



Final Report for Casitas Mutual Water Company

- **Project Name:** Casitas Mutual Water Company Fire Flow Infrastructure Improvement Needs.
- **Proponent:** Casitas Mutual Water Company
- **Type:** Fire flow survey study.
- **Location:** 8881 N. Ventura Ave. Ventura, Ca 93001
- **Cost:** \$24,500.00
- **User Needs Supported Categories (Generated from TAPPS)**
- **Project Abstract:** Survey to document CMWC fire flow and water system with alternatives.
 - This historic project aimed to generate a survey and drawings of the existing water system for CMWC and to provide alternatives for a new water system. This new system would be able to provide increased efficiency and future fire protection for the community. NextGen Engineering facilitated the 2022 Topographic survey and mapping of the existing CMWC system, identified and mapped parcel boundaries and owners, which designates the shareholders of CMWC. NextGen also conducted a title searched on all CMWC serviced parcels to verify that no existing utility easements had been recorded. NextGen also worked with neighboring water districts to obtain current water system data. The survey and existing water system data provided the base for the design of the updated system for construction. Finally, NextGen created and presented five (5) different alternatives and recommended a combination for the new system.
- **Project Outcomes**
 - Outcomes of this project were a complete survey and mapping of the existing CMWC water system and design alternatives for future construction. The alternatives NextGen recommends would include an upgraded connection to Casitas Municipal Water Company, a new connection to Ventura River Water District, new water mains and service lines, and creating a loop for improved pressure, flow, and accessibility for the community. CMWC and NextGen are currently working on the construction phase of this project and anticipate breaking ground December 2022.
- **Project Pictures / Exhibits**
 - Attached

- **Community / Participant Testimonials (If available / Applicable)**

I, Christine Salisbury Casitas Mutual Water Company Secretary, speaking on behalf of our community shareholders must say this CSUSB grant in the amount of \$24,500.00 has made history for us. Never in the fifty plus year history of CMWC has had an actual survey to show the layout of our water system. Actually, CMWC did not even have a water meter map. All community members/shareholders that have seen the survey and alternatives are delighted to see the existing line structure with meters and where the new piping to code and fire hydrants shall be implemented.

This survey will help greatly for the water line replacement and in applying for fire hydrant funding. The shareholders Of Casitas Mutual Water company are most grateful.

Best Regards,
CMWC Secretary
Christine Salisbury

I would like to say that the new ongoing improvement project is a blessing and a first for this community. It will not only improve our water lines but also make it possible for the fire department to help us all if we have another fire like the Thomas fire. This is the first time in our recent history that improvements have been made to the system. We are grateful for all the hard work you are doing. Our community will be much safer from the threat of wildfires in the future thanks to your hard work in these improvements. The SVC funding for the project for \$24,500.00 from Cal State San Bernardino is making this project possible to improve our fire flow infrastructure needs.

Thank you
Raymond Welch
Casitas Springs Resident



BENCHMARK:

COUNTY OF VENTURA
 VCPID: 839
 DESIGNATION: 79 FMK

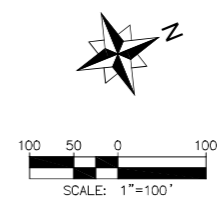
NAVD 88 ELEVATION (USFT): 296.481' (VEN CO ADJ PUB 1992)

DESCRIPTION:

0.5 MILE WEST ALONG THE SOUTHERN PACIFIC RAILROAD FROM THE CALIFORNIA STREET CROSSING, THENCE 5.95 MILES NORTHERLY ALONG VENTURA AVENUE, THENCE 0.7 MILE NORTHERLY ALONG STATE HIGHWAY 33, 7.75 MILES SOUTHWESTERLY OF OJAI, 0.05 MILE SOUTHWESTERLY OF THE SOUTH ONE OF TWO JUNCTIONS OF NYE ROAD, 0.1 MILE NORTHEASTERLY OF THE JUNCTION OF SYCAMORE DRIVE, 58.4 FEET SOUTHERLY OF POWER POLE 1531676E, 47.6 FEET NORTHERLY OF A 27-INCH PEPPER TREE, 42.7 FEET WESTERLY OF THE SOUTHWEST CORNER OF HOUSE 8450, 24.0 FEET EASTERLY OF THE CENTER OF THE HIGHWAY, 0.5 FT. SOUTHWESTERLY OF THE NORTHWEST END OF THE SOUTHEAST HEADWALL OF 20-INCH PIPE CULVERT 6.52.

