RESOLUTION NO. 2023-51
RESOLUTION NO. PFA-01
ORDINANCE NO. 2023-02

AGENDA

OUR MISSION

Protect, enhance, and develop Calaveras County's water resources and watersheds to provide safe, reliable, and cost-effective services to our communities.

2021-2026 Strategic Plan, Adopted April 28, 2021, and can be viewed at this link

Regular Board Meeting
Wednesday, September 27, 2023
1:00 p.m.

Calaveras County Water District
120 Toma Court
San Andreas, California 95249

Board Chambers are open to the public and the following alternative is available to members of the public who wish to participate in the meeting virtually:

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting
Or call in (audio only)
+1 323-647-8603,,605388082# United States,
Phone Conference ID: 605 388 082#

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Administration Office at 209-754-3028. Notification in advance of the meeting will enable CCWD to make reasonable arrangements to ensure accessibility to this meeting. Any documents that are made available to the Board before or at the meeting, not privileged or otherwise protected from disclosure, and related to agenda items, will be made available at CCWD for review by the public.

ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. ROLL CALL

BOARD OF DIRECTORS

Scott Ratterman, President — Russ Thomas, Vice President
Cindy Secada, Director — Bertha Underhill, Director — Jeff Davidson, Director

2. PUBLIC COMMENT

At this time, members of the public may address the Board on any non-agendized item. The public is encouraged to work through staff to place items on the agenda for Board consideration. No action can be taken on matters not listed on the agenda. Comments are limited to three minutes per person.

3. CONSENT AGENDA

3a Report on the Monthly Investment Transactions for August 2023
(Jeffrey Meyer. Director of Administrative Services)

3b Review Board of Directors Monthly Time Sheets for August 2023
(Rebecca Hitchcock, Clerk to the Board)

3c Ratify Claim Summary #618 Secretarial Fund in the Amount of $3,601,087.89 for August 2023
(Jeffrey Meyer, Director of Administrative Services) **RES 2023-_____**

4. NEW BUSINESS

4a Recognition of Chris Zanardi for 34 Years of Service at the District
(Damon Wyckoff, Director of Operations) **RES 2023-_____**

4b Hydrologic Conditions Update
(Brad Arnold, Water Resources Manager)

4c Discussion/Action Regarding a Sole Source Purchase of a t UPS for the Ozone Generator at the Copper Cove Water Treatment Plant
(Jesse Hampton, Plant Operations Manager)

4d Discussion/Action Regarding a Sole Source Purchase of Ozone Generators CIP Project #11133
(Jesse Hampton, Plant Operations Manager)

4e Discussion/Action Regarding the Award of Construction Contract for the Copper Cove Phase 1 and 2 Tanks Project, CIP #11083C
(Charles Palmer, P.E., Senior Engineer) **RES 2023-_____**

4f Discussion/Action Regarding Approval of Addendum No.1 under CEQA Guidelines §15164 Incorporating Proposed Project Changes to the Adopted Mitigated Negative Declaration for the Copper Cove Booster Pump Station and Water Transmission Pipeline Project, SCH #2007012054
(Charles Palmer, P.E., Senior Engineer) **RES 2023-_____**

4g Discussion/Action Approving Repayment of the Loan from the Special Project Fund to the Jenny Lind Water Expansion Fund
(Jeffrey Meyer, Director of Administrative Services)

4h Discussion/Direction Regarding District's Capital R&R Rate Ordinance and Financial Management Policy – No. 5.00, Budget and Fiscal Policies
(Jeffrey Meyer, Director of Administrative Services)

5. REPORTS

5a Report on the August 2023 Operations Department
(Damon Wyckoff, Director of Operations)

5b* General Manager's Report
(Michael Minkler)

6. BOARD REPORTS / INFORMATION / FUTURE AGENDA ITEMS

7. NEXT BOARD MEETINGS

- Wednesday, October 11, 2023, 1:00 p.m., Regular Board Meeting
- Wednesday, October 25, 2023, 1:00 p.m., Regular Board Meeting

8. CLOSED SESSION

8a Conference with Legal Counsel – Anticipated Litigation. Significant exposure to litigation pursuant to subdivision (d)(2) of Government Code section 54956.9. 2 potential cases

9. ADJOURNMENT

*No information included in packet

CALAVERAS COUNTY WATER DISTRICT

Board of Directors

District 1	Scott Ratterman
District 2	Cindy Secada
District 3	Bertha Underhill
District 4	Russ Thomas
District 5	Jeff Davidson

Legal Counsel

Matthew Weber, Esq.
Downey Brand, LLP

Financial Services

Umpqua Bank
US Bank
Wells Fargo Bank

Auditor

Richardson & Company, LLP

CCWD Committees / Membership**

*Engineering Committee	Davidson / Thomas (alt. Secada)
*Finance Committee	Secada / Ratterman (alt. Underhill)
*Legal Affairs Committee	Ratterman / Davidson (alt. Thomas)
*External Relations Committee	Underhill / Thomas (alt. Secada)

Joint Power Authorities

ACWA / JPIA	Ratterman (alt. Michael Minkler)
CCWD Public Financing Authority	All Board Members
Calaveras-Amador Mokelumne River Authority (CAMRA)	Ratterman / Secada (alt: Michael Minkler)
Calaveras Public Power Agency (CPPA)	Michael Minkler (alt. Brad Arnold)
Eastern San Joaquin Groundwater Authority	Thomas (alt: Brad Arnold)
Tuolumne-Stanislaus Integrated Regional Water Management Joint Powers Authority (T-Stan JPA)	Secada (alt. Thomas)
Upper Mokelumne River Watershed Authority (UMRWA)	Davidson (alt. Ratterman)

Other Regional Organizations of Note

Calaveras County Parks and Recreation Committee	Thomas (alt. Ratterman)
Mountain Counties Water Resources Association (MCWRA)	All Board Members
Mokelumne River Association (MRA)	All Board Members
Tuolumne-Stanislaus Integrated Regional Water Mgt. JPA Watershed Advisory Committee (WAC)	Brad Arnold (alt: Kelly Gerkensmeyer)
Eastern San Joaquin Groundwater Authority-Technical Advisory Committee	Brad Arnold (alt: Kelly Gerkensmeyer)

* Standing committees, meetings of which require agendas & public notice 72 hours in advance of meeting.
** The 1st name listed is the committee chairperson.

Item 3a

Agenda Item

DATE: September 27, 2023

TO: Michael Minkler, General Manager

FROM: Jeffrey Meyer, Director of Administrative Services

SUBJECT: Report on the Monthly Investment Transactions for August 2023

RECOMMENDED ACTION:

For information only.

SUMMARY:

Per the District's Investment Policy, staff will report the monthly investment activity for the preceding month. During August 2023, the following investment transactions occurred:

MONTHLY ACTIVITY			
Chandler Asset Management Activity:	**General**	**Water CIP Loan**	**Sewer CIP Loan**
Book Value at 07/31/2023	**20,211,964.44**	**19,420,345.38**	**8,145,445.69**
Security Purchases	454,999.30	-	-
Money Market Fund Purchases	289,587.30	78,570.19	33,936.64
Money Market Contributions	-	-	-
Security Sales	-	-	-
Money Market Fund Sales	(455,421.43)	-	-
Maturities	(200,000.00)	-	-
Principal Paydown	(59,251.40)	-	-
Money Market Fund Withdrawals	(10.32)	(1,242.21)	(893,242.58)
Amortization/Accretion	(1,398.21)	-	-
Gain/Loss on Dispositions	-	-	-
Book Value at 08/31/2023	**20,240,469.68**	**19,497,673.36**	**7,286,139.75**
Local Agency Investment Fund Activity:			
Balance at 07/312023	**11,229,460.16**		
Withdrawals, Operating Cash	-		
Interest			
Balance at 08/312023	**11,229,460.16**		

LAIF (Local Agency Investment Fund) daily interest rates are 3.52% as of August 31, 2023.

Attachment: Investment Activity Report for August 2023

CALAVERAS COUNTY WATER DISTRICT
INVESTMENT ACTIVITY
FOR THE MONTH ENDING August 31, 2023

INVESTMENT TRUSTEE	TYPE OF FUNDS/Availability	MARKET VALUE	INVESTMENT COST		CPN RATE	DATE INVST	CM INTEREST AND DIVIDEND RECVD
			COST	PAR (PRINC)			
Local Agency Investment Fund	Restricted for Reserves/Special Projects	11,229,460.16	11,229,460.16	11,229,460.16	3.370%	ongoing	-
Chandler Asset Management	Restricted/Reserves/Expansion/AD/R&R	19,143,424.03	20,240,469.68	20,299,071.72	1.770%	ongoing	**17,824.78**
Chandler Asset Management - Water Loan	Committed to Specific CIP Projects	19,497,673.36	19,497,673.36	19,497,673.36	4.940%	ongoing	**77,327.98**
Chandler Asset Management - Sewer Loan	Committed to Specific CIP Projects	7,286,139.75	7,286,139.75	7,286,139.75	4.940%	ongoing	**33,400.09**
Totals		**57,156,697.30**	**58,253,742.95**	**58,312,344.99**			**128,552.85**

MONTHLY ACTIVITY

Chandler Asset Management Activity:	General	Water CIP Loan	Sewer CIP Loan
Book Value at 07/31/2023	**20,211,964.44**	**19,420,345.38**	**8,145,445.69**
Security Purchases	454,999.30	-	-
Money Market Fund Purchases	289,587.30	78,570.19	33,936.64
Money Market Contributions	-	-	-
Security Sales	-	-	-
Money Market Fund Sales	(455,421.43)	-	-
Maturities	(200,000.00)	-	-
Principal Paydown	(59,251.40)	-	-
Money Market Fund Withdrawals	(10.32)	(1,242.21)	(893,242.58)
Amortization/Accretion	(1,398.21)	-	-
Gain/Loss on Dispositions	-	-	-
Book Value at 08/31/2023	**20,240,469.68**	**19,497,673.36**	**7,286,139.75**
Local Agency Investment Fund Activity:			
Balance at 07/312023	**11,229,460.16**		
Withdrawals, Operating Cash	-		
Interest			
Balance at 08/312023	**11,229,460.16**		

CALAVERAS COUNTY WATER DISTRICT
CHANDLER ASSET MANAGEMENT (General)
FOR THE MONTH ENDED August 31, 2023

INVESTMENT TRUSTEE/TYPE	MARKET VALUE	INVESTMENT COST			Dividends Earned	Interest Earned
		BOOK	PAR Value/Units	CPN RATE		
Asset Backed Security	738,755.94	759,332.15	759,363.79	1.25%		605.14
Agency Securities	1,897,764.40	2,007,426.94	2,000,000.00	1.93%		2,856.58
CMO	945,325.48	973,917.81	990,000.00	3.74%		
Corporate Securities	4,882,632.07	5,081,379.79	5,070,000.00	2.37%		14,502.50
Money Market Fund (Cash)	59,707.93	59,707.93	59,707.93	4.94%	652.93	
Supernational Securities	1,041,244.46	1,120,150.37	1,120,000.00	0.65%		
US Treasury	9,577,993.75	10,238,554.69	10,300,000.00	1.39%		11,718.75
Totals	**19,143,424.03**	**20,240,469.68**	**20,299,071.72**	**1.78%**	**652.93**	**29,682.97**

Item 3b

Agenda Item

DATE: September 27, 2023

TO: Michael Minkler, General Manager

FROM: Rebecca Hitchcock, Clerk to the Board

SUBJECT: Review Board of Directors Time Sheets for August 2023

RECOMMENDED ACTION:

For information only.

SUMMARY:

Pursuant to direction from the Board of Directors, copies of the Board's monthly time sheets, which the Board is compensated from, are included in the monthly agenda package for information. Attached are copies of the Board's time sheets for the month of August 2023.

Board Members can be reimbursed for mileage cost to travel to meetings/conferences and are paid at the current IRS rate.

FINANCIAL CONSIDERATIONS:

Monthly compensation and mileage reimbursement costs are included in the FY 23-24 budget.

Attachments: Board of Directors Time Sheets for August 2023

CALAVERAS COUNTY WATER DISTRICT
2023 DIRECTOR REIMBURSEMENT FORM

For Admin Use — Payroll X — Expense

Month/Yr August 2023

Name S. Ratterman

Activity Date	Meeting or Other Expense Description	Designated Rep. Yes	Designated Rep. No	Association List Yes	Association List No	Prior Approval Yes	Prior Approval No	Cost Meeting	Cost Expense	Total Miles
8-1	CCWD Legal Affairs Mtg.							$120.-		7
8-3	Mt. Counties reception - El Dorado Hills							120.-		46
8-4	Mt. Counties Mtg. - El Dorado Hills							120.-		46
8-9	CCWD Reg. Mtg.							120.-		7
8-15	CCWD Finance Comm Mtg.							120.-		7
8-16	Presented at VPUD Mtg. - Murphys, CA							120.-		37
8-17	CCWD Townhall Mtg. - Valley Springs							-		32
8-23	CCWD Reg. Mtg.							-		7
Total	*For Totals line, multiply miles by the IRS rate:* 1/1/2023 $0.655							$720.-		189
	Pursuant to Board Policy 4030, receipts required; report /materials required.							Totals *(use IRS mileage rate)*		$123.80

The undersigned, under penalty of perjury states: This claim and the items set forth herein are true and correct; that expenses incurred, meetings attended and business conducted are necessary to District affairs; that this claim is proper and within the scope of California Water Code Section 20200 et seq, and District Ordinance 2015-02; that the service was actually rendered; and that the amount(s) herein are justly true.

Signature of Claimant: S. Ratterman

Administrative Review: _____ **Date:** 9/12/23

Orig to Finance Dept.

CALAVERAS COUNTY WATER DISTRICT
2023 DIRECTOR REIMBURSEMENT FORM

For Admin Use		
	Payroll	X
	Expense	

Month/Yr: Aug-23

Name: Cindy Secada

Activity Date	Meeting or Other Expense Description	Designated Rep. Yes	Designated Rep. No	Association List Yes	Association List No	Prior Approval Yes	Prior Approval No	Cost Meeting	Cost Expense	Total Miles
9-Aug	CCWD Regular Board Meeting							120		38.7
14-Aug	EP Prop 218 Town Hall, remote							120		
15-Aug	CCWD Finance, Remote	X						120		
16-Aug	Copper Prop 218 Town Hall, remote									
17-Aug	Valley Springs Prop 218 Town Hall, remote									
22-Aug	CCWD External Relations Alternate	X						120		38.7
23-Aug	CCWD Regular Board Meeting							120		38.7
Total	***For Totals line, multiply miles by the IRS rate:***	1/1/2023	$0.655						0	116.1
	Pursuant to Board Policy 4030, receipts required; report /materials required.			*Totals*	*(use IRS mileage rate)*			$600.00	$0.00	$76.05

The undersigned, under penalty of perjury states: This claim and the items set forth herein are true and correct; that expenses incurred, meetings attended and business conducted are necessary to District affairs; that this claim is proper and within the scope of California Water Code Section 20200 et seq, and District Ordinance 2015-02; that the service was actually rendered; and that the amount(s) herein are justly true.

Signature of Claimant: Cindy Secada

Administrative Review: _____ **Date:** 6/28/23

Orig to Finance Dept.

CALAVERAS COUNTY WATER DISTRICT
2023 DIRECTOR REIMBURSEMENT FORM

For Admin Use	Payroll ⊘
	Expense

Month/Yr: Aug-23

Name: Bertha Underhill

Activity Date	Meeting or Other Expense Description	Designated Rep. Yes	Designated Rep. No	Association List Yes	Association List No	Prior Approval Yes	Prior Approval No	Cost Meeting	Cost Expense	Total Miles
9-Aug	CCWD Regular Board Meeting							120		64
15-Aug	CCWD Finance Committee							120		64
14-Aug	Ebbetts Pass Community Workshop							120		4
16-Aug	Cooperopolis Community Workshop-Virtual							0		0
22-Aug	CCWD External Relations Committee Mtg							120		64
23-Aug	CCWD Regular Board Meeting							120		64
Total	***For Totals line, multiply miles by the IRS rate:*** 1/1/2023		$0.655						0	260
	Pursuant to Board Policy 4030, receipts required; report /materials required.			Totals	*(use IRS mileage rate)*			$600.00	$0.00	$170.30

The undersigned, under penalty of perjury states: This claim and the items set forth herein are true and correct; that expenses incurred, meetings attended and business conducted are necessary to District affairs; that this claim is proper and within the scope of California Water Code Section 20200 et seq, and District Ordinance 2015-02; that the service was actually rendered; and that the amount(s) herein are justly true.

Signature of Claimant: Bertha Underhill

Administrative Review: _____ **Date:** 9/28/23

Orig to Finance Dept.

CALAVERAS COUNTY WATER DISTRICT
2023 DIRECTOR REIMBURSEMENT FORM

For Admin Use	Payroll	⊘
	Expense	

Month/Yr Aug-23

Name Russ Thomas

Activity Date	Meeting or Other Expense Description	Designated Rep. Yes	Designated Rep. No	Association List Yes	Association List No	Prior Approval Yes	Prior Approval No	Cost Meeting	Cost Expense	Total Miles
9-Aug	CCWD Regular Meeting							120		44
16-Aug	Copperopolis Workshop							120		30
17-Aug	Calaveras County Parks & Recreation							120		48
23-Aug	CCWD Regular Meeting							120		44
24-Aug	Copperopolis Area Business Association							120		44
Total	***For Totals line, multiply miles by the IRS rate:*** 1/1/2023		$0.655						0	210
	Pursuant to Board Policy 4030, receipts required; report /materials required.			*Totals* (use IRS mileage rate)				$600.00	$0.00	$137.55

The undersigned, under penalty of perjury states: This claim and the items set forth herein are true and correct; that expenses incurred, meetings attended and business conducted are necessary to District affairs; that this claim is proper and within the scope of California Water Code Section 20200 et seq, and District Ordinance 2015-02; that the service was actually rendered; and that the amount(s) herein are justly true.

Signature of Claimant: Russ Thomas

Administrative Review: _____ **Date:** 8/28/23

Orig to Finance Dept.

CALAVERAS COUNTY WATER DISTRICT
2023 DIRECTOR REIMBURSEMENT FORM

For Admin Use	Payroll	⊘
	Expense	

Month/Yr: Aug-23

Name: Jeff Davidson

Activity Date	Meeting or Other Expense Description	Designated Rep. Yes	Designated Rep. No	Association List Yes	Association List No	Prior Approval Yes	Prior Approval No	Cost Meeting	Cost Expense	Total Miles
9-Aug	CCWD Regular Board Meeting							120		28
17-Aug	Valley Springs Community Workshop							120		0
23-Aug	CCWD Regular Board Meeting							120		28
Total	*For Totals line, multiply miles by the IRS rate:* 1/1/2023		$0.655						0	56
	Pursuant to Board Policy 4030, receipts required; report /materials required.			Totals	*(use IRS mileage rate)*			$360.00	$0.00	$36.68

The undersigned, under penalty of perjury states: This claim and the items set forth herein are true and correct; that expenses incurred, meetings attended and business conducted are necessary to District affairs; that this claim is proper and within the scope of California Water Code Section 20200 et seq, and District Ordinance 2015-02; that the service was actually rendered; and that the amount(s) herein are justly true.

Signature of Claimant: Jeff Davidson

Administrative Review: _____ **Date:** 6/26/23

Orig to Finance Dept.

Item 3c

Calaveras County Water District
Claim Summary #618
July 2023 vs August 2023

	July 2023	Aug 2023
CCWD Operating Expenditures	1,147,802.53	1,299,187.61
Expenditures to be reimbursed/Fiduciary Payments	2,865.00	2,715.00
Capital Improvement Program Projects	2,271,420.03	1,668,475.76
Capital Outlay	-	-
Sub-Total Vendor Payments	**3,422,087.56**	**2,970,378.37**
Payroll Disbursed	642,988.70	623,479.98
Other EFT Payments	2,482.18	7,229.54
Total Disbursements	**4,067,558.44**	**3,601,087.89**

Vendor	Description	Date	Ref	Amount
49er WATER SERVICES	Lab Samples Sewer 07/23	08/16/2023	142798	6,920.00
49er WATER SERVICES	Lab Samples Water 07/23	08/16/2023	142798	8,385.00
A T & T	Acct#287318536357 IT Phone 08/23	08/16/2023	142799	130.82
A T & T	Acct#9391064579 SA Warehouse 08/23	08/23/2023	142832	50.54
A T & T	Internet Service LC Acct#129469186 07/23	08/09/2023	142752	110.21
A T & T	Lease Acct#23584106903335 08/23	08/09/2023	142751	62.87
A T & T	Ref#2097850520 Long Distance Copper Reclaim	08/02/2023	142717	44.86
A T & T	Ref#2097850520 Long Distance Copper Reclaim	08/30/2023	142882	44.86
A T & T CALNET 3	Acct#9391067346 Camp Connell Tower 07/23	08/09/2023	142753	210.53
A T & T CALNET3	Acct#9391029194 OP HQ Long Distance 08/23	08/23/2023	142837	420.90
A T & T CALNET3	Acct#9391029197 CC Whse 08/23	08/23/2023	142840	2.36
A T & T CALNET3	Acct#9391029198 Hunters 08/23	08/23/2023	142838	26.04
A T & T CALNET3	Acct#9391029199 JLTC 08/23	08/23/2023	142842	26.04
A T & T CALNET3	Acct#9391029200 Dorrington 08/23	08/23/2023	142834	26.02
A T & T CALNET3	Acct#9391029201 District Wide 08/23	08/23/2023	142835	1,378.89
A T & T CALNET3	Acct#9391032214 JLTC 08/23	08/23/2023	142836	130.41
A T & T CALNET3	Acct#9391032215 T1- Line 08/23	08/23/2023	142841	154.88
A T & T CALNET3	Acct#9391032216 Azalea L/S 08/23	08/23/2023	142839	24.50
A T & T CALNET3	Acct#9391069409 SA Shop 07/23	08/02/2023	142718	47.32
A T & T CALNET3	Acct#9391069409 SA Shop 08/23	08/23/2023	142833	50.50
A T & T MOBILITY	Internet Service 07/23	08/02/2023	142719	265.77
A T & T MOBILITY	Internet Service 08/23	08/30/2023	142883	261.88
ABS DIRECT INC	Postage Prop218 Post Card	08/10/2023	142797	4,401.00
ACWA JPIA	CCWD Cyber Liability 07/01/23 - 06/30/24	08/23/2023	142843	9,881.00
ACWA/JPIA	Dental 08/01	08/16/2023	142800	6,700.80
ACWA/JPIA	Dental 09/01	08/16/2023	142800	6,915.28
ACWA/JPIA	EAP 08/01	08/16/2023	142800	176.08
ACWA/JPIA	EAP 09/01	08/16/2023	142800	181.04
ACWA/JPIA	Retiree Dental 08/01	08/16/2023	142800	3,219.96
ACWA/JPIA	Retiree Dental 09/01	08/16/2023	142800	3,219.96
ACWA/JPIA	Retiree Vision 08/01	08/16/2023	142800	909.44
ACWA/JPIA	Retiree Vision 09/01	08/16/2023	142800	909.44
ACWA/JPIA	Vision 08/01	08/16/2023	142800	1,392.00
ACWA/JPIA	Vision 09/01	08/16/2023	142800	1,429.12
AFLAC	Acct#JJ325 07/23	08/16/2023	142801	1,648.46
ANISKO, BRETT	Safety Boot Reimbursement FY 23/24	08/16/2023	142802	200.00
ARCHIMEDES HYDRAULIC SERVICE	Service Crane - V 592	08/30/2023	142884	1,310.16
ASAP ASPHALT SEALING & PATCHING INC.	Overcoat & Seal New Asphalt - Vallecito LS	08/16/2023	142803	1,900.50
AUTOMATION DIRECT	Electrical Parts - EP LS 3	08/23/2023	142845	2,354.14
AUTOMATION DIRECT	Electrical Parts - EP LS 3	08/30/2023	142885	66.50
AZEVEDO, PAMELA	UB Refund 1490 Karock Road	08/23/2023	142846	4.61
BOBCAT CENTRAL, INC	A300 Loader Service - Construction Crew	08/23/2023	142847	119.70
BOBCAT CENTRAL, INC	Excavator Service - Construction Crew	08/23/2023	142847	813.20
BOBCAT CENTRAL, INC	T770 Loader AC Service - Construction Crew	08/23/2023	142847	165.30
BRANNON TIRE	Rear Tires - V736 (GapVax)	08/23/2023	142848	2,906.98
BROWN, JOHN	CEU Operator Training Sacramento Meal Reimbursement	08/23/2023	142849	40.50
CA DEPT OF TAX AND FEE ADMIN	Use Sales Tax 2nd QTR 2023	07/27/2023	REF	34.00
CALAVERAS AUTO SUPPLY	Brake Caliper - V 723	08/09/2023	142754	104.00

Vendor	Description	Date	Ref	Amount
CALAVERAS AUTO SUPPLY	Brake Pads - V 538	08/09/2023	142754	92.58
CALAVERAS AUTO SUPPLY	Brake Pads, Rotors, Wheel Seal, ATF - V 723	08/09/2023	142754	385.44
CALAVERAS AUTO SUPPLY	Generator Parts	08/09/2023	142754	33.81
CALAVERAS AUTO SUPPLY	Oil - SA Shop	08/09/2023	142754	125.42
CALAVERAS AUTO SUPPLY	Repair Parts - SA Shop	08/09/2023	142754	67.82
CALAVERAS COUNTY ENVIRONMENTAL HEALTH	Haz Mat Response/ CUPA AR0000768 Wallace WTP	08/02/2023	142720	262.00
CALAVERAS COUNTY PUBLIC WORKS	Blanket Encroachment Permit Services Rendered 05/23-07/27	08/23/2023	142851	3,586.46
CALAVERAS COUNTY PUBLIC WORKS	Inspection Fee Deposit - JL A-B Transmission Potholing Project (CIP 11088)	08/23/2023	142850	2,500.00
CALAVERAS COUNTY PUBLIC WORKS	Jenny Lind Tank A-B Waterline Encroachment Permit (CIP 11088)	08/30/2023	142887	500.00
CALAVERAS ENTERPRISE	Recruitment Ad- Engineering Coord.	08/16/2023	142804	162.84
CALAVERAS LUMBER CO INC	Concrete - Construction Crew	08/09/2023	142755	84.21
CALAVERAS LUMBER CO INC	Dolly - Electrical Crew	08/09/2023	142755	92.64
CALAVERAS LUMBER CO INC	Materials & Supplies - AWWTP	08/09/2023	142755	164.57
CALAVERAS MINI-STORAGE	Tenant 197637 Storage Rental 08/23	08/02/2023	142721	200.00
CALAVERAS MINI-STORAGE	Tenant 197673 Storage Rental 09/23	08/30/2023	142888	200.00
CALPERS - RETIREMENT	Retirement 07/31/2023 Payroll	08/31/2023	REF	57,652.11
CALPERS - RETIREMENT	Retirement 08/15/2023 Payroll	08/31/2023	REF	56,254.19
CALPERS (Def Comp)	Def Comp 07/31/2023 Payroll	08/31/2023	REF	5,894.24
CALPERS (Def Comp)	Def Comp 08/15/2023 Payroll	08/31/2023	REF	5,704.27
CALPERS (Def Comp)	Def Comp Loan Repay 07/31/2023 Payroll	08/31/2023	REF	1,418.91
CALPERS (Def Comp)	Def Comp Loan Repay 08/15/2023 Payroll	08/31/2023	REF	1,178.94
CALPERS (Health Ins)	Health Insurance Admin Fee, Active & Board August 2023	08/31/2023	REF	509.12
CALPERS (Health Ins)	Health Insurance Admin Fee, Retired August 2023	08/31/2023	REF	186.31
CALPERS (Health Ins)	Health Insurance, Active & Board August 2023	08/31/2023	REF	159,095.73
CALPERS (Health Ins)	Health Insurance, Retired August 2023	08/31/2023	REF	8,607.00
CAMAC, CLINTON	Team Work Shop (10 Participants)	08/02/2023	142729	1,083.00
CAMPORA	Propane -Wallace Acct#5075516 07/23	08/09/2023	142756	22.57
CARBON COPY INC	Copies 07/23	08/09/2023	142757	103.74
CARBON COPY INC	Copies 08/23	08/30/2023	142889	129.00
CARDINAL, BILL	SWRCB D4 Cert Renewal Reimbursement	08/16/2023	142805	105.00
CASILLAS, VEDA	2023 Scholarship Award	08/16/2023	142806	500.00
CENTRAL VALLEY SALINITY COALITION INC	ARNOLD WWTP #1785	08/23/2023	142852	169.11
CENTRAL VALLEY SALINITY COALITION INC	Big Trees WWTP #1810	08/23/2023	142852	159.11
CENTRAL VALLEY SALINITY COALITION INC	CC WWRF #1930	08/23/2023	142852	95.70
CENTRAL VALLEY SALINITY COALITION INC	CC WWRF #3278	08/23/2023	142852	303.23
CENTRAL VALLEY SALINITY COALITION INC	DF VCTO WWTP #1976	08/23/2023	142852	159.11
CENTRAL VALLEY SALINITY COALITION INC	FM WWT & RF #2028	08/23/2023	142852	95.70
CENTRAL VALLEY SALINITY COALITION INC	FM WWTP #3318	08/23/2023	142852	303.23
CENTRAL VALLEY SALINITY COALITION INC	Indian Rock Vineyards WWTF #2144	08/23/2023	142852	159.11
CENTRAL VALLEY SALINITY COALITION INC	LC WWT & RF #2185	08/23/2023	142852	447.34
CENTRAL VALLEY SALINITY COALITION INC	LC WWTP #2186	08/23/2023	142852	101.47
CENTRAL VALLEY SALINITY COALITION INC	Sequoia Woods/Mountain Retreat WWTP #2478	08/23/2023	142852	159.11
CENTRAL VALLEY SALINITY COALITION INC	Southworth WWTP #2517	08/23/2023	142852	231.75
CENTRAL VALLEY SALINITY COALITION INC	Wilseyville WWTP #2636	08/23/2023	142852	159.11
CENTRAL VALLEY SALINITY COALITION INC	WP WWTP #2608	08/23/2023	142852	231.75
CENTRAL VALLEY SALINITY COALITION INC	WP WWTP #2619	08/23/2023	142852	159.11
CITY OF ANGELS	Six Mile Village 07/23	08/09/2023	142758	3,664.14
CLARK PEST CONTROL INC	Pest Control Acct#1365831 Arnold WWTP	08/30/2023	142890	104.00

Vendor	Description	Date	Ref	Amount
CLARK PEST CONTROL INC	Pest Control Acct#1505308 Hunters	08/09/2023	142759	114.00
CLARK PEST CONTROL INC	Pest Control Acct#2120969 Wallace	08/09/2023	142759	145.00
CLARK PEST CONTROL INC	Pest Control Acct#807402 JL WWTP	08/23/2023	142853	156.00
CLARK PEST CONTROL INC	Pest Control Acct#807549 JL WTP	08/16/2023	142807	76.00
CLARK PEST CONTROL INC	Pest Control Acct#808360	08/09/2023	142759	100.00
CLARK PEST CONTROL INC	Pest Control Acct#9328727 OP HQ	08/16/2023	142807	183.00
COLE TISCORNIA CONSTRUCTION	Construction Contract for Forest Meadows UV Project (CIP 15106)	08/30/2023	142891	35,403.00
COLEMAN ENGINEERING, INC.	Engineering and Design Contract for the Jenny Lind A-B Transmission (CIP 11088)	08/16/2023	142808	2,329.00
COLUMBIA COMMUNICATIONS	Vehicle Cloud Service 07/23	08/09/2023	142760	780.00
CONDOR EARTH TECHNOLOGIES INC	Compaction Testing - Utility Crew Project 10083	08/23/2023	142854	601.50
CONDOR EARTH TECHNOLOGIES INC	Monitoring Well Reporting - FY 22/23	06/30/2023	142761	3,049.00
CONFIDENTIAL	25.88 Hours CTO Pay Out	08/24/2023	142881	1,131.80
CONFIDENTIAL	35 Hours CTO Pay Out	08/23/2023	142866	1,449.12
CONFIDENTIAL	40 Hours CTO Pay Out	08/16/2023	142825	1,849.24
CONFIDENTIAL	50 Hours CTO Pay Out	08/30/2023	142886	1,325.69
CONFIDENTIAL	60 Hours CTO Pay Out	08/24/2023	142880	2,231.25
CONFIDENTIAL	Retiree Medical Reimbursement 09/23	08/23/2023	142855	2,367.17
CPPA	Power District Wide 07/23	08/09/2023	142762	198,952.40
CPPA	Power OP HQ 07/23	08/09/2023	142762	1,756.00
CPUD	Water Service Op HQ 08/23	08/30/2023	142892	371.96
CPUD	Water Service Corp Yard 07/23	08/09/2023	142763	113.31
CPUD	Water Service Corp Yard 08/23	08/30/2023	142892	113.39
CPUD	Water Service OP HQ 07/23	08/09/2023	142763	365.78
CWEA	CMS1 Exam Application - Kelly	08/23/2023	142856	413.00
CWEA	CMS2 Exam Application - Byous	08/23/2023	142856	207.00
CWEA	CMS2 Exam Application - Sage	08/23/2023	142856	207.00
CWEA	CSM1 Exam Application - Cyr	08/09/2023	142764	413.00
CWEA	CSM1 Renewal - Duburg	08/02/2023	142722	95.00
CWEA	CSM1 Renewal - Duncan	08/16/2023	142809	98.00
CWEA	CSM2 Retest Application - Edens	08/09/2023	142764	207.00
CWEA	CWEA Membership Renewal - DuBurg	08/23/2023	142856	221.00
CWEA	CWEA Membership Renewal - Reece	08/09/2023	142764	202.00
DATAPROSE	Prop 218 Notices	08/16/2023	142810	2,608.48
DATAPROSE	UB Statement Processing 07/23 & Additional Mailer	08/16/2023	142810	18,222.22
DAVIDSON, JEFF	Travel 07/23	08/02/2023	142723	36.68
DAVIDSON, JEFF	Travel 08/23	08/30/2023	142893	36.68
DE LAGE LANDEN FINANCIAL SRVC INC	Copier Lease 07/2023	08/31/2023	REF	294.71
DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00000 06/23	06/30/2023	142765	1,564.00
DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00003 06/23	06/30/2023	142765	582.00
DOWNEY BRAND ATTORNEYS LLP	Legal Services 31348.00037 06/23	06/30/2023	142765	2,009.00
DUNCAN, MATHEW	DMV Exam Reimbursement	08/02/2023	142724	100.00
EBBETTS PASS GAS SERVICE	Fuel 07/23	08/09/2023	142766	1,900.81
EBBETTS PASS LUMBER	Tools - AWWTP	08/09/2023	142767	44.57
EMPLOYMENT DEVELOPMENT DEPT	Acct#932-0252-1 Period Ending 06/23	06/30/2023	142857	7,642.13
FAGNANI, JOE & MARSHA	UB Refund 2555 Fairway Drive	08/23/2023	142858	285.44
FASTENAL	Gloves - Stock	08/16/2023	142811	85.80
FASTENAL	Materials & Supplies - Vending	08/09/2023	142768	2,172.50
FASTENAL	Materials & Supplies - Vending	08/30/2023	142894	957.07

Vendor	Description	Date	Ref	Amount
FASTENAL	Safety Supplies - Vending	08/09/2023	142768	1,927.97
FASTENAL	Safety Supplies - Vending	08/30/2023	142894	571.56
FINANCIAL PACIFIC LEASING	VacCon #1 Principal & Interest Payment	08/31/2023	REF	31,269.08
FINANCIAL PACIFIC LEASING	VacCon #2 Principal & Interest Payment	08/31/2023	REF	30,983.57
FOOTHILL PORTABLE TOILETS	Rental Portable Toilet 07/18-08/14 SR	08/23/2023	142859	154.50
FOOTHILL PORTABLE TOILETS	Rental Portable Toilet 07/18-08/14 Wallace	08/23/2023	142859	154.50
FROGGY'S AUTO WASH & LUBE	Oil & Lube - V 613	08/23/2023	142860	71.85
GAMBI DISPOSAL INC.	Bio-Solids Removal - July 2023	08/02/2023	142725	2,468.75
GENERAL SUPPLY COMPANY	Electrical Parts - CC	08/09/2023	142769	413.94
GENERAL SUPPLY COMPANY	Electrical Parts - EP Meadowmont Pump 3	08/09/2023	142769	69.30
GENERAL SUPPLY COMPANY	Tools - V 551	08/09/2023	142769	506.67
GEORGE REED INC	12.09 3/8 Asphalt - Utility Crew	08/02/2023	142726	1,038.83
GEORGE REED INC	3.07 Tons 3/8 Rake - Utility Crew	08/16/2023	142812	272.58
GEORGE REED INC	3/8 Cutback - Utility Crew	08/30/2023	142895	885.60
GEORGE REED INC	4.03 Tons 3/8 Rake - Utility Crew	08/16/2023	142812	354.78
GEORGE REED INC	4.06 Tons 3/8 Rake - Utility Crew	08/16/2023	142812	357.36
GEORGE REED INC	5.03 Class II AB - Utility Crew	08/02/2023	142726	437.87
GEORGE REED INC	7.07 3/8 Asphalt - Utility Crew	08/02/2023	142726	611.52
GLOBAL PAY	Global Pay 24728 07/2023	08/31/2023	REF	13,811.13
GLOBAL PAY	Global Pay 7167 07/2023	08/31/2023	REF	2,509.61
GRAINGER	Level Indicator - Distribution	06/30/2023	142770	69.41
HANSON BRIDGETT LLP	Legal Services 040081.000001 07/23	08/16/2023	142813	7,515.20
HOBGOODS CLEANING	Janitorial Services JL TC 07/23	08/16/2023	142814	50.00
HOBGOODS CLEANING	Janitorial Services OP HQ 07/23	08/16/2023	142814	1,935.00
HOBGOODS CLEANING	Janitorial Services Shop 07/23	08/16/2023	142814	37.00
HUNT & SONS, INC	DEF - SA Shop	08/09/2023	142771	304.20
HUNT & SONS, INC	Fuel - CC	08/09/2023	142771	273.67
HUNT & SONS, INC	Fuel - Copper Cove	08/02/2023	142727	1,750.35
HUNT & SONS, INC	Fuel - WP	08/09/2023	142771	2,051.69
HYDROSCIENCE ENGINEERS INC	Design and Engineering Services for the Copper Cove WW 04/23 (CIP 15094T)	06/30/2023	142772	67,279.55
HYDROSCIENCE ENGINEERS INC	Design and Engineering Services for the Copper Cove WW 05/23 (CIP 15094T)	06/30/2023	142728	18,811.81
HYDROSCIENCE ENGINEERS INC	Design and Engineering Services for the Copper Cove WW 07/23 (CIP 15094T)	08/16/2023	142815	3,565.00
IB CONSULTNG LLC	Consulting Services 07/23	08/23/2023	142862	17,069.28
INDUSTRIAL ELECTRICAL CO	Floway Pump - FMWWTP	08/30/2023	142896	20,968.88
IRON MOUNTAIN	Document Destruction 07/23	08/09/2023	142773	180.43
JACKSON TIRE SERVICE, INC	Tires - V538	08/23/2023	142863	517.89
JAMES, ARMOUR	UB Refund 2380 Chamonix Drive	08/23/2023	142864	77.16
JENNY LIND VETERANS MEMORIAL DISTRICT	Hall Rental Fee	08/17/2023	142831	275.00
JONES, DOUGLAS & ONIE	UB Refund 3032 Arrowhead St	08/23/2023	142865	743.84
JONES, DOUGLAS & ONIE	UB Refund 4442 Little John Rd	08/23/2023	142865	120.35
KW EMERSON, INC	Construction Contract for the West Point Wilseyville Consolidation (CIP 15091)	08/30/2023	142897	426,825.50
KW EMERSON, INC	Construction Contract for West Point Water Supply 07/23 (CIP 11106)	08/16/2023	142816	93,016.16
LEDGER DISPATCH	Distribution Employee Recruitment Ad	08/16/2023	142817	18.45
LOWE'S	A/C Unit - CC Whse	08/09/2023	142774	463.87
LOWE'S	A/C Unit - JL Huckleberry LS	08/09/2023	142774	758.57
MARK TWAIN MEDICAL CENTER	Hep B Vaccine	08/16/2023	142818	304.29
MARTIN MARIETTA MATERIALS	12.17 Tons 3/4 Class II AB - Utility Crew	08/30/2023	142898	271.78
MARTIN MARIETTA MATERIALS	Materials for Parking Lot for District Corp Yard (CIP 11101)	08/09/2023	142775	2,276.14

Vendor	Description	Date	Ref	Amount
MARTIN MARIETTA MATERIALS	Road Base - EP Barn	08/30/2023	142898	1,034.33
MARTINEZ, FRANK & ELIZABE	UB Refund 4501 Tomahawk Trail	08/09/2023	142776	377.98
MATHESON TRI-GAS, INC	Liquid Oxygen - CCWTP	08/02/2023	142730	6,721.68
MEYER, JEFFREY	UPS- Notary Service	06/30/2023	142731	15.00
Mission Square	RHI 07/31/2023 Payroll	08/31/2023	REF	1,940.00
Mission Square	RHI 08/15/2023 Payroll	08/31/2023	REF	1,925.00
MODESTO AIRCO GAS & GEAR	Cylinder Rental 07/23	08/09/2023	142777	104.00
MOTHER LODE ANSWERING SERVICE	Answering Service 07/23 Acct#6106	08/09/2023	142778	802.00
MOUNTAIN OASIS PURIFIED WATER	Water Cooler & Supplies 07/23	08/09/2023	142779	301.75
MOZINGO CONSTRUCTION, INC.	Construction Contract for CC Lift Stations 15 & 18 07/23 (CIP 15080)	08/09/2023	142780	422,180.00
MOZINGO CONSTRUCTION, INC.	Construction Contract for the CC Lift Stations Force Main (CIP 15076)	08/09/2023	142780	98,800.00
MUELLER SYSTEMS LLC	Construction Contract AMI/AMR Reso 2020-57 (CIP 11096)	06/30/2023	142819	305,216.27
MUNICIPAL MAINTENANCE EQUIP	Driveline, Engine, Radiator Rebuild - V135	08/02/2023	142732	16,700.91
MUNICIPAL MAINTENANCE EQUIP	Vehicle Repair - V746	08/02/2023	142732	4,849.39
MUTUAL OF OMAHA	Life, AD&D Acct#G000AWXB 08/23	08/02/2023	142733	7,219.86
MUTUAL OF OMAHA	Life, AD&D Acct#GAWXB 09/23	08/30/2023	142899	7,270.11
NEW YORK LIFE	Life Insurance 08/23	08/16/2023	142820	832.94
NORDAHL LAND SURVEYING	Topographical Survey for Big Trees #4 Pump Station (CIP 11108)	08/30/2023	142900	3,560.00
NORTHSTAR CHEMICAL	Sodium Hypochlorite - CCWTP	08/02/2023	142734	1,310.04
NORTHSTAR CHEMICAL	Sodium Hypochlorite - CCWTP	08/23/2023	142867	2,289.62
NORTHSTAR CHEMICAL	Sodium Hypochlorite - JLWTP	08/23/2023	142867	4,892.00
NORTHSTAR CHEMICAL	Sodium Hypochlorite - WPWTP	08/23/2023	142867	1,141.09
NORTHSTAR CHEMICAL	Sodium Hypochlorite - WPWWTP	08/23/2023	142867	602.72
NTU TECHNOLOGIES INC	Pro Pac 926 - JLWTP	08/09/2023	142781	12,971.20
NTU TECHNOLOGIES INC	ProPac 9890 - CCRCP	08/02/2023	142735	15,435.00
NTU TECHNOLOGIES INC	Protek 301 - CCRCP	06/30/2023	142735	6,600.00
NTU TECHNOLOGIES INC	Protek 301 - Hunters WTP	08/23/2023	142868	4,368.00
NTU TECHNOLOGIES INC	Protek301 - JLWTP	08/23/2023	142868	3,640.00
ORTIZ, STEVEN & DEBORAH	UB Refund 128 Raccoon Hollow Loop	08/09/2023	142782	357.59
P G & E	Power CC Water Tank	08/31/2023	REF	52.05
P G & E	Power District Wide 07/2023	08/31/2023	REF	2,912.90
P G & E	Power JLTC 07/2023	08/31/2023	REF	235.21
P G & E	Power OP HQ 07/2023	08/31/2023	REF	16.15
P G & E	Power VS House 07/2023	08/31/2023	REF	16.14
P G & E	Power Wallace Spray Fields 07/2023	08/31/2023	REF	24.64
P G & E	Power Warmwood LS 07/2023	08/31/2023	REF	25.21
P G & E	Power Woodgate LS 07/2023	08/31/2023	REF	42.87
PACE SUPPLY CORP	Fittings - Distribution	08/02/2023	142736	3,787.37
PACE SUPPLY CORP	Fittings - Distribution	08/30/2023	142901	1,931.56
PACE SUPPLY CORP	Hydrant - Forest Meadows	08/23/2023	142869	3,593.44
PACE SUPPLY CORP	Repair Clamps - Distribution	08/23/2023	142869	519.57
PACE SUPPLY CORP	Service Charges	08/30/2023	142901	90.54
PALMER, CHARLES	Engineer Lic Fee Reimbursement	08/09/2023	142783	180.00
PARCELQUEST	Parcel Quest (Admin Services - 300)	08/30/2023	142902	16,500.00
PETERSON BRUSTAD INC	Contract for Engineering Services for Tank B Pump Station 07/23 (CIP 11106)	08/16/2023	142821	25,942.57
PETERSON BRUSTAD INC	Contract for Engineering Services for Zone B-C 06/23 (CIP 11122)	06/30/2023	142737	42,119.33
PETERSON BRUSTAD INC	Engineering and Design Services for the West Point Water 06/23 (CIP 11106)	06/30/2023	142784	31,022.11
PETERSON BRUSTAD INC	Engineering and Design Services for the West Point Water 07/23 (CIP 11106)	08/16/2023	142821	18,350.59

Vendor	Description	Date	Ref	Amount
POTRERO HILLS LANDFILL	Bio-Solids Disposal - AWWTP	08/02/2023	142738	575.43
POTRERO HILLS LANDFILL	Bio-Solids Disposal - FMWWTP	08/23/2023	142870	699.40
POTRERO HILLS LANDFILL	Bio-Solids Disposal - LCWWTP	08/02/2023	142738	451.94
POTRERO HILLS LANDFILL	Bio-Solids Disposal - LCWWTP	08/09/2023	142785	418.84
QUADIENT LEASING INC	Mail Equipment Lease 07/2023	08/31/2023	REF	1,097.48
RATTERMAN, SCOTT	Airfare ACWA Palm Springs	08/30/2023	142903	227.92
RATTERMAN, SCOTT	Hotel Mountain Counties	08/30/2023	142903	181.82
RATTERMAN, SCOTT	Travel 07/23	08/02/2023	142739	32.75
RATTERMAN, SCOTT	Travel 08/23	08/30/2023	142903	123.80
REECE, CHRISTOPHER	DOT Exam Reimbursement	08/16/2023	142822	145.00
REXEL	Electrical Parts	08/23/2023	142871	789.60
REXEL	Stock Parts - Electricians	08/16/2023	142824	387.93
ROBERT SAPIEN	Tree Removal - White Pines FY 23/24	08/23/2023	142872	3,600.00
RYAN PROCESS, INC	Streaming Current Detector - CCWTP	06/30/2023	142740	13,627.78
SECADA, CINDY	Travel 07/23	08/02/2023	142741	25.35
SECADA, CINDY	Travel 08/23	08/30/2023	142904	76.05
SEIU LOCAL 1021	COPE 07/23	08/16/2023	142826	40.00
SEIU LOCAL 1021	SEIU 07/23	08/16/2023	142826	2,675.00
SENDERS MARKET INC	Concrete - Collections Crew	08/09/2023	142786	413.35
SENDERS MARKET INC	Cutoff Wheels, Fasteners - Collections Crew	08/09/2023	142786	11.13
SENDERS MARKET INC	Distilled Vinegar - Collections Crew	08/09/2023	142786	13.50
SENDERS MARKET INC	Distilled Vinegar - JLWTP	08/09/2023	142786	40.49
SENDERS MARKET INC	Hose Bib - JLWTP	08/09/2023	142786	38.59
SENDERS MARKET INC	Materials - Warehouse	08/09/2023	142786	272.35
SENDERS MARKET INC	Materials & Supplies - Collections Crew	08/09/2023	142786	40.30
SENDERS MARKET INC	Materials & Supplies - JLWTP	08/09/2023	142786	93.75
SENDERS MARKET INC	PRV Repair Parts - WP	08/09/2023	142786	280.32
SENDERS MARKET INC	Risers, Lids - Collections Crew	08/09/2023	142786	1,656.57
SENDERS MARKET INC	Water Filters - OP HQ	08/09/2023	142786	62.72
SIGNAL SERVICE	Installation of Security System for District Corp Yard (CIP 11101)	08/30/2023	142905	17,871.35
SOUTHERN TIRE MART	Generator Tires - Mechanics	06/30/2023	142742	853.30
STAPLES CREDIT PLAN	Office Supplies 07/23	08/30/2023	142906	349.57
STEPHENS, DAKOTA	2023 Scholarship Award	08/30/2023	142907	500.00
SWRCB	Water Distribution D3 Renewal - Rose	08/09/2023	142787	90.00
SWRCB	Water Treatment Operator II Renewal - Gravette	08/02/2023	142743	60.00
THOMAS, RUSS	Travel 07/23	08/02/2023	142744	137.55
THOMAS, RUSS	Travel 08/23	08/30/2023	142908	137.55
TIFCO INDUSTRIES	Abrasive Discs - SA Shop	08/09/2023	142788	63.38
TIFCO INDUSTRIES	Credit Abrasive Discs - SA Shop	08/09/2023	142788	(35.46)
TIFCO INDUSTRIES	Gloves - SA Shop	08/09/2023	142788	54.06
TURPIN, JUDY	UB Refund 980 Fairway Court	08/30/2023	142909	171.00
TYLER TECHNOLOGIES, INC.	Insite Transaction Fees 06/30	06/30/2023	142745	16,708.00
TYLER TECHNOLOGIES, INC.	Subscription - UB Notification	06/30/2023	142745	43.30
U.S. BANK	Air Hose Reel	08/16/2023	REF	159.74
U.S. BANK	Alhambra	08/16/2023	REF	167.27
U.S. BANK	Apple Storage	08/16/2023	REF	0.99
U.S. BANK	Aramark	08/16/2023	REF	2,962.29
U.S. BANK	Arnold Auto Supply	08/16/2023	REF	181.61

Vendor	Description	Date	Ref	Amount
U.S. BANK	Asphalt Rakes	08/16/2023	REF	366.55
U.S. BANK	Batteries	08/16/2023	REF	52.17
U.S. BANK	Beverages & Ice - Cal Fire	08/16/2023	REF	31.53
U.S. BANK	BOD Supplies, Office Supplies	08/16/2023	REF	185.28
U.S. BANK	Cal Waste	08/16/2023	REF	1,700.79
U.S. BANK	Cal.Net	08/16/2023	REF	62.04
U.S. BANK	Calaveras Telephone	08/16/2023	REF	1,439.47
U.S. BANK	Car Wash	08/16/2023	REF	16.00
U.S. BANK	Car Wash - V 139	08/16/2023	REF	11.00
U.S. BANK	Comcast	08/16/2023	REF	724.96
U.S. BANK	Commercial Coffee Pot - Office	08/16/2023	REF	757.58
U.S. BANK	Conifer - OP HQ Internet	08/16/2023	REF	649.95
U.S. BANK	Core Drill - AWWTP	08/16/2023	REF	646.33
U.S. BANK	Core Drill - Vallecito	08/16/2023	REF	515.00
U.S. BANK	CWEA Annual Renewal - Gravette	08/16/2023	REF	98.00
U.S. BANK	Docking Station , Internet Cable, Wireless Mic , It Supplies	08/16/2023	REF	1,105.77
U.S. BANK	Employee Relation Supplies & Office Supplies	08/16/2023	REF	501.21
U.S. BANK	Ethernet Adapters - Electricians	08/16/2023	REF	2,110.72
U.S. BANK	Eye Wash Cups	08/16/2023	REF	65.06
U.S. BANK	Financial Reporting Online	08/16/2023	REF	900.00
U.S. BANK	Fire Hose - La Contenta	08/16/2023	REF	1,216.60
U.S. BANK	Firewood - Management Training Supplies	08/16/2023	REF	201.09
U.S. BANK	First Aid Kits, Heat Illness Supplies & Fans	08/16/2023	REF	2,011.07
U.S. BANK	Fridge Filters	08/16/2023	REF	68.08
U.S. BANK	Grease Gun - WP	08/16/2023	REF	216.75
U.S. BANK	Hach / USA - Regents,Turbidity	08/16/2023	REF	710.43
U.S. BANK	Hand Pump	08/16/2023	REF	131.64
U.S. BANK	Hex Key, Ant Bait, Drinks & Ice for CDF Crew @ Hunters	08/16/2023	REF	116.71
U.S. BANK	Hour Meter	08/16/2023	REF	198.31
U.S. BANK	JPIA Leadership Hotel & Meal	08/16/2023	REF	194.55
U.S. BANK	Laundry Soap - Reimbursed in AR 08/10/23	08/16/2023	REF	4.00
U.S. BANK	Meals Tahoe Conference	08/16/2023	REF	62.39
U.S. BANK	Meter Markers	08/16/2023	REF	156.56
U.S. BANK	Oil	08/16/2023	REF	43.10
U.S. BANK	Portable AC Unit - CC	08/16/2023	REF	504.07
U.S. BANK	Postage	08/16/2023	REF	2.17
U.S. BANK	Pressure Water Vessels - Mechanics	08/16/2023	REF	550.35
U.S. BANK	Printer	08/16/2023	REF	707.82
U.S. BANK	Printer Cartridge	08/16/2023	REF	29.41
U.S. BANK	Pumps & Tubing	08/16/2023	REF	1,146.67
U.S. BANK	Recruitment	08/16/2023	REF	1,715.00
U.S. BANK	Satellite for SCADA Access & Ethernet Link	08/16/2023	REF	748.49
U.S. BANK	Saw Blades	08/16/2023	REF	584.99
U.S. BANK	Senders & Amazon - Foil Tape, Screws, Trimmer Line, Log Books	08/16/2023	REF	313.14
U.S. BANK	TP - Paper Towels - District	08/16/2023	REF	1,068.99
U.S. BANK	Transmission Rebuild - V720	08/16/2023	REF	7,583.07
U.S. BANK	Verizon	08/16/2023	REF	3,141.35
U.S. BANK	Volcano	08/16/2023	REF	594.59

Vendor	Description	Date	Ref	Amount
U.S. BANK	Wallace AD Meeting - Casa Piedra Meals (5)	08/16/2023	REF	72.61
U.S. BANK	Water Code Subscription	08/16/2023	REF	37.53
U.S. BANK	Water Treatment Review Course/ Water Distribution	08/16/2023	REF	1,451.24
U.S. BANK	Water Treatment/Excel Basic Online Webinar (6)	08/16/2023	REF	269.00
U.S. BANK	Web Hosting, Ring Central, Adobe Lic, MDM2 FA , SSL Cet	08/16/2023	REF	4,697.94
U.S. BANK	Weinhoff Pre Employment Drug Screening	08/16/2023	REF	75.00
U.S. BANK	Welding Reel - V 247	08/16/2023	REF	470.83
U.S. BANK	Wheel Studs V 723	08/16/2023	REF	156.71
UMPQUA BANK	UAL Loan	08/23/2023	142873	239,708.00
UNDERHILL, BERTHA	Travel 07/23	08/02/2023	142746	180.13
UNDERHILL, BERTHA	Travel 08/23	08/30/2023	142910	170.30
UNION DEMOCRAT	Recruitment Ad Engineer, Mechanics, Distribution	08/16/2023	142827	549.32
UNITED PARCEL SERVICE	Acct#9X5040 Shipping Week 08/02	08/16/2023	142828	10.00
UNITED PARCEL SERVICE	Acct#9X5040 Shipping Week End 08/12	08/23/2023	142874	28.50
UNITED PARCEL SERVICE	Shipping Week End 07/22	08/09/2023	142789	10.00
UNITED PARCEL SERVICE	Shipping Week End 07/29	08/09/2023	142789	10.00
UNITED PARCEL SERVICE	Shipping Week End 08/19	08/30/2023	142911	16.00
USA BLUE BOOK	Lab Supplies - CCWTP	08/02/2023	142747	278.70
USA BLUE BOOK	Lab Supplies - CCWTP	08/30/2023	142912	72.19
USA BLUE BOOK	Lab Supplies - CCWWTP	08/30/2023	142912	49.22
USA BLUE BOOK	Lab Supplies - Hunters WTP	08/16/2023	142829	4,373.48
USA BLUE BOOK	Lab Supplies - JLWTP	08/09/2023	142790	748.74
USA BLUE BOOK	Pitot Gauges - West Point	08/23/2023	142875	338.80
USA BLUE BOOK	Turbidimeter - Wallace WTP	08/02/2023	142747	2,090.88
VALIC	Def Comp 07/31/2023 Payroll	08/31/2023	REF	1,377.22
VALIC	Def Comp 08/15/2023 Payroll	08/31/2023	REF	977.22
VALLEY SPRINGS NEWS	Employee Recruitment Distribution Worker	08/09/2023	142791	110.00
VE SOLUTIONS INC	Change Order #1 - On-Call Structural Engineering Services (CIP 15091)	08/09/2023	142792	1,650.00
VOYA FINANCIAL	Def Comp 07/31/2023 Payroll	08/31/2023	REF	1,654.30
VOYA FINANCIAL	Def Comp 08/15/2023 Payroll	08/31/2023	REF	1,654.30
WAGEWORKS	FSA Admin 08/23	08/30/2023	142913	230.00
WECO INDUSTRIES	PRV - V 736	08/16/2023	142830	927.39
WECO INDUSTRIES	PRV, Kanaflex Tube - V 736	08/09/2023	142793	957.00
WECO INDUSTRIES	Vac-Con Parts - V 736	08/23/2023	142876	1,173.39
WEST POINT LUMBER INC	PRV Repair Parts - WP	08/09/2023	142794	237.12
WEST POINT LUMBER INC	Repair Parts - WP	08/09/2023	142794	63.43
WEST POINT LUMBER INC	Tape - WP	08/09/2023	142794	20.36
WESTECH ENGINEERING, INC	Pre-Purchase Contract for the Filter for the West Point Water (CIP 11106)	06/30/2023	142795	49,257.38
WESTERN HYDROLOGICS	Professional Services - Water Rights Reporting	06/30/2023	142877	1,010.00
WESTERN HYDROLOGICS	Stream-Gage Maintenance, Monitoring, Reporting - Bear Creek Dive	06/30/2023	142748	4,912.13
WESTERN HYDROLOGICS	Stream-Gage Maintenance, Monitoring, Reporting - Bear Creek Dive	06/30/2023	142877	7,253.87
WEX BANK	Fuel 07/2023	08/31/2023	REF	19,554.47
WIENHOFF DRUG TESTING	Specimen Collection Fee	08/23/2023	142878	15.00
WILLE ELECTRIC SUPPLY CO INC	Electrical Parts - EP Meadowmont Tank	08/23/2023	142879	357.91
YOUNG, DAVID	Winter Weather Gear Reimbursement FY 23/24	08/09/2023	142796	200.00
YOUNG'S COPPER ACE HARDWARE	Materials & Supplies - CC	08/02/2023	142749	67.06
ZANARDI, CHRIS	Class A Physcial Exam -Reimbursement	08/02/2023	142750	145.00
		TOTAL AUGUST 2023 DISBURSEMENTS:		**2,970,378.37**

RESOLUTION NO. 2023-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

RATIFYING CLAIM SUMMARY NO. 618

WHEREAS, the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT has reviewed and considered Claim Summary Number 618 at the Regular Meeting held on September 27, 2023; and

WHEREAS, Board Members have resolved questions, issues, or concerns by consultation with District staff during said meeting.

NOW, THEREFORE, BE IT RESOLVED that the CALAVERAS COUNTY WATER DISTRICT Board of Directors hereby ratifies Claim Summary Number 618 in the amount of $3,601,087.89 or the month of August 2023.

PASSED AND ADOPTED this 27th day of September 2023 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Scott Ratterman, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

Item 4b

Agenda Item

DATE: September 27, 2023

TO: Board of Directors

FROM: Brad Arnold, Water Resources Program Manager

SUBJECT: Hydrologic Conditions Update

RECOMMENDED ACTION:

Receive and discuss information regarding the proposed package of California water rights legislation and potential impacts to Calaveras County Water District. This is an information-only item and no action is required.

SUMMARY:

Calaveras County Water District (CCWD) staff will provide a verbal update regarding hydrologic conditions, reservoir storage levels, and other related information in preparation for the start of "Water Year" 2024 on October 1, 2023. Although this past year has been one of the wettest on record for California, CCWD should remain prepared for future dry hydrology and return to drought conditions at any time; see Attachment A. Fortunately, some of the major reservoirs that CCWD relies on for stored water releases are at their highest levels in recent history, as shown in Attachment B. Most of CCWD's service areas remain relatively protected from major supply disruptions, owing to these stored water supplies.

CCWD's currently available water rights and supplies means it is unlikely to face conditions where it is unable to provide water to its domestic service areas and agricultural customers. That said, possible long-term drought conditions, regulatory or contractual constraints, or other issues could impact CCWD's systems in ways never seen previously. CCWD will continue to monitor, analyze, and prepare for these conditions and issues in its briefings, Annual Water Supply & Demand Assessment (AWSDAs), and Fiscal Year Water Supply Projections Reports.

FINANCIAL CONSIDERATIONS:

None

Attachments:
A – San Joaquin Index Frequencies following Wet Hydrologic Years
B – September 1st Historic Reservoir Level Data

Attachment A
California Data Exchange Center (CDEC)
San Joaquin River Watershed Water Year Hydrologic Classification Indices
Percentage occurrence of Indices following "Wet" Hydrologic Year

CDEC Hydrologic Indices[1]	
W	Wet Conditions
AN	"Above Normal" Conditions
BN	"Below Normal" Conditions
D	Dry Conditions
C	Critically Dry Conditions

[1] Based on measured unimpaired runoff in San Joaquin River Watershed (Central Sierras).

