

CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

AGENDA REGULAR MEETING WATER BOARD

Tuesday, June 24, 2025 – 9:30 a.m.

MARGARET H. CHANDLER WATER RECLAMATION PLANT
399 CHANDLER PLACE
San Bernardino, California

WATER BOARD

TONI CALLICOTT
President

Commissioners

WAYNE HENDRIX, P.E.
DAVID E. MLYNARSKI
RIKKE V. JOHNSON
THOMAS BRICKLEY



MIGUEL J. GUERRERO, P.E.

General Manager

ROBIN L. OHAMA

Deputy General Manager

STEVE R. MILLER

Director of Water Utility

KEVIN T. STEWART, P.E.

Director of Water Reclamation

CYNTHIA J. MOUSER

Director of Finance

JENNIFER L. SHEPARDSON

Director of Environmental &
Regulatory Compliance

“Trusted, Quality Service since 1905”

Welcome to a meeting of the Water Board of the City of San Bernardino

- The City of San Bernardino Municipal Water Department recognizes its obligation to provide equal access to those individuals with disabilities. Please contact the General Manager's Office (909-384-5191) two working days prior to the meeting for any requests for reasonable accommodation, to include interpreters.
- All documents for public review are on file with the Water Department located at 1350 South “E” Street, San Bernardino or may be accessed online at <https://www.sbmwd.org/agendacenter>
- Please turn off or mute your cell phone while the meeting is in session.
- Any member of the public desiring to speak to the Water Board concerning any matter not on the agenda, but which is within the subject matter jurisdiction of the Water Board, may address the body during the period reserved for public comments. Said total period for public comments shall not exceed forty-five (45) minutes unless such time limit is extended by the Water Board. A three-minute limitation shall apply to each member of the public unless such time limit is extended by the Water Board. No member of the public shall be permitted to “share” his/her three minutes with any other member of the public.
- The Water Board may refer any item raised by the public to staff for appropriate action or have the item placed on the next agenda of the Water Board. However, no other action shall be taken nor discussion held by the Water Board on any item which does not appear on the agenda unless the action is otherwise authorized in accordance with the provisions of subdivision (b) of Section 54954.2 of the Government Code.
- Public comments will not be received on any item on the agenda when a public hearing has been conducted and closed.

THE SAN BERNARDINO MUNICIPAL WATER DEPARTMENT ENCOURAGES THE PUBLIC TO VIEW THIS WATER BOARD MEETING ONLINE. THE MEETING WILL BE LIVE STREAMED VIA YOUTUBE AT: <https://bit.ly/YouTubeSBWater>

MEMBERS OF THE PUBLIC WHO WISH TO COMMENT ON MATTERS BEFORE THE WATER BOARD MAY PARTICIPATE IN THE FOLLOWING WAYS:

1. IF ATTENDING IN PERSON, MAY PROVIDE COMMENT AT THE APPROPRIATE TIME DICTATED BY THE AGENDA AND WATER BOARD PRESIDENT.
2. COMMENTS AND CONTACT INFORMATION MAY BE E-MAILED TO Comments@sbmwd.org BY 8:30 A.M. THE DAY OF THE SCHEDULED MEETING TO BE INCLUDED IN THE WRITTEN RECORD.

CALL TO ORDER

ROLL CALL

1. ANNOUNCEMENTS BY MEMBERS OF THE WATER BOARD
2. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA: A three-minute limitation shall apply to each member of the public who wishes to address the Water Board of any item not listed on the agenda. There is no limit on the number of items that may be discussed within the three-minute time limit. **To be called by the Water Board President, please see special public comments instructions above.**
3. PUBLIC COMMENTS ON ITEMS LISTED ON THE AGENDA: A three-minute limitation shall apply to each member of the public who wishes to address the Water Board of any item listed on the agenda, excluding public hearings. There is no limit on the number of items that may be discussed within the three-minute time limit. **To be called by the Water Board President, please see special public comment instructions above.**
4. CONSENT CALENDAR

MOTION: That the motions indicated by consent calendar items 4A through 4H be adopted, except for _____.

MOTION: _____ SECONDED: _____

A. PAYROLL

MOTION: Approve the payroll for the pay period beginning June 16, 2025 through June 29, 2025.

B. CONTRACTS AND BILLS

MOTION: Approve the payment of contracts and bills to be presented at this meeting.

C. MINUTES

MOTION: Approve the minutes of June 10, 2025, of the Water Board.

D. RESOLUTION APPROVING THE SECOND AMENDMENT TO THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF SAN BERNARDINO WATER BOARD AND THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL #47 DATED JULY 1, 2023, AMENDING ARTICLE III – SALARIES, 3.1 – SALARY SCHEDULE: The Memorandum of Understanding (MOU) between the City of San Bernardino Water Board and the International Brotherhood of Electrical Workers Local #47 dated July 1, 2023, specifies that salary ranges applicable to unit members shall be adjusted effective July 1, 2025 to reflect the year ending January 2025 Consumer Price Index (CPI), minimum adjustment of 2.5% and maximum adjustment of 4%.

The salary schedule, Exhibit “A-2”, has been adjusted by 2.9%.

MOTION: Adopt a resolution approving the second amendment to the Memorandum of Understanding Between the City of San Bernardino Water Board and the International Brotherhood of Electrical Workers Local #47 dated July 1, 2023, amending Article III – Salaries, 3.1 – Salary Schedule effective July 1, 2025, and adding Exhibit “A-2”, as submitted.

E. RESOLUTION APPROVING THE SECOND AMENDMENT TO THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF SAN BERNARDINO WATER BOARD AND THE SAN BERNARDINO ASSOCIATION OF WATER DEPARTMENT MID-MANAGERS DATED JULY 1, 2023, AMENDING ARTICLE III – SALARIES, 3.1 - SALARY SCHEDULE: The Memorandum of Understanding (MOU) between the City of San Bernardino Water Board and the San Bernardino Association of Water Department Mid-Managers dated July 1, 2023 specifies that the salary ranges applicable to unit members shall be adjusted effective July 1, 2025 to reflect the year ending January 2024 Consumer Price Index (CPI), minimum adjustment of 2.5% and maximum adjustment of 4%.

The salary schedule, Exhibit “B-2”, has been adjusted by 2.9%.

MOTION: Adopt a resolution approving the second amendment to the Memorandum of Understanding Between the City of San Bernardino Water Board and the San Bernardino Association of Water Department Mid-Managers dated July 1, 2023, amending Article III – Salaries, 3.1 – Salary Schedule effective July 1, 2025, and adding Exhibit “B-2”, as submitted.

- F. RESOLUTION APPROVING THE SECOND AMENDMENT TO RESOLUTION NO. 2023-016 WITH THE WATER DEPARTMENT CONFIDENTIAL EMPLOYEES DATED JULY 1, 2023, AMENDING SECTION 2 – SALARY SCHEDULES, AND ADDING EXHIBIT 1-B: Resolution No. 2023-016 establishing a compensation and benefits plan for the Water Department Confidential employees dated July 1, 2023 specifies that the salary ranges for Confidential employees shall be adjusted, and Confidential employees will receive a pay adjustment, effective July 1, 2025 to reflect the year ending January 2025 Consumer Price Index (CPI), minimum adjustment of 2.5% and maximum adjustment of 4%.

The salary schedule, Exhibit “1-B”, has been adjusted by 2.9% for Confidential employees.

MOTION: Adopt a resolution approving the first amendment to Resolution No. 2023-016 with the Water Department Confidential Employees dated July 1, 2023, amending Section 2 – Salary Schedules, adding Exhibit 1-B, effective July 1, 2025, as submitted.

- G. RESOLUTION APPROVING THE SECOND AMENDMENT TO RESOLUTION NO. 2023-018 FOR THE WATER DEPARTMENT REGULAR PART-TIME EMPLOYEES COMPENSATION AND BENEFITS PLAN DATED JULY 1, 2023, AMENDING SECTION 2 – SALARIES, A – SALARY SCHEDULES AND B – GENERAL PROVISIONS AND ADDING EXHIBIT 1-B – HOURLY SALARY SCHEDULE: Regular part-time employees of the Water Department are provided certain limited benefits pursuant to a Water Board Resolution. Traditionally, regular part-time employees receive salary adjustments equivalent to those given to regular full-time employees in the General Unit.

On May 8, 2018, the Board approved the Memorandum of Understanding (MOU) Between the City of San Bernardino Water Board and the International Brotherhood of Electrical Workers Local #47 effective July 1, 2023, through June 30, 2028. The MOU includes a range increase effective July 1, 2025, based on the Consumer Price Index (CPI) for the 12 months ending January 2025 with a minimum of 2.5% and maximum of 4%. The attached Resolution will amend Resolution No. 2023-018 by providing a salary increase of 2.9% effective July 1, 2025.

MOTION: Adopt a resolution approving the second amendment to Resolution No. 2023-018 with the Water Department Regular Part-Time Employees dated July 1, 2023, amending Section 2 – Salaries, A - Salary Schedules and B – General Provisions and adding Exhibit 1-B, effective July 1, 2025, as submitted.

- H. NEW JOB DESCRIPTIONS FOR WELDER II AND INFORMATION SECURITY ANALYST; REACTIVATION OF THE WATER RECLAMATION FACILITIES MAINTENANCE SUPERVISOR JOB DESCRIPTION; REVISED JOB DESCRIPTION FOR WELDER/PIPEFITTER WITH TITLE CHANGE TO WELDER I AND RECLASSIFICATION OF INCUMBENT; REVISED JOB DESCRIPTION FOR GIS MANAGER WITH TITLE CHANGE TO EGIS MANAGER WITH RANGE CHANGE; REVISED JOB DESCRIPTION FOR

PAYROLL SPECIALIST WITH RANGE CHANGE; REVISED JOB DESCRIPTIONS FOR WATER QUALITY CONTROL SPECIALIST, WATER QUALITY LEAD WORKER, AND WATER QUALITY CONTROL OFFICER; RECLASSIFICATION OF ONE VACANT OFFICE ASSISTANT POSITION TO SENIOR OFFICE ASSISTANT; RECLASSIFICATION OF ONE ACCOUNTING TECHNICIAN I POSITION AND INCUMBENT TO ACCOUNTING TECHNICIAN II: On June 10, 2025, the Water Board approved the 2025/2026 fiscal year budget including the classification/job description changes listed in the motion.

Human Resources conducted studies and recommends the classifications, job descriptions, and/or salary range changes to become effective July 1, 2025.

The Salary Schedule Exhibit has been updated to reflect the appropriate changes.

The changes have been included in the approved 2025/2026 fiscal year budget.

MOTION: Approve the new job description for Welder II (1291), Section 3043, General unit, FLSA Non-Exempt, Range 152 (\$40.4582/hour to \$51.7900/hour); and

Approve the new job description for Information Security Analyst (2109), Section 1040, Mid-Management unit, FLSA Exempt, Range 262 (\$55.3752/hour to \$70.6744/hour); and

Approve the reactivated job description for Water Reclamation Facilities Maintenance Supervisor (2174), Section 4060, Mid-Management unit, FLSA Exempt, Range 256 (\$47.7499/hour to \$60.9243/hour); and

Approve the revised job description Welder I (1290) with title change from Welder/Pipefitter, Section 3023, and reclassification of current incumbent with no change in salary range (148); and

Approve the revised job description for Enterprise Geographic Information Systems (EGIS) Manager (2100) with title change from GIS Manager, Section 3060, and Range change from 263 (\$56.7596/hour to \$72.4412/hour) to 265 (\$59.6331/hour to \$76.1085/hour) and reclassification of one incumbent; and

Approve the revised job description for Payroll Specialist (1200), Section 1400, with Range change from 144 (\$33.2060/hour to \$42.5064/hour) to 147 (\$35.7592/hour to \$45.7748/hour); and

Approve the revised job description for Water Quality Specialist (1252), Section 2063; and

Approve the revised job description for Water Quality Lead Worker (1250), Section 2063; and

Approve the revised job description for Water Quality Control Officer (2160), Section 2063, as submitted.

DISCUSSION ITEMS

5. PUBLIC HEARING

PUBLIC HEARING TO RECEIVE COMMENTS ON DEPARTMENT 2025 PUBLIC HEALTH GOALS REPORT IN COMPLIANCE WITH SECTION 11670 OF THE HEALTH AND SAFETY CODE: The purpose of the 2025 Water Quality Public Health Goals (PHG) Public Hearing is to accept and respond to public comments from water consumers about the PHG Report.

As indicated in the “Report on Water Quality Relative to Public Health Goals,” the drinking water served to the City of San Bernardino residents by the Water Department meets all state and federal drinking water standards set to protect public health.

The Water Board President will open the public hearing.

MOTION: Open the Public Hearing and, subsequent to receiving and responding to any comments on the Public Health Goals concerning the City’s water system, that the hearing be closed, and the staff report accepted with no action at this time.

MOTION:_____ SECONDED:_____

6. APPROVAL OF A PROFESSIONAL SERVICES AGREEMENT BETWEEN THE SAN BERNARDINO MUNICIPAL WATER DEPARTMENT AND CAROLLO ENGINEERS, INC FOR ENGINEERING SERVICES FOR MERIDIAN SEWER LIFT STATION RELOCATION AND REPLACEMENT PROJECT (SPECIFICATION NO. 1857): The Meridian Lift Station (LS) was constructed in 1983 and is in poor condition, has no source of backup power, and in addition to the minimally sized wet well, most components for the LS have exceeded their expected design life.

Immediately after taking over responsibility for the Sewer Collection System, staff began working on a backup power system for the Meridian LS. The Meridian LS Project was addressed from 2018 through 2020 in the Sewer Collections Master Plan. That Master Plan included a recommendation not just for a backup power source but for a full replacement of the Meridian LS.

In September 2021, a Professional Services Agreement (PSA) was awarded to a second engineering firm, who worked on design development of the full replacement project, and in January 2024, staff performed a comprehensive review of the project to date. After extensive partnership efforts with the consultant to successfully resolve all of the outstanding issues, the second engineering consultant was released from their PSA in September 2024.

The Department met with three (3) qualified consulting firms and released a Request for Proposal to these firms by invitation only, and on March 14, 2025, one (1) proposal was submitted.

The funding source for this project is the FY 2025/2026 Sewer Fund Capital Project titled *Meridian Lift Station Project* (C.O. C1850012), which, upon approval of the FY25/26 Budget, will have sufficient funds to award the PSA after July 1, 2025.

MOTION: Approve the Professional Services Agreement with Carollo Engineers, Inc. for an amount not-to-exceed ONE MILLION ONE HUNDRED NINE THOUSAND SIXTY-THREE AND 00/100 DOLLARS (\$1,109,063.00); and authorize the General Manager to execute the Agreement.

MOTION:_____ SECONDED:_____

7. REPORTS:

- A. Report of the President
- B. Report of the Commissioners
- C. Report of the Directors
- D. Report of the General Manager

8. ADJOURNMENT

The next regular meeting of the Water Board is scheduled for *9:30 a.m., July 8, 2025*, at The Margaret H. Chandler Water Reclamation Plant, 399 Chandler Place, San Bernardino, CA 92408.



**City of San Bernardino
Municipal Water Department**

399 Chandler Place
San Bernardino, CA 92408
<http://www.sbcitywater.org>

*President Cecilia "Toni"
Callicott*

Commissioners

*Wayne Hendrix
David Mlynarski
Rikke Johnson
Thomas Brickley*

MINUTES

FOR THE
WATER BOARD OF THE CITY OF SAN BERNARDINO

JUNE 10, 2025

CALL TO ORDER

The Regular Meeting of the Water Board of the City of San Bernardino was called to order by President Toni Callicott at 9:30 AM, Tuesday, June 10, 2025, in-person and livestream via YouTube.

ROLL CALL

Attendee Name	Title	Status	Arrived
Cecilia "Toni" Callicott	President	Present	9:30 AM
Wayne Hendrix	Vice President	Present	9:30 AM
David Mlynarski	Board Member	Present	9:30 AM
Rikke Johnson	Board Member	Present	9:30 AM
Thomas Brickley	Board Member	Absent	N/A
Miguel Guerrero	General Manager	Present	9:30 AM

- 1. ANNOUNCEMENTS BY THE BOARD:** None.
- 2. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA:** Interim City Manager, Mr. Bill Gallardo, introduced himself to the Water Board and gave a brief summary of the City's newly adopted budget, which included substantial allocations toward roadway infrastructure and improvements.
- 3. PUBLIC COMMENTS ON ITEMS LISTED ON THE AGENDA:** None.

4. CONSENT CALENDAR – ITEMS 4A THROUGH 4C:**A. PAYROLL:**

	<u>Water Fund</u>	<u>Sewer Treatment</u>	<u>Total</u>
Claims:3012771- 3012994			
Accounts Payable	\$1,331,025.30	\$733,966.98	\$2,064,992.28
Gross Payroll	<u>\$471,463.34</u>	<u>\$441,421.01</u>	<u>\$912,884.35</u>
05/05/25-05/18/25			
TOTALS	<u>\$1,802,488.64</u>	<u>\$1,175,387.99</u>	<u>\$2,977,876.63</u>

Payroll for the pay period beginning June 2, 2025 through June 15, 2025.

B. CONTRACTS AND BILLS: Contracts and bills presented at this meeting.

C. MINUTES: May 27, 2025.

RESULT: APPROVED 4-0 BY ROLL CALL VOTE WITH 1 ABSENT
MOVER: R. Johnson
SECONDER: W. Hendrix
ABSTAINED: N/A
ABSENT: T. Brickley

DISCUSSION ITEMS

- 5. APPROVAL OF PURCHASE ORDER FOR SERVICE INSTALLATIONS AT 575 E. BASELINE STREET:** The Department approved a list of five (5) construction firms to serve as on-call contractors under Contract No. 1825, *On-Call Potable Water and Sanitary Sewer Repair Services*. Bids were solicited from this list of pre-approved on-call contractors for specific water service installation requests over the course of the following fiscal year.

Landwise Development requested to install, one (1) Combination 3-inch DS x 2-inch LS service installation, one (1) 6-inch Fire Hydrant Installation, and one (1) 8-inch Fire Service Installation. Staff solicited bids from the Department's five (5) on-call contractors and two (2) bids were received and opened on May 13, 2025.

The funding source for this contract was Construction Orders assigned for Fiscal Year 2025:

- *No. 11191 Combination Domestic/Landscape Service installation.*
- *No. 11189 Fire Hydrant Installations*
- *No. 11188 Fire Service Installation.*

Construction Orders were generated each fiscal year to capture costs for installing typical service requests. Landwise Development would be issued an invoice to cover these installation fees and the water capacity charges established by Rule and Regulation No. 5. The collected installation fees would be deposited into the Construction Orders No. 11191, No. 11189, and No. 11188 accounts.

MOTION: Approve the purchase order for the project installations located at 575 E. Baseline St. by El-Co Contractors, Inc. in the amount of \$118,460.00.

RESULT: APPROVED 4-0 BY ROLL CALL VOTE WITH 1 ABSENT
MOVER: D. Mlynarski
SECONDER: R. Johnson
ABSTAINED: N/A
ABSENT: N/A

6. **OPERATING AND CAPITAL IMPROVEMENT BUDGET WORKSHOP AND BUDGET ADOPTION: FISCAL YEAR 2025/26:** The second presentation on the proposed budget for Fiscal Year 2025/26 was presented to the Water Board which included Environmental and Regulatory Compliance, Sewer Treatment, Sewer Collection, and an Operating & Capital Improvement summary. In addition, adoption of the proposed final budget was recommended.

Director Mouser thanked staff and Jesica Calva, Administrative Coordinator, for their hard work with the budget process.

President Callicott congratulated General Manager Guerrero, Director Mouser, and Department staff for their efforts in providing a thorough budget.

MOTION: Adopt the City of San Bernardino Municipal Water Department Operating and Capital Improvement Budget for Fiscal Year 2025/26.

RESULT: APPROVED 4-0 BY ROLL CALL VOTE WITH 1 ABSENT
MOVER: W. Hendrix
SECONDER: R. Johnson
ABSTAINED: N/A
ABSENT: N/A

7. **REPORTS:**

A. **Report of the President –** None.

B. **Report of the Commissioners –** None.

C. **Report of the Directors –**

1. Director Mouser thanked the Water Board for adopting the FY 2025-2026 budget.

2. Director Stewart stated that he toured Nursery Products, LLC, on Monday, June 9, 2025.
3. Director Stewart stated that he attended the Regional Biosolids Feasibility Study Kickoff Meeting on Monday, June 2, 2025.

D. Report of the General Manager –

1. General Manager Guerrero stated that this was the second year that the Department would be hosting graduating seniors from Arroyo Valley High School in a partnered internship program with the school district.

General Manager Guerrero stated that the three (3) week internship would include the students visiting all areas of the Department to expose them to the daily operations of each section in the Department.

8. ADJOURNMENT

The next regular meeting of the Water Board was scheduled for *9:30 a.m., June 24, 2025*, at The Margaret H. Chandler Water Reclamation Plant, 399 Chandler Place, San Bernardino, CA 92408.

By: _____
Miguel J. Guerrero
General Manager

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

Received 06-12-25
SBMWD AS
General Manager

WATER BOARD
STAFF REPORT

TO: Miguel J. Guerrero, P.E., General Manager 

FROM: Robin L. Ohama, Deputy General Manager

SUBJECT: **RESOLUTION APPROVING THE SECOND AMENDMENT TO THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF SAN BERNARDINO WATER BOARD AND THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL #47 DATED JULY 1, 2023, AMENDING ARTICLE III – SALARIES, 3.1 – SALARY SCHEDULE**

DATE: June 11, 2025

CC: Payroll, Human Resources

BACKGROUND:

The Memorandum of Understanding (MOU) between the City of San Bernardino Water Board and the International Brotherhood of Electrical Workers Local #47 dated July 1, 2023, specifies that salary ranges applicable to unit members shall be adjusted effective July 1, 2025, to reflect the Consumer Price Index (CPI) for the year ending January 31 (with a minimum of 2.5% and maximum of 4%).

CPI for Pacific Cities and U.S. City Average, Riverside-San Bernardino-Ontario CA for the 12 months ending January 2025 is 2.9%. Therefore, the salary schedule, Exhibit “A-2”, has been adjusted by 2.9%.

GOALS AND OBJECTIVES:

This proposed resolution aligns with the Department’s Strategic Plan under Target #1, Organizational Development, Goal #2, Address recruitment and retention issues; take steps to become an “Employer of Choice”. This supports the specific action to ensure competitive salaries.

FISCAL IMPACT:

This change is included in the 2025-2026 fiscal year budget adopted by the Board on June 10, 2025.

Miguel J. Guerrero, P.E., General Manager

Page 2

June 11, 2025

SUBJECT: RESOLUTION APPROVING THE SECOND AMENDMENT TO THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF SAN BERNARDINO WATER BOARD AND THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL #47 DATED JULY 1, 2023, AMENDING ARTICLE III – SALARIES, 3.1 – SALARY SCHEDULE

RECOMMENDATION:

Staff recommends that the Board adopt a resolution approving the first amendment to the Memorandum of Understanding Between the City of San Bernardino Water Board and the International Brotherhood of Electrical Workers Local #47 dated July 1, 2023, amending Article III – Salaries, 3.1 – Salary Schedule effective July 1, 2025, and adding Exhibit “A-2”.

Respectfully submitted,

Robin Ohama

Robin Ohama (Jun 12, 2025 09:52 PDT)

Robin L. Ohama

Deputy General Manager

Attachments: Resolution, Memorandum Amendment, International Brotherhood of Electrical Workers Local #47 Salary Schedule effective July 1, 2025

RESOLUTION NO. _____

**RESOLUTION OF THE WATER BOARD OF THE CITY OF
SAN BERNARDINO, CALIFORNIA, APPROVING THE
SECOND AMENDMENT TO THE MEMORANDUM OF
UNDERSTANDING WITH THE INTERNATIONAL
BROTHERHOOD OF ELECTRICAL WORKERS LOCAL
#47 DATED JULY 1, 2023, AMENDING ARTICLE III –
SALARIES, 3.1 – SALARY SCHEDULE.**

WHEREAS, in accordance with Section 603 of the City Charter, the Water Board is responsible for oversight and management of the City’s water supply, recycled water, wastewater collection and treatment functions; and

WHEREAS, the Memorandum of Understanding with the International Brotherhood of Electrical Workers Local #47 dated July 1, 2023, approved by the Board specifies that the salary ranges applicable to unit members shall be adjusted effective July 1, 2025, to reflect the Consumer Price Index (CPI) for the year ending January 31 (with a minimum of 2.5% and maximum of 4%); and

WHEREAS, the CPI for Pacific Cities and U.S. City Average, Riverside-San Bernardino-Ontario CA for the 12 months ending January 2025 is 2.9%; and

WHEREAS, the salary schedule, Exhibit A-2, for the International Brotherhood of Electrical Workers Local #47 has been adjusted by 2.9% effective July 1, 2025.

BE IT RESOLVED BY THE WATER BOARD OF THE CITY OF SAN BERNARDINO AS FOLLOWS:

SECTION 1. The above recitals are true and correct and are incorporated herein by this reference.

SECTION 2. The Water Board of the San Bernardino Municipal Water Department hereby amends Article III – Salaries, 3.1 Salary Schedule, adding Exhibit “A-2” effective July 1, 2025, to the Memorandum of Understanding with the International Brotherhood of Electrical Workers Local #47 dated July 1, 2023, a copy of which is attached hereto and incorporated as though set forth at length herein.

SECTION 3. CEQA. The Water Board finds this Resolution is not subject to the California Environmental Quality Act (CEQA) in that the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty, as in this case, that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

SECTION 4. Severability. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications, and to this end the provisions of this Resolution are declared to be severable.

SECTION 5. Effective Date. This Resolution shall become effective immediately.

APPROVED and **ADOPTED** by the Water Board and signed by the President of the Water Board and attested by the Deputy City Clerk & Ex Officio Secretary of the Water Board this 24th day of June, 2025.

Toni Callicott, President
City of San Bernardino Water Board

Attest:

Robin Ohama
Deputy City Clerk & Ex Officio Secretary of the Water Board

CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO) ss
CITY OF SAN BERNARDINO)

I, Robin Ohama, Deputy City Clerk & Ex Officio Secretary of the Water Board, hereby certify that the attached is a true copy of Resolution No. adopted at a regular meeting held on the 24th day of June, 2025 by the following vote:

<u>Water Board:</u>	<u>AYES</u>	<u>NAYS</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
CALLICOTT	_____	_____	_____	_____
HENDRIX	_____	_____	_____	_____
MLYNARSKI	_____	_____	_____	_____
BRICKLEY	_____	_____	_____	_____
JOHNSON	_____	_____	_____	_____

WITNESS my hand and official seal of the City of San Bernardino this 24th day of June, 2025.

Robin Ohama
Deputy City Clerk & Ex Officio Secretary of
the Water Board

SECOND AMENDMENT TO THE
MEMORANDUM OF UNDERSTANDING
DATED JULY 1, 2023, THROUGH JUNE 30, 2028,
BETWEEN THE WATER BOARD AND
THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL #47

ARTICLE III – SALARIES

3.1 Salary Schedule is changed to add:

The salary ranges applicable to unit members effective July 1, 2025, are provided in Exhibit A-2.

CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT

THE INTERNATIONAL BROTHERHOOD
OF ELECTRICAL WORKERS LOCAL #47

BY: *Robin Ohama*
Robin Ohama (Jun 2, 2025 10:39 PDT)

BY: *[Signature]*
Dick Reed (May 20, 2025 12:55 PDT)

BY: *[Signature]*

BY: *Mike Clark*
Mike Clark (May 20, 2025 18:59 PDT)

BY: *Janice Reins*

BY: *[Signature]*
Michael Mayberry (May 21, 2025 07:57 PDT)

BY: *Nathan Ties*
Nathan Ties (May 29, 2025 07:34 PDT)

BY: *Michael Jackson*
Michael Jackson (Jun 1, 2025 18:43 PDT)

BY: *[Signature]*
Lauren Lunn (Jun 2, 2025 09:49 PDT)

BY: *[Signature]*
Eric Dalpiaz (Jun 2, 2025 10:22 PDT)

BY: *Evelyn Galicia*
Evelyn Galicia (Jun 2, 2025 10:34 PDT)

DATED: 06/02/2025

EXHIBIT A-2, 3.1 SALARY SCHEDULE
EFFECTIVE JULY 1, 2025
INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL #47

RANGE	MINIMUM			MAXIMUM		
	\$/HOUR	\$/MONTH	\$/YEAR	\$/HOUR	\$/MONTH	\$/YEAR
119	\$ 17.9110	\$ 3,104.57	\$ 37,254.84	\$ 22.9276	\$ 3,974.11	\$ 47,689.34
120	\$ 18.3588	\$ 3,182.18	\$ 38,186.21	\$ 23.5008	\$ 4,073.46	\$ 48,881.58
121	\$ 18.8177	\$ 3,261.74	\$ 39,140.86	\$ 24.0883	\$ 4,175.30	\$ 50,103.62
122	\$ 19.2882	\$ 3,343.28	\$ 40,119.39	\$ 24.6905	\$ 4,279.68	\$ 51,356.21
123	\$ 19.7704	\$ 3,426.86	\$ 41,122.37	\$ 25.3077	\$ 4,386.68	\$ 52,640.11
124	\$ 20.2646	\$ 3,512.54	\$ 42,150.43	\$ 25.9404	\$ 4,496.34	\$ 53,956.11
125	\$ 20.7712	\$ 3,600.35	\$ 43,204.19	\$ 26.5890	\$ 4,608.75	\$ 55,305.02
126	\$ 21.2905	\$ 3,690.36	\$ 44,284.30	\$ 27.2537	\$ 4,723.97	\$ 56,687.64
127	\$ 21.8228	\$ 3,782.62	\$ 45,391.40	\$ 27.9350	\$ 4,842.07	\$ 58,104.83
128	\$ 22.3684	\$ 3,877.18	\$ 46,526.19	\$ 28.6334	\$ 4,963.12	\$ 59,557.45
129	\$ 22.9276	\$ 3,974.11	\$ 47,689.34	\$ 29.3492	\$ 5,087.20	\$ 61,046.39
130	\$ 23.5008	\$ 4,073.46	\$ 48,881.58	\$ 30.0830	\$ 5,214.38	\$ 62,572.55
131	\$ 24.0883	\$ 4,175.30	\$ 50,103.62	\$ 30.8350	\$ 5,344.74	\$ 64,136.86
132	\$ 24.6905	\$ 4,279.68	\$ 51,356.21	\$ 31.6059	\$ 5,478.36	\$ 65,740.29
133	\$ 25.3077	\$ 4,386.68	\$ 52,640.11	\$ 32.3961	\$ 5,615.32	\$ 67,383.79
134	\$ 25.9404	\$ 4,496.34	\$ 53,956.11	\$ 33.2060	\$ 5,755.70	\$ 69,068.39
135	\$ 26.5890	\$ 4,608.75	\$ 55,305.02	\$ 34.0361	\$ 5,899.59	\$ 70,795.10
136	\$ 27.2537	\$ 4,723.97	\$ 56,687.64	\$ 34.8870	\$ 6,047.08	\$ 72,564.97
137	\$ 27.9350	\$ 4,842.07	\$ 58,104.83	\$ 35.7592	\$ 6,198.26	\$ 74,379.10
138	\$ 28.6334	\$ 4,963.12	\$ 59,557.45	\$ 36.6532	\$ 6,353.21	\$ 76,238.58
139	\$ 29.3492	\$ 5,087.20	\$ 61,046.39	\$ 37.5695	\$ 6,512.05	\$ 78,144.54
140	\$ 30.0830	\$ 5,214.38	\$ 62,572.55	\$ 38.5087	\$ 6,674.85	\$ 80,098.15
141	\$ 30.8350	\$ 5,344.74	\$ 64,136.86	\$ 39.4714	\$ 6,841.72	\$ 82,100.61
142	\$ 31.6059	\$ 5,478.36	\$ 65,740.29	\$ 40.4582	\$ 7,012.76	\$ 84,153.12
143	\$ 32.3961	\$ 5,615.32	\$ 67,383.79	\$ 41.4697	\$ 7,188.08	\$ 86,256.95
144	\$ 33.2060	\$ 5,755.70	\$ 69,068.39	\$ 42.5064	\$ 7,367.78	\$ 88,413.37
145	\$ 34.0361	\$ 5,899.59	\$ 70,795.10	\$ 43.5691	\$ 7,551.98	\$ 90,623.71
146	\$ 34.8870	\$ 6,047.08	\$ 72,564.97	\$ 44.6583	\$ 7,740.78	\$ 92,889.30
147	\$ 35.7592	\$ 6,198.26	\$ 74,379.10	\$ 45.7748	\$ 7,934.29	\$ 95,211.53
148	\$ 36.6532	\$ 6,353.21	\$ 76,238.58	\$ 46.9191	\$ 8,132.65	\$ 97,591.82
149	\$ 37.5695	\$ 6,512.05	\$ 78,144.54	\$ 48.0921	\$ 8,335.97	\$ 100,031.62
150	\$ 38.5087	\$ 6,674.85	\$ 80,098.15	\$ 49.2944	\$ 8,544.37	\$ 102,532.41
151	\$ 39.4714	\$ 6,841.72	\$ 82,100.61	\$ 50.5268	\$ 8,757.98	\$ 105,095.72
152	\$ 40.4582	\$ 7,012.76	\$ 84,153.12	\$ 51.7900	\$ 8,976.93	\$ 107,723.11
153	\$ 41.4697	\$ 7,188.08	\$ 86,256.95	\$ 53.0847	\$ 9,201.35	\$ 110,416.19
154	\$ 42.5064	\$ 7,367.78	\$ 88,413.37	\$ 54.4118	\$ 9,431.38	\$ 113,176.59
155	\$ 43.5691	\$ 7,551.98	\$ 90,623.71	\$ 55.7721	\$ 9,667.17	\$ 116,006.01
156	\$ 44.6583	\$ 7,740.78	\$ 92,889.30	\$ 57.1664	\$ 9,908.85	\$ 118,906.16
157	\$ 45.7748	\$ 7,934.29	\$ 95,211.53	\$ 58.5956	\$ 10,156.57	\$ 121,878.81
158	\$ 46.9191	\$ 8,132.65	\$ 97,591.82	\$ 60.0605	\$ 10,410.48	\$ 124,925.78
159	\$ 48.0921	\$ 8,335.97	\$ 100,031.62	\$ 61.5620	\$ 10,670.74	\$ 128,048.93
160	\$ 49.2944	\$ 8,544.37	\$ 102,532.41	\$ 63.1010	\$ 10,937.51	\$ 131,250.15
161	\$ 50.5268	\$ 8,757.98	\$ 105,095.72	\$ 64.6786	\$ 11,210.95	\$ 134,531.41
162	\$ 51.7900	\$ 8,976.93	\$ 107,723.11	\$ 66.2955	\$ 11,491.22	\$ 137,894.69
163	\$ 53.0847	\$ 9,201.35	\$ 110,416.19	\$ 67.9529	\$ 11,778.50	\$ 141,342.06
164	\$ 54.4118	\$ 9,431.38	\$ 113,176.59	\$ 69.6517	\$ 12,072.97	\$ 144,875.61
165	\$ 55.7721	\$ 9,667.17	\$ 116,006.01	\$ 71.3930	\$ 12,374.79	\$ 148,497.50

EXHIBIT A-3 REFLECTS A 2.9% INCREASE OVER SCHEDULE EFFECTIVE JULY 1, 2024.

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

Received 06-12-25
SBMWD 18
General Manager

WATER BOARD
STAFF REPORT

TO: Miguel J. Guerrero, P.E., General Manager 

FROM: Robin L. Ohama, Deputy General Manager

SUBJECT: **RESOLUTION APPROVING THE SECOND AMENDMENT TO THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF SAN BERNARDINO WATER BOARD AND THE SAN BERNARDINO ASSOCIATION OF WATER DEPARTMENT MID-MANAGERS DATED JULY 1, 2023, AMENDING ARTICLE III – SALARIES, 3.1 - SALARY SCHEDULE**

DATE: June 11, 2025

CC: Payroll, Human Resources

BACKGROUND:

The Memorandum of Understanding between the City of San Bernardino Water Board and the San Bernardino Association of Water Department Mid-Managers dated July 1, 2023, specifies that the salary ranges applicable to unit members shall be adjusted effective July 1, 2025, to reflect the year ending January 2025 Consumer Price Index (CPI), minimum adjustment of 2.5% and maximum adjustment of 4%.

CPI for Pacific Cities and U.S. City Average, Riverside-San Bernardino-Ontario CA for the 12 months ending January 2025 was 2.9%. Therefore, the salary schedule, Exhibit “B-2”, for Mid-Managers has been adjusted by 2.9%.

GOALS AND OBJECTIVES:

This proposed resolution aligns with the Department’s Strategic Plan under Target #1, Organizational Development, Goal #2, Address recruitment and retention issues; take steps to become an “Employer of Choice”. This supports the specific action to ensure competitive salaries.

FISCAL IMPACT:

This change is included in the 2025-2026 fiscal year budget adopted by the Board on June 10, 2025.

Miguel J. Guerrero, P.E., General Manager

Page 2

June 11, 2025

SUBJECT: RESOLUTION APPROVING THE SECOND AMENDMENT TO THE MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF SAN BERNARDINO WATER BOARD AND THE SAN BERNARDINO ASSOCIATION OF WATER DEPARTMENT MID-MANAGERS DATED JULY 1, 2023, AMENDING ARTICLE III – SALARIES, 3.1 – SALARY SCHEDULE

RECOMMENDATION:

Staff recommends that the Board adopt a resolution approving the second amendment to the Memorandum of Understanding Between the City of San Bernardino Water Board and the San Bernardino Association of Water Department Mid-Managers dated July 1, 2023, amending Article III – Salaries, 3.1 – Salary Schedule effective July 1, 2025, and adding Exhibit “B-2”.

Respectfully submitted,

Robin Ohama

Robin Ohama (Jun 17, 2025 09:51 PDT)

Robin L. Ohama
Deputy General Manager

Attachments: Resolution, Memorandum Amendment, San Bernardino Association of Water Department Mid-Managers Salary Schedule effective July 1, 2025.

RESOLUTION NO. _____

**RESOLUTION OF THE WATER BOARD OF THE CITY OF
SAN BERNARDINO, CALIFORNIA, APPROVING THE
SECOND AMENDMENT TO THE MEMORANDUM OF
UNDERSTANDING WITH THE SAN BERNADINO
ASSOCIATION OF WATER DEPARTMENT MID-
MANAGERS DATED JULY 1, 2023, AMENDING ARTICLE
III – SALARIES, 3.1 – SALARY SCHEDULE.**

WHEREAS, in accordance with Section 603 of the City Charter, the Water Board is responsible for oversight and management of the City’s water supply, recycled water, wastewater collection and treatment functions; and

WHEREAS, the Memorandum of Understanding with the San Bernardino Association of Water Department Mid-Managers dated July 1, 2023, approved by the Board specifies that the salary ranges applicable to unit members shall be adjusted effective July 1, 2025, to reflect the year ending January 2025 Consumer Price Index (CPI) (with a minimum of 2.5% and a maximum of 4%); and

WHEREAS, the CPI for Pacific Cities and U.S. City Average, Riverside-San Bernardino-Ontario CA for the 12 months ending January 2025 is 2.9%; and

WHEREAS, the salary schedule, Exhibit B-2, for the San Bernardino Association of Water Department Mid-Managers has been adjusted by 2.9% effective July 1, 2025.

BE IT RESOLVED BY THE WATER BOARD OF THE CITY OF SAN BERNARDINO AS FOLLOWS:

SECTION 1. The above recitals are true and correct and are incorporated herein by this reference.

SECTION 2. The Water Board of the San Bernardino Municipal Water Department hereby amends Article III – Salaries, 3.1 Salary Schedule, adding Exhibit “B-2” effective July 1, 2025, to the Memorandum of Understanding with the San Bernardino Association of Water Department Mid-Managers dated July 1, 2023, a copy of which is attached hereto and incorporated as though set forth at length herein.

SECTION 3. CEQA. The Water Board finds this Resolution is not subject to the California Environmental Quality Act (CEQA) in that the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty, as in this case, that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

SECTION 4. Severability. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications, and to this end the provisions of this Resolution are declared to be severable.

SECTION 5. Effective Date. This Resolution shall become effective immediately.

APPROVED and **ADOPTED** by the Water Board and signed by the President of the Water Board and attested by the Deputy City Clerk & Ex Officio Secretary of the Water Board this 24th day of June, 2025.

Toni Callicott, President
City of San Bernardino Water Board

Attest:

Robin Ohama
Deputy City Clerk & Ex Officio Secretary of the Water Board

CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO) ss
CITY OF SAN BERNARDINO)

I, Robin Ohama, Deputy City Clerk & Ex Officio Secretary of the Water Board, hereby certify that the attached is a true copy of Resolution No. adopted at a regular meeting held on the 24th day of June, 2025 by the following vote:

<u>Water Board:</u>	<u>AYES</u>	<u>NAYS</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
CALLICOTT	_____	_____	_____	_____
HENDRIX	_____	_____	_____	_____
MLYNARSKI	_____	_____	_____	_____
BRICKLEY	_____	_____	_____	_____
JOHNSON	_____	_____	_____	_____

WITNESS my hand and official seal of the City of San Bernardino this 24th day of June, 2025.

Robin Ohama
Deputy City Clerk & Ex Officio Secretary of
the Water Board

SECOND AMENDMENT TO THE
MEMORANDUM OF UNDERSTANDING
DATED JULY 1, 2023, THROUGH JUNE 30, 2028,
BETWEEN
THE WATER BOARD
AND

THE SAN BERNARDINO ASSOCIATION OF WATER DEPARTMENT MID-MANAGERS

ARTICLE III – SALARIES

Paragraph 3.1 – Salary Schedules is changed to add:

The salary schedule provided in Exhibit B-2 is effective July 1, 2025

CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT

THE SAN BERNARDINO ASSOCIATION
OF WATER DEPARTMENT MID-MANAGERS

BY: *Robin Ohama*
Robin Ohama (May 27, 2025 15:45 PDT)

BY: *Warren Huang*

BY: *Jul Huang*

BY: *Warren Huang*
Warren Huang (May 20, 2025 13:46 PDT)

BY: *Janice Reins*

BY: *Marissa Flores-Acosta*

BY: *Tyler Buechter*
Tyler Buechter (May 27, 2025 15:27 PDT)

BY: *Richard Hyle*
Richard Hyle (May 27, 2025 15:38 PDT)

DATED: 05/27/2025

EXHIBIT B-2, 3.1 SALARY SCHEDULE
EFFECTIVE JULY 1, 2025
ASSOCIATION OF WATER DEPARTMENT MID-MANAGERS

RANGE	MINIMUM			MAXIMUM		
	\$/HOUR	\$/MONTH	\$/YEAR	\$/HOUR	\$/MONTH	\$/YEAR
240	\$ 32.1655	\$ 5,575.36	\$ 66,904.26	\$ 41.0522	\$ 7,115.72	\$ 85,388.68
241	\$ 32.9696	\$ 5,714.74	\$ 68,576.87	\$ 42.0786	\$ 7,293.62	\$ 87,523.39
242	\$ 33.7939	\$ 5,857.61	\$ 70,291.29	\$ 43.1305	\$ 7,475.96	\$ 89,711.48
243	\$ 34.6387	\$ 6,004.05	\$ 72,048.57	\$ 44.2088	\$ 7,662.86	\$ 91,954.27
244	\$ 35.5047	\$ 6,154.15	\$ 73,849.79	\$ 45.3140	\$ 7,854.43	\$ 94,253.12
245	\$ 36.3923	\$ 6,308.00	\$ 75,696.03	\$ 46.4469	\$ 8,050.79	\$ 96,609.45
246	\$ 37.3021	\$ 6,465.70	\$ 77,588.43	\$ 47.6080	\$ 8,252.06	\$ 99,024.69
247	\$ 38.2347	\$ 6,627.35	\$ 79,528.14	\$ 48.7982	\$ 8,458.36	\$ 101,500.30
248	\$ 39.1906	\$ 6,793.03	\$ 81,516.35	\$ 50.0182	\$ 8,669.82	\$ 104,037.81
249	\$ 40.1703	\$ 6,962.85	\$ 83,554.26	\$ 51.2686	\$ 8,886.56	\$ 106,638.76
250	\$ 41.1746	\$ 7,136.93	\$ 85,643.11	\$ 52.5503	\$ 9,108.73	\$ 109,304.73
251	\$ 42.2039	\$ 7,315.35	\$ 87,784.19	\$ 53.8641	\$ 9,336.45	\$ 112,037.34
252	\$ 43.2590	\$ 7,498.23	\$ 89,978.80	\$ 55.2107	\$ 9,569.86	\$ 114,838.28
253	\$ 44.3405	\$ 7,685.69	\$ 92,228.27	\$ 56.5910	\$ 9,809.10	\$ 117,709.23
254	\$ 45.4490	\$ 7,877.83	\$ 94,533.97	\$ 58.0058	\$10,054.33	\$ 120,651.97
255	\$ 46.5853	\$ 8,074.78	\$ 96,897.32	\$ 59.4559	\$10,305.69	\$ 123,668.26
256	\$ 47.7499	\$ 8,276.65	\$ 99,319.75	\$ 60.9423	\$10,563.33	\$ 126,759.97
257	\$ 48.9436	\$ 8,483.56	\$ 101,802.75	\$ 62.4659	\$10,827.41	\$ 129,928.97
258	\$ 50.1672	\$ 8,695.65	\$ 104,347.82	\$ 64.0275	\$11,098.10	\$ 133,177.19
259	\$ 51.4214	\$ 8,913.04	\$ 106,956.51	\$ 65.6282	\$11,375.55	\$ 136,506.62
260	\$ 52.7069	\$ 9,135.87	\$ 109,630.43	\$ 67.2689	\$11,659.94	\$ 139,919.29
261	\$ 54.0246	\$ 9,364.27	\$ 112,371.19	\$ 68.9506	\$11,951.44	\$ 143,417.27
262	\$ 55.3752	\$ 9,598.37	\$ 115,180.47	\$ 70.6744	\$12,250.23	\$ 147,002.70
263	\$ 56.7596	\$ 9,838.33	\$ 118,059.98	\$ 72.4412	\$12,556.48	\$ 150,677.77
264	\$ 58.1786	\$ 10,084.29	\$ 121,011.48	\$ 74.2523	\$12,870.39	\$ 154,444.72
265	\$ 59.6331	\$ 10,336.40	\$ 124,036.76	\$ 76.1086	\$13,192.15	\$ 158,305.83
266	\$ 61.1239	\$ 10,594.81	\$ 127,137.68	\$ 78.0113	\$13,521.96	\$ 162,263.48
267	\$ 62.6520	\$ 10,859.68	\$ 130,316.12	\$ 79.9616	\$13,860.01	\$ 166,320.07
268	\$ 64.2183	\$ 11,131.17	\$ 133,574.03	\$ 81.9606	\$14,206.51	\$ 170,478.07
269	\$ 65.8237	\$ 11,409.45	\$ 136,913.38	\$ 84.0096	\$14,561.67	\$ 174,740.02
270	\$ 67.4693	\$ 11,694.68	\$ 140,336.21	\$ 86.1099	\$14,925.71	\$ 179,108.52
271	\$ 69.1561	\$ 11,987.05	\$ 143,844.62	\$ 88.2626	\$15,298.85	\$ 183,586.23
272	\$ 70.8850	\$ 12,286.73	\$ 147,440.73	\$ 90.4692	\$15,681.32	\$ 188,175.89
273	\$ 72.6571	\$ 12,593.90	\$ 151,126.75	\$ 92.7309	\$16,073.36	\$ 192,880.29
274	\$ 74.4735	\$ 12,908.74	\$ 154,904.92	\$ 95.0492	\$16,475.19	\$ 197,702.29
275	\$ 76.3354	\$ 13,231.46	\$ 158,777.54	\$ 97.4254	\$16,887.07	\$ 202,644.85
276	\$ 78.2437	\$ 13,562.25	\$ 162,746.98	\$ 99.8610	\$17,309.25	\$ 207,710.97
277	\$ 80.1998	\$ 13,901.30	\$ 166,815.66	\$ 102.3576	\$17,741.98	\$ 212,903.75
278	\$ 82.2048	\$ 14,248.84	\$ 170,986.05	\$ 104.9165	\$18,185.53	\$ 218,226.34

EXHIBIT B-2 REFLECTS A 2.9% INCREASE OVER SCHEDULE EFFECTIVE JULY 1, 2024

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**WATER BOARD
STAFF REPORT**

TO: Miguel J. Guerrero, P.E., General Manager 

FROM: Robin L. Ohama, Deputy General Manager

SUBJECT: **RESOLUTION APPROVING THE SECOND AMENDMENT TO RESOLUTION NO. 2023-016 WITH THE WATER DEPARTMENT CONFIDENTIAL EMPLOYEES DATED JULY 1, 2023, AMENDING SECTION 2 – SALARY SCHEDULES, AND ADDING EXHIBIT 1-B**

DATE: June 11, 2025

CC: Janice Reins, Amy Smith, Jamie Laureano, Miriam Alvarez, Elizabeth Razo, Jessica Calva, Payroll, Human Resources

BACKGROUND:

Resolution No. 2023-016 which establishes a compensation and benefit plan for the Water Department Confidential employees dated July 1, 2023, specifies that the salary ranges for Confidential employees shall be adjusted, and Confidential employees will receive a pay adjustment, effective July 1, 2025, to reflect the year ending January 2025 Consumer Price Index (CPI), minimum of 2.5%, maximum of 4%.

CPI for Pacific Cities and U.S. City Average, Riverside-San Bernardino-Ontario CA for the 12 months ending January 2025 was 2.9%. Therefore, the salary schedule, Exhibit 1-B, has been adjusted by 2.9%.

GOALS AND OBJECTIVES:

This proposed resolution aligns with the Department's Strategic Plan under Target #1, Organizational Development, Goal #2, Address recruitment and retention issues; take steps to become an "Employer of Choice". This supports the specific action to ensure competitive salaries.

FISCAL IMPACT:

This change is included in the 2025-2026 fiscal year budget adopted by the Board on June 10, 2025.

Miguel J. Guerrero, P.E., General Manager

Page 2

June 11, 2025

**SUBJECT: RESOLUTION APPROVING THE SECOND AMENDMENT TO RESOLUTION NO. 2023-16
WITH THE DEPARTMENT CONFIDENTIAL EMPLOYEES DATED JULY 1, 2023,
AMENDING SECTION 2 – SALARY SCHEDULES, 1-B**

RECOMMENDATION:

Staff recommends that the Board adopt a resolution approving the second amendment to Resolution No. 2023-016 with the Water Department Confidential Employees dated July 1, 2023, amending Section 2 – Salary Schedules, adding Exhibit 1-B, effective July 1, 2025.

Respectfully submitted,

Robin Ohama

Robin Ohama (Jun 12, 2025 09:50 PDT)

Robin L. Ohama

Deputy General Manager

Attachments: Resolution, Compensation Plan Amendment, Management and Confidential Salary Schedule effective July 1, 2025

RESOLUTION NO. _____

**RESOLUTION OF THE WATER BOARD OF THE CITY OF
SAN BERNARDINO, CALIFORNIA, APPROVING THE
SECOND AMENDMENT TO RESOLUTION NO. 2023-016
WITH THE WATER DEPARTMENT CONFIDENTIAL
EMPLOYEES DATED JULY 1, 2023, AMENDING SECTION
2 - SALARY SCHEDULES.**

WHEREAS, in accordance with Section 603 of the City Charter, the Water Board is responsible for oversight and management of the City's water supply, recycled water, wastewater collection and treatment functions; and

WHEREAS, Resolution No. 2023-016 establishes a compensation and benefits plan for Confidential employees and specifies that the salary ranges for Confidential employees shall be adjusted effective July 1, 2025, to reflect the year ending January 2025 Consumer Price Index (CPI) with a minimum of 2.5% and a maximum of 4%; and

WHEREAS, the CPI for Pacific Cities and U.S. City Average, Riverside-San Bernardino-Ontario CA for the 12 months ending January 2025 is 2.9%; and

WHEREAS, the salary schedule, Exhibit 1-B, for the Management and Confidential employees has adjusted the ranges for Confidential employees by 2.9% effective July 1, 2025.

BE IT RESOLVED BY THE WATER BOARD OF THE CITY OF SAN BERNARDINO AS FOLLOWS:

SECTION 1. The above recitals are true and correct and are incorporated herein by this reference.

