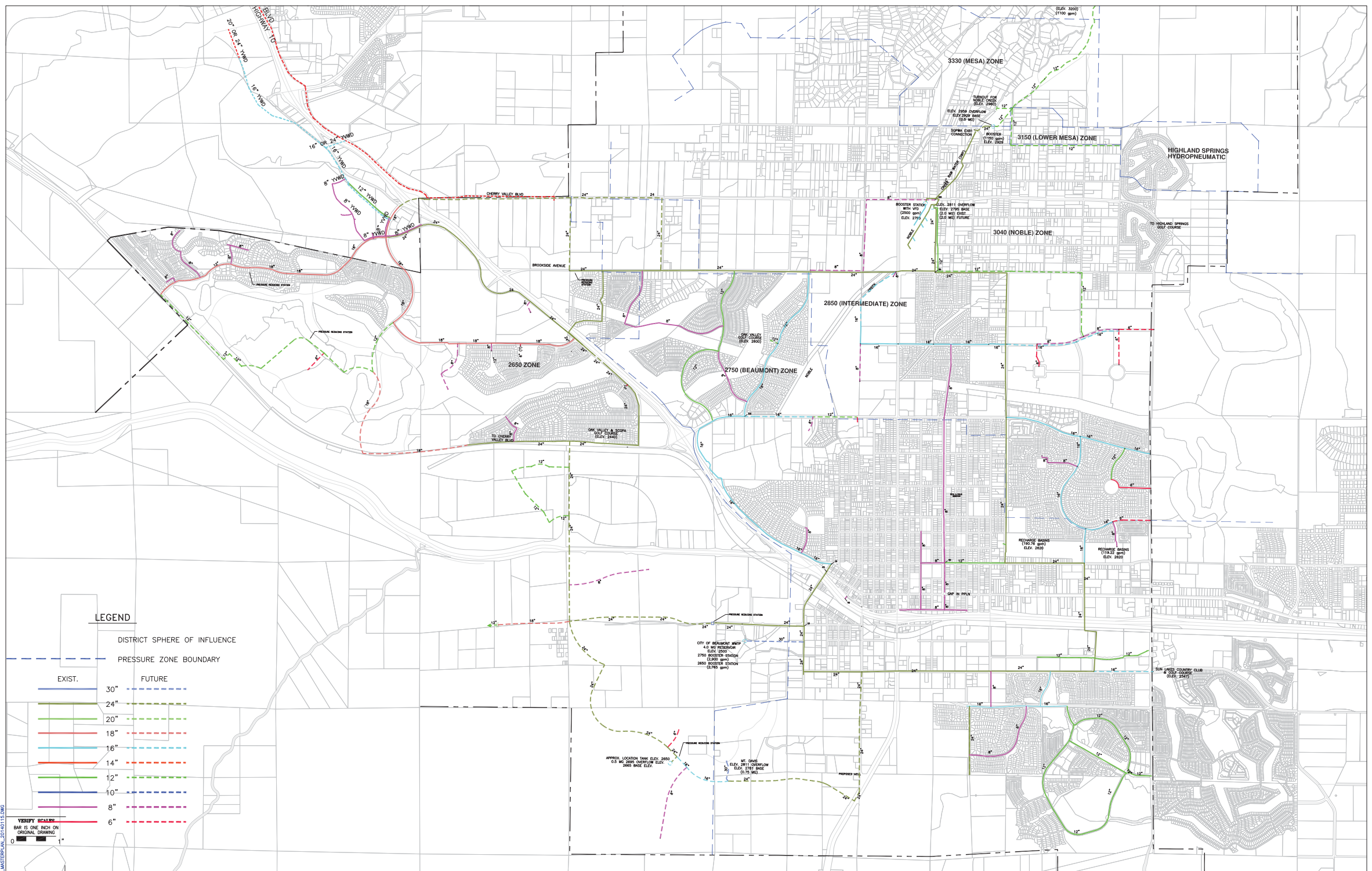


FIGURE 9



**LEGEND**

DISTRICT SPHERE OF INFLUENCE  
 PRESSURE ZONE BOUNDARY

EXIST.	FUTURE
30"	30"
24"	24"
20"	20"
18"	18"
16"	16"
14"	14"
12"	12"
10"	10"
8"	8"
6"	6"