Figure A1. Frequency of Indices following "Wet" Year Pre-1950 (WY 1901-1950)

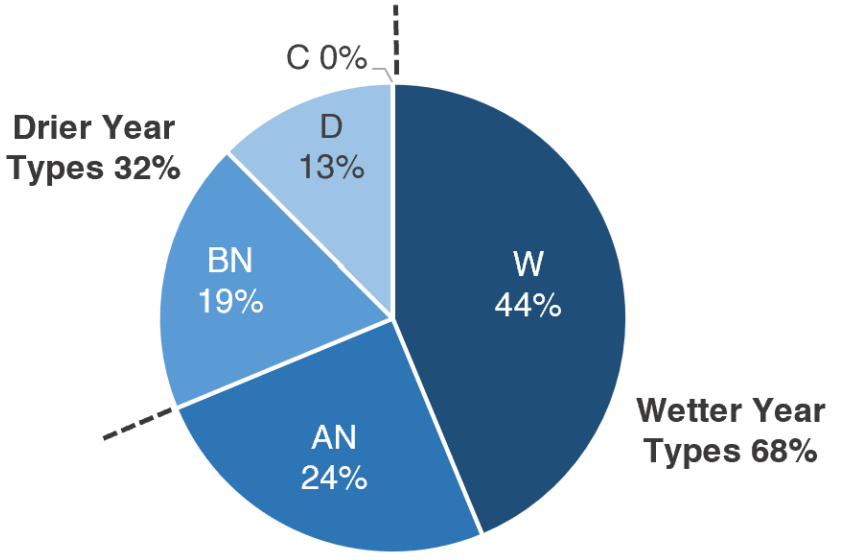
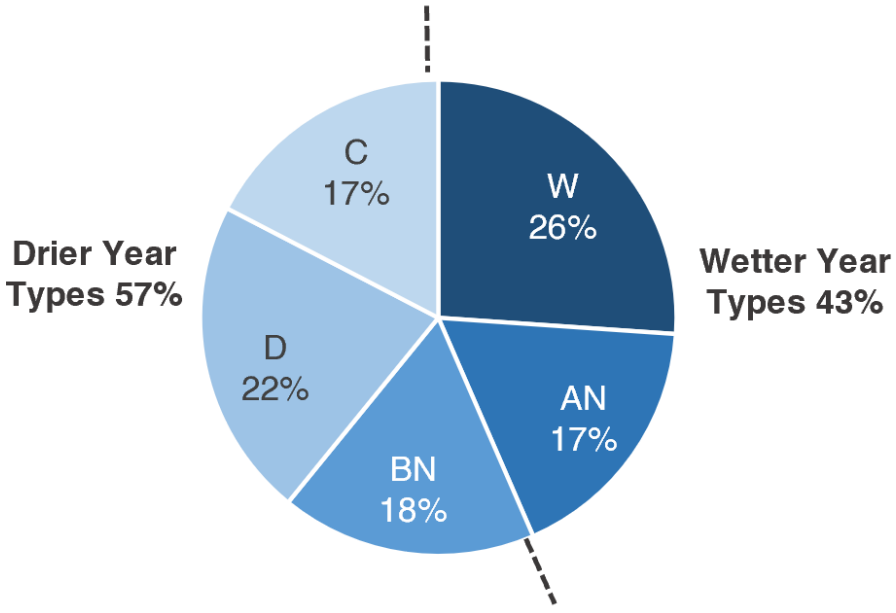


Figure A2. Frequency of Indices following "Wet" Year Post-1950 (WY 1950-2022)



Attachment B
California Data Exchange Center (CDEC)
Daily Reservoir Storage Levels

Figure B1. New Hogan Reservoir Storage on September 1 (NHG 2014 to Present)

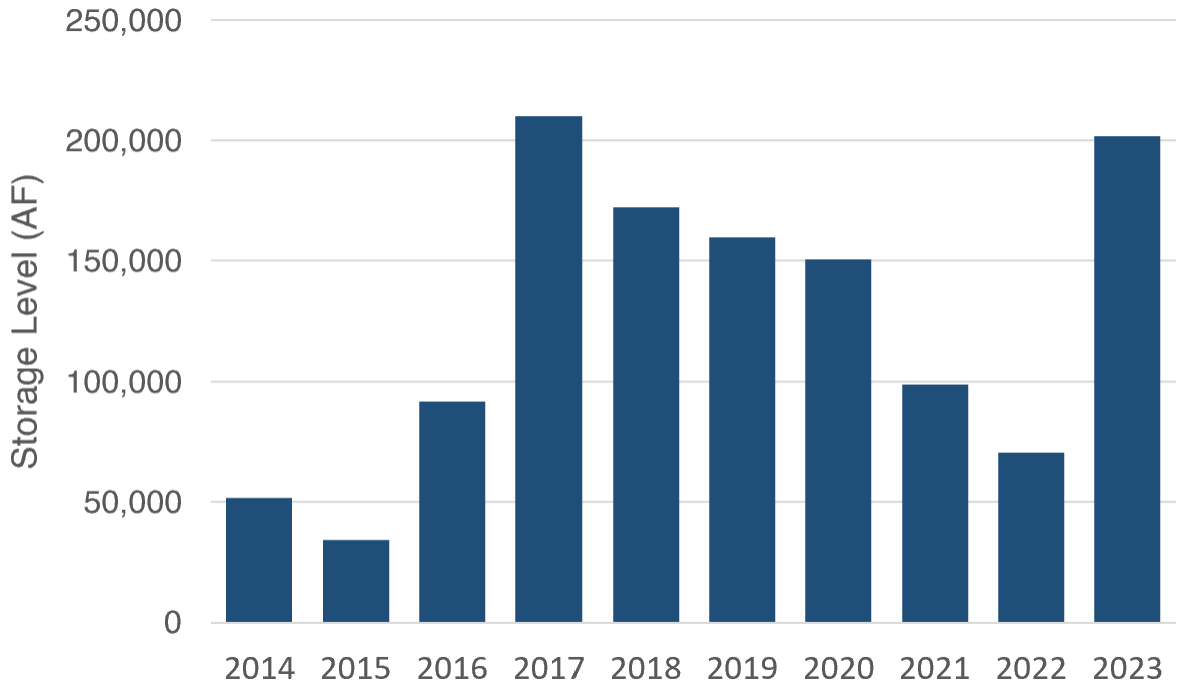
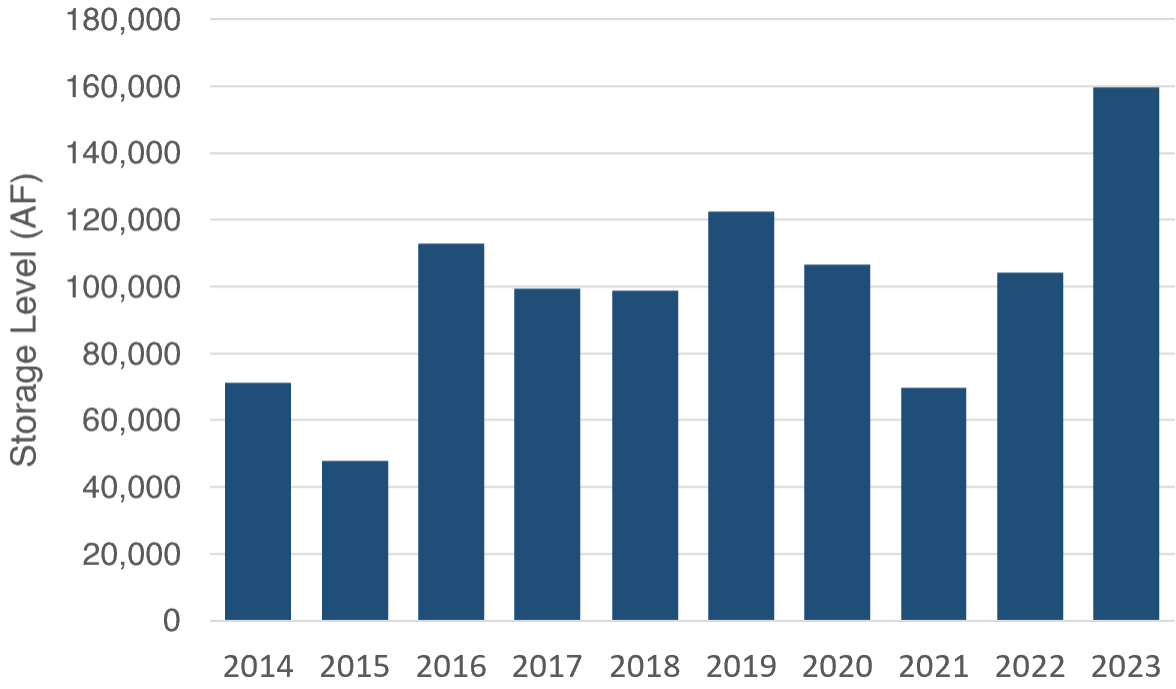


Figure B2. New Spicer Meadow Reservoir Storage on September 1 (SPM 2014 to Present)



Item 4c

Agenda Item

DATE: September 27, 2023

TO: Michael Minkler, General Manager

FROM: Jesse Hampton, Plant Operations Manager

RE: Discussion/Action regarding a Sole Source Purchase of a UPS for the Copper Cove Treatment Plant Ozone Generator

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RECOMMENDED ACTION:

Motion _____ / _____ by Minute Entry Approving the Sole Source Purchase of a UPS for the Copper Cove Treatment Plant Ozone Generator

SUMMARY:

At the District's Copper Cove Water Treatment Plant there's a UPS (battery backup) for the ozone generators. The UPS that is currently there has run out of life and is out of date due to being around 20 years old. The UPS is used to condition the power that is used for the ozone generators. It is also used to power the ozone generators during a power outage while transferring to our generator power backup system.

The Operations Department would like to sole source the purchase of a new UPS. The UPS is from the Toshiba Manufacture and supplied from Systat Critical System Protection Services. The District only has one other large UPS unit like this that is in Forest Meadows and is used for the UV system. This unit is also manufactured by Toshiba and we would like to keep consistency throughout the District. We have found that Toshiba has service and technical support for the District.

FINANCIAL CONSIDERATIONS:

The FY 2023-24 Capital Outlay budget includes $100,000 for UPS battery backups, including a UPS backup for the ozone generators at Copper Cove Water Plant.

The total cost of the Toshiba unit, with tax and delivery quote, is $93,305.96 but the PO will be written not to exceed $96,000.00 for unseen shipping charges that are outside the shipping quote.

Attachments: *Systat Quote*

CALAVERAS COUNTY WATER DISTRICT
120 Toma Court
San Andreas, California 95249
(209) 754-3543
www.ccwd.org

PURCHASE ORDER
No. 83450

VENDOR:	SHIP TO:	BILL TO:
SYSTAT PO BOX 9721 SAN JOSE, CA 95157	CALAVERAS CNTY WATER DIST 120 TOMA COURT SAN ANDREAS, CA 95249-0846	CALAVERAS CNTY WATER DIST 120 TOMA COURT SAN ANDREAS, CA 95249-0846

VENDOR NO.	VENDOR PHONE NUMBER	TERMS	DATE	REQUIRED DELIVERY DATE
9605		0	09/07/2023	

SHIPPING INSTRUCTIONS

(none)

ITEM	QTY	U/M	DESCRIPTION/TASK	PRD CODE	ACCOUNT	UNIT PRICE	AMOUNT
1	0.00		UPS - CC Ozone Generators		300-54-75200	41,567.25	41,567.25
2	0.00		UPS - CC Ozone Generators 11133-00		120-54-60310	54,432.75	54,432.75

SUBTOTAL:	96,000.00
TAX:	0.00
SHIPPING:	0.00
TOTAL:	96,000.00

TAXABLE: Yes
CONFIRMING:

AUTHORIZED SIGNATURE

IMPORTANT: OUR ORDER NUMBER MUST APPEAR ON EVERY INVOICE AND PACKAGE

CALAVERAS COUNTY WATER DISTRICT
120 Toma Court — P.O. Box 846
San Andreas, CA 95249 (209) 754-3543
Fax (209) 754-9620

PURCHASE ORDER

83450

To Systat Date 9 / 7 / 23

Address

Phone/ Fax Contact Person

F.O.B. Freight Charge Yes ☐ No ☐

Account Number	Project Number	Quantity Ordered	Quantity Received	Description	Unit Price	TOTAL
				UPS for Copper Cove Ozone generators		82,896
300-54-75200						41,567.25
120-54-60310	11133					54,432.75
				Not to exceed		
				Tax	about	6,009.96
				Shipping	about	4,400
				Total		96,000

135

White - Accounting
Canary - Department Copy
Pink - O & M Copy

Ordered/Received By

Authorized By

QUOTATION

SYSTAT
CRITICAL SYSTEM PROTECTION SERVICES

P.O. Box 9721
San Jose, CA 95157
888-782-8498

Account Address

Calaveras County Water District
Tony Broglio
5130 Kiva Place
Copperopolis, CA 95228
209-768-7415
tonyb@CCWD.org

Equipment Location

Same

Quotation Number	Quotation Date	Agreement Term	Scheduled
323-CC-0097.1	8/28/2023	N/A	TBD

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
	New Toshiba UPS Solutions		
1	Toshiba 80kVA G9000 480/277V UPS, Remote Eye UPS Manager	82,896.00	82,896.00
	Dimensions: 27.6"W x 32.7"D x 80.7"H; 775lbs.		
	Battery Solution with Enersys HX205 batteries, 8.3 min. @ full load		incl.
	Dimensions: 36.0"W x 29.5"D x 78.7"H; 2,140lbs.		
	3-Breaker Side-Car Bypass Panel w/KK & SKRU		incl.
	Dimensions: 12"W x 32.8"D x 78.7"H; 275lbs		
	Start-up normal hours (Mon – Fri, 8am – 5pm) w/2 weeks notice		incl.
	Three Year Warranty (Does not include PM visits)		incl.
	Clarifications:		
	1. Freight and Sales Tax are **NOT** included in the pricing above.		
	2. Work to be performed during normal hours.		
	3. Electrical Design, Engineering and Installation is by others.		

1. Total cost is for equipment and/or services above and scope(s) of work attached, if any, to this quotation. Any customer requested changes may result in additional charges. If customer requires a certificate of insurance with customer listed as additional insured, customer will be charged the actual cost of the certificate.
2. Payment terms are Net 30 days from date of invoice. If this quotation is for an Annual Service Agreement the total cost will be billed annually in advance. Sales Tax and/or Shipping charges, if applicable, are not included in the above
3. This quotation is valid for sixty (60) days from date of SYSTAT signature.
4. By signing below or by issueing an order for services and/or products listed in this quote, customer agrees to all of the terms and conditions as set forth in this quotation.

Quotation Accepted and Approved By:

	SYSTAT:		Customer:
Signature:	*Bill Biltz*	Signature:	
Title:	Sales Manager	Title:	
Date:	August 28, 2023	Date:	

PLEASE SIGN AND RETURN WITH YOUR PURCHASE ORDER

SYSTAT

Item 4d

Agenda Item

DATE: September 27, 2023

TO: Michael Minkler, General Manager

FROM: Jesse Hampton, Plant Operations Manager

RE: Discussion/Action regarding a Sole Source Purchase of Ozone Generators CIP Project #11133

RECOMMENDED ACTION:

Motion:____/____ by Minute Entry to approve the Sole Source purchase of 2 Ozone Generators for Copper Cove Water Treatment Plant, CIP #11133

SUMMARY:

At the District's Copper Cove Water Treatment Plant there are two ozone generators that were originally installed back in 1998. Ozone is used as an oxidizer in pretreating the raw water for organics and manganese before the water flows to the filtration units. District staff have done a great job keeping the generators in functioning order. But we have come to a point where the generators are beyond their life and the parts for them are no longer manufactured.

The District also has Ozone Generators at our Jenny Lind Water Treatment Plant that were installed back in 2014. These generators are manufactured by Ozonia. Ozonia has since been bought out by Veolia who is still using the Ozonia name and technology. We would like to keep the consistency of having the same Ozone Generators at both treatment plants. The units have not changed much since 2014.

With the information given above, the Operations Department would like to sole source the purchase of the two Ozone Generators from Veolia. With this purchase we are including new diffusers that will replace the original ones that are within the Ozone towers where the contact of Ozone and the raw water takes place for oxidation.

FINANCIAL CONSIDERATIONS:

The FY 2023-24 CIP budget includes $300,000 for the purchase of two Ozone Generators.
The total cost of the Ozone Generators, diffusers, and tax and delivery is $283,676.25 but the PO will be written not to exceed $300,000.00 for unseen parts that will be needed during installation.

Attachment *Veolia Quote*

CALAVERAS COUNTY WATER DISTRICT
120 Toma Court
San Andreas, California 95249
(209) 754-3543
www.ccwd.org

PURCHASE ORDER
No. 87771

VENDOR:

VEOLIA WATER TECHNOLOGIES, INC.
ATTN ARAH SWEET
4001 WESTON PARKWAY
CARY, NC 27513

SHIP TO:

CALAVERAS CNTY WATER DIST

120 TOMA COURT

SAN ANDREAS, CA 95249-0846

BILL TO:

CALAVERAS CNTY WATER DIST
120 TOMA COURT

SAN ANDREAS, CA 95249-0846

VENDOR NO.	VENDOR PHONE NUMBER	TERMS	DATE	REQUIRED DELIVERY DATE
5547		0	09/20/2023	

SHIPPING INSTRUCTIONS

(none)

ITEM	QTY	U/M	DESCRIPTION/TASK	PRD CODE	ACCOUNT	UNIT PRICE	AMOUNT
1	0.00		(2) Ozone Generators, (1) Diffuser Package - CCWTP 11133-00		120-54-60310	300,000.00	300,000.00

SUBTOTAL:	300,000.00
TAX:	0.00
SHIPPING:	0.00
TOTAL:	300,000.00

TAXABLE: Yes
CONFIRMING:

AUTHORIZED SIGNATURE

IMPORTANT: OUR ORDER NUMBER MUST APPEAR ON EVERY INVOICE AND PACKAGE

Veolia Water Technologies
Treatment Solutions USA Inc.
600 Willow Tree Road
Leonia, NJ 07605, USA,
Tel: +1 201 676 2525

TO:	Jesse Hampton Plant Operations Manager Calaveras County Water District JesseH@ccwd.org	TEL:	Tel/Phone: (209)754-3316 Cell :(209)768-7417
CC:	Bill Cardinal BillC@ccwd.org	FAX:	
FR:	Veolia Water Technologies Treatment Solutions USA Shanshan Jin ONA#: S23-256 AQ	TEL: FAX: EMAIL:	(201) 402-8128 (Cell) (201) 346-5460 Shanshan.jin1@veolia.com
RE:	CFS-28 and Ozone Diffusers - CCWD		
PAGE 1 of 9		DATE	September 14, 2023

Thank you for your interest in the products and services of Veolia Water Technologies Treatment Solutions. We are pleased to quote the following, for your review. The objective of this quote is to replace the existing CF-5 ozone generator and the diffusors that's currently installed at the Copper Cove WTP site. The design is based on 60 lbs/day at 10% O_3 and up to 50 lbs/day at 12% O_3 concentration with a system consisting of two (2) ozone generators, each rated for 50 - 60 lbs per day (3.5 – 4.5 SCFM). The ozone capacity of the ozone generator is based on an inlet cooling water temperature of 60 °F.

OZONE GENERATOR MODEL CFS-28

Two (2) OZAT Model CFS-28 Ozone Generators.

Each CFS-28 unit:

- Delivers a maximum of 85 lbs ozone per day (~1606 grams per hour) at 6 wt% concentration from ~11.8 scfm (710 SCFH) oxygen with 60°F cooling water
- Delivers a maximum of 67 lb. ozone per day(~1267 grams per hour) at 10 wt% concentration from ~5.6 scfm (338 SCFH) oxygen with 60°F cooling water
- Dimensions: 1302 mm L x 872 mm W x 1450 mm H (51.2"L x 34.3" W x 57.1" H)
- Weight: ~ 665 kg (~1466 lb.)
- Engineering, Project Management, Testing, Inbound Freight, Commissioning, Training and Warranty included

2 x Net Price: **US$ 252,340**

Estimated Shipment: **16 to 20 weeks after approval to proceed**

The CFS-28 ozone generator can be adjusted to deliver ozone at various concentrations and production rates. Please see the attached specification sheets for additional details

The ozone generator will require the following utilities:

- Power (See Note 6): 400V/460V/480V, 3 phase, 50/60 Hz, 17.2 kW, 32A circuit breaker
- Cooling Water: 9.7 GPM @ 40°F to 86°F, tap quality with low chlorides
- Feed Gas Inlet Pressure: 35 – 116 psig (oxygen), 45 – 116 psig (air)
- Feed Gas Dewpoint: -85°F or drier @ 14.7 psi
- Standard Ambient Conditions: < 3280 ft elevation, < 104 deg F internal temp; < 65% avg annual RH

Dome Diffusers

Thirty – two (32) dome differs of 120 mm in diameter.

Net Price Total: **US$ 12,160**

Estimated Shipment: **16 to 20 weeks after approval to proceed**

SERVICE

Start up and Training Service are not included in our price. Field service can be contracted at a rate of US$ 1,485.00 per day, portal to portal, plus expenses.

NOTES and CLARIFICATIONS

1. Veolia ozonia does not offer installation services. Installation and connections to utilities and proposed or existing piping are not included in our offering.

2. Prices quoted are based on quantities shown. Prices may change should quantities change or should order be placed beyond proposal valid period.

3. Ozone generator is manufacturer's standard, CE compliant.

TERMS

- Payment: 15% with order ; 25% with notice to proceed with fabrication; 50% prior to shipment; balance net 30 after shipment
  Restocking 25% after notice to proceed is given ;
  Credit card payments incur a 4% service fee.
- EXW: Shipping Point, USA
- Validity: 30 days
- Equipment Warranty: One year after start up or 18 months after delivery, whichever comes first

Buyer is responsible for all federal and local taxes and duties and sales tax in all jurisdictions unless certificate of tax exemption is presented with order

VEOLIA

Ozonia* CFS

Compact Ozone Generators

WATER TECHNOLOGIES

Ozonia Technology:
Ozonia CFS

The **Ozonia CFS** range is designed for small to medium sized ozone applications and uses the same robust industrial ozone production technology as larger **Ozonia** systems.

Applications

- Drinking water
- Bottling water plants
- Cooling towers
- Aquaculture
- Food and beverage

The **Ozonia CFS** range is ideal for small to medium-sized ozone applications. Our design is based on feedback from hundreds of operators and includes the latest technology to ensure continuous operation at full-load in industrial environments.

An **Ozonia CFS** compact ozone generator includes the ozone generator, the medium-voltage power supply to the generator, control system, process related control equipment and interconnections. The control system ensures flexible operation and allows integration into all types of plant concepts.

How It Works

Ozone, the triatomic form of oxygen, is generated by recombining oxygen atoms with oxygen molecules. This process takes place in the gap between the dielectric layer on the high voltage electrode and an earth electrode in the ozone generator. When high voltage is applied to this arrangement, a silent electrical discharge occurs in the gap. This excites the oxygen molecules in the feed gas flowing through the gap, which causes them to split and combine with other oxygen molecules to form ozone.

Product Highlights

- High performance
- Compact and versatile
- Low-cost
- High ozone concentration
- Low power
- User friendly
- Easily integrated
- Low service requirement

Main Features

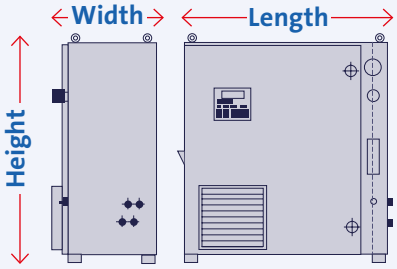
- Larger models feature the Ozonia SmartO3* controller with Modbus TCP/IP connectivity
- Robust Ozonia advanced technology (AT) dielectrics
- Very compact dimensions for easy integration
- Low maintenance and service personnel requirement
- High adaptability: Ozone production range 4-100%

Model	Ozone Production						Oxygen Requirement				Air Requirement	
	Oxygen 6 wt%		Oxygen 10 wt%		Air 3 wt%		Oxygen 6 wt%		Oxygen 10 wt%		Air 3 wt%	
	lb/d	g/h	lb/d	g/h	lb/d	g/h	scfm	Nm^3/h	scfm	Nm^3/h	scfm	Nm^3/h
Ozonia CFS-1	3.86	73	2.91	55	1.96	37	0.53	0.85	0.24	0.39	0.6	0.96
Ozonia CFS-3	11.59	219	8.78	166	5.93	112	1.58	2.54	0.72	1.15	1.8	2.89
Ozonia CFS-7	26.98	510	19.89	376	13.86	262	3.69	5.93	1.63	2.61	4.2	6.74
Ozonia CFS-14	53.97	1020	39.74	751	27.67	523	7.39	11.86	3.25	5.22	8.4	13.49
Ozonia CFS-28	108.47	2050	79.47	1502	55.34	1046	14.82	23.78	6.5	10.44	16.79	26.98
Ozonia CFS-42	162.44	3070	119.21	2253	83.02	1569	22.20	35.63	9.74	15.64	25.20	40.45

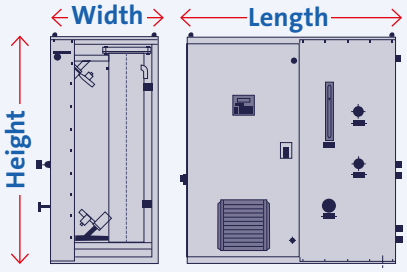
The recommended concentration range is between 6 wt% and 12 wt% when fed with oxygen and 3 wt% to 5 wt% when fed with dry air.

Ozonia CFS Technology

Ozonia CFS-1, 3 and 7



Ozonia CFS-14-42



Model	L x H x W		Weight	
	inch	mm	lb	kg
Ozonia CFS-1	28.4 x 31.5 x 14.6	720 x 800 x 370	154	70
Ozonia CFS-3	28.4 x 31.5 x 14.6	720 x 800 x 370	187	85
Ozonia CFS-7	39.4 x 31.5 x 17.7	1,000 x 800 x 450	440	200
Ozonia CFS-14	51.2 x 57.1 x 26.4	1,300 x 1,450 x 670	965	420
Ozonia CFS-28	53.5 x 57.1 x 34.4	1,359 x 1,452 x 874	1605	728
Ozonia CFS-42	61.3 x 71.0 x 38.4	1,557 x 1,802 x 974	2386	1082

Veolia's **Ozonia** ozone technology portfolio includes products from the laboratory scale to the largest ozone systems ever built. Veolia uses our extensive ozone technology experience to provide the industry's most reliable and robust products.

Our unique ability to deliver the most reliable and robust systems is why thousands of customers around the world have chosen **Ozonia** ozone systems.

We have been the ozone industry pioneer for over 25 years. Trust Veolia to deliver the highest quality ozone solutions to meet your treatment challenges.

Technical Features

- **Voltage Ozonia CFS-1, 3:** 1 x 230/207 VAC ± 10%
- **Voltage Ozonia CFS-7, 14, 28:** 3 x 400/480 VAC ± 10%
- **Frequency:** 50/60 Hz
- **Ambient Temperature:** +5 to 40ºC
- **Design Altitude:** < 1,000 m.a.s.l.
- **Humidity:** RH < 65% (yearly average)
- **Feed Gas Inlet Pressure:** 3 to 8 bar (g)
- **Cooling Water Pressure:** 2 to 6 bar (g)

Materials

- **Enclosure:** Powder coated mild steel
- **In Contact with Ozone:** Stainless steel 316, PTFE, PVDF, Viton
- **In Contact with Water:** PE, brass, stainless steel 304/316

Control

- **Ozonia SOC – Smart Ozone Controller**
- **Modbus TCP/IP Connectivity**
- **OPC UA**
- **Profinet**
- **Ozone Production On/Off**
- **Set Value (4 to 20 mA)**
- **Gas Valve Open**
- **7" TFT Color Touch Screen (800 x 480)**

over 10,000 installations

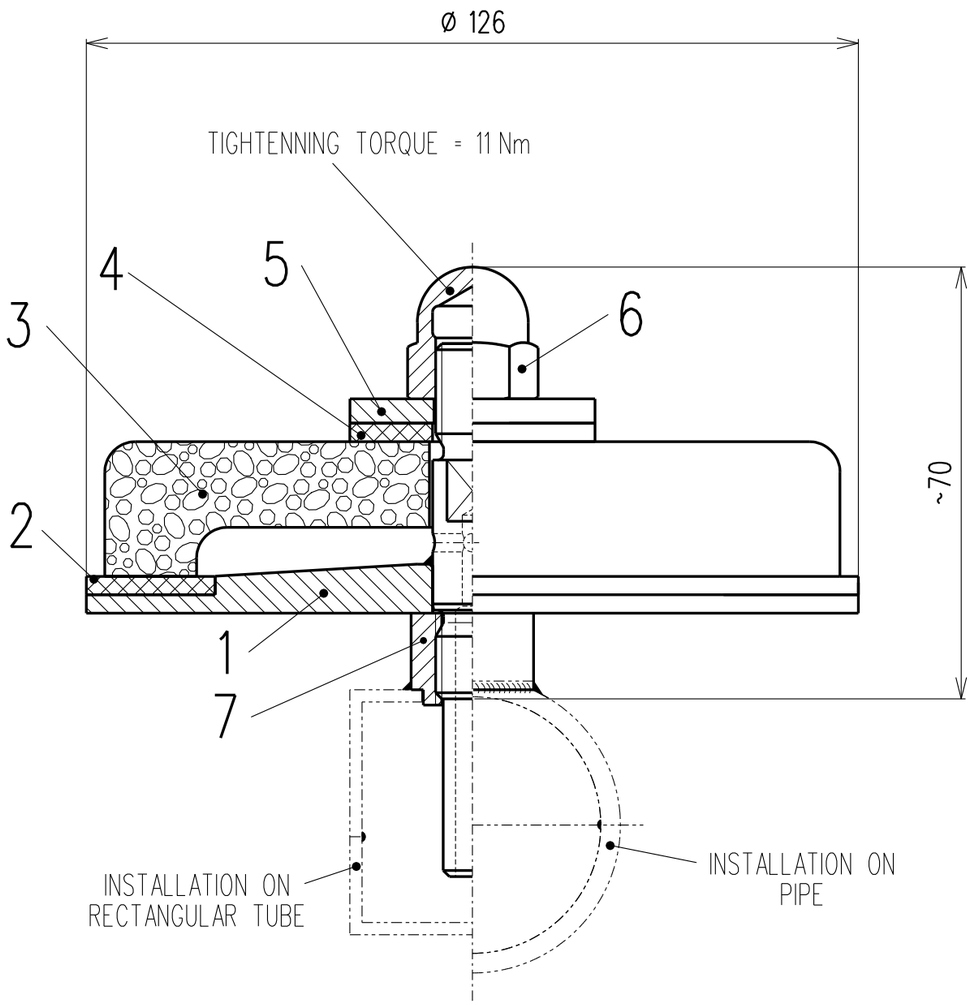
7 product ranges certified to international standards

over 25 years of experience

Resourcing the world

Veolia Water Technologies
Please contact us via:
www.veoliawatertechnologies.com

R/QUANTITY	UNIT	ITEM	DESCRIPTION	ART.NO.	DWG.NO.
R1		-	DOME DIFFUSER ASSEMBLED TYPE 120 KTL	TV 15678	HSD100952R1
1		1	DOME DIFFUSER DISC COMPL. TYPE 120 KTL	TV 15676	HSD100991R1
1		2	FLAT GASKET TYPE 120 KT	TV 15648	HSD100943P2
1		3	DOME DIFFUSER TYPE 120 F	TV 15655	HSD100956P1
1		4	FLAT GASKET TYPE KT	TV 15649	HSD100943P3
1		5	WASHER TYPE KT	TV 22404	HSD103543P1
1		6	CAP NUT M12 EXTRA WORK TYPE KT	TV 15650	HSD100944P1
1		7	SOCKET M12 TYPE KT	TV 15651	HSD100936P1



NOMINAL FLOW RATE 0.2-2.0 Nm 3/h

Weight 1,1 Kg

E (D,F)

REV.	DATE	PREPARED	REVIEWED	APPROVED	MODIFICATION	ZONE
	- -					
	- -					
	- -					
A	01-11-09	voF	Ms	Ms	DESIGNATION & WASHER	

ORDER NAME: ORDER NO.:

PREPARED SM 99-09-24

REVIEWED Ms 99-09-24

APPROVED Lg 99-09-24

SCALE 1:1

DOME DIFFUSER ASSEMBLED
TYPE 120 KTL

OZONIA

STETTBACHSTRASSE 1
CH-8600 DUEBENDORF

SEP. PL. SAME No. ☐
SEP. PL. ANOTHER No. ☐

DERIVED FROM:	REV.:	INDEX:	DRAWING NO.	REV.
REPLACES:	REV.:	SHEET: 1 OF: 1	HSD 100993	A

J:\Public\Ozonia Standard Documents\X - Files (HSD)\HSD 100993-e - 120 KTL Dome Diffuser Assembled.dgn

A3

Item 4e

Agenda Item

DATE: September 27, 2023

TO: Michael Minkler, General Manager

FROM: Charles Palmer, P.E., Senior Engineer

RE: Discussion/Action Regarding the Award of Construction Contract for the Copper Cove Phase 1 and 2 Tanks Project, CIP #11083C

RECOMMENDED ACTION:
Motion: _____/_____ to adopt Resolution No.2023 -____ accepting the bid submitted by T&S Construction as the lowest responsive and responsible bidder for the Copper Cove Phase 1 and 2 Tanks Project and authorizing the General Manager to execute a construction contract with T&S Construction in the amount of $6,929,450 for said project.

SUMMARY:
Engineering and operations staff have identified replacement and rehabilitation of the Copper Cove Water System Tank B and Clearwells as a critical priority for the Capital Improvement Program. The project includes the following features:

- Demolition of existing Redwood B-Tank and replacement with a new 380,000 gallon welded steel tank.
- Construction of new 330,000-gallon clearwell at the Water Treatment Plant
- Rehabilitation of 680,000-gallon welded steel tank at B-Tank site.
- Rehabilitation of 330,000-gallon existing clearwell at the Water Treatment Plant.
- Associated site piping, both above and below ground, and appurtenances for interconnecting the tanks.
- Pavement, site grading, and installation of concrete tank foundations.
- Miscellaneous electrical improvements and cathodic protection for tanks.

The engineering firm, PBI, Inc., prepared plans and bid documents for construction of the project. CCWD advertised and publicly bid the project for a period of 55-days and held a bid opening on August 10, 2023. A total of five bids were received with T&S Construction Co., Inc. of Sacramento, CA being the apparent low bidder. All bidders listed Crosno Construction, Inc. of Arroyo Grande, CA as supplying and erecting the welded steel tanks. Crosno will perform 48% of the total contract amount under subcontract to T&S.

A bid summary and Engineer's Estimate are shown below.

BIDDER	BID AMOUNT
T&S Construction Co., Inc.	$6,929,450
Myers & Sons Construction	$7,969,000 [(a)]
Auburn Constructors	$9,178,300
Mountain Cascade	$9,287,187
Sierra Mountain Construction	$9,866,210
Engineer's Estimate	$8,400,000

(a) Based on numerical representation of bid price; discrepancy with written amount of bid in words.

PBI, Inc. reviewed the two apparent low bids (T&S and Myers & Sons) to determine responsiveness. The apparent low bidder, T&S Construction, responded with all the requested information: license information, certificate of authorization, non-collusion declaration, bid bond, list of subcontractors, list of references and signed addenda. PBI, Inc. found no discrepancies in the bid information and recommends awarding the construction contract to T&S as the lowest responsive and responsible bidder. Also, staff recognizes T&S Construction's previous successful performance in completing the Ebbetts Pass Reach 3A pipeline project in Arnold, CA.

Upon reviewing the second apparent low bidder, Myers & Sons, PBI found it was responsive in submitting the required information. However, Myers & Sons' has a $968,000 discrepancy between the written amount (in words) compared to the numerical amount of its bid. Myers & Sons was promptly notified of this bid discrepancy.

FINANCIAL CONSIDERATIONS:

Staff recommends approving a construction contract with T&S Construction Co., Inc. in the amount of $6,929,450.00. The current adopted CIP budget includes $4.0 million in FY 2023-24 and another $4.0 million in FY2024-25 available for construction. The project funding includes $6,077,447 from the Water CIP Loan issued June 1, 2022 and $1,922,553 in expansion funds from CC Water Fund 374.

Attachments: *T&S Construction Co. Inc., Bid Forms*
Resolution 2023-___ accepting the bid submitted by T&S Construction as the lowest responsive and responsible bidder for the Copper Cove Phase 1 and 2 Tanks Project

RESOLUTION NO. 2023-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

AWARDING A CONSTRUCTION CONTRACT FOR THE COPPER COVE PHASE 1 AND 2 TANKS PROJECT / CIP #11083C

WHEREAS, for the Copper Cove Phase 1 and 2 Tanks Project, CCWD prepared project plans, advertised and publicly bid the project for construction and held a bid opening on August 10, 2023, at which time, five bids were received with T&S Construction Co., Inc. of Sacramento, CA being the lowest responsible and responsible bidder with a total bid amount of $6,929,450; and

WHEREAS, engineering and operations staff identify replacement and rehabilitation of the Copper Cove Water System Tank B and Clearwells as a critical priority for the Capital Improvement Program which the current adopted budget includes $4.0 million in FY 2023-24 and another $4.0 million in FY2024-25 for project construction; and

BE IT RESOLVED, the Calaveras County Water District Board of Directors hereby accepts the bid submitted by T&S Construction Co., Inc. as the lowest responsive and responsible bidder for the Copper Cove Phase 1 and 2 Tanks Project (CIP #11083C) and authorizes the General Manager to enter into a construction contract with T&S Construction Co., Inc. in the amount of $6,929,450.00 for said project.

PASSED AND ADOPTED this 27th day of September, 2023 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Scott Ratterman, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

SECTION 00 04 10
BID FORM

CALAVERAS COUNTY WATER DISTRICT

COPPER COVE PHASE 1 AND 2 TANKS PROJECT

TABLE OF ARTICLES

Article 1 – Bid Recipient

Article 2 – Bidder's Acknowledgments

Article 3 – Bidder's Representations

Article 4 – Bidder's Certification

Article 5 – Basis of Bid

Article 6 – Time of Completion

Article 7 – Attachments to Bid

Article 8 – Defined Terms

Article 9 – Bid Submittal

ARTICLE 1- BID RECIPIENT

1.01 This Bid is submitted to: Calaveras County Water District at the main office at 120 Toma Court, San Andreas, California 95249, no later than **2:00 PM local time on July 27, 2023.**

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2- BIDDERS ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3- BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

Addendum No.	Addendum Date
1	July 18th, 2023
2	August 3rd, 2023
3	August 7th, 2023

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and is satisfied as to all Federal, State and local Laws and Regulations that may affect cost, progress and performance of the Work.

D. Bidder has carefully studied all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site.

E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.

F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that any further examinations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.

G. Bidder is aware of the general nature of the Work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.

I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

J. Bidder will submit written evidence of its authority to do business in the State or other jurisdiction where the Project is located not later than the date of its execution of the Agreement.

ARTICLE 4- BIDDER'S CERTIFICATION

4.01 Bidder further represents that:

A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation;

B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;

C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.

2. "fraudulent practice" means an intentional misrepresentation of facts made to (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5- BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the price(s) provided in the attached bid schedule (at the end of this section).

5.02 Unit Prices have been computed in accordance with Paragraph 11.04.B of the General Conditions

5.03 Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

5.04 Bid Prices are for work that has been furnished and installed by the Contractor and is fully completed. The bid items as described and provided are for bidding and payment purposes and do not in any way limit the Contractor's responsibility to perform all work that may be reasonably inferred from the plans, specifications and other bid documents to produce the intended result.

5.05 All specified cash allowances are included in the price(s) set forth above and have been computed in accordance with Paragraph 13.02 of the General Conditions.

5.06 If "additive" or "deductive" Bid Items are included in the Bid- clearly identify the method for applying the alternates and the basis for award of the contract.

ARTICLE 6- TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7- ATTACHMENTS TO THIS BID

7.01 Contract documents include project drawings, project specifications, and bid documents, which are incorporated by reference. The following documents are attached to and made a condition of this Bid (Section 00 04 10):

(ATTACH EACH DOCUMENT BELOW TO THE BID)

A. Non-Collusion Affidavit (Section 00 04 20);

B. Required Bid security in the form of a Bid Bond or Certified Check (Section 00 04 30);

C. List of Subcontractors (Section 00 04 70); and

D. List of References (Section 00 04 80).

ARTICLE 8- DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders (Section 00 02 00), General Conditions (Section 00 07 00), and Supplementary Conditions (Section 00 08 00).

ARTICLE 9 - BID SUBMITTAL

9.01 This Bid is submitted by: T & S Construction Co., Inc.

Bidder's Business address: 6100 Hedge Avenue
Sacramento, CA 95828

Phone: (916) 381-3052 Facsimile: (916) 387-1861

Submitted on August 10th, 2023.

State Contractor License No. 301528

Employer's Tax ID No. 88-0118410

DIR Registration No. 1000000972

If Bidder is:

An Individua

Name: _____

By: _____

(Individual's signature)

Doing business as: _____

A Pa tne ship

Partnership Name: _____

_____ *(SEAL)*

By: _____

(Signature of general partner – attach evidence of authority to sign)

Name: _____

A Co po ation

Corporation Name: T & S Construction Co, Inc.

_____ *(SEAL)*

State of Incorporation: Nevada

Type *(General Business, Professional, Service, Limited Liability)*: General Business

By: Arthur T. Spinella

(Signature – attach evidence of authority to sign)

Name: Arthur T. Spinella

Title: President

Attest: Ashley A. Spinella

(Signature of Corporate Secretary)

Date of Qualification to do business is 7/23/1973

A Joint Ventu e

Name of Joint Venturer: _____

CERTIFICATE OF AUTHORIZATION

(If bidder is a Corporation or a Limited Liability Company)

STATE OF CALIFORNIA

COUNTY OF SACRAMENTO

I HEREBY CERTIFY that at a meeting of the Board of Directors of the T & S Construction Co., Inc. existing under the laws of the State of Nevada, held on January 3rd, 2023, the following resolution was duly pass and adopted:

"RESOLVED, that Arthur T. Spinella,

as President of the Corporation, be and is hereby authorized to execute the bid documents for Calaveras County Water District's "Copper Cove Phase 1 and 2 Tanks Project" and this Corporation and that his/her execution thereof, attested by the Secretary of the Corporation, and with the corporate seal fixed, shall be the official act and deed of this Corporation.

I further Certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the Corporation this August 10th, 2023.

Secretary

Anthony A. Spinella

Corporate Officer

T & S Construction Co, Inc.

6100 Hedge Avenue

Sacramento, CA 95828

Corporate Address

(Seal)

First Joint Venturer Name: _____

_____ *(SEAL)*

By: _____

(Signature of first joint venture partner – attach evidence of authority to sign)

Name: _____

Title: _____

Second Joint Venturer Name:

_____

_____ *(SEAL)*

By: _____

(Signature of second joint venture partner – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

BID SCHEDULE

CALAVERAS COUNTY WATER DISTRICT

COPPER COVE PHASE 1 AND 2 TANKS PROJECT

BID ITEM	DESCRIPTION	UNIT	EST QTY.	UNIT PRICE	BID AMOUNT
1	MOBILIZATION/ DEMOBILIZATION	LS	1	$200,000.00	$200,000.00
2	IMPLEMENTATION OF WATER POLLUTION CONTROL PLAN	LS	1	$10,000.00	$10,000.00
3	WORKER PROTECTION AND SAFETY/SHORING	LS	1	$5,000.00	$5,000.00
4	EXISTING REDWOOD B TANK DEMOLITION	LS	1	$60,000.00	$60,000.00
5	CLEARWELL TANK SITE DEMOLITION	LS	1	$20,000.00	$20,000.00
6	B TANK SITE DEMOLITION	LS	1	$25,000.00	$25,000.00
7	TREE REMOVAL	EA	26	$750.00	$19,500.00
8	CLEARWELL SITE PAVING	SF	6,350	$15.00	$95,250.00
9	B TANK SITE ACCESS DRIVEWAY	SF	2,380	$20.00	$47,600.00
10	CLEARWELL SITE CHAIN LINK FENCE	LF	340	$100.00	$34,000.00
11	B TANK SITE CHAIN LINK FENCE AND GATE	LF	40	$250.00	$10,000.00

12	CLEARWELL SITE – 24" TREATED WATER BELOW GRADE (DIP) PIPING AND APPURTENANCES	LS	1	$430,000.00	$430,000.00
13	CLEARWELL SITE – STORM DRAIN (PVC) PIPING AND APPURTENANCES	LS	1	$130,000.00	$130,000.00
14	B TANK SITE – 10" TW BELOW GRADE (DIP) PIPING AND APPURTENANCES	LS	1	$70,000.00	$70,000.00
15	B TANK SITE – 12" TW BELOW GRADE (DIP) PIPING AND APPURTENANCES	LS	1	$150,000.00	$150,000.00
16	B TANK SITE – 16" OVERFLOW (PVC) PIPING AND APPURTENANCES	LS	1	$80,000.00	$80,000.00
17	B TANK SITE – 6" DRAIN (PVC) PIPING AND APPURTENANCES	LS	1	$5,000.00	$5,000.00
18	NEW CLEARWELL – INLET/OUTLET PIPING AND APPURTENANCES	LS	1	$100,000	$100,000.00
19	EXISTING CLEARWELL REHAB – INLET PIPING AND APPURTENANCES	LS	1	$50,000.00	$50,000.00

20	NEW B TANK – INLET/OUTLET PIPING AND APPURTENANCES	LS	1	$60,000.00	$60,000.00
21	EXISTING STEEL B TANK REHAB – INLET PIPING MODIFICATIONS AND APPURTENANCES	LS	1	$30,000.00	$30,000.00
22	NEW CLEARWELL – OVERFLOW PIPING AND APPURTENANCES	LS	1	$55,000.00	$55,000.00
23	NEW B TANK – OVERFLOW PIPING AND APPURTENANCES	LS	1	$50,000.00	$50,000.00
24	EXISTING CLEARWELL REHAB – OVERFLOW PIPING MODIFICATIONS AND APPURTENANCES	LS	1	$25,000.00	$25,000.00
25	EXISTING STEEL B TANK REHAB – OVERFLOW PIPING MODIFICATIONS AND APPURTENANCES	LS	1	$23,000.00	$23,000.00
26	EFFLUENT BOOSTER PUMP STATION – TRANSMISSION MAIN (DIP) PIPING AND APPURTENANCES	LS	1	$275,000.00	$275,000.00
27	CLEARWELL TANK SITE – GRADING	LS	1	$100,000.00	$100,000.00

28	CLEARWELL TANK SITE – HAULING OF EXCAVATED MATERIAL	LS	1	$30,000.00	$30,000.00
29	NEW CLEARWELL SUBGRADE AND FOUNDATION	LS	1	$150,000.00	$150,000.00
30	NEW B TANK SUBGRADE AND FOUNDATION	LS	1	$185,000.00	$185,000.00
31	NEW CLEARWELL TANK AND APPURTENANCES	LS	1	$880,000.00	$880,000.00
32	EXISTING CLEARWELL REHAB AND APPURTENANCES	LS	1	$885,000.00	$885,000
33	NEW B TANK AND APPURTENANCES	LS	1	$845,000.00	$845,000.00
34	EXISTING STEEL B TANK REHAB AND APPURTENANCES	LS	1	$895,000.00	$895,000.00
35	CATHODIC PROTECTION FOR EACH TANK	EA	4	$25,000.00	$100,000.00

36	FORCED AIR VETILATION FOR EACH TANK	EA	4	$80,000.00	$320,000.00
37	ELECTRICAL MODIFICATIONS	LS	1	$220,000.00	$220,000.00
38	ROCK EXCAVATION	100	CY	$1.00	$100.00
39	REMAINING WORK: All remaining Work identified in the Contract Documents NOT INCLUDED in Bid Items 1-38.	LS	1	$260,000.00	$260,000.00
					$6,929,450.00
					TOTAL BID AMOUNT ITEMS 1 THROUGH 39 *(NUMERICAL)*
Six Million nine hundred twenty nine thousand four hundred fifty dollars and zero cents					
					TOTAL BID AMOUNT ALL ITEMS *(WRITTEN)*

END OF SECTION

NONCOLLUSION DECLARATION TO BE EXECUTED
BY
BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the President (Position) of T&S Construction Co., Inc. (Firm), the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder
or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid
price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on 8/8/23 [date], at Sacramento [city], California [state].

Arthur T. Spinella
Signature of Declarer

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of Sacramento

Subscribed and sworn to (or affirmed) before me
This 8 day of August, 2023,

Arthur T. Spinella
(name of signor)

proved to me on the basis of satisfactory evidence
to be the person who appeared before me.

STACI FINE
Comm. #2439523
Notary Public · California
Sacramento County
Comm. Expires Feb 28, 2027

(Seal)

Signature of Notary

SECTION 00 04 20
NON-COLLUSION AFFIDAVIT

NON-COLLUSION DECLARATION TO BE EXECUTED

BY BIDDER AND SUBMITTED WITH BID

(Public Contract Code Section 7106)

State of California

County of Calaveras

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed:

By _____

Subscribed and sworn to before me on _____

(date)

_____ *(SEAL)*

(Notary Public)

* See Attached

END OF SECTION

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SECTION 00 04 30
BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER

Name and Address: T & S Construction Co., Inc.
6100 Hedge Avenue, Sacramento, CA 95829

SURETY

Name and Address: Travelers Casualty and Surety Company of America
One Tower Square, Hartford, CT 06183

OWNER

Name and Address: CALAVERAS COUNTY WATER DISTRICT
120 Toma Ct., San Andreas, CA 95249

BID

Bid Due Date: August 10, 2023

Project Name: Copper Cove Phase 1 and 2 Tanks Project

BOND

Bond Number: N/A

Bond Date: August 8, 2023

Penal Sum: Five Percent of Total Amount Bid---------- 5% of Bid

(Words) *(Figures)*

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER *(Name and Corporate Seal)*	**SURETY** *(Name and Corporate Seal)*
T & S Construction Co., Inc.	Travelers Casualty and Surety Company of America
By: _____	*(Attach Power of Attorney)*
Signature	By: _____
	Signature

	Arthur T. Spinella		Alexis Estrada
	Print Name		*Print Name*
	President		Attorney-In-Fact
	Title		*Title*
Attest:	[signature]	Attest:	(See Attached)
	Signature		*Signature*
	Corporate Secretary		
	Title		*Title*

Note: Above addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint venturers, if necessary.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.

3. This obligation shall be null and void if:

   3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or

   3.2 All Bids are rejected by Owner, or

   3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).

4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.

6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

END OF SECTION

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Placer)

On August 8, 2023 before me, K. Hanley, Notary Public
(insert name and title of the officer)

personally appeared Alexis Estrada,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature K Hanley (Seal)

K. HANLEY
Notary Public · California
Placer County
Commission # 2384942
My Comm. Expires Nov 30, 2025

TRAVELERS

Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Alexis Estrada** of **ROSEVILLE**, **California**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April, 2021**.

State of Connecticut

City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

On this the **21st** day of **April, 2021**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June, 2026**

_____
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **8th** day of **August**, **2023**.

_____
Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

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SECTION 00 04 70
LIST OF SUBCONTRACTORS

BIDDER: T & S Construction Co., Inc.

Work to be Performed	Percent of Total Contract Price	Subcontractor's Name and Location of Place of Business, Contractor's License Number, and DIR Registration Number
Coatings	0.5%	Mason Painting. P.O. Box 1115 Orangevale, CA 95662 Lic# 819987 DIR# 1000008947
Welded Steel Tanks	48%	Crosno Construction Inc. 819 Sheridan Rd, Arroyo Grande, CA 93420 Lic# 835288 DIR# 1000006959
Fencing	0.5%	Golden Bay Fence. 4104 South B St. Stockton, CA 95206 Lic# 664905 DIR# 1000000720
AVT Valve Insertion	0.5%	Rangeline Tapping Services, Inc. 30866 Wealth Street, Murietta, CA 92563 Lic# 1086915 DIR# 1000863274
Electrical	2.5%	Gold Electric, Inc. P.O. Box 1008 Murphys, CA 95247 Lic# 554744 DIR# 1000002795

(ADD ADDITIONAL SHEETS IF NECESSARY)

END OF SECTION

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SECTION 00 04 80
LIST OF REFERENCES

BIDDER: T&S Construction Co., Inc.

Project References: Provide project references for at least three similar to this Project within the last five (5) years.

Project Name	Amount,	Contact Person	Phone Number
1. City of Lincoln Verdera North Tank #3	$9,632,111	Duane Schilling, P.E.	(530) 401-4610
2. City of Folsom Zone 5/6 Tank & P.S.	$6,806,000	Ben Rau	(916) 765-4642
3. Lewiston Comm. Services Dist. WWTP Improvements	$6,627,978	Eric Marshall	(530) 949-8566
4. CLOCWD USDA Water System	$6,211,926	Dianna Mann	(707) 350-3292
5. PCWA Twelve Bridges Pump/Metering Station	$4,712,346	Duane Schilling, P.E.	(530) 401-4610

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Calaveras County Water District
Copper Cove, California
Bidding Documents
Copper Cove Phase 1 and 2 Tanks Project

ADDENDUM NO. 1
Issued July 18, 2023

The Drawings and Project Manual including Specifications are modified as follows. Addendum No. 1 forms a part of the Contract Documents and modifies the original documents dated June 14, 2023.

This Addendum consists of five (5) pages and two (2) attachments:

- Attachment A: Revised drawings
- Attachment B: Pre-Bid Meeting Sign-in Sheet

Bidder's Note: Bidder shall acknowledge receipt and examination of this addendum on the Bid form and attach a signed copy to the Bid, both as required by the Sealed Proposal.

Contract Documents - Drawings Changes:

Modify the following drawings per the instruction outlined below:

1) Replace C7 and C13 with the attached revised sheets in attachment A.

Contract Documents – Specifications Change:

1) Revise Section 00 01 00 – Advertisement For Bids, as follows:

   Separate sealed Bids for the construction of the Copper Cove Phase 1 and 2 Tanks Project will be received at the office of the Calaveras County Water District at 120 Toma Court, San Andreas, California 95249 until 2:00 PM local time on **August 10,** ~~July 27,~~ 2023, at which time Bids will be publicly opened and read aloud. The Engineer's estimate of project construction cost is $8.2 million.

2) Revise Section 00 05 00 – 2: Agreement for Construction, as follows:

   a. Article 4.02 Contract Times: Days

   A) The Phase 1 improvements as defined in Section 01 10 00 – Summary, Section 1.12.A.1, shall be substantially complete within ~~365~~ **420** calendar days **from NTP.** ~~The Work will be substantially completed within 700 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions~~ and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within ~~730~~ **750** calendar days after the date when the Contract Times commence to run.

B) The Phase 2 improvements as defined in Section 01 10 00 – Summary, Section 1.12.A.2, shall be substantially complete within ~~365 calendar days~~ **720 calendar days from NTP,** ~~The Work will be substantially completed within 700 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions~~ and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within ~~730~~ **750** calendar days after the date when the Contract Times commence to run.

2) Revise Section 00 07 00 – 21: General Conditions, as follows:

a. Article 6.05: Property Insurance.

A) ~~Builder's Risk: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:~~

~~(1) include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."~~

~~(2) be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.~~

~~(3) cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.~~

~~(4) cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).~~

~~(5) extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).~~

~~(6) extend to cover damage or loss to insured property while in transit.~~

~~(7) allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.~~

~~(8) allow for the waiver of the insurer's subrogation rights, as set forth below.~~

~~(9) provide primary coverage for all losses and damages caused by the perils or causes of loss covered.~~

~~(10) not include a co-insurance clause.~~

~~(11) include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.~~

~~(12) include performance/hot testing and start-up.~~

~~(13) be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.~~

3) Revise Section 00 07 00 – 24: General Conditions, as follows:

a. Article 7.02: Labor; Working Hours

A) Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday**, from 7:00 am to 5:00 pm**. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

4) Revise Section 01 20 00 – 4: Price and Payment Procedures, as follows:

a. Bid Item No. 4

A) The work under this bid item shall include the demolition and removal of existing equipment and facilities, including but not limited to, the existing redwood tank, appurtenances, and foundation, as shown on the Contract Drawings and as specified in Section 02 41 00 - Demolition. This bid item shall also include the hauling and disposal of removed materials. ~~Upon tank demolition, Contractor shall stack redwood lumber (exterior wall boards) on site for material salvage by the District.~~ **Contractor shall incorporate salvaged value of redwood in bid pricing. For informational purposes, the salvaged value shall be provided to the District upon request.**

Responses to Bidder Questions:

Question #1: Is there any lead-based paint on the existing tanks?

Response #1: Based on the year of construction (1982 and 1998), lead-based paint is not anticipated.

Question #2: Is there an engineer estimate for the total cost of the project?

Response #2: Section 00 01 00 states that the Engineer's estimate of project construction cost is $8.2 million.

Question #3: Is the contractor required to provide builder's risk insurance?

Response #3: No, refer to revised specification language in Section 00 07 00 – 21 presented herein eliminating the requirement for builder's risk insurance.

Question #4: What is the contractor to do with the Redwood B-tank demolition materials?

Response #4: Refer to revised specification language in 01 20 00 – 4 presented herein. The contractor salvage the redwood and incorporate the salvaged value of the material in the bid price.

Question #5: For the two (2) tank renovations, are the overflow weir heights being modified?

Response #5: Yes, the overflow weirs are being modified to accommodate the sloshing wave height requirements.

Question #6: What are the regular working hours?

Response #6: The regular working hours are Monday through Friday from 7:00 am to 5:00 pm.

By: _____
Charles Palmer, PE
Calaveras County Water District

ACKNOWLEDGMENT BY BIDDER,

By: _____
Arthur T. Spinella, T&S Construction Co, Inc.

Title: President

(NOTE – Bidders are hereby advised that they also need to sign their acknowledgement of this Addendum on their Bid Schedule.)

-END OF ADDENDUM NO. 1

ATTACHMENT A

ATTACHMENT B

Calaveras County Water District

Copper Cove Phase 1 and 2 Tanks

Pre-Bid Meeting
Sign-In Sheet
Date: June 29, 2023

	Printed Name	Company	Phone Number	E-mail	Signature / Initials
1	Louie Martinez	PARC	559-999-5444	LMARTINA2@PARCENVIRONMENTAL.COM	
2	Jojo Hernandez	KW Emerson	209 768 9208	jojo@kwemerson.com	
3	Mitchell Scott	Crosno Construction	805 343 7437	mitche crosnoconstruction.com	
4	Aimee Castee	mountaincascade	925-373-8370	estimating e mountaincascade.com	
5	Sean Alexander	RDC inc	775-343-9714	SAlexander@Reconderelectric.com	
6					
7					
8					
9					
10					
11					
12					
13					

CONSTRUCT NEW CLEARWELL PER DETAIL 1/C9

(N) TANK INLET

VALVE 1

RIM EL=778.45
18" INV EL (IN)=774.95
18" INV EL (OUT)=774.85
12" INV EL (IN)=775.2
12" INV EL (IN)=775.2

VALVE 3

STORM DRAIN OVERFLOW CROSSING DETAIL 4/C13

18" INV EL (OUT)=774
INSTALL FLAPGATE PER DETAIL 6/C13

INSTALL 12" SD PVC

(E) OF/DRAIN PIPE

INSTALL TEE
INV EL=771.0

INSTALL 45° ELBOW
INV EL=771.0

INSTALL 11.25° ELBOW
INV EL=771.2

REINSTALL WATER QUALITY ANALYZER PANEL WITH CONCRETE PAD AND NEW CHLORINE ANALYZER, SEE NOTE 4.

INSTALL 22.5° ELBOW
INV EL=772.0

ANALYZER DRAIN TO DI

RIM EL=781.0
18" INV EL(IN)=775.5
18" INV EL (OUT)=775.4
12" INV EL (IN)=775.5

RIM EL=779.6
12" INV EL(IN)=775.7
12" INV EL (OUT)=775.6

INSTALL 22.5° ELBOW
INV EL=773.0

SADDLE TAP 1" LINE TO ANALYZER PANEL

VALVE 6

(N) TANK OUTLET

(P) 70' DIAMETER STEEL TANK

OVERFLOW DRAIN BOX

INSTALL 22.5° ELBOW
INV EL=771.0

VALVE 2
VALVE 4

INSTALL 11.25° ELBOW
INV EL=771.8

(E) 70' DIAMETER STEEL TANK

(N) TANK INLET

VALVE 5

VALVE 7

(E) TANK OUTLET

VALVE 8

MIN CLEARANCE 4' (TYP)

CONNECT TO (E) 24" FE PER DETAIL 1/C15

INSTALL 20" BLIND FLANGE

MAINTAIN 10' CLEARANCE FROM (E) 10" SS

INSTALL 45° ELBOW
INV EL=789.0

INSTALL 22.5° ELBOW
INV EL=783.0

RIM EL=778.65
12" INV EL (OUT)=775.3

INSTALL 11.25° ELBOW
INV EL=772.6

INSTALL 45° ELBOW
INV EL=772.6

INSTALL 22.5° ELBOW
INV EL=772.6

CONSTRUCT NEW 6' CHAIN LINK FENCE PER DETAILS ON SHEET C15

REHABILITATE (E) CLEARWELL PER DETAIL 1/C11

INSTALL 45° ELBOW
INV EL=772.6

20" DIP TRANSMISSION MAIN

CONNECT TO (E) 24" TW/BWS PER DETAIL 2/C15

INSTALL 22.5° ELBOW
INV EL=785.0

VALVE 10

INSTALL 18" WYE WITH TWO BFVS

VALVE 9

REPLACE EXISTING 18" C900 PVC WITH 60 LF OF NEW 18" DIP UP TO EXISTING COUPLING. REPAIR ASPHALT AS NEEDED.

CONNECT 18" PVC TO EXISTING MANHOLE
(E) RIM EL=788.7
(E) 6" INV EL (IN)=783.84
(E) 18" INV EL (IN)=783.78
(E) 12" INV EL (IN)=UNKNOWN
(E) 12" INV EL (OUT)=782.09, SEE NOTE 5
(P) 18" INV EL (OUT)=782.0

NOTES:

1. ALL PIPE SHALL BE FULLY RESTRAINED.
2. TRENCHING SHALL BE PERFORMED IN ACCORDANCE WITH CALAVERAS COUNTY WATER DISTRICT STANDARDS.
3. PROVIDE LOCKOUT VALVE COVER TO VALVES 2, 3, AND 8, PER SPECIFICATIONS.
4. NEW CHLORINE ANALYZER TO BE ECO DC-80 OR APPROVED EQUAL REAGENT-LESS ANALYZER.
5. PLUG EXISTING 12" STORM DRAIN WITH CONCRETE AND ABANDON PIPE IN PLACE.

ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
1	7/6/23	TMB	ADDENDUM #1

SCALE: 1" = 20'

DATE: JUNE 2023

WARNING: 0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED: MS
DRAWN: NWL/TMB
CHECKED: KRB

120 TOMA COURT,
SAN ANDREAS, CALIFORNIA 95249
PHONE (209) 754-3543

PETERSON . BRUSTAD . INC
ENGINEERING . CONSULTING
80 Blue Ravine Rd. Suite 280
Folsom, CA 95630
PH. 916-608-2212

Exp. 6/30/24
6/14/23

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

CLEARWELL TANK SITE PIPING PLAN

DRAWING C7

SHEET 11 OF 42

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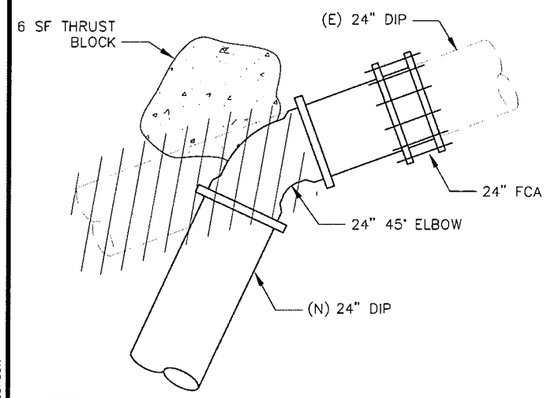
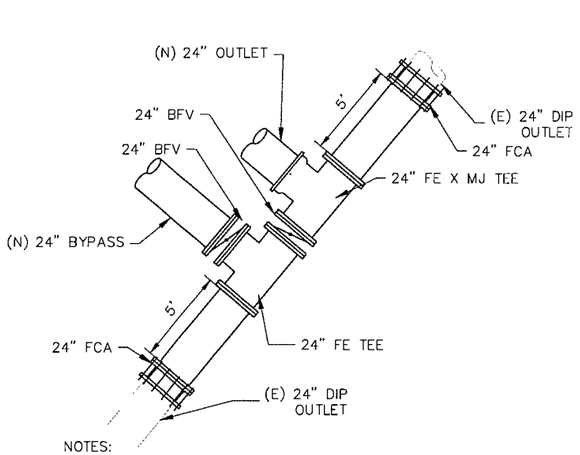


NOTES:

1. CONTRACTOR TO POTHOLE TO VERIFY EXISTING PIPE MATERIAL, OD, AND CONDITION PRIOR TO PREPARING DETAILED TIE-IN PLAN.
2. CONTRACTOR TO PROVIDE DETAILED TIE-IN PLAN FOR DISTRICT REVIEW AT LEAST 2 WEEKS PRIOR TO SCHEDULED WORK.
3. CONNECTION TO EXISTING 24" PIPE TO BE MADE AFTER NEW 24" IS INSTALLED AND DISINFECTED.