SECTION 2. The Water Board of the San Bernardino Municipal Water Department hereby amends Section 2 - Salary Schedules, adding Exhibit "1-B" effective July 1, 2025, to Resolution No. 2023-016 dated July 1, 2023, Adopting a Compensation and Benefits Plan for Water Department Confidential Employees, a copy of which is attached hereto and incorporated as though set forth at length herein.

SECTION 3. CEQA. The Water Board finds this Resolution is not subject to the California Environmental Quality Act (CEQA) in that the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty, as in this case, that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

SECTION 4. Severability. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications, and to this end the provisions of this Resolution are declared to be severable.

SECTION 5. Effective Date. This Resolution shall become effective immediately.

APPROVED and **ADOPTED** by the Water Board and signed by the President of the Water Board and attested by the Deputy City Clerk & Ex Officio Secretary of the Water Board this 24th day of June, 2025.

Toni Callicott, President
City of San Bernardino Water Board

Attest:

Robin Ohama
Deputy City Clerk & Ex Officio Secretary of the Water Board

CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO) ss
CITY OF SAN BERNARDINO)

I, Robin Ohama, Deputy City Clerk & Ex Officio Secretary of the Water Board, hereby certify that the attached is a true copy of Resolution No. adopted at a regular meeting held on the 24th day of June, 2025 by the following vote:

<u>Water Board:</u>	<u>AYES</u>	<u>NAYS</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
CALLICOTT	_____	_____	_____	_____
HENDRIX	_____	_____	_____	_____
MLYNARSKI	_____	_____	_____	_____
BRICKLEY	_____	_____	_____	_____
JOHNSON	_____	_____	_____	_____

WITNESS my hand and official seal of the City of San Bernardino this 24th day of June, 2025.

Robin Ohama
Deputy City Clerk & Ex Officio Secretary of
the Water Board

SECOND AMENDMENT TO
RESOLUTION NO. 2023-016
DATED JULY 1, 2023
OF THE
CITY OF SAN BERNARDINO WATER BOARD
ESTABLISHING A COMPENSATION
AND BENEFITS PLAN FOR THE
WATER DEPARTMENT CONFIDENTIAL EMPLOYEES

SECTION 2: SALARY SCHEDULES: is changed to add:

The salary schedule provided in Exhibit 1-B is effective July 1, 2025.

San Bernardino Municipal Water Department

SALARY SCHEDULE

EFFECTIVE JULY 1, 2025

CONFIDENTIAL EMPLOYEES ARE:

Range	Unit	Position
322	C	Human Resources Manager
311	C	Executive Assistant to the General Manager
300	C	Administrative Coordinator

RANGE	MINIMUM			MAXIMUM		
	\$/HOUR	\$/MONTH	\$/YEAR	\$/HOUR	\$/MONTH	\$/YEAR
CONFIDENTIAL						
300	\$37.1423	\$6,437.99	\$77,255.92	\$51.8922	\$8,994.66	\$107,935.86
301	\$38.0708	\$6,598.94	\$79,187.32	\$53.1895	\$9,219.52	\$110,634.26
302	\$39.0226	\$6,763.92	\$81,167.00	\$54.5193	\$9,450.01	\$113,400.12
303	\$39.9982	\$6,933.01	\$83,196.18	\$55.8823	\$9,686.26	\$116,235.12
304	\$40.9981	\$7,106.34	\$85,276.08	\$57.2793	\$9,928.42	\$119,141.00
305	\$42.0231	\$7,284.00	\$87,407.98	\$58.7113	\$10,176.63	\$122,119.52
306	\$43.0736	\$7,466.10	\$89,593.18	\$60.1791	\$10,431.04	\$125,172.51
307	\$44.1505	\$7,652.75	\$91,833.01	\$61.6897	\$10,692.87	\$128,314.48
308	\$45.2542	\$7,844.07	\$94,128.84	\$63.2319	\$10,960.20	\$131,522.35
309	\$46.3856	\$8,040.17	\$96,482.06	\$64.8191	\$11,235.31	\$134,823.70
310	\$47.5452	\$8,241.18	\$98,894.11	\$66.4396	\$11,516.19	\$138,194.30
311	\$48.7339	\$8,447.21	\$101,366.46	\$68.1006	\$11,804.10	\$141,649.15
312	\$49.9522	\$8,658.39	\$103,900.62	\$69.8031	\$12,099.20	\$145,190.38
313	\$51.2010	\$8,874.84	\$106,498.14	\$71.5481	\$12,401.68	\$148,820.14
314	\$52.4811	\$9,096.72	\$109,160.59	\$73.3368	\$12,711.72	\$152,540.65
315	\$53.7931	\$9,324.13	\$111,889.61	\$75.1703	\$13,029.51	\$156,354.16
316	\$55.1379	\$9,557.24	\$114,686.85	\$77.0495	\$13,355.25	\$160,263.02
317	\$56.5164	\$9,796.17	\$117,554.02	\$78.9758	\$13,689.13	\$164,269.59
318	\$57.9293	\$10,041.07	\$120,492.87	\$80.9502	\$14,031.36	\$168,376.33
319	\$59.3775	\$10,292.10	\$123,505.19	\$82.9739	\$14,382.15	\$172,585.74
320	\$60.8619	\$10,549.40	\$126,592.82	\$85.0483	\$14,741.70	\$176,900.38
321	\$62.3835	\$10,813.14	\$129,757.64	\$87.1745	\$15,110.24	\$181,322.89
322	\$63.9431	\$11,083.47	\$133,001.58	\$89.3538	\$15,488.00	\$185,855.97
323	\$65.5416	\$11,360.55	\$136,326.62	\$91.5877	\$15,875.20	\$190,502.37
324	\$67.1802	\$11,644.57	\$139,734.79	\$93.8774	\$16,272.08	\$195,264.92
325	\$68.8597	\$11,935.68	\$143,228.16	\$96.2243	\$16,678.88	\$200,146.55

Salary Schedule Exhibit 1-B reflects a 2.9% increase over schedule 1 dated 7/1/2024.

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

Received 06-12-25
SBMWD AS
General Manager

WATER BOARD
STAFF REPORT

TO: Miguel J. Guerrero, P.E., General Manager 

FROM: Robin L. Ohama, Deputy General Manager

SUBJECT: RESOLUTION APPROVING THE SECOND AMENDMENT TO RESOLUTION NO. 2023-018 FOR THE WATER DEPARTMENT REGULAR PART-TIME EMPLOYEES COMPENSATION AND BENEFITS PLAN DATED JULY 1, 2023, AMENDING SECTION 2 – SALARIES, A – SALARY SCHEDULES AND B – GENERAL PROVISIONS AND ADDING EXHIBIT 1-B – HOURLY SALARY SCHEDULE

DATE: June 11, 2025

CC: Payroll, Human Resources

BACKGROUND:

Regular part-time employees of the Water Department are provided certain limited benefits pursuant to a Water Board Resolution. Traditionally, regular part-time employees receive salary adjustments equivalent to those given to regular full-time employees in the General Unit.

On May 8, 2018, the Board approved the Memorandum of Understanding (MOU) Between the City of San Bernardino Water Board and the International Brotherhood of Electrical Workers Local #47 effective July 1, 2023, through June 30, 2028. The MOU includes a range increase effective July 1, 2025, based on the Consumer Price Index (CPI) for the 12 months ending January 2025 with a minimum of 2.5% and maximum of 4%. The CPI for the 12 months ending January 2025 is 2.9%. The attached Resolution will amend Resolution No. 2023-018 by providing a salary increase of 2.9% effective July 1, 2025.

GOALS AND OBJECTIVES:

This proposed resolution aligns with the Department's Strategic Plan under Target #1, Organizational Development, Goal #2, Address recruitment and retention issues; take steps to become an "Employer of Choice". This supports the specific action to ensure competitive salaries.

FISCAL IMPACT:

This change is included in the 2025-2026 fiscal year budget adopted by the Board on June 10, 2025.

Miguel J. Guerrero, P.E., General Manager

Page 2

June 11, 2025

**SUBJECT: RESOLUTION APPROVING THE SECOND AMENDMENT TO RESOLUTION NO. 2023-18
WITH THE WATER DEPARTMENT REGULAR PART-TIME EMPLOYEES DATED JULY
1, 2023, AMENDING SECTION 2 – SALARIES, A – SALARY SCHEDULES AND B –
GENERAL PROVISIONS AND ADDING EXHIBIT 1-B**

RECOMMENDATION:

Staff recommends that the Board adopt a resolution approving the second amendment to Resolution No. 2023-018 with the Water Department Regular Part-Time Employees dated July 1, 2023, amending Section 2 – Salaries, A - Salary Schedules and B – General Provisions and adding Exhibit 1-B, effective July 1, 2025.

Respectfully submitted,

Robin Ohama
Robin Ohama (Jun 12, 2025 09:47 PDT)

Robin L. Ohama
Deputy General Manager

Attachments: Resolution, Compensation Plan Amendment, Hourly Salary Schedule - Regular Part-Time Employees effective July 1, 2025

RESOLUTION NO. _____

**RESOLUTION OF THE WATER BOARD OF THE CITY OF
SAN BERNARDINO, CALIFORNIA, APPROVING THE
SECOND AMENDMENT TO RESOLUTION NO. 2023-018
ESTABLISHING A COMPENSATION AND BENEFITS
PLAN FOR THE WATER DEPARTMENT REGULAR
PART-TIME EMPLOYEES DATED JULY 1, 2023,
AMENDING SECTION 2 – SALARIES, A – SALARY
SCHEDULES AND B – ADDING EXHIBIT 1-B – HOURLY
SALARY SCHEDULE.**

WHEREAS, in accordance with Section 603 of the City Charter, the Water Board is responsible for oversight and management of the City’s water supply, recycled water, wastewater collection and treatment functions; and

WHEREAS, Regular part-time employees of the Water Department are provided certain limited benefits pursuant to Resolution No. 2023-018 which establishes a compensation and benefits plan for regular part-time employees; and

WHEREAS, regular part-time employees traditionally receive salary adjustments equivalent to those given to regular full-time employees in the General unit; and

WHEREAS, the Board approved the Memorandum of Understanding (MOU) Between the City of San Bernardino Water Board and the International Brotherhood of Electrical Workers Local #47 effective July 1, 2023, through June 30, 2028, which includes a range adjustment effective July 1, 2025, based on the Consumer Price Index (CPI) for the year ending January 2025 for General unit employees (with a minimum of 2.5% and a maximum of 4%); and

WHEREAS, the CPI for Pacific Cities and U.S. City Average, Riverside-San Bernardino-Ontario CA for the 12 months ending January 2025 is 2.9%; and

WHEREAS, the salary schedule, Exhibit 1-B, Hourly Salary Schedule - Regular Part-Time Employees has been adjusted by 2.9% effective July 1, 2025.

BE IT RESOLVED BY THE WATER BOARD OF THE CITY OF SAN BERNARDINO AS FOLLOWS:

SECTION 1. The above recitals are true and correct and are incorporated herein by this reference.

SECTION 2. The Water Board of the San Bernardino Municipal Water Department hereby amends Section 2 – Salaries, A – Salary Schedules, and B – General Provisions, adding Exhibit “1-B” effective July 1, 2025, to Resolution No. 2023-018 Establishing a Compensation and Benefits Plan for the Water Department Regular Part-Time Employees dated July 1, 2023, a copy of which is attached hereto and incorporated as though set forth at length herein.

SECTION 3. CEQA. The Water Board finds this Resolution is not subject to the California Environmental Quality Act (CEQA) in that the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the

environment. Where it can be seen with certainty, as in this case, that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

SECTION 4. Severability. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications, and to this end the provisions of this Resolution are declared to be severable.

SECTION 5. Effective Date. This Resolution shall become effective immediately.

APPROVED and **ADOPTED** by the Water Board and signed by the President of the Water Board and attested by the Deputy City Clerk & Ex Officio Secretary of the Water Board this 24th day of June, 2025.

Toni Callicott, President
City of San Bernardino Water Board

Attest:

Robin Ohama
Deputy City Clerk & Ex Officio Secretary of the Water Board

CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO) ss
CITY OF SAN BERNARDINO)

I, Robin Ohama, Deputy City Clerk & Ex Officio Secretary of the Water Board, hereby certify that the attached is a true copy of Resolution No. adopted at a regular meeting held on the 24th day of June, 2025 by the following vote:

<u>Water Board:</u>	<u>AYES</u>	<u>NAYS</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
CALLICOTT	_____	_____	_____	_____
HENDRIX	_____	_____	_____	_____
MLYNARSKI	_____	_____	_____	_____
BRICKLEY	_____	_____	_____	_____
JOHNSON	_____	_____	_____	_____

WITNESS my hand and official seal of the City of San Bernardino this 24th day of June, 2025.

Robin Ohama
Deputy City Clerk & Ex Officio Secretary of
the Water Board

SECOND AMENDMENT TO
RESOLUTION NO. 2023-018
DATED JULY 1, 2023
OF THE
THE CITY OF SAN BERNARDINO WATER BOARD
ESTABLISHING A COMPENSATION
AND BENEFITS PLAN FOR
THE WATER DEPARTMENT REGULAR PART-TIME EMPLOYEES

SECTION 2 – SALARIES

- A. SALARY SCHEDULES is changed to add “and exhibit 1-B effective July 1, 2025”.
- B. GENERAL PROVISIONS is changed to add “Exhibit 1-B”

EXHIBIT 1-B
HOURLY SALARY SCHEDULE - REGULAR PART-TIME EMPLOYEES
EFFECTIVE JULY 1, 2025

SALARY RANGE	PART-TIME CLASSIFICATION	STARTING SALARY 1	FROM DATE OF HIRE									
			1 YEAR 2	2 YEAR 3	3 YEAR 4	4 YEAR 5	5 YEAR 6	6 YEAR 7	7 YEAR 8	8 YEAR 9	9 YEAR 10	10 YEAR 11
928	Office Assistant	\$22.3686	22.9278	23.5010	24.0885	24.6908	25.3080	25.9407	26.5892	27.2540	27.9353	28.6337
933	Customer Service Rep I	\$25.3079	25.9406	26.5892	27.2539	27.9352	28.6336	29.3495	30.0832	30.8353	31.6062	32.3963
933	Bilingual Customer Service Rep I	\$25.3079	25.9406	26.5892	27.2539	27.9352	28.6336	29.3495	30.0832	30.8353	31.6062	32.3963
937	Truck Driver	\$27.9385	28.6369	29.3529	30.0867	30.8389	31.6098	32.4001	33.2101	34.0403	34.8913	35.7636
938	Field Service Rep II	\$28.6338	29.3496	30.0834	30.8354	31.6063	32.3965	33.2064	34.0366	34.8875	35.7597	36.6537
940	Administrative Assistant	\$30.0830	30.8351	31.6060	32.3961	33.2060	34.0362	34.8871	35.7593	36.6532	37.5696	38.5088

Exhibit 1-B reflects a 2.9% increase over schedule effective July 1, 2024.

CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT
WATER BOARD
STAFF REPORT

Received 06-12-25
SBMWD AS
General Manager

TO: Miguel J. Guerrero, P.E., General Manager 

FROM: Robin L. Ohama, Deputy General Manager

SUBJECT: NEW JOB DESCRIPTIONS FOR WELDER II AND INFORMATION SECURITY ANALYST; REACTIVATION OF THE WATER RECLAMATION FACILITIES MAINTENANCE SUPERVISOR JOB DESCRIPTION; REVISED JOB DESCRIPTION FOR WELDER/PIPEFITTER WITH TITLE CHANGE TO WELDER I AND RECLASSIFICATION OF INCUMBENT; REVISED JOB DESCRIPTION FOR GIS MANAGER WITH TITLE CHANGE TO EGIS MANAGER WITH RANGE CHANGE; REVISED JOB DESCRIPTION FOR PAYROLL SPECIALIST WITH RANGE CHANGE; REVISED JOB DESCRIPTIONS FOR WATER QUALITY CONTROL SPECIALIST, WATER QUALITY LEAD WORKER, AND WATER QUALITY CONTROL OFFICER; RECLASSIFICATION OF ONE VACANT OFFICE ASSISTANT POSITION TO SENIOR OFFICE ASSISTANT; RECLASSIFICATION OF ONE ACCOUNTING TECHNICIAN I POSITION AND INCUMBENT TO ACCOUNTING TECHNICIAN II.

DATE: June 11, 2025

CC: Steve Miller, Kevin Stewart, Cynthia Mouser, Jennifer Shepardson, Human Resources, Payroll

BACKGROUND:

On June 10, 2025, the Water Board approved the 2025/2026 fiscal year budget including the following classification/job description changes.

The Welder/Pipefitter job description was originally approved by the Board on December 4, 2001, and was subsequently revised on April 4, 2006, and November 21, 2006. Currently there are two (2) Welder/Pipefitter positions in Water Utility, one is filled, and one is vacant. One of these positions is assigned to Operations and one to Distribution. In preparation for the eventual relocation of the Water Utility Division, the current Operations and Distribution welding shops will be combined into a single shop and the job title will be changed from Welder/Pipefitter to Welder I with no change in salary range (148). The vacant Welder/Pipefitter position will be inactivated. The Welder I position will perform the hands-on welding tasks for both Operations and Distribution. A new classification and job description for Welder II will be established at Range 152 and will act as a lead for the Welder I position and oversee all Water Utility Division welding operations to ensure quality, safety and efficiency and perform complex tasks.

June 11, 2025

SUBJECT: NEW JOB DESCRIPTIONS FOR WELDER II AND INFORMATION SECURITY ANALYST; REACTIVATION OF THE WATER RECLAMATION FACILITIES MAINTENANCE SUPERVISOR JOB DESCRIPTION; REVISED JOB DESCRIPTION FOR WELDER/PIPEFITTER WITH TITLE CHANGE TO WELDER I AND RECLASSIFICATION OF INCUMBENT; REVISED JOB DESCRIPTION FOR GIS MANAGER WITH TITLE CHANGE TO EGIS MANAGER WITH RANGE CHANGE; REVISED JOB DESCRIPTION FOR PAYROLL SPECIALIST WITH RANGE CHANGE; REVISED JOB DESCRIPTIONS FOR WATER QUALITY CONTROL SPECIALIST, WATER QUALITY LEAD WORKER, AND WATER QUALITY CONTROL OFFICER; RECLASSIFICATION OF ONE VACANT OFFICE ASSISTANT POSITION TO SENIOR OFFICE ASSISTANT; RECLASSIFICATION OF ONE ACCOUNTING TECHNICIAN I POSITION AND INCUMBENT TO ACCOUNTING TECHNICIAN II.

This change will create a new structure that establishes clear hierarchy while promoting collaboration and skill development between sections and ensure both project needs and long-term growth are met. The single welding shop will also improve efficiency in the utilization of equipment, vehicles, and manpower.

Cybersecurity threats are ever increasing and continue to evolve, especially with the use of Artificial Intelligence (AI), and the Department needs to be prepared for increasingly sophisticated attacks. In addition, there are new regulations regarding data confidentiality, data integrity, data availability, and network performance to ensure that sensitive data remains shielded from unauthorized access. The majority of cybersecurity-related duties are currently being performed by the IT Manager as these duties represent a substantial departure from general IT systems or administrator duties. The cybersecurity role now requires special expertise in regulatory frameworks, security automation tools and specialized certifications. The new classification of Information Security Analyst (Range 262) will perform responsibilities beyond what our existing classifications cover including overseeing the Department's cybersecurity posture, leading cyber risk management efforts such as vulnerability assessments and management, security audits and compliance enforcement, managing incident response, digital forensics, cyber insurance coordination, securing Industrial Control Systems (ICS), Operational Technology (OT), and IoT infrastructure, which directly support the safety of the public and service delivery.

The Water Reclamation Maintenance Supervisor job description was originally approved by the Board on February 7, 1995. In 2010 when the Water Reclamation Facilities Maintenance Supervisor retired, the Facilities section was combined with Mechanical Maintenance and supervised by the Water Reclamation Maintenance Supervisor and/or Superintendent and the Water Reclamation Facilities Maintenance Supervisor classification was inactivated. Since that time the Water Reclamation Maintenance section has taken on additional responsibilities (such as lift station maintenance previously performed by Sewer Collections staff) and the strategy of the section has shifted from reactive to proactive/preventive resulting in a noticeable increase in the quantity of work. In response to industry standard and as required by NPDES Tentative Order R8-2025-0012, the Department must now shift to predictive maintenance as part of the forthcoming Asset Management Program. Currently, the Water Reclamation Maintenance Supervisor oversees nineteen (19) positions resulting in challenges and missed opportunities including additional field training, staff development and oversight, timely completion of performance evaluations of assigned staff, and reduced efficiencies. Moving Facilities into its own group and reactivating the Water Reclamation Facilities Maintenance Supervisor position will remove eight (8) positions from supervision by the Water Reclamation Maintenance Supervisor, leaving a more manageable eleven (11) positions to be supervised. This will allow the respective supervisors to provide adequate training and oversight, complete performance evaluations timely and increase efficiency. The recommended salary range is 256.

SUBJECT: NEW JOB DESCRIPTIONS FOR WELDER II AND INFORMATION SECURITY ANALYST; REACTIVATION OF THE WATER RECLAMATION FACILITIES MAINTENANCE SUPERVISOR JOB DESCRIPTION; REVISED JOB DESCRIPTION FOR WELDER/PIPEFITTER WITH TITLE CHANGE TO WELDER I AND RECLASSIFICATION OF INCUMBENT; REVISED JOB DESCRIPTION FOR GIS MANAGER WITH TITLE CHANGE TO EGIS MANAGER WITH RANGE CHANGE; REVISED JOB DESCRIPTION FOR PAYROLL SPECIALIST WITH RANGE CHANGE; REVISED JOB DESCRIPTIONS FOR WATER QUALITY CONTROL SPECIALIST, WATER QUALITY LEAD WORKER, AND WATER QUALITY CONTROL OFFICER; RECLASSIFICATION OF ONE VACANT OFFICE ASSISTANT POSITION TO SENIOR OFFICE ASSISTANT; RECLASSIFICATION OF ONE ACCOUNTING TECHNICIAN I POSITION AND INCUMBENT TO ACCOUNTING TECHNICIAN II.

The Geographic Information Systems (GIS) Manager job description was originally approved by the Board on June 24, 2003, and subsequently revised on March 22, 2005, November 6, 2012, and August 15, 2017. The duties and responsibilities of the Geographic Information Systems (GIS) Manager have increased and become more complex due to the industry-wide change to an Enterprise GIS system. These changes include Environmental Systems Research Institute (ESRI) upgrades to Enterprise ArcGIS applications and the transition to a cloud-based GIS database and applications platform. In addition, the current customer billing system does not have the capability to create work orders and a work around was implemented utilizing a feature in Field Mapplet and GIS to address this issue and create work orders. This position is also instrumental as part of a large number of workflows for Divisions throughout the Department. The continued growth in automating workflows has increased GIS demand since GIS applications are now widely used by Water Quality, Water Utility Operations and Distribution, and Sewer Collections sections. Reclassification of this position to Enterprise GIS Manager more accurately reflects the responsibilities of the position and the increase in salary range from Range 263 to 265 will allow the Department to hire and retain staff with the required technical knowledge.

The Payroll Specialist job description was originally approved with the title Payroll Technician by the Board on April 3, 2001, and subsequently revised on September 5, 2006, August 7, 2012, and October 3, 2017, with a title change to Payroll Specialist. There have been changes in the job duties of the position since the last job description revision in 2017. The job description has been revised to reflect current duties and the minimum education requirements have been revised to allow substitution of additional experience in lieu of the required education. An equity study indicates that this classification is approximately 7.5% below the average maximum at the survey agencies. Therefore, it is recommended that the salary range be changed from 144 to 147.

Effective July 1, 2025, the agency responsible for testing and issuing backflow certification is changing from the San Bernardino County Department of Environmental Health Services to American Water Works Association (AWWA) necessitating revised job descriptions for Water Quality Specialist, Lead Worker, and Control Officer. The job descriptions have been revised to reflect this change.

The existing Office Assistant position in the Engineering section was originally a Senior Office Assistant until it was underfilled by an Office Assistant in September 2018 and subsequently downgraded to Office Assistant with the 2023/2024 fiscal year budget. This change was made to create a career ladder in the administrative series and to have a full-time receptionist to address increased development services interaction at the Engineering public counter. At that time the administrative workload did not necessitate two (2) Senior Office Assistant positions.

Since that time the administrative workload has changed and there is a need for performance of advanced level, more complex and varied administrative, financial, and customer service functions comparable to the Senior Office Assistant classification.

June 11, 2025

SUBJECT: NEW JOB DESCRIPTIONS FOR WELDER II AND INFORMATION SECURITY ANALYST; REACTIVATION OF THE WATER RECLAMATION FACILITIES MAINTENANCE SUPERVISOR JOB DESCRIPTION; REVISED JOB DESCRIPTION FOR WELDER/PIPEFITTER WITH TITLE CHANGE TO WELDER I AND RECLASSIFICATION OF INCUMBENT; REVISED JOB DESCRIPTION FOR GIS MANAGER WITH TITLE CHANGE TO EGIS MANAGER WITH RANGE CHANGE; REVISED JOB DESCRIPTION FOR PAYROLL SPECIALIST WITH RANGE CHANGE; REVISED JOB DESCRIPTIONS FOR WATER QUALITY CONTROL SPECIALIST, WATER QUALITY LEAD WORKER, AND WATER QUALITY CONTROL OFFICER; RECLASSIFICATION OF ONE VACANT OFFICE ASSISTANT POSITION TO SENIOR OFFICE ASSISTANT; RECLASSIFICATION OF ONE ACCOUNTING TECHNICIAN I POSITION AND INCUMBENT TO ACCOUNTING TECHNICIAN II.

In addition, reclassification of the vacant Office Assistant position to Senior Office Assistant will allow this position to act as a back-up to the existing Senior Office Assistant position without the possibility of working out of class and will increase efficiency.

The Accounting Technician I/II job description states that incumbents can generally expect to progress from the I (Range 135) to the II classification (Range 139) after gaining the requisite experience and demonstrating proficiency and full performance at the higher level. The Director of Finance has determined that the incumbent in position number 101501 has successfully transitioned from basic responsibilities to more complex and sophisticated tasks that demand a comprehensive grasp of accounting principles and practices. The incumbent has consistently shown preparedness for the higher-level position through outstanding performance and skillset, has adeptly managed the complexities of financial transactions with confidence and precision, performs duties with a high level of autonomy, and has become a valuable resource for other staff. The incumbent displays a collaborative attitude that cultivates a positive workplace and increases the overall productivity of the team. The incumbent's proactive efforts to streamline processes have resulted in less time needed to process invoices, in turn enhancing cash flow and strengthening vendor relationships.

Human Resources conducted studies and recommends the classifications, job descriptions, and/or salary range changes below effective of July 1, 2025.

The Salary Schedule Exhibit has been updated to reflect the appropriate changes.

FISCAL IMPACT:

These changes have been included in the approved 2025/2026 fiscal year budget.

RECOMMENDATION:

It is recommended that the Water Board make the following motions effective July 1, 2025:

- Approve the new job description for Welder II (1291), Section 3043, General unit, FLSA Non-Exempt, Range 152 (\$40.4582/hour to \$51.7900/hour); and
- Approve the new job description for Information Security Analyst (2109), Section 1040, Mid-Management unit, FLSA Exempt, Range 262 (\$55.3752/hour to \$70.6744/hour); and
- Approve the reactivated job description for Water Reclamation Facilities Maintenance Supervisor (2174), Section 4060, Mid-Management unit, FLSA Exempt, Range 256 (\$47.7499/hour to \$60.9243/hour); and

June 11, 2025

SUBJECT: NEW JOB DESCRIPTIONS FOR WELDER II AND INFORMATION SECURITY ANALYST; REACTIVATION OF THE WATER RECLAMATION FACILITIES MAINTENANCE SUPERVISOR JOB DESCRIPTION; REVISED JOB DESCRIPTION FOR WELDER/PIPEFITTER WITH TITLE CHANGE TO WELDER I AND RECLASSIFICATION OF INCUMBENT; REVISED JOB DESCRIPTION FOR GIS MANAGER WITH TITLE CHANGE TO EGIS MANAGER WITH RANGE CHANGE; REVISED JOB DESCRIPTION FOR PAYROLL SPECIALIST WITH RANGE CHANGE; REVISED JOB DESCRIPTIONS FOR WATER QUALITY CONTROL SPECIALIST, WATER QUALITY LEAD WORKER, AND WATER QUALITY CONTROL OFFICER; RECLASSIFICATION OF ONE VACANT OFFICE ASSISTANT POSITION TO SENIOR OFFICE ASSISTANT; RECLASSIFICATION OF ONE ACCOUNTING TECHNICIAN I POSITION AND INCUMBENT TO ACCOUNTING TECHNICIAN II.

- Approve the revised job description Welder I (1290) with title change from Welder/Pipefitter, Section 3023, and reclassification of current incumbent with no change in salary range (148); and
- Approve the revised job description for Enterprise Geographic Information Systems (EGIS) Manager (2100) with title change from GIS Manager, Section 3060, and Range change from 263 (\$56.7596/hour to \$72.4412/hour) to 265 (\$59.6331/hour to \$76.1085/hour) and reclassification of one incumbent; and
- Approve the revised job description for Payroll Specialist (1200), Section 1400, with Range change from 144 (\$33.2060/hour to \$42.5064/hour) to 147 (\$35.7592/hour to \$45.7748/hour); and
- Approve the revised job description for Water Quality Specialist (1252), Section 2063; and
- Approve the revised job description for Water Quality Lead Worker (1250), Section 2063; and
- Approve the revised job description for Water Quality Control Officer (2160), Section 2063.

Respectfully submitted,

Robin Ohama

Robin Ohama (Jun 12, 2025 09:47 PDT)

Robin L. Ohama

Deputy General Manager

Attachments: New job descriptions for Welder II and Information Security Analyst, final draft versions.

Reactivated job description for Water Reclamation Facilities Maintenance Supervisor, redline and final draft versions.

Revised job descriptions with title changes for Welder I and EGIS Manager, redline and final draft versions.

Revised job descriptions for Payroll Specialist, Water Quality Specialist, Water Quality Lead Worker, and Water Quality Control Officer, redline and final draft versions.

Revised Salary Schedule Exhibit.

June 11, 2025

SUBJECT: NEW JOB DESCRIPTIONS FOR WELDER II AND INFORMATION SECURITY ANALYST; REACTIVATION OF THE WATER RECLAMATION FACILITIES MAINTENANCE SUPERVISOR JOB DESCRIPTION; REVISED JOB DESCRIPTION FOR WELDER/PIPEFITTER WITH TITLE CHANGE TO WELDER I AND RECLASSIFICATION OF INCUMBENT; REVISED JOB DESCRIPTION FOR GIS MANAGER WITH TITLE CHANGE TO EGIS MANAGER WITH RANGE CHANGE; REVISED JOB DESCRIPTION FOR PAYROLL SPECIALIST WITH RANGE CHANGE; REVISED JOB DESCRIPTIONS FOR WATER QUALITY CONTROL SPECIALIST, WATER QUALITY LEAD WORKER, AND WATER QUALITY CONTROL OFFICER; RECLASSIFICATION OF ONE VACANT OFFICE ASSISTANT POSITION TO SENIOR OFFICE ASSISTANT; RECLASSIFICATION OF ONE ACCOUNTING TECHNICIAN I POSITION AND INCUMBENT TO ACCOUNTING TECHNICIAN II.

Attachments: New job descriptions for Welder II and Information Security Analyst, final draft versions.

Reactivated job description for Water Reclamation Facilities Maintenance Supervisor, redline and final draft versions.

Revised job descriptions with title changes for Welder I and EGIS Manager, redline and final draft versions.

Revised job descriptions for Payroll Specialist, Water Quality Specialist, Water Quality Lead Worker, and Water Quality Control Officer, redline and final draft versions.

Revised Salary Schedule Exhibit.

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WELDER II

DATE: 07/01/2025

JOB CODE: 1291

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GENERAL

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under general supervision, to lead, guide, and participate fully in the work of welding crews engaged in skilled welding, pipefitting and fabrication work in the repair, installation, and modification of Department facilities such as wells and booster stations. Perform fabrication tasks for equipment maintenance; perform work on distribution and transmission mains; read and interpret blueprints and schematics; lead a small work crew; and perform related work as required.

DISTINGUISHING CHARACTERISTICS

The class of Welder II is the advanced journey/lead level in the welding pipefitting series. Incumbents routinely assign specific tasks to crew members in the shop or in the field, train, instruct, and correct the work of assigned staff ensuring that accepted work and safety methods are practices. Supervision is received from a Water Utility Supervisor, or as designated by the Director of Water Utility.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City and Department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Build, modify, and repair new and existing pump stations from sketches and blueprints or your judgment and initiative when sketches and blueprints are not available;
- Weld nozzles on existing pipelines; layout and fabricate various sizes of pipeline offsets; make tie-ins; install mainlines and well discharge pipe, including pipe supports, valves, and check valves, install and repair hydrants;
- Order parts, supplies, and materials; maintain inventory control over tools, equipment, and materials;

- Operate light tractors and medium trucks;
- Use drill presses, grinders, metal saws, wrenches, jacks, chisels, vice grips, jigs, hydraulic presses and metal shears;
- Brazes metal, matching metals to heat acceptance;
- May weld stainless steel;
- Fabricate pipe and meter locking devices;
- Fabricate templates from blueprints;
- May plan a project when more than one trade is involved;
- Weld and fit pipe in the field;
- Ensure that safety precautions are observed in the shop and in the field;
- Drive a truck with welding equipment to the job site;
- Research new operational methods and techniques for application to assigned tasks;
- May direct the work of assigned helpers;
- Required to wear respiratory protective equipment to include Self Contained Breathing Apparatus (SCBA);
- Keep labor and material records.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Principles and practices for framing; speed and combination squares;
- Oxyacetylene gas welding procedures and methods;
- Electrical welding procedures and methods;
- Types of metal and their characteristics in welding;
- Effects of heat on metals;
- Gas-cutting techniques;
- Basic journeyman level fabrication methods;
- Occupational hazards and safety precautions common in welding and pipeline construction;
- Welding processes;

- Electrodes and consumables;
- Welding metallurgy;
- Joint design, material preparations, welding workshop and analysis;

Ability to:

- Plan and layout work from sketches, blueprints, job requisitions, or verbal instructions;
- Schedule and coordinate activities with other sections;
- Repair, modify, install, and/or rebuild metal fixtures, structural parts of buildings, machinery, and other structures utilizing welding and fabrication skills;
- Perform a range of arc and gas welding assignments and tasks including pipe welding, TIG welding, MIG welding, STICK welding, stainless steel welding, aluminum welding, oxygen/acetylene, and plasma cutting, well and booster site fabrications and maintenance. Locking devices and theft deterrent components, and fabrication of spools and manifolds;
- Perform a diverse range of welding tasks on active pressurized water distribution/transmission mains including wet and through water;
- Independently organize work, set priorities, meet critical deadlines, and follow up on assignments;
- Perform metal fabrication by cutting, shaping, drilling, and welding;
- Perform welding fabrication and repairs related to miscellaneous valve wrenches, meter readers, as well as electrical fabrication repair requests;
- Read and write at a level sufficient for job success;
- Understand and carry out oral and written instructions;
- Perform shop math related to the welding trade;
- Maintain accurate logs, records, and basic written records of work performed; transfer data into computerized work order system;
- Operate a vehicle observing legal and defensive driving practices;
- Establish and maintain positive and effective relationships with those contacted in the course of work;
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier;
- Be physically capable of entering permit required confined spaces and wearing Self Contained Breathing Apparatus (SCBA) equipment;
- Operate an atmospheric tester for entry into confined spaces;
- Wear protective respiratory equipment to include SCBA and personal escape respirator.

MINIMUM QUALIFICATIONS

Education: Graduation from high school or GED/equivalent,

And

Experience: Five (5) years of journey level welding experience with journey level knowledge of water distribution and transmission pipelines,

And

Certificate: Must have and maintain a valid California State Water Resources Control Board (SWRCB) Water Distribution Operator Grade 1 certificate at the time of application. Must submit a copy of the required certificate with application.

Must obtain and maintain an AWS 6G pipe welding certificate within six (6) months after appointment.

Obtaining and maintaining required certification is a condition of employment. Failure to obtain and maintain any required certifications noted within the stipulated timeframes shall be considered grounds for termination. The responsibility for obtaining and maintaining certifications is the sole responsibility of the employee.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid California Class "C" driver's license required upon application. Note: For out-of-state applicants, a valid driver's license is required and a valid California Class "C" driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

Must be clean shaven or trimmed facial hair in order to properly use personal respirators. Must pass a respirator medical exam and be physically able to wear respirator equipment. Must be able to work in enclosed spaces while wearing protective clothing under extreme temperatures and hazardous environment.

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

Work involves exposure to potential physical harm, hazardous chemicals, and infectious disease including smoke, fumes, gas, treated water, high frequency noise, dirt, dust, grease, oil, chemicals, solvents and toxic agents. Incumbents need to be able to tolerate unpleasant odors, wet conditions, and uncomfortable climatic conditions. There is frequent need to stand, stoop, walk, crawl, climb, and perform other similar actions during the course of the workday.

Incumbents require sufficient mobility to work in a field setting in varying weather conditions, to operate hand tools and mechanical and motorized equipment, to transport materials and supplies weighing up to 75 pounds, and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to see color and read small print as well as distance. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Welder / Pipefitter

To: Water Utility Lead Worker
Water Utility Supervisor

Job Description:

Board Approved: _____

Testing Standards: App Review/ Supp App Review/Welding Performance (Dept.)

DRAFT

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: INFORMATION SECURITY ANALYST

DATE: 7/1/2025

JOB CODE: 2109

FLSA STATUS: EXEMPT

UNIT REPRESENTATION: MID-MGMT

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under general direction, to design, implement, monitor, and maintain security policies and solutions to protect the Department's information assets. This position analyzes security risks, manages cybersecurity incidents, ensures compliance with security frameworks, conducts security assessments, and oversees security-related projects. This position works with Information Technology (IT) staff, management, and third-party vendors to maintain a robust cybersecurity posture for the Department. Perform related duties as assigned.

DISTINGUISHING CHARACTERISTICS

The information Security Analyst is a specialized classification within the IT series focusing on network and system security, incident response, and cybersecurity governance. The incumbent is expected to exercise sound and independent judgment in the performance of duties. The Information Security Analyst is distinguished from the Network and Systems Administrator by the former's primary focus on security controls, risk assessment, and compliance rather than general IT infrastructure management. This position reports to the IT Manager.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City and Department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Conduct risk assessments and vulnerability analyses to identify security weaknesses;
- Monitor, analyze, and respond to cybersecurity threats and incidents;
- Manage cybersecurity-related policies, procedures, and best practices;
- Implement and manage security solutions, including firewalls, IDS/IPS, endpoint protection, and SIEM solutions;

- Perform regular security audits and compliance checks;
- Monitor network and system activity for security breaches or anomalies;
- Investigate security incidents and provide timely remediation;
- Develop, update and execute incident response plans and conduct cybersecurity drills;
- Work with IT staff to remediate vulnerabilities and prevent future incidents;
- Remediate vulnerabilities and mitigate the risk of security incidents. This entails direct responsibility for implementing fixes, patches, and configuration changes promptly, with appropriate testing and documentation;
- Ensure compliance with industry regulations and security frameworks (e.g., NIST, CIS, ISO 27001, CJIS, CCPA);
- Assist with security documentation, reporting, and audits;
- Manage identity and access control policies, including privileged access management;
- Conduct security awareness training for employees and IT staff;
- Develop guidelines and best practices for secure computing within the Department;
- Communicate emerging threats and recommend mitigation strategies;
- Secure systems and operational technology (OT) used for water distribution;
- Collaborate with relevant teams to Implement network segmentation and monitoring solutions for OT environments;
- Detect and mitigate threats targeting ICS infrastructure;
- Develop and enforce Zero Trust policies across all IT systems;
- Secure cloud-based workloads (e.g., Azure AD, Microsoft 365, AWS);
- Implement cloud access security brokers (CASB) to monitor SaaS applications;
- Implement Security Orchestration, Automation, and Response (SOAR) for automated threat mitigation;
- Use AI-driven anomaly detection to identify insider threats or compromised accounts;
- Automate log analysis and reporting;
- Work with other sections of the Department to optimize cyber insurance policies;
- Conduct cost-benefit analysis for new cybersecurity investments;
- Develop cyber risk quantification models to prioritize security spending;
- Assess vendors' cybersecurity postures prior to contract approval;
- Enforce vendor security policies for software and hardware providers;

- Implement Software Bill of Materials (SBOM) tracking to detect vulnerable software components;
- Collaborate with physical security teams to integrate cybersecurity with access control systems;
- Secure IoT devices such as smart meters and remote monitoring systems;
- Maintain security logs, reports, and documentation;
- Represent the Department in cybersecurity-related meetings and committees; and
- Perform other related duties as assigned.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Cybersecurity principles, frameworks, and best practices;
- Network Security protocols, firewalls, IDS/IPS, VPNs, and endpoint security;
- OT and ICS security considerations;
- Security compliance frameworks such as NIST 800-53, CIS, ISO 27001, CJIS, and CCPA;
- Incident response methodologies and forensics analysis;
- Security Information and Event Management (SIEM) solutions;
- Zero Trust security models and cloud security controls.

Ability to:

- Conduct risk assessments of Department information technology infrastructure, systems, and devices and make recommendations for necessary changes;
- Respond to and investigate security threats, incidents, and violations;
- Troubleshoot, diagnose, analyze, and resolve information security problems and identify and recommend alternative solutions;
- Monitor information technology security vulnerabilities; implement approved measures to ensure integrity and security of infrastructure and systems;
- Work collaboratively with Department staff to identify and implement security solutions for business process improvements and efficiencies;
- Recommend and implement new, enhanced, or modified information technology security systems and tools;

- Prepare clear, concise, and accurate technical documentation, user guides, reports of work performed, and other written materials;
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies, and procedures, and standards relevant to work performed;
- Integrate technology solutions across multiple platforms;
- Communicate complex technology issues clearly to non-technical parties;
- Maintain a variety of filing, record keeping, and tracking systems;
- Organize work, set priorities, meet critical deadlines and follow up on assignments;
- Effectively use computer systems and software applications relevant to work performed and modern business equipment to perform a variety of work tasks;
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax;
- Use tact, initiative, and judgment within general policy and procedural guidelines;
- Maintain a variety of filing, record keeping, and tracking systems;
- Remediate vulnerabilities and mitigate the risk of security incidents. This entails direct responsibility for implementing fixes, patches, and configuration changes promptly, with appropriate testing and documentation, as well as managing related assigned projects through to completion;
- Develop and implement cybersecurity governance frameworks and Department-wide security policies aligned with standards such as NIST, CIS, and ISO 27001;
- Quantify cyber risks using modeling and impact analysis to prioritize mitigation strategies and security investments;
- Design and manage automated incident response workflows using Security Orchestration, Automation, and Response (SOAR) platforms;
- Use AI-driven anomaly detection and behavior analytics to identify insider threat and compromised accounts;
- Configure, monitor, and tune SIEM solutions for proactive detection, alerting, and investigation of security events;
- Apply Zero Trust security principles to cloud and hybrid environments, enforcing least-privilege access and network segmentation;
- Secure Microsoft 365, Azure AD and SaaS environments using identity governance, multifactor authentication (MFA), and CASB tools;
- Implement Software Bill of Materials (SBOM) tracking and enforce vendor security compliance for software and hardware providers;
- Assess cybersecurity posture of third-party vendors and manage contractual enforcement of cybersecurity standards;
- Secure OT/IS systems used in water distribution through segmentation, protocol-aware detection, and secure remote access;

- Collaborative with operational and engineering staff to protect smart meters, IoT devices, and telemetry systems;
- Deliver Department-wide security awareness training tailored to different roles and functions;
- Communicate emerging cybersecurity threats and strategies to management and cross-functional teams in a clear, actionable manner;
- Lead or participate in incident response drills, policy development committees, and cyber risk assessments;
- Draft, present, and maintain comprehensive cybersecurity documentation including policies, standards, and audit reports;
- Establish and maintain positive and effective working relationships with those contacted in the course of work;
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier.

MINIMUM QUALIFICATIONS

Education/Experience:

Bachelor's degree in Cybersecurity, Information Security, Computer Science, Information Technology, or a related field;

And

Three (3) years of progressively responsible experience in IT security, cybersecurity operations, network security, or a related field.

OR

Associate's degree in Cybersecurity, Computer Science, Information Technology, or a related field;

And

Five (5) years of progressively responsible experience in IT security, cybersecurity operations, network security, or a related field.

Desirable Certifications:

- Certified Information Systems Security Professional (CISSP)
- Certified Information Security Manager (CISM)
- GIAC Security Essentials (GSEC)
- CompTIA Security+
- Microsoft Azure Security Engineer Associate

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid Class "C" California driver's license. For out of state applicants, a valid driver's license is required and a valid Class "C" California driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Testing Standards: App Review/Supp App Review

Job Description:

BOWC Approved: _____

~~SAN BERNARDINO MUNICIPAL WATER DEPARTMENT~~

~~FACILITIES MAINTENANCE SUPERVISOR~~

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
CLASSIFICATION SPECIFICATION

TITLE: WATER RECLAMATION FACILITIES MAINTENANCE SUPERVISOR

DATE: 07/01/2025

JOB CODE: 51809 2174

FLSA STATUS: EXEMPT

UNIT REPRESENTATION: MID-MGMT

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

JOB DESCRIPTION DUTIES SUMMARY

Under general supervision/direction, to participate in the work of and supervises, plan, schedule, assign, monitor, review, lead, guide, motivate, and evaluate the work of a staff engaged in facilities maintenance; supervise and inspect the work of contractors; train, instruct, and correct the work of assigned staff members; assist in the design, planning, scheduling, and construction management of projects; participate in the gathering and compiling of data and preparation and review of designs, plans, estimates, specification, and reports for the construction, alteration, and maintenance of the Water Reclamation Plant, RIX, Lift Stations, and the Department's Southern Campus buildings, facilities and grounds; directly responsible for the implementation and adherence to the weekly work schedule and coordinating its execution with applicable sections/Divisions of the Department; directly responsible for the implementation of the work order system at the line level; and control job interruptions due to emergency requests. of semi-skilled tradesmen engaged in the maintenance, repair, alteration and limited construction of special projects related to buildings, equipment, and facilities; supervises and inspects the work of contractors; leads, guides, motivates, and evaluates the work of the Facilities Maintenance Worker series and other assigned staff; trains, instructs and corrects the work of assigned staff members in the performance of specific tasks. Directly responsible for the implementation and adherence to weekly work schedules and coordination with other sections; controls job interruptions due to emergency request; and performs related work as required.

DISTINGUISHING CHARACTERISTICS

The class of Water Reclamation Facilities Maintenance Supervisor is the working supervisory level in the facilities maintenance series. Supervision is received from the Water Reclamation Maintenance Superintendent. Supervision is exercised over subordinate Water Facility Maintenance staff. Incumbents are responsible for assisting the Water Reclamation Maintenance Superintendent in formulating and developing goals and objectives, supervising assigned personnel, directing day-to-day activities, and ensuring that the Plant's and related equipment and facilities are maintained in a safe and efficient manner. The ability to understand customer needs and balance response with cost-effective scheduling is essential. Duties and responsibilities are carried out with considerable independence within the framework of established policies, procedures, and guidelines and the incumbent has significant accountability and ongoing decision-making responsibilities associated with the work. Incumbents are expected to use sound and independent judgment in carrying out job assignments and may serve in the absence of the Water Reclamation Maintenance Superintendent

REPRESENTATIVE DUTIES EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provides courteous and expeditious service to the general public and City and department staffs;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Participate in the selection, training, supervision, and evaluation of assigned staff; participate in the establishment of performance requirements and personal development targets and provide technical assistance and advice to assigned staff;
- Organize and coordinate the work schedules of staff to meet work assignments; provide day-to-day leadership and work with staff to ensure a high-performance, customer-oriented work environment that supports achievement of the section's and Department's mission, strategic plan objectives, and values;
- Assist with the development and administration of the Division's annual budget; direct the forecast of additional funds needed for staffing, consultants, contractors, equipment, materials, and supplies;
- Assist the Water Reclamation Maintenance Superintendent in long-range planning of Water Reclamation Division projects; participate in the preparation of operating and capital budget recommendations; review plans and specification of work to be done and requisition materials; authorize the purchase of materials in accordance with the Department's Purchasing Policy and monitor work activities and expenditures to control budgeted costs;
- Interpret and modify work orders for proper completion of requested tasks verifying validity and necessity of requests;
- Provide day-to-day leadership and work with staff to ensure a high-performance, customer service-oriented work environment which supports achievement of the Division's and the Department's mission, strategic plan, objectives, and values;

- Determine priorities between reported problems and scheduled work assignments; ensure the timely completion of reactive/corrective, preventive, or predictive maintenance programs or work orders;
- Prepare, maintain, critically review, and approve a variety of records and reports, including timecards, time off requests, work schedules, assignment schedules, worksheets, accident reports, work orders, daily logs, and other documents; supervise and manage assigned staff schedules, rotations, vacations, and or sick leave coverage while minimizing overtime usage;
- Assist in the continuous development and maintenance of the Computerized Maintenance Management System (CMMS); perform routine audits of work orders completed by staff for accuracy of information, train staff on and enforce the proper use of the CMMS;
- Provide job-related technical assistance to other Department section supervisors and staff; serve as a resource for the Water Reclamation Maintenance Superintendent; research new operational methods, techniques, and equipment and recommend their application;
- Maintain information exchange with other department sections concerning the impacts of section activities;
- Attend and participate in professional group meetings; stay abreast of industry trends and innovations in assigned field;
- Instruct/train and evaluate personnel in work methods, good housekeeping, and safety practices; ensure the adherence to safety standards and the proper use of tools or safety equipment; carry out the Department's safety program; ensure subordinates follow safety practices in work methods and procedures; enforce proper safety procedures while working in dangerous situations; educate employees on rules, regulations, safe work habits, and potential hazards presented by their work environment;
- Plan and lay out jobs from blueprints, drawings, sketches, or verbal instructions; maintain records in the form of blueprints, drawings, and specifications for equipment and machinery related to the duties of the sections; plan and design modifications to Water Reclamation facilities; review or prepare drawings and specifications for contract work and inspect work performed to determine compliance to standards and requirements;
- Attend and actively participate in briefings and meetings/ confer with and make reports to superiors on work programs; compile information of past and current activities of the section;
- Plan, document, and evaluate the performance of assigned subordinate personnel; motivate skilled, semi-skilled, and unskilled staff; evaluate plan, and schedule additional training; establish performance requirements and personal development targets; regularly monitor performance and provide coaching for performance improvement and development; subject to management concurrence, take appropriate disciplinary action to address performance deficiencies in accordance with Personnel Rules, Department policies , and Memoranda of Understanding (MOU) provisions;
- Answer emergency calls; respond to emergencies at various locations, if necessary;
- Provide technical and safety training to personnel on safety hazards, work procedures, and care and use of equipment and tools;

- Evaluate condition of Department facilities; develop cost recommendations and estimates for repairs and coordinate and monitor repairs for Department facilities; recommend special work or necessary equipment maintenance; requisition necessary equipment and supplies; ensure the timely completion of preventive maintenance programs;
- Monitor, inspect, and evaluate the performance of contractors engaged in the construction, maintenance, and repair of Department buildings, grounds, and facilities; ensure contractor performance complies with contract provisions, specifications, and standards; prepare specifications and plans for new projects to be performed by Department personnel or contractors; monitor contract activities to ensure compliance with applicable laws and regulations;
- Respond to inquiries and complaints from other sections; coordinate activities with other sections;
- Prepare or review and maintain a wide variety of written reports and records, including personnel records, periodic progress reports, accident reports, maintenance requests, and requisitions for section activities;
- Inspect and evaluate work being performed by Department staff and/or contractors; identify problem areas and direct remedial action; respond to emergency situations as necessary;
- Attend meetings with other sections and Department staff;
- Participate in long-term planning to assess future needs;
- Ensure staff observes and complies with all Department and mandated safety rules, regulations, and protocols;
- Operate Department vehicles and equipment; and
- ~~Perform other related duties as required. performs safety, quality, and time standard monitoring of jobs; recommends and participates in hiring, firing, and disciplinary actions; prepares performance evaluations of assigned staff; recommends facilities maintenance practice improvements and cost reductions; identify the cause of failures and breakdowns, and repetitive repairs; recommends skill level and training for assigned staff; ensures that accepted work and safety methods are practiced; supervises, coordinates, and participates with the Maintenance Planner in inspection, diagnoses, planning and scheduling of all work; performs and supervises construction and repair work involving the use of tractors, mowers, back hoes, trucks, cranes, manlifts, ditch witchers, and related equipment; assists in the development of specifications for maintenance and repair contractual services — including air conditioning, heating, janitorial, grounds keeping, and building maintenance; estimates time, labor, equipment and materials, and develops cost estimates; reads and interprets blueprints and sketches; ensures that safety rules and regulations are observed; routinely adheres to and maintains a positive attitude towards City and department goals, and performs related work as required.~~

MINIMUM QUALIFICATIONS

Graduation from high school or G.E.D. equivalent, and a minimum of three (3) years of responsible and specialized construction and maintenance experience, of which two (2) years must have included construction trades such as sandblasting, painting, pipe fittings, welding, and construction of concrete and wooden structures. Must also have experience as trades supervisor or lead person for a minimum of one (1) year. Must possess a valid Class "C" California Driver's License and maintain a driving record acceptable to the Department's insurance carrier. Must be responsive to 24-hour call outs during non-duty hours.