VERIFY SCALES  
 BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET, READ SCALES ACCORDINGLY

**BEAUMONT-CHERRY VALLEY WATER DISTRICT CAPITAL IMPROVEMENT PROGRAM  
2017-2026 FUNDING POTENTIALS**

**APPENDIX A**

**BCVWD  
CIP Funding Potentials**

<b>CIP Budget Year</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
<b>Facilities Fees Restricted Cash:</b>										
Beginning Cash Balance	\$10,184,646	\$6,420,346	\$8,056,470	\$2,873,386	\$756,152	\$410,147	\$2,092,109	\$7,957,713	\$7,546,690	\$3,282,240
Estimated Dwelling Units Per Year (1)	450	450	450	450	450	450	450	450	450	450
Estimated Facilities Fees	16,500	16,500	16,500	16,500	16,500	18,000	18,000	18,000	18,000	18,000
Estimated Facilities Fees to be Collected (1)	7,425,000	7,425,000	7,425,000	7,425,000	7,425,000	8,100,000	8,100,000	8,100,000	8,100,000	8,100,000
Holdback Fees for SWP Newsrource Purchase (Sites)	(377,190)	(377,190)	(377,190)	(377,190)	(377,190)	(411,480)	(411,480)	(411,480)	(411,480)	(411,480)
Estimated Interest Earned on Investment	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
<b>Restricted Cash Available</b>	<b>17,299,406</b>	<b>13,535,106</b>	<b>15,171,230</b>	<b>9,988,146</b>	<b>7,870,912</b>	<b>8,167,117</b>	<b>9,849,079</b>	<b>15,714,683</b>	<b>15,303,660</b>	<b>11,039,210</b>
<b>CIP Projects:</b>										
Potable System	9,608,903	4,038,758	9,575,245	6,564,453	4,624,220	4,673,389	453,115	4,010,254	7,984,776	7,519,021
Non-Potable System	1,270,157	1,439,878	2,722,599	2,667,541	2,836,544	1,401,619	1,438,251	4,157,738	4,036,644	2,030,079
Pipeline Replacement	0	0	0	0	0	0	0	0	0	0
IT Infrastructure Acquisitions	0	0	0	0	0	0	0	0	0	0
Vehicle and Equipment Acquisitions	0	0	0	0	0	0	0	0	0	0
<b>Total CIP</b>	<b>10,879,060</b>	<b>5,478,636</b>	<b>12,297,844</b>	<b>9,231,994</b>	<b>7,460,764</b>	<b>6,075,008</b>	<b>1,891,366</b>	<b>8,167,993</b>	<b>12,021,421</b>	<b>9,549,100</b>
<b>Ending Facilities Fees Restricted Balance</b>	<b>\$ 6,420,346</b>	<b>\$ 8,056,470</b>	<b>\$ 2,873,386</b>	<b>\$ 756,152</b>	<b>\$ 410,147</b>	<b>\$ 2,092,109</b>	<b>\$ 7,957,713</b>	<b>\$ 7,546,690</b>	<b>\$ 3,282,240</b>	<b>\$ 1,490,109</b>
<b>Capital Replacement Reserves:</b>										
Beginning Cash Balance	19,864,154	16,303,990	15,784,032	13,932,262	13,250,381	13,270,943	12,345,557	10,281,967	9,062,002	6,213,550
Unavailable: Purchase of State Water (Storage)	-317,000	-317,000	-317,000	-317,000	-317,000	-317,000	-317,000	-317,000	-475,500	-475,500
Unavailable: Possible Reclass to Restricted (2)	-500,000									
<b>Available Capital Replacement Cash</b>	<b>19,047,154</b>	<b>15,986,990</b>	<b>15,467,032</b>	<b>13,615,262</b>	<b>12,933,381</b>	<b>12,953,943</b>	<b>12,028,557</b>	<b>9,964,967</b>	<b>8,586,502</b>	<b>5,738,050</b>
Estimated Increase From Operations (Depreciation)	2,500,000	2,564,350	2,628,700	2,693,050	2,757,400	2,821,750	2,886,100	2,950,450	3,014,800	3,079,150
<b>CIP Projects:</b>										
Potable System	2,816,221	564,498	2,059,120	1,052,624	0	2,164,892	3,192,480	2,795,107	4,272,401	4,132,319
Non-Potable System	0	0	0	0	0	0	0	0	0	0
Pipeline Replacement	1,175,655	1,065,826	1,103,297	1,048,566	1,306,795	862,986	1,419,968	1,037,495	1,093,952	1,124,757
IT Infrastructure Acquisitions	1,078,711	1,061,518	909,357	823,216	846,398	19,689	20,243	20,813	21,399	22,002
Vehicle and Equipment Acquisitions	172,576	75,466	91,697	133,525	266,645	382,570	0	0	0	0
<b>Total CIP</b>	<b>5,243,164</b>	<b>2,767,308</b>	<b>4,163,471</b>	<b>3,057,931</b>	<b>2,419,838</b>	<b>3,430,136</b>	<b>4,632,690</b>	<b>3,853,415</b>	<b>5,387,752</b>	<b>5,279,078</b>
<b>Ending Capital Replacement Cash Balance</b>	<b>\$16,303,990</b>	<b>\$15,784,032</b>	<b>\$13,932,262</b>	<b>\$13,250,381</b>	<b>\$13,270,943</b>	<b>\$12,345,557</b>	<b>\$10,281,967</b>	<b>\$9,062,002</b>	<b>\$6,213,550</b>	<b>\$3,538,122</b>