CLEARWELL INLET TIE IN DETAIL — 1 / C7

1/2" = 1'

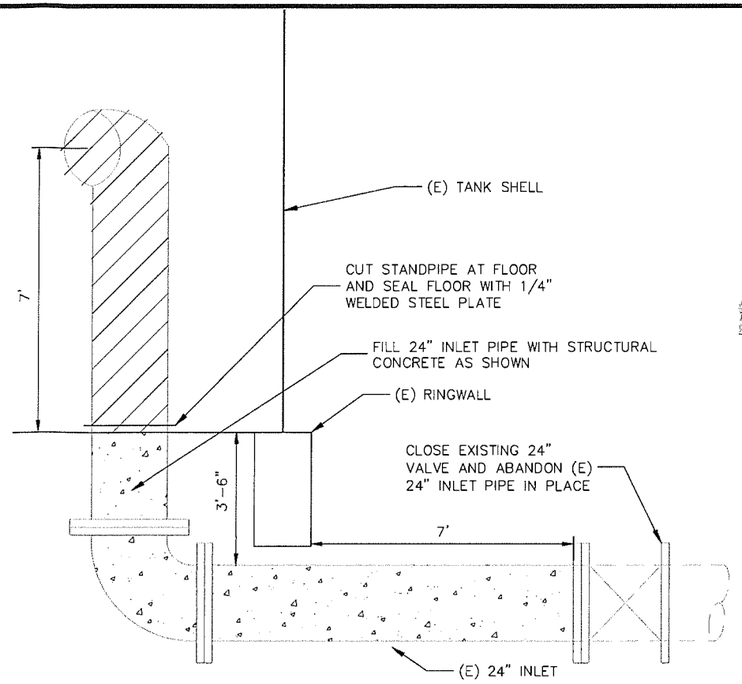


NOTES:

1. CONTRACTOR TO POTHOLE TO VERIFY EXISTING PIPE MATERIAL, OD, AND CONDITION PRIOR TO PREPARING DETAILED TIE-IN PLAN.
2. CONTRACTOR TO PROVIDE DETAILED TIE-IN PLAN FOR DISTRICT REVIEW AT LEAST 2 WEEKS PRIOR TO SCHEDULED WORK.
3. CONNECTION TO EXISTING 24" PIPE TO BE MADE AFTER NEW 24" IS INSTALLED AND DISINFECTED.

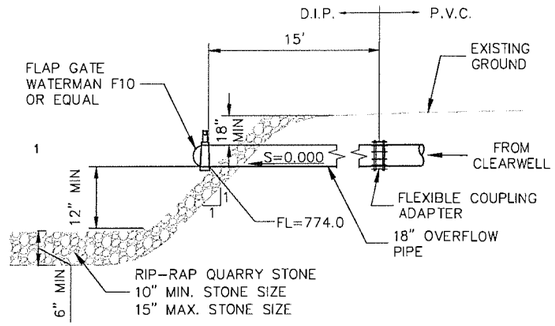
CLEARWELL OUTLET TIE-IN DETAIL — 2 / C7

1/4" = 1'



EXISTING CLEARWELL INLET DEMO DETAIL — 3 / C11

1/2" = 1'

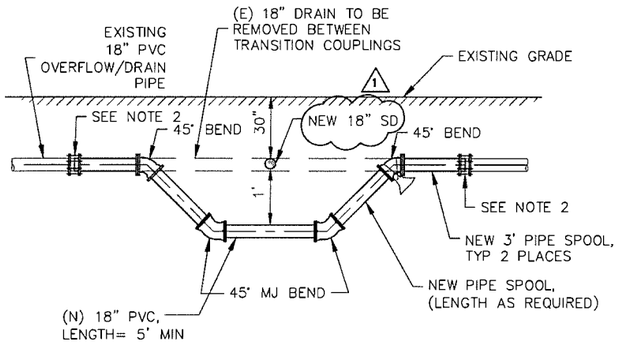


NOTES:

1. LAST SECTION OF OUTFALL PIPE TO BE PLACED AT FLAT (0.000).

CLEARWELL OVERFLOW OUTFALL DETAIL — 6 / C7

NTS

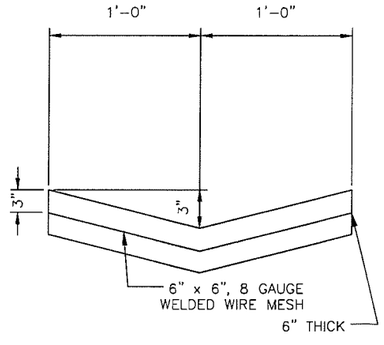


NOTES:

1. RESTRAIN ALL JOINTS.
2. MECHANICAL OR TRANSITION COUPLING AS REQUIRED FOR EXISTING PIPE MATERIAL.

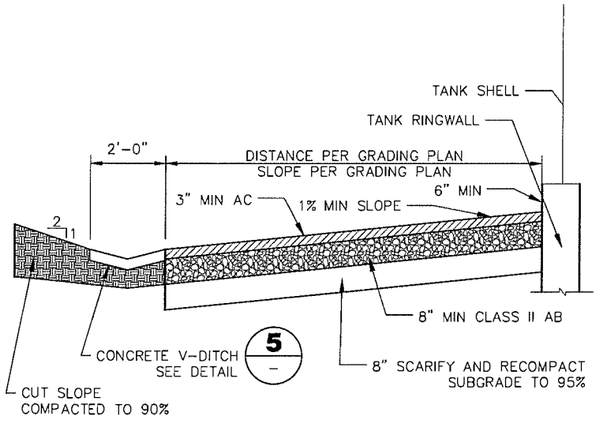
STORM DRAIN/OVERFLOW CROSSING DETAIL — 4 / C7

NTS



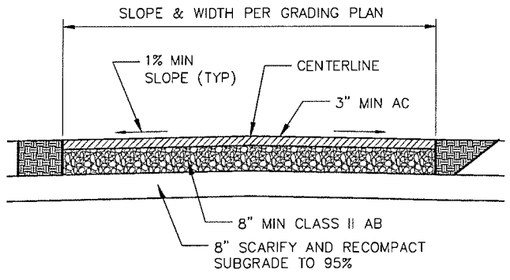
CONCRETE V-DITCH DETAIL — 5 / –

NTS



TYPICAL TANK SITE PAVING SECTION — A / C5

NTS



TYPICAL TANK ACCESS PAVING SECTION — B / C5

NTS

ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
1	7/6/23	TMB	ADDENDUM #1

SCALE: AS NOTED

DATE: JUNE 2023

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED AAS
DRAWN NMVL/TMB
CHECKED KRB

CALAVERAS COUNTY WATER DISTRICT
120 TOMA COURT,
SAN ANDREAS, CALIFORNIA 95249
PHONE (209) 754-3543

PETERSON . BRUSTAD . INC
ENGINEERING . CONSULTING
80 Blue Ravine Rd. Suite 280
Folsom, CA 95630
PH. 916-608-2212

REGISTERED PROFESSIONAL ENGINEER — KARL B. BRUSTAD — NO. 57869 Exp. 6/30/24 — CIVIL — STATE OF CALIFORNIA — 6/14/23

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

PIPE CONNECTION DETAILS CLEARWELL

DRAWING C13

SHEET 21 OF 42

P:\CCWD\Copper Cove Water System Improvements\05 Drawings\5.1 CAD\Phase 1 and 2 Tanks\COPPER COVE (2019) - Details - Addendum1.dwg 7-07-23 03:27:25 PM zalzanoon

Calaveras County Water District
Copper Cove, California
Bidding Documents
Copper Cove Phase 1 and 2 Tanks Project

ADDENDUM NO. 2
Issued August 3, 2023

The Drawings and Project Manual including Specifications are modified as follows. Addendum No. 2 forms a part of the Contract Documents and modifies the original documents dated June 14, 2023.

This Addendum consists of ten (10) pages and three (3) attachments:

- Attachment A: Revised drawings
- Attachment B: Precast Concrete Structures Specification
- Attachment C: Shop Drawings for B Tank

Bidder's Note: Bidder shall acknowledge receipt and examination of this addendum on the Bid form and attach a signed copy to the Bid, both as required by the Sealed Proposal.

Contract Documents - Drawings Changes:

Modify the following drawings per the instruction outlined below:

1) Replace C1, C2, C5, and C7 with the attached revised sheets in attachment A.

Contract Documents – Specifications Change:

1) Update Table of Contents to include Section 03 41 00: Precast Concrete Structures.

2) Add Section 03 41 00: Precast Concrete Structures, as written in Attachment B.

3) Revise Section 33 01 15: Pipe and Pipe Fittings: Basic Requirements, as follows:

Article 3.08 Schedules

System	Service	Notes on Size, Material, Lining, or Coating	Restrained Joint	Spec Section	System
TW	Treated Water	See System Schedule	Y	33 01 21 or 33 01 22	1
OF	Potable Water	See System Schedule	Y	33 01 21 or 33 01 22 **or** **33 01 24**	1, **2**

TP	Transmission Pipeline	See System Schedule	Y	33 01 22	1
SAM	Potable Water Sample	See System Schedule	N	33 01 24	2
SD	Storm Water	See System Schedule	N	33 01 24	2

A. Piping Specification Schedule - System 1
   1. General:
      a. Piping and Symbol service:
         1) TW - Treated Water
         2) OF - Potable Water **(above ground)**
         3) TP - Transmission Pipeline

B. Piping Specification Section - System 2
   1. Piping Symbol and Service:
      a. SD - Storm drain
      b. SAM - Potable Water Sample
      c. **OF – Potable water (below ground)**

4) Revise Section 33 16 00: Water Utility Storage Tanks, as follows:

Article 2.01 Tank Design Criteria

A. New Clearwell: Cylindrical tank with flat bottom on grade, with roof; including appurtenances.
   1. Diameter: 70 feet.
   2. Capacity: 346,000 gallons.
   3. Shell Height: 16 feet from top of foundation to top of shell.
   4. Height: 13.5 feet from top of foundation to overflow level.
   5. Structurally designed to comply with applicable building codes including:
      a. Live and dead loads.
      b. **Design snow load of 16 pounds per square foot.**
      c. Design wind speed of 110 miles per hour.
      d. Seismic movements.
         1) Site Modified Spectral Acceleration Values
            (i) S_{MS} = 0.507
            (ii) S_{M1} = 0.293
         2) Design Spectral Acceleration
            (i) S_{DS} = 0.338
            (ii) S_{D1} = 0.195
      e. Thermal movements resulting from temperature change range of 120 degrees F ambient and 180 degrees F on material surfaces.
   6. Designed to comply with ~~**NFPA 22**~~ **AWWA D100.**

Article 2.01 Tank Design Criteria, Paragraph B – 6:

A. New B Tank: Cylindrical tank with flat bottom on grade, with roof; including appurtenances.
   1. Diameter: 65 feet.
   2. Capacity: 360,000 gallons.
   3. Shell Height: 18 feet from top of foundation to top of shell.
   4. Height: 15.5 feet from top of foundation to overflow level.
   5. Structurally designed to comply with applicable building codes including:
      a. Live and dead loads.
      b. **Design snow load of 16 pounds per square foot.**
      c. Design wind speed of 110 miles per hour.
      d. Seismic movements.
         1) Site Modified Spectral Acceleration Values
            (i) S_{MS} = 0.507
            (ii) S_{M1} = 0.293
         2) Design Spectral Acceleration
            (i) S_{DS} = 0.338
            (ii) S_{D1} = 0.195
      e. Thermal movements resulting from temperature change range of 120 degrees F ambient and 180 degrees F on material surfaces.
   6. Designed to comply with ~~**NFPA 22**~~ **AWWA D100.**

Article 2.02 Steel Tanks

A. Surface Tanks: Steel plates with all seams welded, complying with AWWA D100, with overlapping rafter, single/center column-support roof.
   1. **Seal Welding: Provide seal welds for butt welds and lap joints in wet areas, including interior roof surfaces and rafter flanges.**
B. Foundations: Reinforced concrete; see Section 03 30 00.

Article 2.03 Tank Fittings

A. Inlet, Outlet, and Overflow Piping: Welded steel, ASTM A53/A53M Grade B Schedule 40, with steel butt-welded fittings, ASTM A234/A234M Grade WPB Schedule 40.
   1. **All exposed steel piping shall be epoxy lined and coated.**
   2. Expansion Joint:
      a. a. Rubber bellows style expansion joint.
         1) Tube elastomer: FDA-EPDM.
         2) Cover elastomer: EPDM
      b. Pressure rating: 70 psi at 170 degree Fahrenheit
      c. Minimum vertical displacement upward: 4 inches
      d. Minimum vertical displacement downward: 0.5 inches
      e. Minimum horizontal (radial and tangential) deflection: 2 inches
      f. Sealing gaskets: EPDM g. PROCO Style 234-L, or approved equal.

Article 3.03 Field Quality Control

B. Engage an independent testing agency to test tank seam welds and to test for leaks.
   1. Seam Welds: Test using radiographic method in accordance with AWWA D100.
   2. Leak Test: Fill with potable water and test for leaks in accordance with AWWA D100 ~~and NFPA 22~~; water furnished by District.
   3. Repair defects and retest until no failures are encountered.
   4. Refinish repaired areas using same preparation and coating as specified for original coating.

5) Add parts C and D to Article 2.01 in Section 33 16 00.10: Water Utility Storage Tank Rehabilitation, as follows:

C. Structurally designed to comply with applicable building codes including:
   1. Live and dead loads.
   2. Design snow load of 16 pounds per square foot.
   3. Design wind speed of 110 miles per hour.
   4. Seismic movements
      a. Site Modified Spectral Acceleration Values
         1) SMS = 0.507
         2) SM1 = 0.293
      b. Design Spectral Acceleration
         1) SDS = 0.338
         2) SD1 = 0.195
   5. Thermal movements resulting from temperature change range of 120 degrees F ambient and 180 degrees F on material surfaces.
D. Design to comply with AWWA D100.

6) Add parts C and D to Article 2.02 in Section 33 16 00.10: Water Utility Storage Tank Rehabilitation, as follows:

C. Structurally designed to comply with applicable building codes including:
   1. Live and dead loads.
   2. Design snow load of 16 pounds per square foot.
   3. Design wind speed of 110 miles per hour.
   4. Seismic movements
      a. Site Modified Spectral Acceleration Values
         1) SMS = 0.507
         2) SM1 = 0.293
      b. Design Spectral Acceleration
         1) SDS = 0.338
         2) SD1 = 0.195
   5. Thermal movements resulting from temperature change range of 120 degrees F ambient and 180 degrees F on material surfaces.
D. Design to comply with AWWA D100.

7) Revise Section 33 16 00.10: Water Utility Storage Tank Rehabilitation, as follows:

Article 2.03 Steel Tanks

A. Surface Tanks: Steel plates with all seams welded, complying with AWWA D100, with overlapping rafter, column-support roof.
   1. **Seal Welding: Provide seal welds for butt welds and lap joints in wet areas, including interior roof surfaces and rafter flanges.**

Article 2.04 Tank Fittings

A. Inlet, Outlet, and Overflow Piping: Welded steel, ASTM A53/A53M Grade B Schedule 40, with steel butt-welded fittings, ASTM A234/A234M Grade WPB Schedule 40.
   1. **All exposed steel piping shall be epoxy lined and coated.**
   2. Expansion Joint:
      a. a. Rubber bellows style expansion joint.
         1) Tube elastomer: FDA-EPDM.
         2) Cover elastomer: EPDM
      b. Pressure rating: 70 psi at 170 degree Fahrenheit
      c. Minimum vertical displacement upward: 4 inches
      d. Minimum vertical displacement downward: 0.5 inches
      e. Minimum horizontal (radial and tangential) deflection: 2 inches
      f. Sealing gaskets: EPDM g. PROCO Style 234-L, or approved equal.

Article 3.02 Field Quality Control

C. Engage an independent testing agency to test tank seam welds and to test for leaks.
   1. Seam Welds: Test using radiographic method in accordance with AWWA D100.
   2. Leak Test: Fill with potable water and test for leaks in accordance with AWWA D100 ~~**and NFPA 22**~~; water furnished by District.
   3. Repair defects and retest until no failures are encountered.
   4. Refinish repaired areas using same preparation and coating as specified for original coating.

8) Revise Bid Item No. 30 – New B Tank Subgrade & Foundation (Lump Sum), as follows:

1. The lump sum amount for constructing the subgrade and foundation at the new B Tank site as shown and specified in the Contract Documents. **Basis of bid shall only assume two (2) feet of over excavation.**
2. The lump sum price shall be full compensation for the preparation and installation or submittal of these materials, and for furnishing and installing all the labor, equipment, tools and incidentals to complete this item. This item shall be paid in proportion to the percentage of the Bid Item No. 30 completed. **If additional over excavation beyond two (2) feet is required (up to four feet), it will be paid proportionally to the base bid assumptions.**

Responses to Bidder Questions:

Question #1: Is there a snow load to consider?

Response #1: Yes, a snow load of 16 pounds per square foot should be considered. Refer to revised specification language in Section 33 16 00 and Section 33 16 00.1 herein.

Question #2: Is seal welding of the interior of roof plate junctions and rafter flanges to bottom side required?

Response #2: Yes, seal welding of the interior of roof plate junctions and rafter flanges are required. Refer to revised specification language in Section 33 16 00 and Section 33 16 00.10 herein.

Question #3: Is lining required on the overflow piping?

Response #3: Yes, all exposed steel piping for the new tanks and rehabilitated tanks shall be epoxy lined and coated. Refer to revised specification language in Section 33 16 00 and Section 33 16 00.10 herein.

Question #4: Are we to match existing structure shown on TRUSCO drawings for 70'-0"Øx12'-0" tank?

Response #4: Yes, TRUSCO drawings are provided for Bidder's reference on existing structure. Existing structure is to be modified per our plans and specifications.

Question #5: Are there shop drawings for STL B tank?

Response #5: Yes, shop drawings for the existing steel B tank are added as Attachment C of this document.

Question #6: Can we assume there isn't any "lead" or other hazardous materials to be concerned with in the coatings?

Response #6: Per Addendum 1, based on the years of construction (1982 and 1998), lead-based paint is not anticipated.

Question #7: Among other requirements, NFPA22 requires a lightning protection system. Would this be required by the district?

Response #7: No, refer to revised specification language in Section 33 16 00 Water Utility Storage Tanks herein. Tank design criteria to comply with AWWA D100.

Question #8: Are we to consider seismic requirements for the two tanks being rehabilitated?

Response #8: Yes, seismic requirements for the two tanks being rehabilitated should be considered. Refer to revised specification language in Section 33 16 00.10 herein.

Question #9: Drawing sheet E10, note 8 instructs the contractor to "relocate (E) analyzer and extend (E) conduit and wire to new location". The drawing shows the proposed new location as well as the location of the existing junction box for the analyzer panel. Should the wire be extended from this junction box to the new analyzer panel location? Please provide details on the conduit and wire size/type required for the analyzer panel.

Response #9: Intercept existing conduit and wire. Above ground Junction Box to be removed. Underground new conduit and wire to new location. Contractor to verify conduit size and wire in field.

Question #10: A new cathodic protection system controller is being provided at each of the four tanks per detail 1 on drawing sheet CP-5. These cathodic protection system control panels do not show up on the electrical drawings or conduit schedules. How are these controllers being powered? Please provide details on the conduit routing and wire size/type for delivering power to these panels.

Response #10: The CP system controller is passive and only requires a 9-volt battery to power the LCD screen for taking readings.

Question #11: Sheet E10, note 8 refers to extending existing conduit and wire to new location for the existing analyzer panel. The specification states that "No wire shall be spliced without prior approval by the Engineer." Is the expectation that new wire should be provided for the analyzer panel? If so, please detail the conduit layout and wire type for the existing conduit/wire.

Response #11: Splice new matching wire to existing cable. Extend new conduit and wire to new location.

Question #12: No detail is shown for the analyzer panel being relocated on sheet E10. Please provide information on the existing panel and how it should be mounted.

Response #12: The analyzer will be relocated and mounted to a new concrete pad, re-plumbing the existing equipment as currently mounted within the fiberglass shed, see revised sheet C7 in Attachment A.

Question #13: The Conduit & Wire Routing Schedules on sheets E10 and E20 both mention #12 VFD rated cable. Does the Owner have a preference on which

type of cable is supplied for this? Please provide a specification (make, model, etc..) for this cable.

Response #13: All VFD load side power wiring shall have rated blended composite semi-conductive, tray-cable rated, UL-type TC 90°C insulation and 100% shielding with foil tape & tinned copper braid.

Question #14: The anode specified in the drawings and plans are not manufactured by any of the Cathodic Protection suppliers for magnesium anodes. Can a substitute 2.024" Mag rode anode be used (this is the industry standard anode for tank internal Cathodic Protection).

Response #14: Yes, 2.024" mag rode anodes can be substituted, but the rheostat setting will need to be adjusted accordingly.

Question #15: Can a design life requirement be provided for the Cathodic Protection systems? Typical Cathodic Protection design life is 10-20 years for a magnesium anode system. With the current design and anode count per the drawings the systems are way over designed.

Response #15: The design of the passive CP system is for a 20-year life. The design is more conservative with additional anodes due to limited information for the specific conductance to use for all four tanks.

Question #16: Plan sheet C7 indicates 12" SD PVC for the tank drain lines, however, details 6/13 (Flapgate/outfall) and 4/16 (New Clearwell Overflow Drain Detail) indicate 18" drains. Please clarify what size these drain lines and flapgate are to be.

Response #16: Per Addendum 1, the drain lines and flapgate are to be 18" diameter.

Question #17: We cannot locate a detail for the catch basins, can a catch basin detail be provided.

Response #17: Refer to added Specification Section 03 41 00: Precast Concrete Structures herein.

Question #18: Detail 4 on sheet C13 shows an offset for the 18" overflow drain, what is the material of the existing 18" drain (i.e. C900, SDR26, Steel, etc.)?

Response #18: The material for the existing 18" drain is SDR 35 PVC.

Question #19: Bid Item 16 calls for 16" PVC piping for the B Tank site overflow line and if I'm assuming correctly, the piping schedule in the specifications has this listed as System "OF" and refers to Piping Specification Schedule – System

1. However, System 1 only allows for ductile iron pipe for buried service. Please provide a material type and specification for the 16" PVC overflow piping.

Response #19: Below-ground piping shall be PVC per specification 33 01 24. See revised language to 33 01 15 included herein.

By: _____
Charles Palmer, PE, Senior Engineer
Calaveras County Water District

ACKNOWLEDGMENT BY BIDDER,

By: _____
Arthur T. Spinella, T&S Construction Co, Inc.

Title: President

(NOTE – Bidders are hereby advised that they also need to sign their acknowledgement of this Addendum on their Bid Schedule.)

-END OF ADDENDUM NO. 2

ATTACHMENT A

ATTACHMENT B

SECTION 03 41 00

PRECAST CONCRETE STRUCTURES

PART 1 - GENERAL

2.01 DESCRIPTION

A. Scope:
   1. Precast catch basin frames and grates.

2.02 SUBMITTALS

A. Shop Drawings:
   1. Fabrication and/or layout drawings:
      a. Include detailed diagrams of manholes showing typical components and dimensions.
      b. Indicate knockout elevations for all piping entering each structure.

PART 2 - PRODUCTS

3.01 ACCEPTABLE MANUFACTURERS

A. Precast catch basins:
   1. Oldcastle Infrastructure
   2. Jensen Precast
   3. Or approved equal

3.02 Catch Basin Frames and Grates:

A. Size as shown on plans.

B. Traffic rated grate and frame, H20 loading.

C. Oldcastle 4'X4'-CB-DIC, Jensen Drop Inlet 4848, or approved equal.

PART 3 - EXECUTION

4.01 Structure CONSTRUCTION

A. General:

B. Place precast structures on 6 inches compacted Class 2 aggregate base.

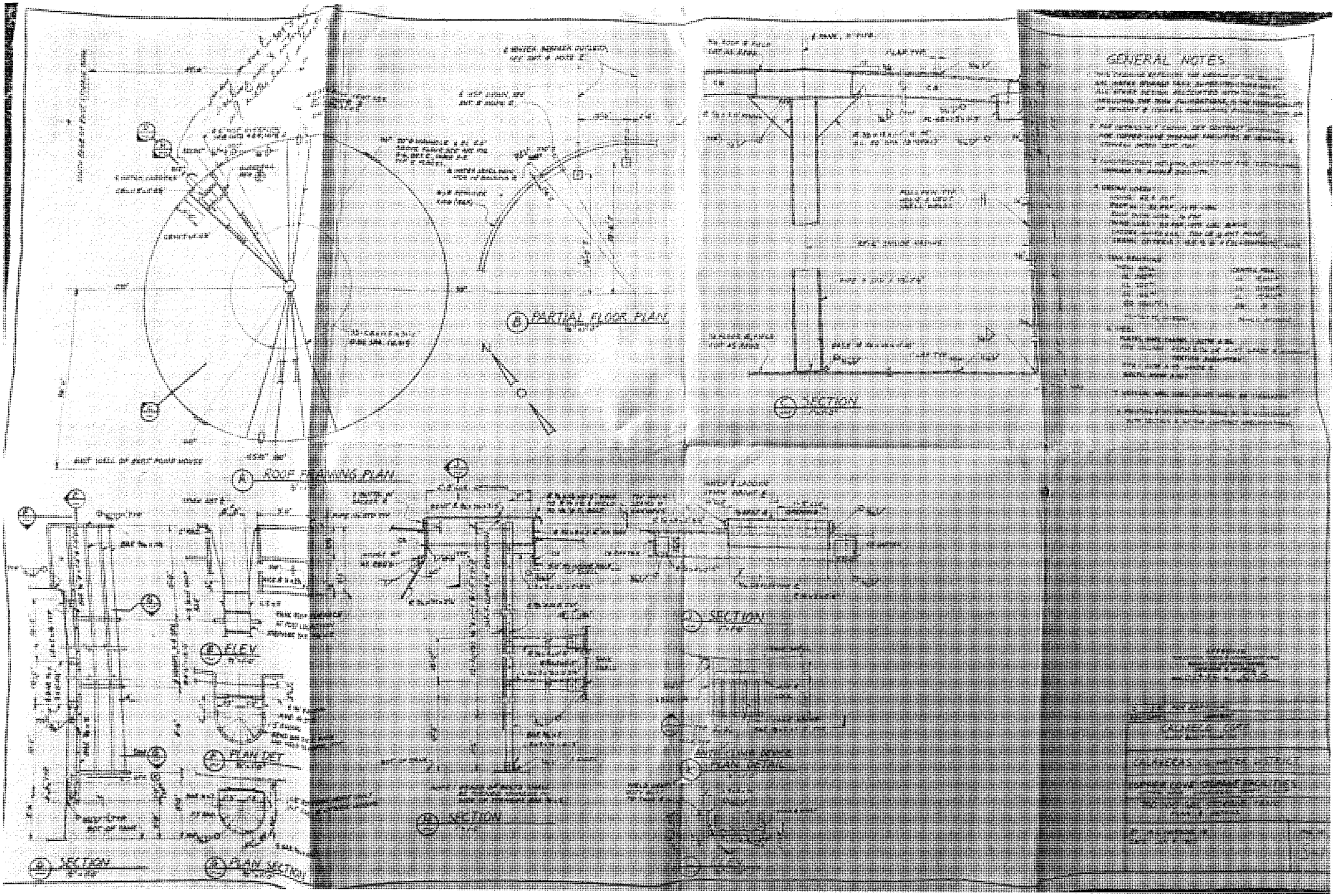
C. Build each structure to dimensions shown on plans and at such elevation that pipe sections built into wall of structure will be true extensions of line of pipe.

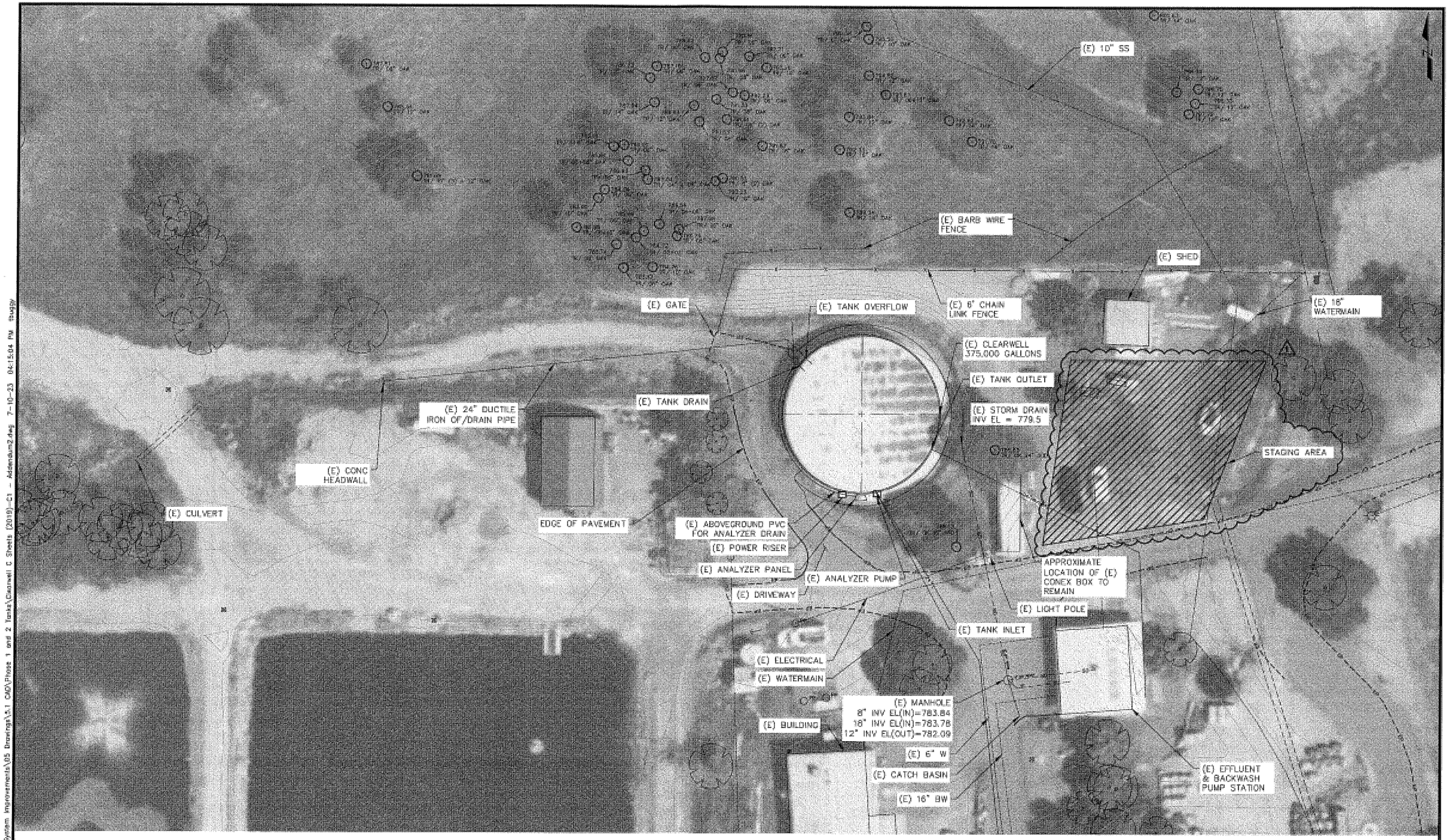
D. Seal all pipe penetrations in structures. Form pipe openings smooth and well shaped. After installation, seal cracks with non shrink grout. After grout cures, wire brush smooth and apply two coats emulsified fibered asphalt compound to minimum wet thickness of 1/8 inch to ensure complete seal.

E. Set and adjust frame and cover final 6-inch (minimum) to 18-inch (maximum) to match finished pavement or finished grade elevation using precast adjuster rings.

END OF SECTION 03 41 00

ATTACHMENT C


GENERAL NOTES
ROOF FRAMING PLAN
PARTIAL FLOOR PLAN
SECTION
ELEV
PLAN DET
SECTION
SECTION
SECTION
PLAN SECTION



ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
1	7/10/23	TMB	ADDENDUM #2

SCALE: 1" = 20'

DATE: JUNE 2023

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED AAS
DRAWN NMG/TMB
CHECKED KBB

133 TOMA COURT,
SAN ANDREAS, CALIFORNIA 95249
PHONE (209) 754-3543

PETERSON . BRUSTAD . INC
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60 Blue Ravine Rd. Suite 280
Folsom, CA 95630
PH. 916-608-2312

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

EXISTING CLEARWELL SITE PLAN

DRAWING C1

SHEET 6 OF 42

P:\CCWD\Copper Cove Water System Improvements\05 Drawings\5.1 CAD\Phase 1 and 2 Tanks\Clearwell C Sheets (2019)--C1 - Addendum2.dwg 7-10-23 04:15:04 PM tbaggy

CONSTRUCT NEW CLEARWELL PER DETAIL 1/C11

(N) TANK INLET

VALVE 1

RIM EL=778.45
18" INV EL (IN)=774.95
18" INV EL (OUT)=774.85
12" INV EL (IN)=775.2
12" INV EL (IN)=775.2

1

VALVE 3

STORM DRAIN OVERFLOW CROSSING DETAIL 4/C13

18" INV EL (OUT)=774
INSTALL FLAPGATE PER DETAIL 6/C13

INSTALL 12" SD PVC

(E) OF/DRAIN PIPE

INSTALL TEE
INV EL=771.0

INSTALL 45° ELBOW
INV EL=771.0

INSTALL 11.25° ELBOW
INV EL=771.2

REINSTALL WATER QUALITY ANALYZER PANEL WITH CONCRETE PAD AND NEW CHLORINE ANALYZER, SEE NOTE 4.

INSTALL 22.5° ELBOW
INV EL=772.0

ANALYZER DRAIN TO DI

1

RIM EL=781.0
18" INV EL(IN)=775.5
18" INV EL (OUT)=775.4
12" INV EL (IN)=775.5

2

RIM EL=779.6
12" INV EL(IN)=775.7
12" INV EL (OUT)=775.6

INSTALL 22.5° ELBOW
INV EL=773.0

2

NOTES:

1. ALL PIPE SHALL BE FULLY RESTRAINED.
2. TRENCHING SHALL BE PERFORMED IN ACCORDANCE WITH CALAVERAS COUNTY WATER DISTRICT STANDARDS.
3. PROVIDE LOCKOUT VALVE COVER TO VALVES 2, 3 AND 8, PER SPECIFICATIONS.
4. NEW CHLORINE ANALYZER TO BE ECO DC-80 OR APPROVED EQUAL, REAGENT-LESS ANALYZER.
5. PLUG EXISTING 12" STORM DRAIN WITH CONCRETE AND ABANDON PIPE IN PLACE.
6. 1" SCHEDULE 80 PVC CARRIER PIPE FROM EXISTING PUMP TO NEW ANALYZER POSITION TO BE INSTALLED WITH SMOOTH RADIUS BENDS TO ACCOMMODATE ½" TUBING.

SADDLE TAP 1" LINE TO EXISTING PUMP AND 1" LINE FROM EXISTING PUMP TO ANALYZER PANEL, SEE NOTE 6.

10'

VALVE 6
(N) TANK OUTLET
(P) 70' DIAMETER STEEL TANK
OVERFLOW DRAIN BOX

INSTALL 22.5° ELBOW
INV EL=771.0

VALVE 2
VALVE 4

12" SD PVC
18" SD PVC
24" TW DIP

INSTALL 11.25° ELBOW
INV EL=771.8
(E) 70' DIAMETER STEEL TANK
(N) TANK INLET
VALVE 5
VALVE 7
(E) TANK OUTLET
VALVE 8

VALVE 9

MIN CLEARANCE 4' (TYP.)

CONNECT TO (E) 24" FE PER DETAIL 1/C15

INSTALL 20" BLIND FLANGE

MAINTAIN 10' CLEARANCE FROM (E) 10" SS

INSTALL 45° ELBOW
INV EL=789.0

INSTALL 22.5° ELBOW
INV EL=783.0

RIM EL=778.65
12" INV EL (OUT)=775.3

INSTALL 11.25° ELBOW
INV EL=772.6

INSTALL 45° ELBOW
INV EL=772.6

INSTALL 22.5° ELBOW
INV EL=772.6

CONSTRUCT NEW 6' CHAIN LINK FENCE PER DETAILS ON SHEET C15

REHABILITATE (E) CLEARWELL PER DETAIL 1/C11

INSTALL 45° ELBOW
INV EL=772.6

20" DIP TRANSMISSION MAIN

CONNECT TO (E) 24" TW/BWS PER DETAIL 2/C15

INSTALL 22.5° ELBOW
INV EL=785.0

18" X 20" REDUCER DOWNSTREAM OF VALVE 9

VALVE 10

INSTALL 18" WYE WITH TWO 18" BFVS

REPLACE EXISTING 18" C900 PVC WITH APPROXIMATELY 60 LF OF NEW 18" DIP UP TO EXISTING COUPLING (APPROXIMATELY 5 FEET FROM THE OUTSIDE FACE OF EXISTING WALL). REPAIR ASPHALT AS NEEDED.

(E) ANALYZER PUMP

CONNECT 18" PVC TO EXISTING MANHOLE
(E) RIM EL=788.7
(E) 6" INV EL (IN)=783.84
(E) 18" INV EL (IN)=783.78
(E) 12" INV EL (IN)=UNKNOWN
(E) 12" INV EL (OUT)=782.09, SEE NOTE 5
(P) 18" INV EL (OUT)=782.0

ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
2	7/31/23	TMB	ADDENDUM #2
1	7/06/23	TMB	ADDENDUM #1

SCALE: 1" = 20'

DATE: JUNE 2023

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED AAS
DRAWN KMVL/TMB
CHECKED KBB

CALAVERAS COUNTY WATER DISTRICT
120 TOMA COURT,
SAN ANDREAS, CALIFORNIA 95249
PHONE (209) 754-3543

PETERSON . BRUSTAD . INC
ENGINEERING . CONSULTING
80 Blue Ravine Rd. Suite 280
Folsom, CA 95630
PH. 916-608-2212

8/14/23

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

CLEARWELL TANK SITE PIPING PLAN

DRAWING C7

SHEET 11 OF 42

P:\CCWD\Copper Cove Water System Improvements\06 Drawings\01 CAD\Phase 1 and 2 Tanks\Clearwell C Sheets (2019)-C7 Addendum-2.dwg 8-01-23 10:16:37 AM tburgey

Calaveras County Water District
Copper Cove, California
Bidding Documents
Copper Cove Phase 1 and 2 Tanks Project

ADDENDUM NO. 3
Issued August 7, 2023

The Drawings and Project Manual including Specifications are modified as follows. Addendum No.3 forms a part of the Contract Documents and modifies the original documents dated June 14, 2023.

This Addendum consists of ten (10) pages and one (1) attachment:

- Attachment A: Revised drawings

Bidder's Note: Bidder shall acknowledge receipt and examination of this addendum on the Bid form and attach a signed copy to the Bid, both as required by the Sealed Proposal.

Contract Documents - Drawings Changes:

Modify the following drawings per the instruction outlined below:

1) Replace C7, C8, C9A, C14, and C16 with the attached revised sheets in attachment A.

Contract Documents – Specifications Change:

1) Revise Section 01 10 00: Summary, as follows:

B. Clearwell Site
   1. Prepare subgrade for new Clearwell foundation and construct foundation with a minimum 28-day compressive strength of 7,000 pounds per square inch.
   2. Construct new 346,000-gallon welded steel storage tank Clearwell.
   3. Construct all below ground site piping and terminate short of tanks and tie-in locations.
      a. Perform pressure testing, disinfection, sampling and verification of bacteriological test results.
      b. Connect inlet and outlet piping to new Clearwell.
      c. **Complete installation of inline insertion valve #11 and** shut down 24-inch outlet TW/BWS pipe to complete tie-in of new outlet TW/BWS piping per Contract Documents.

2) Add line 1 to paragraph 1.05 B in section 09 97 13.24: Steel Water Tank Painting, as follows:

1.05 SUBMITTALS

B. Containment: Contractor shall submit to the District a written plan describing the type and performance of the proposed containment method to ensure spent abrasive and overspray does not leave the site. Performance data shall include time required to raise and lower containment and containment efficiency. This submittal shall be for informational purposes only. Review of this submittal shall not constitute approval of the proposed method nor place any responsibility for the same upon the District. An engineer licensed in the State of California must seal the containment plan.
   1. **No airborne particulates may leave the job site nor cross over the site property line onto adjacent public or private property. If airborne particulates are observed to be leaving the project site and/or complaints are made by nearby property owners, the abrasive blasting and/or spraying operations must be immediately suspended until proper controls are implemented by the contractor/subcontractor.**

3) Revise Section 32 31 13: Chain Link Fences and Gates, as follows:

2.01 COMPONENTS

A. Line Posts: Minimum 2 inch inner diameter.
B. ~~**Victory Arms**~~ **Angled Outriggers**: Minimum 2 inch inner diameter formed with a 45 degree angle in the direction of the climber.
   1. **To accommodate 3 strands of barbed wire.**
C. Corner and Terminal Posts: Minimum 2.5 inch inner diameter.
D. ~~**Victory Arms**~~ **Angled Outriggers** and Terminal Posts: Minimum 2.5 inch inner diameter formed with a 45 degree angle in the direction of the climber.
   1. **To accommodate 3 strands of barbed wire.**
E. Gate Posts: Minimum 6 inch inner diameter for gate widths of 6 feet to 12 feet.
F. Top and Brace Rail: Minimum 1.25 inch diameter, plain end, sleeve coupled.
G. Bottom Rail: Minimum 1.25 inch diameter, plain end, sleeve coupled.
H. Fabric: 2 inch diamond mesh interwoven wire, 9 gauge, 0.1483 inch thick, top selvage knuckle end closed, bottom selvage twisted tight.
I. Tension Wire: 6 gauge, 0.1920 inch thick steel, single strand.
J. Tie Wire: Aluminum alloy steel wire.

4) Revise Section 33 14 19: Valves and Hydrants, as follows:

2.03 GATE VALVES: 3 TO 12 IN DIAMETER

K. ~~**Double Disc Gate Valve**~~ **Resilient Wedge Gate Valve**:

1. Comply with AWWA C509 or AWWA C515.
2. Ductile iron, NRS, open left, NSF 61 and NSF 372 compliant, 2-inch square operating nut (unless otherwise noted).
3. Fusion epoxy coated and lined
4. Design Requirements:
   a. 200 psi working pressure.

5) Add Sections 2.07 and 3.02 C Inline Insertion Valve to 33 14 19: Valves and Hydrants, as follows:

2.07 INLINE INSERTION VALVES

A. **Model: AVT EZ Valve, or equal.**
   1. **Rated for 250 psi.**
   2. **NSF 61 compliant.**
   3. **Epoxy coated ductile iron body, bonnet, and resilient wedge valve cartridge**
   4. **The valve shall be engineered to achieve a positive seal on the interior of a clean or tuberculated host pipe.**
   5. **Insertion valves shall have a full-size, full-port flow way unobstructed and free of depressions to provide optimum flow and sealing and not trap tuberculation or debris.**
   6. **Insertion valves shall be NRS (non-rising stem).**
   7. **Contractor will submit shop drawings and vendor product information for approval by the engineer.**

3.02 Installation

C. INLINE INSERTION VALVES

1. **All insertion valves must be installed by companies trained and authorized by the approved valve manufacturer. This will ensure high-quality installation and guarantee the warranty of the product.**

2) Revise Section 33 14 19.03: Butterfly Valves, as follows:

1.03 ACCEPTABLE MANUFACTURERS

A. Subject to Compliance with the Contract Documents, the Following Manufacturers are Acceptable to match District standards:
   1. Mueller LinesealXPH, Pratt HP 250II, NIBCO T-FP600A-LF, **Val-Matic** or approved equal.

2.01 BUTTERFLY VALVES

A. General:
   1. AWWA C504, Class ~~150B~~ **250B**:
      a. One piece shaft construction.
      b. One piece body construction.
   2. Minimum operator torque rating:
      a. AWWA C504, Class ~~150B~~ **250B**.
   3. Resilient-seat, tight-closing, set in valve body.
   4. Flanged body construction where indicated specifically in Contract Drawings.
   5. Discs seat at 90 Degrees with pipe axis.
   6. Buried or submerged service: 0-ring shaft seals or chevron seal.
   7. Valve position indicators:
      a. Provide on each exposed operator.
      b. Provide on each extension stem operating nut, Mills Engineering "Indico Model 128," Pratt "Diviner," or equal.
   8. Operator locking devices:
      a. Throttling service: Infinitely variable locking device or a totally enclosed geared operator.
      b. Other lever operators: Readily locked in the open, closed, and not less than five intermediate positions.
   9. Disc:
      a. ~~Cast iron~~ **Ductile iron**, ASTM ~~A126~~ **A536** Class B, with stainless steel type 316 edge.
      b. Discs shall be retained by stainless steel pins extending through full diameter of shaft.
   10. Shaft: Stainless steel, type 304.
   11. Seat: EPDM.

2.02 VALVE BODIES

A. Flanged, where called for in Contract Documents: ASTM ~~A126~~ **A536** Class B, with 18-8 Type 304 Stainless.

3) Revise Section 33 16 00: Water Utility Storage Tanks, as follows:

C. Stairs, Ladders, Platforms, and Railings: Comply with 29 CFR 1910, Subpart D, Sections 21-30.
   1. Inside tank and other submerged locations use welded steel. ~~in accordance with~~
   2. Outside tank, use hot-dipped galvanized steel, zinc coated in accordance with ASTM A123/A123M.
   3. Provide handrails at open sides of all platforms and:
   4. Provide ladders in the following locations:
      a. Inside tank, from bottom to top.
   5. Provide stairs in the following locations:

a. Outside of tank, up to roof.

6. **Landing grates shall be serrated.**

Responses to Bidder Questions:

Question #1: Can section 14 of AWWA D100 be used for design of new and rehab tanks?

Response #1: No, section 14 cannot be used. The District prefers the standard D100 design.

Question #2: Sheet C8 shows a line from the new 12" TW line that ties in to the existing 10" BPS effluent line outside of the B Tank booster pump station building that includes an altitude valve vault with a 36" removable spool piece. Is this line intended to be 10" or 12"? Is the altitude valve being relocated from another location or provided by the utility? Could you provide a detail for the vault and piping? Could you provide a detail for the tie-in to the existing 10" BPS effluent?

Response #2: The altitude valve will be procured as part of a future project. This line is intended to be a 12" line, see revised sheets C8 and C14 included in Attachment A.

Question #3: Per Spec 331600 paragraph 2.03 / C, do the Landing Gratings need to be Serrated?

Response #3: Yes, the landing gratings need to be serrated. Refer to revised specification Section 33 16 00 herein.

Question #4: Per Spec 331600 para 2.03 / C, what is the Material required of the Tank Internal Ladders?

Response #4: Tank internal ladders shall use welded steel material, per specification Section 33 16 00 article 2.03: Tank Fittings.

Question #5: Could you send us the PHL / Bidder List / Prebid Sign-in sheet for our bidding?

Response #5: The Prebid Sign-in sheet can be found in Attachment B in Addendum 1.

Question #6: Specification section 33 14 19 2.03 Gate Valves: 3 to 12 in Diameter asks for "Double Disc Gate Valves", but references AWWA C509 and AWWA C515. Those AWWA references are for Resilient Wedge (RW) Gate Valves. The

manufacturer part numbers listed in the project specification and in the CCWD Approved Materials List are also for RW gate valves. Is the call out for "Double Disc Gate Valves" in error?

Response #6: Yes, the call out for "Double Disc Gate Valves" is in error. Refer to revised specification Section 33 14 19 herein.

Question #7: Specification section 26 05 00, 1.01.N requires the system integrator to provide any necessary PLC hardware. Section 2.06 details requirements for all new I/O and panel modifications for this project. What are the make/model of the existing PLCs at the Tank B site and the Copper Cove WTP site? Is there available spare I/O for the new signals, or is the expectation that the contractor provide new I/O cards for the new signals? Please provide as built drawings of the PLC panels or an I/O list so the system integrator can define what (if any) new PLC hardware will be required.

Response #7: There are existing Modicon Compact and Momentum PLCs. No additional PLC IO cards need to be provided. Spare IO is available, interposing relays and isolators may be necessary at each site. No as-built drawings are available.

Question #8: Per section 0700 in the General Conditions it states that "Contractor shall pay all government charges and inspection fees necessary for the prosecution of the work". Does the district know what the costs of these fees will be?

Response #8: The contractor is not required to pay any arbitrary government charges and inspection fees unless the contractor's or subcontractor's scope specifically calls out for those inspections and clearly identifies the inspection requirements. Note that it is anticipated that the county may require a grading permit for the disposal of excavated materials and there may be an associated fee.

Question #9: Sheet C7 Clearwell Tank Site – At the 20" Transmission Main Tie-In, it calls for an 18" Wye to be installed with 2 valves. Please confirm the connection will be a transition from the 20" new Main to the exiting main using an 18" wye instead of a 20" Wye and what size the valves should be if we do connect to an existing 18" Line.

Response #9: Per addendum 2 Attachment A, the wye shall be 18" with a reduction downstream from the wye to the new 20" transmission main.

Question #10: I'd like to submit Val-Matic butterfly valves as "or equal" to the butterfly valves listed in specification section 33 14 19.03. Please see the attached information from B&K Valves, our Val-Matic manufacturers representative. I've also attached the page from the CCWD Approved Materials List showing Val-Matic as an accepted butterfly valve manufacturer.

Response #10: No exceptions taken. Refer to revised specification Section 33 14 19.03 herein.

Question #11: I have a question on this project from my integrator - Who is providing the clearwell vent control panels?

Response #11: The vent supplier should supply their standard control panel.

Question #12: It is unclear if PLC I/O cards are required to add the new I/O. It does not list what PLC it is or if there are multiple PLCs. Please Advise.

Response #12: There are existing Modicon Compact and Momentum PLCs. No additional PLC IO cards need to be provided. Spare IO is available, interposing relays and isolators may be necessary at each site. No as-built drawings are available.

Question #13: Is this project subject to the Buy America or Buy American material requirements for steel products?

Response #13: No, this project is not subjected to the Buy America or Buy American requirements.

Question #14: In the General Conditions under 6.03 – "F", it calls out for "Contractor Pollution Liability Insurance". In the Supplement Conditions where the limited amounts are given, there is no mention of the Contractor Pollution Liability Insurance. Is the Contractor Pollution Liability Insurance required? If so, what is the amount of coverage required?

Response #14: No, a separate pollution liability insurance policy is not required for this project. Refer to revised specification 09 97 13.24: Steel Water Tank Painting herein.

Question #15: If Contractor Pollution is required, this coverage is not typically carried by most subcontractors and is expensive to purchase. Will the subcontractor performing the fence and gate scope of the work be required to furnish the Contractor Pollution Liability Insurance policy?

Response #15: Not applicable.

Question #16: On plan sheet C15 detail "A" is called out as "Gate Operator Section", There are no other gate operator reference in the specifications or details. Is there a requirement for a gate operator? If required, please supply specifications for the gate operator.

Response #16: A gate operator is required per detail 5 on sheet C15.

Question #17: In the specification under Accessories – "C" calls out for Victory Arms, in the fence industry, this term is associated with a barb wire arm holding 6 strands of barb wire. In the details and other areas in the specs, it calls out 3 strands of barb wire. Please confirm that the required barb wire arm is a 45 degree barb wire arm for 3 strands of barb wire as shown on detail sheet C15.

Response #17: The required barb wire arm is a 45-degree arm with three (3) strands of barb wire as shown on detail sheet C15. Refer to revised specification Section 32 31 13 herein.

Question #18: Bid Item number 11 for "B" Tank on the Bid Schedule calls out 40 LF of chain link and gate. When scaled, it scales as 85 feet of fence and a 20' gate. Please clarify the amount of fence and gate for Bid Item #11.

Response #18: The estimated amount of fence is 20 feet to replace where the old gate was (to be demolished), and a new 20-foot gate, for a total of 40 feet.

Question #19: Bid Item 11 - B tank site chain link fence estimated quantity is 40 LF, however, actual at 95 LF of fence plus a 20' double gate for a total of 115 LF? Please confirm.

Response #19: The estimated amount of fence is 20 feet to replace where the old gate was (to be demolished), and a new 20-foot gate, for a total of 40 feet.

Question #20: Under section 33 16 00 Water Utility Storage Tanks, 2.02 Steel Tanks, paragraph A. Is the interior roof area to be seal welded, including roof plate to rafters and overlapping seams, or the roof plate?

Response #20: Per addendum 2, seal welding of the interior of roof plate junctions and rafter flanges are required.

Question #21: Will shop drawings/submittals for the fencing and gate require calculations or an Engineers stamp?

Response #21: No, the shop drawings/submittals for the fencing and gate do not require an Engineers stamp.

Question #22: Pursuant Drawing C7, 24" TW Outlet Line is called out (two locations) at invert elevation of 772.6'. Drawing C9A calls it out at 775.2' and C11A appears to be at approximately 774'. Please confirm elevation of this line.

Response #22: The 24" TW outlet line shall be at an invert elevation of 775.0 at the new clearwell. Refer to revised sheets C7 and C9A.

Question #23: Pursuant Drawing C7 and Detail 2/C13, can the existing tank be taken out of service to perform the tie-in?

Response #23: Inline insertion valves have been added to C7 to accommodate the outlet tie-in as well as the tie-in to the 18" wye. Refer to revised sheet C7 and added specification sections 33 14 19: Valves and Hydrants herein.

Question #24: There is mention of chlorine analyzers on drawing(s) C7 and C8 but not specs. Please advise.

Response #24: Per note 4 on C7 and note 4 on C8, new chlorine analyzer to be ECD DC-80 or approved equal, reagent-less analyzer.

Question #25: Specification Section 01 74 19, Paragraph 1.05 Asbestos Demolition Procedures, where is this pipe located, size and lengths? This information is required to accurately price the disposal.

Response #25: Approximately five (5) feet of 10" diameter AC treated water pipe is being removed. Refer to revised Detail 5 on sheet C14 herein.

Question #26: In addendum #2 issued yesterday, the type of PVC pipe for the "OF" line at the B Tank Site was addressed. However, SDR26 PVC pipe isn't available in 16" diameter. If this line is to be 16", the engineer will need to specify a different type of PVC pipe. The other option would be to change the size of this line to a diameter that is available in SDR26, either 15" or 18".

Response #26: The OF line shall be 18" SDR 26. However, the existing 16" OF material is unknown, and the tie-in connection will need to account for any material or size transition.

By: _____
Charles Palmer

Senior Engineer, Calaveras County Water District

ACKNOWLEDGMENT BY BIDDER,

By: _____
Arthur T. Spinella, T&S Construction Co, Inc.

Title: President

(NOTE – Bidders are hereby advised that they also need to sign their acknowledgement of this Addendum on their Bid Schedule.)

-END OF ADDENDUM NO. 3

ATTACHMENT A

CONSTRUCT NEW CLEARWELL PER DETAIL 1/C8

(N) TANK INLET

VALVE 1

RIM EL=778.45
18" INV EL (IN)=774.95
18" INV EL (OUT)=774.85
12" INV EL (IN)=775.2
12" INV EL (IN)=775.2

VALVE 3

STORM DRAIN OVERFLOW CROSSING DETAIL 4/C13

18" INV EL (OUT)=774
INSTALL FLAPGATE PER DETAIL 6/C13

INSTALL 12" SD PVC

(E) OF/DRAIN PIPE

INSTALL TEE
INV EL=771.0

INSTALL 45° ELBOW
INV EL=771.0

INSTALL 11.25° ELBOW
INV EL=771.2

REINSTALL WATER QUALITY ANALYZER PANEL WITH CONCRETE PAD AND NEW CHLORINE ANALYZER, SEE NOTE 4.

INSTALL 22.5° ELBOW
INV EL=772.0

ANALYZER DRAIN TO DI

RIM EL=781.0
18" INV EL(IN)=775.5
16" INV EL (OUT)=775.4
12" INV EL (IN)=775.5

RIM EL=779.6
12" INV EL(IN)=775.7
12" INV EL (OUT)=775.6

INSTALL 22.5° ELBOW
INV EL=773.0

SADDLE TAP 1" LINE TO EXISTING PUMP AND 1" LINE FROM EXISTING PUMP TO ANALYZER PANEL, SEE NOTE 6.

10'

VALVE 6

(N) TANK OUTLET

(P) 70' DIAMETER STEEL TANK

OVERFLOW DRAIN BOX

INSTALL 22.5° ELBOW
INV EL=771.0

VALVE 2
VALVE 4

INSTALL 11.25° ELBOW
INV EL=771.8

(E) 70' DIAMETER STEEL TANK

(N) TANK INLET

VALVE 5

(E) TANK OUTLET

VALVE 8

VALVE 9

MIN CLEARANCE 4' (TYP)

CONNECT TO (E) 24" FE PER DETAIL 1/C11

INSTALL 20" BLIND FLANGE

MAINTAIN 10' CLEARANCE FROM (E) 10" SS

INSTALL 45° ELBOW
INV EL=789.0

INSTALL 22.5° ELBOW
INV EL=783.0

RIM EL=778.65
12" INV EL (OUT)=775.3

INSTALL 11.25° ELBOW
INV EL=775.0

INSTALL 45° ELBOW
INV EL=772.6

INSTALL 22.5° ELBOW
INV EL=772.6

CONSTRUCT NEW 6' CHAIN LINK FENCE PER DETAILS ON SHEET C15

REHABILITATE (E) CLEARWELL PER DETAIL 1/C11

INSTALL 45° ELBOW
INV EL=775.0

24" INLINE INSERTION VALVE 8.5 FT FROM OUTSIDE TANK WALL PER SPECIFICATIONS. VALVE 11

VALVE 7

20" DIP TRANSMISSION MAIN

CONNECT TO (E) 24" TW/BWS PER DETAIL

4" BO WITH UTILITY BOX PER STD DETAIL W06A

INSTALL 22.5° ELBOW
INV EL=785.0

18" INLINE INSERTION VALVE PER SPECIFICATIONS. VALVE 10

18" X 20" REDUCER DOWNSTREAM OF VALVE 9

INSTALL 18" WYE WITH TWO 18" BFVS

REPLACE EXISTING 18" C900 PVC WITH APPROXIMATELY 60 LF OF NEW 18" DIP UP TO EXISTING COUPLING (APPROXIMATELY 5 FEET FROM THE OUTSIDE FACE OF EXISTING WALL). REPAIR ASPHALT AS NEEDED.

(E) ANALYZER PUMP

CONNECT 18" PVC TO EXISTING MANHOLE
(E) RIM EL=788.7
(E) 6" INV EL (IN)=783.84
(E) 18" INV EL (IN)=783.78
(E) 12" INV EL (IN)=UNKNOWN
(E) 12" INV EL (OUT)=782.09, SEE NOTE 5
(P) 18" INV EL (OUT)=782.0

NOTES:

1. ALL PIPE SHALL BE FULLY RESTRAINED.
2. TRENCHING SHALL BE PERFORMED IN ACCORDANCE WITH CALAVERAS COUNTY WATER DISTRICT STANDARDS.
3. PROVIDE LOCKOUT VALVE COVER TO VALVES 2, 3, AND 8, PER SPECIFICATIONS.
4. NEW CHLORINE ANALYZER TO BE ECO DC-80 OR APPROVED EQUAL, REAGENT-LESS ANALYZER.
5. PLUG EXISTING 12" STORM DRAIN WITH CONCRETE AND ABANDON PIPE IN PLACE.
6. 1" SCHEDULE 80 PVC CARRIER PIPE FROM EXISTING PUMP TO NEW ANALYZER POSITION TO BE INSTALLED WITH SMOOTH RADIUS BENDS TO ACCOMMODATE ½" TUBING.

ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
3	8/4/23	TMB	ADDENDUM #3
2	7/31/23	TMB	ADDENDUM #2
1	7/6/23	TMB	ADDENDUM #1

SCALE: 1" = 20'

DATE: JUNE 2023

WARNING 0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED AAS
DRAWN MMVL/TMB
CHECKED KBB

CALAVERAS COUNTY WATER DISTRICT
120 TOMA COURT, SAN ANDREAS, CALIFORNIA 95249
PHONE (209) 754-3543

PETERSON . BRUSTAD . INC
ENGINEERING . CONSULTING
80 Blue Ravine Rd. Suite 280
Folksom, CA 95630
PH. 916-608-2212

1/14/23

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

CLEARWELL TANK SITE PIPING PLAN

DRAWING C7

SHEET 11 OF 42

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POWER POLE

INSTALL 4' X 5' X 5' PRECAST VAULT WITH TRAFFIC RATED TORSION ASSIST LID AND 36" LONG REMOVABLE SPOOL PIECE

EX ANALYZER PANEL WITH NEW CHLORINE ANALYZER. SEE NOTE 4.

INSTALL 45° ELBOW INV EL=977.7

INSTALL 45° ELBOW INV EL=977.7

VALVE 23

VALVE 24

18" SDR26 TANK OVERFLOW AND DRAIN

INSTALL 45° ELBOW INV EL=978.0

1" ANALYZER DRAIN TO OVERFLOW DRAIN BOX

INSTALL 45° ELBOW INV EL=978.1

INSTALL 22.5° ELBOW EL TO BE FIELD VERIFIED

TIE (E) 2" VAULT DRAIN TO (P) 6" PVC TANK/VAULT DRAIN

ANALYZER DRAIN TO DI

OVERFLOW DRAIN BOX

INSTALL 45° ELBOW INV EL=978.0

VALVE 18

TIE INTO (E) 6" PVC TANK DRAIN (4/C14)

INSTALL 45° ELBOW INV EL=976.6

TIE INTO (E) UTILITY

TIE INTO (E) 10" DIP TW (6/C14)

VALVE 22

REHABILITATE (E) STEEL TANK PER DETAIL (1/C9)

(E) 65' DIAMETER STEEL B TANK

(P) 65' DIAMETER STEEL B TANK

TIE INTO (E) 10" TW TO GO UNDER EXISTING (5/C14)

VALVE 15

VALVE 14

VALVE 13

VALVE 12 (NCV)

VALVE 11 (NCV)

VALVE 10

VALVE 9

VALVE 7

VALVE 6

VALVE 5

VALVE 4

VALVE 3

(N) TANK OUTLET IN PARALLEL

(N) TANK INLET IN SERIES

(N) TANK OUTLET

VALVE 8

(N) TANK INLET

VALVE 16

VALVE 2

CONSTRUCT NEW STEEL TANK PER DETAIL (1/C10)

(P) GATE, PER C15

GATE

INSTALL 45° ELBOW INV EL=977.8

BUILDING

RELOCATE (E) UTILITY

VALVE 1

VALVE 17

(N) TANK INLET

12" TW

TIE INTO (E) 16" TANK OVERFLOW (3/C14)

2" ARV WITH MINIMUM Ø" ORIFICE PER STD DETAIL W05

4" BO WITH UTILITY BOX PER STD DETAIL W06A

TIE INTO (E) UTILITY

18" TW FROM WTP

VALVE 25

TIE INTO (E) 18" TW (1/C14)

VALVE 19

SADDLE TAP 1" LINE TO ANALYZER PANEL

VALVE 20

10" TW

WALL

WALL

PROPANE TANK

HOUSE

TIE INTO (E) 18" TW (2/C14)

INSTALL 90° ELBOW INV EL=977.1

(P) FENCE, PER C15

10" TW TO DISTRIBUTION SYSTEM

SIGNAL HILL TRAIL

NOTES:

1. ALL PIPE SHALL BE FULLY RESTRAINED.
2. TRENCHING SHALL BE PERFORMED IN ACCORDANCE WITH CALAVERAS COUNTY WATER DISTRICT STANDARDS.
3. PROVIDE LOCKOUT VALVE COVER TO VALVE 7, PER SPECIFICATIONS.
4. NEW CHLORINE ANALYZER TO BE ECD DC-60 OR APPROVED EQUAL, REAGENT-LESS ANALYZER.

ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
1	8/7/23	TMB	ADDENDUM #3

SCALE: 1" = 10'

DATE: JUNE 2023

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED AAS

DRAWN NMVL/TMB

CHECKED KBB

CALAVERAS COUNTY WATER DISTRICT
120 TOMA COURT,
SAN ANDREAS, CALIFORNIA 95249
PHONE (209) 754-3543

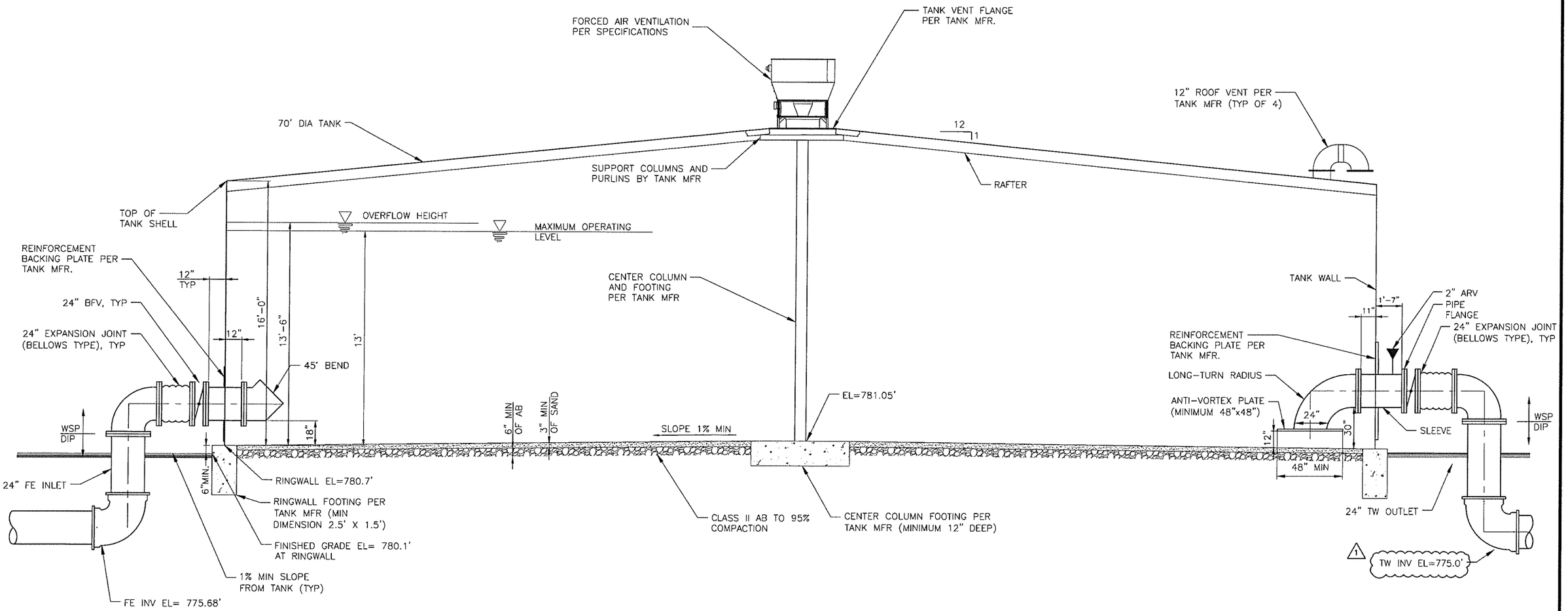
PETERSON . BRUSTAD . INC
ENGINEERING . CONSULTING
80 Blue Ravine Rd. Suite 280
Folsom, CA 95630
PH. 916-608-2212

REGISTERED PROFESSIONAL ENGINEER — KARL B. BRUSTAD — No. 57669 — Exp. 6/30/24 — CIVIL — STATE OF CALIFORNIA — 6/14/23

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

B TANK SITE PIPING PLAN

DRAWING C8



NEW CLEARWELL SECTION
1" = 3'

A
C9

ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
1	8/4/23	TMB	ADDENDUM #3

SCALE: AS NOTED

DATE: JUNE 2023

WARNING
0 1/2 1
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6/14/23

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

TANK SECTION FOR NEW CLEARWELL

DRAWING C9A

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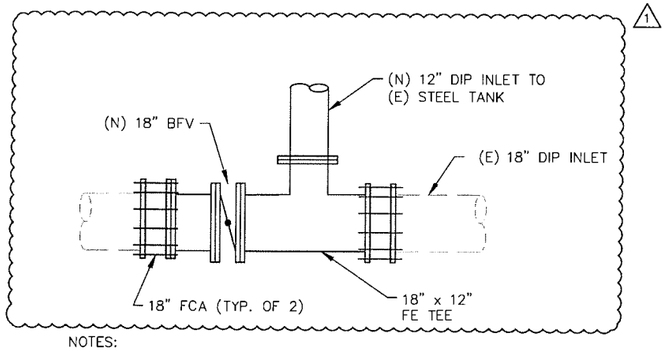
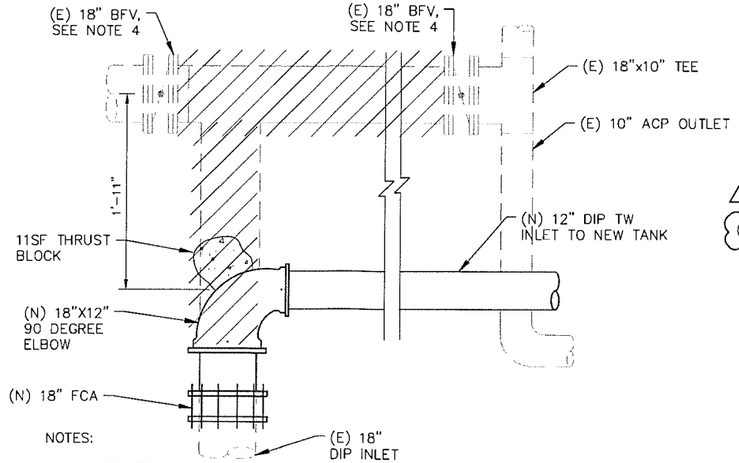


NOTES:

1. CONTRACTOR TO POTHOLE TO VERIFY EXISTING PIPE MATERIAL, OD, AND CONDITION PRIOR TO PREPARING DETAILED TIE–IN PLAN.
2. CONTRACTOR TO PROVIDE DETAILED TIE–IN PLAN FOR DISTRICT REVIEW AT LEAST 2 WEEKS PRIOR TO SCHEDULED WORK.
3. CONNECTION TO EXISTING 18" PIPE TO BE MADE AFTER NEW 12" IS INSTALLED AND DISINFECTED.

EXISTING B TANK INLET TIE–IN DETAIL — 1/2" = 1' — 1 / C8



NOTES:

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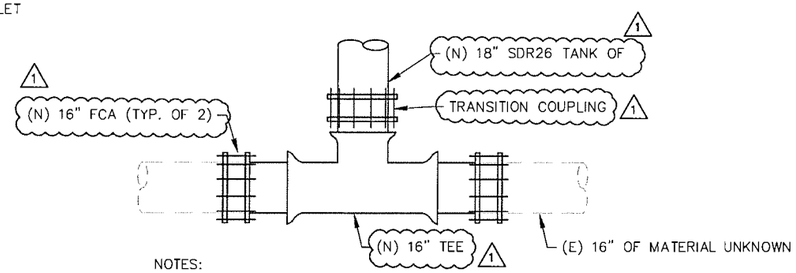
2. CONTRACTOR TO PROVIDE DETAILED TIE–IN PLAN FOR DISTRICT REVIEW AT LEAST 2 WEEKS PRIOR TO SCHEDULED WORK.
3. CONNECTION TO EXISTING 18" PIPE TO BE MADE AFTER NEW B TANK HAS BEEN DISINFECTED.
4. INSTALL BLIND FLANGE AND PERMANENTLY ABANDON VALVE AFTER COMPLETION OF TIE–IN.

NEW B–TANK INLET TIE–IN DETAIL — NTS — 2 / C8



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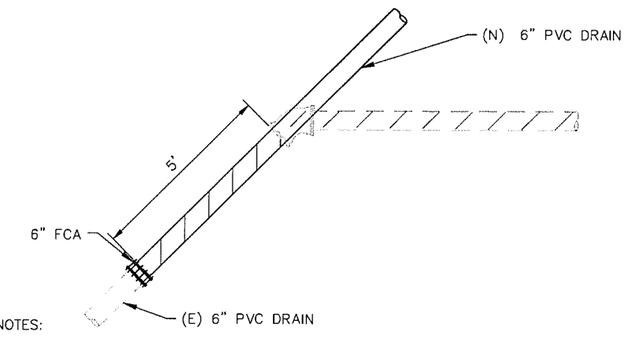
2. CONTRACTOR TO PROVIDE DETAILED TIE–IN PLAN FOR DISTRICT REVIEW AT LEAST 2 WEEKS PRIOR TO SCHEDULED WORK.

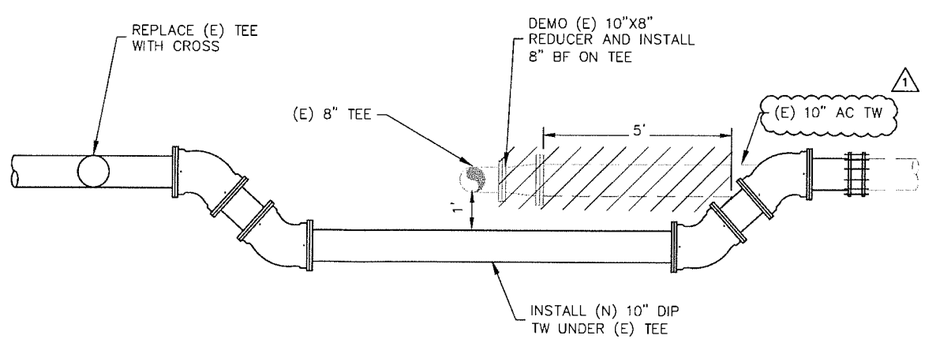
NEW B–TANK OVERFLOW TIE–IN DETAIL — NTS — 3 / C8



NOTES:

1. CONTRACTOR TO POTHOLE TO VERIFY EXISTING PIPE MATERIAL, OD, AND CONDITION PRIOR TO PREPARING DETAILED TIE–IN PLAN.
2. CONTRACTOR TO PROVIDE DETAILED TIE–IN PLAN FOR DISTRICT REVIEW AT LEAST 2 WEEKS PRIOR TO SCHEDULED WORK.

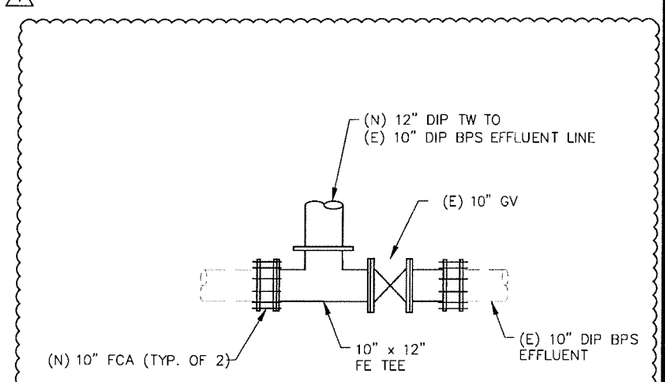
EXISTING B–TANK DRAIN TIE IN DETAIL — 1/2" = 1' — 4 / C8



NOTES:

1. CONTRACTOR TO POTHOLE TO VERIFY EXISTING PIPE MATERIAL, OD, AND CONDITION PRIOR TO PREPARING DETAILED TIE–IN PLAN.
2. CONTRACTOR TO PROVIDE DETAILED TIE–IN PLAN FOR DISTRICT REVIEW AT LEAST 2 WEEKS PRIOR TO SCHEDULED WORK.
3. CONNECTION TO (E) TW TO BE MADE AFTER NEW 10" IS INSTALLED AND DISINFECTED.

EXISTING 10" TREATED WATER TIE IN DETAIL — 1/2" = 1' — 5 / C8



NOTES:

1. CONTRACTOR TO POTHOLE TO VERIFY EXISTING PIPE MATERIAL, OD, AND CONDITION PRIOR TO PREPARING DETAILED TIE–IN PLAN.
2. CONTRACTOR TO PROVIDE DETAILED TIE–IN PLAN FOR DISTRICT REVIEW AT LEAST 2 WEEKS PRIOR TO SCHEDULED WORK.
3. CONNECTION TO EXISTING 10" PIPE TO BE MADE AFTER NEW 12" IS INSTALLED AND DISINFECTED.

EXISTING 10" TREATED WATER TIE IN DETAIL — 1/2" = 1' — 6 / C8

ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
1	8/4/23	TMB	ADDENDUM #3

SCALE: AS NOTED

DATE: JUNE 2023

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

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REGISTERED PROFESSIONAL ENGINEER — KARL B. BRUSTAD — NO. 57869 — Exp 6/30/24 — CIVIL — STATE OF CALIFORNIA — 6/14/23

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

PIPE CONNECTION DETAILS B TANK

DRAWING C14

SHEET 22 OF 42

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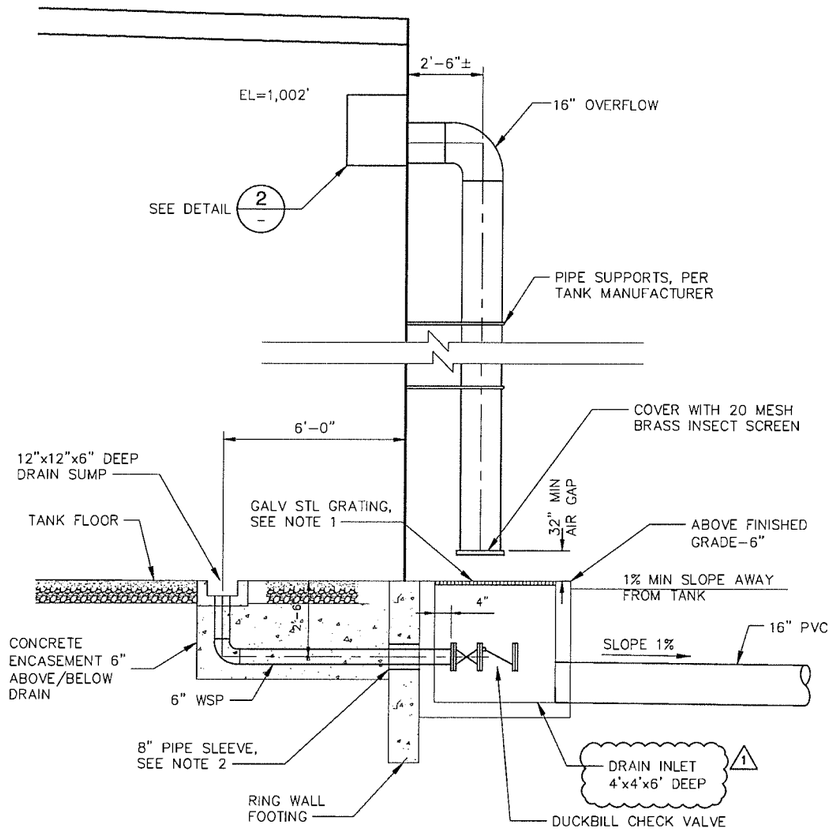
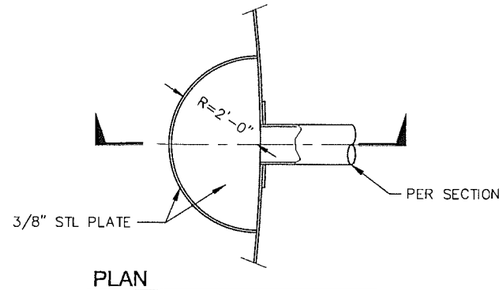


NOTES:

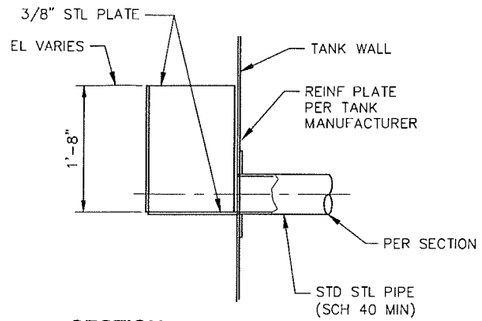
1. PROVIDE NOTCH IN GRATE FOR VALVE KEY.
2. PIPE SLEEVE SHALL BE STEEL ASTM A53, SCH 40, BLACK. SEAL SHALL BE FULL DEPTH COMPRESSION SEALANT W/FINISH SEALANT OR FULL DEPTH EXPANDING FOAM SEALANT.

NEW B TANK OVERFLOW/DRAIN DETAIL 1/-

SCALE: NTS



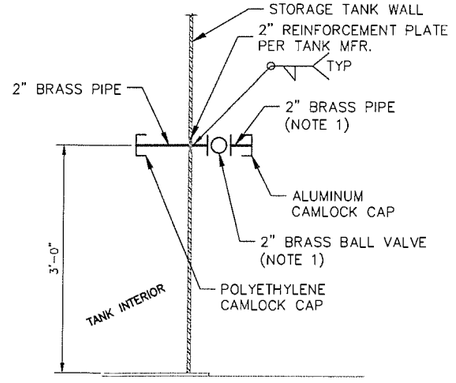
PLAN



SECTION

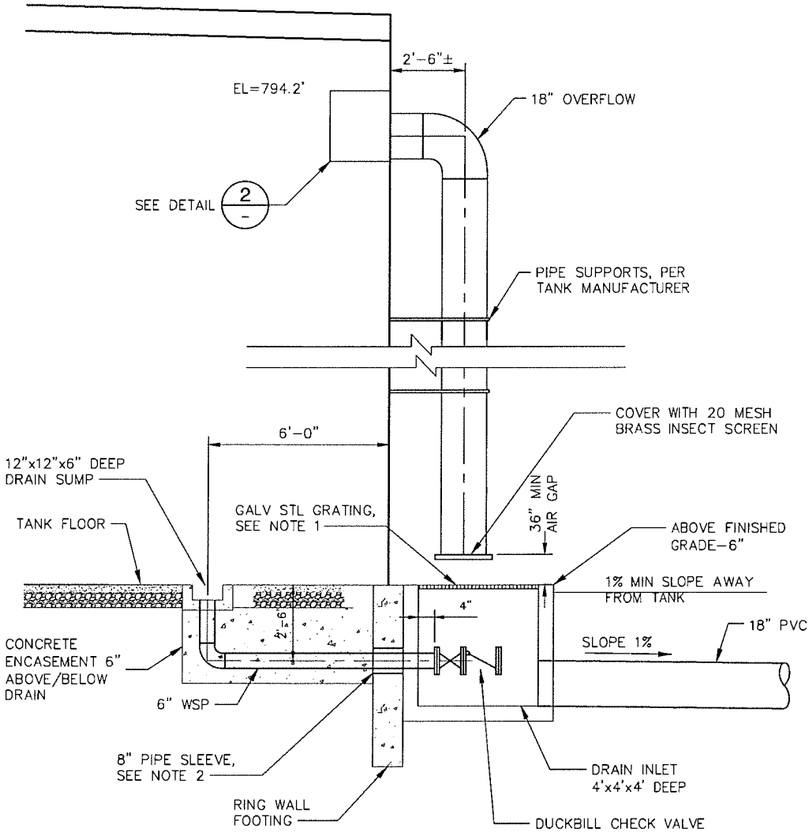
OVERFLOW DETAIL 2/-

SCALE: 1/2"=1'-0"



MAINTENANCE PORT DETAIL 3/-

SCALE: NTS



NOTES:

1. PROVIDE NOTCH IN GRATE FOR VALVE KEY.
2. PIPE SLEEVE SHALL BE STEEL ASTM A53, SCH 40, BLACK. SEAL SHALL BE FULL DEPTH COMPRESSION SEALANT W/FINISH SEALANT OR FULL DEPTH EXPANDING FOAM SEALANT.

NEW CLEARWELL OVERFLOW/DRAIN DETAIL 4/-

SCALE: NTS

ISSUED FOR BID

REV	DATE	BY	DESCRIPTION
1	8/4/23	TMB	ADDENDUM #3

SCALE: AS NOTED

DATE: JUNE 2023

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REGISTERED PROFESSIONAL ENGINEER KARL B. BRUSTAD NO. 57867 Exp 6/30/24 CIVIL STATE OF CALIFORNIA 6/14/23

COPPER COVE WATER SYSTEM IMPROVEMENTS PROJECT - PHASE 1 AND PHASE 2 TANKS

NEW TANK OVERFLOW AND DRAIN DETAILS

DRAWING C16

SHEET 24 OF 42

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Item 4f

Agenda Item

DATE: September 27, 2023

TO: Michael Minkler, General Manager

FROM: Charles Palmer, P.E., Senior Engineer

SUBJECT: Approving Addendum No.1 under CEQA Guidelines §15164 Incorporating Proposed Project Changes to the Adopted Mitigated Negative Declaration for the Copper Cove Booster Pump Station and Water Transmission Pipeline Project, SCH #2007012054

RECOMMENDED ACTION:

Motion:____/____ adopting Resolution 2023-_____ as lead agency, approving the project incorporating proposed changes in Addendum No.1, which involve no new significant environmental effects nor cause a substantial increase in the severity of previously identified effects in the adopted MND. Addendum No.1 will be included with or attached to the MND in accordance with CEQA Guidelines §15164.

SUMMARY:

On February 14, 2007, the Board of Directors of the Calaveras County Water District (CCWD), as lead agency, approved the Copper Cove Booster Pump Station and Water Transmission Pipeline Project and adopted a Mitigated Negative Declaration (MND) and Mitigation, Monitoring and Reporting Plan (MMRP) for this project. On February 22, 2007, staff filed a Notice of Determination (NOD) with the State OPR. This project includes construction of 5,800' of new 20" diameter water transmission pipeline and modifications to the existing treated water effluent pump station at the Copper Cove Water Treatment Plant (WTP).

As described in the attached Addendum No.1, CCWD is planning to rehabilitate the existing clearwell at the Copper Cove Water Treatment Plant (WTP) and replace a redwood tank and rehabilitate a steel tank at the B-Tank site. These rehabilitation and replacement activities are categorically exempt under CEQA Guidelines §15301 and §15302. Also, CCWD plans to construct a new 330,000-gallon clearwell at the Copper Cove WTP site. Because a portion of the 20" transmission pipeline, clearwells and clearwell piping occupy the same area and must be constructed together in coordination, the new clearwell is being added by Addendum to the previously approved MND.

FINANCIAL CONSIDERATIONS:

None

Attachments: Resolution 2023-____ approving the project incorporating proposed changes in Addendum No.1, CEQA Addendum

RESOLUTION NO. 2023-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

APPROVING CEQA ADDENDUM NO.1 TO THE PREVIOUSLY ADOPTED MITIGATED NEGATIVE DECLARATION FOR THE COPPER COVE BOOSTER PUMP STATION AND WATER TRANSMISSION PIPELINE PROJECT SCH# 2007012054

WHEREAS, on February 14, 2007, the Board of Directors of the Calaveras County Water District, as CEQA lead agency, approved the Copper Cove Booster Pump Station and Water Transmission Pipeline Project and adopted a Mitigated Negative Declaration (MND) and Mitigation, Monitoring and Reporting Plan (MMRP) for the project. On February 22, 2007, staff filed a Notice of Determination (NOD) with the State OPR; and

WHEREAS, in accordance with CEQA Guidelines §15164, Addendum No.1 (attached hereto and incorporated herein) addresses proposed project changes, both added and deleted work, that do not result in any new or more substantial impacts than previously identified and mitigated by the adopted MND and MMRP; and

WHEREAS, in December 2022 and January 2023, Helix Environmental Planning made supplemental biological, cultural and aquatic resources assessments of the proposed project changes and for consistency with the adopted MND and MMRP. One mitigation measure in the MMRP for preconstruction surveys will be augmented by the Addendum.

BE IT RESOLVED, the Board of Directors of the Calaveras County Water District, as lead agency, approves the project incorporating proposed changes in Addendum No.1, which involve no new significant environmental effects nor cause a substantial increase in the severity of previously identified effects in the adopted MND. Addendum No.1 will be included with or attached to the MND in accordance with CEQA Guidelines §15164.

PASSED AND ADOPTED this 27th day of September 2023 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Scott Ratterman, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

ADDENDUM NO.1

INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION FOR THE COPPER COVE WATER TRANSMISSION PIPELINE AND BOOSTER PUMP STATION PROJECT SCH #2007012054

September 27, 2023

INTRODUCTION

In 2006, the Copper Cove Water Transmission Pipeline and Booster Pump Station Initial Study and Mitigated Negative Declaration (2006 ISMND) evaluated the environmental effects of construction and operation of a water transmission pipeline and booster pump station to remedy distribution demand issues in the Copper Cove Water System. These issues were identified by the Calaveras County Water District's (CCWD) 2004 Copper Cove Water System Master Plan Update. The 2006 ISMND, developed along with the original design and permitting of the proposed project, was approved by CCWD in February, 2007. The CCWD (as project applicant and lead agency) is amending the 2006 ISMND with changes to the project description presented herein. Because the proposed project changes do not result in any new or more substantial impacts that were not previously addressed by the adopted 2006 ISMND, these changes are being incorporated herein by Addendum.

This Addendum addresses the following items:

- History of the 2006 ISMND;
- Description of the proposed project;
- Changes to the 2006 ISMND;
- Standards for adequacy under the California Environmental Quality Act (CEQA) Guidelines;
- Enhancements to existing mitigation measures from the 2006 ISMND; and,
- Applicable CEQA processing requirements for the proposed project.

BACKGROUND

The proposed Copper Cove Water Transmission Pipeline and Booster Pump Station project is located in Calaveras County approximately four miles south of the town of Copperopolis and east of the Saddle Creek (now called Copper Valley) Subdivision. The 2006 ISMND previously evaluated the following improvements:

1) Construction of a new 20" diameter water transmission pipeline.
2) Construction of a new Booster Pump Station (BPS) including underground suction and discharge piping manifolds.
3) Modifications to existing treated Effluent Pump Station at the Water Treatment Plant (WTP) by replacing pumps and upgrading electrical equipment.
4) Temporary staging areas during construction.

The proposed 20-inch diameter water transmission pipeline, approximately 12,000' in length, is located within privately-owned, native oak studded grasslands and within existing streets, public rights-of-way, utility easements, as well as within developed subdivisions or previously disturbed areas. The transmission main begins at the WTP effluent pump station and travels northeast towards the backside of the western properties along Little John Road. The transmission main then turns northwest through open fields until it reaches the intersection of Little John Road and Bow Drive, where it then travels

through neighborhoods to the C Tanks. The construction staging areas included the Copper Cover WTP site, the C Tank site, booster pump station site, and other areas within the Copper Cove Subdivision. The existing public rights-of-way consist of asphalt roads, a vegetated hillside, and areas with exposed soil that is mostly devoid of vegetation.

The 2006 ISMND also envisioned the construction and operation of a BPS to allow increased pumping capacity, control of flows, maintain increased peak flows, and provide operational flexibility of flow rates in the system. The in-line BPS would be located on a 0.5-acre triangular parcel provided to the CCWD by the Copper Valley Golf Club. The BPS site is bounded by Saddle Creek Drive to the northwest and by a construction access road to the southeast. A section of the 20" diameter water transmission pipeline would terminate at a parcel across from the BPS site and would also connect to the BPS itself. Although the BPS was included as part of the 2006 ISMND, it has not been constructed to date. The 2006 ISMND pipeline and BPS improvements are included as **Figure 1** (Appendix A).

OVERVIEW OF THE PROPOSED PROJECT

The CCWD, as CEQA Lead Agency, proposes the Copper Cove Water System Improvements Project (proposed project) as described in the 2006 ISMND with changes incorporated:

1) Construction of a new 20" diameter water transmission pipeline *(adding two altitude control valves in buried vaults pipeline appurtenances at C-Tank site).*
2) Eliminating construction of a new Booster Pump Station (BPS) including deleting underground suction and discharge piping manifolds.
3) Modify the existing Effluent Pump Station at the WTP by replacing the pumps and upgrading electrical equipment.
4) Temporary staging areas during construction.
5) Copper Cove B-Tanks and Clearwells:
    a. Phase 1 / Demolition and replacement of existing redwood water storage tank at Tank B site and construction of a new 330,000-gallon clearwell at the WTP site.
    b. Phase 2 / Repair, rehabilitation and maintenance of existing welded steel tanks at Tank B and clearwell at WTP site.
    c. Associated grading, excavation, piping, and paving for above tanks.

The 2006 ISMND included a new inline BPS in addition to modifications to the existing Effluent Pump Station at the Copper Cove WTP. Rather than constructing a new BPS, the proposed project would replace the existing effluent pumps with three higher-head pumps at the existing Copper Cove WTP Effluent Pump Station. The existing WTP Effluent Pump Station currently includes two operating effluent pumps and a third unused, redundant pump. The project objectives can be accomplished by upgrading the pumps in existing locations. The existing Copper Cove WTP and BPS sites will be used as a staging area for the improvements as considered in the 2006 ISMND. The 20" diameter transmission main and Effluent Pump Station are shown in **Figure 2** (Appendix A).

The new 20" diameter transmission pipeline would be the same as presented in the 2006 ISMND. The pipeline will follow the same alignment from the Copper Cove WTP site to the C Tanks. Because the BPS is being eliminated, the 20" diameter underground piping manifolds for the BPS can also be eliminated and 20" piping simplified passing through the BPS site. Also, altitude valves will be added on the transmission main nearest C Tank to help reduce the risk of overflows.

At the Copper Cove WTP site, the construction of the 20" diameter transmission pipeline coincides with work on the repair and maintenance of the existing clearwell (Phase 1) and construction of the new

330,000-gallon clearwell (Phase 2). The new clearwell is located in an area of open space, north of the existing clearwell on the WTP site. This location is ungraded and requires tree removal, clearing and grubbing. The earthwork for the foundation requires a cut of 13' to lower the ground elevation. The construction of the new clearwell (Phase 1) and rehabilitation of the existing clearwell (Phase 2) must be coordination with the construction of the 20" diameter transmission pipeline on the WTP site. This occurs in a common area of disturbance evaluated in the 2006 ISMND; see **Figure 3** (Appendix A).

CCWD will proceed with tank repair, maintenance and replacement work at its B-Tank site. This work must be performed in a phased order and sequenced to keep tanks in service to supply water to our customers. First / Phase 1, demolition of an existing redwood tank and replacing and putting into service a new welded steel tank. Then / Phase 2, taking the existing steel tank out of service for rehabilitation and to make repairs. The steel tank rehabilitation and redwood tank replacement work occur on the B-Tank site as shown in **Figure 4** (Appendix A).

CHANGES FROM THE 2006 ISMND

The proposed project improvements would include nuance changes to the 2006 ISMND that would not result in any new or more substantial impacts that were not identified by the previously adopted 2006 ISMND. The changes include both added and deleted items of work. The proposed project changes are either categorically exempt activities or would be located within or adjacent to the existing footprint of the improvements evaluated in the 2006 ISMND, as outlined below:

- The 2006 ISMND contemplated both a new C-Tank BPS and modifications to the existing WTP Effluent Pump Station. The project objectives can be accomplished by replacing pumps and by making associated electrical and piping modifications and improvements to the existing Effluent Pump Station at the existing WTP site. The proposed BPS construction will be eliminated from the project, and this site only used as a temporary staging area.
- The proposed 20" diameter transmission line would be located within the same alignment outlined in the 2006 ISMND. Where the BPS is eliminated, the associated underground suction and discharge piping manifolds can equally be eliminated and 20" diameter pipeline will pass straight through this area. Also, to help prevent tank overflows – an existing operational concern – two altitude valves inside buried vaults will be added to the 20" transmission line.
- CCWD will perform maintenance and replacement of existing water storage tanks and existing clearwell, which are categorical exempt activities under Cal. Code Regs. Tit.14, §15301 and §15302. The new clearwell construction, adjacent to the existing clearwell at the WTP site, will include grading, concrete foundation, site piping and erection of the steel tank. The proposed work occurs within the area of disturbance and potential effects evaluated in the 2006 ISMND for the 20" diameter transmission pipeline and adjacent staging area. The project activities all occur in a common area of the WTP site and construction is best accomplished by scheduling and coordinating these related project activities and completing the work together.

BASIS FOR ADDENDUM

The CEQA Guidelines environmental review procedures allow for the updating and use of a previously adopted negative declaration for projects that are different from the previous project or the conditions under which the project was analyzed. Section 15164 of the CEQA Guidelines states the following with respect to an Addendum to an adopted negative declaration:

> *b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.*

c) *An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.*
d) *The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.*

In accordance with CEQA Guidelines Section 15164, this Addendum has been prepared to document that the proposed project modifications do not require preparation of a subsequent EIR or negative declaration under Section 15162.

The proposed project is similar to the project evaluated in the adopted 2006 ISMND, as the proposed project would be constructed in areas that were utilized for the improvements envisioned in the 2006 ISMND. The proposed improvements would be located either within, adjacent to, or in parallel with the improvement areas envisioned as part of the 2006 ISMND. As supported in the 2006 ISMND and this Addendum, there are no substantial changes proposed in the Copper Cove Water System Improvements Project which would result in any new significant environmental effects or a substantial importance which was not known for the 2006 ISMND.

None of the circumstances listed in CEQA Guidelines Section 15162 requiring the preparation of a subsequent negative declaration are present, and only minor technical changes or additions are necessary to update the previously adopted 2006 ISMND; therefore, an Addendum may be prepared.

MITIGATION MEASURE ENHANCEMENT

In addition to the 2006 ISMND, the CCWD made a supplemental Biological Resources Assessment and Aquatic Resources Delineation, included as Appendix B and Appendix C, respectively. A supplemental Cultural Resources Assessment was made included as Appendix D.

The mitigation measure labeled “Pond Turtles”, outlined in the 2006 ISMND, will be augmented and enhanced based on the proposed project improvements. The existing mitigation measure “Pond Turtles” will be renamed to “Preconstruction Surveys for Sensitive Species”. This measure will be enhanced to require a qualified biologist to conduct preconstruction surveys for the western pond turtle, California red-legged frog, California tiger salamander, western spadefoot, western red bat, and hoary bat. The advised enhancements to measures from the 2006 ISMND will be incorporated herein.

As the existing mitigation measures will be augmented and enhanced, no new impacts will result as part of the proposed project. The proposed project will not introduce new or more significant impacts that were not previously disclosed in the 2006 ISMND, and no new mitigation measures are necessitated.

ADDENDUM PROCESSING

The CCWD directed and supervised the preparation of this Addendum, which has been reviewed and determined to be complete and accurate. The CCWD has concluded, based on the proposed project description and the previously approved 2006 ISMND, that this Addendum is the appropriate CEQA compliance document for the proposed project.

APPENDICES

Appendix A—Figures
Appendix B—Biological Resources Assessment
Appendix C—Aquatic Resources Delineation
Appendix D—Cultural Resources Assessment

Appendix A

Figures

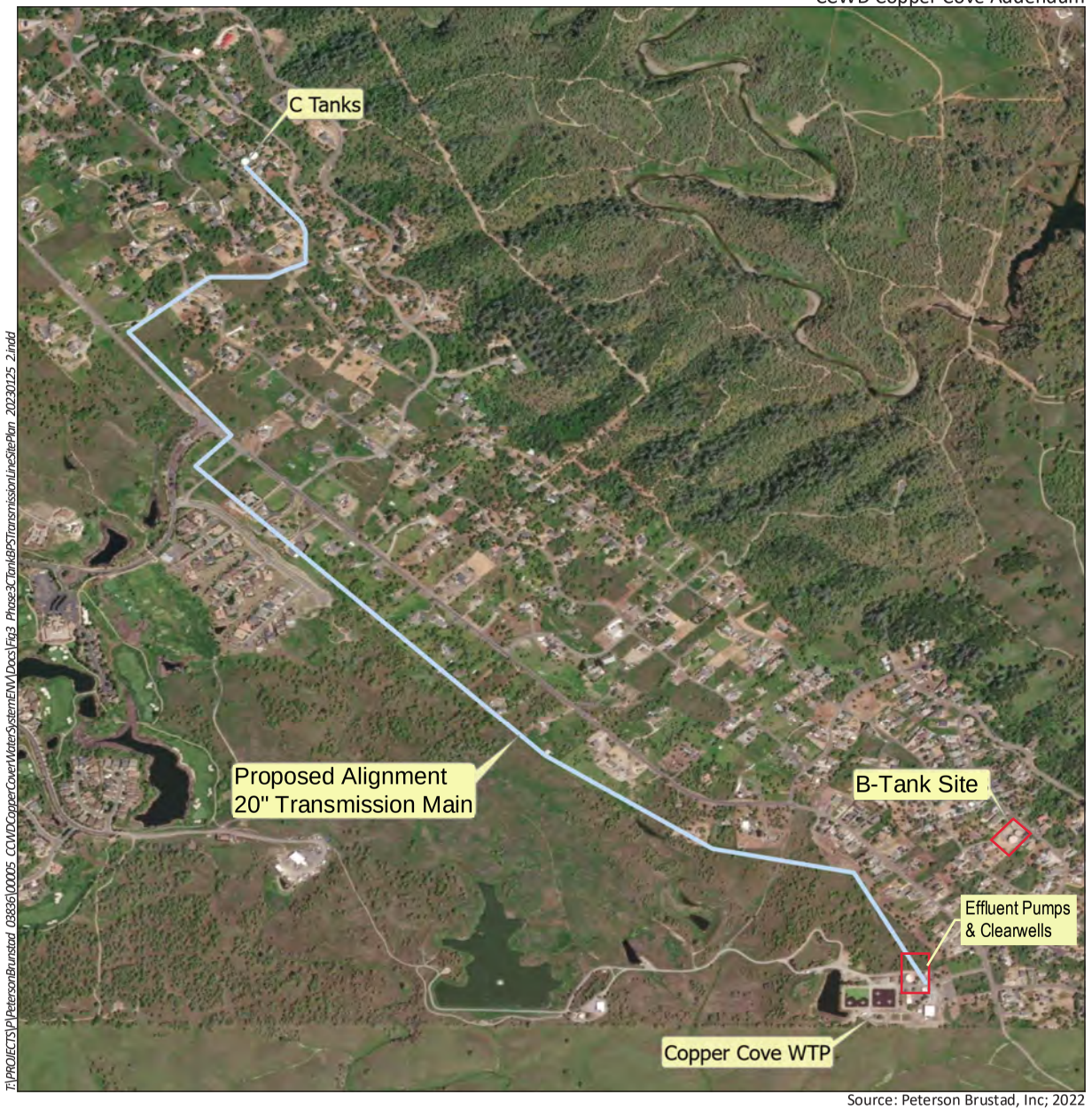
T:\PROJECTS\P\PetersonBrunstad_038361\00005_CCWDCopperCoverWaterSystemENV\Docs\Fig1_2006ISMNDProjectImprovementsSitePlan_20230125.indd

Source: PBS&J

HELIX
Environmental Planning

2006 ISMND Project Improvements Site Plan

Figure 1



Source: Peterson Brustad, Inc; 2022

HELIX Environmental Planning

Effluent Pump Station Site and 20" Transmission Line Plan

Figure 2

T:\PROJECTS\P\PetersonBrunstad_03836\00005_CCWDCopperCoverWaterSystemENV\Docs\Fig2_CopperCoveWTP_20230125.indd

Source: Peterson Brustad, Inc; 2022

HELIX Environmental Planning

Copper Cove WTP Clearwells Site Plan

Figure 3

Source: Peterson Brustad, INC; 2022

HELIX Environmental Planning

Steel Tank Rehabiliation and Redwood Tank Replacement Site Plan

Figure 4

Appendix B

Biological Resources Assessment

Copper Cove Water System Improvements Project Phases 1 and 2

Biological Resources Assessment

Prepared for:

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Prepared by:

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December 2022 | 03836.00005.001

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ACRONYMS AND ABBREVIATIONS

BRA	Biological Resources Assessment
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSA	California Special Animals
CWA	Clean Water Act
DBH	diameter at breast height
EPA	U.S. Environmental Protection Agency
FESA	Federal Endangered Species Act
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
msl	mean sea level
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
OHWM	ordinary high-water mark
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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EXECUTIVE SUMMARY

HELIX Environmental Planning, Inc. (HELIX) conducted a Biological Resources Assessment (BRA) for the 2.76-acre Copper Cove Water System Improvements Project (Project) on November 10, 2022. The Project consists of two separate locations one is located on Kiva Place (Clearwell) and consists of a 1.98-acre site and the other on Signal Hill Trail (B Tank Site) consists of a 0.78-acre site. These two locations are collectively referred to as the Study Area. The Study Area is located in the community of Copper Cove Village in Calaveras County, California (Study Area). The Study Area is situated in Sections 25 and 26 of Township 1 North and Range 12 East on the U.S. Geological Survey (USGS) "*Melones Dam, California"* 7.5-minute quadrangle map. The approximate center of the Study Area of each Study Area component is at latitude 37.912220° and longitude -120. 613331°, NAD 83 (B Tank Site) and latitude 37.908838° and longitude -120.615755°, NAD 83 (Clearwell Site). The elevation of the Study Area is between 785 feet and 985 feet above mean sea level (msl).

The purpose of this BRA is to assess the general biological resources on the Study Area, assess the suitability of the Study Area to support special-status species and sensitive vegetation communities or habitats, analyze any potential impacts to biological resources that could occur as a result of the proposed project and provide suggested mitigation measures to avoid and/or reduce any such impacts to less than significant.

The 2.76-acre Study Area is in a rural residential area in Copperopolis, Calaveras County, California and consists primarily of a developed area, blue oak woodland and annual grassland. The Study Area is comprised of blue oak woodland (0.590 acre), annual grassland (0.425 acre), canal (0.054-acre), developed (1.659 acres), ditch (0.031 acre), and seasonal wetland swale (0.001 acre). Surrounding land uses include rural, single-family residences.

Known or potential sensitive biological resources in the Study Area include:

- Potential habitat for federally threatened and state endangered Chinese Camp brodiaea (*Brodiaea pallida*);
- Potential habitat for special-status plants including Jepson's onion (*Allium jepsonii*), Hoover's calycadenia (*Calycadenia hooveri*), forked hare-leaf (*Lagophylla dichotoma*);
- Although not expected to occur, the Study Area provides potentially suitable habitat for the federally and state listed as threatened California tiger salamander (*Ambystoma californiense*) and the federally listed as threatened California red-legged frog (*Rana draytonii*);
- Habitat for California Department of Fish and Wildlife (CDFW) Species of Special Concern western pond turtle (*Actinemys marmorata*), western spadefoot (*Spea hammondii*) and western red bat (*Lasiurus blossevillii*);
- Potential habitat for CDFW designated special mammals including hoary bat (*Lasiurus cinereus*);
- Sensitive aquatic resources including seasonal wetland swale and a canal; and,
- Blue oak woodland protected by the Calaveras County General Plan.

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1.0 INTRODUCTION

This report summarizes the findings of a Biological Resources Assessment (BRA) completed by HELIX Environmental Planning, Inc. (HELIX) for the for ±2.76-acre Copper Cove Water System Improvements Project (Project), located on Kiva Place in the community of Copperopolis in Calaveras County, California (Study Area). This document addresses the onsite physical features, plant communities present, and the common plant and wildlife species occurring or potentially occurring in the Study Area. In addition, the suitability of habitats to support special-status species and sensitive habitats are analyzed, as well as any potential impacts to biological resources that could occur as a result of the proposed project. Suggested mitigation measures are provided to avoid and/or reduce any such impacts to less than significant.

1.1 PROJECT DESCRIPTION

The Calaveras County Water District (CCWD) is proposing to improve the existing Copper Cove Water System to reliably maintain potable water services to the expanding community. The proposed improvements would be completed in two (2) phases: Phase 1 and Phase 2. Phase 1 would include the replacement of the existing Redwood Tank on the B-Tank Site and the construction of a new Water Treatment Plant (WTP) Clearwell on the Copper Cove WTP Site. Phase 2 would include the rehabilitation of the existing Steel Tank on the B-Tank Site, and the rehabilitation of the existing WTP Clearwell on the Copper Cove WTP Site. Phase 2 also includes replacement of the B Zone Booster Pump Station. Implementation of Phase 1 and Phase 2 would result in a net reduction in water treatment/storage capacity from approximately 1-million gallons to 750,000-gallons. All referenced figures prepared in support of the BRA are included in **Appendix A**.

2.0 REGULATORY FRAMEWORK

Federal, State, and local environmental laws, regulations, and policies relevant to the California Environmental Quality Act (CEQA) review process are summarized below. Applicable CEQA significance criteria are also addressed in this section.

2.1 FEDERAL REGULATIONS

2.1.1 Federal Endangered Species Act

The U.S. Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3) (19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

In the context of the proposed Project, FESA consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) would be initiated if development resulted in the potential for take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

2.1.2 Migratory Bird Treaty Act

Raptors, migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior.

2.1.3 The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to "*take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof.*" Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as "*to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.*"

2.2 STATE JURISDICTION

2.2.1 California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to FESA but pertains to State-listed endangered and threatened species. CESA requires state agencies to consult with the CDFW when preparing CEQA documents. The purpose is to ensure that State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species. It also directs CDFW to determine whether jeopardy would occur and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code § 2081).

2.2.2 California Department of Fish and Game Codes

A number of species have been designated as "Fully Protected" species under Sections 5515, 5050, 3511, and 4700 of the Fish and Game Code (FGC) but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The California Fish and Game Code defines take as "*hunt, pursue,*

catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA), enacted in 1977, allows the Fish and Game Commission to designate plants as rare or endangered. The NPPA prohibits take of endangered or rare native plants, with some exceptions for agricultural and nursery operations and emergencies. Vegetation removal from canals, roads, and other sites, changes in land use, and certain other situations require proper advance notification to CDFW.

2.3 JURISDICTIONAL WATERS

2.3.1 Federal Jurisdiction

Unless considered an exempt activity under Section 404(f) of the Federal Clean Water Act, any person, firm, or agency planning to alter or work in "waters of the U.S.," including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403). Activities exempted under Section 404(f) are not exempted within navigable waters under Section 10.

"Waters of the U.S." are defined as: "All waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; the territorial sea; or wetlands adjacent to these waters (33 Code of Federal Regulations [CFR] Part 328)."

Within non-tidal waters that meet the definition cited above and, in the absence of adjacent wetlands, the indicator used by the USACE to determine the lateral extent of its jurisdiction is the ordinary high water mark (OHWM) – the line on the shore established by fluctuations of water and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, and/or the presence of litter and debris.

Wetlands are defined under the CFR Part 328.3 as those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The USACE has determined that not all features which meet the wetland definition are, in fact, considered to be waters of the U.S. Normally, features not considered as waters of the U.S. include: (a) non-tidal drainage and irrigation ditches excavated on dry land; (b) artificially irrigated areas which would revert to upland if the irrigation ceased; (c) artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing, (d) artificial reflecting or swimming pools or other

small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons, and, (e) waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States (see 33 CFR 328.3(a)). Other features may be excluded based on Supreme Court decisions (e.g., SWANCC and Rapanos) or by regulation.

Federal and state regulations pertaining to waters of the U.S., including wetlands, are discussed below.

The Clean Water Act (33 United States Code (USC) 1251-1376) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. obtain a state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there were no practicable alternative that would have less adverse impacts.

2.3.2 State Jurisdiction

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Federal CWA. Although the CWA is a Federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE permits for fill and dredge discharges within Waters of the United States, and now also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On May 28, 2020, the SWRCB implemented the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California (SWRCB 2019). The Procedures consist of four major elements:

I. A wetland definition;

II. A framework for determining if a feature that meets the wetland definition is a water of the state;
III. Wetland delineation procedures; and,
IV. Procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

Under the Procedures and the State Water Code (Water Code §13050(e)), "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." "Waters of the State" includes all "Waters of the U.S."

More specifically, a wetland is defined as: "*An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation*." The wetland definition encompasses the full range of wetland types commonly recognized in California, including some features not protected under federal law, and reflects current scientific understanding of the formation and functioning of wetlands (SWRCB 2019).

Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

California Department of Fish and Wildlife

CDFW is a trustee agency that has jurisdiction under Section 1600 et seq. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds… except when the department has been notified pursuant to Section 1601." Additionally, CDFW asserts jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over four inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures. Generally, CDFW recommends applying for a Streambed Alteration Agreement (SAA) for any work done within the lateral limit of water flow or the edge of riparian vegetation, whichever is greater.

2.4 CEQA SIGNIFICANCE

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study Checklist included in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;

- Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and,

- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish or result in the loss of an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

2.4.1 California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS Rare Plant Ranking System:

- Rank 1A: Plants presumed Extinct in California and either rare or extinct elsewhere
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- Rank 2A: Plants presumed extirpated in California but common elsewhere
- Rank 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere
- Rank 3: Plants about which we need more information – A Review List

All plants appearing on CNPS Rank 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. The CDFW, in consultation with the CNPS assigns a California Rare Plant Rank (CRPR) to native

species according to rarity; plants with a CRPR of 1A, 1B, 2A, 2B, or 3 are generally considered special-status species under CEQA. Furthermore, the CNPS CRPR include levels of threat for each species. These threat ranks include the following:

0.1 - Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);

0.2 - Moderately threatened in California (20 to 80% occurrences threatened/moderate degree and immediacy of threat); and

0.3 - Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

Threat ranks do not designate a change of environmental protections, so that each species (i.e., CRPR 1B.1, CRPR 1B.2, CRPR 1B.3, etc.), be fully considered during preparation of environmental documents under CEQA.

2.4.2 California Department of Fish and Wildlife Species of Concern

Additional fish, amphibian, reptile, bird, and mammal species may receive consideration by CDFW and lead agencies during the CEQA process, in addition to species that are formally listed under FESA and CESA or listed as fully protected. These species are included on the *Special Animals List*, which is maintained by CDFW. This list tracks species in California whose numbers, reproductive success, or habitat may be in decline. In addition to "Species of Special Concern" (SSC), the *Special Animals List* includes species that are tracked in the California Natural Diversity Database (CNDDB) but warrant no legal protection. These species are identified as "California Special Animals" (CSA).

2.5 LOCAL POLICIES AND REGULATIONS

2.5.1 Calaveras County General Plan

In addition to federal and State regulations described above, the *Calaveras County General Plan* (General Plan) includes goals, objectives, policies, and measures regarding biological resources within the County limits (Calaveras County 2019). Applicable sections of the General Plan for this BRA are summarized below.

Water Resources/Water Quality

- Goal: High quality and abundant water resources.
- Policies:
    - COS 2.1 Participate in regional, watershed-level, and integrated resources management planning efforts to improve watershed health and water quality (IM COS-2A, COS-2D and COS-3D).
    - COS 2.2 Protect the County's surface and ground water resources and watersheds from uses that could adversely impact water quality (IM COS-3A and COS-3B).
    - COS 2.3 Encourage the use of design features in new development to capture stormwater and recharge groundwater (IM COS-3B and COS-3C).

Biological Resources

- Goal: A diversity of native plants, fish, and wildlife species and their habitats.
- Policies:
    - COS 3.1 To protect sensitive biological resources, new development shall use site planning techniques, including buffers and setbacks, and encourage other techniques such as clustering of development (IM COS-4B).
    - COS 3.2 Avoid impacts to habitats that support special status species to the extent practicable. Where impacts cannot be avoided, mitigate impacts in accordance with resource agency (CDFW and/or USFWS) protocols/policies for the species (IM COS-3B, COS-4B, COS-4C, COS-4F, COS-4H, COS-4I, COS-4K, COS-4L, COS-4N and COS-4O).
    - COS 3.3 Require new development to identify and mitigate impacts to wildlife habitat and wetlands, riparian habitats, and other aquatic resources consistent with state and federal regulations (IM COS-4C COS-4D, COS-4H, COS-4I, COS-4K, COS-4L, COS-4N and COS-4O).
    - COS 3.4 Identify and protect corridors important to wildlife movement and dispersal (IM COS-4C and COS-4E).
    - COS 3.5 Encourage preservation of oak woodlands in accordance with state law (IM COS-4D).
    - COS 3.6 Conservation easements may be acceptable means to mitigate impacts to protect wildlife habitat, wetland areas, and oak woodlands from new development (IM COS-4D, COS-4F, COS-4H, COS-4I, COS-4K, COS-4L, COS-4N and COS-4O).
    - COS 3.7 Support efforts to eradicate invasive species and encourage practices that reduce their spread (IM COS-4G, COS-4J and COS-4K).
    - COS 3.8 Where practicable, improve the ability of listed species and any native wildlife to safely cross highways and roadways to reduce human injuries and fatalities resulting from vehicle-animal collisions (IM COS-4O).
    - COS 3.9 Preserve and enhance healthy woodlands consistent with state law, reasonable development, and fire safety considerations (IM COS-4D).

Oak Woodlands (COS-4D)

Calaveras County currently does not have formal guidelines for oak tree conservation. As outlined in the General Plan, until formal guidelines for oak conservation and planning are established, development that is subject to a discretionary entitlement and subject to CEQA review should enlist the services of a qualified professional (meaning a qualified biologist, botanist, arborist, or Registered Professional Forester) to survey the property in question for oak woodlands and to recommend options for avoidance and/or mitigation consistent with the provisions of PRC 21083.4.

In the interim, the County shall require development that is subject to a discretionary entitlement and subject to CEQA review to enlist the services of a qualified professional (meaning a qualified biologist, botanist, arborist, or Registered Professional Forester) to survey the property in question for oak woodlands and to recommend options for avoidance and/or mitigation consistent with the provisions of

RPC 21083.4 if potentially significant impacts to oak woodlands are identified If a potentially significant impact to oak woodlands is identified, the following shall apply:

- The oak woodland on the project site shall be mapped and the extent of woodland canopy proposed to be removed as a result of the proposed project shall be identified.

- If avoidance is utilized for all or part of the mitigation, the oak woodland to be avoided by the project shall be protected by identifying the dripline of the oak woodland canopy to be preserved on all construction plans and by implementation of best management practices or other measures recommended by the qualified professional to prevent damage to the woodland to be preserved.

- Mitigation consistent with the provisions of PRC 21083.4, other than avoidance, shall be applied at a ratio of 1:1 to 2:1. The ratio and the type(s) of mitigation chosen shall be informed by the recommendations of the qualified professional with respect to providing similar habitat functions and values as the woodland habitat removed as part of the project.

- If mitigation consisting of replacement planting, transplanting and/or identification of off-site mitigation through acquisition of a conservation easement is utilized, it shall be applied based on the recommendations of the qualified professional that the replacement habitat will provide similar habitat functions and values as the woodland habitat removed as a part of the project. Mitigation shall take place in Calaveras County.

Blue oak woodlands are present in the Study Area. Based on these findings, additional mitigation is required if oak woodland will be impacted within the Study Area.

3.0 METHODS

Available information pertaining to the natural resources of the region was reviewed prior to conducting the field survey. The following published information was reviewed for this BRA:

- California Department of Fish and Wildlife (CDFW). 2022. *California Natural Diversity Database* (CNDDB); For: *Melones Dam, CA* and eight surrounding USGS 7.5-minute series quadrangles, Sacramento, CA. Accessed [October 20, 2022];

- California Native Plant Society (CNPS). 2022. *Inventory of Rare and Endangered Plants* (online edition, v8-03 0.45) For: *Melones Dam, CA* and eight surrounding USGS 7.5-minute series quadrangles, Sacramento, CA. Accessed [October 20, 2022];

- U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS). 2022. *Web Soil Survey*. Available online at: http://websoilsurvey.sc.egov.usda.gov. Accessed [October 20, 2022];

- U.S. Fish and Wildlife Service (USFWS). 2022. *Information for Planning and Consultation* (IPaC) *Copper Cove Water System Improvements Project.* Accessed [October 20, 2022]; and,

- U.S. Geological Survey (USGS). 2022 *Melones Dam, California*. 7.5-minute series topographic quadrangle. United States Department of Interior.

Prior to conducting the biological field survey, existing information concerning known habitats and special-status species that may occur in the Study Area was reviewed. The results of the database query are summarized in **Appendix B**. The biological field survey was conducted on November 10, 2022, by HELIX senior biologist Patrick Martin. The weather during the field survey was cloudy and clear with an average temperature of between 50 and 60° Fahrenheit. The Study Area was systematically surveyed on foot to ensure total search coverage, with special attention given to portions of the Study Area with the potential to support special-status species and sensitive habitats. Binoculars were used to further extend site coverage and identify species observed. All plant and animal species observed were recorded (**Appendix C**), and all biological communities occurring onsite were characterized. All resources of interest were mapped with a Global Positioning System (GPS)-capable tablet equipped with a GPS receiver running ESRI Collector for ArcGIS® with sub-meter accuracy.

Following the field survey, the potential for each species (including special status species) identified in the database query to occur within the Study Area was determined based on the site survey, soils, elevational and geographic ranges, habitats present within the Study Area, and species-specific information, as shown in **Appendix D**.

4.0 RESULTS

4.1 SITE LOCATION AND DESCRIPTION

The 2.76-acre Study Area is located in the community of Copper Cove Village, Calaveras County, California, just north of Tulloch Lake and south of State Route 4. The Study Area consists of two separate locations: Phase 1 is located on Kiva Place (Clearwell) and Phase 2 on Signal Hill Trail (B Tank Site) in the community of Copper Cove Village (Study Area). The Study Area is situated in Sections 25 and 26 of Township 1 North and Range 12 East on the U.S. Geological Survey (USGS) "*Melones Dam, California"* 7.5-minute quadrangle map (**Appendix A: Figures 1 and 2**). The Study Area consists mostly of the water tanks, developed land, supporting facilities, annual grassland and blue oak woodland (**Appendix A: Figure 3**). Vegetation within the Study Area is largely comprised of blue oak woodland, annual grassland, with ruderal/invasive species dominating previously disturbed or developed areas. The approximate center of the Study Area of each Study Area component is at latitude 37.912220° and longitude -120. 613331°, NAD 83 (B Tank Site) and latitude 37.908838° and longitude -120.615755°, NAD 83 (Clearwell Site).

4.2 PHYSICAL FEATURES

4.2.1 Topography and Drainage

Terrain in the Study Area is comprised of slight hillslopes at each site, with the Study Area at the B Tank Site located at a higher elevation than Clearwell Study Area. The B Tank Site Study Area is dominated by a developed area with two water tanks and support structures. The Study Area at Clearwell consists of the developed areas associated with existing structures such as water tanks and support structures and paved or graveled areas in addition to areas dominated by blue oak woodland, annual grassland, a seasonal wetland swale and an excavated canal that is no longer used or maintained but still conveys water. Elevations on the site range from approximately 780 feet to 985feet above mean sea level (msl).

The Study Area is primarily in the Rock Creek-French Camp Slough watershed (USGS Hydrologic Unit Code (HUC) 18040051). A portion of the B Tank Well Site of the Study Area is located within the Upper Stanislaus River watershed (HUC 18040010). All drainages adjacent to the Study Area are tributary to the San Joaquin River, which is a traditional navigable waters of the U.S.

4.2.2 Soils

The NRCS has mapped four soil units within the Study Area: Bonanza-Loafercreek complex, 3 to 15 percent slopes, Copperopolis-Whiterock complex, 3 to 15 percent slopes, rocky, Urban land-Copperopolis complex, 0 to 15 percent slopes, and Urban land-Loafercreek-Dunstone complex, 3 to 15 percent slopes (Appendix A: Figure 4). The general characteristics and properties associated with these soil types are described below.

Bonanza-Loafercreek complex, 3 to 15 percent slopes is a well-drained soil that consists of loam, and gravelly clay loam over bedrock derived from residuum weathered from metavolcanic rock (volcanic soil). Bonanza-Loafercreek complex, 3 to 15 percent slopes is well drained and is found on hills and backslopes. The restrictive layer consists of lithic and paralithic bedrock at 20 to 49 inches below the surface. This soil series is not prime farmland. This soil unit is not considered hydric (NRCS 2022).

Copperopolis-Whiterock complex, 3 to 15 percent slopes, rocky, is a well-drained soil that consists of channery loam, and extremely gravelly loam over bedrock derived from residuum weathered derived from slate. Copperopolis-Whiterock complex, 3 to 15 percent slopes, rocky is well drained and is found on low hills and summits. The restrictive layer consists of lithic bedrock at 10 to 20 inches below the surface. This soil series is not prime farmland. This soil unit is not considered hydric (NRCS 2022).

Urban land-Copperopolis complex, 0 to 15 percent slopes, is a well-drained soil that consists of loam, clay loam, very gravelly clay loam over bedrock that is derived from colluvium over residuum derived from metavolcanic rock (volcanic soil). Urban land-Copperopolis complex, 0 to 15 percent slopes is well drained and is found on hills and summits. The restrictive layer consists of lithic and paralithic bedrock at 20 to 49 inches below the surface. This soil series is not prime farmland. This soil unit is not considered hydric (NRCS 2022).

Urban land-Loafercreek-Dunstone complex, 3 to 15 percent slopes, is a well-drained soil that consists of loam, clay loam, very gravelly clay loam over bedrock that is derived from colluvium over residuum derived from metavolcanic rock (volcanic soil). Urban land-Loafercreek-Dunstone complex, 3 to 15 percent slopes is well drained and is found on hills and backslopes. The restrictive layer consists of lithic and paralithic bedrock at 20 to 49 inches below the surface. Minor soil components of this soil unit are considered hydric in depressions (NRCS 2022).

4.3 BIOLOGICAL COMMUNITIES

Two upland communities and five aquatic communities occur within the Study Area: blue oak woodland (0.590 acre), annual grassland (0.425 acre), canal (0.054 acre), developed (1.659 acres), ditch (0.031 acre), and seasonal wetland swale (0.001 acre). These habitat types are discussed below. A comprehensive list of all plant and wildlife species observed within the Study Area in these habitats is provided in **Appendix C**. Representative site photographs are included in **Appendix E**.

4.3.1 Developed

Developed habitat consists of paved roads, graveled areas, structures such as water tanks. Developed habitat consists primarily of have paved surfaces which generally do not provide habitat for plants and wildlife. Leaking water tanks at both the B Tank site and the Clearwell site both support wetland aeras where the tanks are leaking that consist of wetland vegetation, but not meet wetland criteria. Native and nonnative trees, shrubs and herbs are present in developed habitat that could provide habitat for wildlife, however developed areas are routinely treated chemically and mechanically for vegetation. Approximately 1.659 acres of developed habitat occurs in the Study Area (**Appendix A, Figures 5a and 5b**).

4.3.2 Blue Oak Woodland

Blue oak woodland habitat dominates the northern boundary of the Study Area and is the dominant natural vegetation community in the surrounding vicinity. Vegetation in this habitat consists primarily of blue oak (*Quercus douglasii*) and interior live oak (*Quercus wislizeni*) dominating parts of the shrub layer underlain with an annual herbaceous species in the understory. Annual vegetation in the understory resembles that of the annual grassland habitat described below. Blue oak woodland within the Study Area. Blue oak woodland provides breeding and foraging habitat for a several species of wildlife, such as cavity nesting birds like woodpeckers. Approximately 0.590 acre of blue oak woodland habitat occurs in the Study Area (**Appendix A, Figure 5b**).

4.3.3 Annual Grassland

Annual grassland habitats are open grasslands composed primarily of annual plant species. Many of these species also occur as understory plants in oak woodland and other habitats. Structure in annual grassland depends largely on weather patterns and livestock grazing; dramatic differences in physiognomy, both between seasons and between years, are characteristic of this habitat. Dominant species observed within annual grassland habitat in the Study Area include medusahead (*Elymus caput-medusae*), wild oats (*Avena fatua*), narrow tarplant (*Holocarpha virgata*). Purple needle grass (*Stipa pulchra*) is also present in the Study Area. Approximately 0.425 acre of annual grassland habitat occurs in the Study Area (**Appendix A, Figure 5b**).

4.4 AQUATIC RESOURCES

4.4.1.1 Seasonal Wetland Swale

A total of 0.001 acre of seasonal wetland swale occurs on the Study Area in the northwestern corner of the Clearwell Site and appears to carry surface runoff from surrounding hillslopes of the Study Area where it intersects a ditch off site of the Study Area where it enters a settling pond that is tributary to Littlejohns Creek. Swales on site meet the 3-paramenter wetland criteria and are typically located in steeper locations and can be associated with vernal pools, which either drain into the swale or are located in deeper sections of the swale. The swale boundaries are characterized by slight shifts in micro-topography over low areas on the landscape between hillslopes as well as shifts in vegetation. A defined ordinary high-water mark is not present, and these features are more similar to seasonal wetlands. Hydric soil in the swale is fulfilled by a depleted matrix with prominent redoximorphic features located

along pore linings of living root channels. Wetland hydrology was met by oxidized rhizospheres, drainage pattern and saturation visible on aerial imagery dated to April 6, 2022. The swale was dry during the site visit in November 2022 following early precipitation for the season. The swale supports a predominance of hydrophytic herbaceous plant species such as Italian ryegrass (*Festuca perennis*), and Mediterranean barley (*Hordeum marinum ssp. gussoneanum*) in addition to upland medusahead.

4.4.1.2 Canal

A total of 0.054 acre of canal is present in the Study Area. The canal in the Study Area is an excavated feature, that likely originated between 1959 and 1984 (NETR 2022). This feature was constructed in part of the seasonal wetland swale described above and was likely constructed in other potential waters of the U.S. that drain the surrounding hillslopes. The canal has steeply incised banks with spoils from excavation of the canal cast downslope into WS-1. The canal is not a part of the wastewater treatment facility and is not managed by the facility. The canal exits the Study Area to the east and reenters the Study Area where there is a confluence with another wetland swale (out of the Study Area) before it enters a culvert in the Study Area. It is unknown where the culvert carries water to, but it likely is diverted to the south where it enters a complex of drainages and wetlands that are tributary to Littlejohns Creek, as evidenced from aerial imagery from 1998 when more of the canal was still above ground (Google Earth 2022). This canal supports hydric soil, wetland hydrology and hydrophytic vegetation and functions similar to a natural drainage feature with a bed and a bank that channels water from surrounding hillslopes and likely only flows during periods of precipitation. Upstream of the Study Area this canal is dominated almost entirely by common cattail (*Typha latifolia*), an obligate hydrophyte. In the Study Area this feature is dominated by tall flatsedge (*Cyperus eragrostis*), and Italian ryegrass.