GENERAL QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of :

- Principles and practices of effective employee supervision, including work planning, assignment review, documentation, and evaluation, selection, discipline, and training of staff in work procedures;
- Principles and practices of leadership;
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly;
- Federal, state, and local laws, codes, and regulations in assigned areas of responsibility;
- Principles and practices of administration, including goal setting, policy and procedure development and implementation, evaluation and work standards;
- Standard practices, principles, procedures, methods, techniques, tools, materials, and equipment used in the installation, inspection, maintenance, and repair of facility related building and grounds maintenance;
- Principles and practices of budget preparation and administration;
- Intermediate to advanced level mathematics applicable to the maintenance trade; basic accounting principles;
- Methods, materials, tools, and techniques used to inspect, diagnose, repair and overhaul various buildings and grounds and facilities-related systems; Preventive and predictive maintenance programs and associated recordkeeping;
- Commonly used plumbing materials such as PVC, CPVC, copper, black iron, galvanized, etc.;

- Computerized Maintenance Management System (CMMS) planning, scheduling and work order software;
- Safety standards and practices applicable to wastewater treatment;
- Terminology used in wastewater, maintenance and construction industries;
- Advanced principles of project and contract management;
- The Globally Harmonized System (GHS) of Classification and Labeling of Chemicals;
- Basic principles and practices in soil compaction, road construction, and road repair;
- Principles, methods, and equipment used in facilities, earthwork construction, maintenance, and repair work;
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and Department staff;
- English usage, spelling, grammar, and punctuation; verbal English to understand and be understood; written English to communicate in writing at an intermediate level;
- Modern equipment and communication tools (including use of smartphone) used for business functions and programs, project, and task coordination, including computers and software programs relevant to work performed;
- Core values, concepts, and framework of continuous improvement criteria, including the principles of management by fact, and organizational and personal learning; familiar with process mapping and structured problem solving; theoretical and practical knowledge necessary to develop and monitor individual performance standards, and insure they align with key performance measures for the unit.

~~Appropriate safety precautions and procedures;~~
~~Applicable codes and regulations;~~
~~Basic work methods in air conditioning, carpentry, plumbing and tool maintenance, painting and coating;~~
~~Principles and techniques of modern management;~~
~~Blueprints, layout plans, and designs;~~
~~Diagnoses and inspection of equipment and facilities;~~
~~Basic mathematics;~~
~~Complete knowledge of hoisting equipment operator hand signals;~~
~~Equipment, materials, tools and advanced methods and procedures used in the maintenance, repair, alteration and limited construction of buildings and facilities;~~
~~Basic record keeping methods;~~
~~Principles of work planning and scheduling;~~
~~Principles of supervision and training.~~

 Ability to:

- Plan, organize, estimate, coordinate, assign, review, document, and evaluate the work of others; evaluate materials and workmanship of construction, maintenance, and repair work;
- Work accurately, efficiently, and effectively with various computer programs in the Microsoft Office Suite (MS Outlook, MS Word, MS Excel, MS PowerPoint);
- Prepare clear and concise reports and cost estimates;
- Assist in developing and implementing goals, objectives, practices, policies, procedures, and work standards;
- Assist with the preparation, administration, and monitoring of the Department's budget;
- Read and interpret plans, specifications, and manuals;
- Use complex diagnostic instruments;
- Make accurate inspections of operating equipment;
- Identify and diagnose malfunctioning equipment;
- Coordinate and implement an effective and appropriate maintenance schedule, making efficient use of all equipment and personnel, maximizing predictive and preventive maintenance schemes;
- Troubleshoot, maintain and repair moderately complex HVAC systems and buildings, facilities, and grounds related equipment performance problems;
- Perform project management including scheduling, change orders, and project closeout activities;
- Interpret and apply Department policies;
- Assist in the selection of new employees;
- Motivate staff and provide for their training and development;
- Sweat copper plumbing fittings, assemble various plumbing systems and related fixtures;
- Prepare subgrade; form and inspect reinforcing steel, embeds, and concrete falsework; place and finish concrete surfaces;
- Clean, prepare, and apply paint and other coating systems to/on industrial and commercial buildings, equipment, and structures in compliance with industry standard methods;
- Order, construct, and inspect repairs and /or patches to asphalt and concrete defects;
- Order, perform, and inspect landscape maintenance, including bushes, shrubs, ground coverings, and trees, including cooperation with trained biologists and arborists;

- Order, construct, maintain, and repair fencing systems and gates;
- Order, construct, maintain, and repair general building systems and finishes (doors, surface finishes, cabinetry, fixtures, ceiling systems, etc.);
- Identify and implement effective courses of action to complete assigned work;
- Estimate material and labor costs;
- Work from blueprints, drawings, sketches, specifications, and technical manuals;
- Read and write at a level sufficient for job success;
- Prepare written and oral reports;

~~Evaluate the need for building maintenance repair;~~

~~Coordinate and implement a maintenance schedule, making efficient use of all equipment and personnel;~~

~~Estimate material and labor costs;~~

~~Order and request materials, supplies and services;~~

~~Operate a vehicle observing legal and defensive driving practices;~~

- Understand and carry out oral and written instructions;
- Organize, coordinate, and supervise the work of facility maintenance staff;
- Communicate clearly and concisely both orally and in writing, using appropriate English grammar and syntax;

~~See in the normal vision range with or without correction;~~

~~Hear in the normal audio range with or without correction;~~

- Establish and maintain effective relationships with those contacted in the course of work;
- Evaluate the need for building maintenance repair;
- Work various shifts, weekends, and overtime as necessary;
- Work under moderate or high stress conditions;
- Serve effectively in the absence of or upon the direction of the Water Reclamation Maintenance Superintendent, performing all administrative functions;
- Learn and apply new information and skills;
- Exercise sound judgment within established guidelines;
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies, and procedures and standards relevant to work performed;
- Independently organize work, set priorities, meet critical deadlines, and follow up on assignments;

- Operate a vehicle observing legal and defensive driving practices;
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier;
- Respond to callout emergencies as required; handle emergency situations as directed;
- Maintain and utilize process flow charts for key processes, with performance standards related to customer and stakeholder needs; validate customer requirements; create a workplace that values employees, encourages their development, values their participation, and encourages innovation; and create an environment of continuous improvement to ensure business unit results consistent with expectations in key performance measures.

~~Perform moderately heavy physical labor;
Must have free action to bend, lift, stoop, etc.~~

ORGANIZATIONAL RELATIONSHIPS

~~The class of Facilities Maintenance Supervisor is the first line working supervisory level in the Facilities Maintenance Worker series. Supervision is received from the Water Reclamation Maintenance Superintendent. Supervision is exercised over facilities maintenance series.~~

MINIMUM QUALIFICATIONS

Education: Graduation from high school, or equivalent.

AND

Experience: Five (5) years of experience in facilities construction and/or maintenance including four (4) years of responsibility for leading the work of others.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid California Class "C" driver's license. For out of state applicants, a valid driver's license is required, and a valid California Class "C" driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

An employee within this classification may be designated as a "key responder" and as such shall be required to respond to non-normal working hour emergency operational conditions.

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

The physical tasks and environmental conditions below are representative of those necessary to perform the essential functions of this position. Reasonable accommodations for physical and/or mental disabilities may be considered on a case-by-case basis.

Work is primarily performed in a field environment that is frequently loud and prolonged, in a variety of environmental and extreme weather conditions (both indoors and out), and in or near street traffic with significant exposure to hazardous drivers. Incumbents regularly work near moving mechanical parts, are exposed to wet and/or humid conditions and heavy vibrations and work in precarious places. Incumbents frequently work on slippery or uneven surfaces or work occasionally involves exposure to potential harm, to fumes or airborne particles, sewage (untreated wastewater), communicable disease, toxic, hazardous, or caustic chemical, smoke, or fumes in various states (gaseous, liquid, or solid), and risk of electric shock.

Incumbents require sufficient mobility to work in a field setting in varying weather conditions, to operate hand tools and mechanical and motorized equipment, to transport materials and supplies, and to travel to various locations. Incumbents must regularly lift and/or move up to 50 pounds and frequently over 100 pounds.

Incumbents are regularly required to sit, walk, stand, talk and hear, use hands to finger, handle, feel, or operate objects, tools, or controls, reach with hands and arms, perform repetitive movements of hands or wrists, climb or balance on ladders or stairs, stoop, kneel, bend at the waist, crouch or crawl, and smell. Incumbents may be required to work from heights on ladders, scaffoldings, motorized platforms, building roofs, or other elevated surfaces. Incumbents must be able to identify and tolerate unpleasant order and environments and take appropriate safety precautions.

Incumbents must be able to see in the normal visual range, with or without correction, with sufficient vision to read small print and gauges, to see up close and at a distance, use both eyes, have depth perception, color vision, and the ability to adjust focus. Must be able to hear in the normal audio range with or without correction.

Job Description:

Board Approved: _____

Testing Standards: App Review/Supp App Review

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER RECLAMATION FACILITIES MAINTENANCE SUPERVISOR

DATE: 07/01/2025

JOB CODE: 2174

FLSA STATUS: EXEMPT

UNIT REPRESENTATION: MID-MGMT

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under general direction, to supervise, plan, schedule, assign, monitor, review, lead, guide, motivate, and evaluate the work of staff engaged in facilities maintenance; supervise and inspect the work of contractors; train, instruct, and correct the work of assigned staff members; assist in the design, planning, scheduling, and construction management of projects; participate in the gathering and compiling of data and preparation and review of designs, plans, estimates, specification, and reports for the construction, alteration, and maintenance of the Water Reclamation Plant, RIX, Lift Stations, and the Department's Southern Campus buildings, facilities and grounds; directly responsible for the implementation and adherence to the weekly work schedule and coordinating its execution with applicable sections/Divisions of the Department; directly responsible for the implementation of the work order system at the line level; and control job interruptions due to emergency requests.

DISTINGUISHING CHARACTERISTICS

The class of Water Reclamation Facilities Maintenance Supervisor is the working supervisory level in the facilities maintenance series. Supervision is received from the Water Reclamation Maintenance Superintendent. Supervision is exercised over subordinate Water Facility Maintenance staff. Incumbents are responsible for assisting the Water Reclamation Maintenance Superintendent in formulating and developing goals and objectives, supervising assigned personnel, directing day-to-day activities, and ensuring that the Plant's and related equipment and facilities are maintained in a safe and efficient manner. The ability to understand customer needs and balance response with cost-effective scheduling is essential. Duties and responsibilities are carried out with considerable independence within the framework of established policies, procedures, and guidelines and the incumbent has significant accountability and ongoing decision-making responsibilities associated with the work. Incumbents are expected to use sound and independent judgment in carrying out job assignments and may serve in the absence of the Water Reclamation Maintenance Superintendent.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious service to the general public and City and Department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Participate in the selection, training, supervision, and evaluation of assigned staff; participate in the establishment of performance requirements and personal development targets and provide technical assistance and advice to assigned staff;
- Organize and coordinate the work schedules of staff to meet work assignments; provide day-to-day leadership and work with staff to ensure a high-performance, customer-oriented work environment that supports achievement of the section's and Department's mission, strategic plan objectives, and values;
- Assist with the development and administration of the Division's annual budget; direct the forecast of additional funds needed for staffing, consultants, contractors, equipment, materials, and supplies;
- Assist the Water Reclamation Maintenance Superintendent in long-range planning of Water Reclamation Division projects; participate in the preparation of operating and capital budget recommendations; review plans and specification of work to be done and requisition materials; authorize the purchase of materials in accordance with the Department's Purchasing Policy and monitor work activities and expenditures to control budgeted costs;
- Interpret and modify work orders for proper completion of requested tasks verifying validity and necessity of requests;
- Provide day-to-day leadership and work with staff to ensure a high-performance, customer service-oriented work environment which supports the achievement of the Division's and the Department's mission, strategic plan, objectives, and values;
- Determine priorities between reported problems and scheduled work assignments; ensure the timely completion of reactive/corrective, preventive, or predictive maintenance programs or work orders;
- Prepare, maintain, critically review, and approve a variety of records and reports, including timecards, time off requests, work schedules, assignment schedules, worksheets, accident reports, work orders, daily logs, and other documents; supervise and manage assigned staff schedules, rotations, vacations, and or sick leave coverage while minimizing overtime usage;
- Assist in the continuous development and maintenance of the Computerized Maintenance Management System (CMMS); perform routine audits of work orders completed by staff for accuracy of information, train staff on and enforce the proper use of the CMMS;
- Provide job-related technical assistance to other Department section supervisors and staff; serve as a resource for the Water Reclamation Maintenance Superintendent; research new operational methods, techniques, and equipment and recommend their application;

- Maintain information exchange with other department sections concerning the impacts of section activities;
- Attend and participate in professional group meetings; stay abreast of industry trends and innovations in assigned field;
- Instruct/train and evaluate personnel in work methods, good housekeeping, and safety practices; ensure the adherence to safety standards and the proper use of tools or safety equipment; carry out the Department's safety program; ensure subordinates follow safety practices in work methods and procedures; enforce proper safety procedures while working in dangerous situations; educate employees on rules, regulations, safe work habits, and potential hazards presented by their work environment;
- Plan and lay out jobs from blueprints, drawings, sketches, or verbal instructions; maintain records in the form of blueprints, drawings, and specifications for equipment and machinery related to the duties of the sections; plan and design modifications to Water Reclamation facilities; review or prepare drawings and specifications for contract work and inspect work performed to determine compliance to standards and requirements;
- Attend and actively participate in briefings and meetings/ confer with and make reports to superiors on work programs; compile information of past and current activities of the section;
- Plan, document, and evaluate the performance of assigned subordinate personnel; motivate skilled, semi-skilled, and unskilled staff; evaluate plan, and schedule additional training; establish performance requirements and personal development targets; regularly monitor performance and provide coaching for performance improvement and development; subject to management concurrence, take appropriate disciplinary action to address performance deficiencies in accordance with Personnel Rules, Department policies , and Memoranda of Understanding (MOU) provisions;
- Answer emergency calls; respond to emergencies at various locations, if necessary;
- Provide technical and safety training to personnel on safety hazards, work procedures, and care and use of equipment and tools;
- Evaluate condition of Department facilities; develop cost recommendations and estimates for repairs and coordinate and monitor repairs for Department facilities; recommend special work or necessary equipment maintenance; requisition necessary equipment and supplies; ensure the timely completion of preventive maintenance programs;
- Monitor, inspect, and evaluate the performance of contractors engaged in the construction, maintenance, and repair of Department buildings, grounds, and facilities; ensure contractor performance complies with contract provisions, specifications, and standards; prepare specifications and plans for new projects to be performed by Department personnel or contractors; monitor contract activities to ensure compliance with applicable laws and regulations;
- Respond to inquiries and complaints from other sections; coordinate activities with other sections;
- Prepare or review and maintain a wide variety of written reports and records, including personnel records, periodic progress reports, accident reports, maintenance requests, and requisitions for section activities;

- Inspect and evaluate work being performed by Department staff and/or contractors; identify problem areas and direct remedial action; respond to emergency situations as necessary;
- Attend meetings with other sections and Department staff;
- Participate in long-term planning to assess future needs;
- Ensure staff observes and complies with all Department and mandated safety rules, regulations, and protocols;
- Operate Department vehicles and equipment; and
- Perform other related duties as required.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of :

- Principles and practices of effective employee supervision, including work planning, assignment review, documentation, and evaluation, selection, discipline, and training of staff in work procedures;
- Principles and practices of leadership;
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly;
- Federal, state, and local laws, codes, and regulations in assigned areas of responsibility;
- Principles and practices of administration, including goal setting, policy and procedure development and implementation, evaluation and work standards;
- Standard practices, principles, procedures, methods, techniques, tools, materials, and equipment used in the installation, inspection, maintenance, and repair of facility related building and grounds maintenance;
- Principles and practices of budget preparation and administration;
- Intermediate to advanced level mathematics applicable to the maintenance trade; basic accounting principles;
- Methods, materials, tools, and techniques used to inspect, diagnose, repair and overhaul various buildings and grounds and facilities-related systems; Preventive and predictive maintenance programs and associated recordkeeping;
- Commonly used plumbing materials such as PVC, CPVC, copper, black iron, galvanized, etc.;

- Computerized Maintenance Management System (CMMS) planning, scheduling and work order software;
- Safety standards and practices applicable to wastewater treatment;
- Terminology used in wastewater, maintenance and construction industries;
- Advanced principles of project and contract management;
- The Globally Harmonized System (GHS) of Classification and Labeling of Chemicals;
- Basic principles and practices in soil compaction, road construction, and road repair;
- Principles, methods, and equipment used in facilities, earthwork construction, maintenance, and repair work;
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and Department staff;
- English usage, spelling, grammar, and punctuation; verbal English to understand and be understood; written English to communicate in writing at an intermediate level;
- Modern equipment and communication tools (including use of smartphone) used for business functions and programs, project, and task coordination, including computers and software programs relevant to work performed;
- Core values, concepts, and framework of continuous improvement criteria, including the principles of management by fact, and organizational and personal learning; familiar with process mapping and structured problem solving; theoretical and practical knowledge necessary to develop and monitor individual performance standards, and insure they align with key performance measures for the unit.

Ability to:

- Plan, organize, estimate, coordinate, assign, review, document, and evaluate the work of others; evaluate materials and workmanship of construction, maintenance, and repair work;
- Work accurately, efficiently, and effectively with various computer programs in the Microsoft Office Suite (MS Outlook, MS Word, MS Excel, MS PowerPoint);
- Prepare clear and concise reports and cost estimates;
- Assist in developing and implementing goals, objectives, practices, policies, procedures, and work standards;
- Assist with the preparation, administration, and monitoring of the Department's budget;
- Read and interpret plans, specifications, and manuals;
- Use complex diagnostic instruments;

- Make accurate inspections of operating equipment;
- Identify and diagnose malfunctioning equipment;
- Coordinate and implement an effective and appropriate maintenance schedule, making efficient use of all equipment and personnel, maximizing predictive and preventive maintenance schemes;
- Troubleshoot, maintain and repair moderately complex HVAC systems and buildings, facilities, and grounds related equipment performance problems;
- Perform project management including scheduling, change orders, and project closeout activities;
- Interpret and apply Department policies;
- Assist in the selection of new employees;
- Motivate staff and provide for their training and development;
- Sweat copper plumbing fittings, assemble various plumbing systems and related fixtures;
- Prepare subgrade; form and inspect reinforcing steel, embeds, and concrete falsework; place and finish concrete surfaces;
- Clean, prepare, and apply paint and other coating systems to/on industrial and commercial buildings, equipment, and structures in compliance with industry standard methods;
- Order, construct, and inspect repairs and /or patches to asphalt and concrete defects;
- Order, perform, and inspect landscape maintenance, including bushes, shrubs, ground coverings, and trees, including cooperation with trained biologists and arborists;
- Order, construct, maintain, and repair fencing systems and gates;
- Order, construct, maintain, and repair general building systems and finishes (doors, surface finishes, cabinetry, fixtures, ceiling systems, etc.);
- Identify and implement effective courses of action to complete assigned work;
- Estimate material and labor costs;
- Work from blueprints, drawings, sketches, specifications, and technical manuals;
- Read and write at a level sufficient for job success;
- Prepare written and oral reports;
- Understand and carry out oral and written instructions;

- Organize, coordinate, and supervise the work of facility maintenance staff;
- Communicate clearly and concisely both orally and in writing, using appropriate English grammar and syntax;
- Establish and maintain effective relationships with those contacted in the course of work;
- Evaluate the need for building maintenance repair;
- Work various shifts, weekends, and overtime as necessary;
- Work under moderate or high stress conditions;
- Serve effectively in the absence of or upon the direction of the Water Reclamation Maintenance Superintendent, performing all administrative functions;
- Learn and apply new information and skills;
- Exercise sound judgment within established guidelines;
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies, and procedures and standards relevant to work performed;
- Independently organize work, set priorities, meet critical deadlines, and follow up on assignments;
- Operate a vehicle observing legal and defensive driving practices;
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier;
- Respond to callout emergencies as required; handle emergency situations as directed;
- Maintain and utilize process flow charts for key processes, with performance standards related to customer and stakeholder needs; validate customer requirements; create a workplace that values employees, encourages their development, values their participation, and encourages innovation; and create an environment of continuous improvement to ensure business unit results consistent with expectations in key performance measures.

MINIMUM QUALIFICATIONS

Education: Graduation from high school, or equivalent,

AND

Experience: Five (5) years of experience in facilities construction and/or maintenance including four (4) years of responsibility for leading the work of others.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid California Class "C" driver's license. For out of state applicants, a valid driver's license is required, and a valid California Class "C" driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

An employee within this classification may be designated as a "key responder" and as such shall be required to respond to non-normal working hour emergency operational conditions.

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

The physical tasks and environmental conditions below are representative of those necessary to perform the essential functions of this position. Reasonable accommodations for physical and/or mental disabilities may be considered on a case-by-case basis.

Work is primarily performed in a field environment that is frequently loud and prolonged, in a variety of environmental and extreme weather conditions (both indoors and out), and in or near street traffic with significant exposure to hazardous drivers. Incumbents regularly work near moving mechanical parts, are exposed to wet and/or humid conditions and heavy vibrations and work in precarious places. Incumbents frequently work on slippery or uneven surfaces or work occasionally involves exposure to potential harm, to fumes or airborne particles, sewage (untreated wastewater), communicable disease, toxic, hazardous, or caustic chemical, smoke, or fumes in various states (gaseous, liquid, or solid), and risk of electric shock.

Incumbents require sufficient mobility to work in a field setting in varying weather conditions, to operate hand tools and mechanical and motorized equipment, to transport materials and supplies, and to travel to various locations. Incumbents must regularly lift and/or move up to 50 pounds and frequently over 100 pounds.

Incumbents are regularly required to sit, walk, stand, talk and hear, use hands to finger, handle, feel, or operate objects, tools, or controls, reach with hands and arms, perform repetitive movements of hands or wrists, climb or balance on ladders or stairs, stoop, kneel, bend at the waist, crouch or crawl, and smell. Incumbents may be required to work from heights on ladders, scaffoldings, motorized platforms, building roofs, or other elevated surfaces. Incumbents must be able to identify and tolerate unpleasant order and environments and take appropriate safety precautions.

Incumbents must be able to see in the normal visual range, with or without correction, with sufficient vision to read small print and gauges, to see up close and at a distance, use both eyes, have depth perception, color vision, and the ability to adjust focus. Must be able to hear in the normal audio range with or without correction.

Job Description:

Board Approved: _____

Testing Standards: App Review/Supp App Review

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WELDER ~~I~~ / PIPEFITTER

DATE: ~~01/09/2007~~ 07/01/2025

JOB CODE: ~~21780~~ 1290

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GENERAL

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under general supervision, to perform ~~skilled~~-welding and ~~pipefitting-fabrication~~ work in ~~repairing, installing, and modifying Department facilities such as well and booster stations; perform fabrication tasks for light and heavy equipment maintenance; perform small tool fabrications; a variety of water system construction and maintenance activities; to lead a small work crew; and to deperform~~ related work as required.

DISTINGUISHING CHARACTERISTICS

The class of Water Utility Welder ~~I~~/Pipefitter is the ~~entry~~/journey level in the welding ~~pipefitting~~-series. Supervision is received from a ~~Water Utility Lead Worker~~, Water Utility Supervisor, or as designated by the Director of Water Utility. ~~Oversight and lead direction is received from a Welder II or Water Utility Lead Worker.~~

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provides courteous and expeditious customer service to the general public and City ~~and~~ Department staff;
- Routinely adheres to and maintains a positive attitude towards City and ~~D~~epartment goals;
- Operated acetylene and electrical welding equipment;
- ~~Installs water lines and constructs pipe angles and fittings as required;~~
- Reads blueprints to determine the layout of metal fabrications;
- ~~Welds steel pipe and damaged fire hydrants~~ Overhaul, rebuild, and service damaged fire hydrants; manufacture replacements for wearing parts;
- ~~Requisitions materials as needed;~~

- Operates light tractors and medium trucks;
- Uses drill presses, grinders, metal saws, wrenches, jacks, chisels, vice grips, jigs, hydraulic presses and metal shears;
- Brazes metals, matching metals to heat acceptance;
- May weld stainless steel;
- Fabricates pipe and meter locking devices;
- Fabricates templates from blueprints;
- ~~• May plan a project when more than one trade is involved;~~
- My ~~W~~welds and fits pipe in the field;
- Ensures that safety precautions are observed in the shop and in the field;
- Drives a truck with welding equipment to the job site;
- ~~• May direct the work of assigned helpers;~~
- Research new operational methods and techniques for application to assigned tasks;
- Required to wear respiratory protective equipment to include Self Contained Breathing Apparatus (SCBA);
- Keeps labor and material records.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Oxyacetylene gas welding procedures and methods;
- Electrical welding procedures and methods;
- Types of metal and their characteristics in welding;
- Effects of heat on metals;
- Gas-cutting techniques;
- Basic fabrication methods;
- Occupational hazards and safety precautions common in welding and pipeline construction;
- Welding processes;
- Electrodes and consumables;
- Welding metallurgy;

- ~~Joint design, material preparations, welding workshop and analysis;~~Principles and practices of fabricating joints; heat treating and tempering methods.

Ability to:

Perform the following in a training/learning capacity:

- Weld in all phases of MIG, TIG, and STICK welding of: Steel, stainless steel, and aluminum; Plasma cutting, welding, fabricating, and ~~basically working~~ with all types of metals;
- Weld various curved metals using gas or electric arc;
- ~~Lay a continuous bead on a pipe seam weld~~Perform a diverse range of welding tasks, including welding wet and through water on live pressurized mains and in the maintenance and upkeep of facilities and equipment;
- ~~Tack weld selecting appropriate rods~~Safely and effectively operate, repair, and maintain hand, power, and shop tools and equipment used in work performed;
- ~~Join pipes of various sizes and metals by welding~~Plan and lay out work from sketches, blueprints, and job requisitions; identify measurements of items to be welded or fabricated; assess appropriate equipment and methods;
- Perform manual work, welding, and pipefitting practices under all weather conditions;
- ~~Work from blueprints, drawings, sketches, specifications and technical manuals~~Perform a range of arc and gas welding assignments and tasks, including pipe welding, Oxygen acetylene and plasma cutting; lift and well site fabrication and maintenance; locking devices and anti-theft deterrent components; fabrication of spools and flanges;
- Perform welding fabrication and repair of miscellaneous valve wrenches and meter tools; fabricate safety enclosures;
- Weld traffic plates; fabricate, erect, and repair fences and gates; use appropriate welding procedures to secure and repair pump stations and other buildings;
- Read and write at a level sufficient for job success;
- Understand and carry out oral and written instructions;
- Perform shop math related to the welding trade;
- Operate a vehicle observing legal and defensive driving practices;
- Establish and maintain effective relationships with those contacted in the course of work;
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier;
- Be physically capable of entering permit-~~r~~required confined spaces and wearing Self Contained Breathing Apparatus (SCBA) equipment;
- Operate an atmospheric tester for entry into confined spaces:
- Wear protective respiratory equipment ~~to include~~including SCBA and personal escape respirator.

MINIMUM QUALIFICATIONS

Education: Graduation from high school or ~~G.E.D./GED~~/equivalent,
And

Experience: ~~Five-Two (52) years of journey level experience in gas and electric welding fabrication and repair on all metals. experience with journey level knowledge of water distribution and transmission pipelines,~~

And

Certificate: ~~Possession of a valid California Class "C" driver's license required upon application. Note: For out of state applicants, a valid driver's license is required and a valid California Class "C" driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).~~

Must obtain and maintain a valid California State Water Resources Control Board (SWRCB) Water Distribution Operator Grade 1 certificate six (6) months after appointment.

Obtaining and maintaining required certification is a condition of employment. Failure to obtain and maintain any required certifications noted within the stipulated timeframes shall be considered grounds for termination. The responsibility for obtaining and maintaining certifications is the sole responsibility of the employee.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid California Class "C" driver's license required upon application. Note: For out-of-state applicants, a valid driver's license is required and a valid California Class "C" driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

Must be clean shaven or trimmed facial hair in order to properly use personal respirators. Must pass a respirator medical exam and be physically able to wear respirator equipment. Must be able to work in enclosed spaces while wearing protective clothing under extreme temperatures and hazardous environment.

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

Work involves exposure to potential physical harm, hazardous chemicals, and infectious disease including smoke, fumes, gas, treated water, high frequency noise, dirt, dust, grease, oil, chemicals, solvents and toxic agents. Incumbents need to be able to tolerate unpleasant odors, wet conditions, and uncomfortable climatic conditions. There is frequent need to stand, stoop, walk, crawl, climb, and perform other similar actions during the course of the workday.

Incumbents require sufficient mobility to work in a field setting in varying weather conditions, to operate hand tools and mechanical and motorized equipment, to transport materials and supplies weighing up to 75 pounds, and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to see color and read small print as well as distance. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Welder ~~/~~ Pipefitter

To: ~~Water Utility Lead Worker~~Welder II
~~Water Utility Supervisor~~

Job Description:

BOWC Approved:

12/4/2001

Rev:

4/4/2006

11/21/2006

Title change from Welder/Pipefitter

Testing Standards:~~CS~~ App Review/~~CS~~ Supp App Review/Welding Performance (Dept.)

~~CSB Approved:~~

~~4/11/2006~~

~~CS Oral Board removed by CSB action:~~

~~4/12/2016~~

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WELDER I

DATE: 07/01/2025

JOB CODE: 1290

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GENERAL

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under general supervision, to perform welding and fabrication work in repairing, installing, and modifying Department facilities such as well and booster stations; perform fabrication tasks for light and heavy equipment maintenance; perform small tool fabrications; and perform related work as required.

DISTINGUISHING CHARACTERISTICS

The class of Water Utility Welder I is the entry/journey level in the welding series. Supervision is received from a Water Utility Supervisor, or as designated by the Director of Water Utility. Oversight and lead direction is received from a Welder II or Water Utility Lead Worker.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City and Department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Operate acetylene and electrical welding equipment;
- Read blueprints to determine the layout of metal fabrications;
- Overhaul, rebuild, and service damaged fire hydrants; manufacture replacements for wearing parts;
- Operate light tractors and medium trucks;
- Use drill presses, grinders, metal saws, wrenches, jacks, chisels, vice grips, jigs, hydraulic presses and metal shears;

- Braze metals, matching metals to heat acceptance;
- May weld stainless steel;
- Fabricate pipe and meter locking devices;
- Fabricate templates from blueprints;
- May weld and fit pipe in the field;
- Ensure that safety precautions are observed in the shop and in the field;
- Drive a truck with welding equipment to the job site;
- Research new operational methods and techniques for application to assigned tasks;
- Required to wear respiratory protective equipment to include Self Contained Breathing Apparatus (SCBA);
- Keep labor and material records.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Oxyacetylene gas welding procedures and methods;
- Electrical welding procedures and methods;
- Types of metal and their characteristics in welding;
- Effects of heat on metals;
- Gas-cutting techniques;
- Basic fabrication methods;
- Occupational hazards and safety precautions common in welding and pipeline construction;
- Welding processes;
- Electrodes and consumables;
- Welding metallurgy;
-

Ability to:

Perform the following in a training/learning capacity:

- Weld in all phases of MIG, TIG, and STICK welding of: Steel, stainless steel, and aluminum; Plasma cutting, welding, fabricating, and work with all types of metals;
- Weld various curved metals using gas or electric arc;
- Safely and effectively operate, repair, and maintain hand, power, and shop tools and equipment used in work performed;
- Plan and lay out work from sketches, blueprints, and job requisitions; identify measurements of items to be welded or fabricated; assess appropriate equipment and methods;
- Perform manual work, welding, and pipefitting practices under all weather conditions;
- Perform a range of arc and gas welding assignments and tasks, including pipe welding, Oxygen acetylene and plasma cutting; lift and well site fabrication and maintenance; locking devices and anti-theft deterrent components; fabrication of spools and flanges;
- Perform welding fabrication and repair of miscellaneous valve wrenches and meter tools; fabricate safety enclosures;
- Weld traffic plates; fabricate, erect, and repair fences and gates; use appropriate welding procedures to secure and repair pump stations and other buildings;
- Read and write at a level sufficient for job success;
- Understand and carry out oral and written instructions;
- Perform shop math related to the welding trade;
- Operate a vehicle observing legal and defensive driving practices;
- Establish and maintain effective relationships with those contacted in the course of work;
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier;
- Be physically capable of entering permit-required confined spaces and wearing Self Contained Breathing Apparatus (SCBA) equipment;
- Operate an atmospheric tester for entry into confined spaces;
- Wear protective respiratory equipment including SCBA and personal escape respirator.

MINIMUM QUALIFICATIONS

Education: Graduation from high school or GED/equivalent,

And

Experience: Two (2) years of journey level experience in gas and electric welding fabrication and repair on all metals.

And

Certificate:

Must obtain and maintain a valid California State Water Resources Control Board (SWRCB) Water Distribution Operator Grade 1 certificate six (6) months after appointment.

Obtaining and maintaining required certification is a condition of employment. Failure to obtain and maintain any required certifications noted within the stipulated timeframes shall be considered grounds for termination. The responsibility for obtaining and maintaining certifications is the sole responsibility of the employee.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid California Class "C" driver's license required upon application. Note: For out-of-state applicants, a valid driver's license is required and a valid California Class "C" driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

Must be clean shaven or trimmed facial hair in order to properly use personal respirators. Must pass a respirator medical exam and be physically able to wear respirator equipment. Must be able to work in enclosed spaces while wearing protective clothing under extreme temperatures and hazardous environment.

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

Work involves exposure to potential physical harm, hazardous chemicals, and infectious disease including smoke, fumes, gas, treated water, high frequency noise, dirt, dust, grease, oil, chemicals, solvents and toxic agents. Incumbents need to be able to tolerate unpleasant odors, wet conditions, and uncomfortable climatic conditions. There is frequent need to stand, stoop, walk, crawl, climb, and perform other similar actions during the course of the workday.

Incumbents require sufficient mobility to work in a field setting in varying weather conditions, to operate hand tools and mechanical and motorized equipment, to transport materials and supplies weighing up to 75 pounds, and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to see color and read small print as well as distance. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Welder I

To: Welder II

Job Description:

BOWC Approved:

Rev:

12/4/2001

4/4/2006

11/21/2006

Board Approved: Title change from Welder/Pipefitter

Testing Standards App Review/Supp App Review/Welding Performance (Dept.)

DRAFT

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: ENTERPRISE GEOGRAPHIC INFORMATION SYSTEMS (EGIS) MANAGER

DATE: 8/21/2017

JOB CODE: 51751-2100

FLSA STATUS: EXEMPT

UNIT REPRESENTATION: MID-MGMT

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under the general direction of the Engineering Manager, manages the Enterprise Geographic Information Systems (EGIS) designed for large scale systems, databases, provide coordination and oversight for the implementation of Geographic Information Systems, databases, and EGIS related technology within the Water Department. The Department's EGIS is a highly integrated complex enterprise system based on an ESRI platform. It is an enterprise geodatabase supporting any number of users and runs on computers of any size and configuration. This position delivers EGIS services to all stakeholders supporting the Department's mission and objectives including Water Utility, Water Reclamation, and Sewer Collections and is responsible for the overall vision, design, management, and leadership of the Department's EGIS program including management of EGIS technology, services, and large EGIS spatial datasets; performs technology infrastructure integration design and services administration between EGIS and other business systems; provides comprehensive planning and system architecture design of EGIS databases, applications, and systems for all EGIS integrated business systems; develops and manages the EGIS group budget and related contracts; and performs related duties as required. Perform a variety of activities, operations, and analysis associated with the support and implementation of Geographic Information Systems (GIS), Computer Aided Drafting (CAD), , and Information Technology (IT) development and support within Water Utility, Water Reclamation, and Sewer Collection. Compile and administer database applications for various Department projects and programs.

DISTINGUISHING CHARACTERISTICS

The class of EGIS Manager is a mid-management supervisory classification responsible for planning and directing the design, development, implementation, and management of a comprehensive EGIS program for the Water Department. advanced professional level position in the Engineering technical/professional series. Work involves responsibility for the application of highly technical, complex, and professional knowledge and skills in various areas of EGIS and Information Technology. This position provides technical expertise in an advisory role to employees, supervisors, and management staff; performs difficult and complex work involving research, analysis, and the preparation of sound recommendations at a policy level; and provides technical and functional supervision of technical staff. The incumbent in this class is expected to use independent judgment and frequently and independently carry out general technical administrative assignments. Supervision is received from the Engineering Manager. Supervision is exercised over EGIS staff and other Department employees as designated by the Engineering Manager and/or the Director of Water Utility.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City Department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Lead, organize, control, and evaluate the work of the EGIS group; establish performance requirements and personal development targets; regularly monitor performance and provide coaching for performance improvement and development;
- Participate in the development and management of budgets and contracts for the EGIS group;
- Manage, define, and monitor the services of the EGIS; coordinate all data standards, processes, and workflow to ensure that EGIS data and services meet requirements; enforce data standards, procedures, and workflow for all information in the EGIS;
- ~~Establish enterprise standards and procedures for GIS data capture, formatting, integration, retrieval, updating, mapping, analysis, and documentation;~~
- Perform complex spatial analysis and solve complex technical EGIS-related issues; using the Department's EGIS, CAD, modeling, and other information technology tools, including the preparation, entry, analysis, and plotting of data, production of high-quality maps, drawings, exhibits, tabular, and statistical reports;
- ~~Coordinate and perform analysis of critical data using the Department's GIS, CAD, modeling, and other information technology tools, including the preparation, entry, analysis, and plotting of data, production of high quality maps, drawings, exhibits, tabular, and statistical reports;~~
- Create, implement, and/or maintain databases for storage, manipulation, and retrieval of information; evaluate and revise database structures; define database information, access, and file structure elements through discussions with users; validate input sources of data into EGIS layers and tables;
- ~~Serve as project manager on newly developed EGIS solutions and provide support for these solutions; manage EGIS contracts and performance of the EGIS related service providers; database, GPS, or related projects; analyze information system needs; recommend solutions and appropriate technology to meet needs; evaluate proposed system hardware and software to ensure compatibility with existing systems; oversee the installation and evaluation of software and hardware; control, monitor, and report budget expenditures; order materials as needed; direct members of the project team; select and monitor contractors for outside services when required for a project; provide written reports and presentations on project status;~~
- ~~Assist in the update and maintenance of the Master Plan including data acquisition, delivery, and tracking; maintain the Water System Hydraulic Model;~~
- Attend and participate in professional group meetings; serve as Department EGIS representative on various information technology-related committees; stay abreast of new trends and innovations in the field of information-EGIS technology; and research possible technological tools to improve efficiency;
- Compose correspondence and interoffice memoranda; compile information from SQL Server to support the Department's daily reports for monthly and annual report preparation required by the State;
- ~~Serve as link to Information Technology Section staff; manage and coordinate all reports of hardware/software problems; assist with hardware/software upgrades and/or maintenance; provide technical support to staff as required;~~

- ~~Coordinate acquisition, maintenance, and updates of County Assessor's Parcel Data, including parcels, subdivisions, tax areas, streets, and other physical attributes; coordinate acquisition and update of aerial imagery and survey data for use with GIS applications;~~
- ~~Set work priorities, coordinate and schedule assignments, and maintain records of activities for the section;~~
- ~~Plan, organize, control, integrate, and evaluate the work of assigned GIS staff, and support staff; develop, implement, and monitor work plans; supervise and participate in developing, implementing, and evaluating plans, work processes, systems, and procedures;~~
- ~~Participate in the selection of staff; provide or coordinate staff training;~~
- ~~Provide day-to-day leadership and work with staff to ensure a high performance, customer service oriented work environment to achieve the Department's strategic priorities, objectives, and values;~~
- Coordinate, develop, communicate, and train staff on Department EGIS standards and practices.
- Perform other related work as required.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- ~~ESRI enterprise software solutions including ArcGIS Pro, ArcGIS Servier, ArcSDE, ArcGIS Portal and Online to include map files (.mxd and aprx), and enterprise geodatabases, other software, Geographic Information Systems (GIS) and ESRI software including Arc View, ArcEditor, Arc GIS Server, ArcInfo, ArcSDE, and GIS products including project files (.apr), map files (.mxd), and geodatabases; software: AutoCAD, Innovyze Infowater, and InfoSWWM, Microsoft Windows and server, Word, Excel, Access, Power Point, Outlook, Internet Explorer, Microsoft Office Products,, Microsoft SQL Server, and Adobe Acrobat or Bluebeam; SQL~~
- EGIS practices and technology solutions to include database design and programming;
- Principles and practices of contract administration and project management, including planning, scheduling, and costing;
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly;
- Spatial data analysis and procedures and geometric/utility network expertise;
- ~~Global Positioning System (GPS) data collection utilities;~~
- AutoCAD engineering symbology in AutoCAD drawings;
- Cartographic techniques, principles, and procedures;
- Basic principles of Civil, Water Utility, Sewer Collections, and Water Reclamation engineering;
- ~~Basic terminology used in networking and desktop computer support;~~
- ~~Principles and techniques of database design and programming;~~
- Problem solving/troubleshooting skills to provide a high level of customer service by effectively dealing with local agencies, vendors, consultants, and other Department staff;

- Using computer systems, software applications, and other business equipment to perform a variety of EGIS tasks;
- Basic principles of supervision;

Ability to:

- Manage, supervise, and/or lead EGIS employees to accomplish set goals;
- Participate in the budgeting process for EGIS/CAD and technological needs;
- ~~Operate a variety of computer hardware and software including, but not limited to, desktops, laptops, tablets or other mobile computers, EGPS devices, printers, scanners, and copiers;~~
- Interpret and analyze technical information;
- Write clear and concise technical reports;
- ~~Supervise and/or lead employees to accomplish set goals;~~
- Coordinate, design, implement, maintain, and utilize an EGIS system to meet critical deadlines and follow up on assignments;
- Manage EGIS mapping and analysis needs for multiple concurrent projects; design and produce high quality maps for reports and presentations;
- ~~Participate in the budgeting process for GIS/CAD and Technological needs;~~
- Understand and edit complex engineering plans and drawings utilizing AutoCAD;
- Understand and carry out oral, written, and intuitive instructions;
- Establish and maintain effective relationships with those contacted in the course of work;
- Establish and maintain a positive attitude toward City and Department goals;
- Work under moderate stress conditions;
- Operate a vehicle observing legal and defensive driving practices;
- Maintain a driving record that meets vehicle code standards and is acceptable to the Department and its insurance carrier;
- Perform related work as required.

MINIMUM QUALIFICATIONS

An employee within this classification may be designated as a “key responder” and as such shall be required to respond to non-normal working hour emergency operational conditions.

Education: ~~Bachelor's degree or E~~ equivalent to a Bachelor's degree from an accredited college or university (120 semester or 180 quarter units) in engineering, computer science, computer information systems, environmental science, geography, architectural or other graphical/spatial design, and/or data information systems, or closely related field, and

Experience: Minimum of five~~three~~ (5) years of professional experience involving the design, implementation, and use of ~~GIS~~ ESRI software, AutoCAD, and enterprise databases such as SQL server and/or Oracle; applications as well as Microsoft Access, Outlook, Excel, and Word.

And

Minimum of two (2) years of experience managing and successfully implementing EGIS projects;

And

General knowledge of and experience with network system design and operation which may include applications in a cloud-based environment.

Municipal government experience is highly desirable.

Certifications: Desired certifications include Geographical Information Systems Professional (GISP), ESRI Enterprise Administration Professional, and ArcGIS Utility Network Specialty. Most competitive applicants will hold one or more industry recognized GIS certifications.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid Class "C" California Motor Vehicle Operator's License. For out of state applicants, a valid Driver's License is required and a valid Class "C" California Motor Vehicle Operator's License must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Incumbents may be required to perform occasional moderately heavy physical labor. Incumbents require sufficient mobility to work in an office setting and operate office equipment, transport materials and supplies weighing up to 25 pounds, and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodation(s) for physical or mental disabilities will be considered on a case-by-case basis.

Job Description:

BOWC Approved:

6/24/2003

Rev:

3/22/2005

Rev/Title Chg from WU Technology Coord:

11/6/2012

Rev/Title Chg from GIS Coord

8/15/2017

Rev/Title Chg from GIS Mgr

Testing Standards: App Review/ Supp App Review

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: ENTERPRISE GEOGRAPHIC INFORMATION SYSTEMS (EGIS) MANAGER

DATE: 8/21/2017

JOB CODE: 2100

FLSA STATUS: EXEMPT

UNIT REPRESENTATION: MID-MGMT

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under the general direction of the Engineering Manager, manages the Enterprise Geographic Information Systems (EGIS) designed for large scale systems, databases, and related EGIS technology within the Water Department. The Department's EGIS is a highly integrated complex enterprise system based on an ESRI platform. It is an enterprise geodatabase supporting any number of users and runs on computers of any size and configuration. This position delivers EGIS services to all stakeholders supporting the Department's mission and objectives including Water Utility, Water Reclamation, and Sewer Collections and is responsible for the overall vision, design, management, and leadership of the Department's EGIS program including management of EGIS technology, services, and large EGIS spatial datasets; performs technology infrastructure integration design and services administration between EGIS and other business systems; provides comprehensive planning and system architecture design of EGIS databases, applications, and systems for all EGIS integrated business systems; develops and manages the EGIS group budget and related contracts; and performs related duties as required..

DISTINGUISHING CHARACTERISTICS

The EGIS Manager is a mid-management supervisory classification responsible for planning and directing the design, development, implementation, and management of a comprehensive EGIS program for the Water Department. Work involves responsibility for the application of highly technical, complex, and professional knowledge and skills in various areas of EGIS. This position provides technical expertise in an advisory role to employees, supervisors, and management staff; performs difficult and complex work involving research, analysis, and the preparation of sound recommendations at a policy level and provides technical and functional supervision of technical staff. The incumbent in this class is expected to use independent judgment and frequently independently carry out technical administrative assignments. Supervision is received from the Engineering Manager. Supervision is exercised over EGIS staff and other Department employees as designated by the Engineering Manager and/or the Director of Water Utility.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City Department staff;

- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Lead, organize, control, and evaluate the work of the EGIS group; establish performance requirements and personal development targets; regularly monitor performance and provide coaching for performance improvement and development;
- Participate in the development and management of budgets and contracts for the EGIS group;
- Manage, define, and monitor the services of the EGIS; coordinate all data standards, processes, and workflow to ensure that EGIS data and services meet requirements; enforce data standards, procedures, and workflow for all information in the EGIS;
- Perform complex spatial analysis and solve complex technical EGIS-related issues using the Department's EGIS, CAD, modeling, and other information technology tools, including the preparation, entry, analysis, and plotting of data, production of high-quality maps, drawings, exhibits, tabular, and statistical reports;
- Create, implement, and/or maintain databases for storage, manipulation, and retrieval of information; evaluate and revise database structures; define database information, access, and file structure elements through discussions with users; validate input sources of data into EGIS layers and tables;
- Serve as project manager on newly developed EGIS solutions and provide support for these solutions; manage EGIS contracts and performance of the EGIS related service providers;
- Attend and participate in professional group meetings; serve as Department EGIS representative on various information technology-related committees; stay abreast of new trends and innovations in the field of EGIS technology and research possible technological tools to improve efficiency;
- Compose correspondence and interoffice memoranda; compile information from SQL Server to support the Department's monthly and annual reports required by the State;
- Provide day-to-day leadership and work with staff to ensure a high performance, customer oriented work environment to achieve the Department's strategic priorities, objectives, and values;
- Coordinate, develop, communicate, and train staff on Department EGIS standards and practices;
- Perform other related work as required.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- ESRI enterprise software solutions including ArcGIS Pro, ArcGIS Server, ArcSDE, ArcGIS Portal and Online to include map files (.mxd and aprx), and enterprise geodatabases, other software: AutoCAD, Innovyze Infowater, and InfoSWMM, Microsoft Windows and Server, Microsoft Office Products, Microsoft SQL Server, and Adobe Acrobat or Bluebeam;
- EGIS practices and technology solutions to include database design and programming;
- Principles and practices of contract administration and project management, including planning, scheduling, and costing;

- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly;
- Spatial data analysis and procedures and geometric/utility network expertise;
- AutoCAD engineering symbology in AutoCAD drawings;
- Cartographic techniques, principles, and procedures;
- Basic principles of Civil, Water Utility, Sewer Collections, and Water Reclamation engineering;
- Problem solving/troubleshooting skills to provide a high level of customer service by effectively dealing with local agencies, vendors, consultants, and other Department staff;
- Using computer systems, software applications, and other business equipment to perform a variety of EGIS tasks;
- Basic principles of supervision.

Ability to:

- Manage, supervise, and/or lead EGIS employees to accomplish set goals;
- Participate in the budgeting process for EGIS/CAD and technological needs;
- Operate a variety of computer hardware and software including, but not limited to, desktops, laptops, tablets or other mobile computers, EGPS devices, printers, scanners, and copiers;
- Interpret and analyze technical information;
- Write clear and concise technical reports;
- Coordinate, design, implement, maintain, and utilize an EGIS system to meet critical deadlines and follow up on assignments;
- Manage EGIS mapping and analysis needs for multiple concurrent projects; design and produce high quality maps for reports and presentations;
- Understand and edit complex engineering plans and drawings utilizing AutoCAD;
- Understand and carry out oral, written, and intuitive instructions;
- Establish and maintain effective relationships with those contacted in the course of work;
- Establish and maintain a positive attitude toward City and Department goals;
- Work under moderate stress conditions;
- Operate a vehicle observing legal and defensive driving practices;
- Maintain a driving record that meets vehicle code standards and is acceptable to the Department and its insurance carrier;
- Perform related work as required.

MINIMUM QUALIFICATIONS

An employee within this classification may be designated as a “key responder” and as such shall be required to respond to non-normal working hour emergency operational conditions.

Education: Bachelor’s degree or equivalent from an accredited college or university (120 semester or 180 quarter units) in engineering, computer science, computer information systems, geography, architectural or other graphical/spatial design, data information systems, or closely related field, and

Experience: Minimum of five (5) years of professional experience involving the design, implementation, and use of ESRI software, AutoCAD, and enterprise databases such as SQL server and/or Oracle;

And

Minimum of two (2) years of experience managing and successfully implementing EGIS projects;

And

General knowledge of and experience with network system design and operation which may include applications in a cloud-based environment.

Municipal government experience is highly desirable.

Certifications: Desired certifications include Geographical Information Systems Professional (GISP), ESRI Enterprise Administration Professional, and ArcGIS Utility Network Specialty. Most competitive applicants will hold one or more industry recognized GIS certifications.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid Class “C” California Motor Vehicle Operator’s License. For out of state applicants, a valid Driver’s License is required and a valid Class “C” California Motor Vehicle Operator’s License must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Incumbents may be required to perform occasional moderately heavy physical labor. Incumbents require sufficient mobility to work in an office setting and operate office equipment, transport materials and supplies weighing up to 25 pounds, and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodation(s) for physical or mental disabilities will be considered on a case-by-case basis.

Job Description:

BOWC Approved:

6/24/2003

Rev:

3/22/2005

Rev/Title Chg from WU Technology Coord:

11/6/2012

Rev/Title Chg from GIS Coord

8/15/2017

Rev/Title Chg from GIS Mgr.

Testing Standards: App Review/ Supp App Review

DRAFT

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: PAYROLL SPECIALIST

DATE: ~~10/3/2017~~ 07/01/2025

JOB CODE: ~~21717~~ 1200

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GENERAL

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under direction, to plan, organize, and perform highly specialized and responsible technical work in connection with the preparation, review and maintenance of payroll and other financial and statistical records; and to perform related work as required.

