Posted 07/19/2024, 12:35pm; Revised 07/22/2024, 7:21pm; Revised 7/23/2024, 1:15pm

MASSACHUSETTS WATER RESOURCES AUTHORITY
Deer Island
33 Tafts Avenue
Boston, MA 02128

Frederick A. Laskey
Executive Director
Chair: R. Tepper
Vice-Chair: A. Pappastergion
Secretary: B. Peña
Board Members:
P. Flanagan
J. Foti
L. Taverna
H. Vitale
J. Walsh
P. Walsh
M. White-Hammond
J. Wolowicz

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

BOARD OF DIRECTORS' MEETING

Date: Wednesday, July 24, 2024

Time: 1:00pm

Location: MWRA Administration Facility, Conference Rooms 2C and 2D
2 Griffin Way, Chelsea, MA 02150
A photo ID will be required for entry.

The meeting will also be available via Webex. The Webex meeting link, event number and password to attend virtually are below:

Webex meeting link (registration required):

https://mwra.webex.com/weblink/register/r3b4078dece11f6d9b5e1b5cacc9169fb

Event number: 2347 363 1981 Password: 72424

REVISED AGENDA

I. APPROVAL OF MINUTES

II. REPORT OF THE CHAIR

III. REPORT OF THE EXECUTIVE DIRECTOR

IV. EXECUTIVE SESSION

i. Approval of June 26, 2024 Executive Session Minutes

A. Litigation

1. To Discuss Strategy with Respect to Litigation
2. *City and County of San Francisco v. EPA*, US Supreme Court No. 23-753 (verbal)
3. *In re Aqueous Film-Forming Products Liability Litigation*, MDL No. 2:18-mn 02873-RMG, U.S. District Court for the District of South Carolina: PFAS Class Action Settlements with Tyco Fire Products LP and BASF Corporation

B. Collective Bargaining

1. Collective Bargaining Update – Units 1, 2, 3, 6 and 9 (verbal)

C. Security

1. Security Update and Strategy (verbal)

V. WASTEWATER POLICY AND OVERSIGHT

A. Contract Awards

1. Deer Island Treatment Plant Combined Heat and Power System – Design, Bidding and Engineering Services During Construction, Burns & McDonnell Engineering Co., Inc., Contract 6730
2. Design, ESDC & RE Services for Cottage Farm CSO Facility PCB Abatement, Weston & Sampson, Contract 7392
3. Oxygen Generation Facility Maintenance Services, Solutionwerks Inc., Contract S619

VI. WATER POLICY & OVERSIGHT

A. Information

1. Overview of Water Pipeline Maintenance Leak Repairs

B. Contract Amendments/Change Orders

1. Carroll Water Treatment Plant SCADA System Improvements, LeVangie Electric Company, Inc., Contract 7582, Change Order 14

VII. PERSONNEL & COMPENSATION

A. Approvals

1. July 2024 PCR Amendments

VIII. ADMINISTRATION, FINANCE & AUDIT

A. Information

1. Delegated Authority Report – June 2024

IX. CORRESPONDENCE TO THE BOARD

X. OTHER BUSINESS

XI. ADJOURNMENT

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Board of Directors

June 26, 2024

A meeting of the Massachusetts Water Resources Authority ("MWRA") Board of Directors was held on June 26, 2024 at MWRA Headquarters at Deer Island, Boston, and via remote participation.

Chair Tepper presided from MWRA Headquarters. Board Members Pappastergion, Peña, Taverna, and White-Hammond also participated at MWRA Headquarters. Board Members Foti and Vitale participated remotely. Board Members Flanagan, Jack Walsh, Patrick Walsh and Wolowicz were absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Special Assistant for Affirmative Action Patterson Riley; MIS Director Paula Weadick; TRAC Director Matthew Dam; Senior Program Manager, Reservoir Operations John Gregoire; Senior Program Manager, Community Support Kristen Hall; Asset Management Analyst Michael Curtis; Chief of Staff Katie Ronan; Associate General Counsel Angela Atchue; Legal Intern Bradley Marcosa; and, Assistant Secretary Kristin MacDougall attended at MWRA Headquarters.

Matt Romero, MWRA Advisory Board ("Advisory Board"), also participated at MWRA Headquarters.

Chair Tepper called the meeting to order at 1:02pm.

ROLL CALL

MWRA General Counsel Francisco Murphy took roll call of Board Members in attendance and announced that Board Members Foti and Vitale were participating remotely. The Chair announced that the meeting was being held at MWRA Headquarters and virtually. She added that the meeting would be recorded, and that the agenda and meeting materials were available on MWRA's website.