BASIS OF BEARING:

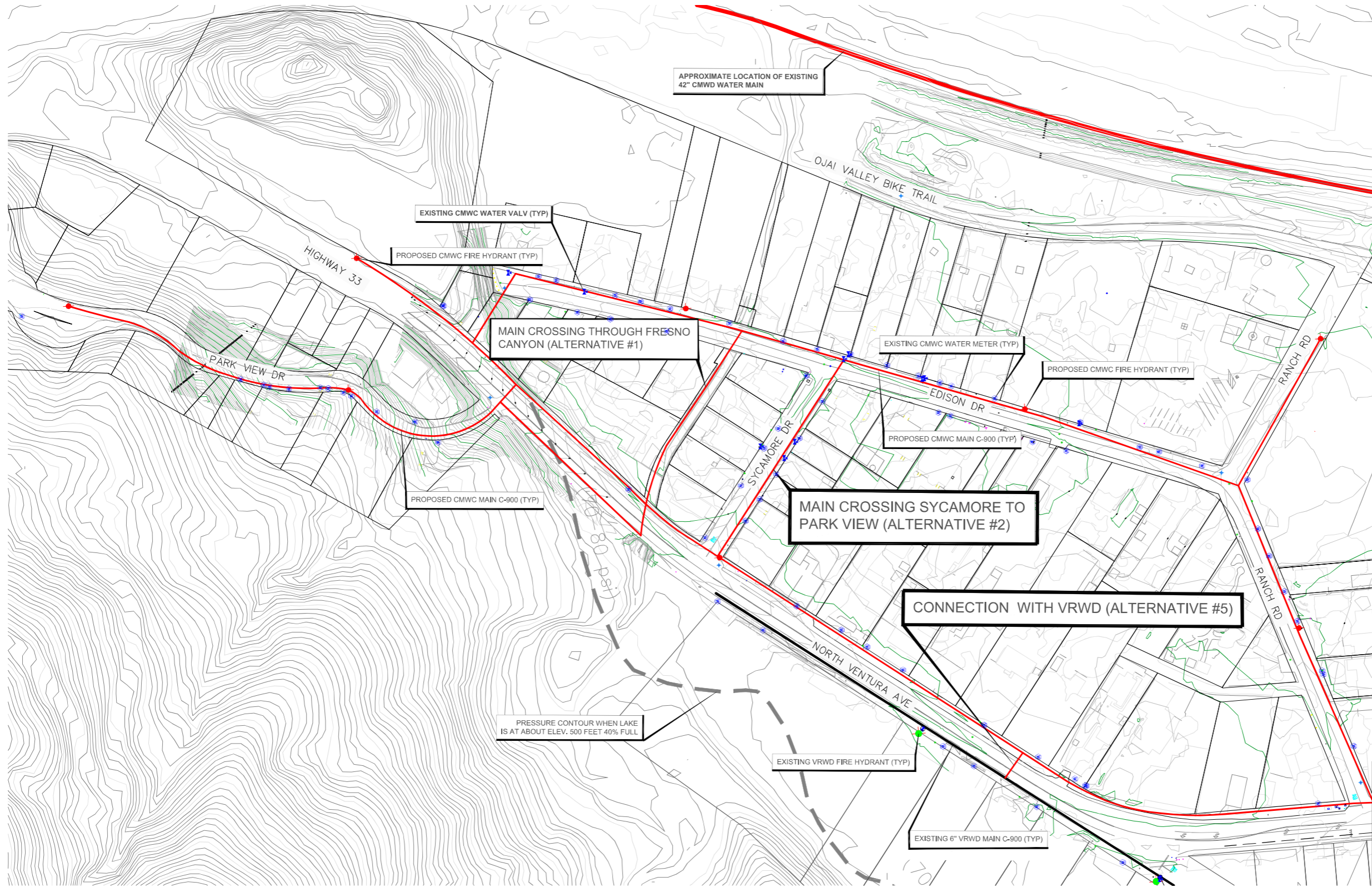
THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE V, NAD83(2011) 2011.00 EPOCH. SAID COORDINATES AND BEARINGS ARE BASED LOCALLY UPON FIELD-OBSERVED TIES TO CALVRS STATIONS. ALL DATA WITHIN THIS DRAWING ARE GROUND DISTANCES.