4.4.1.3 Ditch

A total of 0.031 acre of ditch is present within the Study Area, consisting of one feature that is mostly lined with asphalt with soil, muck and hydrophytic vegetation overlying the ditch. The ditch drains a water tank at the Clearwell site, which continues out of the Study Area and to a series of ponds that drain to Littlejohns Creek to the south. The ditch supports fresh emergent wetland vegetation which consists of slender rush (*Juncus tenius*) and common cattail. No other drainages or wetland drain into this constructed drainage and is entirely a function of the wastewater treatment facility.

4.5 SPECIAL-STATUS SPECIES

Special-status species are plant and wildlife species that have been afforded special recognition and protection by federal, State, or local resource agencies or organizations. These species are generally of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under CESA or FESA;
- Protected under other regulations (e.g., the PCCP, MBTA);
- Included on the CDFW Special Animals List or Watch List;
- Identified as Rare Plant Rank 1 to 3 by CNPS; or,
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on queries of the CNDDB, USFWS, and CNPS ranked species (online versions) for the *New Melones Dam, CA* USGS quadrangle and eight surrounding quadrangles. **Appendix B** includes the common name and scientific name for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence within the Study Area. The following set of criteria has been used to determine each species' potential for occurrence within the Study Area:

Will Not Occur: Species is either sessile (i.e., plants) or so limited to a particular habitat that it cannot disperse on its own and/or habitat suitable for its establishment and survival does not occur on the Study Area;

Not Expected: Species moves freely and might disperse through or across the Study Area, but suitable habitat for residence or breeding does not occur in the Study Area, potential for an individual of the species to disperse through or forage in the site cannot be excluded with 100 percent certainty;

Presumed Absent: Habitat suitable for residence and breeding occurs in the Study Area; however, focused surveys conducted for the current project were negative;

May Occur: Species was not observed on the site and breeding habitat is not present, but the species has the potential to utilize the site for dispersal;

High: Habitat suitable for residence and breeding occurs in the Study Area and the species has been recorded recently in or near the Study Area, but was not observed during surveys for the current project; and

Present: The species was observed during biological surveys for the current project and is assumed to occupy the Study Area or utilize the Study Area during some portion of its life cycle.

Only those species that are known to be present, have a high potential to occur, or may occur are discussed further in the following sections, with the exception of California red-legged frog, which is not expected to occur but is briefly discussed.

4.5.1 Listed and Special-Status Plants

According to the database query, 35 listed and/or special-status plant species have the potential to occur on or in the vicinity of the Study Area (CDFW 2022). Based on field observations, published information, and literature review, five special-status plant species have the potential to occur within the Study Area: Jepson's onion (*Allium jepsonii*), Chinese Camp brodiaea (*Brodiaea pallida*), Hoover's calycadenia (*Calycadenia hooveri*), and forked-hair leaf (*Lagophylla dichotoma*).

Special-Status Plants that May Occur

Jepson's Onion (CRPR 1B.2)

Jepson's onion is a perennial herb that is California Rare Plant Rank (CRPR) 1B.2 by CNPS (see Section 2.4.1 for CNPS rating definitions). This species is typically found in serpentinite or volcanic soils in cismontane woodlands, chaparral, and lower montane coniferous forest habitats. It blooms from April to August and is found at elevations ranging from 300 to 1,320 meters elevation (CNPS 2022). Soil in the Study Area consists of gravelly loam and is derived from metavolcanics (volcanic soil) and sedimentary

rock (NRCS 2022; CGS 2010). The biological survey was conducted outside of the optimal period of identification for this species. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022). Jepson's onion may occur in the blue oak woodland habitat within the Study Area. There is potential for direct and indirect effects to Jepson's onion if this species were to occur within the Study Area.

Chinese Camp Brodiaea (Federally threatened, State endangered, CRPR 1B.1)

Chinese Camp brodiaea is a perennial bulbiferous herb that is federally listed as threatened and state listed as endangered and ranked as CRPR 1B.1 by CNPS. This species may be found in serpentinite soils but is known to occur on other soils within vernal streambeds in cismontane woodland and foothill and valley grassland habitats. It blooms from May to June and is found at elevations ranging from 165 to 385 meters elevation (CNPS 2022). Soil in the Study Area consists of gravelly loam and is derived from metavolcanics (volcanic soil) and sedimentary rock (NRCS 2022; CGS 2010). The biological survey was conducted outside of the optimal period of identification for this species. There are several CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022). The nearest record is from 2005 and is located 1.1 miles south of the Study Area along Littlejohns Creek (CDFW 2022). This CNDDB record and adjacent records for this species occur on metavolcanic soils (CGS 2010) similar to what is found in the Study Area. Chinese Camp brodiaea may occur in the blue oak woodland and annual grassland habitat within the Study Area. There is potential for direct and indirect effects to Chinese Camp brodiaea if this species were to occur in the Study Area.

Hoover's Calycadenia (CRPR 1B.3)

Hoover's calycadenia is an annual herb that is California Rare Plant Rank (CRPR) 1B.3 by CNPS. This species is typically found on rocky microsites within cismontane woodland and foothill and valley grassland habitats. It blooms from July to September and is found at elevations ranging from 65 to 300 meters elevation (CNPS 2022). Soil in the Study Area consists of gravelly loam and is derived from metavolcanics (volcanic soil) and sedimentary rock (NRCS 2022; CGS 2010). The biological survey was conducted outside of the optimal period of identification for this species. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022). Hoover's calycadenia may occur in the blue oak woodland and annual grassland habitats within the Study Area. There is potential for direct and indirect effects to Hoover's calycadenia if this species were to occur in the Study Area.

Forked-hair Leaf (CRPR 1B.1)

Forked hair-leaf is an annual herb that is CRPR 1B.1 by CNPS. This species is typically found in clay soils within cismontane woodland and foothill and valley grassland habitats. It blooms from April to May and is found at elevations ranging from 45 to 335 meters elevation (CNPS 2022). Soil in the Study Area is mix of loam and clay loam in sedimentary and metavolcanic derived soils. The biological survey was conducted outside of the optimal period of identification for this species. There is one record of this species within a 5-mile radius of the Study Area, located 0.5-mile northwest of the Study Area (CDFW 2022). The record is from 2000 and documents an observation near Black Creek Ranch but requires further review (CDFW 2022). Forked-hair leaf may occur in the blue oak woodland habitat within the Study Area. There is potential for direct and indirect effects to forked-hair leaf if this species were to occur in the Study Area.

4.5.2 Listed and Special-Status Wildlife

According to the database query, 28 listed and/or special-status wildlife species have the potential to occur onsite or in the vicinity of the Study Area (CDFW 2022. Based on field observations, published information, and literature review, four special-status wildlife species have the potential to occur within the Study Area: western spadefoot (*Spea hammondii*), western pond turtle (*Actinemys marmorata*), western red bat (*Lasiurus blossevillii*), and hoary bat (*Lasiurus cinereus*). These species are discussed in more detail below. In addition to these special-status wildlife species, nesting birds and raptors protected under federal, State, and local laws/policies also have potential to occur within the Study Area. Two other species, California tiger salamander (*Ambystoma californiense*) and California red-legged frog (*Rana draytonii*), are not expected to occur in the Study Area but are also discussed as they are listed species that have some limited potential to occur within the Study Area.

Special-Status Wildlife that May Occur

Western Spadefoot (CDFW Species of Special Concern)

Western spadefoot is an amphibian that breeds in vernal pools and seasonal ponds or slow portions of streams in grasslands and woodlands. Adults spend most of their time in underground burrows in grasslands surrounding breeding pools (Jennings and Hayes 1994). Breeding is typically finished by the end of March. Adults and juveniles retreat to burrows by late summer, often capable of burrowing up to 20 centimeters in hard soil (Morey and Reznick 2001). Tadpoles mature through late-spring and disperse as pools dry (Zeiner *et al.* 1990). Pools that support potential predators such as fish, bullfrogs, and crayfish are typically unsuitable (Jennings and Hayes 1994).

Western spadefoot was not observed in the Study Area during the biological reconnaissance on November 10, 2022. Blue oak woodlands and surrounding annual grasslands provide suitable upland habitat for this species although aquatic breeding habitat is not present in the Study Area. Cattle ponds, treatment ponds and other seasonal ponds and pools in intermittent streambeds and vernal pool complexes adjacent to the Study Area provide potential aquatic breeding habitat for this species. This species could breed in ponds outside of the Study Area, but this species could utilize upland areas within the Study Area as underground refuge sites or traverse through the Study Area between upland refuge sites and seasonal aquatic breeding sites. There is potential for direct and indirect effects to western spadefoot if this species were to occur in the Study Area.

Western Pond Turtle (CDFW Species of Special Concern)

Western pond turtles are most commonly found in permanent or nearly permanent wetlands, ponds, slow-moving streams, and irrigation ditches (Zeiner *et al.* 1988-1990). Adjacent upland areas are also used for basking and egg-laying. Turtles will lay eggs up to 0.25 mile from water, but typically go no more than 600 feet (Jennings and Hayes 1994). Special habitat features that improve turtle abundance, survival and reproductive success are rocks, logs, open mud banks, emergent aquatic vegetation and streamside vegetation. These features provide the turtles with basking sites and cover from predators (Stebbins 1972). Although pond turtles feed primarily on aquatic invertebrates (USFWS 1992), they also feed on plants, small fish and carrion.

Western pond turtle was not observed in the Study Area during the biological reconnaissance on November 10, 2022. Cattle ponds and other ponds and pools in intermittent streambeds adjacent to the Study Area could provide suitable aquatic habitat for this species. Uplands in blue oak woodlands,

grasslands and other ruderal areas in the Study Area provide suitable egg laying substrate for this species. Western pond turtle could utilize the nearby ponds and surrounding habitats for all life stages, and it could disperse up and down the canal within the Study Area. There are no CNDDB reported occurrences within a 5 mile radius of the Study Area (CDFW 2022). There is potential for direct and indirect effects to western pond turtle if this species were to occur in the Study Area.

Western Red Bat (CDFW Species of Special Concern)

Western red bat roosts primarily in woodlands and forests and forages in open habitat such as croplands, grasslands and shrublands. This species is typically associated with water and/or riparian habitats or mosaics of open space and forests. This species forages along edge habitats and usually found foraging or drinking with other bat species (Zeiner *et al.* 1990). This species has a poor urine concentrating ability and is typically associated with water. Western red bat is known to primarily roost solitarily in trees from 2 to 40 feet high, with females and young roosting higher in the trees than males. Young are typically born from May through July, and volant between 3 to 6 weeks after birth (Zeiner et al. 1990). Reproduction typically occurs individually, with each liter consisting of 1–5 young. Occasionally maternity colonies are found but are rare. Western red bat may also move their young between roost sites and are not tied to a specific roost location (Zeiner *et al.* 1990).

The Study Area contains suitable roosting habitat for this species in blue oak woodland with nearby water sources for this species including larger lakes and large ponds. The Study Area provides both roosting habitat and foraging habitat along woodland edges over adjacent grassland. This species could roost in tall trees and forage over the Study Area. There is one historical record of this species from 1999 documented near Knights Ferry approximately 5 miles south of the Study Area (CDFW 2022). There is potential for direct and indirect effects to western red bat if this species were to roost in or adjacent to Study Area.

Hoary Bat (CDFW Special Animals List)

Hoary bat roosts primarily in woodlands and forests and forages in open habitat such as croplands, grasslands and shrublands. This species is typically associated with water and/or riparian habitats or mosaics of open space and forests. This species forages along edge habitats and is usually found foraging or drinking with other bat species (Zeiner *et al.* 1990). This species has a poor urine concentrating ability and is typically associated with water. Hoary bat is known to primarily roost solitarily in medium to large trees with few branches below the roost site and ground cover with low reflectivity (Zeiner *et al.* 1990). Females and young roosting higher in the trees than males. Young are typically born from May through July, and volant between 33 days after birth (Zeiner *et al.* 1990). Reproduction typically occurs individually, with each liter consisting of 1–4 young.

The Study Area contains suitable roosting habitat for this species in blue oak woodland and areas adjacent to the Study Area contain suitable water sources including larger lakes and large ponds. The Study Area provides both roosting habitat and foraging habitat along woodland edges over adjacent grassland. This species could roost in tall trees and forage over the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022). There is potential for direct and indirect effects to hoary bat if this species were to roost in or adjacent to Study Area.

Special-Status Wildlife Not Expected to Occur

California Tiger Salamander (Federally Threatened; State Threatened)

The historic range of California tiger salamander (*Ambystoma californiense*) was endemic to the San Joaquin-Sacramento River Valleys, bordering foothills and coastal valleys in what was considered a contiguous distribution (USFWS 2017). Currently, the population extends from Petaluma in Sonoma County (Sonoma DPS), east to the Colusa and Yolo County line, with an isolated population near Gray Lodge Wildlife area north of the Sutter Buttes, and south through the Central Valley to Santa Barbara County (Santa Barbara DPS) (Jennings and Hayes 1994). Today the species is known to occur in about 23 counties and is found primarily in low elevation grassland-oak woodland plant communities of Central California up to 1,640 feet elevation in the Sierra Nevada foothills (USFWS 2017).

California tiger salamander occupies a distinct habitat of both aquatic and terrestrial components that consist of aquatic breeding and non-breeding areas embedded within a matrix of habitats used for dispersal, or refugia. Breeding aquatic habitat consists typically of ephemeral freshwater bodies, such as ponds, vernal pools, constructed ponds and other stock ponds. Permanent bodies of water are occasionally used for breeding, but permanent water bodies must be free of potential predators to eggs and larva, such as fish and American bullfrog (*Lithobates catesbeianus*). Non-breeding habitat is located in uplands away from ponds, typically in mammal burrows, where California tiger salamander will spend most of their life (USFWS 2017). A complex of upland habitat with burrowing mammals and breeding ponds are necessary habitat components required for this species to persist (USFWS 2017). During the onset of fall precipitation, California tiger salamander will emerge from their burrows and migrate to breeding habitat. Eggs are laid along the margins of ponds individually or in small clusters on vegetation or other debris (Jennings and Hayes 1994). The breeding season typically occurs from November through April (USFWS 2017) and is likely influenced by local precipitation and ambient temperature. Females typically lay eggs between December and early April. Larvae typically metamorphose in three to six months and juveniles begin to move out of the natal pond in late spring or early summer, and rarely overwinter (USFWS 2017). When juveniles leave their natal ponds, they distribute into uplands in search of suitable underground refugia, which typically consists of mammal burrows excavated by California ground squirrel and Botta's pocket gopher (USFWS 2017). Very little is known of California tiger salamander behavior while underground. The Study Area is not located within federally designated critical habitat.

The Study Area is in the extant range for California tiger salamander and was known to persist in Calaveras County at the time the Recovery Plan was published (USFWS 2017). There are no reported CNDDB records for this species within a 5-mile radius of the Study Area (CDFW 2022). The nearest CNDDB reported occurrence for California tiger salamander is located 8.5 miles southwest of the Study Area. The record documents larvae found in a seasonal pond in 1993 on private property (CDFW 2022).

The Study Area contains aquatic non-breeding habitat that could potentially be suitable movement habitat for this species traversing through uplands or between potential breeding sites such as ponds and vernal pool complexes south of the Study Area. Wetland habitat in the Study Area does not provide deep-water habitat suitable for egg laying or larval development that could support California tiger salamander. The canal appears to flow only briefly during the wet season, and long enough to support wetland vegetation. Nearby treatment ponds were accessible and are managed for water treatment. Water overflow drains to drainages and wetland complexes south of the Study Area, which are tributary to Littlejohns Creek. Ponds adjacent to the Study Area appear to support suitable aquatic breeding

habitat through most of the year since they were inundated during the site visit in November 2022 and are visible on aerial imagery (Google Earth 2022) to be inundated in most years. However, it is unknown whether adjacent ponds support fish predators and/or American bullfrogs *(Lithobates catesbianus*) that could render these features less suitable for breeding or occupation by California tiger salamander. Adjacent ponds and other streams that may provide suitable breeding habitat for California tiger salamander are within the known upland dispersal distance for this species of 1.3-miles (USFWS 2017), especially annual grassland habitat, streams and vernal pool complexes on the property south of the Study Area.

The Study Area does not support aquatic breeding habitat, and habitat for this species is limited to upland dispersal habitat, refuge habitat and aquatic non-breeding habitat. Access or dispersal between adjacent suitable aquatic breeding sites is limited north of the Study Area based on the surrounding development, but to the south and west there are no dispersal barriers. In addition, the closest known population of California tiger salamander is approximately 8.5 miles southwest of the Study Area (CDFW 2022). This species has not been documented recently near the Study Area (CDFW 2022; USFWS 2017) but could still persist in the region since habitat for this species is abundant in annual grasslands south of the Study Area. Additionally, surrounding lands are mostly private lands and would not necessarily have documented records of this species reported in CNDDB. For these reasons, California tiger salamander is not expected to occur in the Study Area or be impacted by the proposed project, although there is potentially suitable habitat present in the Study Area.

California Red-legged Frog (Federally Threatened; CDFW Species of Special Concern)

California red-legged frog occurs in streams, marshes, ponds, and other permanent or ephemeral freshwater sources; typically within humid forests, woodlands, grasslands, and foothills below ±5,200-feet (USFWS 2002). California red-legged frog generally occupies areas within one to two miles of aquatic breeding habitat in places that stay cool and moist through warm periods. This includes non-breeding aquatic habitat or upland habitats with small mammal burrows, logs, dense vegetation/leaf litter, and other cool, moist refuge locations (USFWS 2002). Breeding occurs from late November to April and usually lasts one to two weeks. Some adults inhabit the breeding habitat all year, but other frogs disperse into other habitats and must travel overland some distance, usually on rainy nights, to get to the breeding location (USFWS 2002). Breeding typically occurs in deep, still, or slow-moving water (greater than 2.5 feet) and can have a wide range of edge and emergent cover amounts (USFWS 2002). California red-legged frog can breed at sites with dense shrubby riparian or emergent vegetation, such as cattails, tules (*Scirpus* spp.), or overhanging willows or can proliferate in ponds devoid of emergent vegetation or any apparent vegetative cover (USFWS 2002).

The Study Area is in the historic range for California red-legged frog but this species was considered to be extirpated in Calaveras County at the time the Recovery Plan was published (USFWS 2002). One record in Calaveras County that was documented after the publication of the Recovery Plan for this species documents an occurrence at Young's Creek near Valley Springs, Calaveras County approximately 24 miles north of the Study Area (Barry and Fellers 2013). This record from 2003 documents a small population of California red-legged frog that is reproductively active in oak savannah (Barry and Fellers 2013). The nearest CNDDB reported occurrence is located at Woods Creek 9.4 miles east of the Study Area in Tuolumne County. The record is non-specific and documents a collection of four individuals from 1950 (CDFW 2022). There are no other known occurrences of California red-legged frog in Calaveras County (CDFW 2022).

The Study Area contains aquatic non-breeding habitat that could potentially be suitable for this species to disperse through uplands or between potential breeding sites between adjacent ponds. Wetland habitat in the Study Area does not provide deep-water habitat suitable for egg laying or larval development that could support California red-legged frog. The canal appears to flow only briefly during the wet season, and long enough support wetland vegetation. Nearby treatment ponds were accessible and are managed for water treatment. Water overflow drains to drainages south of the Study Area, which are tributary to Littlejohns Creek. Ponds adjacent to the Study Area appear to support aquatic breeding habitat through most of the year since they were inundated through the site visit in November 2022 and are visible on aerial imagery (Google Earth 2022). However, it is unknown whether adjacent ponds support fish predators and/or American bullfrogs that could render adjacent ponds less suitable for breeding or occupation by California red-legged frog. Adjacent ponds and other streams that may provide suitable breeding habitat for California red-legged frog are within the known upland dispersal distance for this species of one to two miles (USFWS 2002; USFWS 2005), especially annual grassland habitat, streams and vernal pool complexes in the property south of the Study Area.

The Study Area does not support aquatic breeding habitat, and habitat for this species is limited to upland dispersal habitat, refuge habitat and aquatic non-breeding habitat. Access or dispersal between adjacent suitable aquatic breeding sites is limited north of the Study Area based on the surrounding development, but to the south and west there are no dispersal barriers. In addition, the closest known extant population of California red-legged frog is approximately 24 miles north of the Study Area and this species has not been documented recently near the Study Area (Barry and Fellers 2013; CDFW 2022) but could still persist in the region. For these reasons, California red-legged frog is not expected to occur in the Study Area or be impacted by the proposed project, although there is potentially suitable dispersal habitat present within the Study Area.

Nesting Migratory Birds and Raptors

Migratory birds are protected under the MBTA of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10; this also includes feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Additionally, Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., hawks, owls, eagles, and falcons), including their nests or eggs; and Section 3513 specifically states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

A number of migratory birds and raptors have the potential to nest in or adjacent to the Study Area. Many birds were observed within the Study Area during the field survey and suitable nest locations include trees, shrubs, grass, and bare ground. Therefore, nesting birds are expected to occur within the Study Area during the nesting season (generally February 1 to August 31).

4.6 SENSITIVE HABITATS

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA; Section 1600 of the California Fish and Game Code, which includes riparian

areas; and/or Sections 401 and 404 of the Clean Water Act, which include wetlands and other waters of the U.S. Sensitive habitats or resource types within the Study Area are discussed below.

4.6.1 Aquatic Resources

A total of 0.086 acre of aquatic resources have been delineated in the Study Area consisting of a canal (0.054 acre), seasonal wetland swale (0.001 acre), and ditch (0.0301 acre). The canal is not a part of the Copper Cover Sewer Treatment Plant infrastructure and is not maintained and it was constructed in wetlands and is tributary to waters of the U.S. The ditch is part of the Copper Cover Sewer Treatment Plant infrastructure to control wastewater from the facility. This ditch captures wastewater and delivers it to a pond out of the Study Area and is designed to capture polluted water runoff from the treatment plant before it reaches waterways downstream. This ditch is part of a waste treatment system, which removes or reduces pollution from discharging directly into a water of the U.S. The ditch is not expected to be considered jurisdictional under Section 404 or 401 of the Clean Water Act, as waste treatment systems are not considered waters of the U.S. Of the 0.086 acre of aquatic resources mapped, a total of 0.055 acre of aquatic resources (consisting of 0.054 acre of canal and 0.001 acre of seasonal wetland swale) are likely considered waters of the U.S. and waters of the State subject to USACE and RWQCB jurisdiction under Sections 404 and 401 of the CWA. A formal aquatic resource delineation was conducted in conjunction with this BRA and the results can be found under a separate cover (HELIX 2022). The results of the delineation are subject to concurrence from the appropriate resource agencies.

4.6.2 Wildlife Migration Corridors

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. This fragmentation of habitat can also occur when a portion of one or more habitats is converted into another habitat; for instance, when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or construction activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and, (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The Study Area is bordered by rural residential properties on all sides. Although wildlife may disperse through the Study Area on a local level, the Study Area is not considered a wildlife migration or movement corridor.

4.6.3 Oak Woodlands

Approximately 0.590 acre of blue oak woodland habitat occurs in the Study Area, which are protected by Calaveras County.

5.0 IMPACTS AND RECOMMENDED MITIGATION

5.1 SPECIAL-STATUS PLANTS

The Study Area contains suitable habitat for Jepson's onion, Chinese Camp brodiaea, Hoover's calycadenia, and forked-hair leaf. within the blue oak woodland, annual grassland and wetlands. If present within the Study Area, these species could be impacted by the proposed project through grading or vegetation removal activities and development of the Study Area at the Clearwell Site. Loss of special-status plant populations would be a potentially significant impact. It is likely that coordination with USFWS and CDFW will be required in order to obtain concurrence on the potential for Chinese Camp brodiaea to be present in the Study Area and/or be impacted by the proposed project as well as to develop mitigation measures to avoid any potential take of the species. To avoid potential impacts to these species, the following measures are provided as recommendations. Potential impacts to Chinese Camp brodiaea and/or potentially suitable habitat for this species may require informal or formal consultation with USFWS and/or CDFW as required under Section 7 of the Endangered Species Act due to anticipated federal and state permitting associated with the project. To avoid potential impacts to these species, the following measures are recommended:

- A qualified botanist should conduct a special-status plant survey within the appropriate identification (blooming) period prior to the initiation of any ground-disturbing activities that affect suitable habitat for these species or any activities that would disturb or alter suitable habitat in the Study Area. Two botanical surveys should be conducted to identify these species in the Study Area if present, one in May and a follow up survey in July. If no special-status plants are observed, then a letter report documenting the methods and results of the survey should be prepared and submitted to CCWD, CDFW and USFWS and no further measures are recommended.

- If special-status plants are observed within the Study Area, the location of the special-status plants should be marked with pin flags or other highly visible markers and may also be marked by GPS. The project proponent should determine if the special-status plant(s) onsite can be avoided by project design or utilize construction techniques to avoid impacts to the special-status plant species. All special-status plants to be avoided should have exclusion fencing or other highly visible material marking the avoidance area and the avoidance area should remain in place throughout the entire construction period.

- If special-status plants are found within the Study Area and cannot be avoided, the project proponent should consult with the CDFW and/or USFWS to determine appropriate measures to mitigate for the loss of special-status plant populations. These measures may include gathering seed from impacted populations for planting within nearby appropriate habitat, preserving or enhancing existing offsite populations of the plant species affected by the project, or restoring suitable habitat for special-status plant species habitat as directed by CDFW.

5.2 SPECIAL-STATUS WILDLIFE

5.2.1 California Tiger Salamander and California Red-Legged Frog

Based on the habitat assessment conducted for this report, it is our opinion that California red-legged frog is not expected to occur in the Study Area or be impacted by the proposed project. However, the Study Area is within the extant range of California tiger salamander and California red-legged frog and provides potentially suitable upland habitat for these species. It is likely that coordination with USFWS will be required in order to obtain concurrence on the potential for these species to be present in the Study Area and/or be impacted by the proposed project as well as to develop mitigation measures to avoid any potential take of the species. To avoid potential impacts to these species, the following measures are provided as recommendations, but potential impacts to these species and/or potentially suitable habitat for these species may require informal or formal consultation with USFWS as required under Section 7 of the Endangered Species Act due to potential federal and state permitting requirements associated with the project.

- A qualified biologist should conduct a pre-construction survey for California red-legged frog within 7 days and again within 24 hours prior to the start of any project activities that could affect suitable aquatic or upland habitat for California red-legged frog. The survey should include searching for all potential life stages of the frog potentially present at the time of the survey including egg masses, larvae (tadpoles), juveniles, sub adults and adults. If the survey shows that there is no evidence of this species in the Study Area, then a letter report should be prepared to document the survey and be provided to CCWD and USFWS and no additional measures would be warranted. If development does not commence within 24 hours of the survey, or halts for more than 7 days, then an additional survey is required 24 hours prior to starting or resuming work.

    - If California tiger salamander and/or California red-legged frog are observed during the survey, USFWS and CDFW will be notified within one business day and no work shall occur until CDFW and USFWS have been consulted to determine appropriate mitigation and avoidance measures.

- A qualified biologist should conduct an environmental awareness training to all project-related personnel prior to the initiation of work. The training should include identification of California tiger salamander and California red-legged frog, and any other sensitive species with the potential to occur and required practices before the start of construction, general measures that are being implemented to protect the species as they relate to the project, penalties for non-compliance, and boundaries of the permitted disturbance zones. Upon completion of the training, all construction personnel shall sign a form stating that they have attended the training and understand all the measures. Proof of this instruction should be kept on file by the CCWD.

- Wildlife exclusion fencing should be installed around the project area prior to construction. General silt fencing or other solid fencing is recommended. Fencing should be trenched into the soil at least 6-inches and the soil must be carefully compacted against both sides of the fence for its entire length to prevent animals, such as California red-legged frog or western pond turtle from entering the construction area. Plywood cover boards need to be laid down with one edge in contact with the exclusion fence approximately every 100 feet along the perimeter of the silt fence to provide refuge for amphibians seeking cover. Exclusion fencing should be inspected

daily for the duration of construction to ensure it remains intact and any holes, tears, or gaps should be repaired immediately. Fencing should be removed upon construction completion.

- A qualified biological monitor should be present daily during initial construction activities including but not limited to equipment mobilization, site clearing, vegetation removal, and grading/ground disturbance to verify that no California red-legged frog enter the project site during construction.

    - If California red-legged frog or other special-status species are found during construction, work will immediately stop, and all special-status species will be allowed to move out of harm's way on its own accord unless relocation is approved by USFWS and/or CDFW and appropriate handling/take permits are obtained.

    - The biological monitor shall monitor the special-status species to make sure it is not harmed and that it leaves the site on its own and does not return. Alternatively, the biological monitor shall relocate the species to a pre-approved location designated in a relocation plan, if approved/permitted by USFWS and/or CDFW.

    - Prior to the start of daily construction activities during initial ground disturbance, the biological monitor should inspect the exclusion fence to ensure that it is neither ripped nor has holes and that the base is still buried. The fenced area will also be inspected to ensure no wildlife is trapped. If California red-legged frog or western pond turtle or other special-status species are found inside or outside of the fence, work will stop in the immediate vicinity of the animal per the discretion of the biological monitor and the animal will be closely monitored until they move away from the construction area or can be relocated, if allowed.

    - If California tiger salamander, California red-legged frog or western pond turtle are observed during construction, CDFW, USFWS and CCWD should be notified within one business day and no work should occur until CCWD and USFWS have been consulted to determine appropriate mitigation and avoidance measures.

- Construction activities and clearing within the Study Area should be confined to the minimal area necessary to facilitate construction activities. To ensure that construction equipment and personnel do not affect sensitive habitat outside of the work area, orange barrier fencing should be erected to clearly define the habitat to be avoided. This will delineate the Environmentally Sensitive Area(s) (ESA) on the project. The integrity and effectiveness of ESA fencing and erosion control measures should be inspected on a daily basis. Corrective actions and repairs shall be carried out immediately for fence breaches and ineffective BMPs.

- During project activities, all trash that may attract predators should be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris should be removed from work areas.

- To prevent inadvertent entrapment of animals during construction, all excavated, steep walled holes or trenches more than one foot in depth should be covered at the close of each working day with plywood or other suitable material or provided with one or more escape ramps constructed of earth fill or wooden planks.

- To ensure that diseases are not conveyed between work sites by the USFWS-approved biologist or biological monitor, the fieldwork code of practice developed by the Declining Amphibian Population Task Force will be followed at all times.

- All vegetation scheduled for removal should be trimmed back by hand to allow the biological monitor to inspect the ground below for California tiger salamander and California red-legged frog. If no California tiger salamander or California red-legged frog are observed, the brush may be removed with mechanized equipment.

5.2.2 Western Spadefoot

If present in uplands areas in the Study Area at the time of construction, impacts to western spadefoot could include harm as a result of coming into contact with construction equipment or personnel, loss of habitat, displacement from current habitat, or loss of burrow refugia habitat. Impacts that could harm western spadefoot or result in loss of a nest would be considered potentially significant. To avoid potential impacts to individual western spadefoot, the following measures are recommended:

- If the implementation of work activities will occur during the wet season (October 15 – May 15), then a pre-construction survey should be conducted for western spadefoot by a qualified biologist within 7 days of the implementation of project activities. If a western spadefoot is found in the project site during preconstruction surveys, construction activities should not start until the western spadefoot has been relocated by a qualified biologist with appropriate approvals from CDFW to a suitable location outside of the construction zone. The qualified biologist should notify the CCWD and CDFW within 24 hours if western spadefoot is found and shall notify of any individuals that have been relocated. Any western spadefoot observed in the survey limits will be reported to the CNDDB.

- A qualified biological monitor(s) should be present during any initial ground disturbing work or dewatering or other work within the wetlands that could harm western spadefoot in order to relocate any western spadefoot to suitable habitat outside of the work area. Prior to such work occurring, CDFW will be notified of the intent to conduct western spadefoot monitoring and potential relocation. Any western spadefoot observed during biological monitoring activities will be reported to the CNDDB.

5.2.3 Western Pond Turtle

If present in uplands areas in the Study Area at the time of construction, impacts to western pond turtle could include harm as a result of coming into contact with construction equipment or personnel, loss of habitat, displacement from current habitat, or loss of a nest. Impacts that could harm western pond turtle or result in loss of a nest would be considered potentially significant. To avoid potential impacts to individual western pond turtle or nesting pond turtles, the following measures are recommended:

- A pre-construction survey should be conducted for western pond turtle by a qualified biologist within 7 days and again immediately prior to the commencement of construction. If nesting areas for pond turtles are identified within the survey limits, a buffer area of 300 feet should be established between the nesting site and aquatic habitat (e.g. pond or ditch) located near the nesting site. The buffer should be indicated by temporary fencing if construction has or will begin before the nesting period has ended (the period from egg laying to emergence of

hatchlings is normally April to November). If a non-nesting western pond turtle is found in the project site during preconstruction surveys, construction activities should not start until the turtle has been relocated by a qualified biologist with appropriate approvals from CDFW to a suitable location outside of the construction zone. The qualified biologist should notify the CCWD and CDFW within 24 hours if western pond turtle is found and shall notify of any individuals that have been relocated. Any western pond turtles observed in the survey limits will be reported to the CNDDB.

- A qualified biological monitor(s) should be present during any initial ground disturbing work or dewatering or other work within the wetlands that could harm turtles in order to relocate any western pond turtles to suitable habitat outside of the work area. Prior to such work occurring, CDFW will be notified of the intent to conduct western pond turtle monitoring and potential relocation. Any western pond turtles observed during biological monitoring activities will be reported to the CNDDB.

5.2.4 Nesting Migratory Birds and Raptors

Nesting migratory birds and raptors have the potential to forage and nest within the Study Area and other migratory birds and raptors protected under federal, State, and/or local laws and policies have potential to nest and forage within the Study Area. Although no active nests were observed during the field survey, the Study Area and adjacent properties contain suitable habitat to support a variety of nesting birds within trees, shrubs, grass, and on bare ground. If project activities take place during the nesting season (February 1 to August 31), nesting birds may be impacted. Construction activities and construction-related disturbance (e.g., noise, vibration, increased human activity) could adversely affect these species if they were to nest in the Study Area or in suitable habitat adjacent to Study Area through loss of reproductive success, forced fledging, or nest abandonment, which would be a potentially significant impact. If project activities take place outside of the nesting season, no mitigation measures for nesting birds are required. If project activities occur during the nesting season, the following measures are recommended to avoid or minimize impacts to nesting birds:

- To avoid impacts to nesting birds, all ground disturbing activity should be completed between September 1 and January 31, if feasible.

- A qualified biologist should conduct a pre-construction nesting bird survey no more than seven days prior to initiation of project activities.. The survey area should include suitable raptor nesting habitat within 500 feet of the project boundary (inaccessible areas outside of the Study Area can be surveyed from the site or from public roads using binoculars or spotting scopes). Areas that have been inactive for more than 14 days during the avian breeding season must be re-surveyed prior to resumption of project activities. If no active nests are identified, no further mitigation is required. If active nests are identified, the following measure should be implemented:

    - A species-specific buffer (typically 75 to 100 feet for passerines and 300 to 500 feet for raptors) should be established by a qualified biologist around active nests and no construction activities within the buffer should be allowed until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest, or the nest has failed). Encroachment into the buffer may occur at the discretion of a qualified biologist. Any encroachment into the buffer should

be monitored by a qualified biologist to determine whether nesting birds are being impacted.

- A qualified biologist should conduct an environmental awareness training to all project-related personnel prior to the initiation of work. The training should follow the same guidelines as the special-status amphibians training described above.

5.2.5 Western Red Bat and Hoary Bat

If these species are roosting in the Study Area at the time of construction, construction activities and construction-related disturbance (e.g., noise, vibration, increased human activity) could adversely affect western red bat or hoary bay by direct harm, loss of roost tree(s), or by causing individuals to leave the roost under suboptimal conditions and exposing them to stress or increased chance of predation, which would be a potentially significant impact. To avoid potential impacts to these species, the following measures are recommended:

A qualified wildlife biologist should conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine if bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (e.g., Anabat, etc.). The type of survey will depend on the condition of the potential roosting habitat. If no bat roosts are found, then no further study is required.

- If evidence of bat use is observed, then the number and species of bats using the roost will be determined. Bat detectors may be used to supplement survey efforts.

- If roosts are determined to be present and have the likelihood to be disturbed by construction, then a qualified biologist will determine if the bats should be excluded from the roosting site before work adjacent to the roost occurs. A mitigation program addressing compensation, exclusion methods, and roost removal procedures will be developed prior to implementation if exclusion is recommended. Exclusion methods may include use of one-way doors at roost entrances (bats may leave, but not reenter), or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

5.3 BIOLOGICAL COMMUNITIES

Table 1 summarizes impacts to biological communities that would occur as a result of the proposed project.

5.3.1 Sensitive Habitats

Sensitive habitats in the Study Area include seasonal wetland swale, canal, and blue oak woodland that could provide potential habitat for special-status species and are also discussed below.

Table 1.
Impacts to Biological Communities

Biological Community	Permanent Impacts	Temporary Impacts	Avoided Acreage	Total Acres
Canal	0.054	--	--	0.054
Ditch	0.031	--	--	0.031
Seasonal Wetland Swale	0.001	--	--	0.001
Blue Oak Woodland	0.590	--	--	0.590
Annual Grassland	0.425	--	--	0.425
Developed	1.659	--	--	1.659
Total Acres	***2.76***	**--**	**--**	***2.76***

***Acreages calculated at 3 significant figures and subsequently rounded.**

5.3.1.1 Aquatic Habitats

The seasonal wetland swale (0.001 acre), and canal (0.054 acre) within the Study Area are likely to be considered waters of the U.S. and State subject to USACE and RWQCB jurisdiction under Sections 404 and 401 of the CWA as well as subject to CDFW jurisdiction under Section 1600 of the Fish and Game Code. If any impacts to these features are expected, then a formal aquatic resources delineation should be submitted to the appropriate resource agencies to determine the extent of jurisdiction. In the event that any aquatic resources are determined to be jurisdictional, the project proponent will be required to apply for appropriate permits to fill aquatic resources and any mitigation measures contained in the permits will require implementation prior to filling any on-site features or habitats deemed subject to regulation.

The ditch (0.031 acre) is part of the Copper Cover Sewer Treatment Plant infrastructure to control wastewater from the facility. This ditch captures wastewater and delivers it to a pond out of the Study Area and is designed to capture polluted water runoff from the treatment plant before it reaches waterways downstream. This ditch is part of a waste treatment system, which remove or reduce pollution from discharging directly into a water of the U.S. or a water of the State. The ditch is not expected to be considered jurisdictional under Section 404 or 401 of the Clean Water Act, as waste treatment systems are not considered waters of the U.S or waters of the State and manipulation or disturbance of the ditch would not require a permit subject to agency verification.

If aquatic habitats are anticipated to be avoided during the implementation of project activities, then boundaries of these habitats should be clearly marked and avoided during construction. Highly visible material, such as orange construction fencing should be constructed at least 50 feet from the boundary of these habitats to establish an appropriate no-disturbance buffer. Erosion control measures should also be implemented around these habitats and all other measures outlined in the Project's Storm Water Pollution Prevention Plan (SWPPP) and other general construction permits should be followed.

5.3.1.2 Blue Oak Woodland

Approximately 0.590 acre of blue oak woodland habitat occurs in the Study Area. Protected trees under the Calaveras County Oak Woodlands (COS-4D) ordinance within the Study Area include oak woodland canopy. If oak woodland avoidance is not attainable, then mitigation for oak woodland in Calaveras County typically includes the retention of a qualified professional to recommend mitigation per Oak Woodlands (COS-4D) for impacts to oak woodlands. Mitigation may include planting of replacement

trees on or off-site, or preservation of oak woodland onsite. Any oak woodland preserved onsite and all mitigation planting areas must be protected in perpetuity through a conservation easement.

6.0 SUMMARY

HELIX conducted a biological resources assessment of the 2.76-acre Study Area for the Copper Cove Water System Improvements Project located in Copperopolis, Calaveras County, California. A total of 0.086 acre of aquatic resources has been delineated in the Study Area. A total of 0.055 acre of potential jurisdictional waters of the U.S. and state are present including canal (0.054 acre) and seasonal wetland swale (0.001 acre). A 0.031-acre ditch is a part of the wastewater treatment facility and is not likely to be considered a water of the U.S. or water of the State. The Study Area also includes suitable habitat for a variety of special-status plant and wildlife species as outlined below:

- Potential habitat for federally threatened and state endangered Chinese Camp brodiaea (*Brodiaea pallida*);
- Potential habitat for special-status plants including Jepson's onion (*Allium jepsonii*), Hoover's calycadenia (*Calycadenia hooveri*), forked hare-leaf (*Lagophylla dichotoma*);
- Although not expected to occur, the Study Area provides potentially suitable habitat for the federally and state listed as threatened California tiger salamander (*Ambystoma californiense*) and the federally listed as threatened California red-legged frog (*Rana draytonii*);
- Habitat for California Department of Fish and Wildlife (CDFW) Species of Special Concern western pond turtle (*Actinemys marmorata*), western spadefoot (*Spea hammondii*) and western red bat (*Lasiurus blossevillii*);
- Potential habitat for CDFW designated special mammals including hoary bat (*Lasiurus cinereus*);
- Blue oak woodland protected by the Calaveras County General Plan.

7.0 REFERENCES

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Appendix C

Aquatic Resources Delineation

Copper Cove Water System Improvements Project Phases 1 and 2

Aquatic Resources Delineation Report

Prepared for:

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ACRONYMS AND ABBREVIATIONS

--	Plants without a listed indicator status
APN	Assessor's Parcel Number
CFR	Code of Federal Regulations
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
FAC	Facultative Plants
FACU	Facultative Upland Plants
FACW	Facultative wetland plants
HELIX	HELIX Environmental Planning, Inc.
HUC	Hydrologic Unit Code
msl	mean sea level
NRCS	Natural Resource Conservation Service
NWPR	Navigable Waters Protection Rule
OHWM	ordinary high water mark
PCC	Prior Converted Cropland
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
UPL	Upland Plants
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WQC	Water Quality Certification

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EXECUTIVE SUMMARY

This report presents the results of a delineation of aquatic resources conducted for the 2.76-acre Copper Cove Water System Improvements Project – Phases 1 and 2 (Study Area) located in Calaveras County in Copperopolis, California. The potential presence of aquatic resources was assessed following the technical guidelines provided in the *Corps of Engineers Wetlands Delineation Manual* (USACE Manual) and the U.S. Army Corps of Engineers (USACE) *Arid West* Regional Supplement (Supplement). The Supplement presents wetland indicators, delineation guidance, and other information that is specific to the *Arid West* Region. The jurisdictional boundaries for other waters of the United States (Waters of the U.S.) were determined in accordance with, *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States*.

A total of 0.086 acre of aquatic resources have been delineated in the Study Area. Wetlands in the Study Area consist of a canal (0.054 acre), ditch (0.031 acre), and seasonal wetland swale (0.001 acre). The ditch is a part of the wastewater treatment facility and is not likely to be considered a water of the U.S. or water of the State. A total of 0.055 acre of wetlands and drainages within the Study Area are believed to be waters of the U.S. and waters of the State.

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1.0 INTRODUCTION

On behalf of Peterson Brustad Inc. (Applicant), HELIX Environmental Planning, Inc. (HELIX) has prepared this aquatic resources delineation report in support of the Copper Cove Water System Improvements Project (Project) to delineate potential jurisdictional wetlands and other waters of the U.S. and State on a 2.76 acre Study Area located in unincorporated Calaveras County, California. The proposed project would replace existing water tanks and install new water tanks and supporting facilities. The purpose of this delineation was to identify any aquatic resources in the Study Area that would potentially qualify as waters of the U.S. and/or waters of the State. Waters of the U.S. are subject to regulatory jurisdiction by the U.S. Army Corps of Engineers (USACE) as well as the applicable Regional Water Quality Control Board (RWQCB). Waters of the State are subject solely to the jurisdiction of the applicable RWQCB. Impacts to aquatic resources, if present, would potentially require obtaining permits and authorizations from one or both agencies. The results presented in this document are preliminary and subject to verification by the USACE.

The Calaveras County Water District (CCWD) is proposing to improve the existing Copper Cove Water System to reliably maintain potable water services to the expanding community. The total Copper Cove Water System improvements would be constructed within a total of four phases. However, this ARD covers the first two phases of the project: Phase 1 and Phase 2. Phase 1 would include the replacement of the existing Redwood Tank on the B-Tank Site and the construction of a new Water Treatment Plant (WTP) Clearwell on the Copper Cove WTP Site. Phase 2 would include the rehabilitation of the existing Steel Tank on the B-Tank Site, and the rehabilitation of the existing WTP Clearwell on the Copper Cove WTP Site. Implementation of Phase 1 and Phase 2 would result in a net reduction in water treatment/storage capacity from approximately 1-million gallons to 750,000-gallons.

1.1 PROJECT LOCATION

The 2.76-acre Study Area is located on Pleasant Valley Road in the community of Copperopolis in Calaveras County, California (**Appendix A, Figure 1**). The Project consists of two separate locations one is located on Kiva Place (Clearwell) and is a 1.98-acre site and the other site is located on Signal Hill Trail (B Tank Site) and consists of a 0.78 acre site. These two locations are collectively referred to as the Study Area and are located in the community of Copper Cove Village in Calaveras County, California (Study Area). The Study Area is situated in Sections 25 and 26 of Township 1 North and Range 12 East on the U.S. Geological Survey (USGS) "*Melones Dam, California"* 7.5-minute quadrangle map. The approximate center of the Study Area of each Study Area component is at latitude 37.912220° and longitude -120. 613331°, NAD 83 (B Tank Site) and latitude 37.908838° and longitude -120.615755°, NAD 83 (Clearwell Site). The elevation of the Study Area is between 785 feet to 985 feet in elevation.

1.2 DRIVING DIRECTIONS

From downtown Sacramento, travel south on State Route (SR) 99 for approximately 45.6 miles and take the SR-4 east exit (Exit 252B) and turn left/east onto SR-4. Travel 34.2 miles east towards Copperopolis and turn right/south onto Town Square Road and in 450 feet turn right onto Little John Road. Follow Little John Road for 5.5 miles and turn right onto Kiva Place. The Clearwell Site is accessible from Kiva Place through a gate. To access the B Tank Site from the Clearwell Site Road turn left from Kiva Place onto Little John Road and travel north 0.4 mile to Moccasin Street/Court. Continue on Moccasin Street/Court for 0.1 mile and turn right onto Bayview Drive. Continue on Bayview Drive for 0.1 mile and

turn right onto Signal Hill Trail. Travel 0.2 mile to Signal Hill Trail to the B Tank Site. Parking is available along Signal Hill Trail and access is available through a locked gate.

1.3 AGENT CONTACT INFORMATION

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Email: PatrickM@helixepi.com
Contact: Patrick Martin

1.4 REGULATORY SETTING

1.4.1 Waters of the U.S.

Unless considered an exempt activity under Section 404(f) of the Federal Clean Water Act, any person, firm, or agency planning to alter or work in "waters of the U.S.," including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403). Activities exempted under Section 404(f) are not exempted within navigable waters under Section 10.

"Waters of the U.S." are defined as: "All waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; the territorial sea; or wetlands adjacent to these waters (33 Code of Federal Regulations [CFR] Part 328)."

Within non-tidal waters that meet the definition cited above and, in the absence of adjacent wetlands, the indicator used by the USACE to determine the lateral extent of its jurisdiction is the ordinary high water mark (OHWM) – the line on the shore established by fluctuations of water and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, and/or the presence of litter and debris.

Wetlands are defined under the CFR Part 328.3 as those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The USACE has determined that not all features which meet the wetland definition are, in fact, considered to be waters of the U.S. Normally, features not considered as waters of the U.S. include (a) non-tidal drainage and irrigation ditches excavated on dry land; (b) artificially irrigated areas which would revert to upland if the irrigation ceased; (c) artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock

watering, irrigation, settling basins, or rice growing, (d) artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons, and (e) waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States (see 33 CFR 328.3(a)). Other features may be excluded based on Supreme Court decisions (e.g., SWANCC and Rapanos) or by regulation.

Federal and state regulations pertaining to waters of the U.S., including wetlands, are discussed below.

The Clean Water Act (33 United States Code (USC) 1251-1376) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. obtain a state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there were no practicable alternative that would have less adverse impacts.

1.4.2 Waters of the State

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Clean Water Act. Although the Clean Water Act is a federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE permits for fill and dredge discharges within Waters of the United States, and now also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On May 28, 2020, the SWRCB implemented the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California (SWRCB 2019). The Procedures consist of four major elements:

I. A wetland definition;

II. A framework for determining if a feature that meets the wetland definition is a water of the state;
III. Wetland delineation procedures; and
IV. Procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

Under the Procedures and the State Water Code (Water Code §13050(e)), "waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." "Waters of the State" includes all "waters of the U.S."

More specifically, a wetland is defined as: "*An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation*." The wetland definition encompasses the full range of wetland types commonly recognized in California, including some features not protected under federal law, and reflects current scientific understanding of the formation and functioning of wetlands (SWRCB 2019).

Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to waters of the State, which includes waters of the U.S. and non-federal waters of the State, requires filing of an application under the Procedures.

2.0 ENVIRONMENTAL SETTING

2.1 LOCATION DESCRIPTION

The Study Area and surrounding area has changed significantly over the last 50 years based on a review of historic aerial imagery (NETR 2022). The majority of the land surrounding the Study Area consists of rural residences, a water treatment facility and annual grasslands with wetlands. A canal that passes through the Study Area at the Clearwell Study Area was constructed between 1959 and 1984 and is tributary to drainages downstream. Other canals are present in the area that are similar and appear to convey water to stock ponds from other drainages. An aerial image of the Study Area is included in Appendix B, Figure 3.

2.2 EXISTING CONDITIONS

Terrain in the Study Area is comprised of slight hillslopes at each site, with the B Tank Site Study Area located at a higher elevation than Clearwell Study Area. The B Tank Site Study Area is dominated by a developed area with two water tanks and support structures. The Study Area at Clearwell consists of the developed areas associated with existing structures such as water tanks and support structures and paved or graveled areas in addition to areas dominated by blue oak woodland, annual grassland, a seasonal wetland swale and an excavated canal that is no longer used or maintained. Elevations on the site range from approximately 780 feet to 985feet above mean sea level (msl).

2.3 FIELD CONDITIONS

Fieldwork for the aquatic resources delineation was conducted on November 10, 2022. The weather during the site visit was generally dry, sunny, and cool, with temperatures ranging between 40 to 55 degrees Fahrenheit (weather.com). The initial site visit was conducted following a precipitation event and freezing conditions.

2.4 INTERSTATE OR FOREIGN COMMERCE CONNECTION

The Study Area is located primarily in the Rock Creek-French Camp Slough watershed (USGS Hydrologic Unit Code (HUC) 18040051). A portion of the B Tank Well Site of the Study Area is within the Upper Stanislaus River watershed (HUC 18040010). All drainages adjacent to the Study Area are ultimately tributary to the San Joaquin River, which is a traditional navigable waters of the U.S. However, aquatic resources in the Study Area do not cross state boundaries nor are they used for foreign commerce.

3.0 METHODS

3.1 DATA GATHERING

The following sources were used in preparation of this jurisdictional delineation:

- Aerial photography taken April 3, 2020 downloaded from Esri®;
- U.S. Fish and Wildlife Service's (USFWS) National Wetland Inventory online wetland mapper (USFWS 2022);
- Natural Resources Conservation Service (NRCS) web soil survey (NRCS 2022b);
- Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987);
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual*: Arid West* Region (Version 2.0) (USACE 2008);
- Field Indicators of Hydric Soils in the United States (Version 8.2) (NRCS 2018); and
- USACE 2020 National Wetland Plant List for the Arid West Region (USACE 2020).

3.2 BOUNDARIES OF THE DELINEATION

The delineation area includes the estimated 2.76-acre Study Area (Appendix B). Refer to the Delineation Map in **Appendix B** for the limits of the delineation.

3.3 DETERMINATION PROCEDURES

3.3.1 Delineation Methods

Criteria for determining the presence of wetlands subject to Corps jurisdiction are presented in the Corps *Wetlands Delineation Manual* (Environmental Laboratory 1987) and in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008).

Key criteria for determining the presence of wetlands subject to Corps jurisdiction (Environmental Laboratory 1987) are:

a) The presence of inundated or saturated soil conditions resulting from permanent or periodic inundation by ground water or surface water.

b) A prevalence of vegetation typically adapted for life in saturated soil conditions (hydrophytic vegetation).

To assess whether wetlands are present, the Corps requires that data be recorded on three environmental parameters: hydrology, soil, and vegetation. Positive wetland indicators for all three parameters are generally required for the Corps to assert jurisdiction.

Fieldwork for the jurisdictional delineation was conducted by HELIX Senior Biologist, Patrick Martin. The fieldwork was conducted November 10, 2022, in accordance with the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (USACE 2008). Vegetation, soils, and hydrologic characteristics were visually assessed by conducting meandering transects through the entire Study Area to obtain 100 percent visual coverage.

The Munsell Color (Gretag Macbeth 2000) chart was used to determine moist soil colors and thus, hydric soils. Data were taken at eight representative sample points throughout the Study Area to classify the site's soils, vegetation, and hydrologic characteristics. Field data forms are provided in Appendix E.

Plant species identifiable at the time of the survey were recorded (refer to Appendix C for the list of plants observed with the wetland indicator status for each species). Plant species were identified and categorized as shown in **Table 1**.

Table 1
Wetland Indicator Status Rating

Indicator Status (abbreviation)	Characterization
Obligate (OBL)	Occur almost always under natural conditionsin wetlands
Facultative Wetland (FACW)	Usually occur in wetlands butoccasionally found in non-wetlands
Facultative (FAC)	Equally likely to occur in wetlands and non-wetlands
Facultative Upland (FACU)	Usually occur in non-wetlands butoccasionally found in wetlands
Upland (UPL)	Occur in wetlands in another region, but almost always occurs under natural conditions in non-wetlands in theregion specified

Geographic coordinates of aquatic resources boundaries and locations of sample points were recorded in the field with an electronic tablet wirelessly connected to a Geode® (Global Navigation Satellite

System (GNSS)) receiver unit with sub-meter accuracy. Aerial imagery was also used to assist with the development of the boundaries of some of the aquatic resources. These data were exported into ArcMap 10.7.1® and used to produce the Aquatic Resources Delineation Map included as **Appendix B**. Representative photographs are included as **Appendix D**.

3.3.2 Plant/Habitat Nomenclature

Habitat nomenclature is generally derived from *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988). Plant taxonomy nomenclature is taken from *The Jepson Manual: Vascular Plants of California, second edition* (Baldwin et al. 2012).

4.0 RESULTS

4.1 VEGETATION COMMUNITIES/HABITAT TYPES

Three upland communities occur within the Study Area: blue oak woodland (0.590 acre), annual grassland (0.425 acre), and developed (1.659 acres). Upland vegetation communities/habitat types are described in detail below. Aquatic resources are discussed below in Section 5.0.

4.1.1 Blue Oak Woodland

Blue oak woodland habitat dominates the northern boundary of the Study Area and is the dominant natural vegetation community in the surrounding vicinity. Vegetation in this habitat consists primarily of blue oak (*Quercus douglasii*) (--) and interior live oak (*Quercus wislizeni*) (--) dominating parts of the shrub layer underlain with an annual herbaceous species in the understory. Annual vegetation in the understory of this community resembles that of the annual grassland habitat described below. Oak woodland is located between valley foothill riparian and an ephemeral drainage to the east and is bordered by a school to the west of the Study Area.

4.1.2 Annual Grassland

Annual grassland habitats are open grasslands composed primarily of annual plant species. Many of these species also occur as understory plants in oak woodland and other habitats. Structure in annual grassland depends largely on weather patterns and livestock grazing; dramatic differences in physiognomy, both between seasons and between years, are characteristic of this habitat. Dominant species observed within annual grassland habitat in the Study Area include medusahead (*Elymus caput-medusae*) (--), wild oats (*Avena fatua*) (--), narrow tarplant (*Holocarpha virgata*) (--). Purple needle grass (*Stipa pulchra*) (--) is also present in the Study Area.

4.1.3 Developed

Developed habitat consists of paved roads, graveled areas, structures such as water tanks. Developed habitat consists primarily of hard paved surfaces which generally do not provide habitat for plants and wildlife. Leaking water tanks at both the B Tank site and the Clearwell site both support wetland aeras where the tanks are leaking and support wetland vegetation, but do not meet wetland criteria. Native and nonnative trees, shrubs and herbs are present in developed habitat that could provide habitat for wildlife, however developed areas are routinely treated chemically and mechanically for vegetation.

4.2 CLIMATE

The climate in Calaveras County is Mediterranean, characterized by wet, cool winters and dry, hot summers. The nearest weather station to the Study Area with complete climate data is located at New Melones Dam, California approximately 10 miles northeast of the Study Area and is situated at a higher elevation in the Sierra Nevada foothills to the Study Area. Average daily maximum and minimum temperatures are 66° and 98° Fahrenheit (F) in July (NRCS 2022a). Average daily maximum and minimum temperatures are 58° and 38° F in January (NRCS 2022a). The mean annual precipitation is 27.73 inches, with less than one percent occurring as snow. The weather station received approximately 2.04 inches of rainfall in the 2022 season leading up to the first field delineation visit on November 10, 2022 (NRCS 2022a), which was near average for this time of year or 92 percent of a normal year, in addition to some late season rain for the 2021/2022 rain year in August and September. In the 2021/2022 rain year, the weather station received 17.36 inches, which was 63 percent of normal (NRCS 2022a).

4.3 SOILS

The NRCS has mapped four soil units within the Study Area: Bonanza-Loafercreek complex, 3 to 15 percent slopes, Copperopolis-Whiterock complex, 3 to 15 percent slopes, rocky, Urban land-Copperopolis complex, 0 to 15 percent slopes, and Urban land-Loafercreek-Dunstone complex, 3 to 15 percent slopes (Appendix A: Figure 4). The general characteristics and properties associated with these soil types are described below (NRCS 2022b).

Bonanza-Loafercreek complex, 3 to 15 percent slopes is a well-drained soil that consists of loam, and gravelly clay loam over bedrock derived from residuum weathered from metavolcanic rock (volcanic soil). Bonanza-Loafercreek complex, 3 to 15 percent slopes is well drained and is found on hills and backslopes. The restrictive layer consists of lithic and paralithic bedrock at 20 to 49 inches below the surface. This soil series is not prime farmland. This soil unit is not considered hydric (NRCS 2022).

Copperopolis-Whiterock complex, 3 to 15 percent slopes, rocky, is a well-drained soil that consists of channery loam, and extremely gravelly loam over bedrock derived from residuum weathered derived from slate. Copperopolis-Whiterock complex, 3 to 15 percent slopes, rocky is well drained and is found on low hills and summits. The restrictive layer consists of lithic bedrock at 10 to 20 inches below the surface. This soil series is not prime farmland. This soil unit is not considered hydric (NRCS 2022).

Urban land-Copperopolis complex, 0 to 15 percent slopes, is a well-drained soil that consists of loam, clay loam, very gravelly clay loam over bedrock that is derived from colluvium over residuum derived from metavolcanic rock (volcanic soil). Urban land-Copperopolis complex, 0 to 15 percent slopes is well drained and is found on hills and summits. The restrictive layer consists of lithic and paralithic bedrock at 20 to 49 inches below the surface. This soil series is not prime farmland. This soil unit is not considered hydric (NRCS 2022).

Urban land-Loafercreek-Dunstone complex, 3 to 15 percent slopes, is a well-drained soil that consists of loam, clay loam, very gravelly clay loam over bedrock that is derived from colluvium over residuum derived from metavolcanic rock (volcanic soil). Urban land-Loafercreek-Dunstone complex, 3 to 15 percent slopes is well drained and is found on hills and backslopes. The restrictive layer consists of lithic and paralithic bedrock at 20 to 49 inches below the surface. Minor soil components of this soil unit are considered hydric in depressions (NRCS 2022).

4.4 HYDROLOGY

Terrain in the Study Area is comprised of slight hillslopes at each site, with the Study Area at the B Tank Site located at a higher elevation than Clearwell Study Area. The B Tank Site Study Area is dominated by a developed area with two water tanks and support structures. The Study Area at Clearwell consists of the developed areas associated with existing structures such as water tanks and support structures and paved or graveled areas in addition to areas dominated by blue oak woodland, annual grassland, seasonal wetland swale and an excavated canal that is no longer used or maintained but still conveys water. Elevations on the site range from approximately 780 feet to 985 feet in elevation.

The Study Area is primarily in the Rock Creek-French Camp Slough watershed (USGS Hydrologic Unit Code (HUC) 18040051). A portion of the B Tank Well Site of the Study Area is within the Upper Stanislaus River watershed (HUC 18040010). All drainages adjacent to the Study Area are tributary to the San Joaquin River, which is a traditional navigable waters of the U.S.

4.5 USFWS NATIONAL WETLANDS INVENTORY

The USFWS National Wetlands Inventory (NWI) online database was queried to identify whether any wetlands or other waters of the U.S. mapped by the USFWS are present in the Study Area. The query identified one riverine aquatic resource within the Study Area (Appendix A, Figure 5). The NWI also shows a palustrine emergent wetland, excavated freshwater pond and freshwater emergent wetland in the area surrounding the Study Area, which includes some ponds of the treatment facility.

5.0 AQUATIC RESOURCES

As depicted in **Table 2** (located at this end of this section), a total of 0.086 acre of aquatic resources have been delineated in the Study Area. Wetland features mapped within the Study Area include seasonal wetland swale (0.001 acre), canal (0.054 acre and 309 linear feet) and ditch (0.031 acre) (**Appendix B**).

Table 2
Aquatic Resources in the Study Area

Feature	Lat./Long.	Cowardin Classification[1]	Area (ac.)	Area (sq. ft.)	Length (ft.)	Avg. Width (ft.)
Wetlands[1]						
WS-1	38.694146/ -120.820938	PEM1C	0.001	43.56	--	--
D-1	37.908746/-120.616024.	PEM1Cx	0.031	1,350.36	--	--
		Wetlands Total	**0.032**	**1,393.92**	--	--
Other Waters						
C-1	38.694070/ -120.821080	R4SBCx	0.054	2,352.24	309	12
		Other Waters Total	**0.054**	**2,352.24**	**309**	**--**
		Total Aquatic Resources	**0.086**	**3,746.16**	**309**	--

[1] Cowardin Codes for Wetlands: System (P = Palustrine; R = Riverine) Subsystem (4 = Intermittent)– Class (EM = Emergent; SB = Streambed) – Subclass (1 = Persistent) — Water Regime (C = Seasonally Flooded) –Special Modifiers (x = excavated)

[1] R = Valley Foothill Riparian; SP = Seep; ED = Ephemeral Drainage

Seasonal Wetland Swale

A total of 0.001 acre of seasonal wetland swale occurs on the Study Area in the northwestern corner of the Clearwell Site and appears to carry surface runoff from surrounding hillslopes of the Study Area where it intersects a ditch off site of the Study Area where it enters a settling pond that is tributary to Littlejohns Creek. Swales on site meet the 3-paramenter wetland criteria and are typically located in steeper locations and can be associated with vernal pools, which can either drain into the swale or are located in deeper sections of the swale. The swale boundaries are characterized by slight shifts in micro-topography over low areas on the landscape between hillslopes as well as shifts in vegetation. A defined ordinary high-water mark is not present, and these features are more similar to seasonal wetlands. Hydric soil in the swale is fulfilled by a depleted matrix with prominent redoximorphic features located along pore linings of living root channels. Wetland hydrology was met by oxidized rhizospheres, drainage pattern and saturation visible on aerial imagery dated to April 6, 2022. The swale was dry during the site visit in November 2022 following early precipitation for the season. The swale supports a predominance of hydrophytic herbaceous plant species such as Italian ryegrass (*Festuca perennis*) (FAC), and Mediterranean barley (*Hordeum marinum ssp. gussoneanum*) (FAC) in addition to upland medusahead.