APPROVAL OF MAY 22, 2024 MINUTES

A motion was duly made and seconded to approve the minutes of the Board of Directors' meeting of May 22, 2024.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		

Yes	No	Abstain
Pappastergion		
Peña		
Taverna		
Vitale		
		White-Hammond

(ref. I)

REPORT OF THE CHAIR

Secretary Tepper thanked Rev. White-Hammond, who is leaving the MWRA Board of Directors, for her ideas, thoughtful comments and meaningful contributions during her tenure as a Board Member. She invited meeting participants to offer remarks.

On behalf of the Board and MWRA staff, MWRA Executive Director Fred Laskey presented Rev. White-Hammond with a commemorative award. He thanked her for her enthusiasm, intelligence, tenacity, and professionalism. MWRA Advisory Board Executive Director Matt Romero also presented Rev. White-Hammond with a small gift to commemorate her participation in Board discussions.

Rev. White-Hammond thanked Board Members and MWRA and Advisory Board staff. She said that she will remain a strong supporter of MWRA and an advocate for its drinking water, and that she will keep in touch. (ref. II)

REPORT OF THE EXECUTIVE DIRECTOR

MWRA Executive Director Fred Laskey reported that the Quabbin Reservoir was no longer spilling for the first time since January 2024. He noted that the Quabbin had spilled approximately 30 million gallons total (180 gallons per day) in a six-month period.

Mr. Laskey then discussed an upcoming Deer Island walk and luncheon in celebration of Pride, Caribbean Heritage Month, and Juneteenth. He invited Board Members to participate in this annual event, organized as part of MWRA's Diversity, Equity and Inclusion (DEI) efforts. There was brief, general discussion about the event.

Finally, Mr. Laskey congratulated Patterson Riley, MWRA Special Assistant for Affirmative Action, on his upcoming retirement. He presented Mr. Riley with a commemorative award, and thanked him for his hard work, sound advice, and for spearheading many important MWRA initiatives, including the DEI program.

Mr. Riley thanked the Board of Directors, Mr. Laskey and Advisory Board for their years of support and assistance. (ref. III)

EXECUTIVE SESSION

Chair Tepper requested that the Board move into Executive Session to discuss Real Estate, since discussing such in Open Session could have a detrimental effect on the negotiating position of the Authority. She announced that the planned topic for Executive Session was a watershed land acquisition, and that the Board would return to Open Session after the conclusion of Executive Session.

A motion was duly made and seconded to enter Executive Session for these purposes, and to resume Open Session after Executive Session adjournment.

General Counsel Francisco Murphy reminded Board members that under the Open Meeting Law members who were participating remotely in Executive Session must state that no other person is present or able to hear the discussion at their remote location. A response of "yes" to the Roll Call to enter Executive Session when their name was called would also be deemed their statement that no other person was present or able to hear the Executive Session discussion.

Upon a motion duly made and seconded, a roll call vote was taken in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

Voted: to enter Executive Session, and to resume Open Session after Executive Session adjournment.

*** EXECUTIVE SESSION ***

The meeting entered Executive Session at 1:10pm and adjourned at 1:16pm.

*** CONTINUATION OF OPEN SESSION ***

PRESENTATIONS AND SUMMARIES

Approval of Amendments to MWRA regulations for Sewer Use (360 CMR 10.000)

Matthew Dam, MWRA Toxic Reduction and Control "TRAC" Director, presented an overview of proposed amendments to MWRA's regulations for Sewer Use (360 CMR 10.00). He discussed staff's suggestions, the incorporation of requirements and recommendations from a 2021 EPA

audit; 3% increases to implementation charges and annual charges paid by permit holders each fiscal year from FY2025-FY2029; and, text changes to correct minor typos and unclear language.

Mr. Dam discussed MWRA's successful completion of all statutory requirements for public notification, hearing and comment. He reported that no comments were received during the official public comment period; however, one e-mail comment questioning the need for MWRA's proposed sewer discharging and monitoring fee increases was received from a permittee on April 11, 2024, after the public comment period ended. Mr. Dam explained that those fees directly offset the costs to run MWRA's Industrial Pretreatment Program, including drafting and issuing permits; reviewing compliance data and reports; performing facility inspections; monitoring industrial sewer discharges; and administration. He added that the proposed fee increases were in line with a typical inflation factor, and would be applied to TRAC's annual budget, as well as to recoup a portion of annual operating costs. He noted that MWRA had recovered approximately 57% of the Industrial Pretreatment Program's actual Capital Improvement Program budget (CIP) through fees in FY2023.

Mr. Dam then summarized the next steps for the proposed amendments. He explained that staff are not recommending any additional changes to the draft regulations that were issued for public comment prior to promulgation, and that upon Board approval, staff will transmit the adopted amendments to the Massachusetts Secretary of State for publication in the Massachusetts Register and adoption into the Code of Massachusetts Regulations in July 2024. He added that this schedule would allow sufficient time for updating the monitoring and permitting fees before the FY2025 annual TRAC permittee billing cycle. Finally, Mr. Dam presented photos of TRAC staff performing monitoring, inspection and laboratory work.