DISTINGUISHING CHARACTERISTICS

The class of Payroll Specialist is responsible for the Department's centralized payroll processes, records and reports, including payment and reporting of payroll tax liabilities and handling of employee retirement system reporting. The incumbent is accountable for ensuring the payroll function is carried out in an accurate and timely manner and performed in strict adherence with relevant laws and codes, internal policies and procedures, provisions of Memoranda of Understanding with recognized labor groups, and in accordance with sound financial management principles and practices. The Incumbent ~~may serve as a lead and~~ resource to subordinate staff of the Finance division and Department staff at all levels. Supervision is received from the Senior Accountant or higher-level management, as assigned.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City and Department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Perform complex technical duties in the processing and preparation of the bi-weekly payroll in accordance with internal policies, Fair Labor Standards Act, and labor contract provisions;
- Process, code, enter, and retrieve confidential payroll data; process special payroll transactions such as wage assignments and liens, reimbursements, and other special payments; calculate and manually prepare retroactive pay adjustments, overtime adjustments, and employee terminations;

- Develop schedules and methods to accomplish assignments ensuring work is completed in a timely and efficient manner;
- Verify entries and reconcile complex payroll records, audit, reconcile, and prepare quarterly payroll tax reports for submittal to federal and state agencies; generate and reconcile year-end payroll reports; prepare employee W-2 forms and tax statements;
- Compile and complete statistical information for a variety of reporting agencies; prepare special reports and/or supplemental data as necessary; develop spreadsheets of varying sizes and complexity;
- Assist with testing payroll software upgrades, payroll system calculation codes, and report writing to fulfill support staff's information needs;
- Answer Department and employee questions regarding payroll benefits and deductions by explaining requirements, policies, and procedures;
- Perform responsible financial record keeping and analytical duties of above average difficulty involving major segments of the Department's accounting system
- Maintain employee payroll, fringe benefit, and voluntary deduction and contribution records;
- Input, update, and maintain tax withholding, additional pay, and deduction records;
- Compute time sheets; input time; verify payroll pre-processing data for accuracy and correct discrepancies; process payroll direct deposits;
- Oversee and prepare payroll checks for distribution; prepare and process payroll for the Board of Water Commissioners; prepare and process manual checks and voids as required;
- Prepare requests for payment for employee benefits and voluntary deductions;
- Verify accuracy of check registers, prepare disbursement summaries, and prepare cash fund transfers;
- Process bank and other financial institution automated transmissions accurately and within established deadlines and prepare necessary journal entries;
- Download and transmit a variety of files, including but not limited to, taxes, retirement, deferred compensation, etc.;
- ~~Analyze, prepare~~Review, distribute, and file 1095-C forms ~~for in~~ compliance with Affordable Care Act requirements; analyze, prepare, distribute, and file W-2 forms;
- ~~Reconcile and analyze invoices and records of retiree subsidy and employee benefits;~~
- Provide wage and earnings information to Human Resources as needed for employment verifications and Workers' Compensation; monitor leave accrual/usage for employees on protected leave e.g. FMLA, CFRA, and, short and long term disability for conformance with MOU guidelines;
- Track, analyze, and reconcile activity to employee flexible spending accounts and prepare journal entries in accordance with debit card activity reports and requests for funding;
- Prepare pay-outs for compensatory time, sick leave incentive pay and sick leave sell-back at appropriate intervals in accordance with policy and Memoranda of Understanding; prepare sick leave and vacation payouts in accordance with policy and Memoranda of Understanding upon termination;

- Adjust accruals for employees per pay period based on seniority and eligibility for higher level accruals;
- Make mathematical calculations; check various statistical and accounting tables and reports; reconcile records to established balances, identify and resolve discrepancies;
- Access, input, and retrieve varied data from computer system;
- Scan documents and file into electronic data storage system; purge and destroy documents; prepare file folders;
- **Train subordinate timekeepers and –other Department staff on payroll processing as necessary members as assigned;**
- Establish and maintain filing and record keeping systems in accordance with Department policy;
- Operate a calculator, computer, photocopier, scanner, facsimile, and related equipment;
- Answer telephone, process mail, prepare routine forms, schedules, statements, correspondence, checks, lists, reports, and related documents;
- Communicate effectively, both verbally and in writing, with employees, various agencies, and the public regarding policies, practices, and procedures of the Department;
- Review billings and documents for adequacy and accuracy; and
- Perform related work as required.

GENERAL QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Principles and practices of financial and payroll record keeping;
- Rules, regulations, terminology, and processes related to the completion and processing of payroll;
- Knowledge of the Department's personnel rules, policies and labor contract provisions governing compensation, time reporting, deductions, and withholding practices;
- Federal and state regulations such as the Fair Labor Standards Act, and Department requirements related to timekeeping, payroll preparation, and reporting requirements;
- Public sector payroll operations, deduction policies, practices, and procedures;
- Principles and practices of payroll data processing systems and procedures including Automated Clearing House (ACH) and electronic payment transactions;
- Payroll tax requirements and employment benefits as regulated by various federal and state agencies;
- Garnishments, deductions, leave management, and employment verification practices and procedures;
- Modern office equipment and record keeping methods and practices;

- Computer operating methods and financial business related software programs;
- Basic English usage, spelling, grammar, and punctuation;
- Business math;
- Advanced level account record keeping procedures;
- Enterprise accounting principles, procedures, and terminology;
- Electronic data storage systems;
- Word processing at an intermediate level of proficiency and spreadsheets and/or databases at an advanced level of proficiency;
- Principles of confidentiality;
- Basic customer service principles.

Ability to:

- Understand and independently apply a wide variety of payroll policies, procedures and regulations;
- Establish and maintain complex filing systems;
- Independently interpret and explain payroll matters to others;
- Identify and correct errors in mathematical computations and improper entries on a variety of documents;
- Reconcile accounting transactions and prepare financial and accounting reports;
- Examine and verify financial documents and reports;
- Analyze financial and employee concerns, evaluate alternatives and recommend appropriate solutions, as necessary;
- Use tact, discretion and diplomacy in dealing with sensitive situations and concerned employees; maintain strict confidentiality of sensitive employee and Department information;
- Prepare and review payroll documents, reports, statements, and correspondence accurately and compile information in a timely manner;
- Operate a computer;
- Understand pertinent procedures and functions quickly and apply with substantial independence;
- Operate a calculator by touch;
- Maintain accurate and interrelated financial records, and identify and reconcile errors;
- Accomplish difficult financial clerical work involving independent judgment;
- Apply accounting, auditing, and financial analysis principles to specialized work assignments;
- Classify fiscal documents and transactions;

- Perform financial and statistical record keeping work;
- Examine and verify financial documents and reports;
- Write legibly;
- Read, understand, and apply difficult materials;
- Speak clearly and distinctly;
- Communicate effectively in oral and written form;
- Prepare clear, concise, and easily understood statistical and narrative reports;
- Make comparisons quickly and accurately;
- Establish and maintain effective relationships with those contacted in the course of work;
- Understand and carry out oral and written instructions;
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier.

MINIMUM QUALIFICATIONS

Education: Graduation from high school, or equivalent, supplemented by successful completion of two (2) years of college level course work in accounting, economics, business or public administration, or related field;

Two (2) years of additional qualifying experience may substitute for each year of the required education. A total of four (4) years of additional qualifying experience is necessary to substitute for the total required education.

And

Experience: Five (5) years of progressively responsible accounting support experience related to payroll administration, or an equivalent combination of training and experience.

~~An additional year of qualifying experience may substitute for one (1) year of the required education.~~

Experience with ~~Sungard H.T.E~~ Tyler/Munis and Executirme- software is highly desirable.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid Class "C" California driver's license. For out of state applicants, a valid Driver's License is required and a valid Class "C" California driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Incumbents require sufficient mobility to work in an office setting and operate office equipment, transport materials and supplies weighing up to 25 pounds, and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Payroll Specialist

To: Accountant I

Job Description:

BOWC Approved:

4/3/2001

Rev:

9/5/2006

8/7/2012

Rev w/title change

10/3/2017

Rev.

Testing Standards: App Review/Supp App Review~~Written~~

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: PAYROLL SPECIALIST

DATE: 07/01/2025

JOB CODE: 1200

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GENERAL

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under direction, to plan, organize, and perform highly specialized and responsible technical work in connection with the preparation, review and maintenance of payroll and other financial and statistical records; and to perform related work as required.

DISTINGUISHING CHARACTERISTICS

The class of Payroll Specialist is responsible for the Department's centralized payroll processes, records and reports, including payment and reporting of payroll tax liabilities and handling of employee retirement system reporting. The incumbent is accountable for ensuring the payroll function is carried out in an accurate and timely manner and performed in strict adherence with relevant laws and codes, internal policies and procedures, provisions of Memoranda of Understanding with recognized labor groups, and in accordance with sound financial management principles and practices. The Incumbent serves as a resource to subordinate staff of the Finance division and Department staff at all levels. Supervision is received from the Senior Accountant or higher-level management, as assigned.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City and Department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Perform complex technical duties in the processing and preparation of the bi-weekly payroll in accordance with internal policies, Fair Labor Standards Act, and labor contract provisions;
- Process, code, enter, and retrieve confidential payroll data; process special payroll transactions such as wage assignments and liens, reimbursements, and other special payments; calculate and manually prepare retroactive pay adjustments, overtime adjustments, and employee terminations;

- Develop schedules and methods to accomplish assignments ensuring work is completed in a timely and efficient manner;
- Verify entries and reconcile complex payroll records, audit, reconcile, and prepare quarterly payroll tax reports for submittal to federal and state agencies; generate and reconcile year-end payroll reports; prepare employee W-2 forms and tax statements;
- Compile and complete statistical information for a variety of reporting agencies; prepare special reports and/or supplemental data as necessary; develop spreadsheets of varying sizes and complexity;
- Assist with testing payroll software upgrades, payroll system calculation codes, and report writing to fulfill support staff's information needs;
- Answer Department and employee questions regarding payroll benefits and deductions by explaining requirements, policies, and procedures;
- Perform responsible financial record keeping and analytical duties of above average difficulty involving major segments of the Department's accounting system
- Maintain employee payroll, fringe benefit, and voluntary deduction and contribution records;
- Input, update, and maintain tax withholding, additional pay, and deduction records;
- Compute time sheets; input time; verify payroll pre-processing data for accuracy and correct discrepancies; process payroll direct deposits;
- Oversee and prepare payroll checks for distribution; prepare and process payroll for the Board of Water Commissioners; prepare and process manual checks and voids as required;
- Prepare requests for payment for employee benefits and voluntary deductions;
- Verify accuracy of check registers, prepare disbursement summaries, and prepare cash fund transfers;
- Process bank and other financial institution automated transmissions accurately and within established deadlines and prepare necessary journal entries;
- Download and transmit a variety of files, including but not limited to, taxes, retirement, deferred compensation, etc.;
- Review, distribute, and file 1095-C forms in compliance with Affordable Care Act requirements; analyze, prepare, distribute, and file W-2 forms;
- Provide wage and earnings information to Human Resources as needed for employment verifications and Workers' Compensation; monitor leave accrual/usage for employees on protected leave e.g. FMLA, CFRA, and, short and long term disability for conformance with MOU guidelines;
- Track, analyze, and reconcile activity to employee flexible spending accounts and prepare journal entries in accordance with debit card activity reports and requests for funding;
- Prepare pay-outs for compensatory time, sick leave incentive pay and sick leave sell-back at appropriate intervals in accordance with policy and Memoranda of Understanding; prepare sick leave and vacation payouts in accordance with policy and Memoranda of Understanding upon termination;
- Adjust accruals for employees per pay period based on seniority and eligibility for higher level accruals;

- Make mathematical calculations; check various statistical and accounting tables and reports; reconcile records to established balances, identify and resolve discrepancies;
- Access, input, and retrieve varied data from computer system;
- Scan documents and file into electronic data storage system; purge and destroy documents; prepare file folders;
- Train timekeepers and other Department staff on payroll processing as necessary;
- Establish and maintain filing and record keeping systems in accordance with Department policy;
- Operate a calculator, computer, photocopier, scanner, facsimile, and related equipment;
- Answer telephone, process mail, prepare routine forms, schedules, statements, correspondence, checks, lists, reports, and related documents;
- Communicate effectively, both verbally and in writing, with employees, various agencies, and the public regarding policies, practices, and procedures of the Department;
- Review billings and documents for adequacy and accuracy; and
- Perform related work as required.

GENERAL QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Principles and practices of financial and payroll record keeping;
- Rules, regulations, terminology, and processes related to the completion and processing of payroll;
- Knowledge of the Department's personnel rules, policies and labor contract provisions governing compensation, time reporting, deductions, and withholding practices;
- Federal and state regulations such as the Fair Labor Standards Act, and Department requirements related to timekeeping, payroll preparation, and reporting requirements;
- Public sector payroll operations, deduction policies, practices, and procedures;
- Principles and practices of payroll data processing systems and procedures including Automated Clearing House (ACH) and electronic payment transactions;
- Payroll tax requirements and employment benefits as regulated by various federal and state agencies;
- Garnishments, deductions, leave management, and employment verification practices and procedures;
- Modern office equipment and record keeping methods and practices;
- Computer operating methods and financial business related software programs;

- Basic English usage, spelling, grammar, and punctuation;
- Business math;
- Advanced level account record keeping procedures;
- Enterprise accounting principles, procedures, and terminology;
- Electronic data storage systems;
- Word processing at an intermediate level of proficiency and spreadsheets and/or databases at an advanced level of proficiency;
- Principles of confidentiality;
- Basic customer service principles.

Ability to:

- Understand and independently apply a wide variety of payroll policies, procedures and regulations;
- Establish and maintain complex filing systems;
- Independently interpret and explain payroll matters to others;
- Identify and correct errors in mathematical computations and improper entries on a variety of documents;
- Reconcile accounting transactions and prepare financial and accounting reports;
- Examine and verify financial documents and reports;
- Analyze financial and employee concerns, evaluate alternatives and recommend appropriate solutions, as necessary;
- Use tact, discretion and diplomacy in dealing with sensitive situations and concerned employees; maintain strict confidentiality of sensitive employee and Department information;
- Prepare and review payroll documents, reports, statements, and correspondence accurately and compile information in a timely manner;
- Operate a computer;
- Understand pertinent procedures and functions quickly and apply with substantial independence;
- Operate a calculator by touch;
- Maintain accurate and interrelated financial records, and identify and reconcile errors;
- Accomplish difficult financial clerical work involving independent judgment;
- Apply accounting, auditing, and financial analysis principles to specialized work assignments;
- Classify fiscal documents and transactions;
- Perform financial and statistical record keeping work;

- Examine and verify financial documents and reports;
- Write legibly;
- Read, understand, and apply difficult materials;
- Speak clearly and distinctly;
- Communicate effectively in oral and written form;
- Prepare clear, concise, and easily understood statistical and narrative reports;
- Make comparisons quickly and accurately;
- Establish and maintain effective relationships with those contacted in the course of work;
- Understand and carry out oral and written instructions;
- Maintain a driving record which meets Vehicle Code Standards and is acceptable to the Department and its insurance carrier.

MINIMUM QUALIFICATIONS

Education: Graduation from high school, or equivalent, supplemented by successful completion of two (2) years of college level course work in accounting, economics, business or public administration, or related field;

Two (2) years of additional qualifying experience may substitute for each year of the required education. A total of four (4) years of additional qualifying experience is necessary to substitute for the total required education.

And

Experience: Five (5) years of progressively responsible accounting support experience related to payroll administration, or an equivalent combination of training and experience.

Experience with Tyler/Munis and Executirme software is highly desirable.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid Class "C" California driver's license. For out of state applicants, a valid Driver's License is required and a valid Class "C" California driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Employee accommodation(s) for physical or mental disabilities will be considered on a case-by-case basis.

Incumbents require sufficient mobility to work in an office setting and operate office equipment, transport materials and supplies weighing up to 25 pounds, and to travel to various locations. Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodation(s) for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Payroll Specialist

To: Accountant I

Job Description:

BOWC Approved:

Rev:

Rev w/title change

Rev.

4/3/2001

9/5/2006

8/7/2012

10/3/2017

Testing Standards: App Review/Supp App Review

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER QUALITY SPECIALIST

DATE: ~~07/01/2024~~ 07/01/2025

JOB CODE: 1252

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GENERAL

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under general direction, perform technical environmental services work related to gathering, summarizing, evaluating, and reporting water quality data and assisting with implementation of water quality programs related to water supply and water quality. May assist in scheduling and verifying backflow testing, cross-connection investigations, data analyses, and compliance meetings and reporting.

DISTINGUISHING CHARACTERISTICS

The class of Water Quality Specialist is a specialized position in the water quality field. This classification will be primarily responsible for ensuring the Department maintains compliance with the State's Cross Connection Control Policy including assisting with the development of the Department's Cross Connection Control Plan, laboratory data analyses, backflow device database management, and regulatory compliance reporting of Water quality data. Supervision is received from the Water Quality Control officer.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public, City and Department staff, and representatives of various regulatory agencies encountered throughout the performance of water quality control and cross connection control duties;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Assist in the implementation and enforcement of cross connection control program;
- Review, research, and evaluate proposed water quality regulations and prepare water quality section reports;
- Interpret water quality data and prepare technical reports and correspondence in response to requests from regulatory agencies, Department staff, consultants, and the public;

- Perform special studies and research related to water quality as necessary;
- Attend meetings related to water quality as a Department representative and prepare meeting summaries;
- Review, summarize, and analyze complex water quality data;
- Organize and plan field inspections and surveys related to backflow prevention and cross connections;
- Reviews results of periodic backflow prevention device tests to ensure proper testing by backflow testers;
- Assist the Water Quality Control Officer and Water Quality Lead Workers in scheduling inspections with, and provide information as requested, to regulatory agencies;
- Advise property owners, backflow testers, consultants, and others, as necessary, information on backflow device compliance requirements;
- Participate in water use sites where backflow prevention assemblies are necessary; notify customers of backflow instillation(s) required; follow-up to ensure that the appropriate assemblies have been installed;
- Maintain records for backflow prevention assemblies and cross connection control program;
- Assist in preparing and tracking water quality work orders;
- Assist in orderings parts, equipment, and supplies for the Water Quality section;
- Make routine mathematical calculations;
- Track and assist in responding to customers' water quality complaints;
- Work with Customer Service and Water Utility staff in coordinating water "shut offs" for non-compliant backflow services; and
- Perform related work as required.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Water quality regulations;
- Backflow devices;
- Analytical laboratory analyses;
- Mathematics at an intermediate level;

- English usage, spelling, grammar, and punctuation;
- Appropriate safety precautions and procedures;
- Basic public relations and telephone etiquette.

Ability to:

- Assist in enforcing water quality requirements with tact, diplomacy, and firmness;
- Read, understand, and be able to perform technical functions;
- Interpret water quality analytical laboratory reports and summarize results;
- Make accurate mathematical calculations;
- Adhere to Department rules, regulations, policies and procedures;
- Understand and carry out oral and written instructions;
- Establish and maintain effective relationships with those contacted in the course of work;
- Write legibly;
- Maintain filing systems (electronic and paper);
- Work under moderate or high stress conditions;
- Operate a computer and common office equipment/software;
- Maintain a driving record that meets vehicle code standards and is acceptable to the Department and its insurance carrier; and
- Work overtime as needed.

MINIMUM QUALIFICATIONS

Education: Bachelor's degree with a major in Environmental Science, Biology, Chemistry, Engineering, or related field.

And

Experience: Experience: Two (2) years' experience in potable water data analysis, regulatory compliance, backflow device requirements and cross connection controls.

And

Certificates: Must obtain and maintain an ~~American Water Works Association-San Bernardino County Backflow certificate~~, (AWWA) Backflow Prevention Assembly Tester certification, and Cross Connection Control Specialist certification within twelve (12) months of appointment.

OR

Education: Associate's degree with major in Environmental Science, Biology, Chemistry, Engineering, or related field

And

Experience: Three (3) years of experience in water quality control and/or backflow prevention testing

And

Certificates: Must obtain and maintain an ~~an American Water Works Association San Bernardino County Backflow certificate, (AWWA)~~ Backflow Prevention Assembly Tester Certification, and Cross Connection Control Specialist certification within twelve (12) months of appointment.

Obtaining and maintaining required certification(s) is a condition of employment. Failure to obtain and maintain any required certification(s) noted within the stipulated timeframes shall be considered grounds for termination. Obtaining and maintaining certification(s) is the sole responsibility of the employee.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid Class "C" California driver's license. For out of state applicants, a valid driver's license is required and a valid Class "C" California driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Water Quality Specialist

To: Environmental Analyst

Testing Standards: App review/Supp app review

Job Description:

BOWC Approved: 6/25/2024
Revised: _____

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER QUALITY SPECIALIST

DATE: 07/01/2025

JOB CODE: 1252

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GENERAL

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under general direction, perform technical environmental services work related to gathering, summarizing, evaluating, and reporting water quality data and assisting with implementation of water quality programs related to water supply and water quality. May assist in scheduling and verifying backflow testing, cross-connection investigations, data analyses, and compliance meetings and reporting.

DISTINGUISHING CHARACTERISTICS

The class of Water Quality Specialist is a specialized position in the water quality field. This classification will be primarily responsible for ensuring the Department maintains compliance with the State's Cross Connection Control Policy including assisting with the development of the Department's Cross Connection Control Plan, laboratory data analyses, backflow device database management, and regulatory compliance reporting of Water quality data. Supervision is received from the Water Quality Control officer.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public, City and Department staff, and representatives of various regulatory agencies encountered throughout the performance of water quality control and cross connection control duties;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Assist in the implementation and enforcement of cross connection control program;
- Review, research, and evaluate proposed water quality regulations and prepare water quality section reports;
- Interpret water quality data and prepare technical reports and correspondence in response to requests from regulatory agencies, Department staff, consultants, and the public;

- Perform special studies and research related to water quality as necessary;
- Attend meetings related to water quality as a Department representative and prepare meeting summaries;
- Review, summarize, and analyze complex water quality data;
- Organize and plan field inspections and surveys related to backflow prevention and cross connections;
- Reviews results of periodic backflow prevention device tests to ensure proper testing by backflow testers;
- Assist the Water Quality Control Officer and Water Quality Lead Workers in scheduling inspections with, and provide information as requested, to regulatory agencies;
- Advise property owners, backflow testers, consultants, and others, as necessary, information on backflow device compliance requirements;
- Participate in water use sites where backflow prevention assemblies are necessary; notify customers of backflow instillation(s) required; follow-up to ensure that the appropriate assemblies have been installed;
- Maintain records for backflow prevention assemblies and cross connection control program;
- Assist in preparing and tracking water quality work orders;
- Assist in orderings parts, equipment, and supplies for the Water Quality section;
- Make routine mathematical calculations;
- Track and assist in responding to customers' water quality complaints;
- Work with Customer Service and Water Utility staff in coordinating water "shut offs" for non-compliant backflow services; and
- Perform related work as required.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Water quality regulations;
- Backflow devices;
- Analytical laboratory analyses;
- Mathematics at an intermediate level;
- English usage, spelling, grammar, and punctuation;

- Appropriate safety precautions and procedures;
- Basic public relations and telephone etiquette.

Ability to:

- Assist in enforcing water quality requirements with tact, diplomacy, and firmness;
- Read, understand, and be able to perform technical functions;
- Interpret water quality analytical laboratory reports and summarize results;
- Make accurate mathematical calculations;
- Adhere to Department rules, regulations, policies and procedures;
- Understand and carry out oral and written instructions;
- Establish and maintain effective relationships with those contacted in the course of work;
- Write legibly;
- Maintain filing systems (electronic and paper);
- Work under moderate or high stress conditions;
- Operate a computer and common office equipment/software;
- Maintain a driving record that meets vehicle code standards and is acceptable to the Department and its insurance carrier; and
- Work overtime as needed.

MINIMUM QUALIFICATIONS

Education: Bachelor's degree with a major in Environmental Science, Biology, Chemistry, Engineering, or related field.

And

Experience: Experience: Two (2) years' experience in potable water data analysis, regulatory compliance, backflow device requirements and cross connection controls.

And

Certificates: Must obtain and maintain an American Water Works Association, (AWWA) Backflow Prevention Assembly Tester certification and Cross Connection Control Specialist certification within twelve (12) months of appointment.

OR

Education: Associate's degree with major in Environmental Science, Biology, Chemistry, Engineering, or related field

And

Experience: Three (3) years of experience in water quality control and/or backflow prevention testing

And

Certificates: Must obtain and maintain an American Water Works Association (AWWA) Backflow Prevention Assembly Tester Certification and Cross Connection Control Specialist certification within twelve (12) months of appointment.

Obtaining and maintaining required certification(s) is a condition of employment. Failure to obtain and maintain any required certification(s) noted within the stipulated timeframes shall be considered grounds for termination. Obtaining and maintaining certification(s) is the sole responsibility of the employee.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid Class "C" California driver's license. For out of state applicants, a valid driver's license is required and a valid Class "C" California driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Employee accommodation(s) for physical or mental disabilities will be considered on a case-by-case basis.

Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodation(s) for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Water Quality Specialist

To: Environmental Analyst

Testing Standards: App review/Supp app review

Job Description:

BOWC Approved:

Revised:

6/25/2024

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER QUALITY LEAD WORKER

DATE: ~~07/01/2024~~ 07/01/2025

JOB CODE: 1250

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GENERAL

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under the general supervision of the Water Quality Control Officer, to maintain a water quality control program that complies with water quality monitoring standards as established by the Water Department, the State of California Water Resources Control Board (SWRCB), Division of Drinking Water, and the United States Environmental Protection Agency; monitor water quality throughout the Department's water production and distribution system; review and monitor all water quality laboratory data; maintain all water quality laboratory test information; complete all required water quality reports; administer the Department's backflow prevention device testing program; monitor water levels throughout the ground water aquifer; troubleshoot and calibrate water level transducers; Monitor and maintain the geothermal system; and perform other related duties as assigned.

DISTINGUISHING CHARACTERISTICS

The class of Water Quality Lead Worker is a specialized position in the water utility field. This classification directs the daily activities of the Water Quality Control Section. Supervision is received from the Water Quality Control Officer. Lead supervision is exercised over the Water Quality Control Section staff.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the public, City and Department staff, and representatives of various regulatory agencies encountered throughout the performance of water quality control and cross connection control job duties;
- Plan and direct the collection of routine and special bacteriological, general physical, radiological, and chemical water quality samples;
- Plan and direct EPA Superfund sampling and reporting;
- Monitor new pipeline construction and repair and chlorination projects and coordinate with contractors regarding sampling issues and procedures;
- Perform transducer troubleshooting and calibration;

- Monitor water treatment and geothermal waste discharge to assure compliance with regulatory guidelines;
- Monitor departmental backflow prevention cross connection control program;
- Inspect customers' premises for cross connections to determine appropriate backflow prevention device requirements;
- Investigate and respond to customer water quality complaints;
- Monitor backflow acceptance tests subsequent to their installation;
- Prepare cross connections control work orders and correction notices;
- Order parts and supplies;
- Communicate water quality information with SWRCB Officials;
- Operate Department vehicles;
- Calculate, tabulate, and prepare reports;
- Make routine mathematical calculations;
- Maintain time and material records;
- Oversee the Department's flushing program;
- Assign and perform fire flow testing as required;
- Perform, or contract out, preventive maintenance on well sites and distribution system, including motors, valves, piping, and related hardware;
- Oversee and perform EPA Superfund sampling and reporting;
- Oversee and perform fire flow testing to determine fire protection needs for current and new development;
- Maintain contact with Supervisor, Lead worker, and office staff via phone, text, and e-mail;
- Assist in the training of new Water Quality Control Workers;
- Ensure assigned Department vehicles are routinely inspected for proper maintenance and safety;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Perform related work as required.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Principles of water treatment and distribution;

- Chemistry at a basic level;
- Mathematics at an intermediate level;
- English usage, spelling, grammar, and punctuation;
- Appropriate safety precautions and procedures;
- Basic public relations and telephone etiquette.

Ability to:

- Enforce water quality requirements with tact, diplomacy, and firmness;
- Read, understand, and be able to perform technical functions;
- Make accurate mathematical calculations;
- Operate a vehicle observing legal and defensive driving practices;
- Understand and carry out oral and written instructions;
- Give directions to subordinate water quality control employees in a manner which promotes employee productivity, job satisfaction, and motivation to carry out job tasks at a level of quality and performance acceptable to the Department;
- Establish and maintain effective relationships with those contacted in the course of work;
- Write legibly;
- Maintain filing system;
- Lift and transport water quality and backflow prevention equipment and materials;
- Routinely enter subsurface water works structures to collect water quality samples;
- Work under moderate or high stress conditions;
- Maintain a driving record that meets vehicle code standards and is acceptable to the Department and its insurance carrier;
- Operate an atmospheric tester for entry into confined spaces;
- Operate a computer and common office equipment/software; and
- Work overtime as needed.

MINIMUM QUALIFICATIONS

An employee within this classification may be designated as a “key responder” and as such shall be required to respond to non-normal working hour emergency operational conditions.

Education: Graduation from high school or GED/equivalent.

And

Experience: 4 years of experience in water quality control and/or backflow prevention testing

And

Certificates: Must have and maintain a valid California State Water Resources Control Board, (SWRCB) Water Treatment Operator Grade 2 certificate and a valid California SWRCB Water Distribution Operator Grade 2 certificate. Must submit copies of the required SWRCB Water Treatment Operator Grade 2 certification and SWRCB Water Distribution Operator Grade 2 certification at the time of application.

And

~~Must obtain and maintain a valid San Bernardino County Department of Environmental Health Services Certified Backflow Prevention Device Tester certificate within twelve (12) months of appointment.~~

Must obtain an American Water Works Association (AWWA) Backflow Prevention Assembly Tester certification and AWWA Cross Connection Control Specialist certification within 12 months of appointment.

Obtaining and maintaining required certification(s) is a condition of employment. Failure to obtain and maintain any required certification(s) noted within the stipulated timeframes shall be considered grounds for termination. Obtaining and maintaining certification(s) is the sole responsibility of the employee.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid California Class "C" driver's license required upon application. Note: For out-of-state applicants, a valid driver's license is required and a valid California Class "C" driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

Work involves exposure to potential physical harm, hazardous chemicals, and infectious disease. There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Incumbents require sufficient mobility to work in the field of varying weather conditions, lift up to 75 pounds in normal duties, and work under moderate to high stress conditions. Must be able to see in the normal visual range with or without correction. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Water Quality Lead Worker

To: Water Quality Control Officer

Job Description:

BOWC Approved:

11/5/1974

Rev. Approved:

3/19/1985

	<u>6/14/1994</u>
	<u>12/4/2001</u>
	<u>12/05/2006</u>
Title Chg from Tech to Lead Worker	<u>9/25/2018</u>
	<u>9/24/2019</u>
Title chg from WU WQ Control Lead Worker	<u>6/22/2021</u>
Rev. Approved:	<u>6/25/2024</u>

Testing Standards: App Review/Supp App Review

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER QUALITY LEAD WORKER

DATE: 07/01/2025

JOB CODE: 1250

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GENERAL

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under the general supervision of the Water Quality Control Officer, to maintain a water quality control program that complies with water quality monitoring standards as established by the Water Department, the State of California Water Resources Control Board (SWRCB), Division of Drinking Water, and the United States Environmental Protection Agency; monitor water quality throughout the Department's water production and distribution system; review and monitor all water quality laboratory data; maintain all water quality laboratory test information; complete all required water quality reports; administer the Department's backflow prevention device testing program; monitor water levels throughout the ground water aquifer; troubleshoot and calibrate water level transducers; Monitor and maintain the geothermal system; and perform other related duties as assigned.

DISTINGUISHING CHARACTERISTICS

The class of Water Quality Lead Worker is a specialized position in the water utility field. This classification directs the daily activities of the Water Quality Control Section. Supervision is received from the Water Quality Control Officer. Lead supervision is exercised over the Water Quality Control Section staff.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the public, City and Department staff, and representatives of various regulatory agencies encountered throughout the performance of water quality control and cross connection control job duties;
- Plan and direct the collection of routine and special bacteriological, general physical, radiological, and chemical water quality samples;
- Plan and direct EPA Superfund sampling and reporting;
- Monitor new pipeline construction and repair and chlorination projects and coordinate with contractors regarding sampling issues and procedures;
- Perform transducer troubleshooting and calibration;

- Monitor water treatment and geothermal waste discharge to assure compliance with regulatory guidelines;
- Monitor departmental backflow prevention cross connection control program;
- Inspect customers' premises for cross connections to determine appropriate backflow prevention device requirements;
- Investigate and respond to customer water quality complaints;
- Monitor backflow acceptance tests subsequent to their installation;
- Prepare cross connections control work orders and correction notices;
- Order parts and supplies;
- Communicate water quality information with SWRCB Officials;
- Operate Department vehicles;
- Calculate, tabulate, and prepare reports;
- Make routine mathematical calculations;
- Maintain time and material records;
- Oversee the Department's flushing program;
- Assign and perform fire flow testing as required;
- Perform, or contract out, preventive maintenance on well sites and distribution system, including motors, valves, piping, and related hardware;
- Oversee and perform EPA Superfund sampling and reporting;
- Oversee and perform fire flow testing to determine fire protection needs for current and new development;
- Maintain contact with Supervisor, Lead worker, and office staff via phone, text, and e-mail;
- Assist in the training of new Water Quality Control Workers;
- Ensure assigned Department vehicles are routinely inspected for proper maintenance and safety;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Perform related work as required.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Principles of water treatment and distribution;

- Chemistry at a basic level;
- Mathematics at an intermediate level;
- English usage, spelling, grammar, and punctuation;
- Appropriate safety precautions and procedures;
- Basic public relations and telephone etiquette.

Ability to:

- Enforce water quality requirements with tact, diplomacy, and firmness;
- Read, understand, and be able to perform technical functions;
- Make accurate mathematical calculations;
- Operate a vehicle observing legal and defensive driving practices;
- Understand and carry out oral and written instructions;
- Give directions to subordinate water quality control employees in a manner which promotes employee productivity, job satisfaction, and motivation to carry out job tasks at a level of quality and performance acceptable to the Department;
- Establish and maintain effective relationships with those contacted in the course of work;
- Write legibly;
- Maintain filing system;
- Lift and transport water quality and backflow prevention equipment and materials;
- Routinely enter subsurface water works structures to collect water quality samples;
- Work under moderate or high stress conditions;
- Maintain a driving record that meets vehicle code standards and is acceptable to the Department and its insurance carrier;
- Operate an atmospheric tester for entry into confined spaces;
- Operate a computer and common office equipment/software; and
- Work overtime as needed.

MINIMUM QUALIFICATIONS

An employee within this classification may be designated as a “key responder” and as such shall be required to respond to non-normal working hour emergency operational conditions.

Education: Graduation from high school or GED/equivalent.

And

Experience: 4 years of experience in water quality control and/or backflow prevention testing

And

Certificates: Must have and maintain a valid California State Water Resources Control Board, (SWRCB) Water Treatment Operator Grade 2 certificate and a valid California SWRCB Water Distribution Operator Grade 2 certificate. Must submit copies of the required SWRCB Water Treatment Operator Grade 2 certification and SWRCB Water Distribution Operator Grade 2 certification at the time of application.

And

Must obtain an American Water Works Association (AWWA) Backflow Prevention Assembly Tester certification and AWWA Cross Connection Control Specialist certification within 12 months of appointment.

Obtaining and maintaining required certification(s) is a condition of employment. Failure to obtain and maintain any required certification(s) noted within the stipulated timeframes shall be considered grounds for termination. Obtaining and maintaining certification(s) is the sole responsibility of the employee.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid California Class "C" driver's license required upon application. Note: For out-of-state applicants, a valid driver's license is required and a valid California Class "C" driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

Work involves exposure to potential physical harm, hazardous chemicals, and infectious disease. There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Incumbents require sufficient mobility to work in the field of varying weather conditions, lift up to 75 pounds in normal duties, and work under moderate to high stress conditions. Must be able to see in the normal visual range with or without correction. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Water Quality Lead Worker

To: Water Quality Control Officer

Job Description:

BOWC Approved:

Rev. Approved:

11/5/1974

3/19/1985

6/14/1994

12/4/2001

12/05/2006

9/25/2018

Title Chg from Tech to Lead Worker

Title chg from WU WQ Control Lead Worker 9/24/2019
Rev. Approved: 6/22/2021
6/25/2024

Testing Standards: App Review/Supp App Review

DRAFT

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER QUALITY CONTROL OFFICER

DATE: ~~07/01/2024~~07/01/2025

JOB CODE: 2160

FLSA STATUS: EXEMPT

UNIT REPRESENTATION: MID-MGMT

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under the general direction of the Director of Environmental and Regulatory Compliance, assist in establishing and implementing water quality standards, procedures, and controls to ensure effective water sample collection and testing, treatment, and compliance with all local, regional, state, and federal regulations, laws, and programs; track, monitor, and brief Department Management on the status, content, and impacts of pending local, regional, state, and federal water quality and environmental regulations; plan, implement, direct, organize, and administer the Department's backflow/cross connection program.

DISTINGUISHING CHARACTERISTICS

The Water Quality Control Officer is a member of the supervisory class in the Environmental and Regulatory Compliance Division's supervisory series. Supervision is received from the Director of Environmental and Regulatory Compliance (ERC), and supervision is exercised over the Water Quality Control section staff and at the discretion of the Director of ERC, supervision may be exercised over other ERC Division personnel.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City and Department staff;
- Oversee daily operations of water quality and backflow operations;
- Administer the Department's distribution/fire hydrant flushing program and fire flow testing;
- Supervise water quality and Department personnel as assigned and monitor section budget;
- Perform complex tasks to implement, maintain and comply with all water quality and environmental regulations and programs within the district or region;

- Analyze reports and recommend programs to maintain full compliance with applicable requirements in water quality;
- Prepare management reports summarizing water quality assurance activities; maintain water quality databases;
- Oversee EPA Superfund sampling and reporting;
- Oversee operation and monitoring of the Geothermal system;
- Contract with appropriate laboratories for water quality analyses;
- Initiate corrective action for procedural, product, or process deficiencies;
- Participate in DOHS field inspections and may act as company representative with DOHS and EPA as required;
- Supervise water quality personnel and other support staff as assigned; operate two-way radio;
- Interpret construction drawings; perform water quality customer service calls, troubleshoot water quality problems, and communicate verbally and in writing with customers regarding their water quality concerns;
- Use a networked personal computer using MS Windows and MS Office software;
- Establish standards of performance for each position supervised;
- Process and resolve employee grievances;
- Conduct performance evaluations and disciplinary consultations;
- Explain policies, procedures, and objectives of the unit and Water Department to staff by written directive and oral communication; review and maintain timesheets, schedule vacations, monitor sick leave usage, arrange employee assignments to cover absences;
- Responsible for the section's goals and objectives;
- Responsible for the preparation and administration of the section's fiscal budget;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
-
- Required to wear respiratory protective equipment to include Self Contained Breathing Apparatus (SCBA); and
- Perform related work as required

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Principles of Basic supervision;

- Principles of water distribution systems;
- Principles of water treatment;
- Principles of backflow and cross connection control;
- Basic water chemistry;
- Terminology used in civil and water utility engineering;
- Knowledge of water utility construction and maintenance;
- Principles of traffic control safety;
- Trench excavation and shoring safety;
- Knowledge of plant/facility maintenance;
- Knowledge of water utility construction, maintenance, and operation safety precautions and procedures;
- Networked personal computers using MS Windows and MS Office Software;
- Basic public relations;
- Basic knowledge of budgeting and accounting principles;
- Basic mathematics.

Ability to:

- Communicate effectively with subordinates, peers, and superiors in oral and written English;
- Prepare oral and written reports;
- Train others in the daily technical and administrative support activities of the Water Quality section;
- Proficiently use networked personal computers using MS Windows and MS Office software;
- Work from construction plans, drawings, sketches, and specifications;
- Plan and schedule water quality/backflow assignments;
- Make arithmetic calculations with speed and accuracy;
- Interpret and apply Water Department policy;
- Understand and carry out complicated oral and written instructions;
- Establish and maintain effective relationships with those contacted in the course of work;
- Be physically capable of entering permit required confined spaces and wearing Self Contained Breathing Apparatus (SCBA) equipment;
- Operate an atmospheric tester for entry into confined spaces;
- Wear protective respiratory equipment to include SCBA and personal escape respirator.

MINIMUM QUALIFICATIONS

An employee within this classification may be designated as a “key responder” and as such shall be required to respond to non-normal working hour emergency operational conditions.

Education: Successful completion of an accredited 2-year or 4-year college degree in science, engineering, environmental science, or chemistry,

Or

Experience: Equivalent work experience which would have provided the required journeyman level of knowledge, skill, and abilities involving complex work in the area of water quality/environmental engineering, regulations, and water supply operations; supervisory or leadership experience preferred.

And

Certificates: Must obtain and maintain a California State Water Resources Control Board (SWRCB) Water Treatment Operator Grade 3 certificate and a California State Water Resources Control Board (SWRCB) Water Distribution Operator Grade 3 certificate within 36 months of employment; ~~must obtain and maintain a valid San Bernardino County Department of Environmental Health Services Certified Backflow Prevention Device Tester certificate within 18 months of employment.~~

And

Must obtain an American Water Works Association (AWWA) Backflow Prevention Assembly Tester certification and AWWA Cross Connection Control Specialist certification within twelve (12) months of appointment.

Obtaining and maintaining required certification (s) is a condition of employment. Failure to obtain and maintain any required certification(s) noted within the stipulated timeframes shall be considered grounds for termination. Obtaining and maintaining certification(s) is the sole responsibility of the employee.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid California Class “C” driver’s license required upon application. Note: For out-of-state applicants, a valid driver’s license is required and a valid California Class “C” driver’s license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

Must be clean shaven or trimmed facial hair in order to properly use personal respirators and SCBA equipment. Must pass a respirator medical exam and be physically able to wear SCBA equipment. Must be able to work in enclosed spaces while wearing protective clothing under extreme temperatures and hazardous environment.

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

Work involves exposure to potential physical harm, hazardous chemicals, and infectious disease. There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Incumbents require sufficient mobility to work in the field of varying weather conditions, lift up to 75 pounds in normal duties, and work under moderate to high stress conditions. Must be able to see in the

normal visual range with or without correction. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Job Description:

BOWC Approved:	<u>7/3/2001</u>
Rev w/title chg from WU WQ Supv:	<u>10/12/2004</u>
Rev Approved:	<u>12/05/2006</u>
Rev w/title chg from WU WQ Control Officer	<u>6/22/2021</u>
Rev. Approved:	<u>6/25/2024</u>

Testing Standards: App Review/Supp App Review

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: WATER QUALITY CONTROL OFFICER

DATE: 07/01/2025

JOB CODE: 2160

FLSA STATUS: EXEMPT

UNIT REPRESENTATION: MID-MGMT

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under the general direction of the Director of Environmental and Regulatory Compliance, assist in establishing and implementing water quality standards, procedures, and controls to ensure effective water sample collection and testing, treatment, and compliance with all local, regional, state, and federal regulations, laws, and programs; track, monitor, and brief Department Management on the status, content, and impacts of pending local, regional, state, and federal water quality and environmental regulations; plan, implement, direct, organize, and administer the Department's backflow/cross connection program.

DISTINGUISHING CHARACTERISTICS

The Water Quality Control Officer is a member of the supervisory class in the Environmental and Regulatory Compliance Division's supervisory series. Supervision is received from the Director of Environmental and Regulatory Compliance (ERC), and supervision is exercised over the Water Quality Control section staff and at the discretion of the Director of ERC, supervision may be exercised over other ERC Division personnel.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here:

- Provide courteous and expeditious customer service to the general public and City and Department staff;
- Oversee daily operations of water quality and backflow operations;
- Administer the Department's distribution/fire hydrant flushing program and fire flow testing;
- Supervise water quality and Department personnel as assigned and monitor section budget;
- Perform complex tasks to implement, maintain and comply with all water quality and environmental regulations and programs within the district or region;
- Analyze reports and recommend programs to maintain full compliance with applicable requirements in water quality;

- Prepare management reports summarizing water quality assurance activities; maintain water quality databases;
- Oversee EPA Superfund sampling and reporting;
- Oversee operation and monitoring of the Geothermal system;
- Contract with appropriate laboratories for water quality analyses;
- Initiate corrective action for procedural, product, or process deficiencies;
- Participate in DOHS field inspections and may act as company representative with DOHS and EPA as required;
- Supervise water quality personnel and other support staff as assigned; operate two-way radio;
- Interpret construction drawings; perform water quality customer service calls, troubleshoot water quality problems, and communicate verbally and in writing with customers regarding their water quality concerns;
- Use a networked personal computer using MS Windows and MS Office software;
- Establish standards of performance for each position supervised;
- Process and resolve employee grievances;
- Conduct performance evaluations and disciplinary consultations;
- Explain policies, procedures, and objectives of the unit and Water Department to staff by written directive and oral communication; review and maintain timesheets, schedule vacations, monitor sick leave usage, arrange employee assignments to cover absences;
- Responsible for the section's goals and objectives;
- Responsible for the preparation and administration of the section's fiscal budget;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
-
- Required to wear respiratory protective equipment to include Self Contained Breathing Apparatus (SCBA); and
- Perform related work as required

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- Principles of Basic supervision;
- Principles of water distribution systems;
- Principles of water treatment;

- Principles of backflow and cross connection control;
- Basic water chemistry;
- Terminology used in civil and water utility engineering;
- Knowledge of water utility construction and maintenance;
- Principles of traffic control safety;
- Trench excavation and shoring safety;
- Knowledge of plant/facility maintenance;
- Knowledge of water utility construction, maintenance, and operation safety precautions and procedures;
- Networked personal computers using MS Windows and MS Office Software;
- Basic public relations;
- Basic knowledge of budgeting and accounting principles;
- Basic mathematics.

Ability to:

- Communicate effectively with subordinates, peers, and superiors in oral and written English;
- Prepare oral and written reports;
- Train others in the daily technical and administrative support activities of the Water Quality section;
- Proficiently use networked personal computers using MS Windows and MS Office software;
- Work from construction plans, drawings, sketches, and specifications;
- Plan and schedule water quality/backflow assignments;
- Make arithmetic calculations with speed and accuracy;
- Interpret and apply Water Department policy;
- Understand and carry out complicated oral and written instructions;
- Establish and maintain effective relationships with those contacted in the course of work;
- Be physically capable of entering permit required confined spaces and wearing Self Contained Breathing Apparatus (SCBA) equipment;
- Operate an atmospheric tester for entry into confined spaces;
- Wear protective respiratory equipment to include SCBA and personal escape respirator.

MINIMUM QUALIFICATIONS

An employee within this classification may be designated as a “key responder” and as such shall be required to respond to non-normal working hour emergency operational conditions.

Education: Successful completion of an accredited 2-year or 4-year college degree in science, engineering, environmental science, or chemistry,

Or

Experience: Equivalent work experience which would have provided the required journeyman level of knowledge, skill, and abilities involving complex work in the area of water quality/environmental engineering, regulations, and water supply operations; supervisory or leadership experience preferred.

And

Certificates: Must obtain and maintain a California State Water Resources Control Board (SWRCB) Water Treatment Operator Grade 3 certificate and a California State Water Resources Control Board (SWRCB) Water Distribution Operator Grade 3 certificate within 36 months of employment.

And

Must obtain an American Water Works Association (AWWA) Backflow Prevention Assembly Tester certification and AWWA Cross Connection Control Specialist certification within twelve (12) months of appointment.

Obtaining and maintaining required certification (s) is a condition of employment. Failure to obtain and maintain any required certification(s) noted within the stipulated timeframes shall be considered grounds for termination. Obtaining and maintaining certification(s) is the sole responsibility of the employee.

NECESSARY SPECIAL REQUIREMENTS

Possession of a valid California Class “C” driver’s license required upon application. Note: For out-of-state applicants, a valid driver’s license is required and a valid California Class “C” driver’s license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

Must be clean shaven or trimmed facial hair in order to properly use personal respirators and SCBA equipment. Must pass a respirator medical exam and be physically able to wear SCBA equipment. Must be able to work in enclosed spaces while wearing protective clothing under extreme temperatures and hazardous environment.