Canal

A total of 0.054 acre and 309-linear feet of canal is present in the Study Area. Canal in the Study Area is an excavated feature, that likely originated between 1959 and 1984 (NETR 2022). This feature was constructed in part of the seasonal wetland swale WS-1 described above and was likely constructed in other potential waters of the U.S. that was likely used to both drain surrounding hillslopes and carry water between drainages to possibly a pond used for cattle. The canal has steeply incised banks with spoils from excavation of the canal cast downslope into WS-1. The canal is not a part of the wastewater treatment facility and is not managed by the facility. The canal exits the Study Area to the east and reenters the Study Area where there is a confluence with another wetland swale (out of the Study Area) before it enters a culvert in the Study Area. It is unknown where the culvert carries water to, but it likely is diverted to the south where it enters a complex of drainages and wetlands that are tributary to Littlejohns Creek, as evidenced from aerial imagery from 1998 when more of the canal was still above ground (Google Earth 2022). This canal supports hydric soil, wetland hydrology and hydrophytic vegetation and functions similar to a natural drainage feature with a bed and a bank that channels water from surrounding hillslopes and likely only flows during periods of precipitation. Hydric soil in the swale is fulfilled by a depleted matrix with prominent redoximorphic features located along pore linings of living root channels. Wetland hydrology was met by surface water, oxidized rhizospheres, drainage pattern and saturation visible on aerial imagery dated to April 6, 2022. Upstream of the Study Area this canal is dominated almost entirely by common cattail (*Typha latifolia*) (OBL), an obligate hydrophyte. In the Study Area this feature is dominated by tall flatsedge (*Cyperus eragrostis*) (FACW), and Italian ryegrass.

Ditch

A total of 0.031 acre of ditch was delineated within the Study Area, consisting of one feature that is mostly lined with asphalt with soil over the ashphalt, muck and hydrophytic vegetation overlying the ditch. The ditch drains a water tank at the Clearwell site, which continues out of the Study Area and to a series of ponds that drain to Littlejohns Creek to the south. The ditch supports fresh emergent wetland vegetation which consists of slender rush (*Juncus tenius*) (FACW) and common cattail. No other

drainages or wetlands drain into this constructed drainage and is created entirely as a function of the wastewater treatment facility. The ditch is mostly underlain by asphalt but soil has been deposited into the ditch and a loamy gleyed matrix is present that fulfills hydric soil criteria (over the asphalt). Wetland hydrology is provided by the surface water emanating from the water tank. Outside of the Study Area this ditch continues, and it intercepts WS-1 before it drains into a facility pond, which overflows into natural drainages to the south that tributary to Littlejohns Creek.

5.1 POTENTIAL WATERS OF THE U.S.

A total of 0.086 acre of aquatic resources were delineated in the Study Area consisting of 0.055 acre of potentially jurisdictional waters of the U.S. including seasonal wetland swale (0.001 acre), and drainages consisting of one canal (0.054 acre and 309 linear feet). The canal was constructed between 1959 and 1984 as part of the WS-1 described above and was likely constructed in other potential waters of the U.S. that drain the surrounding hillslopes upstream of the Study Area. The canal intercepts one drainage before reentering the Study Area and which are ultimately tributary to Littlejohns Creek south of the Study Area. All aquatic resources are potentially jurisdictional waters of the U.S. All potential wetlands and other waters of the U.S. in the Study Area are ultimately tributary to the San Joaquin River, a traditional navigable water.

The ditch (0.031 acre) is part of the Copper Cover Sewer Treatment Plant infrastructure to control wastewater from the facility. This ditch captures wastewater and delivers it to a pond out of the Study Area and is designed to capture polluted water runoff from the treatment plant before it reaches waterways downstream. This ditch is part of a waste treatment system, which remove or reduce pollution from discharging directly into a water of the U.S. The ditch is not expected to be considered jurisdictional under Section 404 or 401 of the Clean Water Act, as waste treatment systems are not considered waters of the U.S.

5.2 POTENTIAL WATERS OF THE STATE

Waters of the State include natural and artificial wetlands and streams and all waters of the U.S. Within the Study Area, a total of 0.086 acre of aquatic resources have been delineated in the Study Area. Of this 0.086 acre of aquatic resources, 0.055 acre of potentially jurisdictional waters of the State including canal (0.054 acre), and seasonal wetland swale (0.001 acre) are present within the Study Area. The canal was constructed between 1959 and 1984 as part of the WS-1 described above and was likely constructed in other potential waters of the U.S. that drain the surrounding hillslopes upstream of the Study Area which are ultimately tributary to Littlejohns Creek south of the Study Area. The canal intercepts one drainage before reentering the Study Area and where it continues to drain to the south.

The ditch (0.031 acre) likely does not qualify as a water of the State. According to the Procedures, artificial wetlands that were constructed and are currently used and maintained for one or more of the following purposes are not considered waters of the State: industrial or municipal wastewater treatment or disposal, settling of sediment, detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program (SWRCB 2019). The ditch was constructed, is asphalt lined and is being maintained to treat stormwater and polluted runoff from the treatment facility.

6.0 SUMMARY

HELIX conducted an aquatic resources delineation of the estimated 2.76-acre Study Area for the Copper Cove Water System Improvements Project located in Copperopolis, Calaveras County, California. A total of 0.086 acre of aquatic resources have been delineated in the Study Area. Potential jurisdictional waters of the U.S. and state including canal (0.054 acre), and seasonal wetland swale (0.001 acre). The ditch is a part of the wastewater treatment facility and is not likely to be considered a water of the U.S. or water of the State. A total of 0.055 acre of wetlands and drainages are believed to be waters of the U.S. and waters of the State. The results presented in this document are preliminary and subject to verification by the resource agencies.

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Appendix D

Cultural Resources Assessment

Copper Cove Water System Improvements Project Phases 1 and 2

Cultural Resources Assessment

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EXECUTIVE SUMMARY

This report summarizes the findings of a Cultural Resources Assessment completed by HELIX Environmental Planning, Inc. (HELIX) for the 2.76-acre Copper Cove Water System Improvements Project (project) located in the unincorporated community of Copperopolis, Calaveras County, California. The project would take place in two locations within the community's limits: The Copper Cove Water Treatment Plant (WTP) Site and the B-Tank Site. The proposed Copper Cove WTP Site is approximately 2.0-acres and is located at 5130 Kiva Place, on Assessor's Parcel Number (APN) 065032001. The proposed B-Tank Site is approximately 0.8-acre and is located at 3748 Signal Hill Trail on APN 065015002. The project site is located in Section 25 and 26t, Township 1 North, and Range 12 East of the US Geological Survey (USGS) 7.5-minute Melones Dam quadrangle map. The project proponent is the Calaveras County Water District (CCWD).

As part of this CRA, HELIX Archaeologists requested a records search at the Central California Information Center (CCIC) on October 27, 2022, which revealed that four studies have previously been conducted within a 0.25-mile radius of the project's Area of Potential Effect (APE), and that none of these studies included the APE as part of their survey areas. No cultural resources have been previously recorded within the proposed project's APE, though three resources have been previously recorded within a 0.25-mile radius of the APE.

On November 1, 2022, HELIX requested that the Native American Heritage Commission (NAHC) conduct a search of their SLF for the presence of Native American sacred sites or human remains in the vicinity of the proposed project area. On December 9, 2022 the NAHC reported that the SLF search results were negative. However, the NAHC's response also suggested that the absence of specific site information in the SLF does not definitely indicate the absence of cultural resources in the vicinity of the project. As a result, the NAHC recommended that HELIX reach out to points of contact for 12 Native American tribes who may have knowledge of cultural resources within the project vicinity. HELIX sent letters to these 12 Native American Tribal points of contact on December 13, 2022. As of the writing of this report, no responses have been received from the recommended points of contact.

HELIX Senior Archaeologist Ben Siegel M.A., RPA surveyed the entirety of the APE on November 10, 2022. The lone cultural resource encountered during the survey proved to be a redwood water tank which is known to be over 45 years old in age. The tank was given the field name "CCWD Redwood Tank" and additional efforts were made to record features from this water tank on to the appropriate California State Parks DPR forms. The completed DPR forms for this structure, replete with a series of detailed photographs of this cultural resource can be found in Appendix E of this report. HELIX assessed the eligibility of the CCWD Redwood Tank against the criteria for inclusion in both the California Register of Historic Places (CRHR), and the National Register of Historic Places (NRHP) and recommends the resource as ineligible for inclusion in either register. An explanation of this assessment is provided in Section 6.1.1 of this report.

In light of the CCWD Redwood Tank's ineligibility for either the CRHR or NRHP, HELIX recommends that there are no historical resources (under CEQA) and no historical properties (under Section 106 of the National Historical Preservation Act) that would require consideration during project implementation. However, HELIX does recommend that the Inadvertent Discovery Plan outlined in Sections 6.2.2 and 6.2.3 of this report are adopted by project proponents to prepare for the unlikely event that previously

unrecorded resources are encountered to excavations and ground disturbances associated with the proposed project.

1.0 PROJECT BACKGROUND

1.1 INTRODUCTION

This report summarizes the findings of a Cultural Resources Assessment (CRA) completed by HELIX Environmental Planning, Inc. (HELIX) for the 2.76-acre Copper Cove Water System Improvements Project (project), located in the unincorporated community of Copperopolis, Calaveras County, California.

Calaveras County Water District (CCWD) proposes to improve and expand the existing Copper Cove Water System to reliably maintain potable water services to the expanding community. Phase 1 of the improvement project would include the replacement of the existing redwood tank located on the B-Tank Site and the construction of a new water treatment plant (WTP) on the Copper Cove WTP Site. Phase 2 of the improvement project would include the rehabilitation of the existing steel tank on the B-Tank Site and the rehabilitation of the existing WTP on the Copper Cove WTP Site. Implementation of Phase 1 and Phase 2 would result in a net reduction in water treatment/storage capacity from approximately 1 million gallons to 750,000 gallons. The Section 106 review process normally involves a four-step procedure described in detail in the regulations implementing Section 106 of the National Historical Preservation Act (NHPA) (36 CFR Part 800). The following is a summary of the basic requirements of the process:

- Identify and evaluate historic properties in consultation with the State Historic Preservation Office (SHPO) and interested parties.
- Assess the effects of the undertaking on properties that are eligible for inclusion in the National Register of Historic Places (NRHP).
- Consult with the SHPO, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the Advisory Council on Historic Preservation.
- Proceed with the project according to the conditions of the agreement.

HELIX has conducted this CRA to identify historic properties that could potentially be affected by the proposed undertaking. Under federal regulations, where there is a federal undertaking on non-federal land, a consultant may gather the information necessary for the federal agency to meet its responsibilities under Section 106, although the agency official remains legally responsible for all required findings and determinations [36 CFR Part 800.2(a)(3).

Cultural resources investigations conducted in support of this project are also subject to provisions of the California Environmental Quality Act (CEQA), as defined by Section 15064.5 of the CEQA Guidelines, with Calaveras County (County) acting as the Lead Agency. This report documents HELIX's efforts to assess the potential of ground disturbances associated with this project to affect historical resources (i.e., prehistoric or historic-era cultural resources that meet the criteria of significance under CEQA). The County must determine the potential for the proposed project to result in significant impacts to historical resources and must consider mitigation measures and alternatives to avoid those impacts as part of their decision-making process.

1.2 PROJECT DESCRIPTION

The project proposes to improve and expand the existing Copper Cove Water System to reliably maintain potable water services to the expanding community. The proposed project is located within the Copper Cove Subdivision, in the unincorporated community of Copperopolis, Calaveras County. The project would take place in two locations within the community's limits: the Copper Cove WTP Site and the B-Tank Site. The proposed Copper Cove WTP Site is approximately 2.0-acres and is located at 5130 Kiva Place, on Assessor's Parcel Number (APN) 065032001. The proposed B-Tank Site is approximately 0.8-acre and is located at 3748 Signal Hill Trail on APN 065015002. The project site is located in Sections 25 and 26, Township 1 North, and Range 12 East of the U.S. Geological Survey (USGS) 7.5-minute Melones Dam quadrangle map (Figure 1 and Figure 2; Figures are provided in Appendix A). The project proponent is the Calaveras County Water District (CCWD).

The proposed improvements would be completed in two (2) phases: Phase 1 and Phase 2. Implementation of Phase 1 and Phase 2 would result in a net reduction in water treatment/storage capacity from approximately 1-million gallons to 750,000-gallons.

Phase 1 would include the replacement of the existing CCWD Redwood Tank on the B-Tank Site and the construction of a new WTP Clearwell on the Copper Cove WTP Site. The existing CCWD Redwood Tank would be replaced with a 360,000-gallon welded steel water tank that would be approximately 22.25 feet above grade. The proposed water tank would be located within the same footprint of the existing CCWD Redwood Tank as it would require no relocation or extra construction work aside from the already-planned CCWD Redwood Tank demolition. The new WTP Clearwell would include the construction of a new 300,000-gallon tank that would be approximately 13 feet above grade. Construction of the new Clearwell would be located north of the existing Clearwell, in an area with open space and no existing facilities. However, the proposed WTP Clearwell would be at a higher ground elevation than the existing Clearwell, thereby requiring a contractor to cut into the hill to lower the ground elevation by an average of 13 feet to match the existing Clearwell elevation. Construction would require 0.5-acre grading, tree removal, clearing, and grubbing.

Phase 2 would include the rehabilitation of the existing CCWD Steel Tank on the B-Tank Site, the rehabilitation of the existing WTP Clearwell on the Copper Cove WTP Site, and the rehabilitation of the B Zone Booster Pump Station. The existing CCWD Steel Tank would be modified and rehabilitated instead of constructing a new tank. The side shells of the CCWD Steel Tank would be cut to reduce the tank capacity to 360,000 gallons. The rehabilitated CCWD Steel Tank would be approximately 20 feet above grade. The existing 300,000-gallon WTP Clearwell would be modified and rehabilitated and would require, at a minimum, the replacement of its roof plate, rafters, and center column due to degradation and delamination. The rehabilitated 300,000-gallon WTP Clearwell would be approximately 16 feet above grade. Within the B Zone Booster Pump Station and control building, the mechanical, electrical, and instrumentation components are aged and need to be replaced to improve staff safety and system reliability. The building and backup power supply are also in poor condition and would need to be replaced.

1.3 AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) for the proposed project is defined as the geographic area where project activities may directly or indirectly cause changes in the character or use of historic properties of

prehistoric or historic age, if any such properties exist. The APE for the undertaking is intended to address both current and future development, and therefore includes the 2.76-acres of the proposed project area (Figure 3 and Figure 4). The APE is surrounded by rural residences, a water treatment facility, and open grassland. The terrain within the APE consists of slight hillslopes at each site, with the B-Tank Site located at a higher elevation than the Copper Cove WTP Site.

1.4 PERSONNEL

Benjamin D. Siegel, RPA., conducted the pedestrian survey of the project's APE and authored this report. Mr. Siegel has over 12 years of private sector cultural resource management and technical report writing experience for regulatory compliance. He has directed cultural resource management projects across the United States, has authored or co-authored cultural resource and interdisciplinary impact assessments associated with development projects that have required compliance with Section 106 of the National Historic Preservation Act, the CEQA, NEPA, and FERC regulations, and has helped guide numerous projects through SHPO and THPO review processes in several states and jurisdictions. Mr. Siegel meets the U.S. Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology. A resume for Mr. Siegel is provided in Appendix B.

2.0 REGULATORY FRAMEWORK

2.1 FEDERAL REGULATIONS

2.1.1 National Environmental Policy Act

The NEPA and its supporting federal regulations establish certain requirements that must be adhered to for any action "financed, assisted, conducted or approved by a federal agency." In making a decision on the issuance of federal grant monies or a permit to conduct work on federal lands for components of the proposed action, the federally designated lead agency pursuant to NEPA is required to "determine whether the proposed action may significantly affect the quality of the human environment." NEPA requires the systematic evaluation of potential environmental impacts of a proposed action and alternative actions, the identification of adverse effects, and consultation with any federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved. With regard to cultural resources, NEPA states, "It is the continuing responsibility of the Federal Government to use all practicable means . . . to preserve important historic, cultural, and natural aspects of our national heritage." (42 USC 4331). The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP, or may cause loss or destruction of significant scientific, cultural, or historical resources, must be considered [40 Code of Federal Regulations (CFR) 1508.27(b)8].

2.1.2 National Historic Preservation Act of 1966 (16 USC 470)

The NHPA of 1966 (16 USC 470) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at the federal, state, and local levels. The NHPA authorized the expansion and maintenance of the NRHP, established the position of State Historic Preservation Officer and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out

the purposes of the NHPA, assisted Native American tribes in preserving their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

2.1.3 Section 106

Section 106 of the NHPA states that federal agencies with direct or indirect jurisdiction over federally funded, assisted, or licensed undertakings must take into account the effect of the undertaking on any historic property that is included in or eligible for inclusion in the NRHP, and that the ACHP must be afforded an opportunity to comment on such undertakings through a process outlined in 36 CFR Part 800. The Section 106 process involves the identification of significant historic and archaeological resources ("historic properties") within an APE, the determination of whether the undertaking will cause an adverse effect on historic properties, and the resolution of those adverse effects through execution of a Memorandum of Agreement. In addition to the ACHP, interested members of the public—including individuals, organizations, and agencies (such as the California Office of Historic Preservation)—are provided with opportunities to participate in the process.

2.1.4 National Register of Historic Places

The NRHP was established by the NHPA as "an authoritative guide to be used by federal, state, and local governments, private groups, and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 CFR 60.2).

The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

- Criterion A: It is associated with events that have made a significant contribution to the broad patterns of our history.
- Criterion B: It is associated with the lives of persons who are significant in our past.
- Criterion C: It embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction.
- Criterion D: It has yielded, or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

Cemeteries, birthplaces, graves of historic figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, and properties that are primarily commemorative in nature are not considered eligible for the NRHP unless they satisfy certain conditions. In general, a resource must be at least 50 years old to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

2.1.5 Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the inadvertent discovery and/or intentional removal of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

2.1.6 American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) of 1978 was enacted to protect and preserve the traditional religious rights and cultural practices of Native Americans. These rights include, but are not limited to, access of sacred sites, freedom to worship through ceremonial and traditional rights and use, and possession of objects considered sacred. The AIRFA requires that federal agencies evaluate their actions and policies to determine if changes are needed to ensure that Native American religious rights and practices are not disrupted by agency practices. Such evaluations are made in consultation with native traditional religious leaders.

2.2 STATE REGULATIONS

2.2.1 California Environmental Quality Act

Pursuant to CEQA, a historical resource is a resource listed in, or eligible for listing in, the California Register of Historical Resources (CRHR). In addition, resources included in a local register of historic resources, or identified as significant in a local survey conducted in accordance with state guidelines, are also considered historic resources under CEQA, unless a preponderance of the facts demonstrates otherwise. According to CEQA, the fact that a resource is not listed in, or determined eligible for listing in, the CRHR, or is not included in a local register or survey, shall not preclude a Lead Agency, as defined by CEQA, from determining that the resource may be a historic resource as defined in California Public Resources Code (PRC) Section 5024.1.7.

CEQA applies to archaeological resources when (1) the historic or prehistoric archaeological resource satisfies the definition of a historical resource, or (2) the historic or prehistoric archaeological resource satisfies the definition of a “unique archaeological resource.” A unique archaeological resource is an archaeological artifact, object, or site that has a high probability of meeting any of the following criteria (PRC § 21083.2(g)):

1. The archaeological resource contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.

2. The archaeological resource has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. The archaeological resource is directly associated with a scientifically recognized important prehistoric or historic event or person.

2.2.2 California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC § 5024.1(a)). Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks (CHL) numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historic resources surveys, or designated by local landmarks programs may be nominated for inclusion in the CRHR.

A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria (PRC § 5024.1(c)):

> Criterion 1: It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
>
> Criterion 2: It is associated with the lives of persons important in our past.
>
> Criterion 3: It embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.
>
> Criterion 4: It has yielded, or may be likely to yield, information important in history or prehistory.

Resources nominated to the CRHR must retain enough of their historic character or appearance to be recognizable as historic resources and to convey the reasons for their significance. It is possible that a resource whose integrity does not satisfy NRHP criteria may still be eligible for listing in the CRHR. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data. Resources that have achieved significance within the past 50 years also may be eligible for inclusion in the CRHR, provided that enough time has lapsed to obtain a scholarly perspective on the events or individuals associated with the resource.

2.2.3 Native American Heritage Commission

Section 5097.91 of the Public Resources Code (PRC) established the NAHC, whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Under Section 5097.9 of the PRC, a State policy of noninterference with the free expression or exercise of Native American religion was articulated along with a prohibition of severe or irreparable damage to Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines located on public property. Section 5097.98 of the PRC specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

2.2.4 Government Code Sections 6254(r) and 6254.10

These sections of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the NAHC, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

2.2.5 Health and Safety Code Sections 7050 and 7052

Health and Safety Code, Section 7050.5 declares that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease and the county coroner must be notified. Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

2.2.6 Penal Code Section 622.5

Section 622.5 of the Penal Code provides misdemeanor penalties for injuring or destroying objects of historic or archaeological interest located on public or private lands, but specifically excludes the landowner.

3.0 CULTURAL BACKGROUND

The following is a brief overview of the prehistory, ethnography, and historic background of the project area intended to provide a historical context for any cultural resources that might be found in the vicinity of the APE. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview of human occupations and uses of the general project vicinity.

3.1 PREHISTORIC BACKGROUND

Over the decades, a number of schema have been developed to organize the prehistoric past of the west-central Sierra Nevada (e.g., Hull 2007; Moratto 1999; Moratto et al. 1988). Most have been predicated on cross-dating projectile points with types established in the Great Basin and, to a lesser degree, California's Central Valley. A confusing and redundant array of local point typologies, deficient correlations of hydration data, and insufficient use of radiocarbon dating led Rosenthal (2008, 2011) to use the more recent East Sonora Bypass (ESB) Project as a springboard for establishing a new chronology applicable to west slope Sierra Nevada watersheds from the Tuolumne River in the south to the Calaveras River in the north, and for developing a hydration rate model for Bodie Hills obsidian applicable to elevations below the current snowline (i.e., below 4000 feet amsl). The ESB Project resulted in the synthesis of data from more than 100 newly and previously excavated sites, incorporating thousands of radiocarbon, obsidian hydration, projectile point, and shell and glass bead data to delineate five temporal periods that account for the span of human prehistory in the area. This

chronology, a revised, simplified, and clearly defined projectile point typology, and radiocarbon-linked hydration brackets, form the basis of the brief cultural-historical sketch applicable to the Project vicinity.

3.1.1 Early Archaic (11,500-7000 BP)

Similar to much of California, the earliest Holocene archaeological record is the least recognized and most poorly understood temporal segment of human history on the west-central Sierra Nevadan slopes. Well-defined stratigraphic contexts are elusive and often deeply buried. Despite numerous archaeological investigations in the region, the Skyrocket Site (CA-CAL-629/630) (La Jeunesse and Pryor 1996) remains as one of the better examples of an Early Archaic period site with a diverse and abundant artifact assemblage. Another important Early Archaic site is the Clarks Flat Site (CA-CAL-342) (Peak and Crew 1990), located about 13.5 miles southeast of the APE within the Stanislaus River canyon. Early components at both localities were characterized, in part, by a variety of projectile points, most notably in Wide-stem and Large Stemmed Dart forms (see Rosenthal et al. 2011), including a comparatively large quantity of Bodie Hills obsidian and bifaces and points commonly manufactured from local toolstone. The Skyrocket Site also contained hundreds of handstones and millingstones, various cobble-core tools, large greenstone bifaces, and plant macrofossil assemblages dominated by gray pine (*Pinus sabiniana*) and acorn (*Quercus* sp.) nutshell. Early site occupation may have been based around repeated, seasonally structured visits during the fall and winter, a model that contrasts with traditional notions of high mobility and wide-ranging settlement in that time period. Early Archaic deposits have also appeared in the nearby Sonora locality, partially in the form of flake tools and percussion debitage, in a buried late Pleistocene soil near a creek at CA-TUO-4557.

3.1.2 Middle Archaic (7000-3000 BP)

In contrast with earlier occupations, deposits dating to the Middle Archaic are relatively common throughout the region, though they too tend to be buried beneath more recent alluvial deposits. Assemblages are generally varied and diverse, containing most classes of durable artifacts that include high numbers of handstones and millingstones (and rare mortars and pestles); cobble-based chopping, pounding, and milling tools; more flake tools and fewer core tools, drills, battered stone, and other stone and bone tools than in later periods; as well as dart points morphologically typed as large-stemmed, concave base, side-notched, contracting-stem, small-stemmed, and corner-notched darts (Rosenthal 2011). In contrast to lower elevations where they appear significantly later in the archaeological record, soapstone artifacts are an Archaic hallmark in the east Sonora area where they made their first appearance possibly more than five millennia ago. As with other time periods, Bodie Hills obsidian dominates the flaked stone assemblage, while more locally available cryptocrystalline silicates, metavolcanic greenstones, and igneous materials were also widely used to the extent that they were locally available.

It is argued that the model of Middle Archaic site types and distribution demonstrates a focus on wintertime consolidation in substantial residential sites below snowlines and summertime dispersals to higher elevations where groups could take advantage of summer-ripening seeds, berries, and fruits. While this may be the case, it can also be argued that the evidence supporting this may be a reflection of what is preserved and observable in the archaeological record (i.e., what has survived over time).

Deer and, to a lesser extent, rabbits and other small mammals comprise the faunal Middle Archaic assemblages recovered from sites dating to this time period. Distributions of imported obsidian across central California indicate strong ties between west-central and east-slope Sierra Nevadan groups, as

access to eastern obsidian sources, particularly Bodie Hills, became well established during this time. By the Middle Archaic, a strong social territory was in place that included the Tuolumne River watershed to the south and the Calaveras and Mokelumne river watersheds in the north, and from the lower foothills to 6000 feet in elevation. Archaeological sites in Calaveras County are distinctive in that they demonstrate that the people in these areas were not dependent upon Bodie Hills obsidian but instead relied on local lithic materials and broader sources of obsidian to the west.

3.1.3 Late Archaic (3000-1100 BP)

With some exceptions, Late Archaic technologies, lifeways, and settlement patterns differed little from those of the Middle Archaic. However, assemblages dating to this time period are much more numerous on the west slope. They can be found in a variety of settings, are frequently buried beneath alluvial deposits, and often take the form of temporary camps or processing localities or, more frequently, sites that were used seasonally for long periods of time (Wohlgemuth and Whitaker 2009). Marker artifacts, including projectile points, are largely similar to the Middle Archaic, as are dietary faunal and plant assemblages; however, obsidian (primarily Bodie Hills) found its greatest use during the Late Archaic. There are shifts in the relative frequencies of various flaked, ground, and battered tools and plant processing was more strongly emphasized, particularly the rise of the use of acorns as demonstrated in the paleobotanical assemblages during this time.

3.1.4 Recent Prehistoric I and II (1100-200 BP)

This interval marks strong technological, settlement, and subsistence divergences from 6000 years of Archaic Period stability and continuity. It is divided into the Recent Prehistoric I (1100-610 BP) and II (610-200 BP) periods, partially based on projectile point shifts occurring around those times. The bow and arrow appear in the western Sierra Nevada archaeological record around 1100 BP, bringing with them small corner-notched and contracting-stem points. Discrete Recent Prehistoric I assemblages are rarely identified, though, possibly due to well-documented environmental stress (the Medieval Climatic Anomaly) during this time, which may have reduced regional carrying capacities. In contrast, later Recent Prehistoric II deposits are among the more common in the Central Sierra Nevada region, and are mostly associated with bedrock milling stations and Desert Side-notched and Cottonwood arrow points. By this time, the bedrock mortar was ubiquitous, both within residential sites and at unique task sites. The use of the acorn came to prevail over gray pine nuts as a major dietary component, and significant increases in thin-shelled pine nuts (probably sugar pine [*Pinus lambertiana*]) are also apparent; several hypotheses circulate to explain this. Rosenthal (2008) suggests the greater capacity for storage of the acorn in a less cumbersome way than storing pine nuts in their cones. Greater emphasis also seems to have been placed on the harvesting and storage of summer ripening plant foods (manzanita [*Arctostaphylos* spp.] and small seeds) for consumption in the winter. However, the archaeobotanical assemblage of CA-CAL-116, analyzed by Wohlgemuth (in Siskin and Martin 2013), revealed the most robust acorn assemblage that has been recorded in nearly two decades of research in the western Sierra Nevada.

Such subsistence changes, in concert with shifts toward both small, numerous, midden-dominated, continuously occupied residential hamlets and special-use localities, appear to indicate shifts toward resource intensification and logistically organized settlements. In the western slope region, the Recent Prehistoric II period is also notable for residential sites containing an expanded artifact assemblage that included bone awls, drills, and other tool-making tools, evidence for basketry in specialized sites, and incised tablets, bone whistles, shell and glass beads, and other specialized or non-utilitarian implements.

Again, Calaveras County sites demonstrate that the Native populations relied on local toolstone and that while Bodie Hills was perhaps the dominant source of obsidian, Recent Prehistoric sites such as CA-CAL-116 included obsidian, in albeit limited quantities, from Casa Diablo, Napa Valley, and Sutro Springs, in addition to Bodie Hills (Siskin and Martin 2013).

3.2 ETHNOGRAPHIC BACKGROUND

The first written information about the Sierra Miwok was presented in journals from the early 1800s during Spanish and Mexican incursions into Miwok territory, followed by accounts from gold rush miners and newspapermen of the 1850s, and a few tales written by early settlers. Early researchers, principally anthropologists, gathered data on late 19th and early 20th century Miwok material culture, language, social lifeways, customs, and more, documented in monographs and field notes. The most commonly referenced description of Sierra Miwok lifeways is Samuel Barrett and Edward Gifford's 1933 study entitled *Miwok Material Culture: Indian Life of the Yosemite Region*, a compilation of 20th century observations about Sierra and Plains Miwok speakers. There are numerous other references and compilations, summarized in Davis-King (2007, et al. 2010, 2014a, 2014b) and Davis-King in Culleton, and others (2000).

There was contact with Sierra Miwok prior to the 1840s. Important forays into their territory also occurred after Indians working for Charles Weber found gold in the Stanislaus River in May or June of 1848. Accounts and letters from Charles Weber indicate that he had contracted with José Jesus, a Yokuts leader, to pan for gold in the Stanislaus River (Hammond and Morgan 1966). Word rapidly spread that the precious metal was easily found in creek beds, and soon thousands of men migrated to the county in search of gold.

The story of Calaveras County during the first few years of settlement is not much different from other Mother Lode communities. Hordes of miners came; water systems were developed; settlements grew up around the more successful and environmentally rich mining areas; transportation networks between these areas developed, first as trails and then as wagon roads; farms, orchards, and truck gardens sprang up; saloons and fandango halls, along with boarding houses provided entertainment, bed, bath, and sustenance to the miners; the bare bones of western civilization in the form of government, law, newspapers, and social lodges developed; and violence became commonplace, not only among the newly arrived argonauts, but also with the Indians who had lived in the area so long.

Conflict raged daily in the mining camps because of the increasing dominance of the Anglo miners over the Miwok and "foreigners." Much of the county's early archival data revel in tales of hegemony. The fact that Miwok subsistence locales had been totally ravaged, and generally that a whole lifestyle had been uprooted went unacknowledged. The Indians continued to be marginalized in society, even as the miners left and others came to establish homes, ranches, and towns. When lucky, a Miwok family or small group might attach themselves to some farmer or family, and have some semblance of peace and tranquility in their daily life. In other cases, the people were pushed into small settlements on marginal lands that could not support family farm plots or community agriculture. It was into this environment that the first ethnographers came, to find sick and destitute Indians, willing to tell their stories and sell their precious baskets in exchange for food, medicine, or money. This is developed and described more in the ethnographic descriptions offered below.

The Project area falls in the area traditionally associated with Northern Sierra Mi-Wuk speakers. The drainages of the Mokelumne and Calaveras rivers formed the core area where the language was

formerly spoken (Callaghan 1997). Sierra Miwok is a complex and old language, perhaps in place for as much as 3000 years BP (Freeland 1951, Levy 1978), and linguistic indications are that the people were somewhat isolated from their neighbors to the west during this time. It is important to understand that Miwok consists of five diverse languages, broken into two dominant branches, Western Miwok and Eastern Miwok. This is explained and diagramed well in Golla's (2011) masterwork, *California Indian Languages*. The Project vicinity falls in the Eastern Miwok branch, Sierra Miwok language, Northern Sierra dialect (or language). The heritage of language in the Jesus Maria Creek drainage provides great measure of support for the Calaveras Band of Mi-Wuk Indian's claim to traditional areas, and their long-standing ability to identify places of significance to their group.

Although river watersheds tend to characterize ethnolinguistic group locations through time according to linguists, early ethnographers found that linguistic group division was not so easily defined by drainage. Thus C. Hart Merriam (1929) found that Northern Miwok tribes, bands, and villages were found from the Middle Fork Cosumnes River south to Sheep Ranch and Mountain House [sic Mountain Ranch] in Calaveras County, while Tozzer (1900:7) found that the people of Mountain Ranch, Angels Camp, Murphys, Sheep Ranch, Big Trees "talk the same, and toward the south the same." By this Tozzer meant that from Mountain Ranch to Tuolumne County, the people spoke the same language, which would be Central Sierra Me-Wuk, another dialect of Sierra Miwok. When Stephen Powers (1976:346) traveled through California, he was taken by the similarity among the Miwok speakers, noting:

> An Indian may start from the upper end of Yosemite and travel with the sun 150 miles...without encountering a new tongue... Another may journey from the Cosumnes southward to the Fresno, crossing three rivers... and still hear the familiar numerals with scarcely the change of a syllable....

This observation supports the point that Miwok speakers themselves make that they did not differentiate among one another. Kroeber (1976:444), based on Gifford's observations, wrote:

> Among themselves the Miwok are content to refer to one another by village, or employ an endless succession of "northerners" and similar directional names that never crystallize into specific designations. The same people that are northerners to their neighbors on one side are southerners to those on the other, and so on ad infinitum, even beyond the boundaries of the stock.

Merriam (1967:357) recorded that Eph (or Eaph), from the West Point village, was considered the head of "all the Indians from Cosumnes River south to San Andreas and El Dorado in Calaveras County." In September 1905, Eaph told Merriam that his tribe went to the north bank of the South Fork Cosumnes River south to El Dorado and San Andreas, but did not go as far as Sheep Ranch, and on the west the territory went as far as Buena Vista (in Amador County), and easterly as much as ten miles beyond West Point. The Northern Miwok hunted large and small game and birds, gathered numerous varieties of roots, berries, nuts, herbs, and medicines, lived in relatively large year-round villages often centered around a *nena* (ancestral home place and patrilineal lineage), and actively foraged and hunted away from the camps. Travel was along both established trails and idiosyncratic paths, while connection with neighboring villages was important for safety, communication, social bonding, ceremonial activities and more.

3.3 HISTORIC BACKGROUND

Early Spanish explorers and the Franciscan and Jesuit missionaries who followed them were the first Europeans to reach northern California. The interior of the Sacramento Valley, away from the easily defended and more accessible chain of coastal missions and pueblos, was left largely untouched by the Spanish and "Californios" (Hoover et al. 1990). Settlement of the Sacramento area did not begin until the late 1830s and early 1840s, when entrepreneurs such as John Sutter and Jared Sheldon obtained land grants from the Mexican government, typically in exchange for an agreement to protect Mexican interest in these remote regions. In 1839, John Sutter built the earliest Euro-American settlement within Sacramento County. Named Sutter's Fort, it was well known outpost that brought with it an increase in Euro-American trappers, hunters, and settlers to the Sacramento area. As a result of the Mexican War (1847 to 1848), California became part of the territory of the United States. In 1848, gold was discovered at Sutter's Mill in Coloma which resulted in a torrent of gold seekers flooding into the Sacramento region. As the population soared and the gold decreased, many of the settlers who decided to stay turned to alternative vocations, particularly agriculture. Many found that the local land was relatively cheap and provided good crops. Raising grain, livestock, and produce to sell to the thousands of miners heading to the gold fields proved a profitable venture. These combined events hastened the settlement of the area and the development of Sacramento as an economic and transportation center. The designation of Sacramento as the state capital, in 1854, also resulted in the area's increase in socio-political importance.

3.4 LOCAL HISTORY

Miners flooding into the Sierra foothills during the gold rush represent the first non-indigenous settlement of the Project vicinity. Located on El Dorado Creek, the "El Dorado camp" was among the first mining camps established in Calaveras County. In August 1851, it was noted as located in Township 7, when the County Townships were fixed (*Calaveras Chronicle,* 18 October 1851). The name of the camp was changed from El Dorado to Mountain Ranch when a post office was established in 1858, as there was already an established town of El Dorado in Placer County. Within a few short years, the camp had become a trading center for quartz and drift miners in the area. By 1858-59, six properties were assessed in El Dorado locally, but in tents or habitations too simple to be assessed. By 1871, the camp was noted as a decayed mining town, but with promising quartz ledges nearby. By 1876 one quartz mill had been erected, and in 1899 four stamp mills and one Tuster mill were operating (Gudde 1975:228).

Whiskey Slide camp was another early Euro-American settlement in the region. The first mention of the camp was in 1853, when it was reported as "Venetian Slide," "the name given to a new camp just springing into existence near Jesus Maria. The extent of the mining ground is small though extremely rich; some claims paying $1 to the pan" (*San Joaquin Republican,* July 26, 1853). In June 1854, the camp was noted in the *Alta*, as a place where miners regularly washed two dollars to the pan (Daily *Alta*, June 8, 1854). By 1857, it was the seat of the Whiskey Slide Canal Company (Old Italian Ditch) (Gudde 1975). In 1865 the Whiskey Slide Quartz Mill and Whiskey Slide Ditch were assessed. By 1880, there were no longer any assessments for property at Whiskey Slide Camp.

Copperopolis was founded by W. K. Reed and Thomas McCarty in 1860 after they discovered vast copper deposits in the area. In the same year, Hiram Hughes also discovered copper and several extensive copper mines were established in what would come to be known as the Coppern Canon Mining District. These copper discoveries came on the heels of the end of the California gold rush, and consequently the local mines became the main focus of mining efforts in Calaveras County in the 1860s.

William Reed and Thomas McCarty soon founded the Union Copper Mine (and later the Keystone and Empire Mines), while other mines in the area included the Napoleon Mine and the Calaveras Claim. The town adopted the name "Copperopolis" in 1861. In 1862, Reed sold his interests in the mines and built a toll road, named "Reeds Turnpike" which spanned from Copperopolis to Telegraph City. The road also connected with a route to Stockton. This road remained a toll road through 1865.

The mines in the area were heavily used during the Civil War during which time they were the most significant copper producing mines in the US. This sparked the rapid development and industrialization of the area as copper was needed for munitions and shell casings during the war. So great was the boom caused by the war that by 1865, the number of businesses in the Copperopolis region had increased to 90, from 28 just 4 years prior. Copper mined in the area was sent to Stockton and then to San Francisco, where it was shipped to smelters on the East Coast via shipping lanes around Cape Horn.

Copperopolis was a very pro-Union town during the War, a fact which is reflected in the street names within the town including Union (now Main Street), Lincoln, Grant, and Sherman. Several establishments in the region also adopted supportive names including the Union Hotel, Union Mine, and the Union Bridge. In 1867 however, the town of Copperopolis was largely destroyed by a catastrophic fire and was never rebuilt. This was in part due to a steep drop off in demand for copper at the end of the Civil War. Investors from Boston purchased the mines in the 1880s, and some production did continue through the early 20th century. The town also saw upticks in business, productivity, and population growth during boom times caused by the first and second world wars. During World War II the Keystone Mine even briefly reopened until it closed for the last time in 1945. When the mines finally did close, the U.S. Bureau of mines reported that those in Copperopolis had produced 72,598,883 lbs of copper, worth over $12 million, which adjusted for inflation amounts to roughly $160 million worth of copper.

The community of Copperopolis also contains four buildings that are listed on the National Register of Historic Places including: the Copperopolis Armory, the Copperopolis Congregational Church, the Honigsberger Store, and Reeds Store and also features several sites that have had historical markers and or placards installed to commemorate their significance to the community including the Calaveras Telephone Company Building, The Old Corner Saloon, the Copperopolis Historical Plaza, and the Copperopolis Cemetery. The cemetery also features a marker for Thomas McCarty, one of the original founders of the town.

In more recent times the town has been redesigned to welcome visitors and tourists. The town square has been refinished with timeless architecture and covered walkways and now features specialty boutique shops, restaurants, and residential lofts. The community also continues to grow with a population of 3,671 recorded for the 2010 census up from the 2,363 listed in the 2000 census.

The Tulloch Reservoir is located approximately four miles southeast of Copperopolis. The Reservoir had two developments on its shores in the 1970s, Copper Cove and The Shores. The Copper Cove development was built by the I.C. Deal Development Corporation of Hayward, CA and Dallas, TX, on 4,800 acres of a total 5,000 acres previously owned by Clifford Mitchell around the north end of the Tulloch Reservoir. Mitchell had owned and operated the Black Creek Lodge on the reservoir for many years. The overall development consisted of 2,200 single family parcels for homes and cabins ranging from one-half to nine acres in size and a 200+ space mobile home park, with miles of waterfront on Tulloch Reservoir. I.C. Deal Development was renamed Great Lakes Development Corporation, and by the end of 1970 it had merged with and become a subsidiary of Centex Corporation.

In May 1969, the Calaveras County Board of Supervisors approved the first Copper Cove subdivision (Units 1 and 2) consisting of 870 acres with 660 developable lots ranging from one-half to five acres in size in the Black Creek area of Tulloch Reservoir. The first subdivision proposed included 14 miles of roads, a water system, a new homeowners' lodge, residential mobile-home park, commercial area and a community area with boat docks with a value of $21 million. The lodge was to be remodeled, expanded, and renamed as the Copper Cove Lodge. Potable water would be provided by the Calaveras County Water District (CCWD) and the water system serving the development would meet county standards. The water source was initially Tulloch Reservoir, with up to 2,000 acre-feet to be sold annually to CCWD by the South San Joaquin and Oakdale Irrigation Districts. The water source would eventually be changed to the Bureau of Reclamation's New Melones Reservoir once the new dam was completed. The CCWD was to install a pump and water treatment facilities. The Copper Cove development was to be the first in the county to be on a sewage disposal system for the waterfront lots, with the rest of the lots on septic tanks. The developer anticipated completion of Units 1 and 2 within two years, with roads already under construction by May 1969, the homeowner's lodge to be built first (completed in October 1969), and home lots to go on the market by June of that year.

Units 3 through 7 totaling over 2,200 acres with about 1600 lots were approved in July 1969. Quarter- to full-page ads were taken out by the developer in August promoting Copper Cove in the *Oakland Tribune, Modesto Bee* and *San Francisco Examiner* newspapers, and again in March 1970 in other bay area newspapers. Ads would continue in bay area papers in the following years during development of Copper Cove. Unit 8 was approved in January 1970 with 429 lots on 1,040 acres. In September 1971, a 45-acre mixed use expansion of Copper Cove (Unit 8A) was approved for another mobilehome park, 10 rental duplexes, four-acre commercial site, recreation area, and sites for a school and fire station, all to be on county water. The development of Copper Cove was apparently complete by May 1974.

By March 1970, a contract was awarded for construction of Unit 7. The development's roads were constructed by the George Reed Construction Company, and the water and sewer systems were constructed by W.M. Lyles Company. A March 1971 article on the construction progress for the water and sewer system noted that Unit 7's 704 lots would be the first to benefit from the system. The water and sewer systems were taken over by CCWD in February 1973. The sewer system serves only Unit 7 of Copper Cove, while the water system serves Units 1, 2 and 7. Water was pumped from Tulloch Reservoir initially (later New Melones Reservoir) to a tank and booster station, then treated before being pumped to the 300,000-gallon Redwood Water Tank that serves as storage for the Unit 7 homes. A different pumping station sends water to a different 400,000-gallon water tank to provide storage for Units 1 and 2.

4.0 RECORDS SEARCHES

On October 27, 2022, a records search addressing the APE and a 0.25-mile radius beyond the APE boundaries was conducted by the Central California Information Center (CCIC) at California State University, Stanislaus. The purpose of the record search was to (1) identify prehistoric and historic resources previously documented in the APE and within 0.25-mile of APE boundaries; (2) determine which portions of the APE may have been previously studied, when those studies took place, and how the studies were conducted; and, (3) ascertain the potential for archaeological resources, historical resources, and human remains to be found in the APE. This search also included a review of the appropriate USGS topographic maps on which cultural resources are plotted, archaeological site records, building/structure/object records, and data from previous surveys and research reports. The California

Points of Historical Interest, the California Historical Landmarks, the NRHP, the CRHR, and the California State Historic Resources Inventory listings were also reviewed to ascertain the presence of designated, evaluated, and/or historic-era resources within the APE. Historical maps and historical aerial photographs of the area were also examined (NETROnline 2022).

4.1 RECORDS SEARCH RESULTS

4.1.1 Previous Studies

The cultural resources records search conducted at the CCIC revealed that no parts of the APE have previously been archaeologically surveyed, and identified four studies that have previously been conducted within a 0.25-mile radius of the APE (Table 1). These four studies are briefly described in the table below.

Table 1
PREVIOUS STUDIES CONDUCTED WITHIN 0.25 MILE OF THE APE

Report	Year	Author(s)	Title	Includes APE?	Affiliation
04206	2001	PAR Environmental Services	Cultural Resource Inventory of the Proposed Red Mountain Development, Calaveras County, California, Final Report	No	PAR Environmental Services
06678	2008	Rosenthal, J., J. Meyer, J. Costello, and J. Marvin	Cultural Resource Survey and Evaluation for the Tuscany Hills Project, Lake Tulloch, Calaveras County	No	Far Western Anthropological Group, Inc. / Foothill Resources
07476	2008	Costello, J., P. Mikkelsen, J. Rosenthal, and S. Waechter	Draft: Historic Properties Treatment Plan for the Tuscany Hills Project, Lake Tulloch, Calaveras County	No	Foothill Resources Ltd. And Far Western Anthropological Research
09179	2019	Patrick, I.	Letter Report: Lift Station 12 & 13, Force Main Bypass and Lift Station 6, 8, 15, & 18, Renovations (District CIP #151076/ #15080) [Copper Cover Lift Stations]	No	Patrick GIS Group, Inc. for Augustine Planning Associates

4.1.2 Previously Recorded Resources

The records search revealed that no cultural resources have been previously recorded within the APE, and that three cultural resources have been previously recorded within 0.25-mile of the APE. These resources are described briefly in Table 2.

Table 2
PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN 0.25 MILE OF THE APE

Primary	Trinomial	Year	Recorder	Description	Within APE?
P-05-002348	CA-CAL-001856	2001	Dougherty, J., J. Barton, T. Bakic, and K. McIvers	Prehistoric- Bedrock milling feature, fire cracked rock, and small cultural midden	No
P-05-003358	CA-CAL-002047H	2006	Marvin, Judith	Historic- Upper Road to O'Byrnes Ferry, a historic road	No
P-05-003370	CA-CAL-002057	2007	Far Western	Prehistoric- Rock Shelter with lithic scatter and hearths/pits	No

4.1.3 Historic Maps and Aerial Photographs

Historic maps examined for this CRA included an analysis of *Copperopolis* USGS 7.5-minute quadrangle maps from 1916, 1942, and 1954, a *Melones Dam* USGS 7.5-minute quadrangle map from 1962, and a General Land Office (GLO) Map from 1870, all of which depicted the Project Area. The historic USGS quadrangle maps and the GLO map from 1870 revealed no signs of development within the APE through 1962. The historic aerial photograph series examined for this investigation included photographs from 1959 and 1984 which covered the Project Area. The 1959 aerial photograph suggests that the APE and its vicinity was devoid of any development in 1959 and instead covered in sparse shrubs and brush. Within the 1984 photograph however, the water retention ponds associated with the Copper Cover Water system installation appear constructed and the water tanks associated with the system on Signal Hill Trail have been built. Several roads in the project vicinity had also been constructed by this time, including Kiva Place, Kiva Drive, Arrowhead Street, and Little John Road. Notably, no structures are present in the vicinity of the water tanks on Signal Hill Trail as of the 1984 photograph demonstrating that none of the residences in the neighborhood which surrounds these water tanks in 2022 are old enough to be considered historic properties (NETROnline 2022).

4.2 NATIVE AMERICAN HERITAGE COMMISSION SACRED LANDS FILE SEARCH

On November 1, 2022, HELIX requested that the NAHC conduct a search of their SLF for the presence of Native American sacred sites or human remains in the vicinity of the proposed project area. HELIX received a response from NAHC on December 9, 2022 which reported that the SLF search results were negative. However, the NAHC response also suggested that the absence of specific site information in the SLF does not definitely indicate the absence of cultural resources in the vicinity of the project. As a result, the NAHC recommended that HELIX reach out to points of contact for 12 Native American Tribes who may have knowledge of cultural resources within the project vicinity. The recommended points of contact are as follows:

- Debra Grimes, Cultural Resources Specialist, Calaveras Band of Mi-Wuk Indians
- Gloria Grimes, Chairperson, Calaveras Band of Mi-Wuk Indians
- Main Office for Calaveras Band of Mi-Wuk Indians
- Main Office for California Valley Miwok Tribe

- Main Office for California Valley Miwok Tribe
- Lloyd Mathiesen, Chairperson, Chicken Ranch Rancheria of Me-Wuk Indians
- Sara Dutschke, Chairperson, Ione Band of Miwok Indians
- Cosme Valdez, Chairperson, Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- Joey Garfield, Tribal Archaeologist, Tule River Indian Tribe
- Kerri Vera, Environmental Department, Tule River Indian Tribe
- Neil Peyron, Chairperson, Tule River Indian Tribe
- Kenneth Woodrow, Chairperson, Wuksache Indian Tribe/Eshom Valley Band

On December 13, 2022, HELIX sent a letter to each of the tribal representatives listed above to request any information they may possess regarding cultural resources in the vicinity of the APE. As of the writing of this report, no responses have yet been received from these tribal points of contact. All correspondence with the NAHC and Native American Tribes can be found in Appendix C.

5.0 PEDESTRIAN SURVEY

HELIX Registered Professional Archaeologist Benjamin Siegel surveyed the proposed undertaking's APE on November 10, 2022. The survey involved the systematic investigation of the APE's ground surface by walking in parallel 10-meter (m) transects. During the survey, the ground surface was examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, fire-affected rock, prehistoric ceramics), soil discoloration that might indicate the presence of a prehistoric cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations, wells) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as gopher holes, burrows, cut banks, and drainage banks were also visually inspected. Representative survey photographs are found in Appendix D.

The project area consists of two separate locations: one located on Kiva Place (Clearwell) and the other is located on Signal Hill Trail (B Tank Site) in the community of Copper Cove Village. HELIX's surveyor examined the Clearwell portion of the Project Area first. This area was found to contain water tanks, developed and paved over land, support facilities, and a small hilly grass area to the north which was punctuated by rock outcroppings and blue oaks (Photograph 1). The ground surface of the small hilly grass area was thoroughly inspected, with special care given to the examination of the area's rock outcroppings. Fairly densely populated with grasses, the area only afforded the surveyor moderate visibility (50% or less), save for two nearly oval shaped areas that had been cleared of grass, the western most measuring 20m north to south by 7m east to west and the more eastern of the two spanning 7m north to south and 8m east to west, through recent disturbances caused by automobiles. These areas revealed the area's native soils which consisted of a clay loam with shale rock inclusions (Photograph 2).

A drainage was also encountered in the northeastern quarter of the small hilly grassy area. This drainage proved to be 2.5m wide and 1.5m deep (Photograph 3) and ran for approximately 64m from the north center of the APE, through to the mid-eastern boundary of the APE. Once outside the eastern boundary of the APE the drainage flows to the southeast, ultimately draining into a designed and developed ditch which flows back into the developed portion of the Clearwell APE to the south of the grassy area

(Photograph 4). The edges of this drainage were inspected thoroughly for traces of material culture or past human occupation or use. The developed portion of the Clearwell APE was also briefly examined for structures that might be older than 45 years in age, and or other traces of prehistoric or historic era resources (Photograph 5). No cultural resources were encountered within the entirety of the Clearwell portion of the APE.

HELIX's archaeologist next examined the B Tank site of the APE located on Signal Hill Trail (Photograph 6). The entire tank site was found to have been built upon roughly 2.5m of fill dirt and gravel, making it impossible for the surveyor to examine this portion of the Project Area's native soils (Photograph 7). Within the B Tank portion of the APE HELIX's surveyor encountered two large water tanks, as well as piping, and ancillary structures associated with these tanks. One of the water tanks, the further south of the two, site is clearly modern (Photograph 8). It is made out of metal, measures roughly 26m in diameter, and possesses a metallic ladder on its western side, as well as metallic entry latches affixed with metallic fasteners on its western and eastern sides, and metallic tubing along its southeastern side, presumably to regulate the flow of water in and out of the tank.

The second water tank, located further north within the B Tank Site, is a redwood water tank, known to be more than 45 years in age. As a result additional efforts were made to record features from this water tank on to the appropriate California State Parks DPR forms. The completed DPR forms for this structure, replete with a series of detailed photographs of the resource can be found in Appendix E of this report. A brief description of the features of the CCWD Redwood Tank observed in the field is also provided below.

Given the temporary resource name of "CCWD Redwood Tank" in the field, the CCWD Redwood Tank within the B Tank Site of the APE measures approximately 14.5m in diameter (Photograph 9). The tank is seated on a 3 inch (7.62cm) tall poured concrete slab, and possess an water gauge and iron ladder on its northern side. The sides of the tank consist of redwood planks which are uniformly 11.5 inches (29.21 cm) wide and run the full height of the tank wall. These planks are held together, and presumably held watertight, by 28 metal bands approximately 1 inch (2.54 cm) in diameter which possess corkscrew planed ends on one side so they can hold metal nuts. These bands are held around the perimeter of the tank with 8 inch (20.32cm) long fasteners, which are 3.25 inches (8.25cm) tall x 3 (7.62cm) inches wide which hold the metal bands, and can tighten them, using metal hexagonal nuts (which measure 1 inch or 2.54 cm to a side) to sinch down and tighten the metal bands.

The roof of the tank is 16 sided and formed by a series of planks which radiate from the tank's center outward. The outer edges of these planks are fixed together by a series of 16 large planks which form the perimeter of the roof and give the roof its 16 sided shape. On top of these radiating planks the roof is covered in black, sandpaper-like shingles. At its bottom the CCWD Redwood Tank shows signs of leaking water on its southwestern side.

Beyond the CCWD Redwood Tank noted above, HELIX's archaeologist found no other traces of prehistoric or historic-era materials or features within the B Tank Site portion of the APE.

Ultimately the CCWD Redwood Tank proved to be the only cultural resource encountered by HELIX's surveying archaeologist during the intensive pedestrian survey of both the Clearwater and Tank B Site portions of the currently proposed APE.

6.0 NRHP/CRHR EVALUATION OF THE CCWD REDWOOD TANK

The results of this CRA resulted in the identification of one cultural resource within the project's APE, a Redwood Water Tank, given the temporary field name CCWD Redwood Tank, located within the Tank Site B portion of the APE. To determine if this resource should be identified as a historic property (for purposes of Section 106 of the NHPA) or a historical resource (for purposes of CEQA), HELIX evaluated the CCWD Redwood Tank against the criteria of eligibility for listing on the NRHP or CRHR which are described in sections 2.1.4 and 2.2.1 respectively. Each NRHP/CRHR criterion is addressed individually below.

Criterion A/1. The Redwood Tank does not qualify as a historic property or historical resource under Criterion A/1 (association with events that have made a significant contribution to the broad patterns of our history). The CCWD Redwood Tank was built circa 1971 to support the new Copper Cove Community (CCWD 1970). Copper Cove was a 4,800-acre water-oriented subdivision project developed by I. C. Deal Development Corporation, later named Great Lakes Development Corporation. The community was one of many in the Copperopolis area of Calaveras County that were being developed in the 1960s and 1970s, and one of two near Tulloch Reservoir southeast of Copperopolis. According to reports, development in the Sierra Foothills area was booming at the time "spurred primarily by the Bay Area and Peninsula families who like the mountains for a second home or for retirement."[1] Although a portion of Copper Cove homes were the first in the county to be on a sewer system instead of septic tanks, there is no evidence that the Copper Cove Community played any major role in the overall development history of the area. While the CCWD Redwood Tank was integral to the overall development of the Copper Cove Community, its construction and use did not substantially shape local, state, or national history. Likewise, there is no evidence to suggest that the tank is associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B/2. The CCWD Redwood Tank does not qualify as a historic property or historical resource under Criterion B/2 (association with the lives of significant persons in our past). There is no evidence to suggest that construction or operation of the tank is associated with any person considered important in history. Designed by Haight & Weatherby, Inc. this firm was involved in a variety of local development projects. The water system was built by W.M. Lyles Construction Company which was active in Northern California from the 1950s through the 1970s, but the water system for Unit 7 of Copper Cove is a minor project that does not represent the company's overall larger body of work.

Little information is available in the historic record regarding Richard Haight, other than society listings. He was employed as a surveyor in the San Andreas area by at least 1955 through 1965 (*Stockton Daily Evening Record* 1955, 1965a). He served as the surveyor for a new camping/trailer park project in the San Andreas area in 1965 (*Stockton Daily Evening Record* 1965b).

Gene Weatherby grew up in Calaveras County, California, earned his civil engineering degree from UC Berkeley and worked for the US Forest Service and some private firms before receiving his civil engineers license and starting his own engineering firm in 1964. During the 1970s, Weatherby was a director with the Mokelumne Hill Fire Department and the Sanitary District. Weatherby served for a

[1] Elizabeth Chapman McKnight, "The Back Road," *Stockton Daily Evening Record*, August 10, 1969, 12.

time on the Local Agency Formation Committee in Calaveras County, and on the boards of the Consulting Engineers and Land Surveyors of California and the American Council of Engineering Companies. He also served as the consulting engineer for the public works departments of Calaveras and Alpine Counties (*Calaveras Enterprise* 2013). He was named Engineer of the Year by the San Joaquin Engineers Council in 2009 (*The Record* 2009).

Weatherby partnered with land surveyor Richard Haight to form Haight & Weatherby, based in San Andreas, California. Richard Haight served as president and Gene Weatherby served as vice-president of the company. In 1969, Haight & Weatherby participated with the Calaveras County High School and the Operating Engineers Local Union No. 3 to establish a pilot engineering apprentice and journeyman training program in Calaveras County (*Engineers News* 1968). By 1969, Haight & Weatherby Inc. had merged with PMT Associations Inc. of Sacramento under the corporate name of TEVCO. PMT Associations was reportedly "one of the largest professional engineering and land surveying firms in California"[2] at the time. The new company continued to have a San Andreas office that still operated under the Haight & Weatherby name, under the direction of Richard Haight. The available evidence in the historical record indicates that Haight & Weatherby's influence was limited, the Copper Cove water system is not representative of W.M. Lyle Company's overall larger body of work, and neither company appears to be associated with a prominent figure in local, state, or national history.

Criterion C/3. The CCWD Redwood Tank does not qualify as a historic property or historical resource under Criterion C/3 (embodiment of the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction). The CCWD Redwood Tank was built circa 1971 as part of the Copper Cove Community water infrastructure. Pressure for hasty development of settlements began with the California Gold Rush in 1849. Water was needed to support those settlements. The most readily available and significant source of material for building both shelter and water storage was the massive and numerous redwood trees. Through the end of the 1800s and early 1900s, redwood water tanks were built throughout the state and are ubiquitous in Northern California. The generic materials used in their construction have no unique or distinguishing characteristics or features. Furthermore, by the 1960s and 1970s, many water storage facilities were being built of metal rather than the outdated and less efficient wood planks. There is no evidence that Haight & Weatherby, Inc., and their principals were recognized as master engineers. Likewise, there is no evidence that W.M. Lyle Company were recognized as master builders nor is the tank representative of their overall body of work. Therefore, the Redwood Tank does not embody distinctive characteristics of a type, period or method of construction, does not possess significant and distinguishable design elements or high artistic values, and does not represent the work of a master.

Criterion D/4. The CCWD Redwood Tank does not qualify as a historic property or historical resource under Criterion D/4 (has yielded or may be likely to yield, information important in history or prehistory). Generic in materials and construction, the tank does not have the potential to add to our understanding of local, state, or national history.

Based on this analysis, HELIX recommends that the CCWD Redwood Tank at Tank B site is not eligible for listing on the NRHP or CRHR.

[2] Mike Womack, "Survey Notes," *Engineers News*, Vol. 28, No. 8, August 1969, 7.

7.0 SUMMARY AND RECOMMENDATIONS

7.1 SUMMARY

In order to assist CCWD in its responsibility to comply with Section 106 of the NHPA, as well as its responsibility to comply with CEQA, HELIX assessed the potential for the proposed undertaking to affect historic properties within the project APE. This assessment involved an archival record search at the CCIC, Native American Outreach, Historic Map and historic ariel photograph analysis, an intensive pedestrian survey of the APE, and an evaluation of any cultural resources encountered.

A records search conducted by HELIX at CCIC on January 3, 2022, determined that eight studies have previously been conducted within a 0.25-mile radius of the current proposed undertaking's APE, but that none of these studies included the current APE as part of their survey areas. The records search also determined that no previously recorded cultural resources have been documented within 0.25-mile of the current APE, or within the APE itself.

On November 1, 2022, HELIX requested that the NAHC conduct a search of their SLF for the presence of Native American sacred sites or human remains in the vicinity of the proposed project area. On December 9, 2022, the NAHC reported that the SLF search results were negative. However, the NAHC response also suggested that the absence of specific site information in the SLF does not definitely indicate the absence of cultural resources in the vicinity of the project. As a result, the NAHC recommended that HELIX reach out to points of contact for 12 Native American Tribes who may have knowledge of cultural resources within the project vicinity. As of the writing of this report, no responses have been received from the recommended points of contact. correspondence from the NAHC has been received.

HELIX's historic maps and aerial photographs analysis of the project area suggests that the APE remained largely undeveloped from 1870 through 1962. Within a 1984 historic ariel photograph of the project area however, the water retention ponds associated with the Copper Cove Water system installation appear constructed and the water tanks associated with the system on Signal Hill Trail have been built. Several roads in the project vicinity had also been constructed by this time, including Kiva Place, Kiva Drive, Arrowhead Street, and Little John Road. Ultimately HELIX's historic maps and aerial photographs analysis of the project area did not reveal any traces of prehistoric or historic era land use within the APE.

HELIX Secretary of Interior Qualified Archaeologist Ben Siegel, M.A., RPA, surveyed the entirety of the Project APE on November 10, 2022. Within the Clearwell portion of the APE the surveyor encountered a significantly and recently developed area with support facilities and structures to the south, and a small undeveloped area to the north. The ground surface within the undeveloped portion proved to consist of a series of small hills covered in grass. This area was thoroughly inspected using 10m transect intervals, with special care given to the examination of the area's shale rock outcroppings. Fairly densely populated with grass, the area only afforded the surveyor moderate visibility (50% or less), save for two nearly oval shaped areas that had been cleared of grass through recent disturbances caused by automobiles. These cleared spots revealed the area's native soils which consisted of a clay loam with shale rock inclusions. The surveyor also encountered a drainage which cut through the northeastern quarter of the undeveloped area. The edges of this drainage were inspected thoroughly for traces of

material culture or past human occupation or use. No cultural resources were encountered within the entirety of the Clearwell portion of the APE.

HELIX's archaeologist next examined the B Tank site of the APE located on Signal Hill Trail. The entire tank site was found to have been built upon roughly 2.5m of fill dirt and gravel, making it impossible for the surveyor to examine this portion of the Project Area's native soils. Within the B Tank portion of the APE HELIX's surveyor encountered two large water tanks, as well as piping, and ancillary structures associated with these tanks. One of the water tanks, the further south of the two, is clearly a modern metallic water tank which measures roughly 26m in diameter (Photograph 8). The second water tank, located further north within the B Tank Site, is a redwood water tank with a 14.5m diameter which is known to be more than 45 years in age. As a result, the tank was given the temporary field name "CCWD Redwood Tank" and additional efforts were made to record features from this water tank on to the appropriate California State Parks DPR forms. The completed DPR forms for this structure, replete with a series of detailed photographs of this cultural resource can be found in Appendix D of this report.

Ultimately, the CCWD Redwood Tank was the only cultural resource identified through HELIX's cultural resource investigation of the Project APE.