Board Member Taverna requested clarification on the proposed fee increase schedule. Mr. Dam explained that the increases would take effect on a per-year basis. He noted that a hard copy of all proposed changes was available for Board Member review.

Hearing no further discussion or questions from the Board, Chair Tepper moved to the next presentation. (ref V.1)

Informational Update on Quinapoxet Dam Removal

John Gregoire, MWRA Senior Program Manager, Reservoir Operations, presented an update on the Quinapoxet Dam Removal Project. He described the dam's location and original function, and a presented a brief, historical overview of its design and construction (circa 1905).

Next, Mr. Gregoire presented the rationale for removing the dam. He explained that it no longer serves its original purpose due to advances in reservoir operations, monitoring and water treatment, and that the assessed cost to make necessary repairs and perform required studies is not justifiable because the dam is obsolete.

Mr. Gregoire then discussed some of the project's environmental factors. He noted that the Department of Ecological Restoration had determined that the Quinapoxet River at the dam's location had high potential for restoration. He explained that removing the dam would provide ecological benefits, and allow salmon, which are currently landlocked, to migrate upstream. In addition, he emphasized that returning the Quinapoxet's natural riverine hydrology is critical to meeting climate resiliency challenges. Further, he cited the Rapidan Dam in Minnesota, which is currently facing the threat of collapse, as an example of the importance of the Quinapoxet Dam's removal.

Finally, Mr. Gregoire presented photos of a groundbreaking ceremony for the Quinapoxet Dam Removal project, noting that Commissioner Brian Arrigo of the Department of Conservation and Recreation, Commissioner Tom O'Shea of the Department of Fish and Game, and Beth Lambert, Director of the Department of Ecological Restoration were among those in attendance.

Chair Tepper thanked staff for their work on the dam removal, and praised MWRA for its ongoing commitment to ecological restoration. Mr. Laskey thanked Mr. Gregoire for his contributions to the project. (ref V.2)

Approval of Revisions to the Lead Service Line Replacement Program Guidelines

Kristen Hall, MWRA Senior Program Manager, Community Support, presented an overview of proposed revisions to MWRA's Lead Service Line Replacement ("LSLR") Program Guidelines. She described the Program's goals, including the promotion of public health by facilitating the removal of all lead service lines in MWRA water service communities. She noted that lead service lines are the largest contributors to lead levels in drinking water.

Ms. Hall then explained that the proposed LSLR Program revisions are intended to accelerate the rate of lead service line replacement within the MWRA service area, in anticipation of expected Lead and Copper Rule changes. She noted that MWRA water communities have reported that homeowners' reluctance to pay for the replacement of the privately-owned portions ("private-side") of lead service lines is a major obstacle to the Program's success. She briefly reviewed the Board's May, 2024 approval of $100 million in additional funding for the LSLR Program, and its authorization to include a 25% grant to address these community concerns.

Next, Ms. Hall described staff's work to incorporate the grant and the conditions for utilization into the proposed LSLR Guidelines revisions, with input from the MWRA Advisory Board. She presented an illustration depicting the private and public sides of a typical lead service line.

Ms. Hall then presented highlights of the proposed LSLR Guidelines revisions, including updated language, and a requirement that a community must commit to fully funding the replacement of the private-side portions of lead service lines at no cost to the property owners in order to be eligible for a grant. She explained that retroactive funding will not be eligible for the grant

because its intent is to accelerate lead service line replacement; however, communities may apply for retroactive funding through interest-free loans only. She noted that while interest-free loans will continue to be available for communities that do not commit to private-side line replacement, MWRA staff will continue to strongly encourage full replacement.

She then explained that if approved, the revised LSLR guidelines will go into effect on July 1, 2024, with a potential first round of distributions in August. She noted MWRA staff have received positive feedback and inquiries about the grant from communities.

Finally, Ms. Hall discussed the next steps for the LSLR Program, including regular progress updates for the Board, and continued efforts to meet the goal of replacing all lead service lines in the MWRA service area by 2032, in order to eliminate this source of lead exposure and avoid changes to MWRA's water treatment. She noted that MWRA communities will submit lead inventories by October, 2024, and that Finance staff are investigating additional funding sources, including Massachusetts Clean Water Trust SRF funds.

Hearing no discussion or questions from the Board, Chair Tepper moved to Board Actions. (ref V.3)

BOARD ACTIONS

APPROVALS

Approval of the FY25 Final Capital Improvement Program

A motion was duly made and seconded to approve the FY25 Final Capital Improvement Program (CIP) with planned spending of $347.9 million, including $252.4 million in project spending and $95.5 million in community assistance loan programs.

Chair Tepper asked if there was any discussion or questions from the Board.

Vice Chair Pappastergion noted that the FY2025 Final CIP was discussed during the morning Administration, Finance and Audit Committee meeting (ref. AF&A B.1), and that a consensus had supported the proposal.