(1) Estimated Facilities Fees are based on 450 EDUs constructed per year times Facilities Fees per EDU( Subject to change based on the finalization of the facility fee study curently in progress).  
(2) Amount to be determined based on completion of the SB 1760 analysis. This is a conservative holdback reserve.







**BEAUMONT-CHERR VALLEY WATER DISTRICT  
CAPITAL IMPROVEMENT PROGRAM - CAPITAL ASSETS 2017-2026  
APPENDIX D**

Item	Tier	CAPITAL ACQUISITION IMPROVEMENT PROJECT	FUNDING SOURCE				Total Project Cost 2014 Dollars	Total Project Cost 2016 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	ADJUSTED COST BY FUNDING SOURCE				Total Adjusted Cost						
			Facilities Fee	Cap. Repl. Res.	Developer	Other													Facilities Fee	Cap. Repl. Res.	Developer	Other							
Inflation Factor								1.02816	1.0571	1.0869	1.1175	1.1490	1.1813	1.2146	1.2488	1.2839	1.3201												
		<b>Description</b>																											
IT-NETW-0001		Firewall Upgrade Project	0%	100%	0%	0%	N / A	\$10,000	\$10,282									\$0	\$10,282	\$0	\$0	\$10,282							
IT-NETW-0002		Redundant SAN Project	0%	100%	0%	0%	N / A	20,000	\$20,563									\$0	\$20,563	\$0	\$0	\$20,563							
IT-NETW-0003		Endpoint Protection / LanGuard Security Software Project	0%	100%	0%	0%	N / A	8,000	\$8,225									\$0	\$8,225	\$0	\$0	\$8,225							
IT-NETW-0004		Email Spam Protection / Archive Solution	0%	100%	0%	0%	N / A	5,000	\$5,141									\$0	\$5,141	\$0	\$0	\$5,141							
IT-NETW-0005		IP Surveillance Project	0%	100%	0%	0%	N / A	20,000	\$20,563									\$0	\$20,563	\$0	\$0	\$20,563							
IT-NETW-0006		Workstation Replacement project (50 units @ \$1,000 per unit - 33% per year)	0%	100%	0%	0%	N / A	166,667	\$17,136	\$17,619	\$18,115	\$18,625	\$19,149	\$19,689	\$20,243	\$20,813	\$21,399	\$22,002	\$0	\$194,789	\$0	\$0	\$194,789						
IT-NETW-0007		A/C Replacement project	0%	100%	0%	0%	N / A	8,000		\$8,457								\$0	\$8,457	\$0	\$0	\$8,457							
IT-NETW-0008		Shoretel Phone System Redundancy Equipment	0%	100%	0%	0%	N / A	9,000		\$9,514								\$0	\$9,514	\$0	\$0	\$9,514							
<b>TOTAL IT NETWORK INFRASTRUCTURE CAPITAL PROJECTS</b>							<b>\$246,667</b>	<b>\$81,910</b>	<b>\$35,589</b>	<b>\$18,115</b>	<b>\$18,625</b>	<b>\$19,149</b>	<b>\$19,689</b>	<b>\$20,243</b>	<b>\$20,813</b>	<b>\$21,399</b>	<b>\$22,002</b>	<b>\$0</b>	<b>\$277,534</b>	<b>\$0</b>	<b>\$0</b>	<b>\$277,534</b>							
IT-SCAD-0001		Wonderware SCADA Phase 1 Project	0%	100%	0%	0%	N / A	\$50,000	\$51,408									\$0	\$51,408	\$0	\$0	\$51,408							