CONTROL COORDINATE TABLE				
NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	1958153.31	6166937.33	267.03	MAG AT
101	1958354.55	6167385.01	270.80	MAG AT
102	1957690.07	6166537.50	267.99	MAG AT
103	1958634.01	6166705.76	278.69	MAG AT
104	1957117.05	6166670.52	262.49	MAG AT
105	1957426.77	6167070.98	273.49	MAG AT
106	1957096.13	6166828.75	283.01	MAG AT
107	1958884.93	6167379.64	276.70	MAG AT
108	1959547.02	6167139.05	284.33	MAG AT

NOTE: THIS MAP EXHIBIT IS FOR VISUAL REFERENCE OF THE AREA THAT HAS BEEN LOCATED AND THE FINDINGS OF THE SURVEY. LOCALIZED PROJECT CONTROL HAS BEEN USED TO DERIVE TOPOGRAPHIC DATA SHOWN ON THIS MAP. SURFACE AND POINT DATA ARE CONTAINED WITHIN THE ACCOMPANIED FILES. UNDERLYING IMAGERY IS FOR REFERENCE ONLY.





- LEGEND:**
- PROPOSED FIRE HYDRANT
 - EXISTING VRWD FIRE HYDRANT
 - EXISTING CMWC WATER WELL
 - ⊕ EXISTING VRWD VALVES
 - ⊕ EXISTING CMWC WATER METER
 - EXISTING CMWC WATER TANK
-
- PRESSURE CONTOUR WHEN LAKE IS AT ABOUT ELEV. 500 FEET 40% FULL
 - EXISTING 6" VRWD MAIN C-900
 - TOPOGRAPHIC CONTOURS (FEET)
 - EDGE OF PAVEMENT
 - PROPOSED (NEW) 6" WATER MAIN C-900
 - CMWC PARCEL BOUNDARY

CMWC ALTERNATIVES WATER SYSTEM LAYOUT

MATCHLINE STA. 21+18
SEE SHEET 1

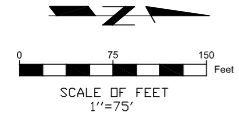
UNDERGROUND SERVICE ALERT
CALL BEFORE YOU DIG:



