

CRESCENTA VALLEY WATER DISTRICT

2700 Foothill Boulevard
La Crescenta, California

Agenda for the
Adjourned Regular Meeting of the Board of Directors
of the Crescenta Valley Water District
to be held on Tuesday, September 22, 2020 at 7:00 p.m.

Posted: Friday, September 18, 2020 at 3:00 p.m.

TELECONFERENCING NOTICE

[This meeting will be held by teleconference only.]

Pursuant to the provisions of Executive Order N-29-20 issued by Governor Gavin Newsom on March 18, 2020, the public may not attend the meeting in person.

Any member of the public may participate using a touchtone phone. You may select any of the following phone numbers (there are more than one for increased reliability during this time of increased phone traffic)

(669) 900-6833

(346) 248-7799

(929) 205-6099

(253) 215-8782

(301) 715-8592

(312) 626-6799

Then, enter Access Code: 864 2814 7667

Those members of the public who are able to and would like to additionally participate through computer may access the Zoom teleconferencing tool available at the following link – <https://us02web.zoom.us/j/86428147667>.

Public comment may be made either by emailing comments ahead of the meeting or by speaking over the phone. Emailed comments will be sent to the Board of Directors prior to the meeting and posted on the District's website. Comments may be sent to Christy Colby, Regulatory and Public Affairs Manager, at (818) 248-3925 or customerservice@cvwd.com by 3pm on September 22, 2020.

Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by contacting the District by phone or in writing at the above email address. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.

Any written materials distributed to the Board in connection with this agenda will be made available at the same time for public inspection at the District office located at the above address and posted on the District's website.

Call to Order and Determination of Quorum

Pledge of Allegiance

Adoption of Agenda

Public Comments

At this time, the public shall have an opportunity to comment on any non-agenda item relevant to the subject matter jurisdiction of the Board. This opportunity is non-transferable, and speakers are limited to one three-minute (3) comment.

Foothill Municipal Water District Report

1. Report on activities at Foothill Municipal Water District.

Consent Calendar

1. Consideration and approval of the Minutes of the Regular Board Meeting on September 8, 2020.
2. Ratification of Disbursements for August 2020

Action Calendar

The public shall have an opportunity to comment on any action item as each item is considered by the Board prior to action being taken. This opportunity is non-transferable, and speakers are limited to one two-minute (2) comment.

1. **Staffing Plan**- Approve the staffing plan consistent with 2020 Strategic Plan Goals.
2. **Proposition 218** – Discuss scheduling as it relates to a potential Proposition 218 Notice.
3. **Water Main Replacement on the 2400 -2500 Blocks of Janet Lee Dr. and 4300 Block of Rosemont Ave., Project E-1008** – Consideration and motion to authorize the General Manager to advertise for bids for the construction of approximately 2,300 lineal feet of pipeline replacement on the 2400-2500 Blocks of Janet Lee Dr. and 4300 Block of Rosemont Ave. with an engineer's estimate of \$704,000 and to find said project exempt from the provisions of CEQA.
4. **Professional Consulting Services for a SCADA Radio Communications Feasibility Study, Project E-1025** – Consideration and motion to authorize the General Manager to enter into an agreement with Systems Integrated to provide professional consulting services for a SCADA Radio Communications Feasibility Study, Project E-1025 for a cost of \$63,640 and establish a contingency amount of \$6,364 (10% of contract) to cover the cost of unforeseen or additional work.
5. **Long-Term Infrastructure Reliability and Funding Roadmap** – Discuss updates related to the District's bond financing.

Information Items

Written Communications to District/Board of Directors

General Manager's Report

Attorney Report

Reports of Committees

- Engineering Committee
- Finance Committee
- Employee Relations Committee
- Policy Committee
- Community Relations/Water Conservation Committee
- Emergency Planning Committee

Director's Oral Reports – Report on issues, meetings, or activities attended by Directors.

Board Members' Request for Future Agenda Items

Adjournment

CRESCENTA VALLEY WATER DISTRICT REGULAR MEETING, BOARD OF DIRECTORS

September 8, 2020

Pursuant to the order of the Board of Directors of the Crescenta Valley Water District, made at the Regular Meeting on August 11, 2020, a Regular Meeting was held on September 8, 2020, at 7:00 p.m. through teleconference due to the COVID-19 pandemic, with President Kerry D. Erickson presiding.

At roll call, the following Directors and staff members were online:

Directors:	Kerry D. Erickson James D. Bodnar Kenneth R. Putnam Sharon S. Raghavachary Judy L. Tejeda
Attorney:	Thomas Bunn
General Manager:	Nem Ochoa
Director of Finance & Administration:	James Lee
Director of Engineering:	David Gould
Others Present:	Christy Colby, Regulatory & Public Affairs Manager Wendy Holloway, Customer Service Manager Dennis Maxwell, Director of Operations Brook Yared, Senior Engineer Arturo Montes, Finance & Administration Manager Pam Leddy, Administrative Assistant

PLEDGE OF ALLEGIANCE

President Erickson opened the meeting by leading the Directors and staff in reciting the Pledge of Allegiance.

ADOPTION OF AGENDA

It was moved by Director Tejeda, seconded by Director Raghavachary, and carried by a 5-0 roll call vote that the Agenda for the Regular Meeting of September 8, 2020 be adopted as presented.

AYES:	Director Tejeda Director Bodnar Director Raghavachary Director Erickson Director Putnam
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NOES:	None
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PUBLIC COMMENTS – Ms. Marilyn Tyler reported a significant increase in water revenue since the onset of the pandemic in March 2020. A 27% increase in metered water sales was reported at the Finance Committee meeting on August 13, 2020 for the four-month period ending June 2020. Ms. Tyler requested staff to review and compare the actual revenue from metered water sales through August 2020 with same period during 2019 and delay any consideration for a rate increase.

FOOTHILL MUNICIPAL WATER DISTRICT REPORT – Mr. Frank Colcord reported that Foothill Municipal Water District has an article published in the Crescenta Valley Weekly announcing the Annual Water for Life Student Art Contest sponsored by the Metropolitan Water District.

CONSENT CALENDAR

It was moved by Director Tejeda, seconded by Director Bodnar, and carried by a 5-0 roll call vote to approve the Minutes of the Regular Board Meeting held on August 11, 2020 through teleconference with the following adjustment. The statement made under the heading of the Pledge of Allegiance “Director Bodnar announced that the Regular Board meeting would be recessed after Action Item #1 for the CVWD Finance Corporation Meeting”, be moved under the heading of the Adoption of the Agenda and to ratify the disbursements for July 2020 as presented.

Payment of demands against the Crescenta Valley Water District on or before July 2020, the same having been approved by the General Manager, and heretofore paid, are to be ratified and approved subject to audit, in the aggregate sum of Eight Hundred Twenty-Four Thousand, One Hundred Sixteen Dollars and Twenty-Five Cents (824,116.25), which is composed of the individual items set forth herein.

AYES: Director Tejeda
 Director Bodnar
 Director Putnam
 Director Raghavachary
 Director Erickson

NOES: None

ACTION CALENDAR

Ballot for LAFCO Independent Special District Alternate – Mr. Ochoa requested a formal vote by the Crescenta Valley Board of Directors for the candidate of its’ choosing for the LAFCO Independent Special District Alternate.

Following discussion:

It was moved by Director Bodnar, seconded by Director Tejeda, and carried by a 5-0 roll call vote to cast the District’s ballot for the LAFCO Independent Special District Alternate for Director Sharon S. Raghavachary.

AYES: Director Tejeda
 Director Bodnar

Director Putnam
Director Raghavachary
Director Erickson

NOES: None

Long-Term Infrastructure Reliability and Funding Roadmap – Mr. Ochoa congratulated the Financing Team on the recent success of the District’s credit rating, and bond pricing. Standard & Poor’s rated Crescenta Valley Water District as “AA-“, which represents a jump of two notches since the District’s last rating.

Proposition 218 Discussion – Mr. Ochoa presented a sample timeline displaying several alternative schedules needed to issue a potential Proposition 218 Notice for Water and Wastewater charges. Following discussion, the Board requested staff to prepare a revenue versus expenditures report to be presented at the Adjourned Regular Board meeting on September 22, 2020.

Award of Contract – Steel Reservoir Rehabilitation – Rosemont Reservoir, Project E-1018 – Mr. Gould requested consideration and motion to award a contract to the lowest responsible bidder, Crosno Construction Inc. for the rehabilitation of Rosemont Reservoir. On September 3, 2020, the District opened and read (5) five bid proposals for this project. Crosno Construction, Inc. was the apparent low bidder at a cost of \$473,822. Mr. Gould recommended awarding a contract to Harper & Associates Engineers, Inc. to provide Quality Control Inspection Services for the rehabilitation of Rosemont Reservoir at a cost not-to-exceed \$34,400.

Director Bodnar resides more than 500 feet, but less than 1,000 feet from the Rosemont Reservoir Site, and did not participate in any discussion regarding the Rosemont Reservoir – Steel Reservoir Rehabilitation Project. Director Bodnar recused himself from the roll call vote for Action Item No. 4.

Following discussion:

It was moved by Director Erickson, seconded by Director Raghavachary, and carried by a 4-0 roll call vote to authorize the General Manager to award a contract to the lowest bidder, Crosno Construction, Inc., for the rehabilitation of Rosemont Reservoir at a cost of \$473,822, including alternative bid items. Consideration and motion to authorize the General Manager to enter into an agreement with Harper & Harper Associates Engineers, Inc. for a Quality Control Inspection Services for the rehabilitation of Rosemont Reservoir at a cost not-to-exceed \$34,400.

AYES: Director Tejeda
Director Putnam
Director Raghavachary
Director Erickson

RECUSED: Director Bodnar

NOES: None

Mutual Response Agreement with Los Angeles County Water Agency Mutual Assistance Agreement

Mr. Gould provided a final draft of the proposed Mutual Response Agreement in an effort coordinated through the Public Water Agencies Group (PWAG), to establish a more formal means of providing mutual aid in the event of a localized emergency and/or a catastrophic event. This agreement has been vetted by each of the seventeen PWAG-Emergency Response Members' staff, and will provide each of its member agencies with the resources to respond and recover more quickly from a disaster, a forum for developing and maintaining emergency contacts and relationships, and new ideas from lessons learned in disasters.

Following discussion:

It was moved by Director Raghavachary, seconded by Director Erickson, and carried by a 5-0 roll call vote to authorize the General Manager to enter into a Mutual Response Agreement with the Public Water Agencies Group and its participating member agencies.

AYES: **Director Tejeda**
 Director Bodnar
 Director Putnam
 Director Raghavachary
 Director Erickson

NOES: **None**

INFORMATION ITEMS – None

WRITTEN COMMUNICATIONS TO DISTRICT – A letter was received from Ms. Marilyn Tyler.

REPORTS OF PERSONNEL – None

GENERAL MANAGER – Mr. Ochoa presented an update on the COVID-19 issues in relation to the new plan put into place by Governor Newsom. Mr. Ochoa announced the retirement of Joe Huerta on September 17, 2020 after over 35 years of service with the District. Mr. Yared provided information on a cost saving measure to enter a lease contract for the Engineering Department plotter. Mr. Gould reported the water production for the month of August 2020 was a 44/56 split and 7% greater than August 2019. Rainfall totals are predicted to fall 9% below the average, ending the rainfall season with a total of 25.52 inches. Mr. provided updates on Engineering and Operations activities.

ATTORNEY – Mr. Bunn gave a report about a lawsuit filed by L.A. Waterkeeper concerning the Los Angeles sewage treatment plants regarding the dumping of treated wastewater into the Pacific Ocean. The Los Angeles Superior Court compelled the State Water Resources Control Board to analyze whether this is wasteful and unreasonable as opposed to recycling the treated wastewater.

REPORTS OF COMMITTEES

Engineering Committee – Director Bodnar reported that the Committee had not met, however a teleconference meeting will be scheduled as needed.

Finance Committee – Director Tejeda reported that the Committee had not met, however; a teleconference meeting will be scheduled as needed.

Employee Relations Committee – Director Erickson reported that the Committee had not met; however, a teleconference meeting will be scheduled as needed.

Policy Committee – Director Erickson reported that the Committee had not met; however, a teleconference meeting will be scheduled as needed.

Community Relations/Water Conservation Committee – Director Tejeda reported that the Committee had not met; however, a teleconference meeting will be scheduled as needed.

Emergency Planning Committee – Director Raghavachary reported that the Committee had not met; however, a teleconference meeting will be scheduled as needed.

Executive Committee – Director Erickson reported that the Committee had not met; however, a teleconference meeting will be scheduled as needed.

DIRECTORS' ORAL REPORTS

Director Erickson – Reported that he visited the St. George Water Conservation Garden in the Red Hills Desert. Director Erickson thanked staff for the hard work involved in the publishing of the CVWD Cookbook.

Director Bodnar – Reported that he attended the American Water Works Association CA/NV Section Water Education Seminar held online August 19, 2020.

Director Tejeda – Reported that she attended an online Energy Committee workshop with the Association of California Water Agencies (ACWA).

Director Putnam – No Report

Director Raghavachary – No report

BOARD MEMBERS' REQUESTS FOR FUTURE AGENDA ITEMS – None

CLOSED SESSION – No reportable items

ADJOURNMENT

There being no other business to come before the Board, at 9:28 p.m., it was moved by Director Bodnar, seconded by Director Raghavachary and carried by a 5-0 roll-call vote that the meeting be adjourned to September 22, 2020, at 7:00 p.m.