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

Work involves exposure to potential physical harm, hazardous chemicals, and infectious disease. There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Incumbents require sufficient mobility to work in the field of varying weather conditions, lift up to 75 pounds in normal duties, and work under moderate to high stress conditions. Must be able to see in the normal visual range with or without correction. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

Job Description:

BOWC Approved:
Rev w/title chg from WU WQ Supv:
Rev Approved:
Rev w/title chg from WU WQ Control Officer
Rev. Approved:

7/3/2001
10/12/2004
12/05/2006
6/22/2021
6/25/2024

Testing Standards: App Review/Supp App Review

DRAFT

San Bernardino Municipal Water Department (SBMWD)
Salary Schedule

Position Title	Grade	Unit	Monthly Minimum	Monthly Maximum
ACCOUNTANT I	146	GENERAL/IBEW	6,047	7,741
ACCOUNTANT II	150	GENERAL/IBEW	6,675	8,544
ACCOUNTING TECHNICIAN I	135	GENERAL/IBEW	4,609	5,900
ACCOUNTING TECHNICIAN II	139	GENERAL/IBEW	5,087	6,512
ADMINISTRATIVE ASSISTANT	140	GENERAL/IBEW	5,214	6,675
ADMINISTRATIVE COORDINATOR	300	CONFIDENTIAL	6,438	8,995
ADMINISTRATIVE SERVICES MANAGER	272	MID-MANAGEMENT	12,287	15,681
BILINGUAL CUSTOMER SERVICE REPRESENTATIVE I	133	GENERAL/IBEW	4,387	5,615
BILINGUAL CUSTOMER SERVICE REPRESENTATIVE II	137	GENERAL/IBEW	4,842	6,198
BILLING AND COLLECTION SUPERVISOR	254	MID-MANAGEMENT	7,878	10,054
BUYER	148	GENERAL/IBEW	6,353	8,133
COLLECTIONS SYSTEM LEAD WORKER	148	GENERAL/IBEW	6,353	8,133
COLLECTIONS SYSTEM SUPERINTENDENT	270	MID-MANAGEMENT	11,695	14,926
COLLECTIONS SYSTEM SUPERVISOR	257	MID-MANAGEMENT	8,484	10,827
COLLECTIONS SYSTEM SUPPORT WORKER	134	GENERAL/IBEW	4,496	5,756
COLLECTIONS SYSTEM WORKER I	140	GENERAL/IBEW	5,214	6,675
COLLECTIONS SYSTEM WORKER II	144	GENERAL/IBEW	5,756	7,368
CONSTRUCTION PROJECT MANAGER	265	MID-MANAGEMENT	10,336	13,192
CONSTRUCTION SERVICES MANAGER	268	MID-MANAGEMENT	11,131	14,207
CONTRACTS ADMINISTRATOR	264	MID-MANAGEMENT	10,084	12,870
CONTROL SYSTEMS AND COMMUNICATION SUPERVISOR	268	MID-MANAGEMENT	11,131	14,207
CONTROL SYSTEMS AND COMMUNICATION TECHNICIAN	157	GENERAL/IBEW	7,934	10,157
CUSTOMER SERVICE LEAD REPRESENTATIVE	141	GENERAL/IBEW	5,345	6,842
CUSTOMER SERVICE REPRESENTATIVE I	133	GENERAL/IBEW	4,387	5,615
CUSTOMER SERVICE REPRESENTATIVE II	137	GENERAL/IBEW	4,842	6,198
CUSTOMER SERVICE SUPERVISOR	258	MID-MANAGEMENT	8,696	11,098
DEPUTY GENERAL MANAGER	402	EXECUTIVE	14,709	20,885
DEVELOPMENT SERVICES MANAGER	266	MID-MANAGEMENT	10,595	13,522
DIRECTOR OF ENVIRONMENTAL AND REGULATORY COMPLIANCE	400	EXECUTIVE	14,000	19,879
DIRECTOR OF FINANCE	400	EXECUTIVE	14,000	19,879
DIRECTOR OF WATER RECLAMATION	400	EXECUTIVE	14,000	19,879
DIRECTOR OF WATER UTILITY	400	EXECUTIVE	14,000	19,879
ELECTRICAL AND INSTRUMENTATION LEAD WORKER	161	GENERAL/IBEW	8,758	11,211
ELECTRICAL AND INSTRUMENTATION SUPERVISOR	268	MID-MANAGEMENT	11,131	14,207
ELECTRICAL AND INSTRUMENTATION TECHNICIAN	153	GENERAL/IBEW	7,188	9,201
ELECTRICAL REPAIR WORKER	139	GENERAL/IBEW	5,087	6,512
ELECTRICAL SERVICES SUPERINTENDENT	274	MID-MANAGEMENT	12,909	16,475
ENGINEER	265	MID-MANAGEMENT	10,336	13,192
ENGINEERING ASSOCIATE	162	GENERAL/IBEW	8,977	11,491
ENGINEERING MANAGER	277	MID-MANAGEMENT	13,901	17,742
ENGINEERING TECHNICIAN	152	GENERAL/IBEW	7,013	8,977
ENTERPRISE GIS MANAGER	265	MID-MANAGEMENT	10,336	13,192
ENVIRONMENTAL ANALYST	159	GENERAL/IBEW	8,336	10,671
ENVIRONMENTAL COMPLIANCE INSPECTOR	144	GENERAL/IBEW	5,756	7,368

San Bernardino Municipal Water Department (SBMWD)
Salary Schedule

Position Title	Grade	Unit	Monthly Minimum	Monthly Maximum
ENVIRONMENTAL COMPLIANCE LEAD INSPECTOR	153	GENERAL/IBEW	7,188	9,201
ENVIRONMENTAL CONTROL SUPERVISOR	263	MID-MANAGEMENT	9,838	12,556
ENVIRONMENTAL MANAGER	273	MID-MANAGEMENT	12,594	16,073
EQUIPMENT MECHANIC I	136	GENERAL/IBEW	4,724	6,047
EQUIPMENT MECHANIC II	140	GENERAL/IBEW	5,214	6,675
EQUIPMENT MECHANIC LEAD WORKER	148	GENERAL/IBEW	6,353	8,133
EXECUTIVE ASSISTANT TO THE GENERAL MANAGER	311	CONFIDENTIAL	8,447	11,804
FIELD AND METER SERVICES LEAD WORKER	147	GENERAL/IBEW	6,198	7,934
FIELD AND METER SERVICES REPRESENTATIVE I	137	GENERAL/IBEW	4,842	6,198
FIELD AND METER SERVICES REPRESENTATIVE II	141	GENERAL/IBEW	5,345	6,842
FIELD AND METER SERVICES SUPERVISOR	258	MID-MANAGEMENT	8,696	11,098
FINANCE MANAGER	272	MID-MANAGEMENT	12,287	15,681
FLEET SUPERVISOR	260	MID-MANAGEMENT	9,136	11,660
GENERAL MANAGER	CON	CONTRACT	28,325	28,325
GIS/DATABASE ANALYST	159	GENERAL/IBEW	8,336	10,671
GIS/DATABASE TECHNICIAN	150	GENERAL/IBEW	6,675	8,544
HUMAN RESOURCES ANALYST	252	MID-MANAGEMENT	7,498	9,570
HUMAN RESOURCES MANAGER	322	CONFIDENTIAL	11,083	15,488
HUMAN RESOURCES SPECIALIST	144	GENERAL/IBEW	5,756	7,368
INFORMATION SECURITY ANALYST	262	MID-MANAGEMENT	9,598	12,250
INFORMATION TECHNOLOGY MANAGER	272	MID-MANAGEMENT	12,287	15,681
INFORMATION TECHNOLOGY SPECIALIST	150	GENERAL/IBEW	6,675	8,544
LEAD CONTROL SYSTEMS AND COMMUNICATION TECHNICIAN	163	GENERAL/IBEW	9,201	11,779
NETWORK AND SYSTEMS ADMINISTRATOR	258	MID-MANAGEMENT	8,696	11,098
OFFICE ASSISTANT	128	GENERAL/IBEW	3,877	4,963
PAINTER	143	GENERAL/IBEW	5,615	7,188
PAYROLL SPECIALIST	147	GENERAL/IBEW	6,198	7,934
PRINCIPAL ENGINEER	270	MID-MANAGEMENT	11,695	14,926
PURCHASING MANAGER	268	MID-MANAGEMENT	11,131	14,207
RISK MANAGEMENT ANALYST	254	MID-MANAGEMENT	7,878	10,054
RIX MECHANICAL/MAINTENANCE SUPERVISOR	258	MID-MANAGEMENT	8,696	11,098
SAFETY COORDINATOR	254	MID-MANAGEMENT	7,878	10,054
SAFETY MANAGER	270	MID-MANAGEMENT	11,695	14,926
SAFETY SPECIALIST	149	GENERAL/IBEW	6,512	8,336
SENIOR ACCOUNTANT	258	MID-MANAGEMENT	8,696	11,098
SENIOR ACCOUNTING TECHNICIAN	143	GENERAL/IBEW	5,615	7,188
SENIOR BUSINESS SYSTEMS ANALYST	258	MID-MANAGEMENT	8,696	11,098
SENIOR CONTROL SYSTEMS AND COMMUNICATION TECHNICIAN	160	GENERAL/IBEW	8,544	10,938
SENIOR ELECTRICAL AND INSTRUMENTATION TECHNICIAN	157	GENERAL/IBEW	7,934	10,157
SENIOR ENGINEERING TECHNICIAN	156	GENERAL/IBEW	7,741	9,909
SENIOR INFORMATION TECHNOLOGY SPECIALIST	154	GENERAL/IBEW	7,368	9,431
SENIOR NETWORK AND SYSTEMS ADMINISTRATOR	262	MID-MANAGEMENT	9,598	12,250
SENIOR OFFICE ASSISTANT	136	GENERAL/IBEW	4,724	6,047
SENIOR PROGRAMMING ANALYST	262	MID-MANAGEMENT	9,598	12,250
WAREHOUSE LEAD WORKER	146	GENERAL/IBEW	6,047	7,741

San Bernardino Municipal Water Department (SBMWD)
Salary Schedule

Position Title	Grade	Unit	Monthly Minimum	Monthly Maximum
WAREHOUSE WORKER	133	GENERAL/IBEW	4,387	5,615
WATER AND WATER RECLAMATION WORKER	130	GENERAL/IBEW	4,073	5,214
WATER CONSERVATION/PUBLIC AFFAIRS MANAGER	259	MID-MANAGEMENT	8,913	11,376
WATER CONSERVATION/PUBLIC AFFAIRS SPECIALIST	146	MID-MANAGEMENT	6,047	7,741
WATER QUALITY CONTROL OFFICER	267	MID-MANAGEMENT	10,860	13,860
WATER QUALITY LEAD WORKER	157	GENERAL/IBEW	7,934	10,157
WATER QUALITY SPECIALIST	158	GENERAL/IBEW	8,133	10,410
WATER QUALITY WORKER I	145	GENERAL/IBEW	5,900	7,552
WATER QUALITY WORKER II	149	GENERAL/IBEW	6,512	8,336
WATER RECLAMATION FACILITIES MAINTENANCE LEADPERSON	147	GENERAL/IBEW	6,198	7,934
WATER RECLAMATION FACILITIES MAINTENANCE SUPERVISOR	256	MID-MANAGEMENT	8,277	10,563
WATER RECLAMATION LEAD MECHANIC	158	GENERAL/IBEW	8,133	10,410
WATER RECLAMATION LEAD OPERATOR	161	GENERAL/IBEW	8,758	11,211
WATER RECLAMATION MAINTENANCE PLANNER	156	GENERAL/IBEW	7,741	9,909
WATER RECLAMATION MAINTENANCE SUPERINTENDENT	271	MID-MANAGEMENT	11,987	15,299
WATER RECLAMATION MAINTENANCE SUPERVISOR	262	MID-MANAGEMENT	9,598	12,250
WATER RECLAMATION MECHANIC I	146	GENERAL/IBEW	6,047	7,741
WATER RECLAMATION MECHANIC II	150	GENERAL/IBEW	6,675	8,544
WATER RECLAMATION MECHANIC III	154	GENERAL/IBEW	7,368	9,431
WATER RECLAMATION OPERATIONS MANAGER - FLEX	274	MID-MANAGEMENT	12,909	16,475
WATER RECLAMATION OPERATIONS SUPERINTENDENT	276	MID-MANAGEMENT	13,562	17,309
WATER RECLAMATION OPERATOR	145	GENERAL/IBEW	5,900	7,552
WATER RECLAMATION PLANT SUPERVISOR	266	MID-MANAGEMENT	10,595	13,522
WATER RECLAMATION PROCESS CONTROL SUPERVISOR	261	MID-MANAGEMENT	9,364	11,951
WATER RECLAMATION RIX SUPERVISOR	264	MID-MANAGEMENT	10,084	12,870
WATER RECLAMATION SENIOR OPERATOR	159	GENERAL/IBEW	8,336	10,671
WATER RECLAMATION TRAINEE	130	GENERAL/IBEW	4,073	5,214
WATER TREATMENT LEAD WORKER	158	GENERAL/IBEW	8,133	10,410
WATER TREATMENT OPERATOR I	145	GENERAL/IBEW	5,900	7,552
WATER TREATMENT OPERATOR II	149	GENERAL/IBEW	6,512	8,336
WATER TREATMENT SUPERVISOR	260	MID-MANAGEMENT	9,136	11,660
WATER UTILITY DISTRIBUTION SUPERINTENDENT	271	MID-MANAGEMENT	11,987	15,299
WATER UTILITY LEAD WORKER	152	GENERAL/IBEW	7,013	8,977
WATER UTILITY OPERATIONS SUPERINTENDENT	271	MID-MANAGEMENT	11,987	15,299
WATER UTILITY SUPERVISOR	260	MID-MANAGEMENT	9,136	11,660
WATER UTILITY WORKER I	139	GENERAL/IBEW	5,087	6,512
WATER UTILITY WORKER II	143	GENERAL/IBEW	5,615	7,188
WATER UTILITY WORKER III	147	GENERAL/IBEW	6,198	7,934
WELDER I	148	GENERAL/IBEW	6,353	8,133
WELDER II	152	GENERAL/IBEW	7,013	8,977

Part-Time

Position Title	Grade	Grade Description	Minimum Hourly	Maximum Hourly
P/T BILINGUAL CUSTOMER SERVICE REPRESENTATIVE	933	REGULAR PART-TIME	25.31	32.40

San Bernardino Municipal Water Department (SBMWD)
Salary Schedule

Position Title	Grade	Unit	Monthly Minimum	Monthly Maximum
P/T CUSTOMER SERVICE REPRESENTATIVE I	933	REGULAR PART-TIME	25.31	32.40
P/T OFFICE ASSISTANT	928	REGULAR PART-TIME	22.37	28.63
P/T ADMINISTRATIVE ASSISTANT	940	REGULAR PART-TIME	30.08	38.51
ENGINEERING INTERN	102	TEMP PART-TIME	20.00	20.00
STUDENT INTERN	100	TEMP PART-TIME	18.00	18.00

BOWC Approved:

Effective:7/1/2025

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

Received 06-16-25
SBMWD AS
General Manager

**WATER BOARD
STAFF REPORT**

TO: Miguel J. Guerrero, P.E., General Manager 
FROM: Jennifer L. Shepardson, Director of Environmental & Regulatory Compliance
SUBJECT: **PUBLIC HEARING TO RECEIVE COMMENTS ON THE
DEPARTMENTS 2025 WATER QUALITY RELATIVE TO PUBLIC
HEALTH GOALS REPORT IN COMPLIANCE WITH SECTION 11670
OF THE HEALTH AND SAFETY CODE**
DATE: June 13, 2025
CC: Steve Miller, Daniel Marquez & Jose Machuca

BACKGROUND:

California Health and Safety Code, Section 116470 (2)(B) mandates the preparation of a report that is intended to inform the public concerning any drinking water Public Health Goals (PHG) exceedances that occur and specifies that a public hearing be held for the purpose of “accepting and responding” to public comment.

PHGs are non-enforceable goals established by the California Environmental Protection Agency’s (CAL-EPA) Office of Environmental Health Hazard Assessment (OEHHA). As indicated in the attached “*Report on Water Quality Relative to Public Health Goals*”, the domestic drinking water served to the City of San Bernardino residents by the Department meets state and federal drinking water standards set to protect public health.

Copies of the Department’s 2025 Report on Water Quality Relative to Public Health Goals and supporting laboratory test results associated with this Report are available to the public at the following location:

Water Department’s Customer Service Office

located at 1350 South E Street

Monday through Thursday, 8:00 a.m. to 5:00 p.m.,
and Friday 8:00 a.m. to 4:30 p.m., and

The report indicates what PHGs were exceeded in 2022-2024, what health risks are associated with the exceedances, and what the cost of the best treatment technology available would be based on each detected constituent and its location.

**SUBJECT: PUBLIC HEARING TO RECEIVE COMMENTS ON THE
DEPARTMENTS 2025 WATER QUALITY RELATIVE TO PUBLIC
HEALTH GOALS REPORT IN COMPLIANCE WITH SECTION 11670
OF THE HEALTH AND SAFETY CODE**

GOALS AND OBJECTIVES:

This request for a Hearing aligns with the Department's Strategic Plan under Target #3 – Customer Service/Public Relations, Goal #8: Meet and exceed internal and external customer expectations including responsiveness and timeliness. This Hearing supports the specific actions to develop an information campaign highlighting 120 years of trusted service to the San Bernardino community.

FISCAL IMPACT:

Costs associated with the monitoring and development of the PHGs are included in the annual laboratory monitoring budget since the constituents reviewed are all included in the Department's established routine monitoring requirements. The laboratory monitoring budgets for the years associated with this report are as follows: FY 22/23: \$500,000; FY 23/24: \$600,000 and FY24/25: \$600,000.

RECOMMENDATION:

It is recommended that the Water Board make the following motion:

- Open the Public Hearing and, subsequent to receiving and responding to any comments on the Public Health Goals concerning the City's water system, that the hearing be closed and the staff report accepted with no action at this time.

Respectfully submitted,

Jennifer L. Shepardson

Jennifer L. Shepardson
Director of Environmental of Environmental & Regulatory Compliance

Attachments: Report on Water Quality Relative to Public Health Goals

**CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

**REPORT ON
WATER QUALITY RELATIVE TO PUBLIC HEALTH GOALS**



**REPORT PREPARED BY
CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT**

JULY 1, 2025

Report Prepared Under Supervision:

**Jennifer Shepardson
Director, Environmental & Regulatory Compliance**

EXECUTIVE SUMMARY:

The City of San Bernardino Municipal Water Department (SBMWD) meets or exceeds all United States Environmental Protection Agency (USEPA) and State Water Resources Control Board, Division of Drinking Water (SWRCB) standards for drinking water delivered through its distribution system. These two regulatory agencies govern the water quality of public drinking water systems. For the purposes of this report, the quantity of contaminants in drinking water fall into two categories: one category involves “Maximum Contaminant Level” (MCL), which is the regulatory definition of what is considered “safe” and the criterion used to determine a water system’s compliance; the other is a “Public Health Goal” (PHG). Unlike an MCL that demands corrective procedures, a PHG is a non-enforceable drinking water quality goal set by the California Office of Environmental Health Hazard Assessment (OEHHA) and is not required to be met by any public water system. A Maximum Contaminant Level Goal (MCLG) is the federal equivalent to a state PHG.

This report emphasizes the following three important realities of drinking water safety:

1. SBMWD water is in full compliance with existing drinking water quality standards.
2. There can be significant costs per resident and technology limitations associated with water treatment to reduce constituents to meet PHG or MCLG levels.

No public water supply can meet all PHG and MCLG levels. SBMWD routinely monitors its water supplies for over 250 constituents and contaminants, of which 115 have enforceable standards. For calendar years 2022 through 2024, 10 of the 250 contaminants were detected above PHG or MCLG levels in the City’s water supply. All detections were at levels below enforceable drinking water standards except for nitrate as nitrogen found in Cajon 2 Well and Mt. Vernon Well and Perfluorooctanoic Acid (PFOA), found in 31st Street & Mt. View Well, Mallory Well No. 3 and Newmark 2 Well. Cajon 2 and Mt. Vernon Wells have been severed from SBMWD’s distribution system prior to 2021 and reported to the State Water Resources Control Board, Division of Drinking Water as inactive, so they do not contribute water to the drinking water system. PFOA is classified as a Per- and polyfluoroalkyl substance and per USEPA, public water systems have until April 10, 2029, to comply with the new PFAS MCLs. Therefore, SBMWD will need to develop an action plan to address the PFOA MCL exceedances detected in 31st Street & Mt. View Well, Mallory Well No. 3 and as well as the Newmark 2 Well prior to this deadline.

BACKGROUND:

Provisions of the California Health and Safety Code (Reference No. 1) specify that larger (>10,000 service connections) water utilities prepare a special report by July 1, 2025, if their water quality measurements have exceeded any PHGs. PHGs are non-enforceable goals established by the California Environmental Protection Agency’s (CAL-EPA)

Office of Environmental Health Hazard Assessment (OEHHA). The law also requires that where OEHHA has not adopted a PHG for a constituent, water suppliers are to use the MCLGs adopted by USEPA. Only constituents which have a California Primary Drinking Water Standard and for which either a PHG or MCLG has been set are to be addressed. Reference No. 2 is a OEHHA list of all regulated constituents with an MCL and PHG or MCLG.

There are a few constituents that are routinely detected in water systems at levels usually well below the drinking water standards for which no PHG or MCLG has been adopted by OEHHA or USEPA. These constituents will be addressed in a future report after a PHG or MCLG has been adopted.

If a constituent was detected in SBMWD's water supply in 2022, 2023 or 2024 at a level exceeding an applicable PHG or MCLG, this report provides the information required by law as follows:

- List of the constituents MCL, PHG or MCLG exceeded during the reporting period.
- The numerical public health risk associated with the MCL, PHG or MCLG.
- The category or type of risk to health that could be associated with each constituent.
- The best treatment technology available that could be used to reduce the constituent level.
- An estimate of the cost to install that treatment if it is appropriate and feasible.

WHAT ARE PHGs?

As noted, PHGs are set by the OEHHA, and are based solely on public health risk considerations. None of the practical risk management factors that are considered by the USEPA or the SWRCB in setting drinking water standards (MCL) are considered in setting PHGs. These factors include analytical detection capability, treatment technology available, benefits, and costs. The PHGs are not enforceable and are not required to be met by any public water system. MCLGs are the federal equivalent to PHGs.

WATER QUALITY DATA CONSIDERED:

All of the water quality data collected by the Department from 2022-2024, or the last sample taken during the previous three-year period, for purposes of determining compliance with drinking water standards, was considered. This data has also been summarized in SBMWD's 2022, 2023, and 2024 Annual Consumer Confidence Reports. The 2022 and 2023 Consumer Confidence Reports are included here as Reference No. 3. The Report for 2024 will be made available on the Water Department website when it is complete.

GUIDELINES FOLLOWED:

The Association of California Water Agencies (ACWA) formed a work group which prepared guidelines for water utilities to use in preparing the PHGs required reports. The ACWA guidelines were used in the preparation of previous triannual reports and the report format established in those guidelines was utilized for this report.

BEST AVAILABLE TECHNOLOGY AND COST ESTIMATES:

Both the USEPA and SWRCB adopt what are known as BATs, or Best Available Technologies, which are the best-known methods of reducing contaminant levels below MCLs. Costs can be estimated for such technologies. However, since many PHGs and all MCLGs are set much lower than the MCL, it is not always possible or feasible to determine what treatment is needed to further reduce a constituent to or near the PHG or MCLG, many of which are set at zero. Estimating the costs to reduce a constituent to zero is difficult, if not impossible, because it is not possible to verify by analytical means that the level has been lowered to zero. In some cases, installing treatment to try and further reduce very low levels of one constituent may have adverse effects on other aspects of water quality. In this report, treatment cost estimates for constituents detected above any PHG were estimated using U.S. EPA's Drinking Water Treatment Technology Unit Cost Models.

CONSTITUENTS DETECTED THAT EXCEED A PHG OR A MCLG:

The following is a discussion of the constituents that were detected in one or more of SBMWD's drinking water sources and distribution system at levels above the PHG, or, if no PHG exists, above the MCLG.

Arsenic

Arsenic is a naturally occurring metalloid element found in the earth's crust. It is widely distributed and commonly associated with ores of metals like copper, lead, and gold. Arsenic is present in all sources of water. It has generally been assumed that surface waters, including the sea are "self-purifying" with respect to arsenic, i.e., that the arsenic is removed from solution by deposition with sediments.

Arsenic has been detected at levels ranging from <2.0 ug/L to 8.4 ug/L in five groundwater wells supplying SBMWD's water system. The MCL for arsenic is 10.0 ug/L, while the PHG is 0.004 ug/L or 0.004 parts per billion (ppb). The levels detected in SBMWD wells were never above the MCL but are over the level identified by OEHHA as the PHG.

The numerical health risk for arsenic is 1×10^{-6} (1 per million). This is set at a level considered to pose no significant risk of cancer; this is usually a no more than one-in-a-million excess cancer risk level for a lifetime of exposure at the PHG. The category of

health risk associated from ingestion of arsenic is identified by OEHHA as carcinogenicity, capable of producing cancer.

The best available technology identified to lower arsenic is reverse osmosis (RO). The most effective treatment system would be to use RO at the 5 wells that exceed 0.004 ug/L PHG. The annualized capital and operation and maintenance costs for RO treatment at the 5 wells are estimated at \$10,533,292.06. The estimated cost per water service customer per year for this treatment is \$228.98. This is an estimate based on the expected annual production from the 5 wells. Expected production was estimated using the average production of the wells for 2022, 2023 and 2024. Because these wells are not centrally located and cannot produce into one treatment plant, the cost to construct and operate 5 individual RO plants could easily become far more expensive than the estimate above. Therefore, this cost estimate is not meant to be an in-depth analysis for the installation of this type of treatment.

Bromoform:

Bromoform is a type of trihalomethane (TTHMs) found in drinking water as a result of the disinfection processes. The treatment of drinking water is necessary to protect the public from microbial organisms. According to OEEHHA, more than 600 disinfection byproducts have been identified to date due to disinfection processes. Health risks due to exposure to these byproducts are minor in comparison to the risks of exposure to microbial contamination.

Bromoform has been detected at levels ranging from <0.5 ug/L to 2.4 ug/L in 10 groundwater wells supplying SBMWD's water system.

In February 2020, OEHHA set a Public Health Goal of 0.5 parts per billion, or 0.50 ug/L for bromoform. The MCL for total trihalomethanes, which includes bromoform is 80 ug/L. The level detected in the 10 SBMWD's well was never above the MCL but was over the level identified by OEHHA as the PHG.

The category of health risk associated from ingestion or inhalation of bromoform is identified by OEHHA as carcinogenicity, capable of producing cancer. However, studies on humans have been limited.

The best available technology identified to lower bromoform is granular activated carbon (GAC). The most effective treatment system would be to use GAC at the 10 wells that exceed 0.50 ug/L PHG. However, 6 of these 10 wells already are treated by carbon adsorption systems at SBMWD's Newmark or Waterman plants. Therefore, the annualized capital and operation and maintenance costs estimates for further GAC treatment only include those for the 4 wells that are not currently treated by carbon adsorption systems. The estimate for GAC treatment for these 4 wells is \$694,575.14. The estimated cost per water service customer per year for this treatment is \$15.10. This is an estimate based on the expected annual production from the 4 wells. Because these wells are not centrally located and cannot produce into one treatment plant, the cost to construct and operate five individual RO plants could easily become far more expensive

than the estimates provided herein. Therefore, this cost estimate is not meant to be an in-depth analysis for the installation of this type of treatment.

Tetrachloroethylene (perchloroethylene)(PCE)

Tetrachloroethylene (PCE) is primarily used in the dry-cleaning industry. It is also used in degreasing and cleaning processes.

PCE has been detected above the PHG at levels ranging from <0.5 ug/L to 6.5 ug/L in 23 of the Department's groundwater wells supplying water to the distribution system. The MCL for PCE is 5.0 ug/L and the PHG is set at 0.06 ug/L. One well, EPA No. 111 tested above the MCL with a result of 6.5 ug/L. However, this result is for the testing of the raw well water. This well's water is treated through a carbon adsorption system at SBMWD's 19th Street plant before being directed to SBMWD's drinking water distribution system.

The numerical health risk for PCE is 1×10^{-6} at the PHG. This is set at a level considered to pose no significant risk of cancer; this is considered a no more than one-in-a-million excess cancer risk level for a lifetime of exposure. The health risk associated with ingestion of PCE is identified by OEHHA as carcinogenicity, capable of producing cancer.

The best available technology to lower the level of PCE below its respective MCL is either granular activated carbon (GAC) or packed tower aeration (PTA). Since the PCE level in the Department's EPA No. 111 well is the only well where PCE was detected above the MCL, and this well is already treated by GAC through the 19th Street Plant, no further treatment action is recommended for this well at this time. Of the 22 remaining wells that tested above the PHG for PCE, all but 8 are treated through one of SBMWD's four carbon adsorption systems. EPA Wells Nos. 8 and 9 did not have production flow during 2022 through 2024, so estimated costs for production at these wells could not be determined. Therefore, only the annualized capital and maintenance costs to treat the remaining 6 wells not currently being treated through a carbon adsorption system will be estimated here. The estimate to treat these 6 wells is \$1,063,998.36. The estimated cost per water service customer per year is \$23.13. This is an estimate based on the expected annual production from the 6 wells based on the average production for 2022, 2023 and 2024. Because these wells are not centrally located and cannot produce into one treatment plant, the cost to construct and operate 6 individual GAC plants could easily become far more expensive than the estimates provided herein. Therefore, this cost estimate is not meant to be an in-depth analysis for the installation of this type of treatment.

Nitrate as Nitrogen:

Nitrate is a natural oxide of nitrogen. It exists naturally in soil and water. It can also be found in fertilizers, industrial waste, animal and human waste and food processing facilities. Human exposure to nitrates is primarily through ingestion of food or water. The PHG and MCL for nitrate as nitrogen is 10 mg/L and the U.S. EPA's MCLG for nitrate

as nitrogen is zero. The primary health risk associated with the ingestion of nitrate is methemoglobinemia. Methemoglobinemia is a blood condition that prevents hemoglobin from carrying enough oxygen to the body's cells. Too many nitrates can cause hemoglobin to convert to methemoglobin, a form of hemoglobin that cannot carry oxygen. Some symptoms of methemoglobinemia are a bluish hue to the skin (cyanosis), shortness of breath, dizziness, headaches and fatigue. Severe cases can include heart arrhythmias, seizures and coma.

Nitrate as nitrogen has been detected at levels ranging from 3.3 mg/L to 15.0 mg/L in 2 wells within SBMWD's service area.

The best available technology identified to lower nitrate as nitrogen is reverse osmosis (RO). The most effective treatment system would be to use RO at the 2 wells that exceed 10 mg/L PHG. The annualized capital and operation and maintenance costs to treat these 2 wells with RO systems are estimated to be \$3,550,501.58. The estimated cost per water service customer per year is \$77.18. This is an estimate based on the expected annual production from these two wells based on average production from 2022-2024. The cost of constructing and operating 2 individual RO plants could easily become far more expensive than the estimate above. As mentioned with other constituents detected, this cost estimate is not meant to be an in-depth analysis for installation RO. SBMWD has severed the two wells that have exceeded the MCL from its distribution system and has declared them inactive with the State Water Resources Control Board's Division of Drinking Water. Therefore, although the wells' raw water is sampled, these wells do not provide water into the drinking water distribution system.

Perchlorate:

Perchlorate is used in the manufacture of propellants, rocket fuels, fireworks and explosives.

Perchlorate has been detected at 1 well within the SBMWD's water system at levels ranging from 2.2 ug/L to 2.5 ug/L.

The MCL for perchlorate is 6.0 ug/L, while the PHG is 1.0 ug/L or 1.0 parts per billion (ppb). The level detected in the one SBMWD well was never above the MCL but was over the level identified by OEHHA as the PHG.

The primary health risks associated with ingestion of perchlorate are identified by OEHHA as an endocrine toxicity (specifically toward the thyroid) and neurodevelopment deficiencies.

The best available technology identified to lower perchlorate is reverse osmosis (RO). The most effective treatment system would be to use RO at the well that exceeds the 1.0 ug/L PHG. The annualized capital and operation and maintenance costs estimated for RO at this well site is \$2,910,199.90. The estimated cost per water service customer per

year is \$63.27. This is an estimate based on the expected annual production from this well based on an average production rate taken from years 2022 – 2024.

Nickel:

Nickel is a metallic element that exists primarily within the earth's crust. It is used in the manufacture of metallic alloys, magnets, alkaline batteries and fuel cell electrodes.

Nickel has been detected in 1 groundwater well within SBMWD's water service area at a level of 22 ug/L.

The MCL for nickel is 100 ug/L, while the PHG is 12 ug/L. The level detected in the SBMWD well was never above the MCL but was over the level identified by OEHHA as the PHG.

The primary health risk associated with ingestion of nickel is identified by OEHHA as neonatal developmental toxicity.

The best available technology identified to lower nickel is reverse osmosis (RO). The most effective treatment system would be to use RO at the well that exceeded the 12 ug/L PHG. The annualized capital and operation and maintenance costs are estimated for an RO system at this well is \$1,970,653.10. The estimated cost per water service customer per year is \$42.84. This is an estimate based on the expected annual production from the well with the detection based on the average production over years 2022 – 2024.

Perfluorooctanoic acid (PFOA):

Perfluorooctanoic acid (PFOA) is a synthetic chemical developed in the 1940s. It was used in the manufacture of nonstick coatings, waterproof fabrics, stain-resistant materials, food packaging, industrial and chemical processing and some firefighting foams. As mentioned earlier, PFOA is one of a larger group of chemicals that fall under the label of perfluoroalkyl and polyfluoroalkyl substances (PFAS), which as a group are labeled "forever chemicals" because they resist degradation and persist within the environment. These chemicals have been found in soil, air, and groundwater throughout the United States.

PFOA has been detected at levels ranging from <1.7 ng/L to 4.6 ng/L in 22 wells supplying SBMWD's water system. The USEPA MCL for PFOA is 4.0 ng/L and the PHG value per OEHHA for PFOA is set at 0.007 ng/L. Based on collected data, it was determined that 2 of the 22 wells that where PFOA was detected had values that exceeded the MCL.

The numerical health risk for PFOA is 1×10^{-6} (1 per million). This is set at a level considered to pose no significant risk of cancer; this is usually a no more than one-in-a-million excess cancer risk level for a lifetime of exposure at the PHG. The category of

health risk associated with ingestion of PFOA is identified by OEHHHA as carcinogenicity, capable of producing cancer.

The best available technology identified to lower PFOA is reverse osmosis (RO). The most effective treatment system would be to use RO at all 22 wells that exceeded the PHG, especially the two well sites that also exceeded PFOA's MCL. However, Newmark Well No. 3 and Seventh Street Well did not produce flows during this monitoring period, so cost of treatment based on an average flow was not calculated for these wells. The annualized capital and operation and maintenance costs to establish RO systems at the remaining 20 well sites is estimated to be \$36,394,038.60. The estimated cost per water service customer per year for RO treatment at these well sites is \$791.17. This is an estimate based on the expected annual production from the 22 wells based on an average production rate taken from years 2022 – 2024. Because these wells are not centrally located and cannot produce into one treatment plant, the cost to construct and operate 20 individual RO plants could easily become far more expensive than the estimate above. Therefore, this cost estimate is not meant to be an in-depth analysis for the installation of this type of treatment. The USEPA has given water agencies that exceed the MCL for PFOA s until 2029 to determine a treatment solution to reduce this contaminant to below its MCL.

Perfluorooctane sulfonic acid (PFOS):

Similarly to PFOA, perfluorooctane sulfuric acid (PFOS) is also a synthetic chemical manufactured in the 1940s used primarily in the manufacture of water and stain resistant materials and firefighting foams. It too is encapsulated within the larger group of “forever chemicals” known as perfluoroalkyl and polyfluoroalkyl substances (PFAS), and has also been found in soil, water and air samples throughout the United States.

PFOS has been detected at levels ranging from <1.7 ng/L to 2.8 ng/L in 20 wells supplying SBMWD's water system. The USEPA MCL for PFOS is 4.0 ng/L and the PHG per OEHHHA for PFOS is set at 1.0 ng/L. The laboratory testing minimum detection method limit is <1.7 ng/L, therefore, it cannot be determined how many samples noted as <1.7 ng/L were actually less than the MCL of 1.0 ng/L. No results were detected above the MCL of 4.0 ng/L.

The numerical health risk for PFOS is 1×10^{-6} (1 per million). This is set at a level considered to pose no significant risk of cancer; this is usually a no more than one-in-a-million excess cancer risk level for a lifetime of exposure at the PHG. The category of health risk associated from ingestion of PFOS is identified by OEHHHA as carcinogenicity, capable of producing cancer.

The best available technology identified to lower PFOS is reverse osmosis (RO). The most effective treatment system would be to use RO at all 20 wells where PFOS was detected since the minimum detection limit for this constituent is above the PHG, it cannot be determined if detection values noted as <1.7 ng/L are above or below the PHG of 1.0 ng/L. However, similarly to PFOA, Newmark Well No. 3 and Seventh Street Well

did not produce flows during this monitoring period, so the cost of treatment based on an average flow was not calculated for these wells. Therefore, the annualized capital and operation and maintenance costs for RO systems the remaining 18 well sites is estimated at \$31,877,929.08. The estimated cost per water service customer per year for this treatment is \$693. These values are estimates based on the expected annual production of the 20 wells over years 2022 – 2024. The cost of constructing and operating twenty individual RO plants could easily become far more expensive than the estimates suggest. Therefore, this cost estimate is not meant to be an in-depth analysis for the installation of this type of treatment.

Hexavalent Chromium:

Hexavalent Chromium is a compound used in the manufacture of metal alloys, dyes, paints, leather tanning chemicals, corrosion inhibitors, and several other industrial processes. Hexavalent chromium does occur naturally, and trivalent chromium can be transformed into hexavalent chromium through chemical reactions.

Hexavalent Chromium has been detected at levels ranging from 0.21 ug/L to 3.6 ug/L in 42 wells supplying SBMWD's water system. The level detected in these wells were never above the MCL of 10 ug/L but were detected over 0.02 ug/L, the level identified by OEHHHA as the PHG.

The numerical health risk for hexavalent chromium is 1×10^{-6} (1 per million). This is set at a level considered to pose no significant risk of cancer; this is usually a no more than one-in-a-million excess cancer risk level for a lifetime of exposure at the PHG. The category of health risk associated with ingestion or inhalation of hexavalent chromium is identified by OEHHHA as carcinogenicity, capable of producing cancer.

The best available technology identified to lower hexavalent chromium is reverse osmosis (RO). The most effective treatment system would be to use RO at the 42 wells that exceed the 0.02 ug/L PHG. However, there was no production flow Devil Canyon No. 3 Well, Newmark No. 3 Well and the Seventh Street Well during this monitoring period, so the cost of treatment based on an average flow was not calculated for these wells. Therefore, the estimated annualized capital and operation and maintenance costs for RO systems at the remaining 39 well sites is \$64,793,681.64. The estimated cost per water service customer per year for this treatment is \$1408.56. This is an estimate based on the expected annual production from the 39 wells using the average production values from these wells for the years 2022 - 2024. Because these wells are scattered throughout the service area and not centralized to be treated by a single RO system, costs to construct and operate 42 individual RO plants could easily become far more expensive than the estimate herein. Therefore, this cost estimate is not meant to be an in-depth analysis for the installation of this type of treatment.

RECOMMENDATIONS FOR FURTHER ACTION:

The drinking water quality of SBMWD meets all State of California, Regional Water Quality Control Board, Division of Drinking Water, and USEPA drinking water standards set to protect public health. The 2 wells that showed nitrate as nitrogen detections above the MCL have been severed from SBMWD's distribution system and declared inactive to the State Water Resources Control Board's Division of Drinking Water and do not provide water into the drinking water distribution system. Additionally, 3 of SBMWD's wells had PFOA detected above the MCL of 4.0 ng/L. The USEPA has given water agencies until 2029 to determine what treatment method will be utilized to lower PFOA constituents in the water supply below this MCL. SBMWD management is in the process of reviewing viable options to ensure an action plan and solution is developed to address PFAS contaminants in the SBMWD's water supply within the USEPA's deadline.

To further reduce the levels of the constituents identified in this report that are already significantly below the health-based MCLs established to provide "safe drinking water", additional costly treatment processes would be required. The estimated cost per water service customer per year would be \$3,930.55. The effectiveness of the treatment processes to provide any significant reductions in constituent levels at these already low values is uncertain. The health benefits of these hypothetical reductions are not at all clear and may not be quantifiable. Therefore, no action is proposed at this time.

REFERENCES:

- No. 1 Excerpt from California Health & Safety Code: Section 116470 (b).
- No. 2 Office of Environmental Health Hazard Assessment (OEHHA) – Public Health Goals (PHG) - February 2025
- No. 3 City of San Bernardino Municipal Water Department's 2022, and 2023 Consumer Confidence Reports
- No. 4 Laboratory Reports for PHG Monitoring in 2022, 2023 & 2024

ATTACHMENTS:

- No. 1 Exceedance Summary
- No. 2 Treatment Cost Summary

REFERENCE NO. 1

HEALTH AND SAFETY CODE

Section 116470. (b)

- (b) On or before July 1, 1998, and every three years thereafter, public water systems serving more than 10,000 service connections that detect one or more contaminants in drinking water that exceed the applicable public health goal, shall prepare a brief written report in plain language that does all of the following:
 - (1) Identifies each contaminant detected in drinking water that exceeds the applicable public health goal.
 - (2) Discloses the numerical public health risk, determined by the office, associated with the maximum contaminant level for each contaminant identified in paragraph (1) and the numerical public health risk determined by the office associated with the public health goal for that contaminant.
 - (3) Identifies the category of risk to public health, including, but not limited to, carcinogenic, mutagenic, teratogenic, and acute toxicity, associated with exposure to the contaminant in drinking water, and includes a brief, plainly- worded description of these terms.
 - (4) Describes the best available technology, if any is then available on a commercial basis, to remove the contaminant or reduce the concentration of the contaminant. The public water system may, solely on its own discretion, briefly describe actions that have been taken on its own, or by other entities, to prevent the introduction of the contaminant into drinking water supplies.
 - (5) Estimates the aggregate cost and the cost per customer of utilizing the technology described in paragraph (4), if any, to reduce the concentration of that contaminant in drinking water to a level at or below the public health goal.
 - (6) Briefly describes what action, if any, the local water purveyor intends to take to reduce the concentration of the contaminant in public drinking water supplies and the basis for that decision.
- (c) Public water systems required to prepare a report pursuant to subdivision (b) shall hold a public hearing for the purpose of accepting and responding to public comment on the report. Public water systems may hold public hearing as part of any regularly scheduled meeting.

- (d) The department shall not require a public water system to take any action to reduce or eliminate any exceedance of a public health goal.
- (e) Enforcement of this section does not require the department to amend a public water system's operating permit.
- (f) Pending adoption of a public health goal by the Office of Environmental Health Hazard Assessment pursuant to subdivision (c) of Section 116365, and in lieu thereof, public water systems shall use the national maximum contaminant level goal adopted by the United States Environmental Protection Agency for the corresponding contaminant for purposes of complying with the notice and hearing requirements of this section.
- (g) This section is intended to provide an alternative form for the federally required consumer confidence report as authorized by 42 U.S.C. Section 300g-3(c).

REFERENCE NO. 2

Health Risk Information for Public Health Goal Exceedance Reports

Prepared by

Office of Environmental Health Hazard Assessment
California Environmental Protection Agency

February 2025

NEW for the 2025 Report: New in this document are newly established Public Health Goals (PHGs) for perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), and five haloacetic acids: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

Background: Under the Calderon-Sher Safe Drinking Water Act of 1996 (the Act), public water systems with more than 10,000 service connections are required to prepare a report every three years for contaminants that exceed their respective PHGs.¹ This document contains health risk information on drinking water contaminants to assist public water systems in preparing these reports. A PHG is the concentration of a contaminant in drinking water that poses no significant health risk if consumed for a lifetime. PHGs are developed and published by the Office of Environmental Health Hazard Assessment (OEHHA) using current risk assessment principles, practices and methods.²

The water system's report is required to identify the health risk category (e.g., carcinogenicity or neurotoxicity) associated with exposure to each contaminant in drinking water that has a PHG and to include a brief, plainly worded description of these risks. The report is also required to disclose the numerical public health risk, if available, associated with the California Maximum Contaminant Level (MCL) and with the PHG for each contaminant. This health risk information document is prepared by OEHHA every three years to assist the water systems in providing the required information in their reports.

¹ Health and Safety Code Section 116470(b)

² Health and Safety Code Section 116365

Numerical health risks: Table 1 presents health risk categories and cancer risk values for chemical contaminants in drinking water that have PHGs.

The Act requires that OEHHA publish PHGs based on health risk assessments using the most current scientific methods. As defined in statute, PHGs for non-carcinogenic chemicals in drinking water are set at a concentration “at which no known or anticipated adverse health effects will occur, with an adequate margin of safety.” For carcinogens, PHGs are set at a concentration that “does not pose any significant risk to health.” PHGs provide one basis for revising MCLs, along with cost and technological feasibility. OEHHA has been publishing PHGs since 1997 and the entire list published to date is shown in Table 1.

Table 2 presents health risk information for contaminants that do not have PHGs but have state or federal regulatory standards. The Act requires that, for chemical contaminants with California MCLs that do not yet have PHGs, water utilities use the federal Maximum Contaminant Level Goal (MCLG) for the purpose of complying with the requirement of public notification. MCLGs, like PHGs, are strictly health based and include a margin of safety. One difference, however, is that the MCLGs for carcinogens are set at zero because the US Environmental Protection Agency (US EPA) assumes there is no absolutely safe level of exposure to such chemicals. PHGs, on the other hand, are set at a level considered to pose no *significant* risk of cancer; this is usually no more than a one-in-one-million excess cancer risk (1×10^{-6}) level for a lifetime of exposure. In Table 2, the cancer risks shown are based on the US EPA’s evaluations.

For more information on health risks: The adverse health effects for each chemical with a PHG are summarized in a PHG technical support document. These documents are available on the OEHHA website (<https://oehha.ca.gov/water/public-health-goals-phgs>).

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Alachlor	carcinogenicity (causes cancer)	0.004	NA ^{5,6}	0.002	NA
Aluminum	neurotoxicity and immunotoxicity (harms the nervous and immune systems)	0.6	NA	1	NA
Antimony	hepatotoxicity (harms the liver)	0.001	NA	0.006	NA
Arsenic	carcinogenicity (causes cancer)	0.000004 (4×10 ⁻⁶)	1×10 ⁻⁶ (one per million)	0.01	2.5×10 ⁻³ (2.5 per thousand)
Asbestos	carcinogenicity (causes cancer)	7 MFL ⁷ (fibers >10 microns in length)	1×10 ⁻⁶	7 MFL (fibers >10 microns in length)	1×10 ⁻⁶ (one per million)
Atrazine	carcinogenicity (causes cancer)	0.00015	1×10 ⁻⁶	0.001	7×10 ⁻⁶ (seven per million)
Barium	cardiovascular toxicity (causes high blood pressure)	2	NA	1	NA

¹ Based on the OEHHA PHG technical support document unless otherwise specified. The categories are the hazard traits defined by OEHHA for California's Toxics Information Clearinghouse (online at: <https://oehha.ca.gov/media/downloads/risk-assessment/gcregtext011912.pdf>).

² mg/L = milligrams per liter of water, equivalent to parts per million (ppm)

³ Cancer Risk = Upper bound estimate of excess cancer risk from lifetime exposure. Actual cancer risk may be lower or zero. 1×10⁻⁶ means one excess cancer case per million people exposed.

⁴ MCL = maximum contaminant level.

⁵ NA = not applicable. Cancer risk cannot be calculated.

⁶ The PHG for alachlor is based on a threshold model of carcinogenesis and is set at a level that is believed to be without any significant cancer risk to individuals exposed to the chemical over a lifetime.

⁷ MFL = million fibers per liter of water.

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Bentazon	hepatotoxicity and digestive system toxicity (harms the liver, intestine, and causes body weight effects ⁸)	0.2	NA	0.018	NA
Benzene	carcinogenicity (causes leukemia)	0.00015	1x10 ⁻⁶	0.001	7x10 ⁻⁶ (seven per million)
Benzo[a]pyrene	carcinogenicity (causes cancer)	0.000007 (7x10 ⁻⁶)	1x10 ⁻⁶	0.0002	3x10 ⁻⁵ (three per hundred thousand)
Beryllium	digestive system toxicity (harms the stomach or intestine)	0.001	NA	0.004	NA
Bromate	carcinogenicity (causes cancer)	0.0001	1x10 ⁻⁶	0.01	1x10 ⁻⁴ (one per ten thousand)
Cadmium	nephrotoxicity (harms the kidney)	0.00004	NA	0.005	NA
Carbofuran	reproductive toxicity (harms the testis)	0.0007	NA	0.018	NA
Carbon tetrachloride	carcinogenicity (causes cancer)	0.0001	1x10 ⁻⁶	0.0005	5x10 ⁻⁶ (five per million)

⁸ Body weight effects are an indicator of general toxicity in animal studies.

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Chlordane	carcinogenicity (causes cancer)	0.00003	1x10 ⁻⁶	0.0001	3x10 ⁻⁶ (three per million)
Chlorite	hematotoxicity (causes anemia) neurotoxicity (causes neurobehavioral effects)	0.05	NA	1	NA
Chromium, hexavalent	carcinogenicity (causes cancer)	0.00002	1x10 ⁻⁶	0.010	5x10 ⁻⁴ (five per ten thousand)
Copper	digestive system toxicity (causes nausea, vomiting, diarrhea)	0.3	NA	1.3 (AL ⁹)	NA
Cyanide	neurotoxicity (damages nerves) endocrine toxicity (affects the thyroid)	0.15	NA	0.15	NA
Dalapon	nephrotoxicity (harms the kidney)	0.79	NA	0.2	NA
Di(2-ethylhexyl) adipate (DEHA)	developmental toxicity (disrupts development)	0.2	NA	0.4	NA
Di(2-ethylhexyl) phthalate (DEHP)	carcinogenicity (causes cancer)	0.012	1x10 ⁻⁶	0.004	3x10 ⁻⁷ (three per ten million)

⁹ AL = action level. The action levels for copper and lead refer to a concentration measured at the tap. Much of the copper and lead in drinking water is derived from household plumbing (The Lead and Copper Rule, Title 22, California Code of Regulations [CCR] section 64672.3).

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
1,2-Dibromo-3-chloropropane (DBCP)	carcinogenicity (causes cancer)	0.000003 (3x10 ⁻⁶)	1x10 ⁻⁶	0.0002	7x10 ⁻⁵ (seven per hundred thousand)
1,2-Dichlorobenzene (o-DCB)	hepatotoxicity (harms the liver)	0.6	NA	0.6	NA
1,4-Dichlorobenzene (p-DCB)	carcinogenicity (causes cancer)	0.006	1x10 ⁻⁶	0.005	8x10 ⁻⁷ (eight per ten million)
1,1-Dichloroethane (1,1-DCA)	carcinogenicity (causes cancer)	0.003	1x10 ⁻⁶	0.005	2x10 ⁻⁶ (two per million)
1,2-Dichloroethane (1,2-DCA)	carcinogenicity (causes cancer)	0.0004	1x10 ⁻⁶	0.0005	1x10 ⁻⁶ (one per million)
1,1-Dichloroethylene (1,1-DCE)	hepatotoxicity (harms the liver)	0.01	NA	0.006	NA
1,2-Dichloroethylene, cis	nephrotoxicity (harms the kidney)	0.013	NA	0.006	NA
1,2-Dichloroethylene, trans	immunotoxicity (harms the immune system)	0.05	NA	0.01	NA
Dichloromethane (methylene chloride)	carcinogenicity (causes cancer)	0.004	1x10 ⁻⁶	0.005	1x10 ⁻⁶ (one per million)

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
2,4-Dichloro-phenoxyacetic acid (2,4-D)	hepatotoxicity and nephrotoxicity (harms the liver and kidney)	0.02	NA	0.07	NA
1,2-Dichloro-propane (propylene dichloride)	carcinogenicity (causes cancer)	0.0005	1x10 ⁻⁶	0.005	1x10 ⁻⁵ (one per hundred thousand)
1,3-Dichloro-propene (Telone II®)	carcinogenicity (causes cancer)	0.0002	1x10 ⁻⁶	0.0005	2x10 ⁻⁶ (two per million)
Dinoseb	reproductive toxicity (harms the uterus and testis)	0.014	NA	0.007	NA
Diquat	ocular toxicity (harms the eye) developmental toxicity (causes malformation)	0.006	NA	0.02	NA
Endothall	digestive system toxicity (harms the stomach or intestine)	0.094	NA	0.1	NA
Endrin	neurotoxicity (causes convulsions) hepatotoxicity (harms the liver)	0.0003	NA	0.002	NA
Ethylbenzene (phenylethane)	hepatotoxicity (harms the liver)	0.3	NA	0.3	NA
Ethylene dibromide (1,2-Dibromoethane)	carcinogenicity (causes cancer)	0.00001	1x10 ⁻⁶	0.00005	5x10 ⁻⁶ (five per million)

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Fluoride	musculoskeletal toxicity (causes tooth mottling)	1	NA	2	NA
Glyphosate	nephrotoxicity (harms the kidney)	0.9	NA	0.7	NA
Haloacetic acids: dibromoacetic acid	carcinogenicity (causes cancer)	0.00003	1×10^{-6}	0.06*	2×10^{-3} (two per thousand) ¹⁰
Haloacetic acids: dichloroacetic acid	carcinogenicity (causes cancer)	0.0002	1×10^{-6}	0.06*	3×10^{-4} (three per ten thousand) ¹¹
Haloacetic acids: monobromoacetic acid	musculoskeletal toxicity (causes muscular degeneration)	0.025	NA	0.06*	NA
Haloacetic acids: monochloroacetic acid	general toxicity (causes body and organ weight changes ⁸)	0.053	NA	0.06*	NA
Haloacetic acids: trichloroacetic acid	carcinogenicity (causes cancer)	0.0001	1×10^{-6}	0.06*	6×10^{-4} (six per ten thousand) ¹²
Heptachlor	carcinogenicity (causes cancer)	0.000008 (8×10^{-6})	1×10^{-6}	0.00001	1×10^{-6} (one per million)

* For total haloacetic acids (the sum of dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, and trichloroacetic acid). There are no MCLs for individual haloacetic acids.

¹⁰ Based on 0.060 mg/L dibromoacetic acid; the risk will vary with different combinations and ratios of the other haloacetic acids in a particular sample.

¹¹ Based on 0.060 mg/L dichloroacetic acid; the risk will vary with different combinations and ratios of the other haloacetic acids in a particular sample.

¹² Based on 0.060 mg/L trichloroacetic acid; the risk will vary with different combinations and ratios of the other haloacetic acids in a particular sample.

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Heptachlor epoxide	carcinogenicity (causes cancer)	0.000006 (6×10 ⁻⁶)	1×10 ⁻⁶	0.00001	2×10 ⁻⁶ (two per million)
Hexachloro-benzene	carcinogenicity (causes cancer)	0.00003	1×10 ⁻⁶	0.001	3×10 ⁻⁵ (three per hundred thousand)
Hexachloro-cyclopentadiene (HCCPD)	digestive system toxicity (causes stomach lesions)	0.002	NA	0.05	NA
Lead	developmental neurotoxicity (causes neurobehavioral effects in children) cardiovascular toxicity (causes high blood pressure) carcinogenicity (causes cancer)	0.0002	<1×10 ⁻⁶ (PHG is not based on this effect)	0.015 (AL ⁹)	2×10 ⁻⁶ (two per million)
Lindane (γ-BHC)	carcinogenicity (causes cancer)	0.000032	1×10 ⁻⁶	0.0002	6×10 ⁻⁶ (six per million)
Mercury (inorganic)	nephrotoxicity (harms the kidney)	0.0012	NA	0.002	NA
Methoxychlor	endocrine toxicity (causes hormone effects)	0.00009	NA	0.03	NA
Methyl tertiary-butyl ether (MTBE)	carcinogenicity (causes cancer)	0.013	1×10 ⁻⁶	0.013	1×10 ⁻⁶ (one per million)

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Molinate	carcinogenicity (causes cancer)	0.001	1×10^{-6}	0.02	2×10^{-5} (two per hundred thousand)
Monochloro-benzene (chlorobenzene)	nephrotoxicity (harms the kidney)	0.07	NA	0.07	NA
Nickel	developmental toxicity (causes increased neonatal deaths)	0.012	NA	0.1	NA
Nitrate	hematotoxicity (causes methemoglobinemia)	45 as nitrate	NA	10 as nitrogen (=45 as nitrate)	NA
Nitrite	hematotoxicity (causes methemoglobinemia)	3 as nitrite	NA	1 as nitrogen (=3 as nitrite)	NA
Nitrate and Nitrite	hematotoxicity (causes methemoglobinemia)	10 as nitrogen ¹³	NA	10 as nitrogen	NA
N-nitroso-dimethyl-amine (NDMA)	carcinogenicity (causes cancer)	0.000003 (3×10^{-6})	1×10^{-6}	none	NA
Oxamyl	general toxicity (causes body weight effects)	0.026	NA	0.05	NA

¹³ The joint nitrate/nitrite PHG of 10 mg/L (10 ppm, expressed as nitrogen) does not replace the individual values, and the maximum contribution from nitrite should not exceed 1 mg/L nitrite-nitrogen.