Hearing no further discussion or questions from the Board, Chair Tepper requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI A.1)

Approval of the Final FY25 Current Expense Budget

A motion was duly made and seconded to adopt the Final FY25 Current Expense Budget (CEB) set forth in Attachment A of the June 26, 2024 Staff Summary presented and filed with the records of the meeting with current revenue and expense of $900,622,003.

Further, a motion was duly made and seconded to adopt the Final FY25 Operating Budget (Trustee's Budget), set forth in Attachment B of the June 26, 2024 Staff Summary presented and filed with the records of this meeting.

Vice Chair Pappastergion noted that the proposed Final FY25 Current Expense Budget (CEB) was discussed during the morning's Administration, Finance and Audit Committee meeting (ref. AF&A B.2), and that the proposed budget was in line with most of the MWRA Advisory Board's recommendations. Chair Tepper asked if there were any notable discrepancies between MWRA's proposed final CEB and the Advisory Board's recommendations. Mr. Pappastergion responded that there were not. There was brief, general discussion about the proposed CEB.

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI A.2)

A.3. Final FY2025 Water and Sewer Assessments

A motion was duly made and seconded to adopt the following effective July 1, 2024:

1) **water system assessments of $311,379,328 and sewer system assessments of $544,108,672 for FY25;**
2) **FY25 sewer assessments of $500,000 for the Town of Clinton and $501,935 for the Lancaster Sewer District;**
3) **FY25 charge to the City of Worcester of $233,026 representing approximately 7.9% of the direct operating expenses for the Clinton Wastewater Treatment Plant;**
4) **FY25 water assessments of $4,088,633 for the City of Chicopee, $755,970 for South Hadley Fire District #1, and $857,930 for the Town of Wilbraham;**

5) **a wholesale water rate of $4,991.08 per million gallons; and,**
6) **a retail sewer rate of $8,310.71 per million gallons, all as further detailed in the June 26, 2024 Staff Summary presented and filed with the records of the meeting.**

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI A.3)

Defeasance of Future Debt Service

A motion was duly made and seconded to authorize the Executive Director or his designee, on behalf of the Authority, to enter into, execute and deliver all necessary agreements and other instruments and to take such other actions necessary to effectuate the redemption and defeasance of an aggregate principal amount of $22,665,000 of outstanding MWRA senior bonds including to cause the escrow of cash and/or securities in an amount necessary to fund such redemption and defeasance, in order to reduce the debt service requirement by $27,360,750 in the FY25 through FY30 timeframe.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI A.4)

Surplus of a Portion of the Abandoned Mystic Water Main Water Easement

A motion was duly made and seconded to declare as surplus to the Authority's water system

construction, maintenance, or operation needs and purposes a certain portion of an existing Commonwealth of Massachusetts water easement under the care, custody and control of the Authority located on a parcel of land with an address of 58 Main Street, Somerville, as shown on Attachment A of the June 26, 2024 Staff Summary presented and filed with the records of this meeting, and to return it to the control of the Massachusetts Division of Capital Asset Management and Maintenance ("DCAMM") in accordance with Section 9(c) of Chapter 372 of the Acts of 1984, as amended ("Enabling Act").

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI A.5)

Amendments to MWRA regulations for Sewer Use (360 CMR 10.000)

A motion was duly made and seconded to authorize the adoption of amendments to MWRA's Regulations for Sewer Use (360 CMR 10.000), as summarized in the June 26, 2024 Staff Summary presented and filed with the records of this meeting, by publication in the Code of Massachusetts Regulations.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI A.6)

Annual Renewal of Wastewater Advisory Committee (WAC) Contract

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to execute a contract with the Wastewater Advisory Committee for a term of one year, from July 1, 2024 to June 30, 2025, for a total contract cost of $87,374, substantially in the form attached to in the June 26, 2024 Staff Summary presented and filed with the records of this meeting.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
		Taverna
Vitale		
White-Hammond		

(ref. VI A.7)

Approval of Revisions to the Lead Service Line Replacement Program Guidelines

A motion was duly made and seconded to approve the revised guidelines for the Lead Service Line Replacement Program as outlined in the June 26, 2024 Staff Summary presented and filed with the records of this meeting.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI A.8)

Annual Renewal of Water Supply Citizens Committee (WSCAC) Contract

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to execute a contract with the Water Supply Citizens Advisory Committee for a

one-year period beginning July 1, 2024 to June 30, 2025, with a total contract cost of $125,043, substantially in the form attached to the June 26, 2024 Staff Summary presented and filed with the records of this meeting.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI A.9)

June 2024 PCR Amendments

A motion was duly made and seconded to approve amendments to the Position Control Register (PCR) as presented and filed with the records of this meeting.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI A.10)

Extension of Employment Contract of the Director of the Tunnel Redundancy Program