AYES:

**Director Tejeda
Director Bodnar
Director Raghavachary
Director Erickson
Director Putnam**

NOES: None

APPROVED

Kerry D. Erickson
President

James Lee
Director of Finance & Administration

CASH DISBURSEMENT LIST

August 2020



<u>Check#</u>	<u>Check Date</u>	<u>Payable To</u>	<u>Description</u>	<u>Water Amount</u>	<u>Wastewater Amount</u>
0		CalPERS	PERS Contributions - July 2020	28,395.53	16,116.37
0		CalPERS	Annual fee - Social Security Administration 218	240.00	160.00
0		Southern California Edison	Power purchased - July 2020	33,125.30	475.00
0		Los Angeles County Public Works	Excavation permits	3,366.00	
41427	8/11/2020	Abe's Lock and Key	Replace locks, misc. keys made	375.84	125.27
41428	8/11/2020	ADS, LLC	Monthly sewer monitoring - July 2020		1,850.00
41429	8/11/2020	Affordable Generator Services, Inc.	Annual emergency generator inspection services	2,130.00	
41430	8/11/2020	Airgas National Carbonation	Well #2 - carbon dioxide rental tank - August 2020	57.00	
41431	8/11/2020	American Water Works Assoc.	AWWA Wes Seminar virtual training event - August 19, 2020	702.75	172.25
41432	8/11/2020	Anawalt Lumber & Materials Co.	Misc. hardware - July 2020	223.98	74.65
41433	8/11/2020	Anderson's Electric Gates	Glenwood plant - install pedestrian gate	497.00	203.00
41434	8/11/2020	Apex Manufacturing Solutions	E-995 - SCADA programming - algorithm blending modification	2,755.00	
41435	8/11/2020	APTwater, LLC	Nitrate Plant maintenance - October 2019 - June 2020	20,230.00	
41436	8/11/2020	Aqua - Metric Sales, Co.	Meter replacement program - 300 - 3/4"meters, 50 - 1" meters	58,681.06	
41437	8/11/2020	ARC	Monthly MPS billing - July 2020	606.75	202.25
41438	8/11/2020	AT&T	Voice Communication - July 2020	300.05	235.75
41439	8/11/2020	Regino Avalos	Monthly landscape maintenance - July 2020, brush removal at Edmund #2	3,234.03	195.97
41440	8/11/2020	BC Laboratories, Inc.	Water analysis - July 2020	3,797.70	
41441	8/11/2020	BC Laboratories, Inc.	Water analysis - July 2020	3,277.50	
41442	8/11/2020	BC Laboratories, Inc.	Water analysis - July 2020	3,056.00	
41443	8/11/2020	Best Drilling & Pump, Inc.	E-1015 - Well #11 rehabilitation - progress payment #1	45,980.00	
41444	8/11/2020	Cannon	S-962 - La Granada Lift Station design services - July 2020		9,778.15
41445	8/11/2020	CCS Interactive, Inc.	Monthly website hosting - August 2020	170.00	
41446	8/11/2020	City of Glendale	Glendale Water Use Tax - May & June 2020	38,299.21	
41447	8/11/2020	City of Glendale	Well #16 - monthly water purchase - January 2020	11,537.34	
41448	8/11/2020	City of Glendale Water & Power	Power purchased - June 2020	32,248.18	83.01
41449	8/11/2020	City of L.A. Bureau Sanitation	Sewerage facilities charges - May/June 2020		7,275.24
41450	8/11/2020	Clark Pest Control, Inc.	Glenwood, Mills, Encinal, Well 9 - monthly pest service - July 2020	228.75	21.25
41451	8/11/2020	Colonial Life & Accidents Ins.	Employee paid insurance - August 2020	228.67	
41452	8/11/2020	County of Los Angeles	District portion within Los Angeles County LAFCO fees	5,417.07	

41453	8/11/2020	Do-it Center	Misc. hardware - July 2020	61.05	24.00
41454	8/11/2020	ESRI, Inc.	Annual primary maintenance renewal	2,000.00	
41455	8/11/2020	Eurofins Eaton Analytical Inc.	Water analysis - July 2020	1,129.00	
41456	8/11/2020	Extreme Safety, Inc.	N95 masks with valves - 300 total	762.09	311.27
41457	8/11/2020	Foothill Car Wash, Lube & Oil	Unit #45 - oil change	64.25	39.38
41458	8/11/2020	Gilmore Heating & Air Conditioning	Office - A/C diagnostic	87.78	26.22
41459	8/11/2020	Glendale Medical Group	Covid-19 testing various employees	595.00	280.00
41460	8/11/2020	Grace Environmental Services	Well # 2 monitoring assistance - June 2020	7,547.26	
41461	8/11/2020	Grainger	Stock - misc. supplies - July 2020	206.28	83.53
41462	8/11/2020	Great America Leasing Corp.	Kyocera copiers lease - August 2020	898.76	863.50
41463	8/11/2020	Gsolutionz Professional Services	Voice communications - August 2020	185.62	145.83
41464	8/11/2020	Harper & Associates Eng., Inc.	E-1018 - Rosemont rehab. design services - June 2020	4,730.00	
41465	8/11/2020	Highroad Information Technology	Monthly support services - August 2020	4,739.30	970.70
41466	8/11/2020	Home Depot Credit Services	Misc. hardware - July 2020	548.17	166.46
41467	8/11/2020	John Robinson Consulting, Inc.	E-995 - consulting services - June 2020	3,165.00	
41468	8/11/2020	John Robinson Consulting, Inc.	E-995 - consulting services - July 2020	2,340.00	
41469	8/11/2020	J's Maintenance Service, Inc.	Janitorial services - July 2020	807.12	254.88
41470	8/11/2020	Lagerlof, LLP	Legal services - July 2020	6,791.24	1,490.76
41471	8/11/2020	Legend Pump & Well Service, Inc.	E-1013 - Booster 32 & 33 - July 2020 - progress payment #1	34,356.75	
41472	8/11/2020	Liebert Cassidy Whitmore	Annual Employment Relations Consortium membership	3,665.40	804.60
41473	8/11/2020	Logan Supply Co., Inc.	Misc. supplies - July 2020	91.53	95.25
41474	8/11/2020	Mc Fence Co.	Well #11 - install new chain link fence	1,400.00	
41475	8/11/2020	Office Depot	Misc. supplies - July 2020	228.63	211.04
41476	8/11/2020	O'Reilly Auto Parts	Misc. parts - July 2020	55.37	20.85
41477	8/11/2020	Paper Cuts, Inc.	Paper shredding - July 2020	2.60	2.40
41478	8/11/2020	Paveco Construction, Inc.	Paving - various locations	15,151.33	
41479	8/11/2020	Plumbers Depot, Inc.	Unit #53 - "Y" eliminator plug		328.28
41480	8/11/2020	Red Wing Business Advantage	Mortenson - safety boots	182.96	74.73
41481	8/11/2020	Analisa Reinoso	Refund check - 2342 Mountain	88.81	
41482	8/11/2020	Royal Industrial Solutions	E-939 - A/B controller, power source and cabinet	2,084.09	110.86
41483	8/11/2020	Simpler Systems	Monthly maintenance - August 2020	500.00	
41484	8/11/2020	Southwest Hydrotech	Well #16 - repair pressure reducing valve	2,635.91	
41485	8/11/2020	Spectrum Business	Office - data communications - August 2020	2,132.11	749.12
41486	8/11/2020	Spectrum Business	Lowell - data communications - August 2020	1,576.08	553.74
41487	8/11/2020	Springbrook Software LLC	Annual Civic pay online subscription	1,832.00	
41488	8/11/2020	Steven Engineering, Inc.	Four new SCADA radios	3,104.47	875.62
41489	8/11/2020	Sully-Miller Contracting Co.	Cold mix for temporary AC repairs - 8.24 tons	563.43	
41490	8/11/2020	Vidadi Sultanov	Refund check - 2875 Community	95.89	

41491	8/11/2020	The Gas Company	Glenwood - gas purchased - August 2020	16.40	5.18
41492	8/11/2020	Toro's Lawnmower & Garden	Unit #40 - fuel filter for sewer easement machine	4.99	26.40
41493	8/11/2020	Traffic Management Products, Inc.	Stock - 30 new safety cones		491.18
41494	8/11/2020	Underground Service Alert	Underground notifications - July 2020	301.95	142.09
41495	8/11/2020	Univar Solutions USA, Inc.	Sodium hypochloride - Glenwood 797 gal., Mills 745 gal	4,247.62	
41496	8/11/2020	UPS	Plant - misc. shipping charges	11.28	10.82
41497	8/11/2020	Brent Vinson	Refund check - 4647 Marellen	2.14	
41498	8/11/2020	Vision Service Plan Co.	Group Vision - August 2020	342.72	228.48
41499	8/11/2020	Water Wise Consulting, Inc.	Water Audit - 2724 Pinelawn Drive	175.00	
41500	8/11/2020	Western Water Works	Stock - misc. supplies - July 2020	87.60	
41501	8/14/2020	Clean Nest Flood Restoration	Mills house - sewer back up (To replace check #41331 July 2020)	795.00	265.00
41502	8/20/2020	Cash - Petty Cash	Reimbursement for petty cash	352.07	137.88
41503	8/20/2020	County Clerk of Los Angeles	E-1018 - CEQA processing fee	75.00	
41504	8/20/2020	Grainger	Misc. supplies - July 2020	15.88	14.67
41505	8/20/2020	Quadient Leasing USA, Inc.	Postage machine lease - September to December 2020	188.66	181.25
41506	8/24/2020	Wendy Holloway	Health reimbursement	20.49	13.66
41507	8/24/2020	Nemesciano Ochoa	Wellness reimbursement	225.00	75.00
41508	8/25/2020	ACWA Joint Powers Ins. Authority	Group Health - September 2020	41,552.63	26,682.45
41509	8/25/2020	ACWA/JPIA	Quarterly Worker's Comp - April 2020 through June 2020	7,541.78	5,027.86
41510	8/25/2020	Aflac	Employee paid insurance - August 2020	1,364.30	
41511	8/25/2020	All American Landscape Co.	Office - landscape maintenance - August 2020	255.50	94.50
41512	8/25/2020	Ameripride Uniform Services, Inc.	Uniform rentals - July 2020	740.81	221.28
41513	8/25/2020	ARC	E-1018 Rosemont Reservoir Rehab. - 10 Spec. Books	410.83	
41514	8/25/2020	AT&T Mobility	Voice communication - July 2020	1,380.27	412.28
41515	8/25/2020	Citibank	Misc. supplies - Costco - July 2020	190.26	175.62
41516	8/25/2020	City of Glendale Water & Power	Power purchased - July 2020	36,296.79	
41517	8/25/2020	County Sanitation District #2	Green waste refuse charge	939.13	
41518	8/25/2020	Cypress Ancillary Benefits	Group Dental - September 2020	2,802.06	1,337.89
41519	8/25/2020	Direct Connection	CVWD business cards for Sandoval, Wood	83.60	80.32
41520	8/25/2020	Extreme Safety, Inc.	Misc. safety equipment	154.90	63.27
41521	8/25/2020	Foothill Municipal Water	Water delivery - July 2020	365,672.35	
41522	8/25/2020	Harper & Associates Eng., Inc.	E-1018 - Rosemont rehab. design services - July 2020	5,550.00	
41523	8/25/2020	J. De Sigio Construction, Inc.	Refund for flood meter	925.00	
41524	8/25/2020	LA Dept Water and Power	Power purchased - August 2020	51.54	
41525	8/25/2020	Danielle Schulte Lewis	Refund check - 3363 Mills	97.84	
41526	8/25/2020	Lincoln Financial Group	Group Life & Disability Insurance - September 2020	832.24	554.82
41527	8/25/2020	Napa Auto Parts	Unit #35 - Emergency Generator - battery replacement	314.74	
41528	8/25/2020	Quadient Finance USA, Inc.	Reimburse postage machine	357.00	343.00

41529	8/25/2020	Shell	Gasoline purchased - July 2020	1,252.97	374.26
41530	8/25/2020	Steven Engineering, Inc.	Repair 2 Phoenix contract radios	381.06	56.94
41531	8/25/2020	The Gas Company	Office - gas purchased - August 2020	22.01	6.95
41532	8/25/2020	Total Graphics	Unit #58 & #59 - CVWD logo and markings	99.20	60.80
41533	8/25/2020	Tri-Xecutex Corp.	Remote access charge - alarm system maintenance	56.80	23.20
41534	8/25/2020	Univar Solutions USA, Inc.	Sodium hypochloride - Glenwood 720 gal., Mills 660 gal	3,508.00	
41535	8/25/2020	Wells Fargo Card Services	Colby - monthly email charges, working lunches	181.30	27.72
41536	8/25/2020	Wells Fargo Card Services	Gould - misc. computer hardware, retirement luncheon	497.11	142.35
41538	8/25/2020	Wells Fargo Card Services	Lee - monthly computer charges, Zoom meetings, postage, plexi glass	535.11	108.07
41539	8/25/2020	Wells Fargo Card Services	Maxwell - safety lunches, working dinner, sewer line services, care pkg.	309.67	323.29
41540	8/25/2020	Wells Fargo Card Services	Ochoa - leadership subscription, shutterfly, working dinners, replace cell	1,865.33	227.03
41541	8/25/2020	Westlake Ace Hardware	Misc. hardware - July 2020	30.62	
41542	8/27/2020	Highroad Information Technology	C-1010 - IT Network - upgrade cabling & data runs	30,381.17	7,857.80
41543	8/27/2020	Highroad Information Technology	C-1010 - IT Network - upgrade surveillance cameras	23,126.87	6,021.60
41544	8/27/2020	Majestic Fire Protection	Glenwood - annual fire door testing	296.25	98.75

Total Disbursements for August 2020

\$ 942,739.71 \$ 97,364.84

Payroll Report

Directors	1,080.00
Office Regular Payroll	128,958.00
Office OT	227.00
Plant Regular Payroll	108,996.00
Plant OT & Standby	6,205.00
Employer Payroll Taxes	17,231.00
Payroll Service Charges	466.00
Total Payroll for August 2020	<u>263,163.00</u>

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 1

September 22, 2020

To: Honorable President and Members of the Board of Directors

From: Nem Ochoa, P.E. – General Manager

Subject: Staffing Plan

ACTION ITEM:

Approve the staffing plan consistent with 2020 Strategic Plan Goals

BACKGROUND:

Over the past two years, the District has made organizational strides to become more efficient in the way it operates and in the way it provides water and wastewater services to the community. In the most recent budget cycle, the planned reductions in operational costs were reflected in a 7% year-over-year savings in the current fiscal year's budget as compared to the previous year's budget. The 2020 Strategic Plan reinforces the District's vision of becoming more cost efficient by streamlining roles and responsibilities throughout the organization. The strategic plan also calls out the framework for organizational sustainability through succession planning and career development for staff. This past week, the District successfully completed the issuance of \$5M in bonds designated for construction projects that meet the District's infrastructure reliability goals. The staffing plan described herein supports these efforts; and since its inception two years ago, it has enabled the District to meet the following strategic goals:

- Cost-Efficiency / Fiscal Responsibility
- Organizational Sustainability/Succession Planning
- Infrastructure Reliability
- Exceptional Customer Service
- Employer & Workforce Excellence

DISCUSSION:

The following staffing changes address succession planning and/or expanded roles and responsibilities needed to meet a strategic plan goal. Table 1 below lays out the staffing change (title), the expanded responsibilities (compared to the prior title), compensation adjustment, and the reasoning for the recommended change based on the strategic plan. In anticipation of retirements (in the near future) and the recent issuance of the \$5M bond, the proposed staffing plan is recommended for adoption immediately and implemented at the discretion of the General Manager.