IT-SCAD-0002		Wonderware SCADA Phase 2 Project	0%	100%	0%	0%	N / A	350,000	\$205,118	\$159,096								\$0	\$364,213	\$0	\$0	\$364,213							
IT-SCAD-0003		Wonderware SCADA Phase 3 Project	0%	100%	0%	0%	N / A	200,000		\$105,711	\$108,688							\$0	\$214,399	\$0	\$0	\$214,399							
IT-SCAD-0004		AMR / AMI Deployment Project	0%	100%	0%	0%	N / A	3,600,000	\$740,275	\$761,121	\$782,555	\$804,591	\$827,249					\$0	\$3,915,791	\$0	\$0	\$3,915,791							
<b>TOTAL IT SCADA INFRASTRUCTURE CAPITAL PROJECTS</b>							<b>\$4,200,000</b>	<b>\$996,801</b>	<b>\$1,025,928</b>	<b>\$891,243</b>	<b>\$804,591</b>	<b>\$827,249</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,545,812</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,545,812</b>						
<b>TOTAL IT CAPITAL PROJECTS</b>							<b>\$4,446,667</b>	<b>\$1,078,711</b>	<b>\$1,061,518</b>	<b>\$909,357</b>	<b>\$823,216</b>	<b>\$846,398</b>	<b>\$19,689</b>	<b>\$20,243</b>	<b>\$20,813</b>	<b>\$21,399</b>	<b>\$22,002</b>	<b>\$0</b>	<b>\$4,823,345</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,823,345</b>							
						Original Cost																							
VE-HEAV-0001		Cat 416C Backhoe (May, 1998)	0%	100%	0%	0%	\$57,097	\$120,000	\$123,379									\$0	\$123,379	\$0	\$0	\$123,379							
VE-TRUK-0002		2008 F150 (Dec, 2008)	0%	100%	0%	0%	\$18,056	\$21,850	\$22,465									\$0	\$22,465	\$0	\$0	\$22,465							
VE-TRUK-0003		F150 (Replacing the 2005 4X4 Ranger) (Dec, 2004)	0%	100%	0%	0%	\$19,991	\$26,000	\$26,732									\$0	\$26,732	\$0	\$0	\$26,732							
VE-TRUK-0004		2005 4X2 F250 (Feb, 2005)	0%	100%	0%	0%	\$24,031	\$33,156		\$35,049								\$0	\$35,049	\$0	\$0	\$35,049							
VE-TRUK-0005		2005 4X4 F250 (Feb, 2005)	0%	100%	0%	0%	\$27,711	\$38,233		\$40,416								\$0	\$40,416	\$0	\$0	\$40,416							
VE-TRUK-0006		F150 (Replacing the 2005 4X4 Ranger) (Dec, 2004)	0%	100%	0%	0%	\$19,991	\$26,000		\$28,259								\$0	\$28,259	\$0	\$0	\$28,259							
VE-TRUK-0007		F150 (Replacing the 2006 4X4 Ranger)(Dec, 2004)	0%	100%	0%	0%	\$13,397	\$26,000		\$28,259								\$0	\$28,259	\$0	\$0	\$28,259							
VE-TRUK-0008		2006 4X4 F250 (Apr, 2006)	0%	100%	0%	0%	\$24,452	\$32,367		\$35,179								\$0	\$35,179	\$0	\$0	\$35,179							
VE-TRUK-0009		2008 4X4 F250 (May, 2007)	0%	100%	0%	0%	\$24,859	\$32,245		\$36,033								\$0	\$36,033	\$0	\$0	\$36,033							
VE-TRUK-0010		2004 Dodge 1500 (Mar, 2004)	0%	100%	0%	0%	\$30,556	\$43,594		\$48,716								\$0	\$48,716	\$0	\$0	\$48,716							