A motion was duly made and seconded to adopt the Executive Director's performance rating of Excellent for Kathleen M. Murtagh, Director of the Tunnel Redundancy Program, for FY24 and extend the term of her employment agreement to June 3, 2027.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI A.11)

CONTRACT AWARDS

West Roxbury Tunnel Inspection: Black Dog Divers, Inc., Contract 6898

A motion was duly made and seconded to approve the award of Contract 6898, West Roxbury Tunnel Inspection, Sections 637 & 637A, to the lowest responsive bidder, Black Dog Divers, Inc. and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of $1,656,930 for a contract term of 365 calendar days from the Notice to Proceed.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI B.1)

CONTRACT AMENDMENTS/CHANGE ORDERS

Maximo Lawson Interface Enhancements: Starboard Consulting, LLC, Contract 7649, Amendment #4

A motion was duly made and seconded that the Executive Director, on behalf of the Authority, approve Amendment 4 to Contract 7649, Maximo Lawson Interface Enhancements, with Starboard Consulting, LLC, to extend the contract term by three months from June 26, 2024 to September 26, 2024 at no additional cost to the Authority.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she

requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI C.1)

Agency-Wide Technical Assistance Consulting Services: Hazen and Sawyer, P.C., Contract 7990, Amendment 1

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Amendment 1 to Contract 7990, Agency-Wide Technical Assistance Consulting Services, with Hazen and Sawyer, P.C., increasing the contract amount by $1,500,000, from $3,000,000 to $4,500,000, and extending the contract term by twelve months from January 9, 2025 to January 9, 2026.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI C.2)

Agency-Wide Technical Assistance Consulting Services: Kleinfelder Northeast, Inc., Contract 7991, Amendment 1

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Amendment 1 to Contract 7991, Agency-Wide Technical Assistance Consulting Services, with Kleinfelder Northeast, Inc., increasing the contract amount by $1,500,000, from $3,000,000 to $4,500,000, and extending the contract term by twelve months from December 21, 2024 to December 21, 2025.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI C.3)

Nut Island Headworks Odor Control and HVAC Improvements: Walsh Construction Co. II, LLC, Contract 7548, Change Order 18

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Change Order 18 to Contract 7548, Nut Island Headworks Odor Control and HVAC Improvements, with Walsh Construction Company II, LLC for a not-to-exceed amount of $236,982.08, increasing the contract amount from $61,433,487.56 to $61,670,469.64 with no increase in contract term.

Further, a motion was duly made and seconded to authorize the Executive Director to approve additional change orders as may be needed to Contract 7548 in an amount not to exceed the aggregate of $200,000, in accordance with the Management Policies and Procedures of the Board of Directors.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI C.4)

Dam Safety Compliance and Consulting, GZA GeoEnvironmental, Contract 7614, Amendment 3

A motion was duly made and seconded to authorize the Executive Director, on behalf of the

Authority, to approve Amendment 3 to Contract 7614, Dam Safety Compliance and Consulting Services - Repairs, Design and Engineering Services During Construction, with GZA GeoEnvironmental, Inc. in the amount of $101,769.97, increasing the contract amount from $481,041.54 to $582,811.51 and increasing the contract term by 15 months from July 21, 2024 to October 21, 2026.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. VI C.5)

OTHER BUSINESS (BOARD ACTION)

Review and Extension of Contract for MWRA's Executive Director

Chair Tepper announced that Board Members would conduct the review and extension for the contract for MWRA's Executive Director, Frederick A. Laskey. Mr. Laskey left the Board Room.

Personnel and Compensation Committee Vice-Chair White-Hammond briefed Chair Tepper on the conversation about Mr. Laskey's job performance during the morning's Annual Meeting of the Personnel and Compensation Committee Independent of Management (ref. P&C C.1). She explained that the Committee participants were unanimous on Mr. Laskey's FY2024 recommended performance rating of Excellent, and were in full agreement about Mr. Laskey's strong leadership and the culture of leadership that he fosters at MWRA.

Rev. White-Hammond further explained that Committee participants were also unanimous on the recommendation to extend Mr. Laskey's contract by one year, through June 30, 2029 (limit of a one-year extension because the total term allowed under the MWRA Enabling Act is five years), and that the Committee participants hope that Mr. Laskey will continue in his role as Executive Director for as long as he would like to and is able.

Finally, Rev. White-Hammond summarized the discussion during the Committee meeting about Mr. Laskey's proposed salary increase. She reported that a salary increase of 5%, effective July 1, 2024 was proposed and a vote was taken, in which the majority voted yes, with one abstention. Rev. White-Hammond explained that the question was not about the

percentage but mostly about timing - whether to do it now or wait, noting collective bargaining is not yet currently resolved. She complimented Mr. Laskey's job performance and noted his many responsibilities as the leader of a 24-7 organization that provides essential services.