Table 1. Proposed Positions in Staffing Plan

Current Position	New Position/ Succession Ladder¹	Expanded / Expected Responsibilities	Salary Range (%Change)	Applicable Strategic Planning Goal(s)
Senior Engineer	Engineering Manager	- Expanded role in managing Engineering Dept. - Increased oversight of CIP planning, design and implementation, and asset management - Increased interaction with external stakeholders	+10%	Succession Planning, Infrastructure Reliability, Regional Collaboration & Synergy
Assistant Engineer	Associate Engineer	- Expanded role of managing consultants and contracts, asset management, water quality and operations	+10%	Succession Planning, Infrastructure Reliability, Asset Management, Operations
Customer Service Rep	Customer Service Lead	- Expanded role in supervision of staff - Expanded role of customer service programming	+10%	Succession Planning, Exceptional Customer Service
Operations Coordinator	Operations Coordinator II	- Expanded role in asset management, procurement, and inventory - Expanded role in data analysis and optimization	+10%	Efficiency Through Technology, Operational Reliability
Customer Service Manager	Management Analyst	- Support all administrative and public outreach - Analytical support including database management, benefit-cost analyses, etc.	-7.5%	Succession Planning, Efficiency Through Technology, Employer & Workforce Excellence
Senior Engineering Tech	Project Coordinator	- Administrative support for Eng. Dept., CIP implementation, development projects and grant coordination	-25%	Infrastructure Reliability, Efficiency Through Technology

1. Only one (1) FTE will fill either the current position or new position at one time.

RECOMMENDATION:

Approve the staffing plan consistent with the 2020 Strategic Plan Goals.

ENVIRONMENTAL REVIEW:

Not applicable

FUNDING AVAILABILITY:

Not applicable.

Submitted by:

A handwritten signature in blue ink, appearing to read "Nem Ochoa", is written over a horizontal line.

Nem Ochoa, P.E.
General Manager

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 2
September 22, 2020

To: Honorable President and Members of the Board of Directors
From: Nem Ochoa – General Manager
Subject: **Proposition 218 Scheduling Discussion**

ACTION ITEM:

Proposition 218 Scheduling Discussion – Discuss scheduling as it relates to a potential Proposition 218 Notice.

BACKGROUND:

At the April 14, 2020 Board meeting, the Board directed staff to postpone the Proposition 218 Notice for Water and Wastewater Charges due to the Covid-19 pandemic until further notice.

At the September 8, 2020 Board meeting, the Board directed staff to provide a preliminary FY 2019-20 financial close-out summary to better inform a discussion about scheduling a Proposition 218 notice.

FY 2019-20 ESTIMATED FINANCIALS

The Water Enterprise had been budgeted to draw \$720K from reserves. It is estimated that \$162K will be added to reserves. Water sales accelerated in tandem with water production through the last several months of the fiscal year, improving the outlook projected in Q3. Although water sales revenue was still \$468K less than budgeted, this and other shortfalls such as Other Income and Construction Revenue were mitigated by Investment Income for a net shortfall in revenue of \$355K. While revenues were lower than budgeted, Operating and Capital expenses were reduced, and they were \$873K and \$389K lower than budgeted, respectively. This was the cumulative impact of reductions in Labor & Benefits, Operating Cost, and CIP/Capital Outlays, along with the decision not to remit an OPEB contribution this year.

The Wastewater Enterprise has been budgeted to draw \$699K from reserves. It is estimated that \$338K will be drawn from reserves. Wastewater user charge sales tracked expectations, and revenue is estimated to be \$112K less than budgeted. The City of LA Treatment Cost was significantly higher due to a reconciliation bill from FY 2018-19. Due to the cumulative impact of reductions in Labor & Benefits and CIP/Capital Outlays, along with the decision not to remit an OPEB contribution this year, the overall draw on reserves for the Wastewater Enterprise was significantly mitigated.

A copy of the FY 2019-20 Estimated Financials is enclosed.

LONG-TERM IMPACT OF RATES

The District's operations today are supported by rates developed over years past, and today's rates will support operations over future years. This includes operating and capital needs, along with commitments, whether financial covenants, reserve targets, or retiree benefits.

An illustration of this relationship is enclosed.

PROPOSITION 218 SCHEDULE & NOTICE

Proposition 218 schedule alternatives and a draft notice are enclosed.

RECOMMENDATION:

Discuss Proposition 218 schedule alternatives and determine best course of action.

Submitted by:

A handwritten signature in blue ink, appearing to read "Nem Ochoa", is written over a horizontal line.

Nem Ochoa
General Manager

Attachment(s):

1. FY 2019-21 Estimated Year-End Financials
2. Impact of 1%
3. Alternative Prop 218 Schedules
4. Draft Proposition 218 Notice

Attachment 1

WATER ENTERPRISE		4th Quarter Estimated Actuals			
Description		Annual Budget	4th Quarter	Variance	% of Total Budget
Revenue					
Water Sales - Fixed		\$ 3,023,931	\$ 3,089,198	\$ (65,267)	102%
Water Sales - Metered		9,141,201	8,672,894	468,307	95%
Investment Income Water		200,000	366,455	(166,455)	183%
Other Income Water		160,000	121,952	38,048	76%
Construction Revenue		452,500	371,647	80,853	82%
Revenue		\$ 12,977,632	\$ 12,622,146	\$ 355,486	97%
Expenses					
Labor & Benefits		\$3,376,264	\$3,141,820	\$234,444	93%
Imported Water (Foothill)		3,332,018	3,226,941	105,077	97%
Imported Water (Glendale)		157,850	23,426	134,424	15%
Power Cost		695,671	719,330	(23,659)	103%
Operating Cost		2,310,039	1,887,015	423,024	82%
Expenses		\$ 9,871,842	\$ 8,998,532	\$ 873,310	91%
Debt Service		\$ 539,645	\$ 539,645	\$ -	100%
Infrastructure		\$2,877,500	\$2,737,800	\$139,700	95%
Capital Outlays & Equip		308,370	158,600	149,770	51%
OPEB		100,000		100,000	0%
Total CIP & OPEB		\$3,285,870	\$2,896,400	\$389,470	88%
Net Revenue minus Expenses - Change in Water Reserve		(\$719,725)	\$187,569		

WASTEWATER ENTERPRISE		4th Quarter Estimated Actuals			
Description		Annual Budget	4th Quarter	Variance	% of Total Budget
Revenue					
Wastewater - User Charges		\$ 3,305,000	\$ 3,187,260	\$ 117,740	96%
Interest Income Wastewater		500	1,196	(696)	239%
Other Income Wastewater		7,500	10,464	(2,964)	140%
Construction Revenue		29,000	30,605	(1,605)	106%
Revenue		\$ 3,342,000	\$ 3,229,524	\$ 112,476	97%
Expenses					
Labor & Benefits		\$1,710,943	\$1,426,803	\$284,140	83%
City of LA Sewer Services		1,426,000	1,640,595	(214,595)	115%
Operating Cost		449,000	440,315	7,530	98%
Expenses		\$ 3,585,943	\$ 3,507,713	\$ 77,075	98%
Infrastructure		\$175,000	\$35,854	\$139,146	20%
Capital Outlays & Equip		80,000	23,698	56,302	30%
OPEB		200,000		200,000	0%
Total CIP & OPEB		\$455,000	\$59,552	\$395,448	13%
Net Revenue minus Expenses - Change in Wastewater Reserve		(\$698,943)	(\$337,742)		

Attachment 2

Impact of 1% Over Time

Assumes 1% = \$100,000 for illustrative purposes

Assumes 1% = \$100,000 for illustrative purposes									Today	Tomorrow			
FY	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
2012-13	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
2013-14		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
2014-15			\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
2015-16				\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
2016-17					\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
2017-18						\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
2018-19							\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
2019-20								\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
2020-21									\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Annual	\$100,000	\$200,000	\$300,000	\$400,000	\$500,000	\$600,000	\$700,000	\$800,000	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000
Cumulative	\$100,000	\$300,000	\$600,000	\$1,000,000	\$1,500,000	\$2,100,000	\$2,800,000	\$3,600,000	\$4,500,000	\$5,400,000	\$6,300,000	\$7,200,000	\$8,100,000

Attachment 3

Prop 218 Notice Sample Timeline

September 2020

Month for Public Hearing & Approval	Board Approve Prop 218 Notice (Closes Board Mtg)	Send Prop 218 (Start 45-Day Review Period)	Send Prop 218 Due (On the Monday before Mtg)	Public Hearing	Board Approval
November	Tuesday, September 22, 2020	Friday, September 25, 2020	Monday, November 9, 2020	Tuesday, November 10, 2020	Tuesday, November 24, 2020
December	Tuesday, October 13, 2020	Friday, October 23, 2020	Monday, December 7, 2020	Tuesday, December 8, 2020	Tuesday, December 22, 2020
January	Tuesday, November 24, 2020	Friday, November 27, 2020	Monday, January 11, 2021	Tuesday, January 12, 2021	Tuesday, January 26, 2021
February	Tuesday, December 22, 2020	Friday, December 25, 2020	Monday, February 8, 2021	Tuesday, February 9, 2021	Tuesday, February 23, 2021
March	Tuesday, January 19, 2021	Friday, January 22, 2021	Monday, March 8, 2021	Tuesday, March 9, 2021	Tuesday, March 23, 2021
April	Tuesday, February 23, 2021	Friday, February 26, 2021	Monday, April 12, 2021	Tuesday, April 13, 2021	Tuesday, April 27, 2021
May	Tuesday, March 23, 2021	Friday, March 26, 2021	Monday, May 10, 2021	Tuesday, May 11, 2021	Tuesday, May 25, 2021
June	Tuesday, April 20, 2021	Friday, April 23, 2021	Monday, June 7, 2021	Tuesday, June 8, 2021	Tuesday, June 22, 2021

Attachment 4



PUBLIC NOTICE OF PROPOSED INCREASE IN WATER AND WASTEWATER RATES AND CHARGES

Public Hearing to be held on Tuesday, **June 9, 2020, at 6:00 p.m.**

**Crescenta Valley Water District is considering an increase of up to 7% in water rates
and up to 7% in wastewater rates**

The District recognizes that Covid-19 has put a significant burden on some of its customers. Nevertheless, as we have communicated over the past several months, the District must keep pace with increasing costs. First, water rates have not kept up with the District's costs, and the difference has been taken from reserves. If this continues, the District will have insufficient reserves for emergencies, such as last year's main break on Pennsylvania Avenue. Second, much of the District's infrastructure is reaching the end of its useful life—about 80 years—and must be replaced. Third, the District has been assessed with a greater than 60% increase in wastewater charges from the City of Los Angeles over the last 2 years. A rate increase is needed to cover rising maintenance costs and to replace aging infrastructure. By keeping rates and charges in line with expenses and the replacement of infrastructure costs, the District will remain financially stable, which will allow us to adequately maintain facilities and continue providing reliable service. Delaying rate increases, even for a few months, means looking at a higher percentage increase later that will be necessary to make up for the lost revenue.

CVWD recognizes that COVID-19 can impact the ability to make timely payments; thus, late fees and water shut-offs have been suspended until further notice

WATER BILL IMPACT (IF APPROVED)	WASTEWATER BILL IMPACT (IF APPROVED)
If new rates are approved, a water bill for a typical residence with a 3/4-inch water meter using 17 units of water (17,000 gallons) during a two-month billing period would increase by \$11.38, from \$162.78 to \$174.16.	If new rates are approved, a wastewater bill for a typical residence with a 3/4-inch meter using 17 units of water (17,000 gallons) during a two-month winter billing period would increase by \$5.73, from \$80.60 to \$86.33.

TO ESTIMATE YOUR PROPOSED NEW WATER BILL GO TO WWW.CVWD.COM

CVWD provides both Water and Wastewater services in the community. Not all customers receive both services from the District. This notice applies to all customers who pay their water and/or wastewater bills to CVWD. Any rate increases would apply to each bill paid to CVWD for the services we provide to your residence.

Effective Date: If approved, the increased rates will become effective on all rates and charges on any bill generated after **July 1, 2020**

WHAT IS CVWD DOING TO REDUCE COSTS?