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Pentachloro-phenol (PCP)	carcinogenicity (causes cancer)	0.0003	1x10 ⁻⁶	0.001	3x10 ⁻⁶ (three per million)
Perchlorate	endocrine toxicity (affects the thyroid) developmental toxicity (causes neurodevelopmental deficits)	0.001	NA	0.006	NA
Perfluorooctane sulfonic acid (PFOS)	carcinogenicity (causes cancer)	1x10 ⁻⁶	1x10 ⁻⁶	NA	NA
Perfluoro-octanoic acid (PFOA)	carcinogenicity (causes cancer)	7x10 ⁻⁹	1x10 ⁻⁶	NA	NA
Picloram	hepatotoxicity (harms the liver)	0.166	NA	0.5	NA
Polychlorinated biphenyls (PCBs)	carcinogenicity (causes cancer)	0.00009	1x10 ⁻⁶	0.0005	6x10 ⁻⁶ (six per million)
Radium-226	carcinogenicity (causes cancer)	0.05 pCi/L	1x10 ⁻⁶	5 pCi/L (combined Ra ²²⁶⁺²²⁸)	1x10 ⁻⁴ (one per ten thousand)
Radium-228	carcinogenicity (causes cancer)	0.019 pCi/L	1x10 ⁻⁶	5 pCi/L (combined Ra ²²⁶⁺²²⁸)	3x10 ⁻⁴ (three per ten thousand)
Selenium	integumentary toxicity (causes hair loss and nail damage)	0.03	NA	0.05	NA

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Silvex (2,4,5-TP)	hepatotoxicity (harms the liver)	0.003	NA	0.05	NA
Simazine	general toxicity (causes body weight effects)	0.004	NA	0.004	NA
Strontium-90	carcinogenicity (causes cancer)	0.35 pCi/L	1×10^{-6}	8 pCi/L	2×10^{-5} (two per hundred thousand)
Styrene (vinylbenzene)	carcinogenicity (causes cancer)	0.0005	1×10^{-6}	0.1	2×10^{-4} (two per ten thousand)
1,1,2,2-Tetrachloro-ethane	carcinogenicity (causes cancer)	0.0001	1×10^{-6}	0.001	1×10^{-5} (one per hundred thousand)
2,3,7,8-Tetra-chlorodibenzo-<i>p</i>-dioxin (TCDD, or dioxin)	carcinogenicity (causes cancer)	5×10^{-11}	1×10^{-6}	3×10^{-8}	6×10^{-4} (six per ten thousand)
Tetrachloro-ethylene (perchloro-ethylene, or PCE)	carcinogenicity (causes cancer)	0.00006	1×10^{-6}	0.005	8×10^{-5} (eight per hundred thousand)
Thallium	integumentary toxicity (causes hair loss)	0.0001	NA	0.002	NA

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Thiobencarb	general toxicity (causes body weight effects) hematotoxicity (affects red blood cells)	0.042	NA	0.07	NA
Toluene (methylbenzene)	hepatotoxicity (harms the liver) endocrine toxicity (harms the thymus)	0.15	NA	0.15	NA
Toxaphene	carcinogenicity (causes cancer)	0.00003	1x10 ⁻⁶	0.003	1x10 ⁻⁴ (one per ten thousand)
1,2,4-Trichlorobenzene	endocrine toxicity (harms adrenal glands)	0.005	NA	0.005	NA
1,1,1-Trichloroethane	neurotoxicity (harms the nervous system), reproductive toxicity (causes fewer offspring) hepatotoxicity (harms the liver) hematotoxicity (causes blood effects)	1	NA	0.2	NA
1,1,2-Trichloroethane	carcinogenicity (causes cancer)	0.0003	1x10 ⁻⁶	0.005	2x10 ⁻⁵ (two per hundred thousand)
Trichloroethylene (TCE)	carcinogenicity (causes cancer)	0.0017	1x10 ⁻⁶	0.005	3x10 ⁻⁶ (three per million)

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Trichlorofluoromethane (Freon 11)	accelerated mortality (increase in early death)	1.3	NA	0.15	NA
1,2,3-Trichloropropane (1,2,3-TCP)	carcinogenicity (causes cancer)	0.0000007 (7×10 ⁻⁷)	1×10 ⁻⁶	0.000005 (5×10 ⁻⁶)	7×10 ⁻⁶ (seven per million)
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	hepatotoxicity (harms the liver)	4	NA	1.2	NA
Trihalomethanes: Bromodichloromethane	carcinogenicity (causes cancer)	0.00006	1×10 ⁻⁶	0.080 [#]	1.3×10 ⁻³ (1.3 per thousand) ¹⁴
Trihalomethanes: Bromoform	carcinogenicity (causes cancer)	0.0005	1×10 ⁻⁶	0.080 [#]	2×10 ⁻⁴ (two per ten thousand) ¹⁵
Trihalomethanes: Chloroform	carcinogenicity (causes cancer)	0.0004	1×10 ⁻⁶	0.080 [#]	2×10 ⁻⁴ (two per ten thousand) ¹⁶

[#] For total trihalomethanes (the sum of bromodichloromethane, bromoform, chloroform, and dibromochloromethane). There are no MCLs for individual trihalomethanes.

¹⁴ Based on 0.080 mg/L bromodichloromethane; the risk will vary with different combinations and ratios of the other trihalomethanes in a particular sample.

¹⁵ Based on 0.080 mg/L bromoform; the risk will vary with different combinations and ratios of the other trihalomethanes in a particular sample.

¹⁶ Based on 0.080 mg/L chloroform; the risk will vary with different combinations and ratios of the other trihalomethanes in a particular sample.

Table 1: Health Risk Categories and Cancer Risk Values for Chemicals with California Public Health Goals (PHGs)

Chemical	Health Risk Category ¹	California PHG (mg/L) ²	Cancer Risk ³ at the PHG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Trihalomethanes: Dibromochloromethane	carcinogenicity (causes cancer)	0.0001	1x10 ⁻⁶	0.080 [#]	8x10 ⁻⁴ (eight per ten thousand) ¹⁷
Tritium	carcinogenicity (causes cancer)	400 pCi/L	1x10 ⁻⁶	20,000 pCi/L	5x10 ⁻⁵ (five per hundred thousand)
Uranium	carcinogenicity (causes cancer)	0.43 pCi/L	1x10 ⁻⁶	20 pCi/L	5x10 ⁻⁵ (five per hundred thousand)
Vinyl chloride	carcinogenicity (causes cancer)	0.00005	1x10 ⁻⁶	0.0005	1x10 ⁻⁵ (one per hundred thousand)
Xylene	neurotoxicity (affects the senses, mood, and motor control)	1.8 (single isomer or sum of isomers)	NA	1.75 (single isomer or sum of isomers)	NA

[#] For total trihalomethanes (the sum of bromodichloromethane, bromoform, chloroform, and dibromochloromethane). There are no MCLs for individual trihalomethanes.

¹⁷ Based on 0.080 mg/L dibromochloromethane; the risk will vary with different combinations and ratios of the other trihalomethanes in a particular sample.

Table 2: Health Risk Categories and Cancer Risk Values for Chemicals without California Public Health Goals

Chemical	Health Risk Category ¹	US EPA MCLG ² (mg/L)	Cancer Risk ³ at the MCLG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Disinfection byproducts (DBPs)					
Chloramines	acute toxicity (causes irritation) digestive system toxicity (harms the stomach) hematotoxicity (causes anemia)	4 ^{5,6}	NA ⁷	none	NA
Chlorine	acute toxicity (causes irritation) digestive system toxicity (harms the stomach)	4 ^{5,6}	NA	none	NA
Chlorine dioxide	hematotoxicity (causes anemia) neurotoxicity (harms the nervous system)	0.8 ^{5,6}	NA	none	NA
Radionuclides					

¹ Health risk category based on the US EPA MCLG document or California MCL document unless otherwise specified.

² MCLG = maximum contaminant level goal established by US EPA.

³ Cancer Risk = Upper estimate of excess cancer risk from lifetime exposure. Actual cancer risk may be lower or zero. 1×10^{-6} means one excess cancer case per million people exposed.

⁴ California MCL = maximum contaminant level established by California.

⁵ Maximum Residual Disinfectant Level Goal, or MRDLG.

⁶ The federal Maximum Residual Disinfectant Level (MRDL), or highest level of disinfectant allowed in drinking water, is the same value for this chemical.

⁷ NA = not available.

Office of Environmental Health Hazard Assessment
Water Toxicology Section
February 2025

Table 2: Health Risk Categories and Cancer Risk Values for Chemicals without California Public Health Goals

Chemical	Health Risk Category ¹	US EPA MCLG ² (mg/L)	Cancer Risk ³ at the MCLG	California MCL ⁴ (mg/L)	Cancer Risk at the California MCL
Gross alpha particles ⁸	carcinogenicity (causes cancer)	0 (²¹⁰ Po included)	0	15 pCi/L ⁹ (includes radium but not radon and uranium)	up to 1×10^{-3} (for ²¹⁰ Po, the most potent alpha emitter)
Beta particles and photon emitters ⁸	carcinogenicity (causes cancer)	0 (²¹⁰ Pb included)	0	50 pCi/L (judged equiv. to 4 mrem/yr)	up to 2×10^{-3} (for ²¹⁰ Pb, the most potent beta-emitter)

⁸ MCLs for gross alpha and beta particles are screening standards for a group of radionuclides. Corresponding PHGs were not developed for gross alpha and beta particles. See the OEHHA memoranda discussing the cancer risks at these MCLs at <http://www.oehha.ca.gov/water/reports/grossab.html>.

⁹ pCi/L = picocuries per liter of water.

REFERENCE No. 3

City of San Bernardino Municipal Water Department's 2022 and 2023 Consumer Confidence Reports

2024 will be added to the website when it is available

REFERENCE No. 4

Due to the size of the laboratory reports they have not been printed. They can be found on the Department website - www.sbmwd.org/agendacenter

Attachment No. 1 Exceedance Summary

Public Health Goals (PHG) Exceedance Summary 2024													
txtWellName	Constituent	TxtStoreID	Unit	California MCL	DLR	Cancer Risk at MCLG	California PHG	Health Risk Category	Cancer Risk at the PHG	Cancer Risk at the California MCL	Value	Date	Exceedance
10th & J STREET	PERFLUOROOCTANE SULFONIC ACID (PFOS)	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<2.0	1/26/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	4/20/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	7/20/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	10/23/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	1/25/2024	
	PERFLUOROOCTANOIC ACID (PFOA)	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<2.0	1/26/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	4/20/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	7/20/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	10/23/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	1/25/2024	
16TH & SIERRA WAY	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	1/26/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	4/27/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<2.0	7/20/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	10/23/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	1/25/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	1/26/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	4/27/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<2.0	7/20/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	10/23/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	1/25/2024	
17TH & SIERRA WAY 2	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	1/26/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	4/27/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	7/20/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	10/23/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	1/25/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	1/26/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	4/27/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	7/20/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	10/23/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	1/25/2024	
19TH ST- 2	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/3/2023	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/3/2023	
27TH & ACACIA	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/3/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	11/21/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	4/16/2024	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	7/15/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	2.1	11/3/2023	
	PERFLUOROOCTANOIC ACID		ng/L								1.8	11/21/2023	
	PERFLUOROOCTANOIC ACID		ng/L								2.1	4/16/2024	
	PERFLUOROOCTANOIC ACID		ng/L								2.6	7/15/2024	

30TH ST	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/3/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	11/21/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<2.0	4/16/2024
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	7/15/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/3/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	11/21/2023
	PERFLUOROOCTANOIC ACID		ng/L								<2.0	4/16/2024
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	7/15/2024
31ST ST & MT. VIEW WELL	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/3/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								1.8	11/21/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	4/16/2024
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	7/15/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	4.2	11/3/2023
	PERFLUOROOCTANOIC ACID		ng/L								3.7	11/21/2023
	PERFLUOROOCTANOIC ACID		ng/L								3.7	4/16/2024
	PERFLUOROOCTANOIC ACID		ng/L								3.8	7/15/2024
CAJON 2	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	11/21/2023
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
	PERFLUOROOCTANOIC ACID		ng/L								2.1	11/21/2023
CAJON 3	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	11/21/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	4/16/2024
	PERFLUOROOCTANE SULFONIC ACID		ng/L								1.7	7/15/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	11/21/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	4/16/2024
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	7/15/2024
CAJON 4	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								2.0	4/16/2024
	PERFLUOROOCTANE SULFONIC ACID		ng/L								2.8	7/15/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	2.1	11/2/2023
	PERFLUOROOCTANOIC ACID		ng/L								3.9	4/16/2024
	PERFLUOROOCTANOIC ACID		ng/L								3.8	7/15/2024
CAJON CANYON	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	11/21/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	4/16/2024
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	7/15/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	11/21/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	4/16/2024
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	7/15/2024

DEVIL CANYON 1	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	1.9	11/2/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	4/16/2024
	PERFLUOROOCTANE SULFONIC ACID		ng/L							2.3	7/15/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	1.8	11/2/2023
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	4/16/2024
	PERFLUOROOCTANOIC ACID		ng/L							2.0	7/15/2024
DEVIL CANYON 2	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
DEVIL CANYON 4	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	2.2	11/2/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<2.0	4/16/2024
	PERFLUOROOCTANE SULFONIC ACID		ng/L							2.8	7/15/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
	PERFLUOROOCTANOIC ACID		ng/L							<2.0	4/16/2024
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	7/15/2024
DEVIL CANYON 5	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023
DEVIL CANYON 6	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/2/2023
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/2/2023
DEVIL CANYON 7	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<2.0	11/2/2023
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<2.0	11/2/2023
EPA WELL 1	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	7/20/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	10/23/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	4/19/2024
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	7/15/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	7/20/2023
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	10/23/2023
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	4/19/2024
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	7/15/2024
EPA WELL 108	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	1/26/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	4/27/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<2.0	7/20/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	10/23/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	1/25/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	1/26/2023
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	4/27/2023

	PERFLUOROOCTANOIC ACID		ng/L							<2.0	7/20/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	10/23/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	1/25/2024	
EPA WELL 1085	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	1/26/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	4/27/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<2.0	7/20/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	10/23/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	1/25/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	1/26/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	4/27/2023
	PERFLUOROOCTANOIC ACID		ng/L								<2.0	7/20/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	10/23/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	1/25/2024
EPA WELL 109	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	1/26/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	4/27/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	7/20/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	10/23/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<2.0	1/25/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	1/26/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	4/27/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	7/20/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	10/23/2023
	PERFLUOROOCTANOIC ACID		ng/L								<2.0	1/25/2024
EPA WELL 110	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/3/2023
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/3/2023
EPA WELL 111	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<2.0	11/3/2023
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<2.0	11/3/2023
EPA WELL 112	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/3/2023
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/3/2023
EPA WELL 2	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	10/27/2022
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	9/8/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	10/23/2023
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	1/25/2024
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	4/16/2024
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	7/15/2024
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	10/27/2022
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	9/8/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	10/23/2023
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	1/25/2024
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	4/16/2024
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	7/15/2024

EPA WELL 3	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	10/27/2022	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	1/26/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<2.0	4/27/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<2.0	7/20/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	10/23/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	1/25/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	10/27/2022	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	1/26/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<2.0	4/27/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<2.0	7/20/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	10/23/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	1/25/2024	
EPA WELL 4	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<2.0	10/27/2022	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<2.0	1/26/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<2.0	4/27/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	7/20/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	10/23/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	1/25/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<2.0	10/27/2022	
	PERFLUOROOCTANOIC ACID		ng/L								<2.0	1/26/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<2.0	4/27/2023	
	PERFLUOROOCTANOIC ACID		ng/L								1.7	7/20/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	10/23/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	1/25/2024	
EPA WELL 5	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<2.0	10/27/2022	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	1/27/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<2.0	4/27/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	7/27/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	10/23/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	1/24/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<2.0	10/27/2022	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	1/27/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<2.0	4/27/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	7/27/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	10/23/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	1/24/2024	
EPA WELL 6	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	4/16/2024	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	7/15/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	4/16/2024	
	PERFLUOROOCTANOIC ACID		ng/L								2.2	7/15/2024	
EPA WELL 7	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	11/21/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	4/16/2024	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	7/15/2024	

	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	11/21/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	4/16/2024	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	7/15/2024	
GILBERT ST												
	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	10/27/2022	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	1/26/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	4/27/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	7/20/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	10/23/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<2.0	1/25/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	10/27/2022	
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	1/26/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	4/27/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	7/20/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	10/23/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<2.0	1/25/2024	
KENWOOD 1	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<2.0	4/16/2024	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	7/15/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<2.0	4/16/2024	
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	7/15/2024	
KENWOOD 2	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023	
LEROY	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/3/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	11/3/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	4/16/2024	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	7/15/2024	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	10/17/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/3/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	11/3/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	4/16/2024	
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	7/15/2024	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	10/17/2024	
LYNWOOD	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/3/2023	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/3/2023	
LYTLE CREEK 2	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/2/2023	

MALLORY NO.3	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/3/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	11/21/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<2.0	4/16/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	2.3	11/3/2023	
	PERFLUOROOCTANOIC ACID		ng/L							2.1	11/21/2023	
	PERFLUOROOCTANOIC ACID		ng/L							4.6	4/16/2024	
MILL & D	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	10/27/2022	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	1/26/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	1/30/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<2.0	4/27/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	7/20/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	10/23/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	1/25/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	10/27/2022	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	1/26/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	1/30/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<2.0	4/27/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	7/20/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	10/23/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	1/25/2024	
NEWMARK 2	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/3/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	4/16/2024	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	7/15/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/3/2023	
	PERFLUOROOCTANOIC ACID		ng/L							3.4	4/16/2024	
	PERFLUOROOCTANOIC ACID		ng/L							4.2	7/15/2024	
NEWMARK 3 EXT	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/3/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	11/21/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	4/16/2024	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	7/15/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/3/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.7	11/21/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	4/16/2024	
	PERFLUOROOCTANOIC ACID		ng/L							2.2	7/15/2024	
NEWMARK 4	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/3/2023	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	11/3/2023	
VINCENT	PERFLUOROOCTANE SULFONIC ACID	C805	ng/L	NA	NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/2/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.8	11/21/2023	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	4/16/2024	
	PERFLUOROOCTANE SULFONIC ACID		ng/L							<1.7	7/15/2024	
	PERFLUOROOCTANOIC ACID	C806	ng/L	NA	NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.7	11/2/2023	
	PERFLUOROOCTANOIC ACID		ng/L							<1.8	11/21/2023	

	PERFLUOROOCTANOIC ACID		ng/L								<1.7	4/16/2024	
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	7/15/2024	
WATERMAN AVE.	PERFLUOROOCTANE SULFONIC ACID	CB05	ng/L	NA		NA	0.001	carcinogenicity (causes cancer)	0.001	NA	<1.8	4/16/2024	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.7	7/15/2024	
	PERFLUOROOCTANE SULFONIC ACID		ng/L								<1.8	10/17/2024	
	PERFLUOROOCTANOIC ACID	CB06	ng/L	NA		NA	0.000007	carcinogenicity (causes cancer)	0.001	NA	<1.8	4/16/2024	
	PERFLUOROOCTANOIC ACID		ng/L								<1.7	7/15/2024	
	PERFLUOROOCTANOIC ACID		ng/L								<1.8	10/17/2024	

Attachment No. 2 Treatment Cost Summary

2024 PHG Treatment Cost Summary - Estimate by Constituent Used Average MGD for FY 2021-2023 for Wells with Detections														
CONSTITUENT	WELL	GPM	Gallons Per Year GPM x 1,440 x 365	MGD	Gallons/1,000 (Amortized Capital + O&M Costs)	\$/1,000 gallons treated	Total Annual Cost	Active Services	Cost per year per Well	Treatment Technology	Constituent Min - Max	Constituent MCL	Constituent U.S. EPA MCLG	Source of Information
ARSENIC (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<0.5 - 0.83	80.0	0	0.004
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	<0.5 - 0.81	80.0	0	0.004
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	<0.50 - 1.3	80.0	0	0.004
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	<0.50	80.0	0	0.004
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	<0.50	80.0	0	0.004
BROMOFORM (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<0.50 - 0.61	80.0	0	0.004
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	<0.50 - 0.61	80.0	0	0.004
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	<0.50 - 1.5	80.0	0	0.004
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	<0.50 - 0.79	80.0	0	0.004
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	<0.50 - 0.75	80.0	0	0.004
NITRATE as Nitrogen (mg/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	0.54 - 0.77	5.0	0	0.06
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	0.74 - 1.8	5.0	0	0.06
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	0.61 - 2.0	5.0	0	0.06
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	0.61 - 2.0	5.0	0	0.06
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	0.61 - 2.2	5.0	0	0.06
PERFLUOROOCTANOIC ACID (PFOA)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<0.50 - 0.74	5.0	0	0.06
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	1.4 - 1.8	5.0	0	0.06
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	<0.5 - 1.0	5.0	0	0.06
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	0.69 - 1.0	5.0	0	0.06
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	1.0 - 2.5	5.0	0	0.06
NITRATE as Nitrogen (mg/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	3.1 - 3.9	5	0	0.08
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	4.9 - 6.5	5	0	0.08
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	2.0 - 3.6	5	0	0.08
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	5.8 - 1.2	5	0	0.08
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	2.0 - 2.2	5	0	0.08
PERCHLORATE (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<0.5 - 0.62	5	0	0.08
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	<0.5 - 1.0	5	0	0.08
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	2.2 - 2.5	6.0	0	1.0
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC				
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC				
NICKEL (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<10.0 - 22.0	100		12
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC				
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC				
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC				
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC				
PERFLUOROOCTANOIC ACID (PFOA)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	2.1 - 2.6	4.0	0	0.007
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	<1.7 - <2.0	4.0	0	0.007
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	3.7 - 4.2	4.0	0	0.007
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	<1.8 - <2.0	4.0	0	0.007
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	<1.8 - <2.0	4.0	0	0.007
PERCHLORATE (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<1.7 - <2.0	4.0	0	0.007
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	<1.8 - <2.0	4.0	0	0.007
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	<1.8 - <2.0	4.0	0	0.007
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	<1.8 - <2.0	4.0	0	0.007
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	<1.8 - <2.0	4.0	0	0.007
NICKEL (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<1.7 - <1.8	4.0	0	0.007
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	<1.8 - <2.0	4.0	0	0.007
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	<1.8 - <2.0	4.0	0	0.007
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	<1.8 - <2.0	4.0	0	0.007
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	<1.8 - <2.0	4.0	0	0.007
PERCHLORATE (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<1.7 - <1.8	4.0	0	0.007
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	<1.8 - <2.0	4.0	0	0.007
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	<1.8 - <2.0	4.0	0	0.007
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	<1.8 - <2.0	4.0	0	0.007
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	<1.8 - <2.0	4.0	0	0.007
NICKEL (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<1.7 - <1.8	4.0	0	0.007
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	<1.8 - <2.0	4.0	0	0.007
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	<1.8 - <2.0	4.0	0	0.007
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	<1.8 - <2.0	4.0	0	0.007
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	<1.8 - <2.0	4.0	0	0.007
PERCHLORATE (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<1.7 - <1.8	4.0	0	0.007
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	<1.8 - <2.0	4.0	0	0.007
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	<1.8 - <2.0	4.0	0	0.007
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	<1.8 - <2.0	4.0	0	0.007
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	<1.8 - <2.0	4.0	0	0.007
NICKEL (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<1.7 - <1.8	4.0	0	0.007
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	<1.8 - <2.0	4.0	0	0.007
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	<1.8 - <2.0	4.0	0	0.007
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	<1.8 - <2.0	4.0	0	0.007
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	<1.8 - <2.0	4.0	0	0.007
PERCHLORATE (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<1.7 - <1.8	4.0	0	0.007
	16th Street #2	1,331	658,573,600	1.917	658,573.60	0.34	\$ 237,855.02	46,000	\$ 5.17	GAC	<1.8 - <2.0	4.0	0	0.007
	27th & Acacia	1,381	388,425,600	1.059	388,425.60	0.48	\$ 176,853.89	46,000	\$ 3.84	GAC	<1.8 - <2.0	4.0	0	0.007
	30th Street	1,381	725,853,600	1.989	725,853.60	0.33	\$ 238,531.89	46,000	\$ 5.21	GAC	<1.8 - <2.0	4.0	0	0.007
	31st Street	1,074	392,097,600	1.074	392,097.60	0.48	\$ 186,364.80	46,000	\$ 3.82	GAC	<1.8 - <2.0	4.0	0	0.007
NICKEL (ug/L)	10th & J Street Well	1,373	721,648,800	1.977	721,648.80	0.33	\$ 238,144.10	46,000	\$ 5.18	GAC	<1.7 - <1.8	4.0	0	

Seventh Street Waterman	1,625	854,100,000	0.000	2.340	854,100.00	2.85	Total	\$	36,394,038.60	\$	2,442,726.00	46000	\$	53.10	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	0.007	Reference: U.S. EPA's Drinking Water Treatment Technology Unit Cost Model for Reverse Osmosis and Nanofiltration (RO and NF) Last Updated 04/02/2025
PERFLUOROOCTANE SULFONIC ACID (PFOS)																					
30th Street	1,381	725,853.60	1.989		725,853.60	3.11			2,251,544.26		46000			48.07	Reverse Chloroform	Reverse Chloroform	<1.7 <2.0	4.0	0	1.0	
31st Street	746	392,997.80	1.074		392,997.80	4.08			1,591,916.25		46000			24.55	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	1.0	
Capitol Canyon	856	448,913.60	1.233		448,913.60	3.51			1,858,613.12		46000			40.62	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	1.0	
Capitol #2	1,010	530,596.000	1.454		530,596.00	3.52			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	1.0	
Capitol #3	845	330,112.00	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	1.0	
Capitol #4	845	330,112.00	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	1.0	
EPA #2	1,608	845,164.800	2.316		845,164.80	2.54			2,148,718.59		46000			48.67	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	1.0	
EPA #3	1,411	741,621.600	2.032		741,621.60	2.74			2,032,043.18		46000			41.17	Reverse Chloroform	Reverse Chloroform	<1.7 <2.0	4.0	0	1.0	
EPA #4	1,411	741,621.600	2.032		741,621.60	2.74			2,032,043.18		46000			41.17	Reverse Chloroform	Reverse Chloroform	<1.7 <2.0	4.0	0	1.0	
EPA #5	1,411	741,621.600	2.032		741,621.60	2.74			2,032,043.18		46000			41.17	Reverse Chloroform	Reverse Chloroform	<1.7 <2.0	4.0	0	1.0	
EPA #6	1,411	741,621.600	2.032		741,621.60	2.74			2,032,043.18		46000			41.17	Reverse Chloroform	Reverse Chloroform	<1.7 <2.0	4.0	0	1.0	
EPA #7	1,411	741,621.600	2.032		741,621.60	2.74			2,032,043.18		46000			41.17	Reverse Chloroform	Reverse Chloroform	<1.7 <2.0	4.0	0	1.0	
Gilbert	1,748	938,196.000	2.570		938,196.00	2.39			2,242,288.44		46000			48.75	Reverse Chloroform	Reverse Chloroform	<1.7 <2.0	4.0	0	1.0	
Kennwood #1	1,748	938,196.000	2.570		938,196.00	2.39			2,242,288.44		46000			48.75	Reverse Chloroform	Reverse Chloroform	<1.7 <2.0	4.0	0	1.0	
Kennwood #2	1,748	938,196.000	2.570		938,196.00	2.39			2,242,288.44		46000			48.75	Reverse Chloroform	Reverse Chloroform	<1.7 <2.0	4.0	0	1.0	
Mill # D	213	111,952.800	0.307		111,952.80	4.68			1,574,183.68		46000			35.40	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	1.0	
Newmark #2	1,202	631,771.200	1.731		631,771.20	2.85			2,059,384.90		46000			44.77	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	1.0	
Newmark #3	1,462	768,427.200	2.105		768,427.20	2.68			2,059,384.90		46000			44.77	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	1.0	
Newmark #4	1,462	768,427.200	2.105		768,427.20	2.68			2,059,384.90		46000			44.77	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	1.0	
Seventh Street	1,625	854,100,000	0.000	2.340	854,100.00	2.85	Total	\$	31,877,929.08	\$	693.00										
Waterman	1,625	854,100,000	2.340		854,100.00	2.85			2,442,726.00		46000			53.10	Reverse Chloroform	Reverse Chloroform	<1.7 <1.8	4.0	0	1.0	
Hexavalent Chromium (ug/L)																					
10th & J	1,373	721,648.800	1.977		721,648.80	3.12			2,251,544.26		46000			48.95	Reverse Chloroform	Reverse Chloroform	2.7	10		0.02	Reference: U.S. EPA's Drinking Water Treatment Technology Unit Cost Model for Reverse Osmosis and Nanofiltration (RO and NF) Last Updated 04/02/2025
16th Street	1,331	699,573.600	1.917		699,573.60	2.64			1,886,788.02		46000			30.55	Reverse Chloroform	Reverse Chloroform	0.63	10		0.02	
17th Street	721	378,957.600	1.038		378,957.60	3.71			1,406,932.70		46000			20.84	Reverse Chloroform	Reverse Chloroform	1.4	10		0.02	
21st Street	1,381	725,853.600	1.989		725,853.60	3.11			2,251,544.26		46000			48.07	Reverse Chloroform	Reverse Chloroform	1.4	10		0.02	
27th & Kappa	1,381	725,853.600	1.989		725,853.60	3.11			2,251,544.26		46000			48.07	Reverse Chloroform	Reverse Chloroform	1.4	10		0.02	
30th & R View	1,381	725,853.600	1.989		725,853.60	3.11			2,251,544.26		46000			48.07	Reverse Chloroform	Reverse Chloroform	1.4	10		0.02	
31st Street	746	392,997.800	1.074		392,997.80	4.05			1,591,916.25		46000			34.61	Reverse Chloroform	Reverse Chloroform	2.2	10		0.02	
Capitol Canyon	856	448,913.600	1.233		448,913.60	3.52			1,858,613.12		46000			24.55	Reverse Chloroform	Reverse Chloroform	0.21	10		0.02	
Capitol #2	1,010	530,596.000	1.454		530,596.00	3.51			1,858,613.12		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.47	10		0.02	
Capitol #3	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #4	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #5	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #6	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #7	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #8	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #9	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #10	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #11	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #12	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #13	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #14	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #15	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #16	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #17	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #18	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #19	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #20	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #21	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #22	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #23	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #24	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #25	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #26	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #27	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #28	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #29	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #30	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #31	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #32	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #33	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #34	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform	0.71	10		0.02	
Capitol #35	845	330,112.000	0.920		330,112.00	3.10			1,485,988.50		46000			33.80	Reverse Chloroform	Reverse Chloroform					

ADDITIONAL BACK-UP FOR ITEM #5

DUE TO THE LARGE FILE SIZE,

PHG REPORT – LAB DATA

MAY BE ACCESSED AND VIEWED THROUGH THE FOLLOWING LINK:

<https://www.sbmwd.org/agendacenter>

CITY OF SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT
WATER BOARD
STAFF REPORT

TO: Miguel J. Guerrero, P.E., General Manager 

FROM: Kevin T. Stewart, P.E., Director of Water Reclamation

SUBJECT: **APPROVAL OF A PROFESSIONAL SERVICES AGREEMENT BETWEEN THE SAN BERNARDINO MUNICIPAL WATER DEPARTMENT AND CAROLLO ENGINEERS, INC FOR ENGINEERING SERVICES FOR MERIDIAN SEWER LIFT STATION RELOCATION AND REPLACEMENT PROJECT (SPECIFICATION NO. 1857)**

DATE: June 5, 2025

CC: S. Miller; C. Mouser; D. Andolsen; A. Parker; G. Van Leuven; W. Huang; F. Lopez; T. Mendenhall; J. Branch; J. Martinez; C. Ineichen; R. Hyle; S. Morrison; J. Laureano

BACKGROUND:

In May of 2017, the San Bernardino Municipal Water Department (SBMWD or Department) was given responsibility for operating and maintaining the Sewer Collection System (SCS) for the Department's service area. The SCS included, at the time, twelve (12) outlying "small" sewage lift stations. Some, but not all, of these stations came with backup power capabilities. The Meridian Lift Station (Meridian LS) did not have backup power capability.

The Meridian LS was constructed in 1983 and is in poor condition. In addition to the minimally sized wet well, most components for the lift station have exceeded their expected design life and the lift station has a limited storage capacity to provide adequate response time to address potential station operational issues. The lift station uses an out-of-date auto-dialer system in lieu of a Supervisory Control and Data Acquisition (SCADA) system.

Immediately upon taking over the system, staff began work on replacing the worst of the assets that were well beyond their useful design life and that did not meet the Department's level of service targets. A backup power system for the Meridian LS was identified as one of these necessary efforts. In March 2018, the Department's Water Board authorized issuance of a Professional Services Agreement (PSA) with an engineering consultant for a backup generator design. Shortly after beginning the effort, staff released the engineering consultant in November 2018 after key shortcomings of the consultant were identified.

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In January 2018, a professional engineering consultant began the separate development of the Sewer Collections Master Plan Update. Although the final stamped Master Plan Update was not completed until March 2020, the Draft Lift Station Assessment (LSA) was delivered to the Department in May 2019. That LSA included a recommendation to fully replace the Meridian LS. Department Staff concurred with the recommendation and began initial development of a fully revised project that would encompass a complete lift station replacement and not simply addition of a backup power source.

In May 2021, Department Staff issued a Request for Proposals (RFP) to all firms registered in PlanetBids. Four engineering firms responded to the RFP. Following a review of the proposals, Staff recommended award of a PSA to a second professional engineering firm for Design Services for Meridian Sewer Lift Station Replacement Project. The Department's Water Board authorized the issuance of a PSA in August 2021.

From September 2021 through January 2024, the second engineering firm worked on design development of the full replacement project. In January 2024, after several years of slow progress and five awarded change order requests, Staff performed a comprehensive review of the project to date. Multiple existential outstanding issues remained with power utility coordination; property ownership coordination; environmental conditions of approval; and other major design challenges. Many of these issues were not discovered by the engineering consultant during the preliminary design work or before the "90 percent" design was submitted. Staff worked closely with the engineering firm to develop resolutions for each of these issues.

In August 2024, after a continued lack of progress on successfully resolving the outstanding matters and identifying yet more key setbacks along with another change order request, Staff internally outlined six (6) options for project advancement. These ranged from minor and major redesigns, cost of construction considerations, reduction of scope of work, and/or abandonment of the current design. After careful consideration, the engineering consultant was released from their PSA in September 2024.

Some of the unique critical challenges for the Meridian LS project that go beyond those inherent with any lift station design include:

- Backup power sources are limited to either an internal combustion engine-driven generator or a Battery Energy Storage System (BESS). The former requires a generator sized larger than 49 horsepower, which will require stationary emission source permitting by the South Coast Air Quality Management District (SCAQMD). Given the close proximity to elementary and high schools as well as residential zones, it is highly unlikely that the SCAQMD permitting requirements could be met. This leaves BESS as the sole remaining source of backup power. Minimal experience in the industry (both design and operation) exists. This impacts the availability of experienced design engineers and project timeline.

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- The project is located on top of the boundary between two power utilities. Both utilities have power poles and guy wires that are within the project footprint. This impacts site and traffic access, power availability, project feasibility, and project timeline from both utilities.
- The Meridian LS is located on a debris basin property owned by the San Bernardino County Flood Control District (SBCFCD) and was granted permission to build on that property in 1983. The authority to revise the footprint of the lift station must be granted by the SBCFCD through an easement or perpetual lease agreement. This impacts project feasibility and project timeline.
- The Meridian LS is located in close proximity to areas designated as conservation areas for sensitive species. As part of the permitting effort for multiple items above, multiple environmental clearances must be obtained. This impacts project feasibility, location, and project timeline.
- The Meridian LS is currently located atop a proposed future storm drain extension pursuant to a multi-agency agreement including SBCFCD and others. This requires permitting and planning conditions of approval, as well as project feasibility and timeline.

Given the continued deterioration of the Meridian LS, it is critical that the Department promptly complete a preliminary and final design that is constructible and includes appropriate resolution of all unique constraints identified above before final design begins.

Department Staff thoroughly reviewed all project constraints and developed a robust RFP that addressed each one of these constraint elements, including the potential need for relocation of the existing facility. Where appropriate, prior work completed and data collected is to be reused and built-upon. The Scope of Work specifically EXCLUDED Engineering Services During Construction (ESDC) as the extent of this work could not reasonably be assumed until the project reached a further stage of development. ESDC would be addressed as a change order when the Final Design is nearly complete. The revised RFP was released on PlanetBids in January 2025 by invitation only to three highly-qualified professional engineering firms with multiple previous and successful designs of similar lift stations and with similar constraints. These firms included:

- Carollo Engineers
- CDM-Smith
- Hazen & Sawyer

On March 14, 2025, one (1) proposal was submitted from Carollo Engineers. Both CDM-Smith and Hazen & Sawyer informed the Department after the deadline passed that they were unable to submit proposals based upon staffing changes that occurred after the RFP was released that impacted their ability to meet the necessarily strict experience requirements. The fee proposed was \$1,109,063.00, including the optional elements shown in the table below. This fee included multiple data collection elements for the heavily constrained site. These included:

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Data Collection Items	Cost
Potholing and Slot Trenching	\$239,414
Professional Surveying	\$50,889
Geotechnical Investigation (Optional)	\$21,027
Condition Assessment of Existing Force Main (Optional)	\$16,925
Flow Analysis (Optional)	\$7,020
Subsurface Investigations	\$6,456
Total	\$341,731

Department Staff reviewed the proposal and fee proposal and unanimously found that Carollo Engineers' proposal was responsive and responsible. The higher cost of the data collection items was appropriate based upon the extensive constraints found at the site. Carollo demonstrated extensive experience on all of the critical issues, including on the BESS design. Staff recommends that Carollo Engineers, Inc be awarded a Professional Services Agreement for the Meridian Sewer Lift Station Relocation and Replacement Project, under Specification 1857.

GOALS AND OBJECTIVES:

This project aligns with the Department's Strategic Plan under Target 2, Goal 4: Address the Department's aging infrastructure.

FISCAL IMPACT:

The funding source for this project is the FY 2025/2026 Sewer Fund Capital Project titled *Meridian Lift Station Project* (C.O. C1850012), which, upon approval of the FY25/26 Budget, will have sufficient funds to award the PSA after July 1, 2025.

RECOMMENDATION:

It is recommended that the Water Board make the following motion:

- Approve the Professional Services Agreement with Carollo Engineers, Inc. for an amount not-to-exceed ONE MILLION ONE HUNDRED NINE THOUSAND SIXTY THREE AND 00/100 DOLLARS (\$1,109,063.00); and authorize the General Manager to execute the Agreement.

Miguel J. Guerrero, P.E., General Manager

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BETWEEN THE SAN BERNARDINO MUNICIPAL WATER
DEPARTMENT AND CAROLLO ENGINEERS, INC FOR
ENGINEERING SERVICES FOR MERIDIAN SEWER LIFT STATION
RELOCATION AND REPLACEMENT PROJECT (SPECIFICATION
NO. 1857)**

Respectfully submitted,

A handwritten signature in blue ink that reads "Kevin Stewart". The signature is written in a cursive, flowing style.

Kevin T. Stewart, P.E.
Director of Water Reclamation

Attachments: Proposal and Fee Proposal Spec 1857.pdf
PSA Spec 1857.pdf

KTS



Meridian Sewer Lift Station Relocation and Replacement Engineering Services

City of San Bernardino Municipal Water Department

Scope of Services

Purpose

The San Bernardino Municipal Water Department (SBMWD), established in 1905, provides potable water to approximately 200,000 people within a 45-square-mile area of San Bernardino and unincorporated county regions, sourcing its water from groundwater wells in the Bunker Hill Groundwater Basin.

Since 1973, SBMWD has operated the Water Reclamation Plant (WRP), a 33 MGD regional secondary wastewater treatment facility serving the City of San Bernardino, Loma Linda, San Bernardino International Airport, Patton State Hospital, and parts of unincorporated San Bernardino County. Effluent from the WRP undergoes further treatment at the Rapid Infiltration and Extraction (RIX) facility, co-owned with the City of Colton since 1994. The RIX facility uses percolation and UV disinfection before discharging to the Santa Ana River and can treat up to 40 MGD of influent, with a UV system capacity of 64 MGD.

The wastewater collection system, now managed by SBMWD since a 2017 City Charter reform, includes 493 miles of pipes (primarily vitrified clay), 15 lift stations, 13 siphons, and approximately 38,300 connections, alongside the WRP and RIX facilities.

A key component, the Meridian Sewer Lift Station (Meridian LS), located at 800 South Meridian Avenue, is in poor condition. Installed in 1983, its components have surpassed their life expectancy. The station has limited storage, lacks a backup power supply, and relies on an outdated alarm system. This necessitates a lengthy and resource-intensive manual response during power outages, involving transporting a portable generator. The 2019 Sewer Master Plan recommended a full replacement of the Meridian LS to improve reliability and prevent sanitary sewer overflows. Prior preliminary design work and flow monitoring (MDWF 60.5 GPM, PDWF 210.0 GPM in late 2021) have been conducted for this upgrade.

Task 1 – Data Collection, Review, and Analysis

Task 1.1 Request for Information and Review of Existing Information

The Carollo will obtain all readily available existing data from the Department concerning the existing Meridian Lift Station, including any information from previous design efforts.

As a part of Task 1, Carollo will:

- Submit an initial request for information (RFI) that is determined to be necessary and useful in this type of project. RFIs are to be submitted in Excel (.xlsx) format. Carollo will number each item requested and track the status of each RFI throughout the preliminary design.
- Carollo will review the data, identify any data gaps, and request additional information as required to complete the work as described.

- Carollo will perform, at minimum, two (2) field visits for data collection. Field visits will be coordinated at least two (2) business days in advance such that Maintenance Staff may be scheduled to be present to open the facility.

A list of the existing reports/data from previous design efforts is provided in Exhibit 4. Exhibit 4 also includes a summary of the previous design effort challenges, permitting efforts, and ongoing coordination efforts.

Carollo will thoroughly review the existing information from previous design efforts, including assumptions of significance made. To the extent that the assumptions made were sound, the existing data may be used.

Task 1.2 Professional Surveying

Professional land surveying services will be performed for the project design preparation and all other requirements.

Aerial photogrammetry with one (1) foot contours of the Project site will be captured. The aerial photo survey elements will be incorporated into the plan and profile drawings, but the photographs themselves will not. The survey will include identification of rights-of-way, street centerlines, curbs and gutters, sidewalks, easements, surface and utility appurtenances, finish grade, pipelines, utility location, structural, and other elements relevant to prepare comprehensive construction documents.

Coordinates, a description for benchmark and basis of bearing, and placement of a new brass disc in the vicinity of the project area to be used during the project will be included.

Horizontal project control will be conducted utilizing Global Positioning System (GPS) survey methods. When GPS survey methods cannot be used for all or part of a horizontal project control survey, the Total Station Survey System (TSSS) can be used.

Horizontal control will be established on at least two (2) monuments on the site using first-order (1:100,000) GPS survey methods. The remaining monuments may be tied-in using GPS or conventional survey methods with second-order (1:20,000) accuracy.

Horizontal project control surveys will be referenced and adjusted to California High-Precision Geodetic Network (CA-HPGN) and its densification stations (CA-HPGN-D). Preferred order of accuracy is first-order survey standards with a distance accuracy standard of 1:100,000 in accordance with Caltrans standards. Second-order accuracy standard (1:20,000) is acceptable when using the TSSS method.

The horizontal control will be based on Northern American Datum of 1983 (NAD83), as defined by the National Geodetic Survey (NGS) California State Plane Coordinate System Zone 5, using the California Spatial Reference System (CSRS) Epoch 2011.00.

Vertical project control will be based on the North American Vertical Datum of 1988 (NAVD88), as defined by NGS. Accuracy standard will be second-order survey accuracy in accordance with Caltrans standards, although third-order (1:5,000) accuracy is acceptable.

The aerial topography survey will encompass the Meridian Lift Station site, as well as any other viable locations per the PDR. All surveys will be done within the public right of way and or within SBCFCD property, as determined by the PDR.



Horizontal and vertical control for the survey will be consistent with established control and existing SBMWD facilities. This control will be utilized for design of the proposed facilities and will be the basis to establish location and elevation of the existing and proposed facilities.

All work associated with project site survey will be completed under the supervision of a professional land surveyor licensed in the State of California.

Refer to Exhibit 1 for the Project location, and possible location options. The surveying task includes all location options as well as an allowance for an additional location not considered previously such as outside of SBCFCD property.

Task 1.3 Utility Research/Coordination – Subsurface Investigation

Carollo will perform utility research by obtaining all utility information in the vicinity of the Project site. This may include conducting an Underground Services Alert (USA) inquiry to obtain a list of agencies that operate utilities in the vicinity of the Project site. However, does not include calling USA to mark utility locations on the roadways at this point in the design process.

Carollo will perform further field investigations to identify, verify locations, and determine the status of existing utilities. Carollo will obtain and review all applicable base map plans, atlas maps, substructure maps, specifications, reports, and record data for all existing utilities, agencies, and other entities which may be affected by the Project.

The Construction Drawings will identify all existing SBMWD facilities and all other public utilities in the vicinity of the Project site. Locate, identify, and show SBMWD facilities and appurtenances on the construction drawings, including water mains and appurtenances, vaults, manholes, sewer mains and appurtenances, etc. Relevant water valves and sewer manholes will be “dipped” in conjunction with the survey to properly locate depths.

Given the proximity to the City boundaries at Randall Ave, the utilities of multiple agencies may be present. One such example is the Southern California Edison (SCE) and Colton Electric Utility (CEU) boundary. Both utilities are connected to the pole adjacent to the project site. The boundary with the City of Rialto is also nearby, albeit not directly adjacent.

A Condition Assessment and non-destructive testing will be conducted to understand the existing force main condition.

Task 1.4 Potholing and Slot Trenching

Carollo will conduct a minimum of twenty (20) potholes to obtain all necessary data to prepare final design plans. Any additional potholing above what is previously described will be considered on an as-requested basis.

There is an existing 66” storm drain on-site which is owned by SBCFCD. This line will be field verified prior to proceeding with design, via excavation methods such as slot trenching. See Task 3.2 for further discussion.

Slot trenching may be required to identify other utilities as needed. Five (5) slot trenches 2-ft wide by 10-ft long by 20-ft deep are included in this scope of work.



All potholing results will be professionally surveyed, and the information added to the final design. A potholing report will be prepared, submitted to SBMWD and provided in the Bid Documents as needed.

Task 1.5 Geotechnical Investigation

Two geotechnical reports are available for the existing site, dated June 2018 and February 2022, and were included as part of the RFP. The existing geotechnical reports will be reused if the final selected location deems it appropriate.

However, if the final selected location is not the existing site, then Carollo will conduct a geotechnical investigation at the lift station site and prepare a geotechnical report identifying existing soil conditions. Generally, geotechnical services will consist of the following:

- Three (3) soil borings (minimum) at the Project site, used to define soil properties, groundwater levels, and other factors which may affect the booster station design.
 - » Borings will be identified on a map with survey coordinates and be included in the geotechnical report. Provide logs of all soil profiles.
 - » Borings will be a minimum depth of 25 feet in depth.

All results of the geotechnical investigation will be documented in the geotechnical report, which is to be included with the Preliminary Design Report. All geotechnical investigations and the final geotechnical report must be completed under the supervision of a Geotechnical Engineer registered in the State of California. The report will be stamped and signed by the Geotechnical Engineer.

The geotechnical report will be submitted to SBMWD, the bid documents will reflect the geotechnical report findings and recommendations as needed, and it will be an appendix to the bid documents.

Task 1.6 Additional Flow Analysis

Carollo has coordinated with our subconsultant K-Flow to provide additional flow monitoring services should they be requested by the Department. Services under this task include providing flow monitoring and two (2) separate manhole locations to be determined by the project team. The flow monitoring services will take place for a maximum of three (3) months. These services will be provided on an optional, as needed basis and will not be undertaken without written authorization by the department.

Task 2 – Preliminary Design

As described in the Project Overview, there are two (2) potential design options for this project:

- Expansion of the existing lift station to include (not limited to) new wet well, submersible pumps and appurtenances, electrical and controls, BESS and associated structure to house all electrical items;

OR

- Expansion of the existing lift station to include (not limited to) new wet well large enough to provide for 12 hours of emergency response time, submersible pumps and appurtenances, electrical and controls, structure to house all electrical items.



Task 2.1 Project Design Options Analysis

Carollo, based on the scope provided in Exhibit 2 and Exhibit 3, will review all prior design efforts and provide an in-depth analysis (feasibility, cost, constructability, operability/usability, etc.) of each option and provide a recommendation to Department staff in the Preliminary Design Report (PDR). The analysis will follow the development and review with the Department of robust evaluation criteria.

The analysis will also include a review of the current project site and consider alternative sites for the proposed lift station. As described in Exhibit 4, there are many physical, environmental, and bureaucratic constraints for the site, and an alternative location may provide for the best option to operate the proposed site into perpetuity.

SBCFCD easement acquisition or permanent lease option will be required. Both options will be considered as part of the Preliminary Design Report (PDR), but the Department previously chose an easement acquisition since an easement would be granted to SBMWD once as opposed to the permanent lease option which would require interval lease payments to SBCFCD in perpetuity. Carollo will be required to assist SBMWD staff with preparing required documentation to be submitted such as surveying files, legal, plat and an appraisal.

The analysis will also take into consideration the possibility of SBCFCD requiring that the existing terminus of the storm drain be extended westward to the Right of Way.

In the recent past, the South Coast Air Quality Management District (SCAQMD) has driven continually more stringent rule-making regarding emissions from the use of internal combustion engines driving emergency generators. It is likely that SCAQMD will further, restrict the use of these and emphasize greater use of BESS and Microgrid technology, at some point, potentially limiting the Department to only this option. The Department can benefit from being an early adopter of the BESS and Microgrid technology by learning lessons before any potential shift in regulations.

The evaluation and scoring of the options in Exhibit 2 will consider the following elements:

- Backup power for resiliency improvement
- Operating costs, including consideration of energy arbitrage, if allowable
- Peak shaving / load shedding
- Management of climate-related impacts, including carbon footprint
- Participation with community and utility partners to assist in power grid stabilization and/or demand response
- Early adoption of BESS and Microgrid technology

Based on Carollo's review of Exhibit 4 and all associated reports, data, and project history, Carollo will also provide any additional recommendations which would assist with the project design, construction, and operation.

As reference, Exhibit 8 includes the BESS proposal.



Task 2.2 Preliminary Design Report (PDR) Addendum

The Carollo will prepare an addendum to the existing PDR including the findings and results of activities as described above. The combination of the existing PDR and Carollo's Addendum will address, through recommended additions or revisions, all elements below. At a minimum, the combined PDR and addendum will include draft and final copies in PDF and Word and will include the following:

1. A comparison of the pros and cons of the Project options as described above.
2. Detailed description of the recommended design option and of the major components that will be included in the design.
3. Preliminary construction sequencing schedule (Draft PDR). The existing lift station is required to remain in service until the new lift station is constructed, tested, and is fully operational. By-pass pumping will be minimized as much as possible to connections and tie-overs. The Design will reflect this requirement, and the Specifications will include a robust Bypass Pumping specification section with prior approval steps and 24-hour monitoring by qualified pump mechanics.
4. Detailed sequence of work to maintain operation of the lift station during construction (Final PDR Addendum).
5. Budgetary level construction cost estimates of recommended improvements (AACE Class 4).
6. Construction schedule showing estimated construction duration.
7. Preliminary site layout for the proposed Meridian LS station upgrades and site improvements (retaining wall, structure, wet well, etc.). It is of critical importance that preliminary concepts be discussed with Department Mechanics and Electricians that utilize the facility at this early stage and not beyond the PDR Addendum phase.
8. Preliminary horizontal alignment and profile of the proposed force main and gravity main(s).
9. A brief discussion of the anticipated coordination efforts and the agencies involved (SBCFCD, SCE, USFWS, etc.), along with a matrix of all identified agencies.
10. Anticipating the development of a Department-wide SCADA Master Plan in the near term (Notice to Proceed was effective August 19, 2024), including a new SCADA system serving exclusively the Sewer Collections System, partner with and assist the Electrical Services Superintendent on the development of preliminary components that should be incorporated into the Meridian Sewer Lift Station. The intent will be to incorporate necessary connections and support infrastructure for future SCADA and control components to be designed during the SCADA Master Plan. See Exhibit 3 for more details.
11. Identification of major equipment and proposed manufacturers including the long-lead items. No pre-purchase of equipment will be considered. See Exhibit 3 for Department-preferred manufacturers/equipment. Department may accept equal substitutions as recommended by the Carollo.
12. Existing force main non-destructive condition assessment, consideration of cured in place pipe (CIPP) and existing sewer maintenance hole lining. Existing force main length is approximately half a mile, or about 2,600 linear feet.