VE-TRUK-0011		2008 F250 (Feb, 2008)	0%	100%	0%	0%	\$25,039	\$43,648		\$48,776								\$0	\$48,776	\$0	\$0	\$48,776							
VE-TRUK-0012		2008 F450 (Dec, 2008)	0%	100%	0%	0%	\$51,432	\$89,656		\$103,011								\$0	\$103,011	\$0	\$0	\$103,011							
VE-HEAV-0002		2007 John Deere Backhoe 310SG (Aug, 2009)	0%	100%	0%	0%	\$46,763	\$120,000		\$137,875								\$0	\$137,875	\$0	\$0	\$137,875							
VE-EQIP-0001		Air Compressor (May, 1998)	0%	100%	0%	0%	\$12,861	\$22,419		\$25,759								\$0	\$25,759	\$0	\$0	\$25,759							
VE-TRUK-0013		2007 1 Ton Truck w/ 3/4 Ton Dump Bed (Apr, 2009)	0%	100%	0%	0%	\$35,154	\$42,673		\$50,411								\$0	\$50,411	\$0	\$0	\$50,411							
VE-TRUK-0014		2011 F350 (Jan, 2011)	0%	100%	0%	0%	\$31,615	\$36,066		\$42,606								\$0	\$42,606	\$0	\$0	\$42,606							
VE-TRUK-0015		GIS / Muck Truck (May, 2004)	0%	100%	0%	0%	\$145,297	\$207,295		\$244,880								\$0	\$244,880	\$0	\$0	\$244,880							
VE-EQIP-0002		Ingersoll Rand Air Compressor (Dec, 2008)	0%	100%	0%	0%	\$21,694	\$37,817		\$44,674								\$0	\$44,674	\$0	\$0	\$44,674							
<b>TOTAL VEHICLE AND EQUIPMENT ACQUISITION / REPLACEMENT PROJECTS</b>							<b>\$629,996</b>	<b>\$999,020</b>	<b>\$172,576</b>	<b>\$75,466</b>	<b>\$91,697</b>	<b>\$133,525</b>	<b>\$266,645</b>	<b>\$382,570</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,122,479</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,122,479</b>						
<b>TOTAL IT, VEHICLE AND EQUIPMENT ACQUISITION / REPLACEMENT PROJECTS</b>							<b>\$5,445,686</b>	<b>\$1,251,287</b>	<b>\$1,136,983</b>	<b>\$1,001,054</b>	<b>\$956,741</b>	<b>\$1,113,043</b>	<b>\$402,258</b>	<b>\$20,243</b>	<b>\$20,813</b>	<b>\$21,399</b>	<b>\$22,002</b>	<b>\$0</b>	<b>\$5,945,824</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,945,824</b>							
								<b>Vehicles/Facilities</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>											
<b>Facilities Fee</b>								\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0								
<b>Cap. Repl. Res</b>								\$1,251,287	\$1,136,983	\$1,001,054	\$956,741	\$1,113,043	\$402,258	\$20,243	\$20,813	\$21,399	\$22,002					\$5,945,824							
<b>Developer</b>								\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0						
<b>Other</b>								\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
								<b>\$1,251,287</b>	<b>\$1,136,983</b>	<b>\$1,001,054</b>	<b>\$956,741</b>	<b>\$1,113,043</b>	<b>\$402,258</b>	<b>\$20,243</b>	<b>\$20,813</b>	<b>\$21,399</b>	<b>\$22,002</b>	<b>\$0</b>	<b>\$5,945,824</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,945,824</b>						