The District is committed to efficient operations and continuously evaluates every opportunity to reduce expenses. CVWD has reduced operational expenses by decreasing the number of full-time employees, cross-training personnel to limit staffing levels, renegotiating long-term contracts, reducing benefits costs, and deferring maintenance and replacement of the District's aging facilities for multiple years.

WHY IS THERE A NEED FOR RATE INCREASES?

Here are the main reasons that CVWD will be adjusting the rates and charges:

MAJOR COST DRIVERS:	2020-2021	
	3-YEAR AVERAGE	PROJECTED INCREASE
Imported Water (Metropolitan Water District / Foothill Municipal Water District)	5%	5%
Labor (Cost of Living, Health Insurance)	5%	4%
New Construction (Infrastructure)	3%	3%
Power (Combined SoCal Edison & Glendale Water & Power)	4%	5%

Local water supply – A lower yield of our groundwater supplies has required CVWD to buy more expensive supplemental water from Metropolitan Water District, which imports water from Northern California and the Colorado River.

Infrastructure maintenance and improvements – Aging pipes, reservoirs, pumps, wells and other District assets that are 80 years old or older need replacement to avoid critical system failures. Capital improvements enhance water system reliability, improve water quality, and reduce higher construction costs into the future.

Essential services – The Operations Department monitors water treatment, water demand, power costs, replaces meters, and makes emergency repairs. Customer Service addresses all customer needs, including service requests and analyzing usage to determine if a customer has a leak. Increases for major cost drivers are shown in the table above.

Wastewater services – The wastewater system's primary expense is the cost paid to the City of Los Angeles for treating the wastewater that is collected in the District's service area and sent to Los Angeles' treatment plant. The City of Los Angeles fees have increased by 65% over the last 2 years. Other major cost drivers include the maintenance of the wastewater collection system and the sewer interceptor line that transports all of CVWD's wastewater to the City of Los Angeles treatment plant in Glendale, California.

PROPOSED WATER RATE CHANGES

Water Meter Rates and Charges

Meter charges (Water Service Charges) ensure that water is available for use at your tap whenever you need it, much like phone, cable, power or other utilities. Also known as fixed charges, they help pay for costs associated with operating and maintaining CVWD's water treatment and delivery system, and they are based on meter size.

<u>Meter Charges (per bi-monthly period) by size</u>	<u>Current Rate</u>	<u>Proposed Rate Effective 7/1/2020</u>
¾"*	\$54.10	\$57.89
1"	\$80.69	\$86.34
1 ½"	\$147.19	\$157.49
2"	\$227.01	\$242.90
3"	\$479.92	\$513.51
4"	\$852.17	\$911.82

* The majority Single Family Homes have a ¾" meter.

Usage Rates And Charges

Usage rates cover costs that vary based on the amount of water delivered, such as imported water and electricity costs. These rates are separated into three tiers for single-family residential customers. The rates are uniform for multi-family, commercial and schools. The rates are separated into two tiers for irrigation customers. All rates are based on bi-monthly usage (1 unit = 1,000 gallons).

<u>Usage Charges (per bi-monthly Period)</u>	<u>Current Rate (per unit)</u>	<u>Proposed Rate Effective 7/1/2020</u>
Tier 1 (1 to 10 units)	\$5.17	\$5.53
Tier 2 (11 to 26 units)	\$8.14	\$8.71
Tier 3 (27 units and up)	\$12.29	\$13.15
<u>Multi-Family, Commerical, Institutional, and Schools</u>	\$7.33	\$7.84

Fire Protection Charges*

Fire protection charges are for private fire services and provide readiness for fire protection.

<u>Fire Protection Charges (per bi-monthly period) by size</u>	<u>Current Rate</u>	<u>Proposed Rate Effective 7/1/2020</u>
1"	\$15.85	\$16.96
2"	\$24.46	\$26.17
3"	\$44.05	\$47.13
4"	\$77.83	\$83.28
6"	\$199.05	\$212.98
8"	\$408.15	\$436.72
10"	\$722.67	\$773.26

*Fire protection charges and irrigation rates typically do not apply to Single Family Homes.

Irrigation*

	<u>Current Rate (per unit)</u>	<u>Proposed Rate Effective 7/1/2020</u>
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Tier 1 (1 to 80 units)	\$5.66	\$6.06
Tier 2 (81 units and above)	\$10.89	\$11.65

Service addresses located within the Glendale annex area of La Crescenta pay a \$0.40 tax per 2-month bill, collected by CVWD and paid to the City of Glendale (Glendale Utility Tax).

PROPOSED WASTEWATER SERVICE CHANGES

SEWER: HOW IS MY WASTEWATER BILL DETERMINED?

The amount of wastewater put into the District's collection system is estimated based on the prior year's winter water usage, when water is used less. This usage — up to a two-month maximum of 20 units (20,000 gallons) for a single-family residence — is used to determine the bill for the next 12 months.

Winter Water Usage consists of the 2-month billing period that falls in the range of January through March, depending on the billing cycle.

<u>Single-Family Residence (per bi-monthly period)</u>	Current Rate	Proposed Rate Effective 7/1/2020
Service Charge	\$47.79	\$51.14
Usage Rate - maximum of 20 units based on prior year average winter water use. (New Single Family Residence accounts are assessed based on 8 units until winter water use can be established.)	\$1.93 (Per Unit)	\$2.07 (Per Unit)

<u>Multi-Family Residence (per bi-monthly period)</u>	Current Rate	Proposed Rate Effective 7/1/2020
Service Charge per Equivalent Dwelling Unit (EDU)	\$31.25	\$33.44
Usage Rate - maximum of 15 units per EDU based on prior year average winter water use	\$2.15 (Per Unit)	\$2.30 (Per Unit)

<u>Commercial / Institutional (per bi-monthly period)</u>	Current Rate	Proposed Rate Effective 7/1/2020
Usage Rate per 1,000 gallons	\$5.10 (Per Unit)	\$5.46 (Per Unit)
Minimum Charge	\$31.25	\$33.44

<u>All Schools (per bi-monthly period)</u> ADA (Average Daily Attendance)	Current Rate	Proposed Rate Effective 7/1/2020
Elementary School – Usage Rate per 100 ADA	\$84.86	\$90.80
Middle School – Usage Rate per 100 ADA	\$169.73	\$181.61
High School – Usage Rate per 100 ADA	\$254.59	\$272.41
High School – Customer Charge	\$31.25	\$33.44

Effective Date: If approved, the increased rates will become effective on all rates and charges on any bill generated after **July 1, 2020**.

PROTEST LETTERS:

Any CVWD customer or property owner within the CVWD water or wastewater service area may file a written protest of the proposed rate changes by sending a letter to: CVWD's main office, 2700 Foothill Boulevard, La Crescenta, CA 91214. A valid protest letter must include your name, a CVWD service address, a statement of protest, and an original signature. Only one written protest per parcel, filed by an owner or tenant, will be counted. For your convenience, there is a protest form available at www.cvwd.com. Electronic submittals of signed protest letters may be scanned and emailed to the District at customerservice@cvwd.com. All protests must be received at the address above no later than **June 9th, 2020 at 6:00 p.m.** Protest letters received prior to **June 5, 2020** at noon will be included in the agenda package distributed to the Board of Directors and posted online at www.cvwd.com.

WHEN WILL THE CVWD BOARD OF DIRECTORS CONSIDER ADOPTION OF NEW RATES AND CHARGES?

The Public Hearing will be held on **Tuesday, June 9, 2020, at 6:00 p.m.** Pursuant to the provisions of Executive Order N-29-20 issued by Governor Gavin Newsom on March 18, 2020, the public may not attend the meeting in person. The public hearing will be held via teleconference only. The District will post this information for the Public Hearing on the website, but you may call the District at (818)-248-3925 to obtain the information. The Board of Directors will meet on **June 23, 2020 at 7:00 p.m.** to consider the proposed rate changes, either in person or through teleconference. The Board may adopt, reject, or modify the proposed rate structure. The Board cannot legally increase rates and charges more than indicated in this notice.

Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by contacting Christy Colby by phone or in writing to the District at (818) 248-3925 or customerservice@cvwd.com. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.

QUESTIONS?

This notice is also available on the CVWD website, www.cvwd.com. CVWD staff can assist in answering any questions about your bill between 8:00 a.m. and 4:30 p.m., Monday through Friday. If you have questions or need additional information, please call CVWD at (818) 248-3925 or e-mail customerservice@cvwd.com.

Crescenta Valley Water District
2700 Foothill Blvd.
La Crescenta, CA 91214

**IMPORTANT PROPOSED RATE
INFORMATION ENCLOSED**

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 3

September 22, 2020

To: Honorable President and Members of the Board of Directors

From: Brook Yared, M.S., P.E. – Senior Engineer

Subject: **Advertise for Bids - Water Main Replacement on the 2400-2500 Blocks of Janet Lee Dr. and 4300 Block of Rosemont Ave., Project E-1008**

ACTION ITEM:

Water Main Replacement on the 2400-2500 Blocks of Janet Lee Dr. and 4300 Block of Rosemont Ave., Project E-1008 Consideration and motion to authorize the General Manager to advertise for bids for the construction of approximately 2,300 lineal feet of pipeline replacement on the 2400-2500 Blocks of Janet Lee Dr. and 4300 Block of Rosemont Ave. with an engineer's estimate of \$704,000 and to find said project exempt from the provisions of CEQA.

BACKGROUND:

With the new bond financing becoming available for CIP projects over the next three years, the District's goal is to replace at least a mile of pipeline, that is 50 years or older, annually. These projects were included as part of the annual pipeline replacement projects within the FY 20/21 CIP budget. Currently, the existing pipeline on the 2400 and 2500 blocks of Janet Lee Dr. is 6-inch diameter steel pipe and was constructed in 1954. The existing pipeline on the 4300 Block of Rosemont Ave. is 8-inch steel pipe that has been in use since the 1930s. These pipelines have been in use well beyond their expected life and have each had a number leaks in recent years. In addition, the 2400 and 2500 blocks of Janet Lee Dr. water services were installed with yoke assemblies, which need to be replaced as part of the meter replacement project. The total amount of pipeline to be replaced will be 2,300 linear feet representing about half of the pipeline planned to be replaced this year.

DISCUSSION:

Staff has completed the design of the project, and plans have been submitted to the County of Los Angeles for permit approval. Staff anticipates receiving permit approval prior the bid opening date.

The anticipated project schedule is as follows:

- 9/22/20 – Advertise for Bids
- 10/21/20 – Bid Opening
- 10/27/20 – Award Contract
- December 2020 to March 2021 – Construction

Ms. Christina Olmedo will be the project manager, and construction management services will be selected at a later date to provide field coordination and inspection. The construction cost estimate for the project is \$704,000, and the entire project costs including materials, soils engineering, proposal advertising, staff engineering, inspection services, and contingencies are estimated at \$1,020,000.

RECOMMENDATION:

It is staff's recommendation to authorize the General Manager to advertise for bids for the project. Staff will advertise the project in the McGraw-Hill Dodge Construction News and will send out plans to selected contractors.

ENVIRONMENTAL REVIEW:

This project is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301 of the CEQA Guidelines. This exemption covers the repair of existing facilities involving negligible or no expansion of existing use.

FUNDING AVAILABILITY:

There are sufficient funds available in the following account for the project:

Account Description	Amount
FY 19/20 Water CIP– Water Distribution – Annual Pipeline Replacement	\$2,300,000
Engineer's Cost Estimate for Contractor	<\$704,000>
Additional costs such as material purchase by CVWD, soils engineer, engineering & inspection labor costs & contingency	<\$316,000>
Total Cost Estimate	<\$1,020,000>
Amount Remaining in Water CIP – Distribution System – Annual Pipeline Replacement	\$1,280,000

Prepared by:



Christina Olmedo
Assistant Engineer

Attachments:

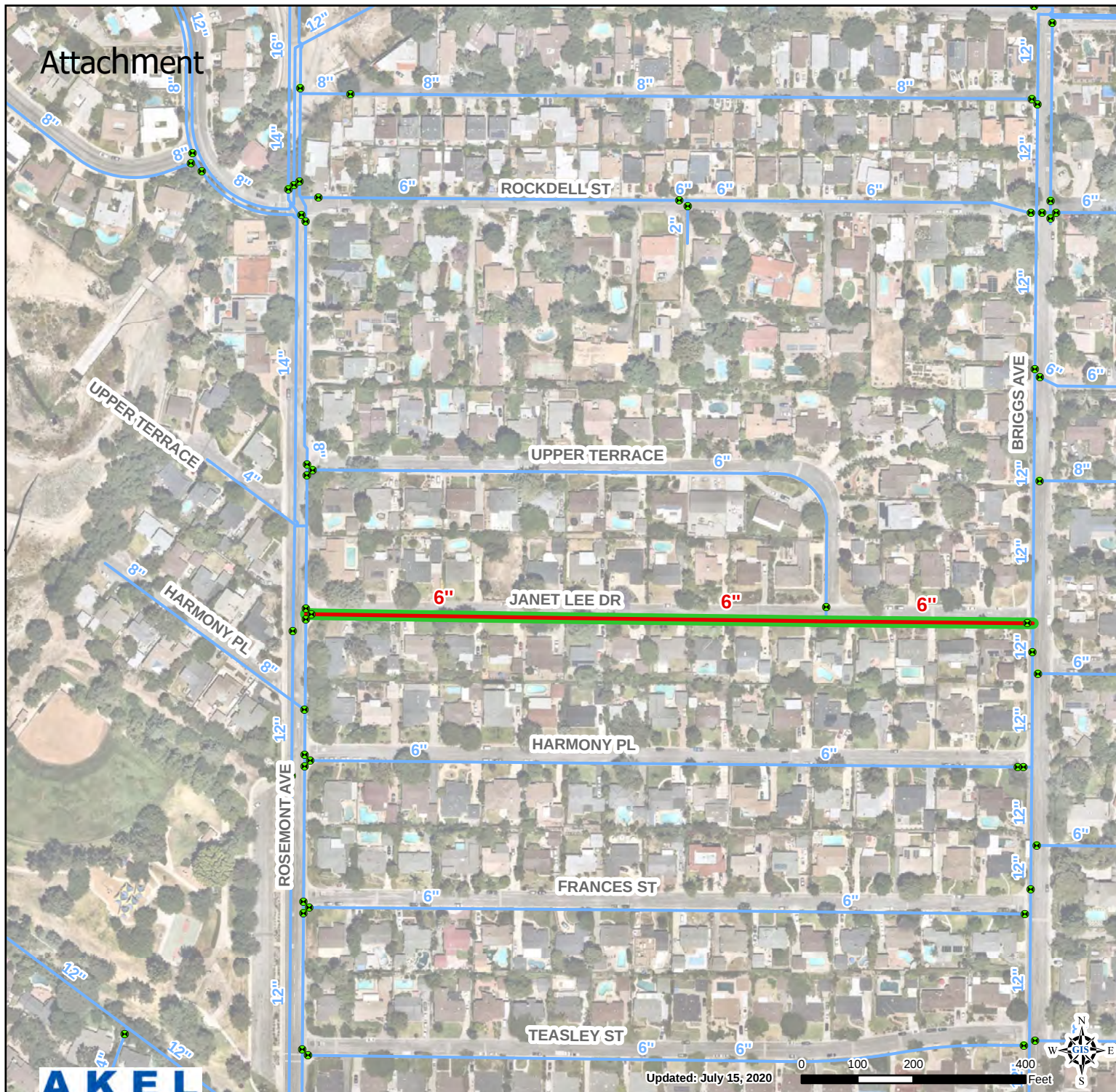
1. Project Location Map

Submitted by:



Brook Yared, M.S., P.E.
Senior Engineer

Attachment



Legend

— Pipeline to Replace

Replacement Segment ID

ID: Length, Year Inst., Material

NA: 1,300ft, NA, STD

Existing System

Tanks

Pump Stations

Wells

Valves

Active Mains

Project 1 Replacement

Total Length: 1,300 ft

PRELIMINARY

Year 1 - FY 20/21

Project 1

Pipeline Replacement
Schedule

Crescenta Valley Water District



Attachment



Legend

— Pipeline to Replace

Replacement Segment ID

ID: Length, Year Inst., Material

689: 650ft, 1929, STD

Existing System

 Tanks

 Pump Stations

 Wells

 Valves

— Active Mains

Project 2 Replacement
Total Length: 650 ft

PRELIMINARY

Year 1 - FY 20/21

Project 2

**Pipeline Replacement
Schedule**

Crescenta Valley Water District



CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 4
September 22, 2020

To: Honorable President and Members of the Board of Directors
From: David S. Gould, P.E. – Director of Engineering
Subject: Award of Contract - Professional Consulting Services for a SCADA Radio Communications Feasibility Study, Project E-1025

ACTION ITEM

Professional Consulting Services for a SCADA Radio Communications Feasibility Study, Project E-1025

– Consideration and motion to authorize the General Manager to enter into an agreement with Systems Integrated to provide professional consulting services for a SCADA Radio Communications Feasibility Study, Project E-1025 for a cost of \$63,640 and establish a contingency amount of \$6,364 (10% of contract) to cover the cost of unforeseen or additional work.

BACKGROUND:

CVWD's Supervisory Control and Data Acquisition (SCADA) system currently in use relies upon a radio communication network to transmit data from and to each site to the main SCADA system at the Glenwood Plant. This existing radio communication network, which was installed in 2011, is comprised of approximately 27 nodes and operates at the 900 MHz frequency. Each node currently includes one or more Phoenix Contact RAD-ISM-900-EN-BD wireless transceiver, and there are two (2) sites that use cellular modems for communications to the SCADA system. The current network was installed, configured, and supported by CVWD personnel with assistance from Phoenix Contact.

Approximately 12 months ago, we observed radio communication network instability, which has impacted CVWD operations. Some of the transceivers periodically experience a "lockup" condition caused by a buffer overrun. Although the exact cause of these buffer overrun events is unknown, it is believed that an increase in the use of the 900 MHz frequency by neighboring entities is one potential source. Additionally, on several occasions outright transceiver failure has occurred. As an interim solution, Allen Bradley RTU processors were installed at 18 of the nodes and configured to power cycle the wireless transceivers when communication loss has been detected. Although this automatic reset approach has significantly improved the overall performance of the radio network, it is not considered by the District to be a viable long-term solution.

DISCUSSION:

Staff prepared a request for proposal (RFP) for a feasibility study (study) with the objective to identify options for the installation of a new communication network to replace the existing radio network. Three (3) primary requirements for this new communication network are such that. First, it must reliably replace the existing radio network for both site-to-base and site-to-site communication. Secondly, it must include communication redundancy within the network. Finally, it must be extensible and compatible with both the existing Tesco RTU's and the Allen Bradley processors previously installed. It is the intention of the District to eventually replace the Tesco components with modern Allen Bradley components. However, until such time as this larger SCADA replacement project is completed, any proposed solution must support both architectures.

Staff sent out a request for proposal (RFP) to four (4) consulting firms to provide a radio communication network feasibility study. Each firm has prior experience specific to SCADA radio equipment and network design. Attached is the RFP that includes the scope of work and other project parameters.

On September 9, 2020, staff held a pre-proposal teleconference meeting with the consulting firms and provided information about CVWD, the scope of work and the proposed schedule. The proposals were due on September 16, 2020, and CVWD received three (3) proposals.

A committee was formed, which included Highroad IT, Raymond Dodge, Brook Yared, James Lee and David Gould, to review each proposal and ranked them in accordance to the following categories and weighted percentages: 1) Proposal, Project Concept & Scope of Work– 30%, 2) Previous work experience – 30%, 3) Expertise of project staff on similar projects – 20%, and 4) Costs of service – 20%.

As shown on the attached ranking matrix, Systems Integrated (SI) from Orange, CA received the highest ranking. SI's proposal highlighted their unique approach to the Study and their process to meet the needs of the District to improve CVWD's SCADA radio communications network.

Systems Integrated has been providing engineering services for the design and implementation of solutions for automated control for the water, power, and transportation industry since 1977. SI has designed communications networks to be cybersecure and meet the North American Electric Reliability Corporation (NERC) CIP current standards and received various certifications from Department of Homeland Security's Cybersecurity and Infrastructure Security Agency (CISA). SI currently is working with Los Angeles County on a radio survey for more than 1,500 intersections to develop a Los Angeles County Wide, wireless communications infrastructure, which includes CVWD service territory. SI has also provided similar services to Elsinore Valley Municipal Water District, City of Chula Vista and City of Riverside and City of Banning.

RECOMMENDATION:

It is staff's recommendation to award a consulting contract to Systems Integrated for \$63,640 and establish a contingency amount of \$6,364 (10% of contract) to cover the cost of unforeseen or additional work to prepare to a radio network feasibility study as they provided a cost-effective proposal to meet the District's needs.

ENVIRONMENTAL REVIEW:

N/A

FUNDING AVAILABILITY:

There are sufficient funds available in the following account for the project:

Account Description	Preliminary Costs
FY 20/21 Water CIP – Technology Radio Communication Network Upgrade	\$260,000
Consultant Contract	(\$63,640)
10% contingency	(\$6,364)
Contact Administration & Misc. Costs	(\$9,996)
Total Cost Estimate	(\$80,000)
Amount Remaining in Water CIP – Technology Radio Communication Network Upgrade	\$180,000

Prepared by:



David S. Gould, P.E.
Director of Engineering

Submitted by:



Nem Ochoa
General Manager

Attachments:

1. Request for Proposal
2. Systems Integrated Proposal
3. Consultant Ranking Table

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REQUEST FOR PROPOSAL

PROFESSIONAL CONSULTING SERVICES FOR A SCADA RADIO COMMUNICATIONS FEASIBILITY STUDY, PROJECT E-1025

PROPOSAL DUE DATE: September 16, 2020

INTRODUCTION:

The Supervisory Control and Data Acquisition (SCADA) system currently in use at the Crescenta Valley Water District (CVWD) relies upon a radio communication network that was installed in 2011. This network is comprised of approximately 27 nodes and operates at the 900 MHz frequency. Each node currently includes one or more Phoenix Contact RAD-ISM-900-EN-BD wireless transceiver as shown on the attached radio inventory list. In addition, there are two (2) sites that use cellular modems for communications to the SCADA system. The current network was installed, configured, and supported by CVWD personnel with assistance from Phoenix Contact.

Approximately 12 months ago radio network instability began to impact CVWD operations. Some of the transceivers periodically experience a “lockup” condition caused by a buffer overrun. Although the exact cause of these buffer overrun events is unknown, it is believed that an increase in the use of the 900 MHz frequency by neighboring entities is one potential source. Additionally, on several occasions outright transceiver failure has occurred. As an interim solution, Allen Bradley processors have been installed at 16 of the nodes and configured to power cycle the wireless transceivers when communication loss has been detected. Although this automatic reset approach has significantly improved the overall performance of the radio network, it is not considered by the District to be a viable long-term solution.

The objective of this study is to identify options for the installation of a new communication network to replace the existing radio network. Three (3) primary requirements for this new communication network are such that. First, it must reliably replace the existing radio network for both site-to-base and site-to-site communication. Secondly, it must include communication redundancy within the network. Finally, it must be extensible and compatible with both the existing Tesco architecture and the Allen Bradley processors previously installed. It is the intention of the District to eventually replace the Tesco components and with modern Allen Bradley components. However, until such time as this larger SCADA replacement project is completed, any proposed solution must support both architectures.

SCOPE OF WORK

The District is requesting a proposal from qualified radio network design firms to provide a network feasibility and design study. Critical elements of this study shall include:

- A. Consultant shall review and provide a summary with recommendations for stabilizing CVWD’s existing 900 MHz network.
- B. Consultant shall review and provide a summary with recommendations for the design of both the primary and backup communication network to be installed. The analysis shall include estimated costs for both installation and annual operation including licensed radio frequency costs, if necessary. Options under consideration include, but are not limited to the following:
 - a. Licensed Frequency
 - b. 900 MHz
 - c. 2.4 GHz
 - d. 4.9 GHz

- e. 5.8 GHz
 - f. Cellular
 - g. Cable – T1 Network
- C. Consultant shall review and provide recommendations for network hardware and configuration and implementation. Considerations shall include, but not be limited to the following:
- a. Transceiver and antenna design and placement
 - b. Redundancy control and monitoring
 - c. Use of self-healing mesh network devices
- D. Consultant shall review and provide recommendations on methodology for polling data from the RTU to the Main SCADA and associated costs including, but not limited to the following:
- a. Pulling data every 1 – 3 minutes
 - b. Wait till change in data and then send data to SCADA
- E. Consultant shall review and provide recommendations on type of equipment to meet the needs of the District's SCADA system and associated costs including, but not limited to the following:
- a. Review of vendors
 - b. Review of equipment
 - c. Power Supply/UPS requirements
 - d. Expected serviceable equipment lifetime
 - e. Equipment warranty
 - f. Enclosure recommendations
 - i. Size
 - ii. Location
 - iii. Required clearances
 - iv. Interference avoidance
 - v. Ventilation
 - g. Maintenance
- F. Consultant shall review and provide recommendations on component installation and commissioning and associated costs including, but not limited to the following:
- a. Design, Bid, Build
 - b. Design-Build
 - c. Key-Turn – Design Build

Deliverables:

- Prepare 100% submittal and final submittal of feasibility study.
- Project Meetings - Attendance at least five (5) design project meeting
 - o Kick-off Meeting
 - o Site Visit
 - o 50% Progress Meeting
 - o 100% Submittal
 - o Final Submittal

Project Schedule:

<u>Task</u>	<u>Date</u>
Pre-Proposal Meeting – Video Conference – 10:00am	September 9, 2020
Proposal Due	September 16, 2020
Award of Contract	September 22, 2020
Kick Off Meeting	September 29, 2020
Complete Feasibility Study	January 15, 2021

PROPOSAL REQUIREMENTS:

Scope of Work

The proposal shall include a detailed list itemizing the tasks required to complete the scope of work addressing all project criteria outlined above. Each task shall include a detailed estimate of man-hours required to complete each task.

Proposal Fee Schedule

The proposal shall include a "Fee Schedule" outlining all applicable hourly rates and costs for services. The proposal shall provide a breakdown of fees associated with the project task as specified above. The proposal shall also include a "not-to exceed" total fee, which shall include all work necessary to complete the project objective.

Schedule

The proposal shall include a proposed project schedule detailing the time of completion for the feasibility study. The schedule shall include the number of calendar days required to perform each task and the total number of calendar days required to complete the entire project.

Project Experience

The proposal shall include description of comparable projects completed by consultant within past three (3) years including date completed, location of work names, addresses, and phone numbers of persons in charge of project, and the name and address of the public agency or firm for whom the project was constructed.

Consultant's Representative

The proposal shall name a responsible representative, an alternate, and all sub-consultants to perform the assigned tasks. The chosen consultant's representative will remain responsible and in charge of all duties from contract negotiations through project completion. If the primary representative is unable to continue with the project, then the alternate representative will become the primary representative. The District must approve any other changes in responsible representative, in advance. The District will have the right to reject other proposed changes in personnel and may consider any other changes in responsible personnel a breach of contract.

Professional Service Agreement

The chosen consultant shall be responsible for completing the specified services in accordance with the District's standard "Professional Services Agreement," which will be prepared by the District. Services specified in this agreement shall be taken directly from the consultant's accepted proposal and from this "Request for Proposal", if applicable.