Chair Tepper asked how the Committee came to a 5% increase. Rev. White-Hammond explained that there was clear agreement among the participants that there wasn't enough distance between Mr. Laskey's salary and those of his direct reports, which could potentially pose future challenges for the recruitment of his successor. She noted that the Committee's discussion on the percent increase focused primarily on the best course of action to bring Mr. Laskey's salary closer to parity with other executives in similar roles, and the timing of the salary increase proposal. Rev. White-Hammond also briefly described potential ways to achieve better parity for Mr. Laskey over time, including incremental increases.

There was also brief, general discussion about the Enabling Act's contract extension limits.

Board Member Foti echoed Rev. White-Hammond's remarks, and stressed that all Board Members present at the Committee meeting agreed on the excellence of Mr. Laskey's job performance, and on extending his contract for as long as possible. He then suggested the creation of a subcommittee to review the MWRA Executive Director's salary and contract with respect to parity, reiterating that Mr. Laskey's salary is behind his peers'.

Chair Tepper recommended that the MWRA Board undertake an independent, third-party study to evaluate the salaries of the MWRA Executive Director and other executives in comparable positions, similar to one recently conducted by the Massachusetts Clean Energy Center, where she serves as Board Chair.

Board Member Vitale stated that in his long-standing view, MWRA's constituents are extremely fortunate to have Mr. Laskey as the Executive Director. He discussed and praised Mr. Laskey's impressive, professional accomplishments and those of MWRA staff. Mr. Vitale noted that the Committee participants generally agreed that a 5% pay increase was advisable. He further complimented MWRA and its staff and expressed his appreciation for their work.

Mr. Pappastergion agreed with Mr. Vitale. He noted that the Committee participants recognize the disparity in Mr. Laskey's salary, and that a proposed 5% increase reflected the desire to compensate him as fairly as possible, and not create difficulties with the collective bargaining process. He also agreed with recommendations to form a subcommittee on MWRA's executive compensation for purposes of parity.

A motion was duly made and seconded that the performance of Frederick A. Laskey, MWRA Executive Director, for Fiscal Year 2024 be rated as Excellent;

Further, a motion was duly made and seconded to extend the term of the Executive

Director's employment agreement and his appointment as the Executive Director by one year, through June 30, 2029; and

Further, a motion was duly made and seconded to increase the Executive Director's current salary by 5%, effective July 1, 2024.

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote on the motion.

Rev. White-Hammond stated that she would abstain from the vote because she would prefer to vote on a motion for the Executive Director's salary increase after appointment of a parity study subcommittee and setting a deadline for the study's completion.

Hearing no further discussion or questions from the Board, Chair Tepper requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
		White-Hammond

There was brief discussion about the potential formation of an executive compensation subcommittee, or the launch of an independent study. Mr. Pappastergion recommended that this discussion be tabled for a future meeting with more Board Members present. Chair Tepper agreed.

The Board invited Mr. Laskey to rejoin the meeting.

When Mr. Laskey returned, Chair Tepper led a discussion about his performance review and contract extension, during which Mr. Pappastergion shared the Board's vote.

Mr. Laskey thanked Board Members and noted that his job performance is a reflection of MWRA staff's excellent work.

Chair Tepper praised Mr. Laskey for leading a well-run organization, and complimented MWRA staff. Mr. Pappastergion added that the Board recognizes that this vote took place amid ongoing collective bargaining negotiations, and that Mr. Laskey has the Board's full support.

Mr. Laskey thanked Board Members and reiterated that he is only as successful as MWRA staff and they are a great team and deserve high praise for their work. Further, he added that in his

view, staff also deserve fair compensation. Finally, Mr. Laskey noted that collective bargaining negotiations are a top priority, and that staff will provide a progress update at a future meeting. (ref. VII.1)

CORRESONDENCE TO THE BOARD

There was no correspondence to the Board.

ADJOURNMENT

A motion was duly made and seconded to adjourn the meeting.

Hearing no discussion or questions from the Board, Chair Tepper requested a roll call vote in which the members were recorded as follows:

Yes	No	Abstain
Tepper		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
White-Hammond		

(ref. IX)

The meeting adjourned at 2:06pm.