13. A preliminary table of contents for the Technical Specifications.
14. Preliminary Sheet index for the Final Design drawings.
15. Other enhancements that may add value, efficiency, maintainability, or operability.
16. The combined PDR and PDR Addendum will also include:
 - a. A copy of the Geotechnical report. The draft and final copies of both the Geotechnical report and the PDR can coincide with each other.
 - b. A copy of the potholing report.
 - c. Any supplemental documents or calculations which support lift station equipment/materials.

All final design drawings, technical specifications, and engineering report(s) will be stamped by a registered professional engineer possessing a valid license in good standing as issued by the State of California.

The Department's comments (and Carollo responses) to the draft PDR will be incorporated into a conformed Final Combined PDR and PDR Addendum. No work will proceed to the final design phase until the combined document has been reviewed and approved by the Department.

Deliverables:

- Carollo will submit an administrative draft PDR Addendum for SBMWD and incorporate all comments in the final Combined PDR and PDR Addendum for review and approval by SBMWD.
- The submittal of preliminary design sheets for the lift station, civil improvements, force main, and all appurtenances included with the final Combined PDR and PDR Addendum can be considered as the "30%" submittal of the construction documents. Any design sheets will meet the requirements of the final design deliverables as described in Task 3, below.
- Meeting Minutes and audio recording from a Preliminary Design Workshop to propose initial options and obtain Department feedback.
- Meeting Minutes and audio recording from the Final Preliminary Design Report workshop.

Electronic copies of all reports, estimates, and layouts in searchable PDF format are acceptable for submittals, but the PDR Addendum will be submitted in Microsoft Word format also.

Task 3 – Final Design Services

Using the final Combined PDR and PDR Addendum developed in Task 2, Carollo will prepare contract documents (technical specifications and plans) for construction of the Project. Plans and specifications will be prepared in accordance with the standard of care for public works construction. The facilities will be designed in accordance with the latest versions of the pertinent codes and regulations, as adopted by the Department, or as agreed to by the Department and the selected Carollo at the beginning of the Project.

The design will be completed in the latest version of AutoCAD Civil 3D software by Autodesk with the intent to minimize conflicts.



Task 3.1 Sewer Lift Station Final Design

Carollo will prepare final design packages at the 60%, 90%, and 100% design levels. The final design packages will be based on the option selected during the PDR phase. Major elements, such as overall layout, existing utility alignment from potholing or slot trenching, surveying, environmental approval, easement application, geotechnical borings, backup power evaluation, SCE coordination, external agency coordination (Colton, San Bernardino, SBCFCD), etc., will reflect a thorough effort during preliminary design and will be mostly or completely resolved by the 60% design phase. The final design, at a minimum, will include the following components:

1. Detailed construction sequencing plan. The existing sewer lift station will remain in service until the new lift pump station has been constructed, tested, and is fully operational. By-pass pumping will be minimized as much as possible to connections and tie-overs.
2. Demolition plan of existing sewer lift station and equipment enclosure. Carollo to confer with SBMWD staff to determine what lift station appurtenances can be salvaged.
3. Lift station site layout and equipment configuration, including all details (Civil).
4. Mechanical Details.
5. Structural Details of proposed pump house structure.
 - a. All structural calculations will be submitted with each design phase
6. Electrical plan and details.
7. Instrumentation
 - a. P&ID diagrams and details
8. Discharge force main replacement plan and profile, including all existing on-site utilities. The length of replacement will be from the new lift station location to an adequate connection point of the existing force main.
9. Gravity main (inflow) replacement plan and profile (as needed), including all existing on-site utilities.
10. Connection details for proposed discharge force main replacement.

Task 3.2 Storm Drain Final Design (OPTIONAL)

If required by SBCFCD and requested by the Department, Carollo will provide final design services for approximately 70 linear feet (LF) of 66-inch storm drain. There is an existing storm drain currently bulkheaded near the existing lift station. The final design of the storm drain will include a plan and profile of the proposed horizontal and vertical alignment and will be designed according to all applicable SBCFCD requirements and standards.

Deliverables:

- Final plan and profile sheet for Storm Drain improvements



Assumptions:

- Storm drain design sheet can be done on the standard project titleblock, no separate titleblock will be required
- Storm drain design will be one sheet, with required details placed directly on the plan and profile sheet.
- Length of designed storm drain will not exceed 100 feet.
- Easement services or preparation of a P&L document for storm drain are not included.
- Storm drain design will use SBCFCD standard drawings and materials. No custom details will be created.

Task 3.3 Development of Lift Station Contract Documents

Carollo will develop detailed design plans and technical specifications in accordance with SBMWD's AutoCAD standards, design standards, standard drawings, and standard technical specifications. Front end specification (bid proposal and contractual documents) will be provided by SBMWD. Develop special provisions, special conditions, and additional technical specifications beyond the SBMWD standard specifications as appropriate in Microsoft Word Construction Standards Institute (CSI) format. Department templates for Division 01 sections will be provided to Carollo but edits and customization will be required by Carollo since not all items will apply to the lift station relocation and replacement project. Plans and specifications will be provided in digital electronic format in accordance with SBMWD design standards. A complete set of project plans will be prepared to indicate all construction elements, including civil and structural elements, and all other related details. Plans will be prepared on size 22" x 34" sheets (scalable to 50% when plotted on 11" x 17" sheets) utilizing SBMWD standard title blocks with plan and profile sheets prepared at scales of 1" = 40' (horizontal) and 1" = 4' (profile) or as needed. The project plan set is expected to include the following:

Drawing Number	Title
G-1	Title Sheet, location map, vicinity map, and signature blocks. List of agencies, cities, and contact information
G-2	General Notes
G-3	Construction Notes, Estimated Quantities, and Legends
G-4	Abbreviations, Survey Information, Pipe Horizontal Control and Sheet Index Map
D1 – D	Demolition Plans
C-1 – C	Civil Design Sheets
CD-1 – CD-	Civil Detail Sheets
S1 – SX	Structural Design Sheets and Details
M1 – M	Mechanical Design Sheets and Details
E1 – Ex	Electrical Sheets and Details
N1 – NX	Instrumentation Sheets and Details

The number of Plan Sheets, Civil Details, Structural, Mechanical, Electrical, and Instrumentation may vary.

Final Design Deliverables

60% Design Submittal

Carollo will prepare and submit plans and specifications at the 60% level of completion. It will include all plan sheets required for the Project; however, some detail sheets may be incomplete; a complete Table of Contents listing all technical specification sections required for the project, with all major equipment sections completed; and a resolution of all comments to the PDR as documented in an updated PDR comment log. A detailed description of any enhancements, deletions, or other modifications to the PDR will also be provided with the 60% design submittal.

The 60% design submittal will include but not be limited to:

- Designs for construction of new facilities and for modification to the existing facilities
 - » Demolition Plan
 - » Site Plan
 - » Preliminary structural plan (Including structural calcs)
 - » Piping Plan (including hydraulic calcs)
 - » Electrical schematics, including those for a BESS (if required)
 - » Construction sequencing
 - » Initial catalog cuts for equipment and materials
- Drawings that will include at a minimum:
 - » Title sheet with general notes, vicinity map, key map, and legend per Department standards
 - » Preliminary list of construction drawings
 - » Locations of existing public and private utilities within the project area
 - » Preliminary site plan including construction staging areas (if applicable)
 - » Other drawings, as applicable to show information from pre-design drawings
 - » Provide spare conduits
 - » List of special conduits, if any
 - » Drawings will show all topographic and utility information and the horizontal alignment of proposed pipeline improvements with sizes

90% Design Submittal

Carollo will prepare and submit plans and specifications at the 90% level of completion. It will include updated plans, majority of technical specification sections completed, resolution of all comments to the 60% design submittal as documented in an updated 60% design comment log, an initial opinion of probable construction costs (OPCC), and an initial construction duration schedule. Initial OPCC will include a 15% contingency.

The 90% Design Submittal will include the following:

- General Sheets - Title Sheet, General Notes, Index to Sheets, Benchmarks Horizontal Control, Vicinity and Location Maps
- Civil Sheets - Rough and Final Grading, Demolition, Site Piping (Inlet & Outlet) & Profiles, Site Improvements such as paving, Sewer, Civil Details



- Mechanical Sheets – Pumps, Piping, Vault Plans, Valve & Fittings, Miscellaneous Metal Items, Hardware & Mechanical Details
- Structural Sheets - General Notes & Details, Foundation, Roof, Roof Reinforcing Layout, Roof Reinforcing Details, Longitudinal & Transverse Sections, Miscellaneous Sections, Walls, Miscellaneous Reinforcing, Hatch Openings Sections & Details, Ladder Details, Miscellaneous Sections & Details
- Electrical & Instrumentation/SCADA – such as but not limited to EI&S Symbols Notes & Abbreviations, Electrical Service, Transformer, Single Line Diagram, Lighting Plan, Motor Control Center, Conduit Schedule, Panel Connection details, Connection Diagram, Electrical Site Plan, P&ID, Instrumentation and Control.
- Landscape and Irrigation Plans (if needed)

100% Design Submittal

Carollo will prepare and submit plans and specifications at the 100% level of completion. It will include complete plans and technical specifications, resolution of all comments to the 90% design submittal as documented in an updated 90% design comment log, a final OPCC, and final construction duration schedule. Final OPCC will include a 10% contingency.

Final Design Submittal

Carollo will prepare and submit plans and specifications at the final design level of completion. The final design submittal will represent the contract documents ready to bid, where all comments have been addressed to the Department's satisfaction. A copy of the 100% design submittal comments will be provided with the final design submittal that clearly delineates the resolution of those comments.

Deliverables:

- 60% Design Package
- 90% Design Package
- 100% Design Package
- Final Design Package

Task 4 – Bidding Phase Assistance

Task 4.1 Requests for Information (RFI)

Carollo will assist with providing information and clarification of bid documents (requests for information of "RFIs") to prospective bidders and prepare up to three (3) addenda to the bid documents. This task assumes up to twenty (20) RFIs during the bidding phase.

Task 4.2 Conformed Set of Construction Plans and Specifications

Carollo will prepare a conformed set of construction plans and technical specifications incorporating all changes made during the bidding process as a result of bidder question responses and addenda issued. Plans and technical specifications will be stamped "Conformed" and submitted per the SBMWD Uniform Design Standards.

Task 4.3 Pre-Bid Conference



Carollo will prepare for and attend the pre-bid conference. The pre-bid conference will be conducted by Department staff, however Carollo will provide technical assistance as needed.

Pre-bid conference will include a meeting at Department administrative facilities and will conclude with a site walk.

Task 5 – Project and Quality Management

Task 5.1 Project Kick-off Meeting

Carollo will organize and attend a project kickoff meeting with SBMWD to discuss the scope and parameters of the project (in-person meeting).

Task 5.2 Progress Meetings

Carollo will prepare for and participate in **monthly** progress meetings with SBMWD (virtual/phone calls), and as needed to review project items. It is assumed each meeting will be 1 hour in length. Carollo's Project Manager and SBMWD's representative will communicate weekly via email, phone calls and virtual meetings as needed for specific project updates, design topics, budget, RFI's and general coordination throughout the contract duration.

Task 5.3 Design Review Meetings

Carollo will schedule and attend up to seven (7) design review meetings (virtual) with SBMWD to ensure that any design issues are resolved. The anticipated meetings are as follows:

- **Draft PDR Addendum Workshop:** To be scheduled within two (2) working days after the administrative draft of the Preliminary Design Report has been returned to the Carollo.
- **Final PDR Addendum Workshop:** To be scheduled within two (2) working days after the Final PDR submittal has been provided to the Department
- **60% Design Review Workshop:** To be scheduled within two (2) working days after the 60% submittal comments have been returned to Carollo.
- **90% Design Review Workshop:** To be scheduled within two (2) working days after the 90% submittal comments have been returned to Carollo.
- **Final Design Review Workshop:** To be scheduled after the 100% submittal comments have been returned to Carollo and plans are ready for final approvals.
- **As-Needed (2):** Two (2) "As-Needed" design review meetings are included in this scope of work.

Task 5.4 Recurring Progress Reports

Carollo will submit monthly progress reports at the same time as monthly invoices that include the following contents:

- Work activities completed to date, in the current reporting period, and projected for the coming month.
 - A brief description of outstanding issues and their potential for impact on scope, schedule, budget, and quality.
 - Potential changes in the project scope.
- 

- Budget status including estimates of actual costs to date, earned value, costs to complete, and costs at completion. The budget status over time will be presented on a graph with associated tabular data indicating for each month the actual costs incurred, earned value, and planned value.
- A discussion of corrective actions to be taken to avoid or mitigate cases where estimated costs at completion exceed budgets.
- Schedule status
- A discussion of corrective actions to be taken to avoid or mitigate cases where the project schedule is expected to be delayed.
- Updated Project Logs
 - » Decision Log
 - » Action Item Log
 - » Meeting Log
 - » RFI Log
- Summary of the status of Carollo invoices, including identification of invoices not yet submitted and submitted but unpaid invoices.
- Overall project budget and schedule completion in graphical format on the same graph. Show actual budget used, original schedule completion, and actual estimated project completion on the graph.
- The approved WBS will form the basis for reporting the status of each Scope of Work task in the monthly project Progress Report and the project Invoices.

All calculations of earned value and estimates to complete will be made at the same level of detail as included in the fee proposal.

Task 5.5 Project Invoices

Carollo will prepare and submit separate monthly invoices listing all project locations awarded to the Department as quickly as possible, with the goal of submitting by the first Wednesday of the following month. Invoices will be submitted for every month that work is being performed unless the Department's Project Manager has provided prior approval for combining the work of two months into a single invoice.

The invoice will contain the following components:

- Invoice Summary for all project tasks
- Invoice Breakdown for each project task
- Supporting Information for each project task

The invoice summary page(s) will contain, at a minimum:

- Company name and address
- Department Purchase Order Number and Construction Order No.



- Unique Invoice No.
- Invoice Date
- Invoice period (beginning and end dates)
- Labor Costs
- Carollo Costs
- Carollo Markup
- ODC Markup
- Total Approved Not-to-Exceed Budget Value by Task
- Billings to Date by category (Labor, Consultant, ODC), separated into Prior, Current, and Total columns
- Amount to be paid for this payment request
- Amount previously billed but not yet received
- Budgeted amount remaining both per task and for the contract as a whole
- Current billing period “total percent invoice date”

The invoice breakdown will contain, at a minimum:

- Breakdown by Category, by Task, by labor classification, by person, by day, the quantity of hours and unit rate, extended to a total daily cost per person per task. The breakdown will include a brief description of each billed item.
- First order subconsultants costs identified at the same level of detail as Carollo staff

The supporting information page(s) will contain, at a minimum:

- Any invoices or other documents supporting costs identified on the Invoice Summary or Invoice Breakdown pages. All costs identified in the invoice will be identified and broken down to their logical component parts.

Approval of an invoice by the Department requires a Progress Report for the period covered by the invoice.

Payment of an invoice will be delayed until the Progress Report is submitted. The Progress Report will include a detailed description of the major activities accomplished for each task worked on during the invoice period. If no work was completed for a specific task, it will be noted and described as such. It will also include a discussion of any potential financial and schedule impacts and how the Carollo plans to recover from these potential concerns.

No billable overtime work will be permitted to occur without the written agreement of the Department’s Project Manager in advance of the overtime work. It is expected that all work for this project will be completed during normal work hours.

Task 5.6 Subconsultant Management

Carollo will use select subconsultants to round out the design team. The anticipated list of subconsultants is provided below:



- ODay Consultants – Survey, potholing, and slot trenching
- UES – Geotechnical investigations
- ProjectLine – Electrical, Instrumentation, and Controls engineering. BESS design and implementation

Task 5.7 Quality Management

Carollo will manage the quality of the project deliverables throughout the development of the project as follows:

- Peer review of concepts by members of Carollo's senior staff.
- Review of all submittals by the project team.
- Constructability review by an in-house team of qualified senior staff, during the development of the 60% design submittal.
- Quality check of the 90% design submittal by an in-house team of qualified senior staff not associated with the project delivery. The quality check will be signed off by QA/QC senior staff indicating that they have reviewed the deliverables and that they meet Carollo's standards for quality. The QA/QC senior staff will certify and authorize the checked plans to be released to SBMWD.

In addition, Carollo will maintain and update Department review comment logs and incorporate revisions from the Department review comments into the drawings and specifications. All comments will indicate how they are addressed by Carollo.

Task 6 – Record Drawing Preparation

Carollo will prepare record drawings utilizing Contractor's digitally produced redlined field plans and any tie sheets or other Department generated documents in compliance with Department standards after construction is completed.

In addition, Carollo will prepare a start-up/commissioning report for the newly constructed sewer lift station, including the BESS (if applicable).

Task 7 – Permits (Allowance - \$20,000)

Carollo will process applications/correspondence for all applicable permitting efforts for this project.

This task includes an assumed cost of \$20,000, which will include direct expenses associated with permit applications, fees, deposits, and other direct costs. These costs will be billed directly to the Department, on each monthly invoice as required.

Assumptions and Exclusions

- The Department will furnish Carollo all available studies, reports and other data pertinent to Carollo's services; obtain or authorize Carollo to obtain or provide additional reports and data as required; furnish to Carollo services of others required for the performance of Carollo's services hereunder, and Carollo will be entitled to use and reasonably rely upon all such information and services provided by the Department or others in performing Carollo's services under this Task Order.



- Project duration of approximately 13 months, to complete the final design assuming a Notice to Proceed is issued in July 2025.
- A preliminary drawing list similar to previous designs of the lift station. The level of effort shown includes two additional plan and profile sheets for offsite sewer to route sewer to and from the new lift station location. If longer sewer runs are required, additional drawings will be needed.
- Bid phase services include responding to up to 20 RFIs and preparing up to three addenda as stated in the RFP.
- Potholing efforts priced reflect the required 20 potholes and 5 slot trenches identified in the RFP. This reflects a high cost from subconsultants. There may be an opportunity to streamline this price as the siting workshop progresses.
- Optional tasks shown will only be undertaken if approved by SBMWD. Exact locations and quantity of borings, potholes, slot trenches, and potential flow monitoring will be determined after award and during preliminary design.
- Task 7 includes direct costs as identified in the RFP for permitting fees, deposits, etc. as well as engineering staff time to prepare, develop, and complete applications.
- Our understanding is that SBMWD wants a control system on their Meridian LS BESS to stay grid connected, peak shave, and operate when the grid fails. These should all be realizable, but will require programming of controls by a 3rd party integrator. Specialist integrators typically have a tried solution that implements a control scheme to perform the functions detailed by the customer. The approach requires controlling the 480V gear, which is not as common as controlling MV. Equipment selection will be important to make sure the system has the capabilities required.
- Our BESS options analysis for Task 2.1 will be limited to:
 - » Preliminary system sizing.
 - » Listing of technical requirements.
 - » Preliminary single line diagram.
 - » Concept-level construction cost estimate.
 - » Life-cycle costs, including battery replacement estimates.





3150 Bristol Street, Suite 500
Costa Mesa, California 92626
714-593-5100
carollo.com

March 14, 2025

Sydney Morrison
Contracts Administrator
City of San Bernardino Municipal Water Department
1350 S. "E" Street
San Bernardino, California 92408

Subject: Fee Proposal to Meridian Sewer Lift Station Relocation and Replacement Engineering Services,
No. 1857

Dear Ms. Morrison:

Please find attached, per the requirements of the RFP, an estimated level of effort and fee proposal for the above-mentioned Meridian Sewer Lift Station Relocation and Replacement Engineering Services, No. 1857. As requested, we have provided a detailed labor-hour level of effort estimate by personnel classification for the work, broken down by major project element task and subtask. The proposed not-to-exceed fee estimate is shown at the bottom of the table, on the second page. Totals are shown, but including and excluding optional tasks identified in the RFP. The hourly rates by personnel classification will be held constant for the duration of the design phase of the project.

Our labor hour effort as presented in the fee table was based on the following assumptions:

- The Department will furnish Carollo all available studies, reports and other data pertinent to Carollo's services; obtain or authorize Carollo to obtain or provide additional reports and data as required; furnish to Carollo services of others required for the performance of Carollo's services hereunder, and Carollo will be entitled to use and reasonably rely upon all such information and services provided by the Department or others in performing Carollo's services under this Task Order.
- Project duration of approximately 13 months, to complete the final design assuming a Notice to Proceed is issued in July 2025.
- A preliminary drawing list similar to previous designs of the lift station. The level of effort shown includes two additional plan and profile sheets for offsite sewer to route sewer to and from the new lift station location. If longer sewer runs are required, additional drawings will be needed.
- Bid phase services include responding to up to 20 RFIs and preparing up to three addenda as stated in the RFP.
- Potholing efforts priced reflect the required 20 potholes and 5 slot trenches identified in the RFP. This reflects a high cost from subconsultants. There may be an opportunity to streamline this price as the siting workshop progresses.
- Optional tasks shown will only be undertaken if approved by SBMWD. Exact locations and quantity of borings, potholes, slot trenches, and potential flow monitoring will be determined after award and during preliminary design.
- Task 7 includes direct costs as identified in the RFP for permitting fees, deposits, etc. as well as engineering staff time to prepare, develop, and complete applications.
- Our understanding is that SBMWD wants a control system on their Meridian LS BESS to stay grid connected, peak shave, and operate when the grid fails. These should all be realizable, but will require programming of controls by a 3rd party integrator. Specialist integrators typically have a tried solution that implements a control scheme to perform the functions detailed by the customer. The approach requires controlling the 480V gear, which is not as common as controlling MV. Equipment selection will be important to make sure the system has the capabilities required.

■ Our BESS options analysis for Task 2.1 will be limited to:

- » *Preliminary system sizing.*
- » *Listing of technical requirements.*
- » *Preliminary single line diagram.*
- » *Concept-level construction cost estimate.*
- » *Life-cycle costs, including battery replacement estimates.*

We appreciate this opportunity to provide these services to SBMWD and look forward to collaborating with you to successfully complete this important project for the Meridian Lift Station Replacement. We are confident that we can find the right fit of scope and services to provide a cost-effective project that meets the requirements of SBMWD. Please feel free to call our Principal-in-Charge for this project, Rajesh Doppalapudi, at (714) 609-9115 or Project Manager, Juan Loera, at (714) 235-1176 should you have any questions or require any additional information.

Sincerely,

CAROLLO ENGINEERS, INC.



Rajesh Doppalapudi, PE
Principal-in-Charge, Vice President



Juan Loera, PE
Project Manager, Vice President





EXHIBIT A
FEE ESTIMATE (March 14, 2025)
SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
MERIDIAN SEWER LIFT STATION RELOCATION AND REPLACEMENT

Meridian Sewer Lift Station Relocation and Replacement San Bernardino Municipal Water Department Fee Estimate		Carollo Labor													Subtotal		Subconsultants & Expenses				Total Cost \$	
		Sr. Professional	Lead Professional	Sr. Civil Eng	Sr. Elec Eng	Sr. Struct Eng	Sr. Mec Eng	Sr. Mech Eng	Project Eng	Assistant Eng	Staff Engineer	Sr. CAD Designer	Assistant CAD Designer	Doc Processing	Total Labor Hours	Total Labor Cost	Subconsultants	5%	ODCs	Travel		
Task	Subtask Description	Bill Rate	325	298	267	325	325	325	325	267	195	180	240	165	155							
1	0 Data Collection, Review, and Analysis		0	6	22	0	4	0	4	34	0	28	4	4	0	106	26,000	309,697	15,485	0	1,750	352,932
1	1 Request for Information & Review of Existing Info			4	8		4		4	16					36	10,200		0		1,000	11,200	
2	2 Professional Surveying / P&L Preparation				2								4		6	1,494	46,329	2,316		750	50,889	
3	3 Utility Research - Subsurface Investigations				2					6		24			32	6,456		0			6,456	
4	4 Potholing / Slot Trenching									4				4	8	1,728	226,368	11,318			239,414	
5	5 Geotechnical Investigation (Optional)				2					4					6	1,602	18,500	925			21,027	
6	6 Condition Assessment of Existing FM (Optional)			2	8					4					14	3,800	12,500	625			16,925	
7	7 Additional Flow Analysis (Optional)											4			4	720	6,000	300			7,020	
2	0 Preliminary Design		0	10	40	30	4	2	24	0	80	40	40	120	20	410	88,460	45,796	2,290	250	0	136,796
1	1 Project Design Options Analysis			2	10	8					20			20		60	13,066	4,036	202			17,304
2	2 Preliminary Design Report (PDR) Addendum			4	10	2	4	2	4		20	40			12	98	20,722	18,824	941	250		40,737
3	3 30% Plans			4	20					20			40	100		184	39,132	20,000	1,000			60,132
4	4 Allowance to assist SBMWD with SCE Coordination					20					40				8	68	15,540	2,936	147			18,623
3	0 Final Design Services		8	30	108	6	78	6	72	108	152	220	50	406	40	1,384	294,292	169,920	8,496	0	500	473,208
1	1 Sewer Lift Station Final Design	Included in Tasks 3.3 below													0	-	0				-	
2	2 Storm Drain Final Design (Optional)			2	4					8				16		30	6,440	0			6,440	
3	3 Development of Lift Station Contract Documents	Included in sub-tasks below													0	-	0				-	
3.1	3.1 60%, 90%, 100%, Final Drawings		2	8	80		64		60	60	152	300	50	380		1,156	239,054	148,420	7,421			394,895
3.2	3.2 60%, 90%, 100%, Final Specifications		4	16	14	4	12	4	10	40				40	144	36,436	15,000	750			52,186	
3.3	3.3 60%, 90%, 100%, Final Estimate		2	4	6	2	2	2	2			20		10	50	11,294	6,500	325			18,119	
3.4	3.4 Final Easement Documents				4										4	1,068	0		500		1,568	
4	0 Bidding Phase Assistance		0	16	16	6	12	4	16	0	24	0	4	60	16	174	39,410	3,046	152	650	0	43,258
1	1 Requests for Information (RFI)		8	12	4	8	2	12		24				20	90	22,018	1,968	98			24,084	
2	2 Conformed Set of Construction Plans & Specs		4	4	2	4	2	4					4	40	80	16,200	1,078	54	500		17,832	
3	3 Pre-Bid Conference			4											4	1,192	0		150		1,342	
5	0 Project and Quality Management		34	81	18	12	12	8	18	0	4	7	0	0	15	209	60,609	0	0	0	0	60,609
1	1 Project Kick-Off Meeting			2	2				2						2	8	2,090	0			2,090	
2	2 Progress Meetings (13)			10										6	16	3,910	0				3,910	
3	3 Design Review Meetings (7)			7	4		4		4			7			26	7,014	0				7,014	
4	4 Site Selection Workshop			4	4	4			4		4				20	5,640	0				5,640	
5	5 Recurring Progress Reports			8										7	15	3,469	0				3,469	
6	6 Project Invoices			8											8	2,384	0				2,384	
7	7 Subconsultant Management			4	12										16	4,876	0				4,876	
8	8 Quality Management		30	30	8	8	8	8	8						100	31,226	0				31,226	
6	0 Record Drawing Preparation		0	4	4	4	4	4	4	0	0	0	6	64	10	104	21,010	0	0	1,000	250	22,260
1	1 Record Drawing Preparation			2									6	64		72	12,596	0	1,000	250		13,846
2	2 Start-up / Commissioning Report			2	4	4	4	4	4					10	32	8,414	0					8,414
7	0 Permits		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,000	0	20,000
1	1 Allowance (Fees, deposits, direct costs)															0	-	-				20,000
Total Including Optional Tasks			42	147	208	58	114	24	138	142	260	395	104	654	101	2,387	529,781	528,459	26,423	21,900	2,500	1,109,063
Total Excluding Optional Tasks			42	143	194	58	114	24	138	126	260	391	104	638	101	2,333	517,219	491,459	24,573	21,900	0	1,057,651

**DESIGN SERVICES AGREEMENT
BETWEEN THE CITY OF SAN BERNARDINO, THROUGH THE SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT,
AND CAROLLO ENGINEERS, INC.
CONTRACT NO. 1857**

1. PARTIES AND DATE.

This Agreement is made and entered into as of July 1, 2025, , by and between the City of San Bernardino, a charter city and municipal corporation organized and operating under the laws of the State of California, through the San Bernardino Municipal Water Department with its principal place of business at 1350 S. "E" Street, San Bernardino, CA 92408 ("City"), and Carollo Engineers, Inc., a California corporation with its principal place of business at 2795 Mitchell Drive, Walnut Creek, CA 94598 (hereinafter referred to as "Designer"). City and Designer are hereinafter sometimes referred to individually as "Party" and collectively as the "Parties."

2. RECITALS.

2.1 City. City is a municipal corporation organized under the laws of the State of California, with power to contract for services necessary to achieve its purpose.

2.2 Designer. Designer desires to perform and assume responsibility for the provision of certain professional design services required by the City on the terms and conditions set forth in this Agreement. Designer warrants that it is fully licensed, qualified, and willing to perform the services required by this Agreement; provided, however, that if Designer is a corporation or other organization, the Project Designer designated pursuant to Section 3.2, and not the Designer itself, shall be fully licensed to practice as an architect and/or engineer in the State of California.

2.3 Project. City desires to engage Designer to render such services for the **MERIDIAN SEWER LIFT STATION RELOCATION AND REPLACEMENT PROJECT** ("Project") as set forth in this Agreement.

3. TERMS

3.1 Employment of Designer.

3.1.1 Scope of Services. Designer promises and agrees to furnish to City all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately supply the professional design and related services necessary for the full and adequate completion of the Project consistent with the provisions of this Agreement (hereinafter referred to as "Services"). The Services are more particularly described throughout this Agreement, including Exhibit "A" attached hereto and incorporated herein by reference. All Services shall be subject to, and performed in accordance with, this Agreement, any exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations. All Services performed by Designer shall be subject to the sole and discretionary approval of the City, which approval shall not be unreasonably withheld.

3.1.2 Term. The term of this Agreement shall be from July 1, 2025 to July 1, 2028, unless earlier terminated as provided herein. Consultant shall complete the Services within the term of this Agreement, and shall meet any other established schedules and deadlines.

3.2 Project Designer; Key Personnel.

3.2.1 Project Designer. Designer shall name a specific individual to act as Project Designer, subject to the approval of City. Designer hereby designates **Rajesh Doppalapudi** (License No. **68534**) to act as the Project Designer for the Project. The Project Designer shall: (1) maintain oversight of the Services; (2) have full authority to represent and act on behalf of the Designer for all purposes under this Agreement; (3) supervise and direct the Services using his or her best skill and attention; (4) be responsible for the means, methods, techniques, sequences and procedures used for the Services; (5) adequately coordinate all portions of the Services; and (6) act as principal contact with City and all contractors, consultants, engineers and inspectors on the Project. Any change in the Project Designer shall be subject to the City's prior written approval, which approval shall not be unreasonably withheld. The new Project Designer shall be of at least equal competence as the prior Project Designer. In the event that City and Designer cannot agree as to the substitution of a new Project Designer, City shall be entitled to terminate this Agreement for cause.

3.2.2 Key Personnel. In addition to the Project Designer, Designer has represented to the City that certain additional key personnel, engineers and consultants will perform the Services under this Agreement. Should one or more of such personnel, engineers or consultants become unavailable, Designer may substitute others of at least equal competence upon written approval of the City. In the event that City and Designer cannot agree as to the substitution of key personnel, engineers or consultants, City shall be entitled to terminate this Agreement for cause. As discussed below, any personnel, engineers or consultants who fail or refuse to perform the Services in a manner acceptable to the City, or who are determined by the City to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project or a threat to the safety of persons or property, shall be promptly removed from the Project by the Designer at the request of the City.

3.3 Hiring of Consultants and Personnel.

3.3.1 Right to Hire or Employ. Designer shall have the option, unless City objects in writing after notice, to employ at its expense architects, engineers, experts or other consultants qualified and licensed to render services in connection with the planning and/or administration of the Project, and to delegate to them such duties as Designer may delegate without relieving Designer from administrative or other responsibility under this Agreement. Designer shall be responsible for the coordination and cooperation of Designer's architects, engineers, experts or other consultants. All consultants, including changes in consultants, shall be subject to approval by City in its sole and reasonable discretion. Designer shall notify City of the identity of all consultants at least fourteen (14) days prior to their commencement of work to allow City to review their qualifications and approve to their participation on the Project in its sole and reasonable discretion.

3.3.2 Qualification and License. All architects, engineers, experts and other consultants retained by Designer in performance of this Agreement shall be qualified to perform the Services assigned to them, and shall be licensed to practice in their respective professions, where required by law.

3.3.3 Standards and Insurance. All architects, engineers, experts and other consultants hired by Designer shall be required to meet all of the same standards and insurance requirements set forth in this Agreement, unless other standards or requirements are approved by the City in writing. Unless changes are approved in writing by the City, Designer's agreements with its consultants shall contain a provision making them subject to all provisions stipulated in this Agreement.

3.3.4 Assignments or Staff Changes. Designer shall promptly obtain written City approval of any assignment, reassignment or replacement of such architects, engineers, experts and consultants, or of other staff changes of key personnel working on the Project. As provided in the Agreement, any changes in Designer's consultants and key personnel shall be subject to approval by City.

3.3.5 Draftsman and Clerical Support. Draftsmen and clerical personnel shall be retained by Designer at Designer's sole expense.

3.4 Standard of Care.

3.4.1 Standard of Care. Designer shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals qualified to perform the Services in the same discipline in the State of California, and shall be responsible to City for damages sustained by the City and delays to the Project as specified in the indemnification provision of this Agreement. Without limiting the foregoing, Designer shall be fully responsible to the City for any increased costs incurred by the City as a result of any such delays in the design or construction of the Project. Designer represents and maintains that it is skilled in the professional calling necessary to perform the Services. Designer warrants and represents that all of its employees, architects, engineers, experts and other consultants shall have sufficient skill and experience to perform the Services assigned to them. Finally, Designer represents that it, its employees, architects, engineers, experts and other consultants have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services assigned to or rendered by them and that such licenses and approvals shall be maintained throughout the term of this Agreement. As provided for in the indemnification provisions of this Agreement, Designer shall perform, at its own cost and expense and without reimbursement from the City, any services necessary to correct errors or omissions which are caused by the Designer's failure to comply with the standard of care provided for herein.

3.4.2 Performance of Employees. Any employee or consultant who is determined by the City to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee or consultant who fails or refuses to perform the Services in a manner acceptable to the City, shall be promptly removed from the Project by the Designer and shall not be re-employed to perform any of the Services or to work on the Project.

3.5 Laws and Regulations.

3.5.1 Knowledge and Compliance. Designer shall keep itself fully informed of and in compliance with all applicable local, state and federal laws, rules and regulations in any manner affecting the performance of the Services or the Project, and shall give all notices required of the Designer by law. Designer shall be liable, pursuant to the standard of care and indemnification provisions of this Agreement, for all violations of such laws and regulations in connection with its Services. If the Designer performs any work knowing it to be contrary to such laws, rules and regulations, Designer shall be solely responsible for all costs arising therefrom. Designer shall defend, indemnify and hold City, its officials, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.5.2 Drawings and Specifications. Designer shall cause all drawings and specifications to conform to any applicable requirements of federal, state and local laws, rules and regulations, including the Uniform Building Code, in effect as of the time the drawings and specifications are prepared or revised during the latest phase of the Services described in Exhibit “A” attached hereto. Any significant revisions made necessary by changes in such laws, rules and regulations after this time may be compensated as Additional Services, which were not known or reasonably should not have been known by Designer. Designer shall cause the necessary copies of such drawings and specifications to be filed with any governmental bodies with approval jurisdiction over the Project, in accordance with the Services described in Exhibit “A” attached hereto. For the preparation of all such drawings and specifications, the Designer shall use Computer Aided Design Drafting (“CADD”) (e.g., AutoCAD) or other technology acceptable to the Designer and City.

3.5.3 Americans with Disabilities Act. Designer will use its best professional efforts to interpret all applicable federal, state and local laws, rules and regulations with respect to access, including those of the Americans with Disabilities Act (“ADA”). Designer shall inform City of the existence of inconsistencies of which it is aware or reasonably should be aware between federal and state accessibility laws, rules and regulations, as well as any other issues, which are subject to conflicting interpretations of the law, and shall provide the City with its interpretation of such inconsistencies and conflicting interpretations. Unless Designer brings such inconsistencies and conflicting interpretations to the attention of the City and requests City’s direction on how to proceed, the Designer’s interpretation of such inconsistencies and conflicting interpretations shall be the sole responsibility and liability of Designer, and the Designer shall correct all plans, specifications and other documents prepared for the Project at no additional cost if its interpretations are shown to be incorrect. In the event that the Designer request’s City’s direction on how to proceed with respect to any inconsistent and/or conflicting interpretation, the Designer shall be responsible to the City only pursuant to the indemnification provisions of this Agreement.

3.5.4 Permits, Approvals and Authorizations. Designer shall provide City with a list of all permits, approvals or other authorizations required for the Project from all federal, state or local governmental bodies with approval jurisdiction over the Project. Designer shall then assist the City in obtaining all such permits, approvals and other authorizations. The costs of such permits, approvals and other authorizations shall be paid by the City.

3.5.5 Water Quality Management and Compliance.

(a) Compliance with Water Quality Laws, Ordinances and Regulations. Designer shall keep itself and all subcontractors, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the Services including, without limitation, all applicable provisions of the City's ordinances regulating water quality and storm water; the Federal Water Pollution Control Act (33 U.S.C. § 1251 *et seq.*); the California Porter-Cologne Water Quality Control Act (Cal Water Code §§ 13000-14950); and any and all regulations, policies, or permits issued pursuant to any such authority. Designer shall additionally comply with the lawful requirements of the City, and any other municipality, drainage district, or other local agency with jurisdiction over the location where the Services are to be conducted, regulating water quality and storm water discharges.

(b) Standard of Care. Designer warrants that all employees and subcontractors shall have sufficient skill and experience to perform the work assigned to them without impacting water quality in violation of the laws, regulations and policies described in Sections 3.5.5(a) of this Agreement. Designer further warrants that it, its employees and subcontractors will receive adequate training, as determined by the City, regarding these requirements as they may relate to the Services.

(c) Liability for Non-compliance.

(i) Indemnity: Failure to comply with laws, regulations, and ordinances listed in Sections 3.5.5(a) of this Agreement is a violation of federal and state law. Notwithstanding any other indemnity contained in this Agreement, Designer agrees to indemnify and hold harmless the City, its officials, officers, agents, employees and authorized volunteers from and against any and all claims, demands, losses or liabilities of any kind or nature which the City, its officials, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the laws, regulations, and ordinances listed above, arising out of or in connection with the Services, except for liability resulting from the sole established negligence, willful misconduct or active negligence of the City, its officials, officers, agents, employees or authorized volunteers.

(ii) Defense: City reserves the right to defend any enforcement action or civil action brought against the City for Designer's failure to comply with any applicable water quality law, regulation, or policy. Designer hereby agrees to be bound by, and to reimburse the City for the costs associated with, any settlement reached between the City and the relevant enforcement entity.

(iii) Damages: City may seek damages from Designer for delay in completing the Services caused by Designer's failure to comply with the laws, regulations and policies described in Section 3.5.5(a) of this Agreement, or any other relevant water quality law, regulation, or policy.

3.6 Independent Contractor.

3.6.1 Control and Payment of Subordinates. City retains Designer on an independent contractor basis and Designer is not an employee of City. Designer is not an employee for state tax, federal tax or any other purpose, and is not entitled to the rights or benefits afforded to City's employees. Any additional personnel performing the Services under this Agreement on behalf of Designer shall also not be employees of City, and shall at all times be under Designer's exclusive direction and control. Designer shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Designer shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

3.7 Schedule of Services.

3.7.1 Designer Services. Designer shall fully and adequately complete the Services described in this Agreement and in Exhibit "A" attached hereto and incorporated herein by reference.

3.7.2 Timely Performance Standard. Designer shall perform all Services hereunder as expeditiously as is consistent with professional skill and care, as well as the orderly progress of the Project work so as not to be the cause, in whole or in part, of delays in the completion of the Project or in the achievement of any Project milestones, as provided herein. Specifically, Designer shall perform its Services so as to allow for the full and adequate completion of the Project within the time required by the City and within any completion schedules adopted for the Project. Designer agrees to coordinate with City's staff, contractors and consultants in the performance of the Services, and shall be available to City's staff, contractors and consultants at all reasonable times.

3.7.3 Performance Schedule. Designer shall prepare an estimated time schedule for the performance of Designer's Services, to be adjusted as the Project proceeds. Such schedule shall be subject to the City's review and approval, which approval shall not be unreasonably withheld, and shall include allowances for periods of time required for City's review and approval of submissions, and for approvals of authorities having jurisdiction over Project approval and funding. If City and Designer cannot mutually agree on a performance schedule, City shall have the authority to immediately terminate this Agreement. The schedule shall not be exceeded by Designer without the prior written approval of City. If the Designer's Services are not completed within the time provided by the agreed upon performance schedule, or any milestones established therein, it is understood, acknowledged and agreed that the City will suffer damage for which the Designer will be responsible pursuant to the indemnification provision of this Agreement.

3.7.4 Excusable Delays. Any delays in Designer's work caused by the following shall be added to the time for completion of any obligations of Designer: (1) the actions of City or its employees; (2) the actions of those in direct contractual relationship with City; (3) the actions of any governmental agency having jurisdiction over the Project; (4) the actions of any parties not within the reasonable control of the Designer; and (5) any act of God or other unforeseen occurrence not due to any fault or negligence on the part of Designer. Neither the City nor the Designer shall be liable for damages, liquidated or otherwise, to the other on account of such delays.

3.7.5 Request for Excusable Delay Credit. The Designer shall, within fifteen (15) calendar days of the beginning of any excusable delay, notify the City in writing of the causes of delay (unless City grants in writing a further period of time to file such notice prior to the date of final payment under the Agreement). City will then ascertain the facts and the extent of the delay, and grant an extension of time for completing the Services when, in its sole judgment, the findings of fact justify such an extension. The City's findings of fact thereon shall be final and conclusive on the parties. Extensions of time shall apply only to that portion of the Services affected by the delay and shall not apply to other portions of the Services not so affected. The sole remedy of Designer for extensions of time shall be an extension of the performance time at no cost to the City. If Additional Services are required as a result of an excusable delay, the parties shall mutually agree thereto pursuant to the Additional Services provision of this Agreement. Should Designer make an application for an extension of time, Designer shall submit evidence that the insurance policies required by this Agreement remain in effect during the requested additional period of time.

3.8 Additional Designer Services.

3.8.1 Request for Services. At City's request, Designer may be asked to perform services not otherwise included in this Agreement, not included within the basic services listed in Exhibit "A" attached hereto, and/or not customarily furnished in accordance with generally accepted design practice.

3.8.2 Definition. As used herein, "Additional Services" mean: (1) any work which is determined by City to be necessary for the proper completion of the Project, but which the parties did not reasonably anticipate would be necessary for the Designer to perform at the execution of this Agreement; or (2) any work listed as Additional Services in Exhibit "A" attached hereto. Designer shall not perform, nor be compensated for, Additional Services without prior written authorization from City and without an agreement between the City and Designer as to the compensation to be paid for such services. City shall pay Designer for any approved Additional Services, pursuant to the compensation provisions herein, so long as such services are not made necessary through the fault of Designer pursuant to the indemnification provision of this Agreement.

3.8.3 Examples of Additional Services. Such Additional Services shall not include any redesign or revisions to drawings, specifications or other documents when such revisions are necessary in order to bring such documents into compliance with applicable laws, rules, regulations or codes of which Designer was aware or should have been aware pursuant to the laws and regulations provision of this Agreement above. Such Additional Services may include, but shall not be limited to:

(a) Separately Bid Portions of Project. Plan preparation and/or administration of work on portions of the Project separately bid.

(b) Fault of Contractor. Services caused by delinquency, default or insolvency of contractor, or by major defects in the work of the contractor, provided that any such services made necessary by the failure of Designer to detect and report such matters when it reasonably should have done so shall not be compensated.

(c) Inconsistent Approvals or Instructions. Revisions in drawings, specifications or other documents when such revisions are inconsistent with written approvals or instructions previously given and are due to causes beyond the control of Designer.

(d) Legal Proceedings. Serving as an expert witness on City's behalf or attending legal proceedings to which the Designer is not a party.

(e) Damage Repair. Supervision of repair of damages to any structure.

(f) Extra Environmental Services. Additional work required for environmental conditions (e.g. asbestos or site conditions) not already contemplated within the Designer's services for the Project.

3.9 City Responsibilities. City's responsibilities shall include the following:

3.9.1 Data and Information. City shall make available to Designer all necessary data and information concerning the purpose and requirements of the Project, including scheduling and budget limitations, objectives, constraints and criteria. As part of the budget limitation information, the City shall provide the Designer with a preliminary construction budget ("City's Preliminary Construction Budget").

3.9.2 Bid Phase. Distribute Construction Documents to bidders and conduct the opening and review of bids for the Project.

3.9.3 Fees of Reviewing or Licensing Agencies. Directly pay or reimburse the payment of all fees required by any reviewing or licensing agency, or other agency having approval jurisdiction over the Project.

3.9.4 City's Representative. The City hereby designates the General Manager of the City of San Bernardino Municipal Water Department, or his or her designee, to act as its representative for the performance of this Agreement ("City's Representative"). City's Representative shall have the power to act on behalf of the City for all purposes under this Contract. Contractor shall not accept direction or orders from any person other than the City's Representative or his or her designee.

3.9.5 Review and Approved Documents. Review all documents submitted by Designer, including change orders and other matters requiring approval by the Water Board or other officials. City shall advise Designer of decisions pertaining to such documents within a reasonable time after submission, so as not to cause unreasonable delay as provided in the excusable delay provisions of this Agreement above.

3.10 Compensation.

3.10.1 Designer's Compensation for Basic Services. City shall pay to Designer, for the performance of all Services rendered under this Agreement, the total not to exceed amount of **ONE MILLION ONE HUNDRED NINE THOUSAND SIXTY-THREE AND 00/100 DOLLARS (\$1,109,063.00)** ("Total Compensation"). This Total Compensation amount shall be based upon, and may be adjusted according to, the fee schedule and related terms and conditions

attached hereto as Exhibit "A" and incorporated herein by reference. The Total Compensation, as may be adjusted upon mutual agreement, shall constitute complete and adequate payment for Services under this Agreement.

3.10.2 Payment for Additional Services. At any time during the term of this Agreement, City may request that Designer perform Additional Services. As used herein, Additional Services means any work which is determined by City to be necessary for the proper completion of the Project, but which the Parties did not reasonably anticipate would be necessary at the execution of this Agreement. Any additional work in excess of this amount must be approved by the City. If authorized, such Additional Services will be compensated at the rates agreed upon by the parties. If City requires Designer to hire consultants to perform any Additional Services, Designer shall be compensated therefore at the rates agreed upon by the parties. City shall have the authority to review and approve the rates of any such consultants. In addition, Designer shall be reimbursed for any expenses incurred by such consultants pursuant to the terms and conditions of Section 3.10.3.

3.10.3 Reimbursable Expenses. Reimbursable expenses are in addition to compensation for the Services and Additional Services. Designer shall not be reimbursed for any expenses unless authorized in writing by City. Such reimbursable expenses shall include only those expenses which are reasonably and necessarily incurred by Designer in the interest of the Project. Designer shall be required to acquire prior written consent in order to obtain reimbursement for the following: (1) extraordinary transportation expenses incurred in connection with the Project; (2) out-of-town travel expenses incurred in connection with the Project; (3) fees paid for securing approval of authorities having jurisdiction over the Project; (4) bid document duplication costs in excess of \$1,000; and (5) other costs, fees and expenses in excess of \$1,000.

3.10.4 Payment to Designer. Designer's compensation and reimbursable expenses shall be paid by City to Designer no more often than monthly. Such periodic payments shall be made based upon the percentage of work completed, and in accordance with the phasing and funding schedule provided in Exhibit "A" attached hereto and incorporated herein by reference. In order to receive payment, Designer shall present to City an itemized statement which indicates Services performed, percentage of Services completed, method for computing the amount payable, and the amount to be paid at the address listed in Section 3.29. The statement shall describe the amount of Services provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement, as well as those expenses for which reimbursement is requested for that statement period. The amount paid to Designer shall never exceed the percentage amounts authorized by the phasing and funding schedule located in Exhibit "A" attached hereto. City shall, within forty-five (45) days of receiving such statement, review the statement and pay all approved charges thereon pursuant to the provisions of Civil Code Section 3320. Disputed amounts shall be resolved by the parties in a mutually agreeable manner.

Payments made for Additional Services shall be made in installments, not more often than monthly, proportionate to the degree of completion of such services or in such other manner as the parties shall specify when such services are agreed upon, and in accordance with any authorized fee or rate schedule. In order to receive payment, Designer shall present to City an itemized statement which indicates the Additional Services performed, percentage of Additional Services

completed, method for computing the amount payable, and the amount to be paid. The statement shall describe the amount of Additional Services provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. City shall, within forty-five (45) days of receiving such statement, review the statement and pay all approved charges thereon pursuant to the provisions of Civil Code Section 3320. Disputed amounts shall be resolved by the parties in a mutually agreeable manner.

Upon cancellation or termination of this Agreement, Designer shall be compensated as set forth in the termination provision herein.

3.10.5 Withholding Payment to Designer. The City may withhold payment, in whole or in part, to the extent reasonably necessary to protect the City from claims, demands, causes of action, costs, expenses, liabilities, losses, damages, or injuries of any kind to the extent arising out of or caused by the negligence, recklessness, or willful misconduct protected under the indemnification provisions of this Agreement. Failure by City to deduct any sums from a progress payment shall not constitute a waiver of the City's right to such sums. The City may keep any moneys which would otherwise be payable at any time hereunder and apply the same, or so much as may be necessary therefor, to the payment of any expenses, losses, or damages as determined by the City, incurred by the City for which Designer is liable under the Agreement or state law. Payments to the Designer for compensation and reimbursable expenses due shall not be contingent on the construction, completion or ultimate success of the Project. Payment to the Designer shall not be withheld, postponed, or made contingent upon receipt by the City of offsetting reimbursement or credit from parties not within the Designer's reasonable control.

3.10.6 Prevailing Wages. Designer is aware of the requirements of California Labor Code Sections 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. If the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Designer agrees to fully comply with and to require its consultants to fully comply with such Prevailing Wage Laws. Designer shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure of the Designer or its consultants to comply with the Prevailing Wage Laws. It shall be mandatory upon the Designer and all subconsultants to comply with all California Labor Code provisions, which include but are not limited to prevailing wages (Labor Code Sections 1771, 1774 and 1775), employment of apprentices (Labor Code Section 1777.5), certified payroll records (Labor Code Sections 1771.4 and 1776), hours of labor (Labor Code Sections 1813 and 1815) and debarment of contractors and subcontractors (Labor Code Section 1777.1). The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

3.10.7 Registration. If the Services are being performed as part of an applicable "public works" or "maintenance" project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Designer and all subconsultants performing such Services must be registered with the

Department of Industrial Relations. Designer shall maintain registration for the duration of the Project and require the same of any subconsultants, as applicable. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

3.10.8 Labor Compliance. This Project may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Designer's sole responsibility to comply with all applicable registration and labor compliance requirements. Any stop orders issued by the Department of Industrial Relations against Designer or any subcontractor that affect Designer's performance of Services, including any delay, shall be Designer's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Designer caused delay and shall not be compensable by the City. Designer shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Designer or any subcontractor.

3.11 Notice to Proceed.

Designer shall not proceed with performance of any Services under this Agreement unless and until the City provides a written notice to proceed.