THREE WORKING DAYS BEFORE YOU DIG

**PRELIMINARY ONLY
NOT FOR CONSTRUCTION**

DATE: 09-14-2022



D				
C				
B				
A				
REVISION	DESCRIPTION	APP.	DATE	

BILL OBRIEN R.C.E. 42711 EXP. 03-31-2024
 09-14-22
 DATE



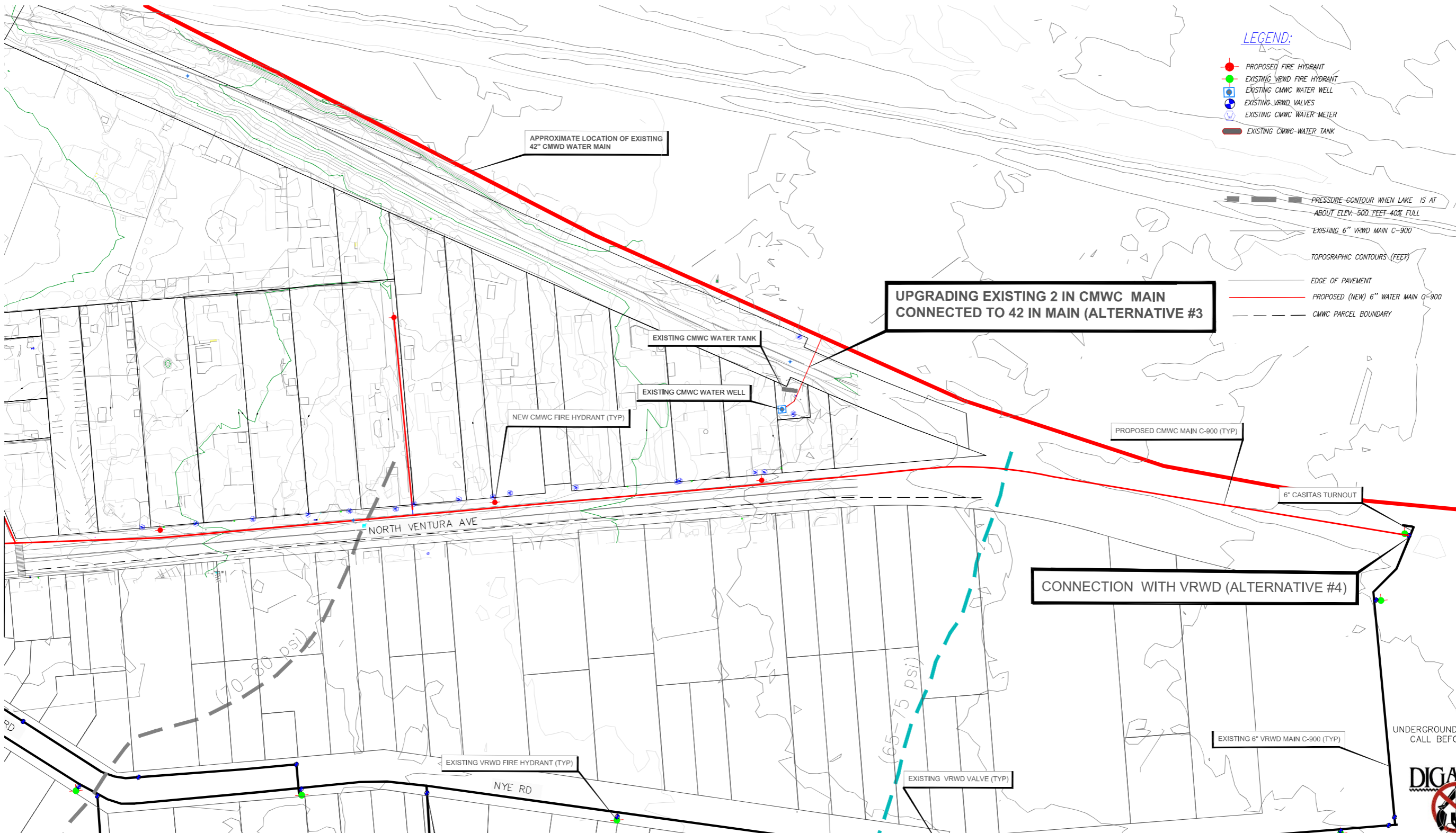
PREPARED BY:
NextGen
 ENGINEERING
 5142 E. HOLMES STREET TUCSON AZ, 85711
 374 POLI STREET SUITE 207, VENTURA, CA 93001
 (805) 798-7664

DESIGNED BY: MOHEB HAMED
 DRAWN BY: MOHEB HAMED
 CHECKED BY: B O'BRIEN

SPEC. NO.
 PROJ. NO.
 0

**CASITAS MUTUAL WATER COMPANY
 SYSTEM UPGRADE
 CMWC ALTERNATIVES WATER SYSTEM**

SHEET 6
 OF 9
 DRAWING NO.



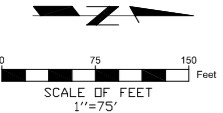
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CMWC ALTERNATIVES WATER SYSTEM LAYOUT

UNDERGROUND SERVICE ALERT
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THREE WORKING DAYS BEFORE YOU DIG



D				
C				
B				
A				
△	REVISION	DESCRIPTION	APP.	DATE

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 09-14-22
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**CASITAS MUTUAL WATER COMPANY
 SYSTEM UPGRADE
 CMWC ALTERNATIVES WATER SYSTEM**

DATE: 09-14-2022
 SHEET 9
 OF 9
 DRAWING NO.



Casitas Mutual Water Company Fire Flow Infrastructure Improvement Needs



Casitas Mutual Water Company and NextGen Engineering

Project Overview

- Project Name: Casitas Mutual Water Company Fire Flow Infrastructure Improvement Needs.
- Proponent: Casitas Mutual Water Company
- Type: Fire flow survey study.
- Location: 8881 N. Ventura Ave. Ventura, Ca 93001
- Cost: \$24,500

Project Abstract

- This historic project aimed to generate the first documented survey and drawings of the existing water system for CMWC and to provide alternatives for a new water system. The goal of the new system is to provide increased efficiency and future fire protection for the shareholders and community.