Approved: July 24, 2024

Attest: _____

Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- Draft Minutes of the May 22, 2024 MWRA Board of Directors' Meeting (ref. I)
- June 26, 2024 Staff Summary and Presentation – Amendments to MWRA regulations for Sewer Use (360 CMR 10.000) (ref. V.1/VI A.6)
- June 26, 2024 Staff Summary and Presentation – Dam Safety Compliance and Consulting, GZA GeoEnvironmental, Contract 7614, Amendment 3 (ref. V.2/VI C.5)
- June 26, 2024 Staff Summary and Presentation – Approval of Revisions to the Lead Service Line Replacement Program Guidelines (ref. V.3/VI A.8)
- June 26, 2024 Staff Summary– Final FY2025 Capital Improvement Program (CIP) (ref AF&A B.1/VI A.1)

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Documents used for this meeting and cited in these minutes, including meeting materials/staff summaries, presentations, and approved minutes, are posted on MWRA's website: https://www.mwra.com/02org/html/bodmtg.htm

- June 26, 2024 Staff Summary – Final FY2025 Current Expense Budget (CEB) (AF&A B.2/VI A.2)
- June 26, 2024 Staff Summary – Final FY2025 Water and Sewer Assessments (AF&A B.3/VI A.3)
- June 26, 2024 Staff Summary – Defeasance of Future Debt Service (ref. AF&A B.4/VI A.4)
- June 26, 2024 Staff Summary and Presentation – Surplus Water Easement of the Abandoned Mystic Water Mains (AF&A B.5/VI A.5)
- June 26, 2024 Staff Summary – Annual Renewal of Wastewater Advisory Committee (WAC) Contract (WW A.1/VI A.7)
- June 26, 2024 Staff Summary and Presentation – Annual Renewal of Water Supply Citizens Committee (WSCAC) Contract (ref. W B.1/VI A.9)
- June 26, 2024 Staff Summary – June 2024 PCR Amendments (ref. P&C B.1/VI A.10)
- June 26, 2024 Staff Summary – Extension of Employment Contract for Kathleen Murtagh, Director of Tunnel Redundancy (ref. P&C B.2/VI A.11)
- June 26, 2024 Staff Summary and Presentation – West Roxbury Tunnel Inspection: Black Dog Divers, Inc., Contract 6898 (ref. WW B.1/VI B.1)
- June 26, 2024 Staff Summary – Maximo Lawson Interface Enhancements: Starboard Consulting, LLC, Contract 7649, Amendment #4 (ref. AF&A C.1/VI C.1)
- June 26, 2024 Staff Summary – Agency-Wide Technical Assistance Consulting Services: Hazen and Sawyer, P.C., Contract 7990, Amendment 1; Presentation – Agency Wide Technical Assistance Consulting Services (ref. WW C.1/VI C.2)
- June 26, 2024 Staff Summary – Agency-Wide Technical Assistance Consulting Services: Kleinfelder Northeast, Inc., Contract 7991, Amendment 1; Presentation – Agency Wide Technical Assistance Consulting Services (ref. WW.C.2/VI C.3)
- June 26, 2024 Staff Summary and Presentation – Nut Island Headworks Odor Control and HVAC Improvements: Walsh Construction Co. II, LLC, Contract 7548, Change Order 18 (ref. WW C.3/VI C.4)

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 24, 2024
SUBJECT: Deer Island Treatment Plant Combined Heat and Power System Design, Bidding and Engineering Services During Construction
Burns & McDonnell Engineering Co., Inc.
Contract 6730

COMMITTEE: Wastewater Policy and Oversight

_____ INFORMATION
_X_ VOTE

Michele S. Gillen
Director of Administration

David Duest, Director, Deer Island Treatment Plant
Richard Adams, Manager, Engineering Services
Preparer/Title

David W. Coppes, P.E.
Chief Operating Officer

RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to award Contract 6730, Deer Island Treatment Plant Combined Heat and Power System – Design, Bidding and Engineering Services During Construction, to Burns & McDonnell Engineering Co., Inc., and to authorize the Executive Director, on behalf of the Authority, to execute said contract in an amount not to exceed $18,377,091 for a contract term of 100 months from the Notice to Proceed.

DISCUSSION:

Deer Island is the largest energy consumer as well as the largest source of renewable energy amongst all the Authority facilities. Though there is a variety of renewable energy generators on Deer Island, the largest source is from digester gas, which is generated in the digester "eggs" as part of the residuals handling process.

The digester gas at Deer Island is currently converted into both heat and electricity using a combined heat and power (CHP) system located in the thermal / power plant. The existing CHP system is a bottoming-type system where heat is generated first and electricity is generated second.

The digester gas, along with some supplemental fuel oil, is burned in a boiler to generate high-pressure steam. The high-pressure steam is then routed through steam turbine generators to produce electricity. The steam that exits the generators provides thermal energy to the heat loop that circulates hot water around Deer Island to meet all of the plant's thermal demands, including heating the buildings and digesters. A high level schematic of the existing CHP system is shown in Figure 1.