## Appendix E

### DEFINITIONS, ABBREVIATIONS AND ACRONYMS

Air gap connection	A connection which includes an unobstructed, vertical space between the point of discharge and the tank or reservoir.
Acre-ft	acre-feet (1 acre-ft = 325,800 gallons)
Acre-ft/yr	acre-feet per year
AFY	acre-feet per year
BCVWD	Beaumont Cherry Valley Water District
BSU	Beaumont Storage Unit, Beaumont Basin
Build-out	Development based on City of Beaumont General Plan 2007, Zoning Map, and Riverside County General Plan, Pass Area Land Use Plan, 2003
Capacity Fees	The same as Facilities Fees, mitigation fees
ccf	hundred cubic feet (748 gallons)
CDPH	California Department of Public Health, now SWRCB Division of Drinking of Water
CEQA	California Environmental Quality Act
cfs	Cubic feet per second
CII	Commercial, Industrial and Institutional
CIP	Capital Improvement Plan
District	Beaumont Cherry Valley Water District
DWR	Department of Water Resources
DWSRF	Drinking Water State Revolving Fund
EBX	East Branch Extension of the State Water Project Phase I also EBX I
EBX II	East Branch Extension of the State Water Project Phase II
EDU	Equivalent Dwelling Unit
EIR	Environmental Impact Report
ENR	Engineering News Record (property of BNP Media)
ft	feet
GIS	Geographic Information System

## Appendix E Cont'd

### DEFINITIONS, ABBREVIATIONS AND ACRONYMS Cont'd

gpcd or GPCD	Gallons per capita per day
gpd	Gallons per day
gpm	gallons per minute
GWMP	Groundwater Management Plan
IT	Information Technology
MAX or max	Maximum
MCL	Maximum Contaminant Level
MG	Million gallons
mgd	million gallons per day
mi <sup>2</sup>	square miles
MIN or min	Minutes or Minimum
MSL	Mean Sea Level
N/A	Not Available/Not Applicable/Not Analyzed
NCRF-Ph I	Noble Creek Recharge Facility – Phase I
NPW	Non-Potable Water
Pass Agency	San Geronio Pass Water Agency
RCFCD	Riverside County Flood Control and Water Conservation District
R & M	Repair and Maintenance
RWQCB	Regional Water Quality Control Board
SAWPA	Santa Ana Watershed Project Authority
SCADA	Supervisory Control and Data Acquisition (telemetry system)
SDWA	Safe Drinking Water Act
SGPWA	San Geronio Pass Water Agency
SOI	Sphere of Influence
sq mi	Square mile

## **Appendix E Cont'd**

### **DEFINITIONS, ABBREVIATIONS AND ACRONYMS Cont'd**

SPW	State Project Water
SWRCB	State Water Resources Control Board
UWMP	Urban Water Management Plan
VE	Vehicles and Equipment
WWTF	Wastewater Treatment Facility
WRF	Water Reclamation or Recycling Facility
WRFP	Water Recycling Funding Program
YVWD	Yucaipa Valley Water District