To determine if the CCWD Redwood Tank should be identified as a historic property (for purposes of Section 106 of the NHPA) or a historical resource (for purposes of CEQA), HELIX evaluated the tank against the criteria of eligibility for listing on the NRHP or CRHR. The tank does not meet Criterion A/1 because it is not associated with events that have made a significant contribution to the broader patterns of local, state, or national history. It does not meet Criterion B/2 because there is no evidence to suggest that the construction or operation of the tank is associated with any person considered important in local, state, or national history. The tank does not meet Criterion C/3 because it does not embody distinctive characteristics of a type, period, or method of construction, nor does it represent the work of a master or possess high artistic values. Finally, the tank does not meet Criterion D/4 as it is unlikely to yield information important to local, state, or national history. As a result, HELIX recommends that the CCWD Redwood Tank is not eligible for inclusion in either the NRHP or CRHR.

7.1.1 Sensitivity and Potential Effects

HELIX's CRA resulted in the identification of one cultural resource within the project's APE, a redwood water tank, given the temporary field name CCWD Redwood Tank which is located within the Tank Site B portion of the APE. HELIX evaluated this resource under the criteria of eligibility for listing on the NRHP or CRHR and recommends that the resource is not eligible for inclusion in either of the two registers.

As a result, HELIX recommends that there would be no effect on historic properties or historical resources, including archaeological and built-environment resources, as a result of the proposed undertaking. No additional studies, archaeological work, or construction monitoring are recommended. However, HELIX does recommend that the Worker Awareness Training Program and Inadvertent Discovery Procedures outlined below be implemented in the unlikely event that human remains or cultural resources are encountered during construction activities.

7.2 RECOMMENDATIONS

7.2.1 Inadvertent Discovery of Human Remains

Although considered highly unlikely, there is always the possibility that ground disturbing activities during construction may uncover previously unknown human remains. In the event of an accidental discovery or recognition of any human remains, PRC Section 5097.98 must be followed. Once project-related earthmoving begins and if there is a discovery or recognition of human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the specific location or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains are Native American, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in PRC Section 5097.98, or

2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendent or on the project area in a location not subject to further subsurface disturbance:

    - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission;

    - The descendent identified fails to make a recommendation; or

    - The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

7.2.2 Inadvertent Discovery of Cultural Resources

In the event that cultural resources are exposed during ground-disturbing activities, construction activities should be halted within 100 feet of the discovery. Cultural resources could consist of but are not limited to stone, bone, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. If the resources cannot be avoided during the remainder of construction, an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards should then be retained, in coordination with the CCWD, to assess the resource and provide appropriate management recommendations. If the discovery proves to be NRHP- and/or CRHR-eligible, additional work, such as data recovery excavation, may be warranted and should be discussed in consultation with the CCWD.

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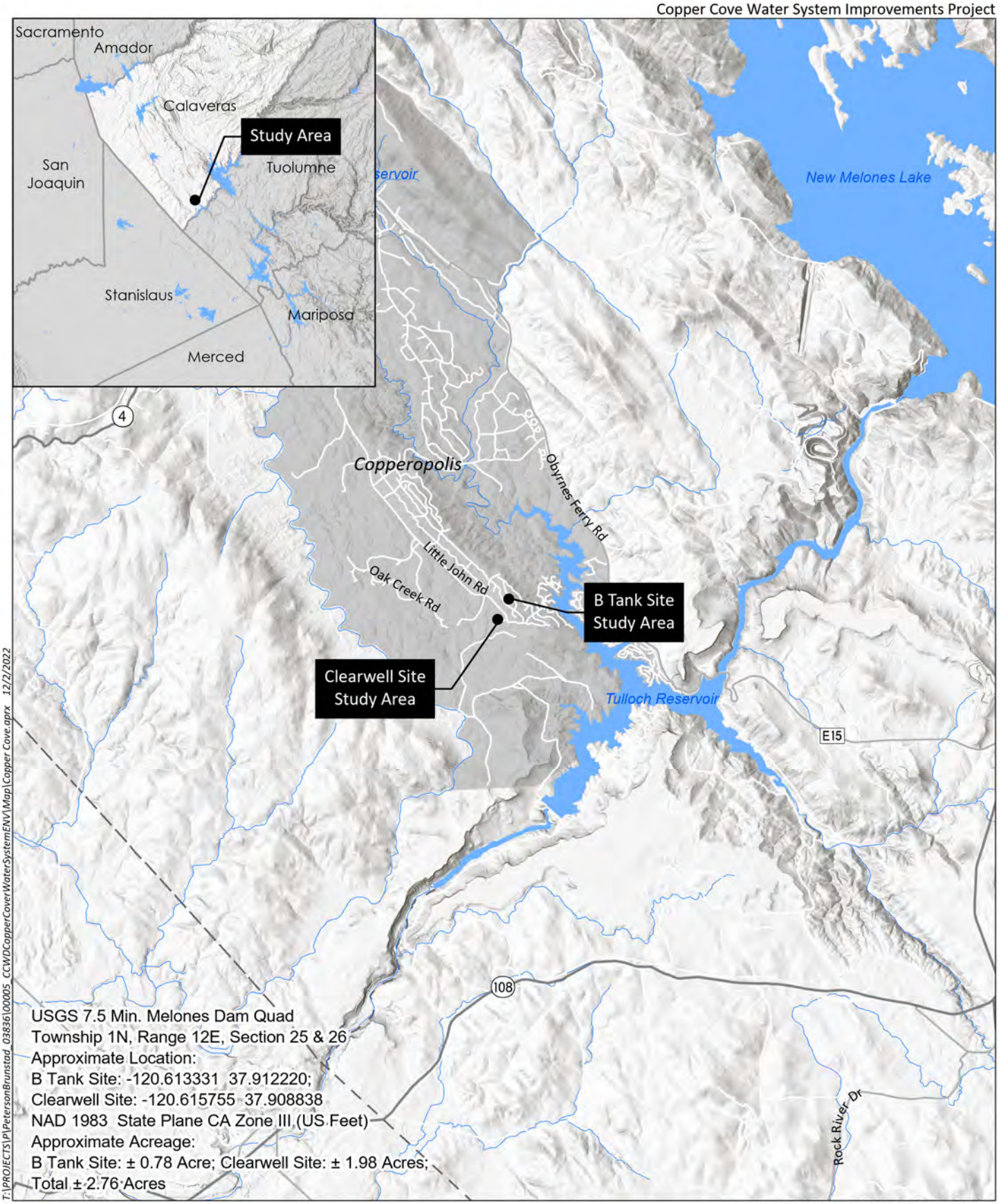
Appendix A

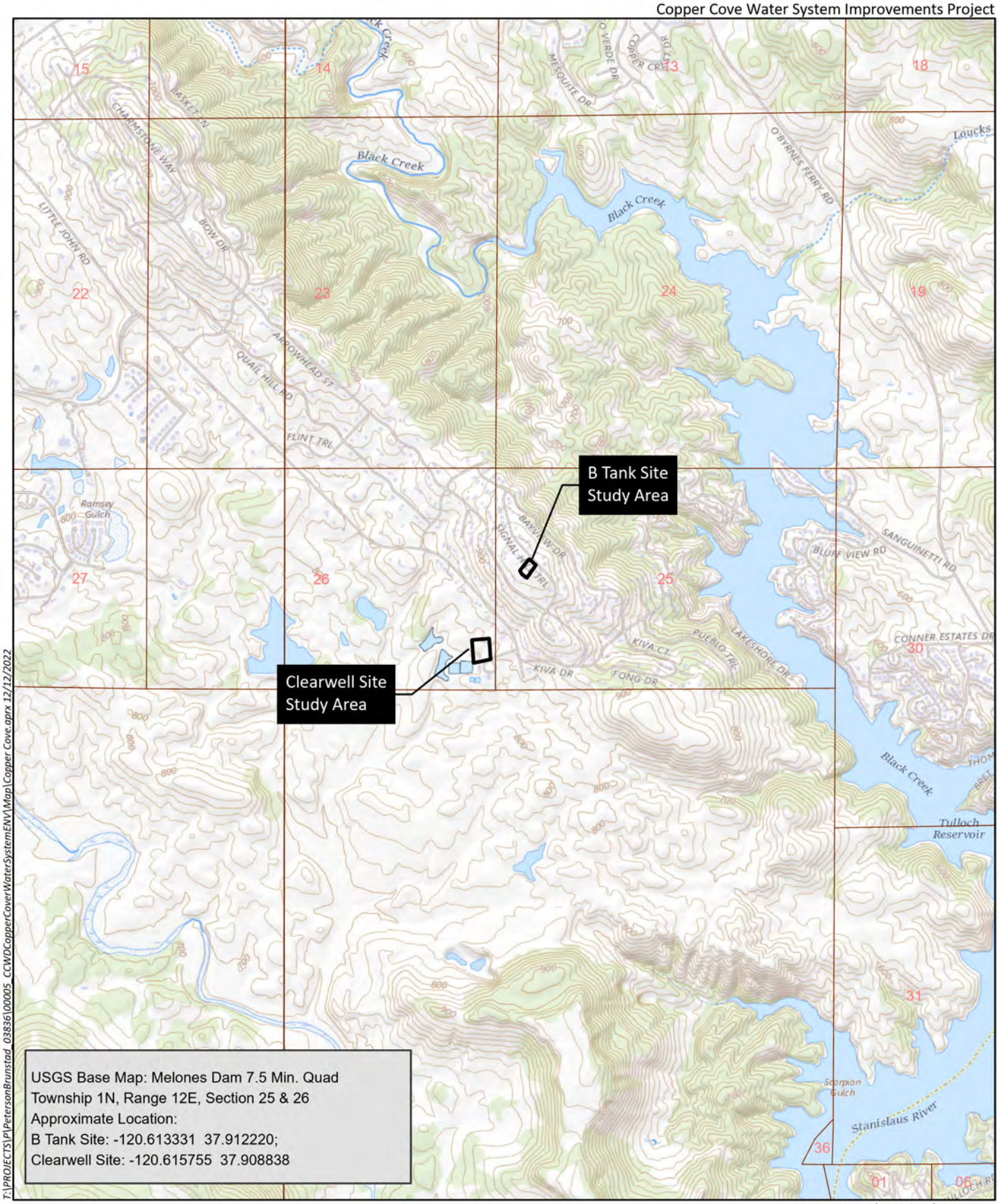
Figures



HELIX Environmental Planning

Vicinity Map

Figure 1



USGS Base Map: Melones Dam 7.5 Min. Quad
Township 1N, Range 12E, Section 25 & 26
Approximate Location:
B Tank Site: -120.613331 37.912220;
Clearwell Site: -120.615755 37.908838

T:\PROJECTS\P\PetersonBrunstad_03836\00005_CCWDCopperCoverWaterSystemENV\Map\Copper Cove.aprx 12/12/2022

0 2,000 Feet

Source: USGS, The National Map, 2021

HELIX Environmental Planning

Project Location Map

Figure 2

HELIX Environmental Planning

Area of Potential Effects Map

Figure 3

Appendix B

Resumes

BENJAMIN SIEGEL, RPA

Cultural Resources Project Manager

Mr. Siegel is an archaeologist and cultural resource manager with 14 years of experience directing cultural resource management efforts across the United States and in countries abroad. He regularly authors or co-authors cultural resource assessments and reports associated with projects requiring compliance with Section 106 of the National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA), and California Environmental Quality Act (CEQA). He has applicable experience in directing records searches, field surveys, site evaluations, data recovery efforts, and developing resource mitigation plans for large scale cultural resource efforts. Mr. Siegel is also experienced in the application of the California Register of Historical Resources (CRHR) and National Register of Historic Places (NRHP) evaluation criteria to various cultural resources. He meets the Secretary of the Interior's (SOI) Professional Qualifications Standards for prehistoric archaeology, historic archaeology, and history and is a member of the Register of Professional Archaeologists.

Social and Ecological Resilience Across the Landscape Fire Management Features Cultural Resources (2021 - 2022). Senior Archeologist managing a fuel break expansion project extending through Stanislaus National Forest lands. Cultural resources studies included Section 106 compliance with the Stanislaus National Forest as the lead agency, and CEQA compliance with the County of Tuolumne as the lead agency. Project activities managed included leading intensive pedestrian surveys of fuel break areas totaling approximately 8,500 acres, documenting over 100 cultural resources using California DPR 523 site recordation forms and following Stanislaus National Forest protocols, developing avoidance and minimization strategies for at-risk cultural resources, and producing a comprehensive Cultural Resources Inventory Report. Work performed for the County of Tuolumne with the U.S. Forest Service as project partners.

West Point Water Supply Drought Resiliency Biological and Cultural Resource Evaluations (2022). Senior Archaeologist for a dam enhancement project, approximately four acres in size, located in West Point, Calaveras County. Responsible for conducting a California Historical Resources Information System (CHRIS) records search and leading a pedestrian survey of the project area. Author of a cultural resource assessment that meets with CEQA and Section 106 requirements. Work performed for Calaveras County Water District.

Forebay Park Improvements (2022). Senior Archaeologist for proposed recreation improvements to the approximately six-acre Forebay Park located in Pollock Pines, El Dorado County. Responsible for conducting a California Historical Resources Information System (CHRIS) records search, Native American outreach, and directing a pedestrian survey of the project area. Author of the project's cultural resource assessment which meets with CEQA requirements. Work performed for El Dorado County.

EDUCATION

Doctor of Philosophy Candidate, Anthropology, University of California, Berkeley, 2023

Master of Arts, Anthropology, University of California, Berkeley, 2019

Master of Arts, Maritime Studies and Nautical Archaeology, East Carolina University, 2011

Master of Arts, American History, Emory University, 2007

Bachelor of Arts, History, Cum Laude, Emory University, 2007

CERTIFICATIONS

Registered Professional Archaeologist, No. 989542

U.S. SOI Qualified for Historic Archaeology, Prehistoric Archaeology, and History

PROFESSIONAL AFFILIATIONS

Society for Historical Archaeology

North Vista Plaza Project (2021 - 2022). Senior Archaeologist for an approximately 41-acre residential development project in Valley Springs, Calaveras County. Responsible for California Historical Resources Information System (CHRIS) records search and Native American Heritage Commission Sacred Lands File. Directed the pedestrian survey of the project area. Authored the cultural resource technical report to comply with USACE and Section 106 of the National Historic Preservation Act. Work performed for LGI Homes.

Orleans Mutual Water Company, Water Treatment and Storage Improvements IS/MND (2022). Senor Archaeologist for replacement of an existing in-line filtration plant and water distribution system with a new water treatment plant system and storage in unincorporated Orleans, Humboldt County. Prepared cultural resources assessment in support of CEQA IS/MND. Work performed as a subconsultant to Water Works Engineers with Orleans Mutual Water Company as the project owner, and State Water Resources Control Board as the lead agency.

Creekside Ridge Drive Development Cultural Extended Phase I Plan & Letter Reports (2021). Senior Archaeologist for approximately two-acre developmental project located in Roseville, Placer County. Responsible for developing and planning an Extended Phase I archaeological study based on previous cultural resource efforts in the project vicinity and for the proposed development project. Work performed for RSC Engineering, Inc. with the City of Roseville as the lead agency.

Mowry Village Residential Development (2021). Senior Archaeologist responsible for conducting a California Historical Resources Information System (CHRIS) records search, historic aerial photograph analysis, tribal outreach, and an intensive pedestrian survey to inform a cultural resource assessment of a 35-acre project area in the City of Newark in Alameda County. The project site had a high potential to contain prehistoric archaeological sites and resources. Served as the primary author for the final cultural resource assessment report for the project to comply with CEQA requirements for the management of cultural resources. Work performed for Integral Communities.

Folsom Corporate Center Apartments IS/MND (2021). Senior Archaeologist for proposed multi-family apartment community project approximately seven acres in size, in Folsom, Sacramento County. Responsible for conducting a California Historical Resources Information System (CHRIS) records search, Native American outreach, and directing a pedestrian survey of the project area. Author of the project's cultural resource assessment which meet with CEQA requirements. Work performed for the City of Folsom Community Development Department.

Natoma Senior Apartments IS/MND (2022). Senior Archaeologist for proposed senior apartment housing project approximately five acres in size, in Folsom, Sacramento County. Responsible for conducting a California Historical Resources Information System (CHRIS) records search, Native American outreach, and directing a pedestrian survey of the project area. Author of a cultural resource assessment that meets with CEQA and Section 106 requirements. Work performed for City of Folsom Community Development Department.

Fred Jackson First Mile/Last Mile Connection Environmental Compliance (2021). Senior Archaeologist for construction monitoring during roadway improvement project located in unincorporated community of North Richmond, Contra Costa County. Responsible for California Historical Resources Information System records search, Native American Heritage Commission Sacred Lands File search, technical cultural report authorship, and for the development of a Worker Environmental Awareness Program training for project construction crews and contractors before excavation and ground disturbance activities. Work performed for Contra Costa County.

Watt Avenue Apartments (2021). Senior Archaeologist for seven-acre apartment complex development project located in North Highlands, Sacramento County. Responsible for producing the Cultural Resource Assessments associated with CEQA and Section 106 compliance. Work performed for New Green Properties, LLC.

Appendix C

Native American Correspondence

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Calaveras County Water District Copper Cover Water System Improvement Project (03836.00005.001)

County: Calaveras

USGS Quadrangle Name: Melones Dam

Township: 9 N **Range:** 5 E **Section(s):** 9

Company/Firm/Agency: Ben Siegel, RPA for HELIX Environmental Planning, Inc.

Street Address: 11 Natoma Street, Suite 155

City: Folsom **Zip:** 95630

Phone: 916-365-8700

Fax: 619-462-1515

Email: bens@helixepi.com

Project Description:

The project consists of improvements to the Calaveras County Water District Copper Cover Water System which includes work in two locations. At the installation located along Kiva Place there will be construction of a new water treatment plant clearwell, and rehabilitation of the existing water treatment plant clearwell. At the installation on Signal Hill Trail there will be a replacement of a redwood water tank, rehabilitation of a steel tank, and the replacement of a booster pump station. Ground disturbances will be limited to the Project Areas depicted on the attached map.

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

December 9, 2022

Ben Siegel
HELIX Environmental Planning, Inc.

Via Email to: bens@helixepi.com

Re: Calaveras County Water District Copper Cover Water System Improvement (03836.00005.001) Project, Calaveras County

Dear Mr. Siegel:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Calaveras County
12/9/2022

Calaveras Band of Mi-Wuk Indians - Grimes
Debra Grimes, Cultural Resources Specialist
P.O. Box 1015 Mi-wuk
West Point, CA, 95255
Phone: (209) 470 - 8688
calaverasmiwukpreservation@gmail.com

Calaveras Band of Mi-Wuk Indians
Gloria Grimes, Chairperson
P.O. Box 899 Mi-wuk
West Point, CA, 95255
Phone: (209) 419 - 5675
calaverasband.miwukindians@gmail.com

Calaveras Band of Mi-Wuk Indians
546 Bald Mountain Road Mi-Wuk
West Point, CA, 95255
Phone: (209) 293 - 2189

California Valley Miwok Tribe
14807 Avenida Central Miwok
La Grange, CA, 95329
Phone: (209) 931 - 4567
Fax: (209) 931-4333

California Valley Miwok Tribe
AKA Sheep Rancheria of Me-Wuk Indians of CA,
P.O. Box 395 Miwok
West Point, CA, 95255
Phone: (209) 293 - 4179
l.ewilson@yahoo.com

Chicken Ranch Rancheria of Me-Wuk Indians
Lloyd Mathiesen, Chairperson
P.O. Box 1159 Me-Wuk
Jamestown, CA, 95327
Phone: (209) 984 - 9066
Fax: (209) 984-9269
lmathiesen@crtribal.com

Ione Band of Miwok Indians
Sara Dutschke, Chairperson
9252 Bush Street Miwok
Plymouth, CA, 95669
Phone: (209) 245 - 5800
consultation@ionemiwok.net

Nashville Enterprise Miwok-Maidu-Nishinam Tribe
Cosme Valdez, Chairperson
P.O. Box 580986 Miwok
Elk Grove, CA, 95758-0017
Phone: (916) 429 - 8047
Fax: (916) 429-8047
valdezcome@comcast.net

Tule River Indian Tribe
Joey Garfield, Tribal Archaeologist
P. O. Box 589 Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
joey.garfield@tulerivertribe-nsn.gov

Tule River Indian Tribe
Kerri Vera, Environmental Department
P. O. Box 589 Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
kerri.vera@tulerivertribe-nsn.gov

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589 Yokut
Porterville, CA, 93258
Phone: (559) 781 - 4271
Fax: (559) 781-4610
neil.peyron@tulerivertribe-nsn.gov

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct. Foothill Yokut
Salinas, CA, 93906 Mono
Phone: (831) 443 - 9702
kwood8934@aol.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Calaveras County Water District Copper Cover Water System Improvement (03836.00005.001) Project, Calaveras County.

Appendix D

Representative Survey Photographs

Photograph 1. Overview of grassy area within clearwell portion of APE, facing West, from Northeast corner.

Photograph 2. Evidence of recent soil disturbance (Western most disturbed area) within grassy area of clearwell portion of the APE, facing Northeast.

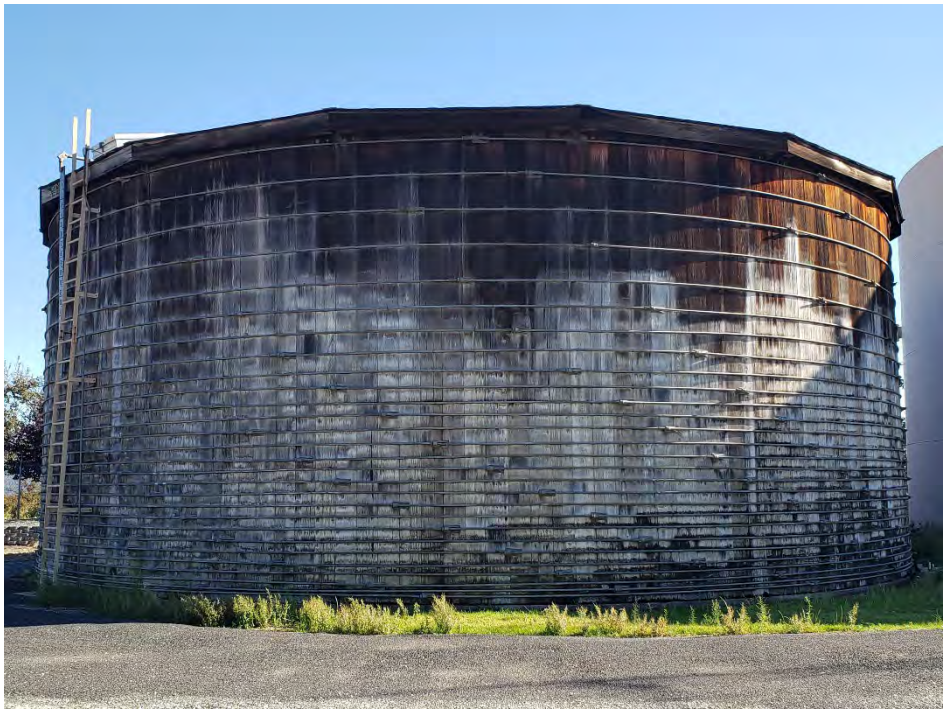
Photograph 3. View of drainage within clearwell portion of the APE, facing North.

Photograph 4. View of designed ditch which funnels the watercourse southeast, back into the developed area within the clearwell portion of APE, facing Southeast.

Photograph 5. View of developed area within clearwell portion of the APE, facing West.

Photograph 6. Overview of Tank Site B portion of APE, facing Southeast.

Photograph 7. View of fill used to create the flat surface/platform forming Tank Site B of the APE, facing Southeast.



Photograph 8. Overview of redwood water tank within Tank Site B portion of APE, facing West.

Appendix E

Completed DPR Forms

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code | Reviewer | Date

Page 1 **of** 12 ***Resource Name or #:** CCWD Redwood Tank

P1. Other Identifier:

***P2. Location:** ■ **Not for Publication** ☐ **Unrestricted** ***a. County:** Calaveras

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Melones Dam **Date:** 1962 **T** 1 N; **R** 12 E; **of Sec** 25 & 26; M.D. **B.M.**

c. Address: 3748 Signal Hill Trail City: Copperopolis Zip: 95228

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

From the intersection of Kiva Drive and Bayview Dr, head northwest onto Bayview Drive for 0.6 miles. At the intersection of Signal Hill Trail and Bayview Drive, turn left. Drive for another 0.2 miles, and arrive at a fenced area on the right side of the road. The water tank is ~30 ft southwest of Signal Hill Trail.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This resource consists of a redwood water tank, currently in use, but slated for demolition, by the Calaveras County Water District. The tank holds 300,000 gallons of water, and measures 14.5 m in diameter. The tank is seated on a 3 inch (7.62 cm) tall poured concrete slab, and possesses a water gauge and iron ladder on its northern side. The sides of the tank consist of redwood planks which are uniformly 11.5 inches (29.21 cm) wide and run the full height of the tank wall. These planks are held together, and presumably held watertight, by 28 metal bands approximately 1 inch (2.54 cm) in diameter which possess corkscrew planed ends on one side so they can hold metal nuts. These bands are held around the perimeter of the tank with 8 inch (20.32 cm) long fasteners, which are 3.25 inches (8.25 cm) tall x 3 (7.62 cm) inches wide. The fasteners hold the metal bands, and can tighten them, using metal hexagonal nuts (which measure 1 inch or 2.54 cm to a side) to sinch down and tighten the metal bands. See archaeological record and continuation sheet for more information.

***P3b. Resource Attributes:** (List attributes and codes) HP39 other (water storage tank)

***P4. Resources Present:** ☐Building ■ Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
Overview of Redwood Tank, Facing North, taken 10/10/22, Photo #133732, from Photolog BS-01

***P6. Date Constructed/Age and Sources:** ■ Historic
☐Prehistoric ☐Both
1970 (newspaper article)

***P7. Owner and Address:**
Calaveras County Water District, 120 Toma Court San Andreas, California 95249

***P8. Recorded by:** (Name, affiliation, and address)
HELIX Environmental Planning, Inc
1180 Iron Point Road, Suite 130, Folsom, CA 95630

***P9. Date Recorded:** 11/10/22

***P10. Survey Type:** (Describe)
Intensive Pedestrian Survey

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Cultural Resource Assessment Copper Cove Water System Improvements Project, Calaveras County, CA. by HELIX Environmental Planning, Inc. 2023.

***Attachments:** ☐NONE ■ Location Map ■ Sketch Map ■ Continuation Sheet ■ Building, Structure, and Object Record ■ Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6Z

***Resource Name or #** (Assigned by recorder) CCWD Redwood Tank

B1. Historic Name: N/A
B2. Common Name: Redwood B-Tank
B3. Original Use: Water Storage Tank for Calaveras County Water District
B4. Present Use: Same as Original Use

***B5. Architectural Style:** Vernacular

***B6. Construction History:** (Construction date, alterations, and date of alterations)
Tank was designed in 1970 in order to facilitate the water storage in association with the Calaveras County Water District's water supply for the community of Copper Cove in Copperopolis, Calaveras County, CA.

***B7. Moved?** ■ **No** ☐**Yes** ☐**Unknown** **Date:** **Original Location:**

***B8. Related Features:**
Resource is used in conjunction with the rest of the Calveras County Water District's Copper Cove Water System which includes a Steel water Tank, filtration systems, a chlorination system, piping, and ancillary structures.

B9a. Architect: Haight & Weatherby, Inc
b. Builder: W. M. Lyles Company

***B10. Significance: Theme:** none **Area:**
Period of Significance: none **Property Type:** Water Tank **Applicable Criteria:** none
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

HISTORIC BACKGROUND
Early Spanish explorers and the Franciscan and Jesuit missionaries who followed them were the first Europeans to reach northern California. The interior of the Sacramento Valley, away from the easily defended and more accessible chain of coastal missions and pueblos, was left largely untouched by the Spanish and "Californios" (Hoover et al. 1990). Settlement of the Sacramento area did not begin until the late 1830s and early 1840s, when entrepreneurs such as John Sutter and Jared Sheldon obtained land grants from the Mexican government, typically in exchange for an agreement to protect Mexican interest in these remote regions. In 1839, John Sutter built the earliest Euro-American settlement within Sacramento County. Named Sutter's Fort, it was well known outpost that brought with it an increase in Euro-American trappers, hunters, and settlers to the Sacramento area. As a result of the Mexican War (1847 to 1848), California became part of the territory of the United States. In 1848, gold was discovered at Sutter's Mill in Coloma which resulted in a torrent of gold seekers flooding into the Sacramento region. See continuation sheet for more information.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**
Cultural Resource Assessment Copper Cove Water System Improvements Project, Calaveras County, CA by HELIX Environmental Planning, Inc. 2023.

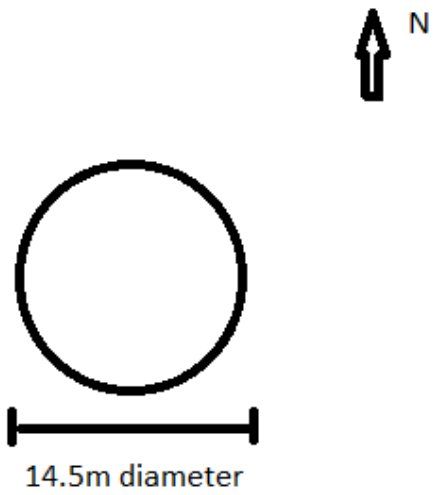
B13. Remarks:

***B14. Evaluator:** Teri Delcamp

***Date of Evaluation:** 11/10/22

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



ARCHAEOLOGICAL SITE RECORD

 ***Resource Name or #:** CCWD Redwood Tank

***A1. Dimensions: a. Length:** 14.5m **(**N/S**) × b. Width:** 14.5m **(**E/W**)**
Method of Measurement: ☐ Paced ☐ Taped ■ Visual estimate ☐Other:
Method of Determination (Check any that apply.): ☐ Artifacts ■ Features ☐ Soil ☐ Vegetation ☐ Topography
☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (Explain):

Reliability of Determination: ■ High ☐ Medium ☐ Low Explain: no artifacts encountered but resource is a built structure

Limitations (Check any that apply): ■ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☐ Disturbances ☐ Vegetation ☐ Other (Explain): the resource is within a fenced perimeter which is under lock and key by Calaveras County Water District

A2. Depth: ■ None ☐ Unknown Method of Determination:
***A3. Human Remains:** ☐ Present ■ Absent ☐ Possible ☐ Unknown (Explain): none observed

***A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.):
Feature 1 – is the water tank itself. It rests on a flat concrete pad 3-inches (7.62 cm) in thickness. Water tank is made from redwood timbers, held together by 28 metal bands approximately 1 inch (2.54 cm) in diameter which possess corkscrew planed ends on one side so they can hold metal nuts. These bands are held around the perimeter of the tank with 8 inch (20.32cm) long fasteners, which are 3.25 inches (8.25cm) tall x 3 (7.62cm) inches wide. The fasteners hold the metal bands, and can tighten them, using metal hexagonal nuts (which measure 1 inch or 2.54 cm to a side) to sinch down and tighten the metal bands. Water tank was still in use at time of survey, though slated for demolition by CCWD to be replaced by larger water tank for upgrades in water system.

***A5. Cultural Constituents (**Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.):
No additional artifacts or ecofacts encountered in association with the water tank

***A6. Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

***A7. Site Condition:** ■ Good ☐ Fair ☐ Poor (Describe disturbances.): resource is still in operation, thus, still has decent integrity, however it is clear from warping and leaking that this structure is at the end of its useful life

***A8. Nearest Water** (Type, distance, and direction.)**:** site is .5 mile west of Lake Tulloch
***A9. Elevation:** 608 ft amsl
A10. Environmental Setting (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.)**:** Water tank lies within a small residential parcel, abutted to the east, west and south by residences. No trees or any vegetation is within the parcel containing the water tank. The soils within this parcel consist of 8-10ft of fill. Some road grade gravel also occupies the ground surface of the parcel.

A11. Historical Information: none

***A12. Age:** ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945
■ Post 1945 ☐ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:**
CCWD "As-Built" schematics suggest that it was designed by Haight & Weatherby, Inc. in 1970 to hold water for a water filtration and distribution system supporting the population of Copperopolis.

A13. Interpretations (Discuss data potential, function[s], ethnic affiliation, and other interpretations):
Somewhere in the vicinity but not observed within the project area must be the associated hardrock mining operation

A14. Remarks:

A15. References (Documents, informants, maps, and other references): none

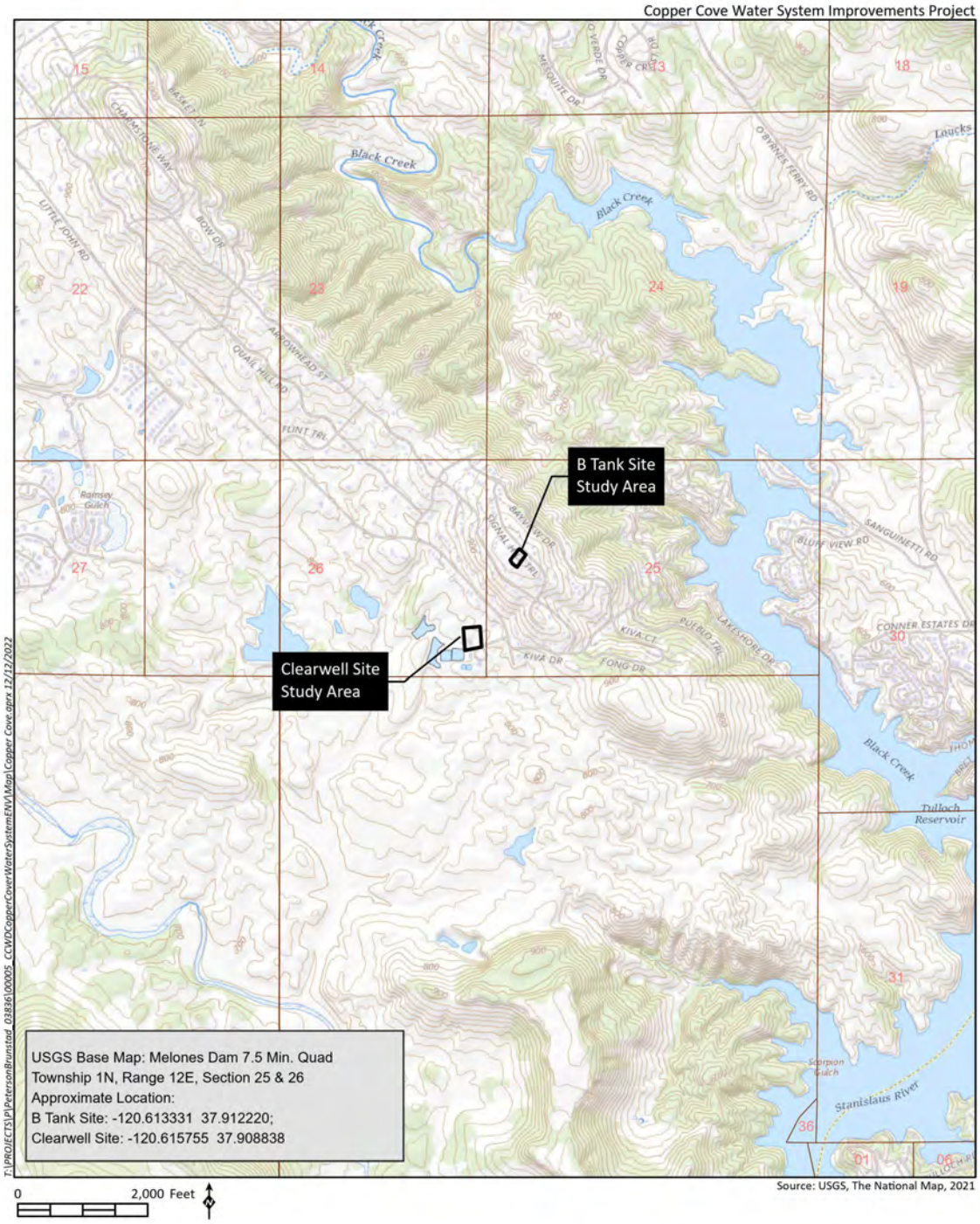
A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.):
photo series BS-01 #s 111514-141814. Original Media/Negatives Kept at: HELIX Environmental Planning, Inc 1180 Iron Point Road, Suite 130, Folsom, CA 95630

***A17. Form Prepared by:** HELIX Environmental Planning, Inc **Date:** 11-10-22
Affiliation and Address: Cultural Resource Assessment Copper Cove Water System Improvements Project, Calaveras County, CA. by HELIX Environmental Planning, Inc. 2023.

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **LOCATION MAP**	Primary # HRI# Trinomial

Page 4 **of** 12 ***Resource Name or #:** CCWD Redwood Tank

***Map Name: CCWD Tank Location Map** ***Scale:** 1:24,000 ***Date of Map:** 11-10-22



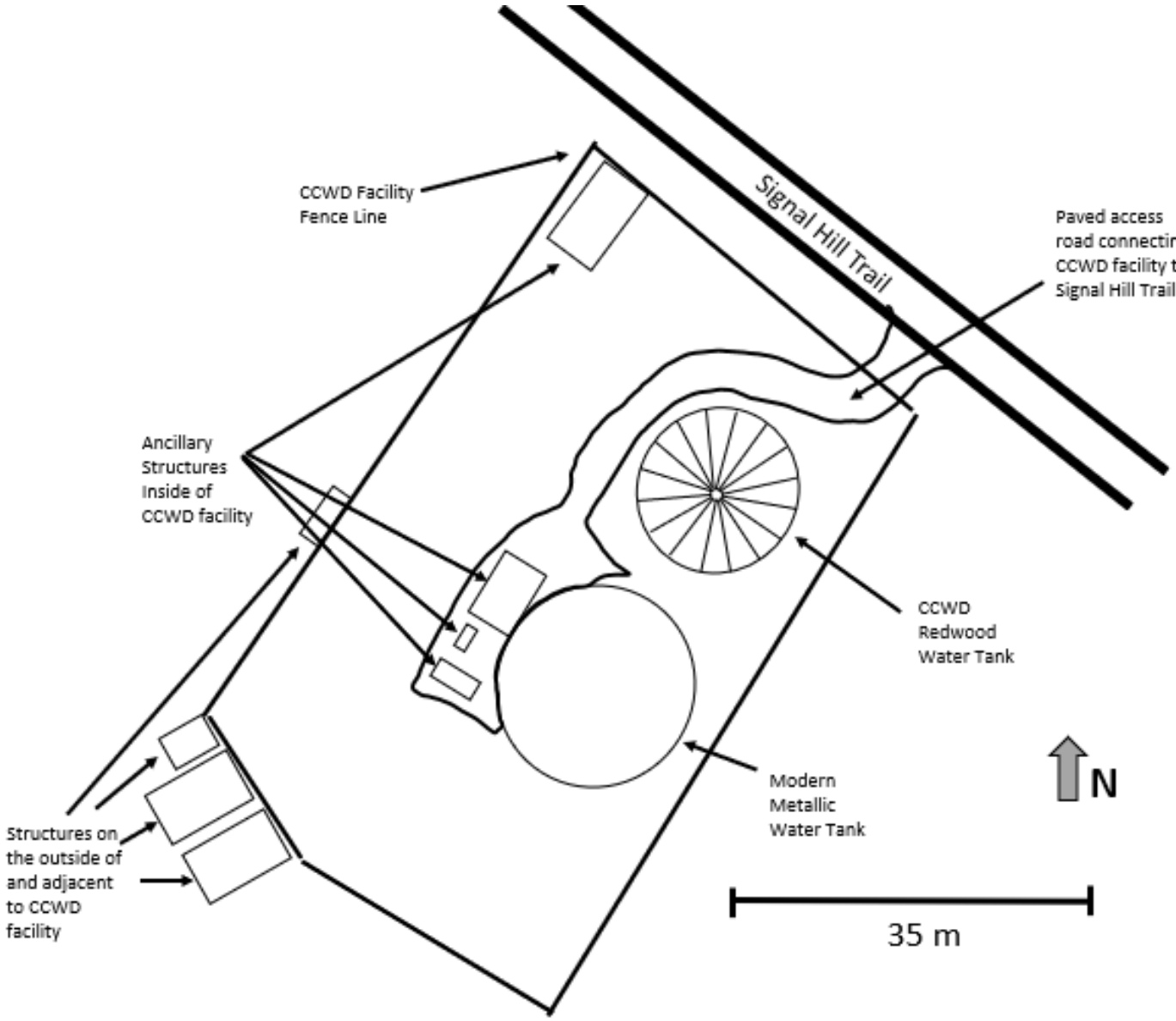
HELIX Environmental Planning

Project Location Map

Figure 2

***Drawn By:** HELIX Environmental Planning, Inc. ***Date:** 11-10-22

Copper Cove Water System Improvements Project
CCWD Redwood Water Tank Sketch Map
Ben Siegel RPA
11-10-22



***Recorded by:** HELIX Environmental Planning Inc. ***Date:** 11-10-22 ■ Continuation ☐ Update

***P3a. Description (continued):**

The roof of the tank is 16 sided and formed by a series of planks which radiate from the tank's center outward. The outer edges of these planks are fixed together by a series of 16 large planks which form the perimeter of the roof and give the roof its 16 sided shape. On top of these radiating planks the roof is covered in black, sandpaper-like shingles. At its bottom the Redwood Tank shows signs of leaking water on its southwestern side. HELIX's archaeologist found no other traces of prehistoric or historic-era materials or features within the B Tank Site portion of the APE.

Close-up of metal fastners which hold redwood tank's metal bands, facing east, taken 11/10/22, Photo #133756, from Photolog BS-01.

Overview showing series of metal bands and fastners of redwood tank as well as obvious signs of leaking on tank's southeast side, facing east, taken 11/10/22, Photo #134610, from Photolog BS-01.

Close up #1 of redwood tank roof construction, showing wooden planks radiating outward from center of rool, and wooden planks which form the perimeter of the structure, taken 11/10/22, Photo #135202, from Photolog BS-01.

Close up #2 of redwood tank roof, showing small superstructure for ventilation and shingles, taken 11/10/22, Photo #135453, from Photolog BS-01.

View of redwood tank wall, showing overall integrity, spacing of metal bands and fastners, and interface with concrete platform underneath, taken 11/10/22, Photo #1135810, from Photolog BS-01.

***B10. Significance (continued):**

As the population soared and the gold decreased, many of the settlers who decided to stay turned to alternative vocations, particularly agriculture. Many found that the local land was relatively cheap and provided good crops. Raising grain, livestock, and produce to sell to the thousands of miners heading to the gold fields proved a profitable venture. These combined events hastened the settlement of the area and the development of Sacramento as an economic and transportation center. The designation of Sacramento as the state capital, in 1854, also resulted in the area's increase in socio-political importance.

Copperopolis History

Miners flooding into the Sierra foothills during the gold rush represent the first non-indigenous settlement of the Project vicinity. Located on El Dorado Creek, the "El Dorado camp" was among the first mining camps established in Calaveras County. In August 1851, it was noted as located in Township 7, when the County Townships were fixed (*Calaveras Chronicle,* 18 October 1851). The name of the camp was changed from El Dorado to Mountain Ranch when a post office was established in 1858, as there was already an established town of El Dorado in Placer County. Within a few short years, the camp had become a trading center for quartz and drift miners in the area. By 1858-59, six properties were assessed in El Dorado; locally, but in tents or habitations too simple to be assessed. By 1871, the camp was noted as a decayed mining town, but with promising quartz ledges nearby. By 1876 one quartz mill had been erected, and in 1899 four stamp mills and one Tuster mill were operating (Gudde 1975:228).

Whiskey Slide camp was another early Euro-American settlement in the region. The first mention of the camp was in 1853, when it was reported as "Venetian Slide," "the name given to a new camp just springing into existence near Jesus Maria. The extent of the mining ground is small though extremely rich; some claims paying $1 to the pan" (*San Joaquin Republican,* July 26, 1853). In June 1854, the camp was noted in the *Alta*, as a place where miners regularly washed two dollars to the pan (Daily *Alta*, June 8, 1854). By 1857, it was the seat of the Whiskey Slide Canal Company (Old Italian Ditch) (Gudde 1975). In 1865 the Whiskey Slide Quartz Mill and Whiskey Slide Ditch were assessed. By 1880, there were no longer any assessments for property at Whiskey Slide Camp.

Copperopolis was founded by W. K. Reed and Thomas McCarty in 1860 after they discovered vast copper deposits in the area. In the same year, Hiram Hughes also discovered copper and several extensive copper mines were established in what would come to be known as the Coppern Canon Mining District. These copper discoveries came on the heels of the end of the California gold rush, and consequently the local mines became the main focus of mining efforts in Calaveras County in the 1860s. William Reed and Thomas McCarty soon founded the Union Copper Mine (and later the Keystone and Empire Mines), while other mines in the area included the Napoleon Mine and the Calaveras Claim. The town adopted the name "Copperopolis" in 1861. In 1862, Reed sold his interests in the mines and built a toll road, named "Reeds Turnpike" which spanned from Copperopolis to Telegraph City. The road also connected with a route to Stockton. This road remained a toll road through 1865.

The mines in the area were heavily used during the Civil War during which time they were the most significant copper producing mines in the US. This sparked the rapid development and industrialization of the area as copper was needed for munitions and shell casings during the war. So great was the boom caused by the war that by 1865, the number of businesses in the Copperopolis region had increased to 90, from 28 just 4 years prior. Copper mined in the area was sent to Stockton and then to San Francisco, where it was shipped to smelters on the East Coast via shipping lanes around Cape Horn.

Copperopolis was a very pro-Union town during the War, a fact which is reflected in the street names within the town including Union (now Main Street), Lincoln, Grant, and Sherman. Several establishments in the region also adopted supportive names including the Union Hotel, Union Mine, and the Union Bridge. In 1867 however, the town of Copperopolis was largely destroyed by a catastrophic fire and was never rebuilt. This was in part due to a steep drop off in demand for copper at the end of the Civil War. Investors from Boston purchased the mines in the 1880s, and some production did continue through the early 20th century. The town also saw upticks in business, productivity, and population growth during boom times caused by the first and second world wars. During World War II the Keystone Mine even briefly reopened until it closed for the last time in 1945. When the mines finally did close, the U.S. Bureau of mines reported that those in Copperopolis had produced 72,598,883 lbs of copper, worth over $12 million, which adjusted for inflation amounts to roughly $160 million worth of copper.

The community of Copperopolis also contains four buildings that are listed on the National Register of Historic Places including: the Copperopolis Armory, the Copperopolis Congregational Church, the Honigsberger Store, and Reeds Store and also features several sites that have had historical markers and or placards installed to commemorate their significance to the community including the Calaveras Telephone Company Building, The Old Corner Saloon, the Copperopolis Historical Plaza, and the Copperopolis Cemetery. The cemetery also features a marker for Thomas McCarty, one of the original founders of the town.

In more recent times the town has been redesigned to welcome visitors and tourists. The town square has been refinished with timeless architecture and covered walkways and now features specialty boutique shops, restaurants, and residential lofts. The community also continues to grow with a population of 3,671 recorded for the 2010 census up from the 2,363 listed in the 2000 census.

Copper Cove

The Tulloch Reservoir is located approximately four miles southeast of Copperopolis. The Reservoir had two developments on its shores in the 1970s, Copper Cove and The Shores. The Copper Cove development was built by the I.C. Deal Development Corporation of Hayward, CA and Dallas, TX, on 4,800 acres of a total 5,000 acres previously owned by Clifford Mitchell around the north end of the Tulloch Reservoir. Mitchell had owned and operated the Black Creek Lodge on the reservoir for many years. The overall development consisted of 2,200 single family parcels for homes and cabins ranging from one-half to nine acres in size and a 200+ space mobile home park, with miles of waterfront on Tulloch Reservoir. I.C. Deal Development was renamed Great Lakes Development Corporation, and by the end of 1970 it had merged with and become a subsidiary of Centex Corporation.

In May 1969, the Calaveras County Board of Supervisors approved the first Copper Cove subdivision (Units 1 and 2) consisting of 870 acres with 660 developable lots ranging from one-half to five acres in size in the Black Creek area of Tulloch Reservoir. The first subdivision proposed included 14 miles of roads, a water system, a new homeowners' lodge, residential mobile-home park, commercial area and a community area with boat docks with a value of $21 million. The lodge was to be remodeled, expanded, and renamed as the Copper Cove Lodge. Potable water would be provided by the Calaveras County Water District (CCWD) and the water system serving the development would meet county standards. The water source was initially Tulloch Reservoir, with up to 2,000 acre-feet to be sold annually to CCWD by the South San Joaquin and Oakdale Irrigation Districts. The water source would eventually be changed to the Bureau of Reclamation's New Melones Reservoir once the new dam was completed. The CCWD was to install a pump and water treatment facilities. The Copper Cove development was to be the first in the county to be on a sewage disposal system for the waterfront lots, with the rest of the lots on septic tanks. The developer anticipated completion of Units 1 and 2 within two years, with roads already under construction by May 1969, the homeowner's lodge to be built first (completed in October 1969), and home lots to go on the market by June of that year.

Copper Cove Units 3 through 7 totaling over 2,200 acres with about 1600 lots were approved in July 1969. Quarter- to full-page ads were taken out by the developer in August promoting Copper Cove in the *Oakland Tribune, Modesto Bee* and *San Francisco Examiner* newspapers, and again in March 1970 in other bay area newspapers. Ads would continue in bay area papers in the following years during development of Copper Cove. Unit 8 was approved in January 1970 with 429 lots on 1,040 acres. In September 1971, a 45-acre mixed use expansion of Copper Cove (Unit 8A) was approved for another mobilehome park, 10 rental duplexes, four-acre commercial site, recreation area, and sites for a school and fire station, all to be on county water. The development of Copper Cove was apparently complete by May 1974.

By March 1970, a contract was awarded for construction of Copper Cove Unit 7. The development's roads were constructed by the George Reed Construction Company, and the water and sewer systems were constructed by W.M. Lyles Company. A March 1971 article on the construction progress for the water and sewer system noted that Unit 7's 704 lots would be the first to benefit from the system. The water and sewer systems were taken over by CCWD in February 1973. The sewer system serves only Unit 7 of Copper Cove, while the water system serves Units 1, 2 and 7. Water was pumped from Tulloch Reservoir initially (later New Melones Reservoir) to a tank and booster station, then treated before being pumped to the 300,000-gallon Redwood Water Tank that serves as storage for the Unit 7 homes. A different pumping station sends water to a different 400,000-gallon water tank to provide storage for Units 1 and 2.

Significance Evaluation

The Redwood Water Tank was given the temporary field name CCWD Redwood Tank, located within the Tank Site B portion of the APE. To determine if this resource should be identified as a historic property (for purposes of Section 106 of the NHPA) or a historical resource (for purposes of CEQA), HELIX evaluated the CCWD Redwood Tank against the criteria of eligibility for listing on the NRHP or CRHR. Each NRHP/CRHR criterion is addressed individually below.

Criterion A/1. The Redwood Tank does not qualify as a historic property or historical resource under Criterion A/1 (association with events that have made a significant contribution to the broad patterns of our history). The Redwood Tank was built circa 1971 to support the new Copper Cove Community (CCWD 1970). Copper Cove was a 4,800-acre water-oriented subdivision project developed by I. C. Deal Development Corporation, later named Great Lakes Development Corporation. The community was one of many in the Copperopolis area of Calaveras County that were being developed in the 1960s and 1970s, and one of two near Tulloch Reservoir southeast of Copperopolis. According to reports, development in the Sierra Foothills area was booming at the time "spurred primarily by the Bay Area and Peninsula families who like the mountains for a second home or for retirement."[1] Although a portion of Copper Cove homes were the first in the county to be on a sewer system instead of septic tanks, there is no evidence that the Copper Cove Community played any major role in the overall development history of the area. While the Redwood Tank was integral to the overall development of the Copper Cove Community, its construction and use did not substantially shape local, state, or national history. Likewise, there is no evidence to suggest that the tank is associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B/2. The Redwood Tank does not qualify as a historic property or historical resource under Criterion B/2 (association with the lives of significant persons in our past). There is no evidence to suggest that construction or operation of the tank is associated with any person considered important in history. Designed by Haight & Weatherby, Inc. this firm was involved in a variety of local development projects. The water system was built by W.M. Lyles Construction Company which was active in Northern California from the 1950s through the 1970s, but the water system for Unit 7 of Copper Cove is a minor project that does not represent the company's overall larger body of work.

Little information is available in the historic record regarding Richard Haight, other than society listings. He was employed as a surveyor in the San Andreas area by at least 1955 through 1965 (Stockton Daily Evening Record 1955, 1965a). He served as the surveyor for a new camping/trailer park project in the San Andreas area in 1965 (Stockton Daily Evening Record 1965b).

Gene Weatherby grew up in Calaveras County, California, earned his civil engineering degree from UC Berkeley and worked for the US Forest Service and some private firms before receiving his civil engineers license and starting his own engineering firm in 1964. During the 1970s, Weatherby was a director with the Mokelumne Hill Fire Department and the Sanitary District. Weatherby served for a time on the Local Agency Formation Committee in Calaveras County, and on the boards of the Consulting Engineers and Land Surveyors of California and the American Council of Engineering Companies. He also served as the consulting engineer for the public works departments of Calaveras and Alpine Counties (Calaveras Enterprise 2013). He was named Engineer of the Year by the San Joaquin Engineers Council in 2009 (The Record 2009).

Weatherby partnered with land surveyor Richard Haight to form Haight & Weatherby, based in San Andreas, California. Richard Haight served as president and Gene Weatherby served as vice-president of the company. In 1969, Haight & Weatherby participated with the Calaveras County High School and the Operating Engineers Local Union No. 3 to establish a pilot engineering apprentice and journeyman training program in Calaveras County (Engineers News 1968). By 1969, Haight & Weatherby Inc. had merged with PMT Associations Inc. of Sacramento under the corporate name of TEVCO. PMT Associations was reportedly "one of the largest professional engineering and land surveying firms in California"[2] at the time. The new company continued to have a San Andreas office that still operated under the Haight & Weatherby name, under the direction of Richard Haight.

[1] Elizabeth Chapman McKnight, "The Back Road," *Stockton Daily Evening Record*, August 10, 1969, 12.
[2] Mike Womack, "Survey Notes," *Engineers News*, Vol. 28, No. 8, August 1969, 7.

The available evidence in the historical record indicates that Haight & Weatherby's influence was limited, the Copper Cove water system is not representative of W.M. Lyle Company's overall larger body of work, and neither company appears to be associated with a prominent figure in local, state, or national history.

Criterion C/3. The redwood tank does not qualify as a historic property or historical resource under Criterion C/3 (embodiment of the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction). The CCWD Redwood Tank was built circa 1971 as part of the Copper Cove Community water infrastructure. Pressure for hasty development of settlements began with the California Gold Rush in 1849. Water was needed to support those settlements. The most readily available and significant source of material for building both shelter and water storage was the massive and numerous redwood trees. Through the end of the 1800s and early 1900s, redwood water tanks were built throughout the state and are ubiquitous in Northern California. The generic materials used in their construction have no unique or distinguishing characteristics or features. Furthermore, by the 1960s and 1970s, many water storage facilities were being built of metal rather than the outdated and less efficient wood planks. There is no evidence that Haight & Weatherby, Inc., and their principals were recognized as master engineers. Likewise, there is no evidence that W.M. Lyle Company were recognized as master builders nor is the tank representative of their overall body of work. Therefore, the redwood tank does not embody distinctive characteristics of a type, period or method of construction, does not possess significant and distinguishable design elements or high artistic values, and does not represent the work of a master.

Criterion D/4. The redwood tank does not qualify as a historic property or historical resource under Criterion D/4 (has yielded or may be likely to yield, information important in history or prehistory). Generic in materials and construction, the tank does not have the potential to add to our understanding of local, state, or national history.

Conclusion

The CCWD Redwood Water Tank does not meet Criterion A/1 because it is not associated with events that have made a significant contribution to the broader patterns of local, state, or national history. It does not meet Criterion B/2 because there is no evidence to suggest that the construction or operation of the tank is associated with any person considered important in local, state, or national history. The tank does not meet Criterion C/3 because it does not embody distinctive characteristics of a type, period, or method of construction, nor does it represent the work of a master or possess high artistic values. Finally, the tank does not meet Criterion D/4 as it is unlikely to yield information important to local, state, or national history. As a result, HELIX recommends that the CCWD Redwood Tank is not eligible for inclusion in either the NRHP or CRHR and it has therefore been assigned a status code of 6Z.

Item 4g

Agenda Item

DATE: September 27, 2023

TO: Michael Minkler, General Manager

FROM: Jeffrey Meyer, Director of Administrative Services

SUBJECT: Discussion/Action Approving Repayment of the Loan from the Special Project Fund to the Jenny Lind Water Expansion Fund

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RECOMMENDED ACTION:

Motion _____ / _____ by Minute Entry Approving Repayment of the Loan from the Special Project Fund to the Jenny Lind Water Expansion Fund.

SUMMARY:

On February 1, 2013, the District obtained a loan from Compass Mortgage Corporation in the amount of $7,499,000 to refund the 2004 Enterprise Refunding Revenue Bonds. The 2004 bonds, which totaled $19,625,000, were used to refund the 1994 Certificates of Participation, the 1995 Certificates of Participation and prepay a capital lease with LaSalle National Bank. The 2013 refunding loan matured in September 2017.

The prior debt issuances were used to fund infrastructure improvements for operations and the expansion service areas listed below. The debt service obligations were based on the following loan share percentages:

- Operations, Water and Wastewater – Funds 300/500 (33.33%)
- Ebbetts Pass Water Service Area – Fund 354 (29.56%)
- Jenny Lind Water Service Area – Fund 364 (20.80%)
- Copper Cove Water Service Area – Fund 374 (13.55%)
- Copper Cove Wastewater Service Area – Fund 584 (2.76%)

The annual debt service for this loan was paid for from both operating and expansion funds. The operating improvements were funded by operating funds, and the debt service attributed to the expansion related improvements were paid from capacity fees (new connection fees) collected in the individual water and wastewater service areas.

Prior to the 2008 recession, the Jenny Lind Water Expansion Fund (Fund 364) collected enough capacity fee revenue to pay its share of the annual debt service. However, as new construction slowed, the reduced capacity fee revenues were not adequate to pay the Jenny Lind Water Expansion Fund's portion of the debt service. Beginning in FY 2011-12, the District backfilled the revenue shortfalls with a loan from the Special Project Fund in the Interest Reserve Fund (Fund 108).

Subsequent loans were required to cover all or part of the annual debt service payments as the downturn in home construction in the Jenny Lind service area continued through the life of the loan. The current amount due from the Jenny Lind Water Expansion Fund (Fund 364) to the Interest Reserve Fund (Fund 108) is $1,522,736 as outlined below. The status of this outstanding loan has been noted in recent audits, including the FY 2021-2022 Audited Financial Statements (Note E attached).

- FY 2011-12 – $393,077
- FY 2012-13 – $393,559
- FY 2013-14 – $306,000
- FY 2014-15 – $276,000
- FY 2015-16 – $ 51,000
- FY 2016-17 – $ 88,100
- FY 2017-18 – $ 15,000

As of June 30, 2023, there is $1,043,436 in the Jenny Lind Water Expansion Fund 364 (attached). The current Five-Year Water Capital Improvement Program (CIP) does not include any Jenny Lind expansion related projects, therefore funds are available in the Jenny Lind Water Expansion Fund to begin repayment of the loan from the Special Project Fund. Staff recommends transferring $400,000 from the Jenny Lind Water Expansion Fund (Fund 364) to the Special Project Fund in the Interest Reserve Fund (Fund) 108 and record the transfer in FY 2022-23. Future repayments will be assessed annually based on new connection revenues and any new Jenny Lind CIP expansion-related projects.

FINANCIAL CONSIDERATIONS:

A transfer of $400,000 from the Jenny Lind Water Expansion Fund (Fund 364) to the Special Project Fund in the Interest Reserve Fund (Fund 108) will reduce the fund balance of Fund 364 to $643,436. The unaudited projected FY 2022-23 fund balance in the Special Project Fund (Fund 108) will increase from $373,667 to $773,667.

Attachments: FY 2021-22 Audited Financial Statements – Note E, Internal Loans
- Fund 364 Trial Balance Report, June 30, 2023

NOTE E – LONG-TERM LIABILITIES (Continued)

2061. Annual principal and interest on the loans and bonds are expected to be 75% or less of net revenues as required by the loan and bond covenants. Total principal and interest remaining to be paid on the loans and bonds are reported in the "Total" column for the Water Fund and Sewer Fund in the table above. Total principal and interest paid on all debt payable from net revenues in the Water and Sewer Funds related to the Debt Service Coverage Ratio was $621,379 and $171,067, respectively, and total water and sewer system net revenues were $8,149,312 and $3,780,769 for the year ended June 30, 2022. At June 30, 2022, the District's total water and sewer system net revenues were 1,303% and 2,199% of debt service payments, respectively, as described in the debt service coverage ratio calculation in the Other Supplementary Information section of the financial statements.

NOTE F – INTERNAL LOANS

On January 11, 2012, the Board of Directors approved a building loan of $3,000,000 from certain water and sewer expansion funds to pay for the construction of the District's operations headquarters. After segregating the joint cost fund, a loan of $1,970,000 from the Sewer Fund to the Water Fund resulted. The internal loan will be repaid with operating funds over ten years at an interest rate of 2.5% or the weighted average of the District's current return on investments each year, whichever is higher. The internal loan will be repaid on an "interest only" basis for the first five years and then principal payments of $645,741 will be made each year thereafter in addition to yearly interest payments. As part of the fiscal year 2017-18 budget adoption (June 28, 2017), the Board approved delaying the start of the principal pay down one year (to fiscal year 2018-19), which extends the "interest only" period to six years. Thus, the revised term will be eleven years, including six years with interest only payments and five years with principal and interest payments. The remaining balance at June 30, 2022 was $406,604.

On June 13, 2012, the Board of Directors approved a loan from special project funds in the District's interest reserve funds to cover debt service payments for the Jenny Lind water expansion funds loan. The transaction resulted in an internal loan of $1,522,736 from the Sewer Fund to the Water Fund after segregating joint costs. The Jenny Lind water expansion funds debt service obligation ended September 2017. The internal loan is non-interest bearing and will be repaid from new water connection fees from the Jenny Lind service area as available. The outstanding loan balance as of June 30, 2022 was $411,139.

On August 8, 2018, the Board of Directors approved a loan from the Water Fund to the Sewer Fund to fund a cash deficit of $1,126,267 at June 30, 2018. The internal loan will be repaid by the Sewer Fund each June 30 from June 30, 2019 to June 30, 2028 in amounts of $125,383, including interest at 2% per year. The outstanding balance at June 30, 2022 was $767,399.