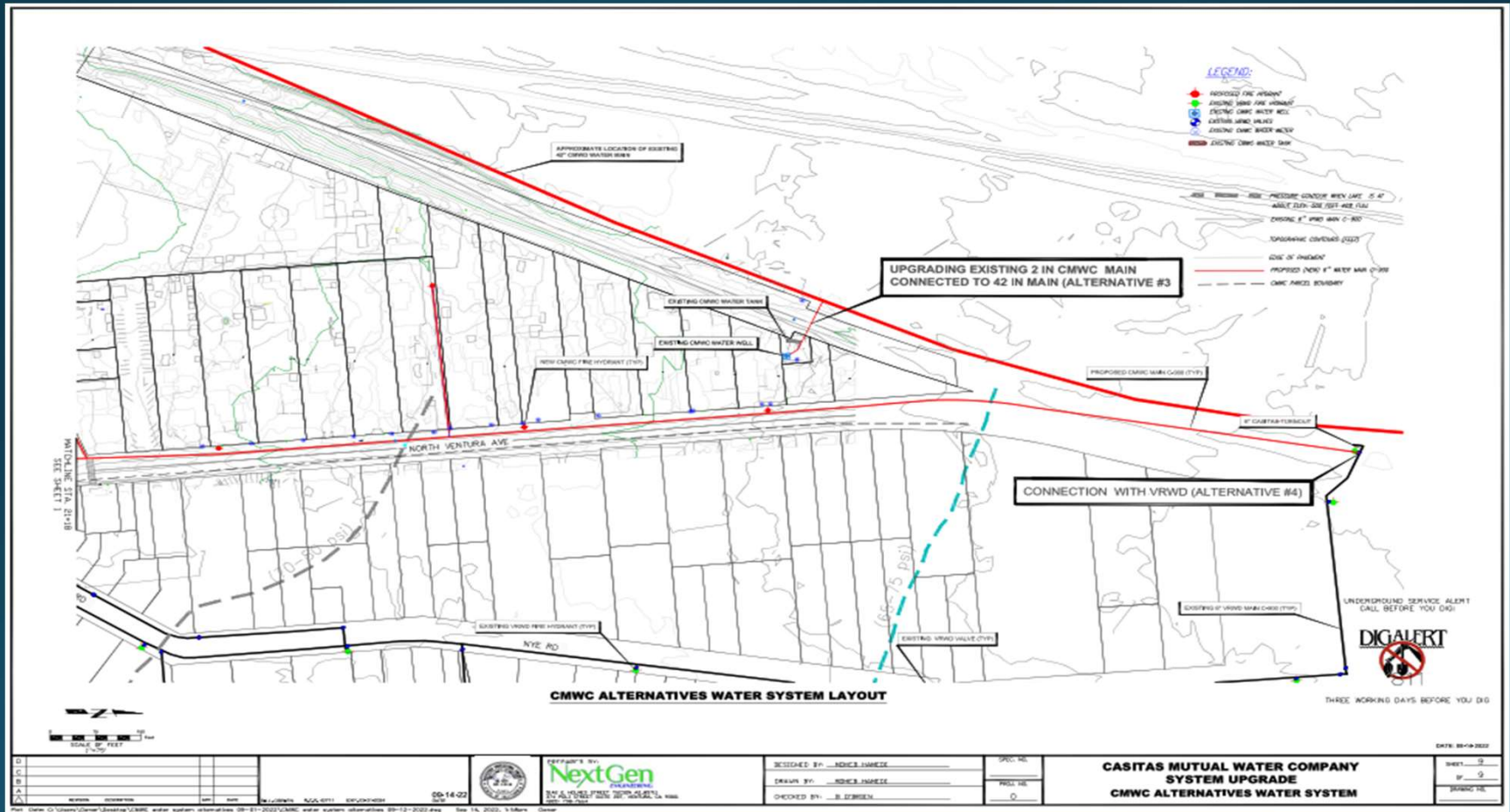
Project Outcomes

- Topographic survey and mapping of the existing CMWC system. The survey and existing water system data provided the base for the design of the updated system for construction.
- Identified and mapped parcel boundaries and owners, which designates the shareholders of CMWC.
- Title researched on all CMWC serviced parcels to verify any existing recorded utility easements.
- Worked with neighboring water districts to obtain current water system data.
- NextGen created and presented five (5) different alternatives and recommended a combination for the new system.

Historic Survey



Alternatives



DATE: 08-19-2022 SHEET: 12 OF: 9 PROJECT:		DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____		PROJECT NO: PLOT NO: DATE:		CASITAS MUTUAL WATER COMPANY SYSTEM UPGRADE CMWC ALTERNATIVES WATER SYSTEM	
SCALE: 1" = 40'						DATE: 08-19-2022	

Testimonials

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