## Appendix F

# City of Beaumont

550 E. 6th Street  
 Beaumont, CA 92223  
 (951) 769-8520  
 www.ci.beaumont.ca.us

### MAJOR PROJECT STATUS AS OF OCTOBER 25, 2016

*(Number Next to Project Title Correlates with Current Development Project Map)*

<u>PROJECT NAME</u>	<u>LOCATION</u>	<u>TOTAL AC.</u>	<u>RES. AC.</u>	<u>COM./IND. AC.</u>	<u>NO. D.U.*</u>	<u>PROJECT STATUS</u>
<b>PROJECTS UNDER DEVELOPMENT:</b>						
Sundance (#17)	N/8th St.; W/Highland Springs Ave.	1195.00	886.85	13.50	4450	Specific Plan, Project Under Development.
Fairway Canyon SCPGA Tract No. 31462, Tract No. 36558, and Tract No. 36783 (#29)	N/ San Timoteo Canyon Rd.; SW/I-10	1555.70	678.00	46.40	3300	Specific Plan, Project Under Development
Four Seasons (#23) Tract No. 32260 & 33096	S/I-10; W/Highland Springs Avenue	565.50	365.30		1890	Specific Plan, Homes Under Construction
Heartland (#6)	N/SR 60; W/Potrero Blvd.	417.20	207.60	61.80	981	Specific Plan, Preliminary graded.
Rolling Hills Ranch Industrial/ Wolverine (#18)	S/SR 60; W/Viele Ave.	155.00	-	155.00	-	Building Under Construction
<b>Subtotal for Projects Under Development:</b>		<b>3888.40</b>	<b>2137.75</b>	<b>276.70</b>	<b>10,621</b>	

\* Total Number of Dwelling Units within the Specific Plan/Tract Map - Includes completed units

**Appendix F Cont'd**

**PROJECTS NOT UNDER DEVELOPMENT:**

<u>PROJECT NAME</u>	<u>LOCATION</u>	<u>TOTAL AC.</u>	<u>RES. AC.</u>	<u>COM./IND. AC.</u>	<u>NO. D.U.</u>	<u>PROJECT STATUS</u>
Kirkwood Ranch (#14)	N/I-10; S/Oak Valley Parkway	128.00	128.00	-	403	Specific Plan (1991) Tentative Tract Map 27357 Approved
Potrero Creek Estates (#26)	S/I-10; W/Highland Springs Ave.	737.10	307.80	-	700	Specific Plan (1989)
Tract No. 32850 (#39)	E/Manzanita Park Rd.; N/First Street	29.09	29.09	-	95	Tract 32850 Approved
Noble Creek Vistas (#10)	N/14th St.; W/Beaumont Ave.	332.28	222.50	-	648	Specific Plan (2006)
Hidden Canyon Industrial (#36)	Southeast corner of SR 60 and Jack Rabbit Trail	196.50	-	158.83	-	Specific Plan / Plot Plan Approved (11-PP-04) PM 36426
Sunny-Cal Specific Plan (#40)	North of Brookside and west of I-10	324.00	216.05	10.08	571	Annexation Pending. Specific Plan & Tract Map Approved TM 36583
Tournament Hills 3, TM 36307	North of Oak Valley Parkway, 1 mile west of Desert Lawn Dr.	63.56	63.56	-	279	Tract 36307, Amendment to Oak Valley Specific Plan Approved
Seasons at Beaumont Units Rental Complex Housing	38 Veterans Illinois Avenue between 6th Street & 8th Street	1.30	1.30	-	38	Plot Plan Approved (15-PP-05)
Beaumont Commercial Center	Northwest Corner of Highland Springs and 1st Street (419-260-075)	7.07	-	7.07	-	Pending Planning Commission Public Hearing (15-PP-03)
Sundance Corporate Center (#46)	NWC of Highland Springs and 8th	13.60	-	13.60	-	Plot Plan Approved (07-PP-12)
<b>Subtotals for Projects Not Under Development:</b>		<b>1832.50</b>	<b>968.30</b>	<b>189.58</b>	<b>2,734</b>	
<b>Estimated Totals - All Projects</b>		<b>5720.90</b>	<b>3106.05</b>	<b>466.28</b>	<b>13,355</b>	

# Appendix F Cont'd

## CITY OF BEAUMONT CURRENT AND RECENTLY BUILT DEVELOPMENT PROJECTS