3.12 Termination, Suspension and Abandonment.

3.12.1 Grounds for Termination; Designer's Termination for Cause. City hereby reserves the right to suspend or abandon, at any time and for any reason, all or any portion of the Project and the construction work thereon, or to terminate this Agreement at any time with or without cause. Designer shall be provided with at least seven (7) days advanced written notice of such suspension, abandonment or termination. In the event of such suspension, abandonment or termination, Designer shall be paid for Services and reimbursable expenses rendered up to the date of such suspension, abandonment or termination, pursuant to the schedule of payments provided for in this Agreement, less any claims against or damages suffered by City as a result of the default, if any, by Designer. Designer hereby expressly waives any and all claims for damages or compensation arising under this Agreement, except as set forth herein, in the event of such suspension, abandonment or termination. Designer may terminate this Agreement for substantial breach of performance by the City such as failure to make payment to Designer as provided in this Agreement.

3.12.2 City's Suspension of Work. If Designer's Services are suspended by City, City may require Designer to resume such Services within ninety (90) days after written notice from City. When the Project is resumed, the Total Compensation and schedule of Services shall be equitably adjusted upon mutual agreement of the City and Designer.

3.12.3 Documents and Other Data. Upon suspension, abandonment or termination, Designer shall provide to City all preliminary studies, sketches, working drawings, specifications, computations, and all other Project Documents, as defined below, to which City would have been entitled at the completion of Designer's Services under this Agreement. Upon

payment of the amount required to be paid to Designer pursuant to the termination provisions of this Agreement, City shall have the rights, as provided in this Agreement hereinafter, to use such Project Documents prepared by or on behalf of Designer under this Agreement. Designer shall make such documents available to City upon request and without additional compensation other than as may be approved as a reimbursable expense.

3.12.4 Employment of other Designers. In the event this Agreement is terminated in whole or in part as provided herein, City may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

3.13 Ownership and Use of Documents; Confidentiality.

3.13.1 Ownership. All plans, specifications, original or reproducible transparencies of working drawings and master plans, preliminary sketches, design presentation drawings, structural computations, estimates and any other documents prepared pursuant to this Agreement, including, but not limited to, any other works of authorship fixed in any tangible medium of expression such as writings, physical drawings and data magnetically or otherwise recorded on computer diskettes (hereinafter referred to as the "Project Documents") shall be and remain the property of City. Although the official copyright in all Project Documents shall remain with the Designer or other applicable subcontractors or consultants, the Project Documents shall be the property of City whether or not the work for which they were made is executed or completed. Within thirty (30) calendar days following completion of the Project, Designer shall provide to City copies of all Project Documents required by City. In addition, Designer shall retain copies of all Project Documents on file for a minimum of fifteen (15) years following completion of the Project, and shall make copies available to City upon the payment of reasonable duplication costs. Before destroying the Project Documents following this retention period, Designer shall make a reasonable effort to notify City and provide City with the opportunity to obtain the documents.

3.13.2 Right to Use. Designer grants to City the right to use and reuse all or part of the Project Documents, at City's sole discretion and with no additional compensation to Designer, for the following purposes:

- (a) The construction of all or part of this Project.
- (b) The repair, renovation, modernization, replacement, reconstruction or expansion of this Project at any time;
- (c) The construction of another project by or on behalf of the City for its ownership and use;

City is not bound by this Agreement to employ the services of Designer in the event such documents are used or reused for these purposes. City shall be able to use or reuse the Project Documents for these purposes without risk of liability to the Designer or third parties with respect to the condition of the Project Documents, and the use or reuse of the Project Documents for these purposes shall not be construed or interpreted to waive or limit City's right to recover for latent defects or for errors or omissions of the Designer.

Any use or reuse by City of the Project Documents on any project other than this Project without employing the services of Designer shall be at City's own risk with respect to third parties. If City uses or reuses the Project Documents on any project other than this Project, it shall remove the Designer's seal from the Project Documents and hold harmless Designer and its officers, directors, agents and employees from claims arising out of the negligent use or re-use of the Project Documents on such other project.

3.13.3 License. This Agreement creates a non-exclusive and perpetual license for City to copy, use, modify or reuse any and all Project Documents and any intellectual property rights therein. Designer shall require any and all subcontractors and consultants to agree in writing that City is granted a non-exclusive and perpetual license for the work of such subcontractors or consultants performed pursuant to this Agreement.

3.13.4 Right to License. Designer represents and warrants that Designer has the legal right to license any and all copyrights, designs and other intellectual property embodied in the Project Documents that Designer prepares or causes to be prepared pursuant to this Agreement. Designer shall indemnify and hold City harmless pursuant to the indemnification provisions of this Agreement for any breach of this Section. Designer makes no such representation and warranty in regard to previously prepared designs, plans, specifications, studies, drawings, estimates or other documents that were prepared by design professionals other than Designer and provided to Designer by City.

3.13.5 Confidentiality. All Project Documents, either created by or provided to Designer in connection with the performance of this Agreement, shall be held confidential by Designer to the extent they are not subject to disclosure pursuant to the Public Records Act. All Project Documents shall not, without the written consent of City, be used or reproduced by Designer for any purposes other than the performance of the Services. Designer shall not disclose, cause or facilitate the disclosure of the Project Documents to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Designer which is otherwise known to Designer or is generally known, or has become known, to the related industry shall be deemed confidential. Designer shall not use City's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the written consent of City.

3.14 Indemnification.

3.14.1 To the fullest extent permitted by law, Designer shall defend (with counsel reasonably approved by the City), indemnify and hold the City, its officials, officers, employees, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any acts, errors or omissions, or willful misconduct of Designer, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Designer's services, the Project or this Agreement, including without limitation the payment of all damages, expert witness fees and attorney's fees and other related costs and expenses. Designer's obligation

to indemnify shall not be restricted to insurance proceeds, if any, received by Designer, the City, its officials, officers, employees, agents, or volunteers.

3.14.2 If Designer's obligation to defend, indemnify, and/or hold harmless arises out of Designer's performance of "design professional" services (as that term is defined under Civil Code section 2782.8), then, and only to the extent required by Civil Code section 2782.8, which is fully incorporated herein, Designer's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Designer, and, upon Designer obtaining a final adjudication by a court of competent jurisdiction, Designer's liability for such claim, including the cost to defend, shall not exceed the Designer's proportionate percentage of fault.

3.15 Insurance. Designer shall not commence work under this Agreement until it has provided evidence satisfactory to the City that it has secured all insurance required under this Section. In addition, Designer shall not allow any subconsultant to commence work on any subcontract until it has provided evidence satisfactory to the City that the subconsultant has secured all insurance required under this section.

3.15.1 Types of Insurance Required. As a condition precedent to the effectiveness of this Agreement for work to be performed hereunder, and without limiting the indemnity provisions of the Agreement, Designer shall, at its expense, procure and maintain in full force and effect for the duration of the Agreement the following policies of insurance. If the existing policies do not meet the insurance requirements set forth herein, Designer agrees to amend, supplement or endorse the policies to do so.

3.15.2 Additional Insured. The City of San Bernardino, its officials, officers, employees, agents, and volunteers shall be named as additional insureds on Designer's and its subconsultants' policies of commercial general liability and automobile liability insurance using the endorsements and forms specified herein or exact equivalents.

3.15.3 Commercial General Liability

(a) The Designer shall take out and maintain, during the performance of all work under this Agreement, in amounts not less than specified herein, Commercial General Liability Insurance, in a form and with insurance companies acceptable to the City.

(b) Coverage for Commercial General Liability insurance shall be at least as broad as the following: Insurance Services Office Commercial General Liability coverage (Occurrence Form CG 00 01) or exact equivalent. Commercial General Liability Insurance must include coverage for the following:

- (1) Bodily Injury and Property Damage
- (2) Personal Injury/Advertising Injury
- (3) Premises/Operations Liability
- (4) Products/Completed Operations Liability

- (5) Aggregate Limits that Apply per Project
- (6) Explosion, Collapse and Underground (UCX) exclusion deleted
- (7) Contractual Liability with respect to this Contract
- (8) Broad Form Property Damage
- (9) Independent Consultants Coverage

(c) The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; (3) products/completed operations liability; or (4) contain any other exclusion contrary to the Agreement.

(d) The policy shall give City, the City Council and each member of the City Council, its officers, employees, agents and City designated volunteers additional insured status using ISO endorsement forms CG 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage.

(e) The general liability program may utilize either deductibles or provide coverage excess of a self-insured retention, subject to written approval by the City, and provided that such deductibles shall not apply to the City as an additional insured.

3.15.4 Automobile Liability

(a) At all times during the performance of the work under this Agreement, the Designer shall maintain Automobile Liability Insurance for bodily injury and property damage including coverage for owned, non-owned and hired vehicles, in a form and with insurance companies acceptable to the City.

(b) Coverage for automobile liability insurance shall be at least as broad as Insurance Services Office Form Number CA 00 01 covering automobile liability (Coverage Symbol 1, any auto).

(c) The policy shall give City, its elected and appointed officials, its officers, employees, agents and City designated volunteers additional insured status.

(d) Subject to written approval by the City, the automobile liability program may utilize deductibles, provided that such deductibles shall not apply to the City as an additional insured, but not a self-insured retention.

3.15.5 Workers' Compensation/Employer's Liability

(a) Designer certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that

code, and he/she will comply with such provisions before commencing work under this Agreement.

(b) To the extent Designer has employees at any time during the term of this Agreement, at all times during the performance of the work under this Agreement, the Designer shall maintain full compensation insurance for all persons employed directly by him/her to carry out the work contemplated under this Agreement, all in accordance with the “Workers’ Compensation and Insurance Act,” Division IV of the Labor Code of the State of California and any acts amendatory thereof, and Employer’s Liability Coverage in amounts indicated herein. Designer shall require all subconsultants to obtain and maintain, for the period required by this Agreement, workers’ compensation coverage of the same type and limits as specified in this Section.

3.15.6 Professional Liability (Errors and Omissions)

(a) At all times during the performance of the work under this Agreement the Designer shall maintain professional liability or Errors and Omissions insurance appropriate to its profession, in a form and with insurance companies acceptable to the City and in an amount indicated herein. This insurance shall be endorsed to include contractual liability applicable to this Agreement and shall be written on a policy form coverage specifically designed to protect against acts, errors or omissions of the Designer. “Covered Professional Services” as designated in the policy must specifically include work performed under this Agreement. The policy must “pay on behalf of” the insured and must include a provision establishing the insurer’s duty to defend.

3.15.7 Minimum Policy Limits Required

(a) The following insurance limits are required for the Agreement:

	<u>Combined Single Limit</u>
Commercial General Liability	\$2,000,000 per occurrence/ \$4,000,000 aggregate for bodily injury, personal injury, and property damage
Automobile Liability	\$1,000,000 per occurrence for bodily injury and property damage
Employer’s Liability	\$1,000,000 per occurrence
Professional Liability	\$1,000,000 per claim and aggregate (errors and omissions)
Cyber Liability	\$1,000,000 per occurrence and aggregate

(b) Defense costs shall be payable in addition to the limits.

(c) Requirements of specific coverage or limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. Any available coverage shall be provided to the parties required to be named as Additional Insured pursuant to this Agreement.

3.15.8 Evidence Required

(a) Prior to execution of the Agreement, the Designer shall file with the City evidence of insurance from an insurer or insurers certifying to the coverage of all insurance required herein. Such evidence shall include original copies of the ISO CG 00 01 (or insurer's equivalent) signed by the insurer's representative and Certificate of Insurance (Acord Form 25-S or equivalent), together with required endorsements. All evidence of insurance shall be signed by a properly authorized officer, agent, or qualified representative of the insurer and shall certify the names of the insured, any additional insureds, where appropriate, the type and amount of the insurance, the location and operations to which the insurance applies, and the expiration date of such insurance.

3.15.9 Policy Provisions Required

(a) Designer shall provide the City at least thirty (30) days prior written notice of cancellation of any policy required by this Agreement, except that the Designer shall provide at least ten (10) days prior written notice of cancellation of any such policy due to non-payment of premium. If any of the required coverage is cancelled or expires during the term of this Agreement, the Designer shall deliver renewal certificate(s) including the General Liability Additional Insured Endorsement to the City at least ten (10) days prior to the effective date of cancellation or expiration.

(b) The Commercial General Liability Policy and Automobile Policy shall each contain a provision stating that Designer's policy is primary insurance and that any insurance, self-insurance or other coverage maintained by the City or any named insureds shall not be called upon to contribute to any loss.

(c) The retroactive date (if any) of each policy is to be no later than the effective date of this Agreement. Designer shall maintain such coverage continuously for a period of at least three years after the completion of the work under this Agreement. Designer shall purchase a one (1) year extended reporting period A) if the retroactive date is advanced past the effective date of this Agreement; B) if the policy is cancelled or not renewed; or C) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement.

(d) All required insurance coverages, except for the professional liability coverage, shall contain or be endorsed to waiver of subrogation in favor of the City, its officials, officers, employees, agents, and volunteers or shall specifically allow Designer or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Designer hereby waives its own right of recovery against City, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

(e) The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further, the limits set forth herein shall not be construed to relieve the Designer from liability in excess of such coverage, nor shall it limit the Designer's indemnification obligations to the City and shall not preclude the City from taking such other actions available to the City under other provisions of the Agreement or law.

3.15.10 Qualifying Insurers

(a) All policies required shall be issued by acceptable insurance companies, as determined by the City, which satisfy the following minimum requirements: Each such policy shall be from a company or companies with a current A.M. Best's rating of no less than A:VII and admitted to transact in the business of insurance in the State of California, or otherwise allowed to place insurance through surplus line brokers under applicable provisions of the California Insurance Code or any federal law.

3.15.11 Additional Insurance Provisions

(a) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Designer, and any approval of said insurance by the City, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Designer pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(b) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, City has the right but not the duty to obtain the insurance it deems necessary and any premium paid by City will be promptly reimbursed by Designer or City will withhold amounts sufficient to pay premium from Designer payments. In the alternative, City may cancel this Agreement.

(c) The City may require the Designer to provide complete copies of all insurance policies in effect for the duration of the Project.

(d) Neither the City nor the City Council, nor any member of the City Council, nor any of the elected and appointed officials, officers, employees, agents or volunteers shall be personally responsible for any liability arising under or by virtue of this Agreement.

3.15.12 Subconsultant Insurance Requirements

(a) Designer shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to the City that they have secured all insurance required under this Section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name the City as an additional insured using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Designer, City may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.

3.16 Records.

Designer shall maintain complete and accurate records with respect to all costs and expenses incurred under this Agreement. All such records shall be clearly identifiable. Designer shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Designer shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of five (5) years from the date of final payment under this Agreement.

3.17 Limitation of Agreement.

This Agreement is limited to and includes only the work included in the Project described herein. Any additional or subsequent construction at the site of the Project, or at any other City site, will be covered by, and be the subject of, a separate Agreement for design services between City and the designer chosen therefor by City.

3.18 Mediation.

Disputes arising from this Agreement may be submitted to mediation if mutually agreeable to the parties hereto. The type and process of mediation to be utilized shall be subject to the mutual agreement of the parties.

3.19 Successors and Assigns.

This Agreement shall be binding upon and shall inure to the benefit of the successors in interest, executors, administrators and assigns of each party to this Agreement. However, Designer shall not assign or transfer by operation of law or otherwise any or all of its rights, burdens, duties or obligations without the prior written consent of City. Any attempted assignment without such consent shall be invalid and void.

3.20 Asbestos Certification.

Designer shall certify to City, in writing and under penalty of perjury, that to the best of its knowledge, information and belief no asbestos-containing material or other material deemed to be hazardous by the state or federal government was specified as a building material in any construction document that the Designer prepares for the Project. Designer shall require all consultants who prepare any other documents for the Project to submit the same written certification. Designer shall also assist the City in ensuring that contractors provide City with certification, in writing and under penalty of perjury, that to the best of their knowledge, information and belief no material furnished, installed or incorporated into the Project contains asbestos or any other material deemed to be hazardous by the state or federal government. These certifications shall be part of the final Project submittal. Designer shall include statements in its specifications that materials containing asbestos or any other material deemed to be hazardous by the state or federal government are not to be included.

3.21 No Third Party Rights.

This Agreement shall not create any rights in, or inure to the benefits of, any third party except as expressly provided herein.

3.22 Governing Law.

This Agreement shall be construed in accordance with, and governed by, the laws of the State of California. Venue shall be in San Bernardino County.

3.23 Exhibits and Recitals.

All exhibits and recitals contained herein and attached hereto are material parts of this Agreement and are incorporated as if fully set forth.

3.24 Severability.

Should any provision in the Agreement be held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall continue in full force and effect.

3.25 Non-Waiver.

None of the provisions of this Agreement shall be considered waived by either party, unless such waiver is specifically specified in writing.

3.26 Safety.

Designer shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Designer shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of its employees, consultant and subcontractors appropriate to the nature of the work and the conditions under which the work is to be performed.

3.27 Harassment Policy.

Designer shall provide a copy of the City's Harassment Policy to each of its employees assigned to perform the tasks under this Agreement. Designer shall submit to the City's representative a statement signed by each of its employees who are assigned to perform the Services under this Agreement certifying receipt of City's Harassment Policy and certifying that they have read the Harassment Policy. A finding by the City that any of Designer's employees has harassed a City employee shall be grounds for appropriate discipline, up to and including such employee's removal from performance of this Agreement at City's request.

3.28 Delivery of Notices.

All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

CITY:

City of San Bernardino
Municipal Water Department
P.O. Box 710
San Bernardino, California 92402
Attn: General Manager

DESIGNER:

Carollo Engineers, Inc.
3400 Central Avenue
Suite 205
Riverside, CA 92506
Attn: Rajesh Doppalapudi

With a Copy to:

City of San Bernardino
Vanir Tower, 290 North D Street
San Bernardino, CA 92401
Attn: City Attorney

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.29 Time of Essence.

Time is of the essence for each and every provision of this Agreement.

3.30 City's Right to Employ Other Consultants.

City reserves right to employ other consultants, including designers, in connection with this Project or other projects.

3.31 Prohibited Interests.

3.31.1 Solicitation. Designer warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Designer, to solicit or secure this Agreement. Further, Designer warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Designer, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, City shall have the right to rescind this Agreement without liability.

3.31.2 Conflict of Interest. For the term of this Agreement, no director, official, officer or employee of City, during the term of his or her service with City, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

3.32 Equal Opportunity Employment.

Designer represents that it is an equal opportunity employer and that it shall not discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, sex, age or any other classification protected by federal or state law. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination. Designer shall also comply with all relevant provisions of City's minority business enterprise program, affirmative action plan or other related programs or guidelines currently in effect or hereinafter enacted.

3.33 Labor Certification.

By its signature hereunder, Designer certifies that it is aware of the provisions of Section 3700 of the California Labor Code, which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

3.34 Subcontracting.

As specified in this Agreement, Designer shall not subcontract any portion of the Services required by this Agreement, except as expressly stated herein, without prior written approval of City. Subcontracts, if any, shall contain a provision making them subject to each and every provision of this Agreement.

3.35 Supplemental Conditions.

Any supplemental conditions shall be attached as an exhibit to this Agreement, and that exhibit shall be incorporated herein by reference.

3.36 Entire Agreement.

This Agreement, with its exhibits, contains the entire agreement of the parties hereto, and supersedes any and all other prior or contemporaneous negotiations, understandings and oral or written agreements between the parties hereto. Each party acknowledges that no representations, inducements, promises or agreements have been made by any person which are not incorporated herein, and that any other agreements shall be void. Furthermore, any modification of this Agreement shall only be effective if in writing signed by all parties hereto.

[SIGNATURES ON FOLLOWING PAGE]

**SIGNATURE PAGE FOR DESIGN SERVICES AGREEMENT
BETWEEN THE CITY OF SAN BERNARDINO, THROUGH THE SAN BERNARDINO
MUNICIPAL WATER DEPARTMENT,
AND CAROLLO ENGINEERS, INC.
CONTRACT NO. 1857**

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

**CITY OF SAN BERNARDINO
SAN BERNARDINO MUNICIPAL
WATER DEPARTMENT**

CAROLLO ENGINEERS, INC.

Approved By:

Miguel J. Guerrero
General Manager

Signature

Approved as to Form:

Name

*****Approved Form*****
Best Best & Krieger LLP
City Attorney

Title

EXHIBIT A

SCOPE OF SERVICES



Meridian Sewer Lift Station Relocation and Replacement Engineering Services

City of San Bernardino Municipal Water Department

Scope of Services

Purpose

The San Bernardino Municipal Water Department (SBMWD), established in 1905, provides potable water to approximately 200,000 people within a 45-square-mile area of San Bernardino and unincorporated county regions, sourcing its water from groundwater wells in the Bunker Hill Groundwater Basin.

Since 1973, SBMWD has operated the Water Reclamation Plant (WRP), a 33 MGD regional secondary wastewater treatment facility serving the City of San Bernardino, Loma Linda, San Bernardino International Airport, Patton State Hospital, and parts of unincorporated San Bernardino County. Effluent from the WRP undergoes further treatment at the Rapid Infiltration and Extraction (RIX) facility, co-owned with the City of Colton since 1994. The RIX facility uses percolation and UV disinfection before discharging to the Santa Ana River and can treat up to 40 MGD of influent, with a UV system capacity of 64 MGD.

The wastewater collection system, now managed by SBMWD since a 2017 City Charter reform, includes 493 miles of pipes (primarily vitrified clay), 15 lift stations, 13 siphons, and approximately 38,300 connections, alongside the WRP and RIX facilities.

A key component, the Meridian Sewer Lift Station (Meridian LS), located at 800 South Meridian Avenue, is in poor condition. Installed in 1983, its components have surpassed their life expectancy. The station has limited storage, lacks a backup power supply, and relies on an outdated alarm system. This necessitates a lengthy and resource-intensive manual response during power outages, involving transporting a portable generator. The 2019 Sewer Master Plan recommended a full replacement of the Meridian LS to improve reliability and prevent sanitary sewer overflows. Prior preliminary design work and flow monitoring (MDWF 60.5 GPM, PDWF 210.0 GPM in late 2021) have been conducted for this upgrade.

Task 1 – Data Collection, Review, and Analysis

Task 1.1 Request for Information and Review of Existing Information

The Carollo will obtain all readily available existing data from the Department concerning the existing Meridian Lift Station, including any information from previous design efforts.

As a part of Task 1, Carollo will:

- Submit an initial request for information (RFI) that is determined to be necessary and useful in this type of project. RFIs are to be submitted in Excel (.xlsx) format. Carollo will number each item requested and track the status of each RFI throughout the preliminary design.
- Carollo will review the data, identify any data gaps, and request additional information as required to complete the work as described.

- Carollo will perform, at minimum, two (2) field visits for data collection. Field visits will be coordinated at least two (2) business days in advance such that Maintenance Staff may be scheduled to be present to open the facility.

A list of the existing reports/data from previous design efforts is provided in Exhibit 4. Exhibit 4 also includes a summary of the previous design effort challenges, permitting efforts, and ongoing coordination efforts.

Carollo will thoroughly review the existing information from previous design efforts, including assumptions of significance made. To the extent that the assumptions made were sound, the existing data may be used.

Task 1.2 Professional Surveying

Professional land surveying services will be performed for the project design preparation and all other requirements.

Aerial photogrammetry with one (1) foot contours of the Project site will be captured. The aerial photo survey elements will be incorporated into the plan and profile drawings, but the photographs themselves will not. The survey will include identification of rights-of-way, street centerlines, curbs and gutters, sidewalks, easements, surface and utility appurtenances, finish grade, pipelines, utility location, structural, and other elements relevant to prepare comprehensive construction documents.

Coordinates, a description for benchmark and basis of bearing, and placement of a new brass disc in the vicinity of the project area to be used during the project will be included.

Horizontal project control will be conducted utilizing Global Positioning System (GPS) survey methods. When GPS survey methods cannot be used for all or part of a horizontal project control survey, the Total Station Survey System (TSSS) can be used.

Horizontal control will be established on at least two (2) monuments on the site using first-order (1:100,000) GPS survey methods. The remaining monuments may be tied-in using GPS or conventional survey methods with second-order (1:20,000) accuracy.

Horizontal project control surveys will be referenced and adjusted to California High-Precision Geodetic Network (CA-HPGN) and its densification stations (CA-HPGN-D). Preferred order of accuracy is first-order survey standards with a distance accuracy standard of 1:100,000 in accordance with Caltrans standards. Second-order accuracy standard (1:20,000) is acceptable when using the TSSS method.

The horizontal control will be based on Northern American Datum of 1983 (NAD83), as defined by the National Geodetic Survey (NGS) California State Plane Coordinate System Zone 5, using the California Spatial Reference System (CSRS) Epoch 2011.00.

Vertical project control will be based on the North American Vertical Datum of 1988 (NAVD88), as defined by NGS. Accuracy standard will be second-order survey accuracy in accordance with Caltrans standards, although third-order (1:5,000) accuracy is acceptable.

The aerial topography survey will encompass the Meridian Lift Station site, as well as any other viable locations per the PDR. All surveys will be done within the public right of way and or within SBCFCD property, as determined by the PDR.



Horizontal and vertical control for the survey will be consistent with established control and existing SBMWD facilities. This control will be utilized for design of the proposed facilities and will be the basis to establish location and elevation of the existing and proposed facilities.

All work associated with project site survey will be completed under the supervision of a professional land surveyor licensed in the State of California.

Refer to Exhibit 1 for the Project location, and possible location options. The surveying task includes all location options as well as an allowance for an additional location not considered previously such as outside of SBCFCD property.

Task 1.3 Utility Research/Coordination – Subsurface Investigation

Carollo will perform utility research by obtaining all utility information in the vicinity of the Project site. This may include conducting an Underground Services Alert (USA) inquiry to obtain a list of agencies that operate utilities in the vicinity of the Project site. However, does not include calling USA to mark utility locations on the roadways at this point in the design process.

Carollo will perform further field investigations to identify, verify locations, and determine the status of existing utilities. Carollo will obtain and review all applicable base map plans, atlas maps, substructure maps, specifications, reports, and record data for all existing utilities, agencies, and other entities which may be affected by the Project.

The Construction Drawings will identify all existing SBMWD facilities and all other public utilities in the vicinity of the Project site. Locate, identify, and show SBMWD facilities and appurtenances on the construction drawings, including water mains and appurtenances, vaults, manholes, sewer mains and appurtenances, etc. Relevant water valves and sewer manholes will be “dipped” in conjunction with the survey to properly locate depths.

Given the proximity to the City boundaries at Randall Ave, the utilities of multiple agencies may be present. One such example is the Southern California Edison (SCE) and Colton Electric Utility (CEU) boundary. Both utilities are connected to the pole adjacent to the project site. The boundary with the City of Rialto is also nearby, albeit not directly adjacent.

A Condition Assessment and non-destructive testing will be conducted to understand the existing force main condition.

Task 1.4 Potholing and Slot Trenching

Carollo will conduct a minimum of twenty (20) potholes to obtain all necessary data to prepare final design plans. Any additional potholing above what is previously described will be considered on an as-requested basis.

There is an existing 66” storm drain on-site which is owned by SBCFCD. This line will be field verified prior to proceeding with design, via excavation methods such as slot trenching. See Task 3.2 for further discussion.

Slot trenching may be required to identify other utilities as needed. Five (5) slot trenches 2-ft wide by 10-ft long by 20-ft deep are included in this scope of work.



All potholing results will be professionally surveyed, and the information added to the final design. A potholing report will be prepared, submitted to SBMWD and provided in the Bid Documents as needed.

Task 1.5 Geotechnical Investigation

Two geotechnical reports are available for the existing site, dated June 2018 and February 2022, and were included as part of the RFP. The existing geotechnical reports will be reused if the final selected location deems it appropriate.

However, if the final selected location is not the existing site, then Carollo will conduct a geotechnical investigation at the lift station site and prepare a geotechnical report identifying existing soil conditions. Generally, geotechnical services will consist of the following:

- Three (3) soil borings (minimum) at the Project site, used to define soil properties, groundwater levels, and other factors which may affect the booster station design.
 - » Borings will be identified on a map with survey coordinates and be included in the geotechnical report. Provide logs of all soil profiles.
 - » Borings will be a minimum depth of 25 feet in depth.

All results of the geotechnical investigation will be documented in the geotechnical report, which is to be included with the Preliminary Design Report. All geotechnical investigations and the final geotechnical report must be completed under the supervision of a Geotechnical Engineer registered in the State of California. The report will be stamped and signed by the Geotechnical Engineer.

The geotechnical report will be submitted to SBMWD, the bid documents will reflect the geotechnical report findings and recommendations as needed, and it will be an appendix to the bid documents.

Task 1.6 Additional Flow Analysis

Carollo has coordinated with our subconsultant K-Flow to provide additional flow monitoring services should they be requested by the Department. Services under this task include providing flow monitoring and two (2) separate manhole locations to be determined by the project team. The flow monitoring services will take place for a maximum of three (3) months. These services will be provided on an optional, as needed basis and will not be undertaken without written authorization by the department.

Task 2 – Preliminary Design

As described in the Project Overview, there are two (2) potential design options for this project:

- Expansion of the existing lift station to include (not limited to) new wet well, submersible pumps and appurtenances, electrical and controls, BESS and associated structure to house all electrical items;

OR

- Expansion of the existing lift station to include (not limited to) new wet well large enough to provide for 12 hours of emergency response time, submersible pumps and appurtenances, electrical and controls, structure to house all electrical items.



Task 2.1 Project Design Options Analysis

Carollo, based on the scope provided in Exhibit 2 and Exhibit 3, will review all prior design efforts and provide an in-depth analysis (feasibility, cost, constructability, operability/usability, etc.) of each option and provide a recommendation to Department staff in the Preliminary Design Report (PDR). The analysis will follow the development and review with the Department of robust evaluation criteria.

The analysis will also include a review of the current project site and consider alternative sites for the proposed lift station. As described in Exhibit 4, there are many physical, environmental, and bureaucratic constraints for the site, and an alternative location may provide for the best option to operate the proposed site into perpetuity.

SBCFCD easement acquisition or permanent lease option will be required. Both options will be considered as part of the Preliminary Design Report (PDR), but the Department previously chose an easement acquisition since an easement would be granted to SBMWD once as opposed to the permanent lease option which would require interval lease payments to SBCFCD in perpetuity. Carollo will be required to assist SBMWD staff with preparing required documentation to be submitted such as surveying files, legal, plat and an appraisal.

The analysis will also take into consideration the possibility of SBCFCD requiring that the existing terminus of the storm drain be extended westward to the Right of Way.

In the recent past, the South Coast Air Quality Management District (SCAQMD) has driven continually more stringent rule-making regarding emissions from the use of internal combustion engines driving emergency generators. It is likely that SCAQMD will further, restrict the use of these and emphasize greater use of BESS and Microgrid technology, at some point, potentially limiting the Department to only this option. The Department can benefit from being an early adopter of the BESS and Microgrid technology by learning lessons before any potential shift in regulations.

The evaluation and scoring of the options in Exhibit 2 will consider the following elements:

- Backup power for resiliency improvement
- Operating costs, including consideration of energy arbitrage, if allowable
- Peak shaving / load shedding
- Management of climate-related impacts, including carbon footprint
- Participation with community and utility partners to assist in power grid stabilization and/or demand response
- Early adoption of BESS and Microgrid technology

Based on Carollo's review of Exhibit 4 and all associated reports, data, and project history, Carollo will also provide any additional recommendations which would assist with the project design, construction, and operation.

As reference, Exhibit 8 includes the BESS proposal.



Task 2.2 Preliminary Design Report (PDR) Addendum

The Carollo will prepare an addendum to the existing PDR including the findings and results of activities as described above. The combination of the existing PDR and Carollo's Addendum will address, through recommended additions or revisions, all elements below. At a minimum, the combined PDR and addendum will include draft and final copies in PDF and Word and will include the following:

1. A comparison of the pros and cons of the Project options as described above.
2. Detailed description of the recommended design option and of the major components that will be included in the design.
3. Preliminary construction sequencing schedule (Draft PDR). The existing lift station is required to remain in service until the new lift station is constructed, tested, and is fully operational. By-pass pumping will be minimized as much as possible to connections and tie-overs. The Design will reflect this requirement, and the Specifications will include a robust Bypass Pumping specification section with prior approval steps and 24-hour monitoring by qualified pump mechanics.
4. Detailed sequence of work to maintain operation of the lift station during construction (Final PDR Addendum).
5. Budgetary level construction cost estimates of recommended improvements (AACE Class 4).
6. Construction schedule showing estimated construction duration.
7. Preliminary site layout for the proposed Meridian LS station upgrades and site improvements (retaining wall, structure, wet well, etc.). It is of critical importance that preliminary concepts be discussed with Department Mechanics and Electricians that utilize the facility at this early stage and not beyond the PDR Addendum phase.
8. Preliminary horizontal alignment and profile of the proposed force main and gravity main(s).
9. A brief discussion of the anticipated coordination efforts and the agencies involved (SBCFCD, SCE, USFWS, etc.), along with a matrix of all identified agencies.
10. Anticipating the development of a Department-wide SCADA Master Plan in the near term (Notice to Proceed was effective August 19, 2024), including a new SCADA system serving exclusively the Sewer Collections System, partner with and assist the Electrical Services Superintendent on the development of preliminary components that should be incorporated into the Meridian Sewer Lift Station. The intent will be to incorporate necessary connections and support infrastructure for future SCADA and control components to be designed during the SCADA Master Plan. See Exhibit 3 for more details.
11. Identification of major equipment and proposed manufacturers including the long-lead items. No pre-purchase of equipment will be considered. See Exhibit 3 for Department-preferred manufacturers/equipment. Department may accept equal substitutions as recommended by the Carollo.
12. Existing force main non-destructive condition assessment, consideration of cured in place pipe (CIPP) and existing sewer maintenance hole lining. Existing force main length is approximately half a mile, or about 2,600 linear feet.

13. A preliminary table of contents for the Technical Specifications.
14. Preliminary Sheet index for the Final Design drawings.
15. Other enhancements that may add value, efficiency, maintainability, or operability.
16. The combined PDR and PDR Addendum will also include:
 - a. A copy of the Geotechnical report. The draft and final copies of both the Geotechnical report and the PDR can coincide with each other.
 - b. A copy of the potholing report.
 - c. Any supplemental documents or calculations which support lift station equipment/materials.

All final design drawings, technical specifications, and engineering report(s) will be stamped by a registered professional engineer possessing a valid license in good standing as issued by the State of California.

The Department's comments (and Carollo responses) to the draft PDR will be incorporated into a conformed Final Combined PDR and PDR Addendum. No work will proceed to the final design phase until the combined document has been reviewed and approved by the Department.

Deliverables:

- Carollo will submit an administrative draft PDR Addendum for SBMWD and incorporate all comments in the final Combined PDR and PDR Addendum for review and approval by SBMWD.
- The submittal of preliminary design sheets for the lift station, civil improvements, force main, and all appurtenances included with the final Combined PDR and PDR Addendum can be considered as the "30%" submittal of the construction documents. Any design sheets will meet the requirements of the final design deliverables as described in Task 3, below.
- Meeting Minutes and audio recording from a Preliminary Design Workshop to propose initial options and obtain Department feedback.
- Meeting Minutes and audio recording from the Final Preliminary Design Report workshop.

Electronic copies of all reports, estimates, and layouts in searchable PDF format are acceptable for submittals, but the PDR Addendum will be submitted in Microsoft Word format also.

Task 3 – Final Design Services

Using the final Combined PDR and PDR Addendum developed in Task 2, Carollo will prepare contract documents (technical specifications and plans) for construction of the Project. Plans and specifications will be prepared in accordance with the standard of care for public works construction. The facilities will be designed in accordance with the latest versions of the pertinent codes and regulations, as adopted by the Department, or as agreed to by the Department and the selected Carollo at the beginning of the Project.

The design will be completed in the latest version of AutoCAD Civil 3D software by Autodesk with the intent to minimize conflicts.



Task 3.1 Sewer Lift Station Final Design

Carollo will prepare final design packages at the 60%, 90%, and 100% design levels. The final design packages will be based on the option selected during the PDR phase. Major elements, such as overall layout, existing utility alignment from potholing or slot trenching, surveying, environmental approval, easement application, geotechnical borings, backup power evaluation, SCE coordination, external agency coordination (Colton, San Bernardino, SBCFCD), etc., will reflect a thorough effort during preliminary design and will be mostly or completely resolved by the 60% design phase. The final design, at a minimum, will include the following components:

1. Detailed construction sequencing plan. The existing sewer lift station will remain in service until the new lift pump station has been constructed, tested, and is fully operational. By-pass pumping will be minimized as much as possible to connections and tie-overs.
2. Demolition plan of existing sewer lift station and equipment enclosure. Carollo to confer with SBMWD staff to determine what lift station appurtenances can be salvaged.
3. Lift station site layout and equipment configuration, including all details (Civil).
4. Mechanical Details.
5. Structural Details of proposed pump house structure.
 - a. All structural calculations will be submitted with each design phase
6. Electrical plan and details.
7. Instrumentation
 - a. P&ID diagrams and details
8. Discharge force main replacement plan and profile, including all existing on-site utilities. The length of replacement will be from the new lift station location to an adequate connection point of the existing force main.
9. Gravity main (inflow) replacement plan and profile (as needed), including all existing on-site utilities.
10. Connection details for proposed discharge force main replacement.

Task 3.2 Storm Drain Final Design (OPTIONAL)

If required by SBCFCD and requested by the Department, Carollo will provide final design services for approximately 70 linear feet (LF) of 66-inch storm drain. There is an existing storm drain currently bulkheaded near the existing lift station. The final design of the storm drain will include a plan and profile of the proposed horizontal and vertical alignment and will be designed according to all applicable SBCFCD requirements and standards.

Deliverables:

- Final plan and profile sheet for Storm Drain improvements



Assumptions:

- Storm drain design sheet can be done on the standard project titleblock, no separate titleblock will be required
- Storm drain design will be one sheet, with required details placed directly on the plan and profile sheet.
- Length of designed storm drain will not exceed 100 feet.
- Easement services or preparation of a P&L document for storm drain are not included.
- Storm drain design will use SBCFCD standard drawings and materials. No custom details will be created.

Task 3.3 Development of Lift Station Contract Documents

Carollo will develop detailed design plans and technical specifications in accordance with SBMWD's AutoCAD standards, design standards, standard drawings, and standard technical specifications. Front end specification (bid proposal and contractual documents) will be provided by SBMWD. Develop special provisions, special conditions, and additional technical specifications beyond the SBMWD standard specifications as appropriate in Microsoft Word Construction Standards Institute (CSI) format. Department templates for Division 01 sections will be provided to Carollo but edits and customization will be required by Carollo since not all items will apply to the lift station relocation and replacement project. Plans and specifications will be provided in digital electronic format in accordance with SBMWD design standards. A complete set of project plans will be prepared to indicate all construction elements, including civil and structural elements, and all other related details. Plans will be prepared on size 22" x 34" sheets (scalable to 50% when plotted on 11" x 17" sheets) utilizing SBMWD standard title blocks with plan and profile sheets prepared at scales of 1" = 40' (horizontal) and 1" = 4' (profile) or as needed. The project plan set is expected to include the following:

Drawing Number	Title
G-1	Title Sheet, location map, vicinity map, and signature blocks. List of agencies, cities, and contact information
G-2	General Notes
G-3	Construction Notes, Estimated Quantities, and Legends
G-4	Abbreviations, Survey Information, Pipe Horizontal Control and Sheet Index Map
D1 – D	Demolition Plans
C-1 – C	Civil Design Sheets
CD-1 – CD-	Civil Detail Sheets
S1 – SX	Structural Design Sheets and Details
M1 – M	Mechanical Design Sheets and Details
E1 – Ex	Electrical Sheets and Details
N1 – NX	Instrumentation Sheets and Details

The number of Plan Sheets, Civil Details, Structural, Mechanical, Electrical, and Instrumentation may vary.

Final Design Deliverables

60% Design Submittal

Carollo will prepare and submit plans and specifications at the 60% level of completion. It will include all plan sheets required for the Project; however, some detail sheets may be incomplete; a complete Table of Contents listing all technical specification sections required for the project, with all major equipment sections completed; and a resolution of all comments to the PDR as documented in an updated PDR comment log. A detailed description of any enhancements, deletions, or other modifications to the PDR will also be provided with the 60% design submittal.

The 60% design submittal will include but not be limited to:

- Designs for construction of new facilities and for modification to the existing facilities
 - » Demolition Plan
 - » Site Plan
 - » Preliminary structural plan (Including structural calcs)
 - » Piping Plan (including hydraulic calcs)
 - » Electrical schematics, including those for a BESS (if required)
 - » Construction sequencing
 - » Initial catalog cuts for equipment and materials
- Drawings that will include at a minimum:
 - » Title sheet with general notes, vicinity map, key map, and legend per Department standards
 - » Preliminary list of construction drawings
 - » Locations of existing public and private utilities within the project area
 - » Preliminary site plan including construction staging areas (if applicable)
 - » Other drawings, as applicable to show information from pre-design drawings
 - » Provide spare conduits
 - » List of special conduits, if any
 - » Drawings will show all topographic and utility information and the horizontal alignment of proposed pipeline improvements with sizes

90% Design Submittal

Carollo will prepare and submit plans and specifications at the 90% level of completion. It will include updated plans, majority of technical specification sections completed, resolution of all comments to the 60% design submittal as documented in an updated 60% design comment log, an initial opinion of probable construction costs (OPCC), and an initial construction duration schedule. Initial OPCC will include a 15% contingency.

The 90% Design Submittal will include the following:

- General Sheets - Title Sheet, General Notes, Index to Sheets, Benchmarks Horizontal Control, Vicinity and Location Maps
- Civil Sheets - Rough and Final Grading, Demolition, Site Piping (Inlet & Outlet) & Profiles, Site Improvements such as paving, Sewer, Civil Details



- Mechanical Sheets – Pumps, Piping, Vault Plans, Valve & Fittings, Miscellaneous Metal Items, Hardware & Mechanical Details
- Structural Sheets - General Notes & Details, Foundation, Roof, Roof Reinforcing Layout, Roof Reinforcing Details, Longitudinal & Transverse Sections, Miscellaneous Sections, Walls, Miscellaneous Reinforcing, Hatch Openings Sections & Details, Ladder Details, Miscellaneous Sections & Details
- Electrical & Instrumentation/SCADA – such as but not limited to EI&S Symbols Notes & Abbreviations, Electrical Service, Transformer, Single Line Diagram, Lighting Plan, Motor Control Center, Conduit Schedule, Panel Connection details, Connection Diagram, Electrical Site Plan, P&ID, Instrumentation and Control.
- Landscape and Irrigation Plans (if needed)

100% Design Submittal

Carollo will prepare and submit plans and specifications at the 100% level of completion. It will include complete plans and technical specifications, resolution of all comments to the 90% design submittal as documented in an updated 90% design comment log, a final OPCC, and final construction duration schedule. Final OPCC will include a 10% contingency.

Final Design Submittal

Carollo will prepare and submit plans and specifications at the final design level of completion. The final design submittal will represent the contract documents ready to bid, where all comments have been addressed to the Department's satisfaction. A copy of the 100% design submittal comments will be provided with the final design submittal that clearly delineates the resolution of those comments.

Deliverables:

- 60% Design Package
- 90% Design Package
- 100% Design Package
- Final Design Package

Task 4 – Bidding Phase Assistance

Task 4.1 Requests for Information (RFI)

Carollo will assist with providing information and clarification of bid documents (requests for information of "RFIs") to prospective bidders and prepare up to three (3) addenda to the bid documents. This task assumes up to twenty (20) RFIs during the bidding phase.

Task 4.2 Conformed Set of Construction Plans and Specifications

Carollo will prepare a conformed set of construction plans and technical specifications incorporating all changes made during the bidding process as a result of bidder question responses and addenda issued. Plans and technical specifications will be stamped "Conformed" and submitted per the SBMWD Uniform Design Standards.

Task 4.3 Pre-Bid Conference



Carollo will prepare for and attend the pre-bid conference. The pre-bid conference will be conducted by Department staff, however Carollo will provide technical assistance as needed.

Pre-bid conference will include a meeting at Department administrative facilities and will conclude with a site walk.

Task 5 – Project and Quality Management

Task 5.1 Project Kick-off Meeting

Carollo will organize and attend a project kickoff meeting with SBMWD to discuss the scope and parameters of the project (in-person meeting).

Task 5.2 Progress Meetings

Carollo will prepare for and participate in **monthly** progress meetings with SBMWD (virtual/phone calls), and as needed to review project items. It is assumed each meeting will be 1 hour in length. Carollo's Project Manager and SBMWD's representative will communicate weekly via email, phone calls and virtual meetings as needed for specific project updates, design topics, budget, RFI's and general coordination throughout the contract duration.

Task 5.3 Design Review Meetings

Carollo will schedule and attend up to seven (7) design review meetings (virtual) with SBMWD to ensure that any design issues are resolved. The anticipated meetings are as follows:

- **Draft PDR Addendum Workshop:** To be scheduled within two (2) working days after the administrative draft of the Preliminary Design Report has been returned to the Carollo.
- **Final PDR Addendum Workshop:** To be scheduled within two (2) working days after the Final PDR submittal has been provided to the Department
- **60% Design Review Workshop:** To be scheduled within two (2) working days after the 60% submittal comments have been returned to Carollo.
- **90% Design Review Workshop:** To be scheduled within two (2) working days after the 90% submittal comments have been returned to Carollo.
- **Final Design Review Workshop:** To be scheduled after the 100% submittal comments have been returned to Carollo and plans are ready for final approvals.
- **As-Needed (2):** Two (2) "As-Needed" design review meetings are included in this scope of work.

Task 5.4 Recurring Progress Reports

Carollo will submit monthly progress reports at the same time as monthly invoices that include the following contents:

- Work activities completed to date, in the current reporting period, and projected for the coming month.
 - A brief description of outstanding issues and their potential for impact on scope, schedule, budget, and quality.
 - Potential changes in the project scope.
- 

- Budget status including estimates of actual costs to date, earned value, costs to complete, and costs at completion. The budget status over time will be presented on a graph with associated tabular data indicating for each month the actual costs incurred, earned value, and planned value.
- A discussion of corrective actions to be taken to avoid or mitigate cases where estimated costs at completion exceed budgets.
- Schedule status
- A discussion of corrective actions to be taken to avoid or mitigate cases where the project schedule is expected to be delayed.
- Updated Project Logs
 - » Decision Log
 - » Action Item Log
 - » Meeting Log
 - » RFI Log
- Summary of the status of Carollo invoices, including identification of invoices not yet submitted and submitted but unpaid invoices.
- Overall project budget and schedule completion in graphical format on the same graph. Show actual budget used, original schedule completion, and actual estimated project completion on the graph.
- The approved WBS will form the basis for reporting the status of each Scope of Work task in the monthly project Progress Report and the project Invoices.

All calculations of earned value and estimates to complete will be made at the same level of detail as included in the fee proposal.

Task 5.5 Project Invoices

Carollo will prepare and submit separate monthly invoices listing all project locations awarded to the Department as quickly as possible, with the goal of submitting by the first Wednesday of the following month. Invoices will be submitted for every month that work is being performed unless the Department's Project Manager has provided prior approval for combining the work of two months into a single invoice.

The invoice will contain the following components:

- Invoice Summary for all project tasks
- Invoice Breakdown for each project task
- Supporting Information for each project task

The invoice summary page(s) will contain, at a minimum:

- Company name and address
- Department Purchase Order Number and Construction Order No.



- Unique Invoice No.
- Invoice Date
- Invoice period (beginning and end dates)
- Labor Costs
- Carollo Costs
- Carollo Markup
- ODC Markup
- Total Approved Not-to-Exceed Budget Value by Task
- Billings to Date by category (Labor, Consultant, ODC), separated into Prior, Current, and Total columns
- Amount to be paid for this payment request
- Amount previously billed but not yet received
- Budgeted amount remaining both per task and for the contract as a whole
- Current billing period “total percent invoice date”

The invoice breakdown will contain, at a minimum:

- Breakdown by Category, by Task, by labor classification, by person, by day, the quantity of hours and unit rate, extended to a total daily cost per person per task. The breakdown will include a brief description of each billed item.
- First order subconsultants costs identified at the same level of detail as Carollo staff

The supporting information page(s) will contain, at a minimum:

- Any invoices or other documents supporting costs identified on the Invoice Summary or Invoice Breakdown pages. All costs identified in the invoice will be identified and broken down to their logical component parts.

Approval of an invoice by the Department requires a Progress Report for the period covered by the invoice.

Payment of an invoice will be delayed until the Progress Report is submitted. The Progress Report will include a detailed description of the major activities accomplished for each task worked on during the invoice period. If no work was completed for a specific task, it will be noted and described as such. It will also include a discussion of any potential financial and schedule impacts and how the Carollo plans to recover from these potential concerns.

No billable overtime work will be permitted to occur without the written agreement of the Department’s Project Manager in advance of the overtime work. It is expected that all work for this project will be completed during normal work hours.

[Task 5.6 Subconsultant Management](#)

Carollo will use select subconsultants to round out the design team. The anticipated list of subconsultants is provided below:



- ODay Consultants – Survey, potholing, and slot trenching
- UES – Geotechnical investigations
- ProjectLine – Electrical, Instrumentation, and Controls engineering. BESS design and implementation

Task 5.7 Quality Management

Carollo will manage the quality of the project deliverables throughout the development of the project as follows:

- Peer review of concepts by members of Carollo's senior staff.
- Review of all submittals by the project team.
- Constructability review by an in-house team of qualified senior staff, during the development of the 60% design submittal.
- Quality check of the 90% design submittal by an in-house team of qualified senior staff not associated with the project delivery. The quality check will be signed off by QA/QC senior staff indicating that they have reviewed the deliverables and that they meet Carollo's standards for quality. The QA/QC senior staff will certify and authorize the checked plans to be released to SBMWD.

In addition, Carollo will maintain and update Department review comment logs and incorporate revisions from the Department review comments into the drawings and specifications. All comments will indicate how they are addressed by Carollo.

Task 6 – Record Drawing Preparation

Carollo will prepare record drawings utilizing Contractor's digitally produced redlined field plans and any tie sheets or other Department generated documents in compliance with Department standards after construction is completed.

In addition, Carollo will prepare a start-up/commissioning report for the newly constructed sewer lift station, including the BESS (if applicable).

Task 7 – Permits (Allowance - \$20,000)

Carollo will process applications/correspondence for all applicable permitting efforts for this project.

This task includes an assumed cost of \$20,000, which will include direct expenses associated with permit applications, fees, deposits, and other direct costs. These costs will be billed directly to the Department, on each monthly invoice as required.

Assumptions and Exclusions

- The Department will furnish Carollo all available studies, reports and other data pertinent to Carollo's services; obtain or authorize Carollo to obtain or provide additional reports and data as required; furnish to Carollo services of others required for the performance of Carollo's services hereunder, and Carollo will be entitled to use and reasonably rely upon all such information and services provided by the Department or others in performing Carollo's services under this Task Order.



- Project duration of approximately 13 months, to complete the final design assuming a Notice to Proceed is issued in July 2025.
- A preliminary drawing list similar to previous designs of the lift station. The level of effort shown includes two additional plan and profile sheets for offsite sewer to route sewer to and from the new lift station location. If longer sewer runs are required, additional drawings will be needed.
- Bid phase services include responding to up to 20 RFIs and preparing up to three addenda as stated in the RFP.
- Potholing efforts priced reflect the required 20 potholes and 5 slot trenches identified in the RFP. This reflects a high cost from subconsultants. There may be an opportunity to streamline this price as the siting workshop progresses.
- Optional tasks shown will only be undertaken if approved by SBMWD. Exact locations and quantity of borings, potholes, slot trenches, and potential flow monitoring will be determined after award and during preliminary design.
- Task 7 includes direct costs as identified in the RFP for permitting fees, deposits, etc. as well as engineering staff time to prepare, develop, and complete applications.
- Our understanding is that SBMWD wants a control system on their Meridian LS BESS to stay grid connected, peak shave, and operate when the grid fails. These should all be realizable, but will require programming of controls by a 3rd party integrator. Specialist integrators typically have a tried solution that implements a control scheme to perform the functions detailed by the customer. The approach requires controlling the 480V gear, which is not as common as controlling MV. Equipment selection will be important to make sure the system has the capabilities required.
- Our BESS options analysis for Task 2.1 will be limited to:
 - » Preliminary system sizing.
 - » Listing of technical requirements.
 - » Preliminary single line diagram.
 - » Concept-level construction cost estimate.
 - » Life-cycle costs, including battery replacement estimates.