Insurance Requirements

The District will require employer's liability, comprehensive commercial liability insurance, and errors and omissions insurance coverage for at least \$2,000,000 and comprehensive automobile liability for at least \$1,000,000. The District requires that the District be named as additional insured on the policy and such insurance policy shall not be terminated or canceled without thirty (30) days prior written notice to the District.

District Reimbursements

The District normally reimburses consultants for the actual cost (plus 15%) for all outside expenses, including those for material costs authorized in advance by the District. Other reasonable expenses will be reimbursed where such costs have been advanced by consultant and approved by the District.

The chosen consultant shall not be compensated for use of computers, office equipment, hardware, or software materials. Said costs are not compensated and time expended by consultant's personnel on such equipment is included within the hourly rate as shown on the consultant's fee schedule.

District Responsibilities:

District will provide the following to assist the selected consultant with the project and its completion:

- Geographic information system (GIS) information and topographic surveys as available.
- Reports, plans, and drawings, as available and pertinent to the proposed study.
- Design criteria, preferred manufacturer's information, and other technical information, as available and pertinent to the study.
- Current operational condition and performance of existing infrastructure pertinent to the proposed study.

Proposal Due Date:

Please submit one (1) copy of the proposal as a PDF file via e-mail via e-mail by 12:00 pm by September 16, 2020 to dgould@cvwd.com. Send three (3) copies of the proposal to the attention of Mr. David S. Gould, Director of Engineering at Crescenta Valley Water District, 2700 Foothill Boulevard, La Crescenta CA 91214. If you have any questions or comments, contact Mr. Gould at (818) 236-4119.



Attachment 2



Request for Proposal: Professional Consulting Services for a SCADA Radio Communications Feasibility Study, Project E-1025

Due Date: September 16, 2020

Submitted by:

Systems Integrated
2200 North Glassell Street
Orange, CA 92865
Tel: 714/998-0900
Fax: 714/998-6059

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This document is intended for the Crescenta Valley Water District's review associated with the Request for Proposal for Professional Consulting Services for a SCADA Radio Communications Feasibility Study, Project E-1025. No part of this document may be disclosed in any manner to a third party without the prior written consent of Systems Integrated.

This document contains proprietary and confidential information to Systems Integrated, which are considered Trade Secrets that are excluded from Public Records Requests.

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COVER LETTER

Systems Integrated (SI) submits for consideration to Crescenta Valley Water District our qualifications for the Professional Consulting Services for a SCADA Radio Communications Feasibility Study. We have fully reviewed all the elements of your Request for Proposal and are confident that our team has the personnel and experience to partner with the District which will make the project a success.

Systems Integrated believes that our response to Crescenta Valley Water District's Request for Proposal is unique in that we are most likely the only respondent, who has included, as part of our proposal, a detailed radio survey showing one approach whereby all the District's requirements can be met (this is included with our attachments).

SI has taken this unusual approach as we want to demonstrate (1) our complete understanding of the District's requirements, (2) our company's qualifications to perform the task and (3) the goal of moving the project forward to quickly implement a long term, expandable implementation which will support all the District's existing requirements. The proposed design is fully cybersecure; can support a completely redundant network and is expandable to support new requirements which the District may require in the future. SI's preliminary design is based upon the use of the licensed 4.9GHz band, the unlicensed 5GHz to 5.8GHz band and the new 5.9GHz band. While this is just one approach, Systems Integrated, as part of our engineering effort, will also provide an analysis of the other technologies available including Cellular, T1, cable and licensed frequency implementations. SI decided to submit our preliminary design so that there is an immediate starting point for the kickoff meeting, for detailed discussions of the advantages and disadvantages of all the various wireless communications infrastructures available, the cost of implementation and the cost of maintenance. At this kickoff meeting, SI will be prepared to provide a preliminary, worse case, engineering estimate for the implementation cost for both a non-redundant and redundant wireless implementation.

Systems Integrated also proposes a different approach to the District's project, since we know that there are key sites that are causing the current difficulties within your communications network. SI would prioritize our field radio surveys with these problem sites, and as part of the field survey temporarily install replacement radios to demonstrate to the District our network design. Should the District determine that SI's design using these radios is acceptable and want to keep the equipment, then we would permanently mount the radios and roll the radio cost into our project cost.

Since the District has highlighted the need for redundancy, we have included the information regarding a radio that provides redundancy. This radio will utilize the same interface as the District's current network is using with their Tesco system and the Allen Bradley equipment. These radios will provide the required compatibility and flexibility that the District is seeking.

Since 1977, Systems Integrated has been providing engineering services for the design and implementation of solutions for the automated control of infrastructure - water, power and transportation. We have always designed our control systems (SCADA) to be distributed, which required us to design the associated communication networks to be capable of transporting high volumes of data, reliably and securely. As the demands of communication networks continue to expand (i.e. more bandwidth; higher speeds; video and ensuring QOS), Systems Integrated's expertise of designing and successfully deploying large scale communication networks using

wireless technology (licensed/unlicensed) has become a premier aspect of our engineering services. Our ability to link together various technologies (i.e. fiber, copper, wireless radio, satellite, cellular, IoT, etc.) within a communication network, benefits customers in that new technologies can be integrated into their solution. For example, IoT is one of the newer wireless technologies that have been introduced which provides an alternative to the carrier based cellular network. This solution provides the same level of reliability as the cellular system but is typically ½ of the monthly cost.

Systems Integrated's communications networks are designed to be cybersecure and meet the North American Electric Reliability Corporation (NERC) CIP current standards; NIST SP 800-82 R2 Industrial Control Systems Security, and FIPS 140-2, etc. Additionally, SI has received various certifications from Department of Homeland Security's Cybersecurity and Infrastructure Security Agency (CISA), and we have third party certifications for compliance with SCADA cybersecurity as well as critical infrastructure design.

Notable is an overlap of SI's radio work with LA County which required SI to perform radio surveys for more than 1,500 intersections to develop a County Wide, wireless communications infrastructure, which included the Crescenta Valley service territory. SI has already completed extensive radio surveys which supported the County in installing many radios for the control of the traffic intersections in your area. As part of the design process for the County, SI evaluated a variety of solutions including private wireless infrastructure, public wireless infrastructure (Cell Phone and IoT), point to point licensed communications, T1 and other types of communications infrastructure. Systems Integrated was first awarded its contract with the County in 2005 and has been under contract continuously to this date. As part of the countywide solution, SI provided the engineering, hardware and installation support for private wireless, public wireless (cellular), fiber and twisted pair communications infrastructure. SI is still under the original LA County contract and continues to provide engineering support as well as operational engineering support of the County's communication network. Systems Integrated's leverage its prior knowledge of the Crescenta Valley to create the attached Radio survey. We realize that the wireless radio environment is dynamic, so the radio survey that is attached will need to be field verified, which we have provided as part of this proposal. The proposed solution uses the latest technology and provides for a completely redundant wireless environment.

SI was the design engineer for the San Francisco Municipal Transportation Agency's wireless traffic control network (awarded in 2011 and completed in 2018). With over 1,000 intersections, the network is a combination of wireless and fiber interconnect which has been fully implemented and the system is fully operational.

Systems Integrated's utility industry network system experience, is respected by the transportation sector which resulted in major contracts with County of Los Angeles, City of San Francisco, Toronto Transit Commission (Canada), and City of Seattle Ferry service, Los Angeles Department of Water and Power, and City of Oklahoma - SI has provided more wireless communications networks for high speed control of traffic and utility infrastructure than any other designer/ supplier within the United States. Additionally, SI has supported many water districts across the United States including Bethpage Water District, Massapequa Water District, LADWP, Suffolk County Water Authority, EVWMD, City of Riverside, City of Banning, City of Arcadia, City of Industry, and County of Ventura. These projects included implementing solutions in geographically diverse landscape, with areas of high interference - Systems Integrated was the vendor of choice to design and install their communications networks.



Elsinore Valley Municipal Water District (EVMWD), has an extensive wireless communications network all engineered, designed by Systems Integrated, which was implemented and made operational by SI as part of a Design/Build project, has been continuously expanded. The EVMWD system originally supported less than 100 field sites, and today the wireless network has been expanded to support over 200 sites. SI provided all the engineering to determine the best communications infrastructure and, their network continues to be state of the art.

Subsequent to the completion of the original EVMWD project, The District has issued more than 30 contracts to SI to continually enhance and expand the District's SCADA and wireless communication system used for SCADA control of the various well, pump and tank sites. The original SCADA system requirements were limited, however due to new requirements by Department of Homeland Security, the original system has been expanded to support video security and wireless IP phones from any of the District's sites. There are over 200 sites within the EVMWD system that are supported by a multilevel mesh wireless communication topology. The mesh environment was created using multiple backhaul rings to support major repeater sites to allow a number of point-to-multipoint sites to be used as collectors from the various field facilities.

Systems Integrated created the EVMWD's network design, provided the material, installed the equipment and made the system operational. SI provided the training of the SCADA and communications infrastructure to both EVMWD management and the SCADA support personnel. The quality of SI's training is evidenced by the fact that the District's SCADA technicians are able to maintain their systems with Systems Integrated merely providing Tier 2 maintenance support to back-up the EVMWD technicians in the event of an emergency situation.

The project manager for Crescenta Valley Water District will be Systems Integrated's Larry Pomatto, whom has been responsible for the design and successful implementation of all the major SCADA and communications network projects. His goal is to assess the project objectives, understand the operational environment and drive the team to the successful project completion within the schedule and budget. The lead RF engineer for the project will be Walter Morris.

SI holds both a California electrical (C-10) and general (B) contractors' licenses and is registered with the CA DIR.

Systems Integrated believes that our qualifications are exceptional and we can rapidly address all the District's requirements to provide a communications system for the SCADA system, which is secure, reliable and expandable.

Sincerely,

A handwritten signature in blue ink that reads 'Susan Corrales-Diaz'.

Susan Corrales-Diaz
Systems Integrated

SCOPE OF WORK

Systems Integrated has been performing radio network design engineering and implementation services for more than 30 years. Systems Integrated is one of the few companies that has both engineering services (with professional engineers) as well as licenses to perform the construction of automated control systems. While other companies provide wireless communications engineering services, SI is one of the few that has both the personnel and the specialized equipment to deploy the equipment needed for the wireless communications infrastructure. SI operates bucket trucks used for this type of service, which includes 48 foot and 65 foot bucket trucks and has the spectrum analyzers which are used to determine the actual noise floor of a variety of frequency bands.

The District has identified the Scope of Work as six elements (A-F) to be accomplished within this study after the Kick Off meeting (task 1), with the completion of the Feasibility Study (task 2).

The following describes Systems Integrated's approach to this work and the sequence of execution of the tasks and scope of work identified. The presented sequence is what we believe will best utilize the manpower of both SI and the District and will allow for completion of the project in the time frame identified.

Task 1 - Kick Off Meeting

As SI has provided a completed radio survey for all the District's sites, during the kickoff meeting, SI is proposing to accomplish the following:

1. Discuss the various communications options using a variety of technologies available today. SI will provide an engineering capital investment for each option as well as the monthly maintenance cost of each option.
2. Discuss the RF engineering study SI provided as part of our RFP response and explain why SI prepared this particular solution for the District.
3. Discuss current issues associated with the 900 MHz radio communications and ask the District to identify which sites are experiencing problems with the 900 Mhz radio communications.
4. Discuss any of the Districts plans for expansion of the network that may be required. For example, as a result Dept. of Homeland Security requirements, many water districts are installing cameras on the top of their water tanks to monitor people climbing the ladders and / or tank hatches.
5. Redundancy: what are the District's requirements (does the District want a second connection using the same technology or a different service at each site)?
6. Determine the overall reliability of the communications infrastructure (99.9% is typical for a non-redundant network with 99.999% for a redundant network). Also is this reliability requirement for the communications equipment or for the whole system?
7. Schedule the site visits, prioritizing the problem sites first.

At the conclusion of the Kick Off meeting, SI will publish the results of the Kick Off meeting.

Based upon the feedback during the Kick Off meeting SI will obtain the required test radios to allow for an analysis of the existing 900 MHz radio system. SI will combine our field radio survey and analysis of the existing 900 MHz radio system into one event.

Element 1 - Radio Survey and Isolation of 900 MHz Radio System Issues

For this project, SI is proposing, as part of the radio survey, to isolate the 900 MHz issues as identified by the District. SI's method of isolation is to replace the 900 MHz radio at a specific site and replace it with another type of radio. During the radio survey / isolation of 900 MHz issues, SI would request that the District identifying those 900 MHz radio lockup sites. If the District does not have a list, one approach would be for the District to disable the automatic reboot of the 900 MHz radios which would reveal this list. The "problem sites" identified by the District will be addressed first.

For those sites that the District can identify as experiencing problems with the existing radio infrastructure, SI proposes that temporary replacement radios be installed to confirm that a different radio on a different frequency will resolve the 900 MHz radio issue at the specific site.

At the conclusion of the radio survey two objectives should have been accomplished. First, the remaining 900 MHz / replacement radio hybrid system will provide the District with a stable and operational network. Second, to validate SI's radio survey that was included in our RFP response which means that the submitted radio survey will work or requires modification.

To be clear on the scope that SI is proposing, the temporary radio installations will be fully functional, however we will install temporary communications cables from the radio mast to the PLC enclosure.

While it appears, based upon SI's radio survey (included in our proposal to the District), that the replacement radio solution will allow full access to all of the sites, and SI will validate that if the proposed private radio solution does not function, an alternate radio communications solution will be tested and verified to ensure that it will be operational.

As a result of SI's proposed approach to accomplishing the radio survey, we will also meet the requirement of providing our recommendations to stabilize the existing 900 MHz network. At the end of our field radio survey, SI will demonstrate that the District's network can be made stable.