NOTE G – INTERFUND TRANSACTIONS

Interfund transfers were as follows for the year ended June 30, 2022:

Fund Receiving Transfer	Fund Making Transfer	Amount	
Water Fund	Sewer Fund	$ 236,052	(a)
Water Fund	Sewer Fund	17,295	(b)
Water Fund	Sewer Fund	18,361	(c)
Water Fund	Sewer Fund	2,487	(d)
Total interfund transfers		$ 274,195	

(a) Transfer to adjust reserve balances
(b) Transfer to correct prior year transfer to reflect Water Fund only
(c) Deposit adjustment to Sewer Funds
(d) Transfer to correct prior year transfers to reflect Water Fund only

General Ledger

Detailed Trial Balance

User: JeffreyM
Printed: 09/19/2023 - 10:48AM
Period: 01 to 13, 2023

CALAVERAS COUNTY WATER DISTRICT
120 Toma Court
San Andreas, California 95249
(209) 754-3543
www.ccwd.org

Account Number				Description	Budget	Beginning Balance	Debit This Period	Credit This Period	Ending Balance
364				JLW Expansion/Replacement 364					
ASSETS									
364-00-13101				Cash in Bank (Umpqua)	0.00				
7/31/2022	GL	1	25	Record LAIF Interest/Offset June Accruals			447.98	0.00	
7/31/2022	GL	1	42	July 2022 Chandler Interest (Net)			62.71	0.00	
8/31/2022	GL	2	35	Chandler Net Interest August 2022			139.19	0.00	
8/31/2022	GL	2	36	Tyler/Incode August 2022 Adjustment			13,347.27	0.00	
9/30/2022	GL	3	34	Tyler UB September 2022			7,078.23	0.00	
9/30/2022	GL	3	37	Chandler Interest September 2022 - 10767			405.00	0.00	
10/31/2022	GL	4	19	LAIF Interest July - September			1,203.09	0.00	
10/31/2022	GL	4	29	Chandler Interest October 2022 - General 10767			348.17	0.00	
10/31/2022	GL	4	31	Tyler UB October 2022			13,617.00	0.00	
11/30/2022	GL	5	35	Tyler UB November 2022			13,617.00	0.00	
11/30/2022	GL	5	39	Chandler Interest November 2022			313.50	0.00	
12/31/2022	GL	6	24	Tyler December 2022			28,066.00	0.00	
12/31/2022	GL	6	27	Chandler Interest, General 10767 December 2022			205.43	0.00	
1/31/2023	GL	7	31	Chandler Interest, General 10767 January 2023			148.83	0.00	
1/31/2023	GL	7	34	LAIF Interest Oct - Dec 2022			1,565.59	0.00	
2/28/2023	GL	8	37	Chandler Interest, February 2023, General 10767			0.00	13.36	
3/31/2023	GL	9	38	Tyler UB, March 2023			27,234.00	0.00	
3/31/2023	GL	9	47	Chandler Interest, March, 2023, General 10767			434.13	0.00	
3/31/2023	GL	9	51	Chandler Nov Interest Correction - Chandler stateme			5.13	0.00	
4/30/2023	GL	10	19	LAIF Interest January - March 2023			1,993.51	0.00	
4/30/2023	GL	10	26	Chandler Interest, April 2023 General (10767)			426.35	0.00	
5/31/2023	GL	11	34	Tyler ERP Pro May 2023			13,617.00	0.00	
5/31/2023	GL	11	34	Tyler ERP Pro May 2023 adjustment from 300-00-2			13,613.35	0.00	
5/31/2023	GL	11	35	Chandler Interest General 10767 May 2023			536.92	0.00	
6/30/2023	GL	12	33	Tyler ERP Pro (Incode) June 2023			27,237.65	0.00	
6/30/2023	GL	12	35	Chandler Interest June 2023			630.51	0.00	
6/30/2023	GL	12	59	Capacity Fee Component Transfer In to Fund 104 (1			0.00	1,620.00	
				364-00-13101 Totals:	0.00	878,775.36	166,293.54	1,633.36	1,043,435.54

Account Number				Description	Budget	Beginning Balance	Debit This Period	Credit This Period	Ending Balance
364-00-13110				Cash in Bank (US Bank-Invest)	0.00				
		364-00-13110 Totals:			0.00	0.00	0.00	0.00	0.00
364-00-14000				CCWD Distributed Investments	0.00				
		364-00-14000 Totals:			0.00	0.00	0.00	0.00	0.00
364-00-14090				Invest Mark to Market	0.00				
		364-00-14090 Totals:			0.00	0.00	0.00	0.00	0.00
364-00-14095				Cash in Bank (US Bank-Invest)	0.00				
7/31/2022	GL	1	30	July 2022 Chandler Interest			253.34	0.00	
7/31/2022	GL	1	41	Reverse JE# 30 July 2022 Chandler Interest			0.00	253.34	
		364-00-14095 Totals:			0.00	0.00	253.34	253.34	0.00
364-00-15000				A/R- Utility Svcs - Applied	0.00				
8/31/2022	GL	2	36	Tyler/Incode August 2022			269.73	0.00	
9/30/2022	GL	3	34	Tyler UB September 2022			0.00	269.73	
12/31/2022	GL	6	24	Tyler December 2022			0.00	832.00	
5/31/2023	GL	11	34	Tyler ERP Pro May 2023			3.65	0.00	
6/30/2023	GL	12	33	Tyler ERP Pro (Incode) June 2023			0.00	3.65	
		364-00-15000 Totals:			0.00	832.00	273.38	1,105.38	0.00
364-00-15490				Accounts Receivable	0.00				
		364-00-15490 Totals:			0.00	0.00	0.00	0.00	0.00
364-00-15800				Accrued Interest Receivable	0.00				
7/31/2022	GL	1	25	Record LAIF Interest/Offset June Accruals			0.00	447.98	
6/30/2023	GL	12	54	Accrue LAIF Interest Receivable Apr-June 2023			2,321.92	0.00	
		364-00-15800 Totals:			0.00	447.98	2,321.92	447.98	2,321.92
364-00-18500				Loan Receivable-Motherlode 603	0.00				
		364-00-18500 Totals:			0.00	0.00	0.00	0.00	0.00
364-00-19085				Due From Other Funds	0.00				
		364-00-19085 Totals:			0.00	0.00	0.00	0.00	0.00
		364-00 ASSETS Totals:			0.00	880,055.34	169,142.18	3,440.06	1,045,757.46
		ASSETS Totals:			0.00	880,055.34	169,142.18	3,440.06	1,045,757.46
LIABILITIES									

Account Number				Description	Budget	Beginning Balance	Debit This Period	Credit This Period	Ending Balance
364-00-20200				Accounts Payable	0.00				
	364-00-20200 Totals:				0.00	0.00	0.00	0.00	0.00
364-00-29025				Loan Payable/Fund 108	0.00				
	364-00-29025 Totals:				0.00	-1,522,735.63	0.00	0.00	-1,522,735.63
	364-00 LIABILITIES Totals:				0.00	-1,522,735.63	0.00	0.00	-1,522,735.63
	LIABILITIES Totals:				0.00	-1,522,735.63	0.00	0.00	-1,522,735.63
FUND BALANCE									
364-00-38000				Retained Earnings/Unreserved	0.00				
	364-00-38000 Totals:				0.00	591,878.30	0.00	0.00	591,878.30
364-00-38001				Retained Earnings/Reserved	0.00				
	364-00-38001 Totals:				0.00	0.00	0.00	0.00	0.00
364-00-38009				Fund Balance Available	0.00				
	364-00-38009 Totals:				0.00	0.00	0.00	0.00	0.00
364-00-38090				Prior Year Adjust/Unreserved	0.00				
	364-00-38090 Totals:				0.00	50,801.99	0.00	0.00	50,801.99
	364-00 FUND BALANCE Totals:				0.00	642,680.29	0.00	0.00	642,680.29
	FUND BALANCE Totals:				0.00	642,680.29	0.00	0.00	642,680.29
REVENUE									
364-59				Finance/Customer Service					
364-59-51100				Interest Income/CCWD Invest	0.00				
7/31/2022	GL	1	30	July 2022 Chandler Interest			0.00	253.34	
7/31/2022	GL	1	41	Reverse JE# 30 July 2022 Chandler Interest			253.34	0.00	
7/31/2022	GL	1	42	July 2022 Chandler Interest (Net)			0.00	62.71	
8/31/2022	GL	2	35	Chandler Net Interest August 2022			0.00	139.19	
9/30/2022	GL	3	37	Chandler Interest September 2022 - 10767			0.00	405.00	
10/31/2022	GL	4	19	LAIF Interest July - September			0.00	1,203.09	
10/31/2022	GL	4	29	Chandler Interest October 2022 - General 10767			0.00	348.17	
11/30/2022	GL	5	39	Chandler Interest November 2022			0.00	313.50	
12/31/2022	GL	6	27	Chandler Interest, General 10767 December 2022			0.00	205.43	
1/31/2023	GL	7	31	Chandler Interest, General 10767 January 2023			0.00	148.83	
1/31/2023	GL	7	34	LAIF Interest Oct - Dec 2022			0.00	1,565.59	

Account Number				Description		Budget	Beginning Balance	Debit This Period	Credit This Period	Ending Balance
2/28/2023	GL	8	37	Chandler Interest, February 2023, General 10767				13.36	0.00	
3/31/2023	GL	9	47	Chandler Interest, March, 2023, General 10767				0.00	434.13	
3/31/2023	GL	9	51	Chandler Nov Interest Correction - Chandler stateme				0.00	5.13	
4/30/2023	GL	10	19	LAIF Interest January - March 2023				0.00	1,993.51	
4/30/2023	GL	10	26	Chandler Interest, April 2023 General (10767)				0.00	426.35	
5/31/2023	GL	11	35	Chandler Interest General 10767 May 2023				0.00	536.92	
6/30/2023	GL	12	35	Chandler Interest June 2023				0.00	630.51	
6/30/2023	GL	12	54	Accrue LAIF Interest Receivable Apr-June 2023				0.00	2,321.92	
		364-59-51100 Totals:			Var: -10,726.62	0.00	0.00	266.70	10,993.32	-10,726.62
364-59-51500				Interest Income-Loans		0.00				
		364-59-51500 Totals:				0.00	0.00	0.00	0.00	0.00
364-59-51700				Net Mark to Market Value		0.00				
		364-59-51700 Totals:				0.00	0.00	0.00	0.00	0.00
364-59-52410				Expansion Fees		0.00				
8/31/2022	GL	2	36	Tyler/Incode August 2022				0.00	13,617.00	
9/30/2022	GL	3	34	Tyler UB September 2022				0.00	6,808.50	
10/31/2022	GL	4	31	Tyler UB October 2022				0.00	13,617.00	
11/30/2022	GL	5	35	Tyler UB November 2022				0.00	13,617.00	
12/31/2022	GL	6	24	Tyler December 2022				0.00	27,234.00	
3/31/2023	GL	9	38	Tyler UB, March 2023				0.00	27,234.00	
5/31/2023	GL	11	34	Tyler ERP Pro May 2023				0.00	27,234.00	
6/30/2023	GL	12	33	Tyler ERP Pro (Incode) June 2023				0.00	27,234.00	
		364-59-52410 Totals:			Var: -156,595.50	0.00	0.00	0.00	156,595.50	-156,595.50
364-59-52430				Area of Benefit Reimbursement		0.00				
		364-59-52430 Totals:				0.00	0.00	0.00	0.00	0.00
364-59-54600				Other Non-Operating Revenue		0.00				
		364-59-54600 Totals:				0.00	0.00	0.00	0.00	0.00
364-59-54800				Loan Principal		0.00				
		364-59-54800 Totals:				0.00	0.00	0.00	0.00	0.00
364-59-59100				Transfer In From Funds		0.00				
		364-59-59100 Totals:				0.00	0.00	0.00	0.00	0.00
		364-59 REVENUE Totals:				0.00	0.00	266.70	167,588.82	-167,322.12

Account Number	Description	Budget	Beginning Balance	Debit This Period	Credit This Period	Ending Balance
	REVENUE Totals:	0.00	0.00	266.70	167,588.82	-167,322.12
EXPENSE						
364-54	Utility Services					
364-54-60000	Salaries/Wages	0.00				
	364-54-60000 Totals:	0.00	0.00	0.00	0.00	0.00
364-54-60030	Overtime	0.00				
	364-54-60030 Totals:	0.00	0.00	0.00	0.00	0.00
364-54-60310	Materials and Supplies	0.00				
	364-54-60310 Totals:	0.00	0.00	0.00	0.00	0.00
364-54-60400	Outside Services	0.00				
	364-54-60400 Totals:	0.00	0.00	0.00	0.00	0.00
364-54-60530	Inspection Fees	0.00				
	364-54-60530 Totals:	0.00	0.00	0.00	0.00	0.00
364-54-60590	Professional Services	0.00				
	364-54-60590 Totals:	0.00	0.00	0.00	0.00	0.00
	364-54 EXPENSE Totals:	0.00	0.00	0.00	0.00	0.00
364-56	Manager					
364-56-60590	Professional Services	0.00				
	364-56-60590 Totals:	0.00	0.00	0.00	0.00	0.00
	364-56 EXPENSE Totals:	0.00	0.00	0.00	0.00	0.00
364-58	Engineering					
364-58-60000	Salaries/Wages	0.00				
	364-58-60000 Totals:	0.00	0.00	0.00	0.00	0.00
364-58-60030	Overtime	0.00				
	364-58-60030 Totals:	0.00	0.00	0.00	0.00	0.00
364-58-60310	Materials and Supplies	0.00				
	364-58-60310 Totals:	0.00	0.00	0.00	0.00	0.00
364-58-60400	Outside Services	0.00				

Account Number	Description	Budget	Beginning Balance	Debit This Period	Credit This Period	Ending Balance
364-58-60400 Totals:		0.00	0.00	0.00	0.00	0.00
364-58-60494	Right of Way Services	0.00				
364-58-60494 Totals:		0.00	0.00	0.00	0.00	0.00
364-58-60520	Engineering	0.00				
364-58-60520 Totals:		0.00	0.00	0.00	0.00	0.00
364-58-60530	Inspection Fees	0.00				
364-58-60530 Totals:		0.00	0.00	0.00	0.00	0.00
364-58-60590	Professional Services	0.00				
364-58-60590 Totals:		0.00	0.00	0.00	0.00	0.00
364-58 EXPENSE Totals:		0.00	0.00	0.00	0.00	0.00
364-59	Finance/Customer Service					
364-59-60590	Professional Services	0.00				
364-59-60590 Totals:		0.00	0.00	0.00	0.00	0.00
364-59-79100	Transfers Out	0.00				
6/30/2023 GL 12 59	Capacity Fee Component Transfer In to Fund 104 (1			1,620.00	0.00	
364-59-79100 Totals:	Var: -1,620.00	0.00	0.00	1,620.00	0.00	1,620.00
364-59-79200	Transfer Out For Projects	0.00				
364-59-79200 Totals:		0.00	0.00	0.00	0.00	0.00
364-59 EXPENSE Totals:		0.00	0.00	1,620.00	0.00	1,620.00
EXPENSE Totals:		0.00	0.00	1,620.00	0.00	1,620.00
364 Totals:		0.00	0.00	171,028.88	171,028.88	0.00
Report Totals:		0.00	0.00	171,028.88	171,028.88	0.00

Item 4h

Agenda Item

DATE: September 27, 2023

TO: Michael Minkler, General Manager

FROM: Jeffrey Meyer, Director of Administrative Services

SUBJECT: Discussion/Direction Regarding District's Capital R&R Rate Ordinance and Financial Management Policy – No. 5.00, Budget and Fiscal Policies

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RECOMMENDED ACTION:

Discussion/Direction Regarding District's Capital R&R Rate Ordinance and Financial Management Policy – No. 5.00, Budget and Fiscal Policies.

SUMMARY:

Ordinance No. 2013-01, an Ordinance of the Calaveras County Water District Modifying Rates for Water and Wastewater Services was adopted by the Board of Directors on July 10, 2013. Section 5 of Ordinance 2013-01, *Use of Additional Revenue*, states:

> "Funds received as a result of a rate increase above the current rates as of July 10, 2013, must be placed in a restricted fund and the funds must be used to fund the renovation and replacement of the District's existing capital infrastructure. The funds in this account cannot be used for any other purpose without a 4/5th vote of the full Board of Directors of the District."

The recently approved Rate Study separated the Capital Renovation and Replacement (Capital R&R) funding requirements from the rates and rate ordinance. Staff presented drafts of a new capital funding ordinance and updated Section 5.00.4, Capital Improvement Policies, and Section 5.00.7, Rate Setting Policies of the Financial Management Policy 5.00, to the Finance Committee on July 18 and August 15, 2023.

The Finance Committee provided comments and the attached proposed ordinance and policy changes reflect those comments. Staff requests comments and direction to submit the ordinance and policies to the Board for adoption at a future date.

FINANCIAL CONSIDERATIONS:

None at this time.

Attachments: Ordinance 2013-01, an Ordinance of the Calaveras County Water District Modifying Rates for Water and Wastewater Services
- *Draft Capital Improvement Funding Ordinance*
- *Draft amendments to District Financial Management Policy No. 5.00 – Budget and Fiscal Policies*

ORDINANCE NO. 2013-01

AN ORDINANCE OF CALAVERAS COUNTY WATER DISTRICT MODIFYING RATES FOR WATER AND WASTEWATER SERVICES

WHEREAS, the Board of Directors of the Calaveras County Water District (District) has responsibility for establishing rates for the provision of District services and corresponding implementation policies; and

WHEREAS, the District has prepared financial and policy information in respect to the provision of water and wastewater services over the next five years for review by the Board of Directors and the public, and caused to be prepared a *Water & Wastewater Rate Study* dated May 2013 that recommended adjustments to water and wastewater rate schedules; and

WHEREAS, the Board of Directors held fifteen public meetings starting in July 2012 on the need to increase water and wastewater rates, including Board meetings on March 13, March 27, April 10, April 24 and May 2, 2013, and held three Town Hall Meetings in various communities throughout the District between June 10 and June 26, 2013 regarding Water and Wastewater financial and rate issues; and

WHEREAS, the Board of Directors has received considerable community input during the public meetings and Town Hall Meetings and has considered this input in formulating the proposed rates; and

WHEREAS, the District has, in accordance with Article XIIID, Section 6 of the California State Constitution, provided written notices containing detailed descriptions of proposed water and wastewater rate changes for property owners who receive water and/or wastewater services from the District; and

WHEREAS, the Notice of Proposed Water and Wastewater Rate Increase, mailed May 24, 2013, included notification of a Public Hearing on July 10, 2013 to consider rate increases, said date having been established by Board action at its meeting of May 2, 2013; and

WHEREAS, the official noticed Public Hearing was held on Wednesday, July 10, 2013, and all public present were given an opportunity to comment on the proposed Ordinance; and

WHEREAS, written protests received in accordance with the procedures outlined in Article XIIID, Section 6 numbered less than half of the property owners served; and

WHEREAS, the Board of Directors finds that it is now necessary to modify existing rates relative to the provision of water and wastewater services.

NOW, THEREFORE, BE IT ORDAINED by the Board of Directors of the Calaveras County Water District as follows:

Section 1. Purpose. The purpose of this Ordinance is to increase water and wastewater rates as necessitated by the cost of providing water and wastewater services, including, but not limited to, operations and maintenance, debt service, the capital improvement program, and meeting financial reserve requirements.

Section 2. Findings. The Board of Directors finds and determines as follows:

- The water and wastewater service rates implemented by this ordinance, in conjunction with other estimated revenue sources, have been fixed in an amount sufficient to pay the operating and maintenance expenses of the District's water and wastewater systems, pay the principal and interest on existing debt, provide sufficient revenues for reserve requirements, and fund the renovation and replacement of the District's existing capital infrastructure.

- The increased water and wastewater rates are reasonably related to, and do not exceed, the District's cost of providing water and wastewater services.

- The revenues derived from the water rates do not exceed the funds required to provide water service, and are not used for any other purpose than in the provision of water services.

- The revenues derived from the wastewater rates do not exceed the funds required to provide wastewater services, and are not used for any other purpose than in the provision of wastewater services.

- The amount of the water and wastewater rates imposed on each water and wastewater service customer does not exceed the proportional cost of the water and/or wastewater service actually delivered or made available to every identified parcel of real property and/or customer within the District's service boundary.

- Every property subject to the rates established by this Ordinance actually uses the underlying service or the service is immediately available for that property's use.

- The District has, in accordance with Article XIIID of the California State Constitution, provided written notices containing detailed descriptions of proposed water and wastewater rate changes to District property owners who receive service from the District and written protests presented to the District for the proposed rates did not exceed fifty percent (50%) of the property owners.

- The District conducted a duly noticed Public Hearing on July 10, 2013 concerning the proposed rate increases at which time the public had the opportunity to speak to the Board of Directors regarding the proposed increases and the Board of Directors considered the testimony received prior to making a final decision to implement the rate increases.

Section 3. Water and Wastewater Rate Schedule. The water and wastewater rates are established in accordance with the provisions of EXHIBIT 1 attached hereto and incorporated herein. The rates shown replace monthly water and wastewater charges established and adjusted by previous actions of the Board of Directors.

Section 4. Effect on Existing Policies. Any provision of any ordinance, resolution, fee, charge and/or other policy of the District in conflict with this Ordinance 2013-01 is hereby modified to the extent, and only to the extent, necessary to conform with the requirements provided herein. If any existing fees, charges and/or regulations in effect on the date of adoption of this ordinance are not in conflict herewith, said existing fees, charges and/or regulations shall remain in effect without modification.

Section 5. Use of Additional Revenue. Funds received as a result of a rate increase above the current rates as of July 10, 2013 must be placed in a restricted fund and the funds must be used to fund the renovation and replacement of the District's existing capital infrastructure. The funds in this account cannot be used for any other purpose without a $4/5^{th}$ vote of the full Board of Directors of the District.

Section 6. Effective Date. Consistent with Water Code Section 31105, this Ordinance shall become effective September 1, 2013.

Section 7. Rates.

The District's water and wastewater rates will be implemented as set forth in this Section.

1.1) **Monthly Water Rates – EXHIBIT 1, Schedule A** attached hereto shall be the basis for minimum water charges to customers receiving service.

1.1.1) **Base Rates – EXHIBIT 1, Table 1** of **Schedule A** represents the monthly water base rate charged for sale of potable water through various meter sizes within the District service area.

1.1.1.1) **Effective Date** - The monthly water base rates shown in **EXHIBIT 1, Table 1** of **Schedule A** shall become effective September 1 of each year as shown. The first base rate increase shall occur on September 1, 2013.

1.1.2) **Consumptive Rates – EXHIBIT 1, Table 2** of **Schedule A** represents the tiered consumptive rates applied to average monthly water usage in cubic feet **(cf)** for various meter sizes. The usage charge is shown in dollars per hundred cubic feet **($/hcf)**.

1.1.2.1) **Effective Date** - The tiered rates shown become effective September 1, 2013 and remain in effect until changed by subsequent Board action.

1.2) **Monthly Wastewater Rates – EXHIBIT 1, Schedule B** attached hereto represents the monthly wastewater flat rate charged for sanitary sewer service within the District service area.

1.2.1) The table in **EXHIBIT 1, Schedule B** represents the charge for a standard single family residential connection (also referred to in Board policy documents as a single family dwelling equivalent – sfde or equivalent single family unit - esfu).

1.2.2) **Effective Date** - The monthly wastewater rates shown in **EXHIBIT 1, Schedule B** shall become effective September 1 of each year shown. The first rate increase shall occur on September 1, 2013.

1.3) **Future Rate Adjustments** - Within six months of September 1, 2018, the District will undertake a water and wastewater rate review.

PASSED AND ADOPTED this 10th day of July 2013, after a noticed Public Hearing by the following vote:

AYES: **Directors Ratterman, Davidson, Stump and Dooley**
NOES: **Director Dean**
ABSTAIN: **None**
ABSENT: **None**

CALAVERAS COUNTY WATER DISTRICT

Dennis Dooley, President
Board of Directors

ATTEST:

Mona Walker
Clerk to the Board

EXHIBIT 1

Schedule A
Monthly Water Rates

The water base rates shall be effective as indicated in Table 1 and shall include up to 500 cubic feet (cf) of water use per month for a 5/8" meter and include proportionately more water for larger meter sizes:

Table 1

Monthly Water Base Rate Charges by Meter Size

Meter Size	Monthly Base Rate Charge				
	Sep 1, 2013	Sep 1, 2014	Sep 1, 2015	Sep 1, 2016	Sep 1, 2017
5/8"	$49.38	$56.78	$61.89	$61.89	$61.89
3/4"	$74.06	$85.17	$92.84	$92.84	$92.84
1"	$123.44	$141.95	$154.73	$154.73	$154.73
1.5"	$246.88	$283.91	$309.46	$309.46	$309.46
2"	$395.00	$454.25	$495.13	$495.13	$495.13
3"	$790.00	$908.50	$990.27	$990.27	$990.27
4"	$1,234.38	$1,419.53	$1,547.29	$1,547.29	$1,547.29

In addition to the above Base Rate Charges, the Usage Rate Charges indicated in Table 2 shall apply for each 100 cubic feet of water used based on meter size.

Table 2

Monthly Water Tiered Rate Charges by Meter Size ($/hcf)

Tiered Rates per 100 cf by Fiscal Year (5/8" meter only)				
Fiscal Year	0 - 500 cf	501 - 3,000 cf	3,001 - 6,000 cf	Over 6,000 cf
FY 13-14	Included	$1.25	$1.56	$2.00
FY 14-15	Included	$1.44	$1.80	$2.30
FY 15-16	Included	$1.57	$1.96	$2.51
FY 16-17	Included	$1.57	$1.96	$2.51
FY 17-18	Included	$1.57	$1.96	$2.51

Tiered Rates per 100 cf by Fiscal Year (3/4" meter only)				
Fiscal Year	0 - 750 cf	751 - 4,500 cf	4,501 - 9,000 cf	Over 9,000 cf
FY 13-14	Included	$1.25	$1.56	$2.00
FY 14-15	Included	$1.44	$1.80	$2.30
FY 15-16	Included	$1.57	$1.96	$2.51
FY 16-17	Included	$1.57	$1.96	$2.51
FY 17-18	Included	$1.57	$1.96	$2.51

Table 2 cont'd

Monthly Water Tiered Rate Charges by Meter Size ($/hcf)

Tiered Rates per 100 cf by Fiscal Year (1.0" meter only)				
Fiscal Year	0 - 1,250 cf	1,251 - 7,500 cf	7,501 - 15,000 cf	Over 15,000 cf
FY 13-14	Included	$1.25	$1.56	$2.00
FY 14-15	Included	$1.44	$1.80	$2.30
FY 15-16	Included	$1.57	$1.96	$2.51
FY 16-17	Included	$1.57	$1.96	$2.51
FY 17-18	Included	$1.57	$1.96	$2.51

Tiered Rates per 100 cf by Fiscal Year (1.5" meter only)				
Fiscal Year	0 - 2,500 cf	2,501 - 15,000 cf	15,001 - 30,000 cf	Over 30,000 cf
FY 13-14	Included	$1.25	$1.56	$2.00
FY 14-15	Included	$1.44	$1.80	$2.30
FY 15-16	Included	$1.57	$1.96	$2.51
FY 16-17	Included	$1.57	$1.96	$2.51
FY 17-18	Included	$1.57	$1.96	$2.51

Tiered Rates per 100 cf by Fiscal Year (2.0" meter only)				
Fiscal Year	0 - 4,000 cf	4,001 - 24,000 cf	24,001 - 48,000 cf	Over 48,000 cf
FY 13-14	Included	$1.25	$1.56	$2.00
FY 14-15	Included	$1.44	$1.80	$2.30
FY 15-16	Included	$1.57	$1.96	$2.51
FY 16-17	Included	$1.57	$1.96	$2.51
FY 17-18	Included	$1.57	$1.96	$2.51

Tiered Rates per 100 cf by Fiscal Year (3.0" meter only)				
Fiscal Year	0 - 8,000 cf	8,001 - 48,000 cf	48,001 - 96,000 cf	Over 96,000 cf
FY 13-14	Included	$1.25	$1.56	$2.00
FY 14-15	Included	$1.44	$1.80	$2.30
FY 15-16	Included	$1.57	$1.96	$2.51
FY 16-17	Included	$1.57	$1.96	$2.51
FY 17-18	Included	$1.57	$1.96	$2.51

Tiered Rates per 100 cf by Fiscal Year (4.0" meter only)				
Fiscal Year	0 - 12,500 cf	12,501 - 75,000 cf	75,001 - 150,000 cf	Over 150,000 cf
FY 13-14	Included	$1.25	$1.56	$2.00
FY 14-15	Included	$1.44	$1.80	$2.30
FY 15-16	Included	$1.57	$1.96	$2.51
FY 16-17	Included	$1.57	$1.96	$2.51
FY 17-18	Included	$1.57	$1.96	$2.51

Schedule B

The following wastewater rates shall be effective as indicated below:

Monthly Wastewater Rates and Effective Dates of Rate Increases

Monthly Wastewater Rate				
Sep 1, 2013	Sep 1, 2014	Sep 1, 2015	Sep 1, 2016	Sep 1, 2017
$77.63	$86.16	$90.00	$90.00	$90.00

ORDINANCE NO. 2023-02

AN ORDINANCE OF CALAVERAS COUNTY WATER DISTRICT DESIGNATING FUNDING LEVELS FOR THE WATER AND WASTEWATER CAPITAL IMPROVEMENT PROGRAM

WHEREAS, *the Board of Directors of the Calaveras County Water District* (District) has responsibility for establishing rates for the provision of District services and corresponding implementation policies; and

WHEREAS, Ordinance No. 2013-01*, an Ordinance of the Calaveras County Water District Modifying Rates for Water and Wastewater Services* was passed and adopted by the District's Board of Directors on July 10, 2013; and

WHEREAS, *Section 5 of Ordinance 2013-01, Use of Additional Revenue***,** states that funds received as a result of a rate increase above the current rates as of July 10, 2013 must be placed in a restricted fund and the funds must be used to fund the renovation and replacement of the District's existing capital infrastructure. The funds in this account cannot be used for any other purpose without a 4/5th vote of the full Board of Directors of the District; and

WHEREAS, the District has prepared a *Water* & *Wastewater Rate Study* dated September 2023 that recommended adjustments to water and wastewater rate schedules, including changes to Capital Renovation and Replacement water and wastewater charges; and

WHEREAS, the official noticed Public Hearing was held on Wednesday, September 13, 2023, and written protests received in accordance with the procedures outlined in Article XIIID, Section 6 numbered less than half of the property owners served; and

WHEREAS, the Board of Directors passed and adopted the rates relative to the provision of water and wastewater services, which did not include the Capital Renovation and Replacement water and wastewater charges; and

WHEREAS, the Board of Directors supports and prioritizes the long-term capability and sustainability of the District's water and wastewater Capital Improvement Program and related infrastructure, and the funding required support said infrastructure; and

WHEREAS, the Board of Directors desires to set a minimum level of funding from water and wastewater rate revenues to adequately support its water and wastewater Capital Improvement Program, including the funding of debt issued to support said program; and

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NOW, THEREFORE, BE IT ORDAINED by the Board of Directors of the Calaveras County Water District as follows:

Section 1. Ordinance 2013-01, Section 5. *Use of Additional Revenue* is hereby rescinded.

Section 2. Funding. At a minimum, the District shall fund its annual capital improvement program, including any capital improvement related debt issuances, at a level equal to the water and wastewater Capital Renovation and Replacement (Capital R&R) revenues received in FY 2023-24; $3.4 million in water Capital R&R and $1.2 million in wastewater Capital R&R.

Section 3. Use of Funds. The capital funds received as a result of this ordinance must be placed in restricted funds and the funds must be used for the District's Capital Improvement Program or related capital improvement debt issuances. Furthermore, the funds cannot be used for any other purpose without a 4/5th vote of the full Board of Directors of the District.

PASSED AND ADOPTED this 11th day of October 2023 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Scott Ratterman, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

Approved 02/11/04
Revised 01/30/08 (Res. 2008-09)
Revised 07/28/10 (Res. 2010-51)
Revised 01/23/19 (Res. 2019-04)

5.00.4 Capital Improvement Policy

A twenty (20) year system master planning period will be utilized by the District with five (5) year updates. The capital improvement program will be developed separately for the Water and Wastewater utilities and will consider mandated capital, growth related capital and renewal and replacement capital. Growth-related capital projects shall be clearly identified.

5.00.4.01 The District will develop facilities master plans for capital improvements to be reviewed annually and updated every five (5) years or as prescribed by State Law. Future Capital expenditures will be projected annually during the budget process based on changes in the community population, real estate development, and replacement of the infrastructure or to meet regulatory mandates.

5.00.4.02 The district staff will construct all capital improvements in accordance with an adopted Capital Improvement Program.

5.00.4.03 All CIP projects have a three (3) year life cycle. If project completion takes longer than three years, the fund balance will need to be reauthorized by the Board or it will be removed.

5.00.4.04 The District will coordinate preparation of the Capital Improvement Budget with preparation of the Operating Budget. Future operating costs associated with new capital improvements will be projected and included in the Operating Budget forecasts.

5.00.4.05 The District prefers a "pay as you go" strategy whenever possible. When appropriate, capital improvements will be paid through current revenue/reserve sources rather than financing capital projects over a period of time.

5.00.4.06 The estimated cost of capital replacement will be consistent with the District's asset management model to ensure that rates and charges incorporate the cost of asset replacement.

5.00.4.07 At a minimum, the District ~~should~~shall fund its annual capital improvement program, ~~renewal and replacements~~ including any capital improvement related debt issuances, at a level equal to the ~~annual depreciation expense of the enterprise fund,~~water and wastewater Capital Renovation and Replacement (Capital R&R) revenues received in FY 2023-24; $3.4 million in water Capital R&R and $1.2 million in sewer Capital R&R. ~~phased in over the next five year period.~~

5.00.4.08 The District staff will identify the estimated costs and potential funding sources for each proposed capital project before it is submitted to the Board for approval. If potential funding source is not available and Staff recommends a loan to fund the CIP Project, Staff will identify where the loan proceeds will come from prior to submitting to the Board for approval.

5.00.4.09 Changes or deviations from the approved Capital Improvement Program should be accounted for and reported directly to the Board before proceeding on the project. The report should include an analysis of long-term financial costs and the overall impact to the current Capital Improvement Program due to the change or deviation.

5.00.4.10 With Board approval, unexpended project appropriations will be carried forward as continuing appropriations to future fiscal years as required to complete the intent of the original budget.

5.00.4.11 The District shall attempt to determine the least costly financing method for all new projects.

5.00.4.12 The District will actively pursue grant and other outside funding sources for all capital improvement projects.

5.00.7 Rate Setting Policies

When reviewing rates, it is important to use a methodology that is "generally accepted" in the financial and rate setting community as well as the water and wastewater utility industry. This will assure a legally defendable approach as well as consistency of the analysis over time.

Rate Setting Methodology

5.00.7.1 Revenue Requirements Analysis:

Revenue requirements will be established on a "cash basis" approach. The "cash basis" approach includes operation & maintenance (O&M) expenses, transfer payments, debt service (P&I), ARR and other capital improvements funded from rates. The revenue requirements, as defined herein, are the basic components. Revenue requirements should also include any other cost items requiring funding (e.g. bond reserves) or needed to operate the utility on a financially stable basis (e.g. accumulation or reduction in working capital).

- O&M expenses will incorporate the budgeted fiscal year costs.

- Debt Service requirements will incorporate appropriate debt schedules (include principal and interest). In addition, the revenue requirement will ensure sufficient funding to meet target debt service coverage ratios.
- Capital Improvements financed from Rates will be consistent with the District's annual asset management program needs, including any capital improvement related debt issuances, ~~needs or a minimum of annual depreciation expense, for the enterprise fund,~~ and will be set at the level of water and wastewater Capital Renovation and Replacement (Capital R&R) revenues received in FY 2023-24; $3.4 million in water Capital R&R and $1.2 million in sewer Capital R&R. ~~phased in over the next five year period~~.

5.00.7.1.2 At a minimum, revenues and costs will be projected for a five-year test period during the preparation of the annual budget.

5.00.7.1.3 Costs associated with mandated program requirements will be identified and included within the "cash basis" approach.

Item 5a

Agenda Item

DATE: September 27, 2023

TO: Michael Minkler, General Manager

FROM: Damon Wyckoff, Director of Operations

RE: Report on the August 2023 Operations Department

RECOMMENDED ACTION:

Report on the Operations Departments Report for Districts 1 through 5.

SUMMARY:

Attached is the monthly Operations Department Report for August 2023. The report will review the operational status and work completed by departmental administration and each of the five Districts. The report will cover the following:

- Administration
- Water treatment plants
- Wastewater treatment plants
- Distribution
- Collections
- Construction
- Electrical
- Mechanical

Staff will be present to report to the Board of Directors and will be available for questions.

FINANCIAL CONSIDERATIONS:

None.

Attachment: August 2023 Operations Department Reports for Districts 1 through 5

Operations Departments Report

August 1st through August 31st, 2023

Director of Operations:

1. On-going coordination and management of multiple District Operations projects and work efforts.
2. Participated in multiple Community Workshops to discuss the proposed five-year rate plan.
3. Site visit to an after-hours water line Replacement in Copperopolis. Copper Distribution, The Utility Crew, and Collections Crew Members did an efficient and effective job.
4. Site visits to multiple in-construction District projects.
5. Continued to work with District Staff and the consultant to ensure the effective resolution of punch list items for the AMI Project.
6. Participated in the August All-Employee Meeting.
7. Participated in multiple onsite project progress meetings.
8. On-going FEMA coordination related to DR-4683 and DR-4699.
9. On-going work related to the District's Disinfection Byproducts Root Cause Analysis
10. Participated in a CARB work group meeting coordinated by the MCWRA to discuss regulation compliance.
11. On-going participation in the development of the District's updated to its Local Hazard Mitigation Plan.

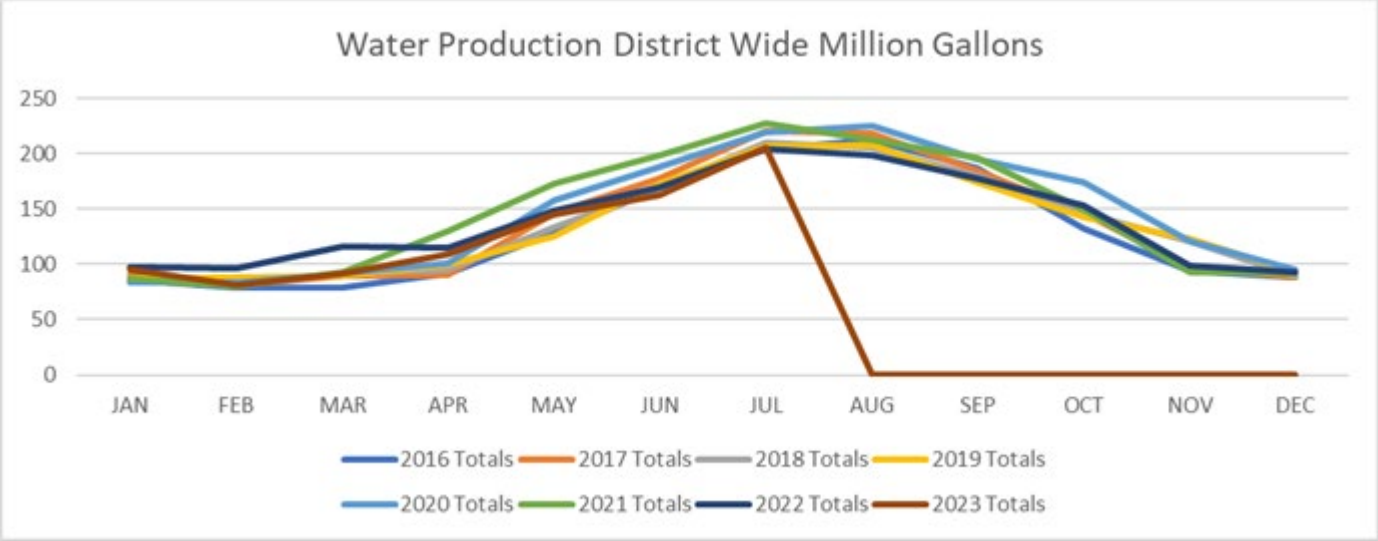
Administrative Technician:

1. Maintained Field Calendar
2. Received/Tracked All USA North Line 811 Locates – Handled Associated Calls
3. Facilitated Employee Reimbursements
4. Facilitated Employee Certification – Applications, Exams, Renewals, Trainings, Resources
5. Field Training Course Ordering/Registrations/Travel Arrangements
6. Process Operations Purchase Order Batches
7. On Call Reminders, Transfers, Logs
8. Electronic Lab Report Filing
9. Organizing and Archiving Operations Department Documents
10. Safety Tailgate Meetings: Create, Track, & Archive
11. Attended Various Meetings & Webinars
12. Permit Renewals
13. Continued CERS Program Work Efforts
14. 2023 Backflow Program Work Efforts
15. Cross Connection Survey Work Efforts
16. Assisted w/ Prop 218 Process
17. Miscellaneous Administrative Functions

Plant Operations Manager:

1. Completed the review and acceptance of the monthly State Water Reports for all the Districts Water Systems and submitted them to the State.

2. Completed the monthly Wastewater Reports for all the Districts Wastewater Systems and submitted them to the State.
3. Working very closely with the new operator in West Point to ensure that all system needs are met.
4. On-going work associated with PO's and ordering supplies for different District facilities and projects.
5. Continued work efforts on annual backflow testing
6. Ongoing work efforts associated with the Ebbetts Pass HAA5 violation for purposes of public notification and data collection.
7. Ongoing work efforts associated with rate study/proposed increase.
8. Attended 3 townhall rate meetings. Arnold, Copperopolis, and Valley Springs.
9. Scheduled AC services throughout the District.
10. Worked on an issue with Mr. Smith in our server room with the AC unit.
11. Participated in interviews for two mechanics positions.
12. Participated in the District's Local Hazard Mitigation Plan meeting.
13. Attended the Western Underground Utility Association board meeting.
14. Ongoing work efforts related to the District's Cross Connection Control Surveys with Ms. Burke.
15. Working on getting approval from the State to get the new Larkspur tank online.
16. Working with Peterson Brustad Inc. on West Point water plant filter addition.
17. Working on a purchase for a UPS battery backup for Copper Cove ozone generators.
18. Working with a customer at 59 Heather Ct. in Forest Meadows on a claim.
19. Working with Hydro Science for Copper Cove Reclaim plant and SAF unit.
20. On-going work efforts with the Districts CERS (California Environmental Reporting System) annual reporting.
21. Updated the District's monthly conservation reports.
22. Below is the water production for the month of July 2023.



Construction and Maintenance Manager:

1. Staff meetings.
2. Board meetings.
3. Multiple Project Meetings – Redwood tanks, AMI, CC Lift Station, etc
4. Participated in the CWEA North Central Training Team's coordination and scheduling of collection worker training sessions.
5. Participated in an Excel basics training course.
6. Participated in the Rate Study Town Hall meetings.
7. Participated in the LHMP Update meetings.
8. Worked with the AMI project Team to ensure the completion of punch list items.
9. Participated in the Pre-Construction Meeting for the Black Creek Church waterline intertie.
10. Participated in the Employee Relations Committee Meetings.

11. Participated in a nighttime shut down in Copperopolis to replace a failed service line in Copper Cove Drive with the Copper Distribution Crew, the Utility Crew, and members of the Collections Crew.
12. Site visits to review the Utility Crews Paving efforts on Baldwin and to game plan with the Ebbetts Pass Distribution and Construction Crew on the installation of the new Dorrington Pressure Station.
13. Responded to and assisted in the repair of a sewer force main damaged by a drill truck in Copperopolis.
14. Participated in the interview process for a Jenny Lind Distribution System Worker.
15. Coordination meeting and site visits with Calaveras County Public Works and CCWD Field Crews to discuss asphalt mitigation efforts post leak repair/line installs.
16. Met with the Engineering Team to discuss the CIP and projects.
17. Participated in the August All Employee Meeting.
18. Field visit with the Engineering Team to assess the D Tank Pressure System in Rancho Calaveras.
19. Site visits to multiple Crew work efforts.
20. Multiple phone calls to customers regarding issues/concerns.

Purchasing Agent:

1. Completed invoicing for purchased material.
2. Met with various reps and received quotes for various items for purchase.
3. Ordered parts, tools, materials, and equipment for all departments.
4. Coordinated servicing of District Vehicles for Field Staff
5. Reconciled Credit Cards for Field Staff
6. Worked with new facilities maintenance tech – painted and laid flooring in the new Warehouse and shop.
7. Ordered pumps for LS 22 in Copper and LS 3 in Arnold.
8. Delivered supplies, materials, and parts.
9. Coordinated the maintenance of pumps in Copper for August with Industrial Electric.

Water Treatment Plants:

Copper Cove Water Treatment Plant:

1. B-Tank, Redwood Tank have now been removed from service. Water slowly leaking from tank bottom and draining the remaining water slowly (nearly empty). this bypass did not show any effect on the B-Tank zone or storage.
2. Worked with PBI Engineering on Water system upgrades.
3. The WTP continues to have PG&E power issues associated with heat. Typically, above 100 Deg F.
4. Power has been much more balanced lately as PG&E has done some work in the field to balance loads.
5. Quotes have been received for replacement O3 machines.
6. Awaiting order on new UPS units to protect the Ozone equipment.
7. On going work on new SCADA app for the Copper Area. Operators continue to troubleshoot the app. The Collections System still needs to be tested and verified for proper operation as well as the recent repair list checked off.

Hunter's (Ebbett's Pass) Water Treatment Plant:

1. Collections Crew cleaned out Backwash Return Pond #1
2. Completed first round of Unregulated Contaminant Monitoring Rule 5 (UCMR 5) sampling.
3. Increased the output of White Pines Reservoir to lower the water level to facilitate an October tule removal effort.
4. A lightning storm knocked out the Clearwell Transducer, Electricians were able to repair the damaged unit. Replaced with a new unit and programmed post storm.
5. Operations as normal.
6. Monthly White Pines Dam inspection complete.
7. Volatile Organic Contaminant (VOC) sampling complete on the new Larkspur Tank.

Jenny Lind Water Treatment Plant:

1. Operations as usual

Sheep Ranch Water Treatment Plant:

1. Operations as usual

Wallace Lake Estates Well System:

1. Operations as usual
2. Filters rehabilitated. Water quality has significantly improved.

West Point Water Treatment Plant:

1. Operations as Usual
2. On-going construction for the installation of the second filter – piping installation continues.

Wastewater Treatment Plants:

Arnold Wastewater Treatment Plant:

1. Operations as usual
2. Coordination with Engineering RE new Clarifier Design

Copper Cove Wastewater Treatment Plant:

1. Pond 6 is dropping with the RCP in operation. Now blending Pond 4 and Pond 6 to maintain operations as the Pond 6 water quality continues to degrade. High color causing operational problems with UVT, Pond 4 blending helps maintain compliance with the discharge permit.
2. Solids in Ponds 1, 2 and 4. Are causing operational issues, and this needs to be addressed as soon as possible. (I am aware that the C&M Manager and the Plant Ops Manager have been in contact and working on a test for the solids removal with CCWD staff and equipment.) This would be a huge cost savings.

Copper Cove Wastewater Reclamation Plant:

1. Ongoing work with Hydro science on the design of the RCP and Pond 6 upgrades.
2. The RCP is currently running at 350 gpm. ½ of the designed capacity because of the water quality and the lack of pretreatment for solids and color removal. We are currently doing our best to maintain the maximum flows and water quality to empty Pond 6 and deliver water to the CVGC.
3. The recently rehabbed filter has been losing sand into the UV trough. This causes operational issues with the UV system regarding maintenance and downtime to remove the sand before it can cause major damage to the UV lamps. I have verified the operation of the valves and flows to the filter and have found everything in perfect working condition. I am currently unsure why there is sand getting by the support media? We have removed a few hundred pounds of sand lately. This is very difficult because of the design of the UV system. The sand has to be removed from an 8' deep hole too small for a man to enter. A shop vac cannot pull the lift and a Vac-Con cannot access the workspace. A shovel and ropes are used for this effort. 3 people are required.

Country House Wastewater Facility:

1. Operations as usual

Forest Meadows Wastewater Treatment Plant:

1. Operations as usual

Indian Rock Vineyards Wastewater Facility:

1. Operations as usual

La Contenta Wastewater Treatment Plant:

1. Operations as usual

Mountain Retreat / Sequoia Woods Wastewater Facility:

1. Operations as usual

Six Mile Wastewater Collection System:

1. Monthly reads taken and report submitted to the City of Angels Camp

Southworth Wastewater Treatment Plant:

1. Operations as usual
2. Discharged treated effluent during fair weather events.

Vallecito / Douglas Flat Wastewater Treatment Plant:

1. Operations as usual
2. Coordinated operations with the Construction Crew related to the installation of the grit chamber.

West Point Wastewater Treatment Plant:

1. Operations as usual

Wilseyville Wastewater Facility:

Operations as usual

Distribution:

Copperopolis Distribution System:

SERVICE LINE WORK

1. 1824 Bear Claw
2. 813 Mother Shipton
3. 326 Sunrise
4. 305 Deer Field Cr
5. 267 Copper Crest
6. 796 Uncle Billy
7. 813 Mother Shipton
8. 3450 Arrowhead
9. 442 Lakeview
10. 586 Thomson
11. 411 Sunrise
12. 1430 Copper Cove Dr

MAIN LINE WORK

2" at the Lakes (2 separate leaks)

Additional Work

1. 8 Valves Turned
2. Service Requests
3. Flushed 126,400 gallons.
4. USA's
5. Completed a nighttime shut down of Copper Cove Dr for Moyle Construction to tie in for the Black Creek Church fire system. We installed a corp and 10' of 1" poly to the service at 1430 Copper Cove Dr.

Ebbett's Pass Distribution System:

SERVICE LINE WORK

1. Murphys Dr. 1" Poly - PG&E Project hit marked line.
2. Mitchell Dr. 1" Poly - PG&E Project hit marked line.
3. Blagen Rd. 1" Poly – Replaced 6 ft section with help from Construction Crew
4. Tamarack Dr. 1" Poly repair
5. Cedar St. ¾" Poly repair
6. Canyon Ridge Ct. 1" Poly – Construction Crew replaced 15 ft section of pipe.
7. Northwood Dr. 1" Poly – PG&E Subcontractor hit line – Locate marks were 1 ft off.
8. Navajo Dr. 1" Poly – Replaced 8 ft section of pipe.

MAIN LINE WORK

1. None during this time

Additional Work

1. Flushed 8,000 gallons in Forest Meadows
2. Assisted Construction Crew with replacement of 3 Fire Hydrants
3. Continuing investigations and manipulations of Big Trees Village water quality improvements
4. Ongoing adjustments to Meadowmont 2 (Flume Ct.) Tank elevations
5. Ongoing adjustments to Larkspur Tank Altitude Valve and Surge Relief
6. Meter reading Manually and with Handheld
7. Continuing investigation and planning for PRV replacement at Dorrington Pump Station
8. Multiple Days locating lines associated with PG&E Underground Project
9. Ongoing assistance to Mueller Subcontractors to finish AMI project.
10. Routine Valve Locating and Exercising
11. Routine infrastructure maintenance and improvements.

Jenny Lind Distribution System:

SERVICE LINE WORK

1. 7210 Baldwin
2. 3746 McCann
3. 7845 Nall
4. 7477 Westhill
5. 2130 Partridge
6. 4988 Baldwin
7. 3330 Antonovich x 2
8. 5726 Rippon
9. 6182 Rippon
10. 6081 Cane
11. 10080 Milton
12. 11332 Milton x 2
13. 3499 Priscilla Ct
14. 4186 Brooks
15. 5226 Cox
16. 7474 Anderson
17. 2565 Danaher
18. 6249 Baldwin
19. 8093 Westhill
20. 4873 Dunn
21. 4336 Dunn
22. 3985 Bartelink
23. 2549 Hwy 26
24. 2385 Hwy 26
25. 3705 Hartvickson
26. 6717 Baldwin
27. 7419 Baldwin
28. 2636 Holmquist
29. 8533 Owens
30. 8535 O'Reilly
31. 3092 Heinemann
32. 6737 Baldwin

MAIN LINE WORK

1. None during this time

ADDITIONAL WORK

1. Vehicle Inspections
2. Month end reads for Lancha Plana, fill stations, hydrants and raw water.
3. Lower end flushing for water quality purposes
4. Tank and pump station checks
5. Large volume of line locates.
6. Work orders for leak checks, meter installations, pressure problems etc.
7. Commissioned several new meters in our Sentryx program.
8. Changed upper kanaflex, high pressure hose reel, tank to boom gasket and greased the GapVax.

9. Responded to pumping problems on two separate occasions at B tank pressure system – Issued work order to electricians.
10. Dug up and replaced broken curb stop at 800 La Contenta Dr
11. Many meter locates for AMI so they could finish the replacement project.
12. New employee Interviews
13. Meeting with Public Works regarding right of way work
14. Met with Mozingo at B tank regarding A to B replacement project.
15. Construction and maintenance meeting with the Director of Ops and C&M Manager in San Andreas
16. New GapVax hydro excavation leak truck demo

West Point Distribution System:

SERVICE LINE WORK

1. 127 Barney
2. 354 Barney
3. 804 Barney
4. Valve at Lancha Plana Fill Station
5. 1" poly at the Warehouse
6. 22929 HWY 26

MAIN LINE WORK

1. None during this time

ADDITIONAL WORK

1. Located, excavated, and marked buried valves off HWY 26, Lambert, Sandy Gulch, and Cross-Country Lines
2. A large amount of USA line locates.
3. Replaced a 1" curb stop and installed a 1" PRV, new meter, and customer valve @ 1467 Bummerville Road.
4. Participated in a demo for a new model of GapVax vacuum truck.
5. Weekly tank, pump station, and flow meter checks
6. On-going work on the warehouse
7. On-going work on the Wilseyville Pump Station.

Construction

1. Assisted in leak repair with the Ebbetts Pass, Copper Cove, and Jenny Lind Distribution Crews
2. Hauled Rock to all yards as needed.
3. Equipment Maintenance
4. Cleaned up/Organized yard in Vallecito.
5. Installed three hydrants on Ebbetts Pass – Lakemont Drive, U.S. Forest Service Station, and Wyldridge. Included new sanitary pads, potholing, and locating infrastructure near the hydrants.
6. Assisted the Utility Crew with Traffic Control in Rancho Calaveras.
7. Repaired the Barn's asphalt saw, sawcut asphalt at the Hunters Backwash Return Basins, and excavated to restore failing asphalt for access to the basins.
8. Reviewed White Pines tule removal project with Treatment Ops.
9. Arnold WWTP stormwater bypass – strapped 6" section o0f C-900 to the clarifier, plumbed to ground level, and poured concrete support pad.
10. Prepped area (cleared brush, dug ditch and rip rapped) for an automatic flusher off Indian Rock road in Big Trees Village.
11. Assessed various issues on the Pass with Distribution including a buried valve on Shoshone and a washed-out valve on Sierra Parkway. Planned for and repaired issues.
12. Cut in a bypass to the Contact Chamber in Vallecito to facilitate operational flexibility.
13. Slurry Line Meter Read.

Electrical:

1. After hours emergency replacement of failed level transducer at A-Tank in Valley Springs.

2. Calibrated the Rosemont pressure transducers on the Ozone towers at Jenny Lind WTP with a HART programmer.
3. Troubleshot plant lockout protocols at Jenny Lind WTP for A-Tank high levels in the SCADA system.
4. Used bucket truck to replace/program new AMI repeater in Camp Connell after the old unit failed.
5. Replaced failed backwash return pump hour meter at Hunters WTP
6. Calibrated the high and high-high pressure switches on the filter at West Point WTP to prevent premature backwash sequences.
7. Cleaned out storage cabinet and loft to make room for the contractor to install a backwash supply tie-in to the new filter at West Point WTP
8. Performed numerous electrical system underground locates in the Copper Cove service area.
9. Replaced the filter high-high pressure switch on filter #2 at Copper Cove WTP
10. Calibrated all pressure and vacuum switches on filters #1 and #2 at Copper Cove WTP
11. Went over security system installation requirements at the new shop on Toma Court, ordered wire and other material.
12. Troubleshot and repaired Dorrington pump station Pump #1 fail to stop alarm, adjusted collar on microswitch, tested, normal operation restored.
13. Inspected Big Trees 4 tank site after contractor notified us that they damaged some of our conduit, conduit was AT&Ts.
14. Troubleshot exhaust fan at Dorrington pump station, tested switch, problem was fan motor is worn out, ordered new.
15. Replaced 750vA UPS at Dorrington pump station after old unit had failed.
16. Replaced rotten plywood with new aluminum backboard for electrical panels at Copper Cove WWTP Pond #6.
17. Troubleshot blower #3 controls in the Biolac panel at La Contenta WWTP, breaker tripped, upon further inspection, found motor cooling fan in pieces and bound up, performed L.O.T.O, unwired and operator ordered new blower motor through the purchasing agent.
18. Troubleshot and repaired sand filter #3 and #4 flow meter at La Contenta WWTP, problem was no water in trough, added water and restored function.
19. Troubleshot and repaired Turbo-mister and booster pump at La Contenta WWTP, got both units working after cleaning and lubricating motor starters.
20. Wired in/tested an aerator in the oops pond at La Contenta WWTP.
21. Troubleshot and repaired high volume booster pump at Sheep Ranch pump station, found burnt wire and replaced.
22. Troubleshot and repaired 3 outside wall pack fixtures at Hunters WTP, replaced failed photocells.
23. Troubleshot inside emergency lighting fixtures at Hunters WTP effluent building, batteries are bad, ordered new.
24. Worked with A-TEEM at West Point WTP on the new filter project, researched I/O points, loaded new PLC program, and tested new Ignition SCADA system.
25. Wired in new pump #2 at Meadowmont pump station, had to modify electrical because of new motor head entrance height.
26. Had to reassign an IP address to a remote I/O unit at Arnold WWTP after a power outage due to a lightning storm.
27. Wired up a fuel transfer pump in the bed mounted auxiliary tank of the new Mechanic's truck.
28. Performed a function test of the pump control system at Arnold lift station #2 after a lightning storm, system was functioning properly.
29. Adjusted the mixer operating levels with the collections staff at Upper Cross Country lift station to prevent the formation of a grease mat in the wet well.
30. Troubleshot and repaired the telemetry radio system at Azalea Court lift station after a PG&E outage, performed online diagnostics with ViPR radio.
31. Troubleshot and repaired Forest Meadows WWTP SCADA system after a PG&E power outage due to a lightning storm.
32. Troubleshot and repaired Copper Cove lift station #12, main breaker kept tripping for no apparent reason, replaced with new, also helped refuel the generator.
33. Troubleshot and repaired Copper Cove lift station #20, replaced failed level transducer.
34. Used remote access to reprogram the Sawmill Tank side bar in the Hunters WTP SCADA system to accept a higher footage in the Tank to enable complete filling of the tank.
35. After-hours emergency troubleshoot and repair of the control system at Copper Cove lift station #9, communications failure, no control power, cooling fan had failed.

36. After hours emergency repair of the Hunters WTP Clearwell transducer after lightning storms, used HART programmer self-diagnostic and repair feature to restore proper level indication.
37. Installed electrical cord and phase adder on new chemical mixer at Jenny Lind WTP
38. Troubleshot and repaired the Clearwell level transducer at Hunters WTP, used tech support, determined RF filters were damaged by lightning, replaced transducer with new unit.
39. Troubleshot and repaired Copper Cove lift station #44 breaker trip, station works perfect, suspect problem was low supply voltage which caused an amperage spike.
40. After hours emergency repair Lower Cross-Country lift station pump #1 failure, pump full of water, unwired, L.O.T.O, sent in for repair.
41. Troubleshot and repaired absorption clarifier ASCO valve at West Point WTP, went to replace, found isolation switch in the off position.
42. Troubleshot and repaired Huckelberry lift station standby generator, it failed to run during a power outage. Upon arrival found coolant hose punctured, repaired hose, and helped mechanical staff add coolant to the radiator.
43. Located underground electrical at Hunters WTP backwash ponds for repaving project.
44. Troubleshot site pole lights at La Contenta WWTP with bucket truck, replaced failed photocells.
45. Pulled wire, wired in door strikes, keypads, and fob stations for the alarm system at the new shop on Toma Court.
46. Troubleshot and repaired the control system at Wallace WWTP, replaced failed float.
47. Pulled in 6 conductor 18-gauge wire to the automatic gates at the new shop on Toma Court.
48. Troubleshot power issues at B-Tank pressure system, overloads were tripped, reset them, suspect brown out condition had occurred.
49. Troubleshot and repaired aerator fail to start problem at Forest Meadows WWTP, overloads on starter were tripped, suspect brownout condition had occurred.
50. Replaced failed ventilation fan at Dorrington pump station.
51. Used bucket truck to install security cameras at West Point WWTP after theft occurred at site.
52. Relocated video camera in the boardroom with the I.T department.
53. Worked with mechanical staff to fabricate/install electric man gate card stations at the new shop on Toma Court.
54. Troubleshot and repaired the control system at Jenny Lind WTP, filter backwash function had failed and communication with the backwash ponds was lost, replaced failed I/O base for the PLC.

Collections:

1. Monthly SSO online reporting completed.
2. Weekly lift station inspections completed.
3. Monthly vehicle inspections completed.
4. Monthly dry can inspections completed.
5. Continued marking USA's District wide as needed.
6. Greased all pumps at LSs with mechanical bearings. Yearly maintenance.
7. Checked Ironwood Ct. clean out for roots. Bi yearly maintenance.
8. Pumped and cleaned the Sequoia Woods septic system for yearly maintenance.
9. Flushed main line in West Point for quarterly maintenance.
10. Pumped and cleaned back wash ponds at Jenny Lind WTP.
11. Pumped and cleaned Mt. Retreat septic tanks and wet well for yearly maintenance.
12. Called to an address on Main Street West Point for a septic issue. Customer is flushing extreme amounts of wipes into tank. Discussed with the customer.
13. Pumped and cleaned Avery septic tanks (yearly maintenance).
14. Pumped and cleaned Hwy 4 lift station. 6-month maintenance.
15. Hydro'd line above Hwy 4 LS for 6-month maintenance. 8-8-23
16. Pulled pump 1 at LS 44 and de-ragged it.
17. Called out to 4864 Little John Rd. Customer has an issue with their lateral.
18. Staged pumper trucks in West Point for septic tank cleaning cycle.
19. Spent many days inspecting and pumping septic tanks in West Point. (5-year cycle).
20. Called out to LS 20 early morning of 8-11-23. Transducer failures. Replaced failed transducers.
21. Called to LS 2 in Arnold due to lightning issues for failure to start on both pumps. 8-14-23
22. Worked with Shape Pump Co. Technician at the Upper and Lower Cross-Country LSs to service.

23. Coordination meeting with the County road department.
24. Pulled pump 1 at Wood Gate 2 in La Contenta and cleaned it due to rags.
25. Called to 16 Veterans Lane in West Point, septic issue. No issue found on CCWD side.
26. Called to Lakeshore in Copper due to drill rig hitting LS 15's force main while drilling for lift station project.
27. Called to 1320 Skunk Ranch Rd. Customer was concerned their tank was leaking but no issues were found power was out at location.
28. Called to 22233 Hwy 26 in West Point. The septic tank was plugged up at the basket.
29. Potholed for Mozingo at LS 18 to locate the force main.
30. Hydro'd the head works at the Vallecito WWTP. Bimonthly maintenance.
31. Pumped and cleaned back wash ponds at Hunters WTP.
32. Called out to Lower Cross-Country LS due to pump 2 failure. Found water in inspection port on motor. Took Pump from the Lower Cross-Country Lift Station to Industrial Electric to get rebuilt.
33. Continued pumping septic tanks in West Point.
34. Helped the Jenny Lind Distribution Crew with water leaks and traffic control on multiple occasions.
35. Called to 7408 Stage Stop for a septic tank alarm. High level float went bad. Replaced float.

Mechanical:

1. Generator checks District wide.
2. Responded to multiple power outages throughout the county requiring generator refueling, maintenance and light repairs.
3. Participated in the interview process for the two vacant mechanics positions.
4. Prepped the two mechanics trucks in anticipation of bringing the new mechanics on board.
5. Air compressor failure at the Forest Meadows WWTP. Diagnosed the issue and researched repair actions.
6. Researched ways to improve the headworks screening unit's debris removal at the Arnold Wastewater Treatment Plant
7. Investigated a blower failure at the La Contenta WWTP and investigated repair actions.
8. Sheep Ranch raw water pump station pump failure. Assisted the EP Distribution Crew in troubleshooting and repair.
9. Arnold WWTP generator fail to start – replaced batteries. Restored normal ops.
10. Emergency response to the Avery Tank's generator (EP), generator shut off during a power outage. Replaced a ruptured coolant hose, refilled with coolant, restored normal generator operation.
11. Diagnosed VacCon # VEH135 rear can door failure to close. Realigned upper hinges and corrected issue.
12. VacCon #VEH126 – evaluated multiple failure conditions and began developing a rehabilitation plan.
13. Troubleshoot Wilseyville Pump Station pump 2 running hot. Replaced failed inlet valve and failed discharge check valve as well as associated plumbing to correct.
14. La Contenta Backhoe – key broken off in ignition – removed broken key, restored normal operation.
15. Tore down and repaired the shop's Lincoln 210 wire-feed welder.
16. Troubleshot the Jenny Lind WTPs backwash pump #1 cla-val failure to close. Cleaned the valve and control lines and ports – corrected the issue. Troubleshot Pump #2 failure to fully open. Replaced failed valve diaphragm and rebuilt the valve. Corrected the issue.

Underground:

1. Assisted the Jenny Lind Distribution Crew with leak repair.
2. Continued Service Lateral replacements in the Jenny Lind Area.
3. Finish-paved replaced service lateral trenches on Baldwin, Ripon, and Bartelink.
4. Assisted the Copper Cove Distribution Crew in a night Service line replacement on Copper Cove Drive.

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