While performing the radio survey, SI will also be gathering the material necessary to provide a Master Plan for upgrading the existing SCADA system.

Task 2 – Visit Existing Field Sites. At each site SI will evaluate the following:

- PLC and support equipment in the field enclosure
 - State of support for the equipment (i.e., is it currently supported by the vendor; is support available, is support difficult to obtain, etc.).
 - Estimated end of life of the equipment
- Functionality of the PLC program at the remote site(s)
 - General description of the functionality of the site
 - Method of control.
 - ◆ Does the site rely on other sites to make a decision?
 - ◆ What happens if the central PLC or SCADA server goes down?
- Is the PLC code documented?
 - If so, does the District have the latest copy of each PLC program?

- Goals for remote control of the site. If the District's system is currently a centrally controlled SCADA system, does the District have a goal for distributing control to allow their field operational personnel the ability to remotely access the system and eliminate the requirement for monitoring the SCADA master at the main plant?
- Identify the type of antenna infrastructure required to ensure a design objective of reliability. Are there trees or other structures in the way of the existing antenna mounting that would require the antenna mast to be relocated?
- Type of system maintenance that the District should expect. For example:
 - Battery replacement
 - ◆ Use of UPS versus DC PLC (the latter provides longer uptime, lower cost and lower replacement battery cost)
- Define the type of automatic testing that would reduce the District's overall operation / maintenance cost, such as:
 - Automatic or remote generator testing
 - PLC battery testing
 - Cabinet temperature monitoring
 - Intrusion alarm
- Type of redundancy that should be implemented:
 - Redundant communications infrastructure:
 - ◆ At all sites?
 - ◆ Only at critical sites?
 - Should the radios make the redundancy transparent?

Master Station. At the master station, SI will perform an evaluation of the equipment that is used by all the sites. SI will collect the following information:

- Master Station changes / upgrades
 - Is existing master station meeting the District's objectives?
 - Who is addressing the cybersecurity issues for the District's system?
 - Are there any specific standards that the District wishes to be compliant with? For example:
 - ◆ Smart alarm processing (IEC 62682)
 - ◆ Screen presentation (ISA101)
 - ◆ Cybersecurity for industrial control systems (i.e., AWWA Water Sector Cybersecurity Risk Management Guidance; Department of Homeland Security for Industrial Control Systems; or NIST SP 800-82 R2, etc.)
 - Operating system:
 - ◆ How are the updates performed?

- ♦ Who does them?
- ♦ What happens to the SCADA system during the updates?
- ♦ What are the requirements for reliability to SCADA master (99.999% or higher?)
- SCADA system operation and maintenance change costs
 - Does the District have a monthly maintenance contract?
 - ♦ If so, is the support 7X24 or Monday through Friday?
 - Total external costs for the SCADA system, including:
 - ♦ Monthly communications cost
 - ♦ Monthly software maintenance cost
 - ♦ IT department or other organization charges for maintaining the network and computer systems
 - ♦ Other consultant monthly charges
 - ♦ Other consultant task order or one-time charges for changes (such as the total cost to implement the automatic reboot of the radio at the PLCs)
 - ♦ Overtime costs for servicing the SCADA system
 - ♦ Cost of replacement (time and material) of various SCADA equipment (including transducers and control elements like VFD's / soft starters)
- Single point of failure. Is there any one component's failure that will cause the entire system to become non-usable?
- What type of network should be implemented (layer 2 or 3)?
- Should the wireless transmission be encrypted?

Operational Issues. Systems Integrated will be performing fact finding associated with the operational and maintenance of the system. As part of our investigation, SI would like access to a variety of District personnel including the SCADA maintenance staff, and finance (the latter is to determine the total operational and maintenance costs associated with the SCADA system, if it is available).

In the area of operation, SI will be seeking out information from the individuals that operate the SCADA system to determine:

- Operational changes that would reduce their time working on the SCADA system
- Changes in the overall control that would make the system more efficient
- Reports or screens that would reduce operator time
- What is the primary reason for afterhours call outs?

Task 3 - 50% Progress Meeting

SI plans, during this progress meeting, that the following will be addressed:

- **Results of the radio survey.** Validation whether the radio survey included in the proposal was accurate, or identify changes required to provide 100% communications coverage.
- **Issues with upgrading the existing communications infrastructure.** Define the issues that will need to be addressed.
- **Identification of information that is yet to be collected.** After the initial collection of information, there generally are items which require additional information. During this progress meeting, SI will identify the information that is outstanding and determine if it is required.
- **How the report is to be presented.** SI plans to provide an updated radio survey that reflects the site verification. This document (the basis being the radio survey provided with SI's proposal) will reflect the results after SI has gone to each site and validated that the data is accurate, identify any modifications and provide confirmation that the system will work as engineered.
- **Discussion of the Master Plan Information.** RFP item E requests that a broad view evaluation of the existing SCADA system be performed. Systems Integrated has included the development of a Master Plan to help the District to determine its overall direction for not only the communications system but also the SCADA system.

Systems Integrated is proposing to solve the District's immediate 900 MHz problem as part of our evaluation process, however the long term solution will be determined by the District's overall objectives and associated funding. As with all systems, the District's SCADA system (as you have indicated) is almost 10 years old, and difficulties are occurring. Some of the issues that the District must sort through are how long to continue using the system; what other options are there, and how to comply with the ever growing cybersecurity requirements.

SI will discuss all the new SCADA options, including the concept of a SCADA appliance. This is a new approach that has been implemented following the invention of Virtual Machine (VM) solutions, which allows water operations to treat their SCADA system just as they treat a piece of network equipment. In the network industry, manufacturers provide the hardware and software associated with a network device, which can be remotely upgraded on a scheduled basis.

Using VM, SCADA manufacturers are providing the same type of solution as is available from the network equipment suppliers – meaning a SCADA appliance. Using the appliance concept all the upgrades including compliance with all cybersecurity upgrades, are included by the manufacturer. The advantages are significant – the end user purchases a SCADA appliance and it is the manufacturer's responsibility to ensure that the appliance is fully compliant with all cybersecurity requirements and ensuring that the appliance is upgraded correctly. It is not uncommon that water districts struggle with SCADA system upgrades that fail or took longer than expected. However, with the SCADA appliance this becomes the manufacturer's responsibility.

This type of technology evolution is just one of many discussion items that will be addressed at this progress meeting for the District's consideration.

Task 4 - 100% Submittal

After the 50% review meeting, SI will incorporate all the District's inputs and develop a final submittal reflecting the data collected and the results of the meetings with the District.

The final 100% product will consist of two documents. The first document will be the Master Plan (SI has enclosed a sample master plan). The master plan will address the overall state of the SCADA system, what was found during our investigation phase of the project and, based upon the District's stated goals and objectives, the proposed path forward. While the master plan will provide insight for the District to move forward, it will also provide information regarding available SCADA systems that might be considered, and address the exposures (if any) of the existing SCADA system regarding both cybersecurity and single points of failure.

The second document will be an updated radio survey reflecting the proposed solution; the RF information associated with the field radio survey performed, a written description of the process that created specific wireless design, the frequency band that was selected and the recommended brand of radio.

Task 5 – Final Submittal

The final master plan will focus on the wireless system but will identify an overall objective of the SCADA system as well as a way forward to provide for (1) an immediate solution to the 900 MHz radio operation issues currently impacting the District, (2) long term communications upgrade including recommendations for a specific radio, design standards for installation antenna masts, and grounding, and (3) an engineering estimate for multiple communications implementation options and a lifetime cost analysis of the various communications options.

This master plan will also include our review and recommendations in regard to component installation and commissioning and of the various contractual approaches to achieve the District's objectives for their SCADA and communications systems.

PROPOSAL FEE SCHEDULE

The cost proposal identified below represents a not to exceed engineering estimate to perform the work identified.

Crescenta Valley Water District Feasibility Study					
Task	Subtask	Description of the Work	Qty	Estimated hours per element	Total time per task
1		Kick Off Meeting	1	8	8
2		Site Visits - below is a listing of the functions that will be done:	34	6	204
	A.	Validate and update radio survey, resolve existing 900 MHz network			
	B.	Validate design of both primary and backup communications network to be installed.			
	C.	Review and make recommendation on methodology for polling data from the RTU to the Main SCADA			
	D.	Review and make recommendations on type of equipment to meet the needs of the SCADA system and associated costs			
	E.	Review and make recommendations regarding component installation and commissioning and associated costs			
3		50% Progress Meeting	1	8	8
4		100% Submittal	1	120	120
5		Final Submittal	1	4	4
Total Estimated Man-Hours					344
Average Engineering Labor Rate / Cost per Hour					\$185.00
Total Estimated Cost					\$63,640.00

The following is Systems Integrated's current fee schedule and general rate information which was used to develop the project fees for this proposal.

Type of Work/Classification	Hourly Billing Rate
Sr. Project Manager	250.00
Project Manager	225.00
Sr. Software Engineer	220.00
Software Engineer	175.00
Sr. Systems Engineer	190.00
System Engineer 2	170.00
Systems Engineer	150.00
Applications Engineer	135.00
Field Engineer	145.00
Field Electrician	135.00
Field Technician	125.00
Designer/Draftsperson	110.00
Shop Labor	80.00

FIELD SERVICES

Field Services are supplied to customers not covered by an established Contract Service Agreement or services as requested by a customer for a specific day, time or reason, outside the scheduled service provided under a Contract Service Agreement. Field Service also includes a the Portal to Portal travel time cost.

Standard Work Hour rates are Monday – Saturday 8am to 5pm - after these hours the overtime rate would apply. Hours for Sunday and Holidays are at the overtime rate.

SHOP FABRICATION SERVICES

Shop fabrication services are available at a shop rate of \$80.00 per hour. Materials will be invoiced at cost plus 25%. Normal shop expenses are included within the above rates; however, additional expenses such as freight, travel, etc., will be billed at cost. Shop/field calibration, acceptance testing, start-up, etc., are considered field services and will be charged at the appropriate field service rates.

SYSTEMS INTEGRATED'S PERSONNEL RATES

Normal labor charges will be at the hourly rates shown in the above tables for each labor classification. Time in excess of 8 hours per day or 40 hours per week is termed overtime. When client authorized, overtime rates are 1.25 times normal rates. Rates are in USD. Rates are not valid for prevailing wage work. Quoted rates are subject to reasonable adjustment after December 31, 2020.

SUBCONTRACTED WORK

When it is necessary to supplement our staff with consultants or outside subcontractors, these services are billed at our cost plus 15%.

EXPENSES – Orange County, CA

These reimbursable costs include, but are not limited to:

- Travel (air fare, auto rental, public transportation and subsistence)
 - Rental Car - \$65/day
 - Hotel Room - \$200/day
 - Meals - \$76/day
- Use of company vehicles (\$90/day) and employee cars (\$0.65/mile)
- Equipment rental or purchase - TBD
- Long distance and cellular telephone, fax, postage, courier and reproduction work - TBD
- Applicable sales taxes and freight charges – TBD
- Additional expenses are charged at cost plus 15%

Please note for local service (within 50 miles) under any Contract Service Agreement, there are no travel, meals or hotel room expenses associated with any service request.

MATERIALS

Material is charged at list price plus 15%. Applicable sales, excise taxes, fees and freight charges are added as applicable.

DOCUMENTATION

All agreed upon documentation including manuals, drawings and reproductions, will be furnished to the customer during or at the close of the job. We reserve the right to retain either originals or reproductions of all our work for our files.

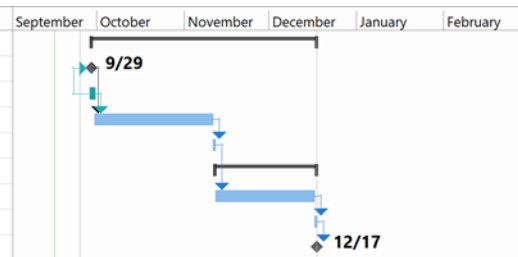
SCHEDULE

The following is Systems Integrated's proposed project schedule. This schedule reflects time off for various holidays during the period of performance.

The schedule reflects that five weeks have been allocated to gather data and six weeks to prepare the final report.

Based upon the proposed schedule, and the proposed implementation approach (installing test radios at the 900 MHz sites that not working correctly), the District should have error free communications near the middle of November 2020.

ID	Task Name	Duration	Start	Finish	Predecessors	September	October	November	December	January	February
1	CVWD Network Feasibility and Design Study	58 days	Tue 9/29/20	Thu 12/17/20							
2	Notice-to-Proceed	0 days	Tue 9/29/20	Tue 9/29/20	355						
3	Kick-off Meeting – September 29, 2020	1 day	Tue 9/29/20	Tue 9/29/20							
4	Conduct Site Visits	6 wks	Wed 9/30/20	Tue 11/10/20	2,3						
5	50% Progress Meeting	1 day	Wed 11/11/20	Wed 11/11/20	4						
6	100% Submittal Package	26 days	Thu 11/12/20	Thu 12/17/20							
7	Development of Submittal	5 wks	Thu 11/12/20	Wed 12/16/20	5						
8	100% Submittal Package Review Meeting	1 day	Thu 12/17/20	Thu 12/17/20	7						
9	Feasibility Study Complete	0 days	Thu 12/17/20	Thu 12/17/20	8						



PROJECT EXPERIENCE

Project Reference No. 1 - County of Los Angeles, California

Project Name:	LA County Wireless Communications System for the Traffic Management System
Agency:	LA County, Department of Public Works
Contact Person:	Pat Smith, Associate Civil Engineer
Address:	900 S. Fremont Avenue Alhambra, CA 91803-1331
Telephone Number:	626/300-4838
Email:	psmith@ladpw.org
Project Schedule:	Started September 2007 and is ongoing to June 2022

The County awarded an engineering prototype with an option to provide the Design / Build contract to Systems Integrated. Systems Integrated (SI) was responsible for engineering, equipment supply, installation, network monitoring, maintenance and warranty replacement of the equipment supplied. The supply included the radios, mounting equipment, surge arresting equipment, and radio extension mounting equipment. After contract award, the County requested that the installation be performed by the County crews. SI agreed to this contract modification and the resultant contract was divided. Following the discussions about division of project responsibilities, it was decided that the County staff would handle the installation, and Systems Integrated would provide the engineering for all of radios; provide all of the hardware, and train the County staff so they understood the installation process, and would be capable of providing long term support.

As all the County's prior experience was using 900 MHz, the County specifically required that SI provide a pilot to demonstrate that the new technology radios would fully meet and exceed their requirements. The pilot was a success and the County issued an amendment to the contract for SI to provide engineering and equipment for the entire County using a variety of communications technologies including fiber optic, copper, wireless point to point, and wireless point to multipoint. The radios operate in the 5.0 to 5.8 GHz unlicensed band (point to point and point to multipoint) and licensed radios that operate on 18 GHz and 11 GHz licensed bands (point to point). At present there over 200 point to point links in the system, and another 700 point to multipoint sites. The scope of the project was to provide wireless communications for 1,500 intersections to support traffic control, and 400 intersections support video.

The wireless system continues to be expanded through the various cities within LA County.

Project Reference No. 2 – Elsinore Valley Municipal Water District

Project Name:	Design/Build SCADA & High Speed Wireless Network for control, communications, video & IP phone
Agency:	Elsinore Valley Municipal Water District
Contact Person:	Jim Ollerton, Director of EVMWD IT
Address:	31315 Chaney Street Lake Elsinore, CA 92531
Telephone Number:	951/674-3146
Email:	ollerton@evmwd.net
Project Schedule:	Continuous, adding new equipment due to expansion

Systems Integrated has been issued more than 30 contracts by EVMWD or through their engineering subcontractors for engineering support (radio surveys) to provide radios in support of the District's wireless communications requirements for the various well, pump and tank sites. The purpose of the wireless communications is to allow remote and automatic control of water and provide video security and wireless IP phones from the sites.

There are over 200 sites within the EVMWD system that are supported by a multilevel point to point wireless ring communication topology. Within each ring there are a number of point to multipoint sites that are used as collectors from the various pump stations. The rings are organized from tank sites that are interconnected using point to point infrastructure. All the point to point links are interconnected using managed switches. The switches are configured to support Ethernet Automatic Protection Switching (ESPR) which provides services similar to rapid spanning tree but with convergences in under 50 milliseconds. This provides for a redundant, high speed (gigabit) wireless communications infrastructure that is fault tolerant with a recovery time under 50 milliseconds.

Systems Integrated did the design, provided the material, installed the equipment and made the system operational. Additionally, SI provided the training for the EVMWD support personnel.

There are multiple frequency bands being used by the system including 900 MHz, 4.9 GHz, 5.0 to 5.8 GHz, and 24 GHz. At present, there are a total 300 radios deployed with more than 50 cameras throughout the District. Currently the District has 113 point to point sites with the remainder being point to multipoint sites.

The original system was first deployed in 2004 and has been upgraded multiple times during the period between 2004 and 2018. During the entire period SI has been under maintenance contract with the District. The overall failure rate of the radios has been less than 1%, with the majority of these failures due to wild fires in the area which destroyed the radios.

CONSULTANT'S REPRESENTATIVE

The project manager for Crescenta Valley Water District will be Systems Integrated's Larry Pomatto, whom has been responsible for the design and successful implementation of all the major SCADA and communications network projects. His goal is to assess the project objectives, understand the operational environment and drive the team to the successful project completion within the schedule and budget.

The lead RF engineer for the project will be Walter Morris.

The following are the resumes of Systems Integrated's key radio / communications network staff members.

Expertise:

- ✓ 40+ years SCADA & systems experience
- ✓ Project Engineering Management
- ✓ System Design
- ✓ Wired & Wireless Communication Networks
- ✓ Critical Utility Control Systems
- ✓ Oversight of large-scale projects from conception through completion

Years of Experience:

40+

Certification:

Adtran Wireless Certified
Proxim Wireless Certified
Adtran Network Certified
Adtran VoIP Network Certified
Phoenix Radio
KeyWest Networks
Telco Systems

Professional Affiliations:

IEEE, AWWA, ITSA

Security Certification:

Department of Interior
Department of Homeland Security
Department of Defense

Publications/Patents:

Mr. Pomatto, has filed for and received over 15 patents on a variety of automation control devices

Education:

B.S., Electrical Engineering,
Stanford University, 1973

Years with Firm

37+

Larry Pomatto

Role on Project

Project Manager - Senior Design Engineer

In his role as a project manager, Mr. Pomatto brings over 40 years of experience designing and managing large-scale automation and control system projects (projects exceeding \$20 Million). His technical expertise, breadth and depth of experience with mechanical, electrical and software systems, hands-on field ability coupled with a practical approach to design and production, ensure that the control system uses current leading technology and exceeds customer expectations. Complete customer satisfaction, cost-effective systems, and meeting customer requirements are his top priorities. Mr. Pomatto is responsible for ensuring that the project is moving forward at all times. This includes everything from project scheduling to billing to development of drawings and specifications.

As the Senior Design Engineer, Mr. Pomatto has significant expertise in the field of automation with more than a dozen patents in everything from automating electrical substations to detecting capacitors on distribution lines to providing a solution to allow breakers to be operated safely to meet all of the newest UL and OSHA requirements. Mr. Pomatto is a subject matter expert in the disciplines of (1) wide area network design and topology, (2) wireless deployment in both licensed and non-licensed spaces, (3) cybersecurity with respect to deployments involving mixed wide area communications networks using a combination of publicly available communications infrastructure (cellular, leased black fiber, MPLS, Metro Fiber, etc.) and private communications infrastructure, (4) bandwidth, latency and jitter analysis of wireless networks to support applications such as SCADA, Video, VOIP, and emergency operations.

Expertise:

- ✓ Wireless and Wired Network Design
- ✓ Indoor and outdoor WiFi product design, development, testing
- ✓ Design, install, manage and optimize wireless infrastructure for major citywide deployments and critical applications in licensed and unlicensed frequencies
- ✓ Linux software development
- ✓ 20 years of experience in system installation and commissioning support
- ✓ Design and implementation of Intelligent Transportation System (ITS), DSRC Connected Vehicle applications
- ✓ Working with customers in capturing product requirements and deliver customer specific products & software releases

Years of Experience:

23+

Patent:

US8982772: Radio transceiver with improved radar detection

Certifications:

Proxim Wireless Certified, Wave Mobile Solutions Certified DSRC radio, IgniteNet MetroLinq, KeyWest Networks

Education:

Bachelor of Science, Electronics & Communications Engineering,
Nagarjuna University, India
MS Computer Engineering, Florida International University, 1995

Years with Firm:

6+

Kishore Gandham

Role on Project

Senior RF Design Engineer

Mr. Gandham is a senior wireless executive with over 20 years of software engineering experience in broadband and wireless networking products, including enterprise and carrier class backhaul base stations; subscriber nodes for Point-to-Point and Point-to-Multipoint applications; DSRC and 802.11 / Wi-Fi Access Points. Mr. Gandham's experience includes architecting, designing and implementing wireless networking systems and programming Linux based PC platforms. Mr. Gandham currently holds the role of Director of RF Engineering at Systems Integrated, and has held similar roles at Fastback Networks, Proxim and MTA at Lucent/Agere.

Relevant Experience

San Francisco Municipal Transportation Agency

Transit Signal Priority

Project Description: The San Francisco Municipal Transportation Agency (SFMTA) Transit Signal Priority (TSP) project is used to provide bus prioritization on all SFMTA bus routes. The project consists of system engineering the network; providing all the hardware; providing all of the training to SFMTA personal to ensure their ability to successfully install and maintain the 5 GHz and 60 GHz WLAN TSP system used to control buses; obtain and control traffic controllers; remotely manage and monitor the network and provide video data to a centralized Traffic Control Center (TCC). The SFMTA wireless video and TSP management system required that an integrated solution be provided that would allow the video, bus prioritization and traffic controller systems to be interconnected to the existing fiber optic system at various locations throughout the City and provide a seamless system to allow video data from all the intersections to be transmitted to a centralized Traffic Control Center (TCC).

Role and Responsibilities: Mr. Gandham performed the radio site surveys, radio configuration, remote network monitoring and post installation support.

Expertise:

- ✓ Wireless and Wired Network Design
- ✓ Certified Cisco CCNP switch, CCNP route, CCNA security
- ✓ Licensed and unlicensed radio deployment
- ✓ Project Start-Up, Commissioning, and troubleshooting

Years of Experience:

20+

Certifications:

Cisco, multiple certifications
Adtran, multiple certifications
Proxim (certified for 10100, 800, 5054)
licensed and unlicensed radios,
Ragant radios, KeyWest Networks radios.

Professional Affiliations:

IEEE
ITS

Education:

B.A. Computer Science, Fresno State
University, advanced degree, Computer
Science UCLA

Years with Firm

11+

Walter Morris

Role on Project: Network Engineer

Mr. Morris has over 20 years of experience working with enterprise, carrier and service providers. Advanced experience with wireless networks (802.11abgn/ac, .16 standards); RF and network design; QA test, measurement, analysis, and field deployments. He has specialized in LAN/WAN integration, network and wireless security, and disaster recovery of networks. He has certifications for Cisco and Adtran routers and switches and the following radios: Cisco, Ruckus, Motorola, Cambium, Ceragon, Siklu, KeyWest Networks and Proxim.

Relevant Experience

City of Riverside

SCADA Wireless Communications Network

Project Description: This design & build project for Riverside Public Utilities (RPU) uses several technologies including OSPF and MPLS, allowing for re-use of existing Layer 2 network over secure VPLS encapsulation. Riverside Public Utilities consists of over 100 different types of wells, boosters, tanks and treatment plants. Complete migration from 900MHz to 5GHz technology. RPU also implemented a fully redundant Wireless/Fiber backbone exceeding 100Mbps, with critical sites attached that are fully redundant.

Role and Responsibilities: Mr. Morris was the primary RF implementation engineer responsible for the deployment and maintenance of the system.

City of Banning

Wireless Communications Network

Project Description: The City of Banning's project consisted of designing and implementing an upgraded SCADA system and communications network. The project is being performed in phases over multiple years. The first phase included the deployment and maintenance of 4.9GHz, 5GHz and 5.9GHz systems. Migrated Serial based PLC to IP SCADA system.

Attachment 3

Crescenta Valley Water District

Professional Consulting Services for a SCADA Radio Communications Feasibility Study, Project E-1025

Consultant Ranking

Ranking	Weighted Percent	Systems Integrated		Tetra Tech		Cannon		Carollo Engineers (Did Not Submit)	
		Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Proposal - Project Concept & Scope of Work	30%	4.0	1.20	3.8	1.13	3.3	0.98		0.00
Project Experience	30%	4.3	1.28	4.3	1.28	4.0	1.20		0.00
Project Team Qualifications	20%	3.8	0.75	3.9	0.78	4.0	0.80		0.00
Consultant's Fee	20%	3.9	0.78	3.8	0.75	2.1	0.43		0.00
Final Weighted Score	100%		4.00		3.93		3.40		0.00
Proposal Cost			\$63,640		\$58,778		\$124,300		

Each consultant's proposal rated 1 - 5 (5 outstanding - 3 average - 1 unsatisfactory) on each category above. Each rating is multiplied by the weighted average for each category and totaled for the final weighted score.

Categories:

Project Concept & Scope of Work - How well the consultant's proposal addressed the needs of the District as outlined in the request for proposal & how well the consultant showed how its firm would complete the requested tasks

Project Experience - *How much previous experience has the consultant on projects similar to this project*

Project Team Qualifications - *How did the consultant's proposal use its staff and the experience of the individual people involved*

Consultants Fee - *How well the consultant's proposal utilized their staff and the costs associated with the proposal*

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 5
September 22, 2020

To: Honorable President and Members of the Board of Directors
From: Nem Ochoa – General Manager
Subject: **Long-Term Infrastructure Reliability and Funding Roadmap – Bond Financing**

ACTION ITEM:

Discussion of the District's Long-Term Infrastructure Reliability and Funding Roadmap.

BACKGROUND:

On September 15, 2020, the District's 2020 Bonds officially finalized, refinancing the District's 2017 loan and funding \$5 million in bond proceeds at an interest rate of 2.65%. Engineering and Operations are ready to deploy those proceeds as part of the District's plan toward infrastructure reliability.

This item serves as an ongoing placeholder to discuss the Roadmap.

RECOMMENDATION

Discuss the Roadmap.

Prepared by:



James Lee
Director of Finance & Administration

Submitted by:



Nem Ochoa
General Manager

CRESCENTA VALLEY WATER DISTRICT

General Manager Report

GM Report

September 22, 2020

To: Honorable President and Members of the Board of Directors

From: Nem Ochoa, General Manager

Subject: General Manager Report

General Managers Report Topics:

- GM Activities

The following are some highlights in this month's report:

- COVID-19 Update
- Website Update
- Local Hazard Mitigation Plan Update

STAFFING

3 employees have work anniversaries in September. David Inman – 4 years, Peter Hilke – 8 years, Brook Yared – 13 years

As of September 18th the District has gone 304 days without a lost time accident.

GENERAL MANAGER ACTIVITIES

Meetings:

Management Staff Meetings
Virtual All-Hands Meeting
CV Town Council Meeting
FMWD Managers Meeting

- September 14th, September 21st
- September 16th
- September 18th
- September 18th

Submitted by:



Nem Ochoa
General Manager