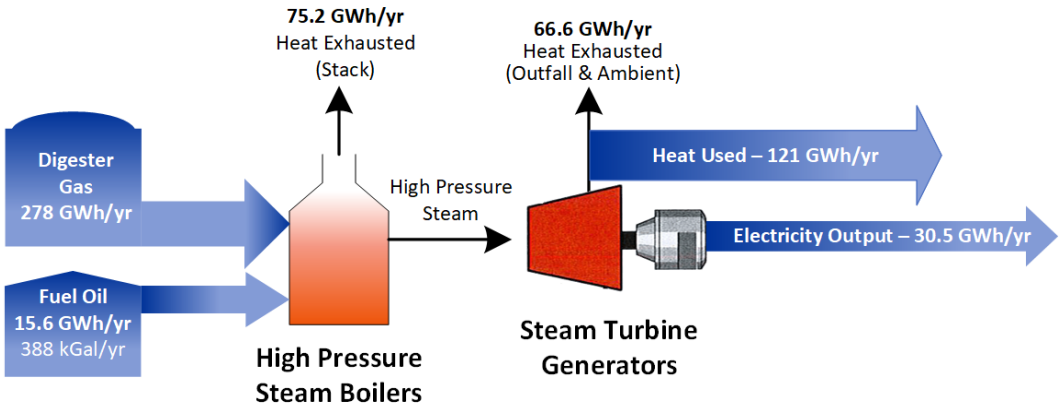


Figure 1– Schematic of Deer Island's existing CHP

The existing CHP system was placed into operation in the mid-1990s. Though it is not currently at the end of its lifespan, a study was initiated to determine if a new CHP system could extract more useful energy from the onsite energy sources.

The goal of the study was to better understand the potential performance of a future CHP system through the creation of a conceptual design and the prediction of its performance through simulation and analysis. This study determined that a new CHP system would significantly outperform the existing CHP system.

The conceptual design developed during this study is a topping-type system where electricity is generated first and useable heat is then extracted from the exhaust heat. This results in a system that generates more electricity for the fuel input than the existing system. Based on the simulation results, this allows for more than twice as much electricity to be extracted from the digester gas than the existing CHP system, while meeting the thermal demand of Deer Island and reducing the fuel oil usage by approximately 75%.

A high level schematic of the new CHP is shown in Figure 2. The new system will split the digester gas supply. Some of it will go to a new array of five 3.0-3.5 MW digester gas fueled spark ignited reciprocating engine generators with a total capacity of 15-17.5 MW. The generators will include exhaust gas heat exchangers, gas cleaning and other appurtenances required for their operation. The remaining digester gas will go to an array of three hydronic boilers generating hot water. The boilers will have the ability to burn digester gas, No. 2 fuel oil or a combination of the two and will have N+1 redundancy sized to meet the full thermal load of the entire Deer Island facility. The new CHP equipment will be housed in a new building.

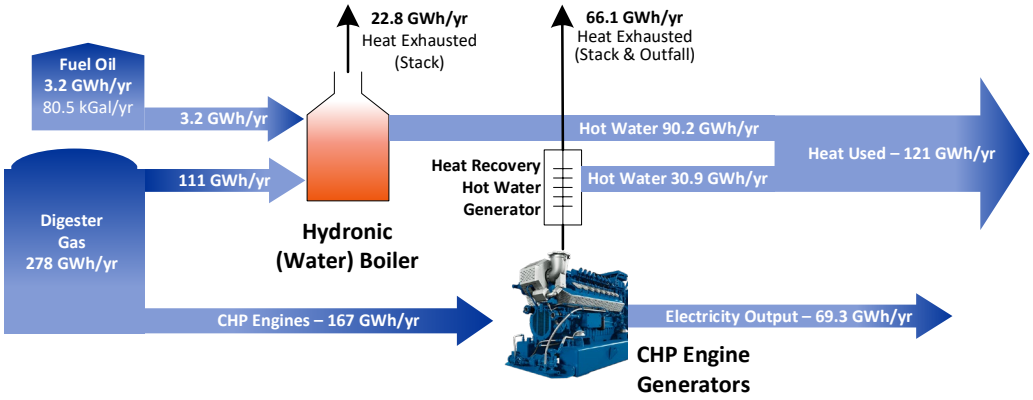


Figure 2 – Schematic of Deer Island's proposed new CHP

The new CHP system is expected to increase the average yearly electricity generated from 30.5 to 69.3 Giga Watt Hour/year. As shown in Table 1, the proposed system will increase total electrical energy production from the CHP system to 48% of total usage with an efficiency increase to 68%. This will increase the percentage of overall thermal and electrical energy used at Deer Island that is generated from onsite sources from approximately 60 to 75%. This is a remarkable amount of onsite generation considering that wastewater treatment is an energy intensive enterprise.

Table 1- Energy Performance Metrics for New and Existing CHP

	Existing CHP	Proposed CHP
Percent electricity from CHP	21%	48%
CHP Efficiency	52%	68%
Percent energy from onsite sources	~60%	~75%

Analysis of the proposed CHP system also indicated that the increase in on-site generated electricity combined with a decrease in fuel oil consumption will result in a decrease in average annual greenhouse gas (GHG) emissions by 12,800 Metric Tons of CO2 equivalent/year. This is equivalent to avoiding driving 32.5 million car-miles per year.

Contract 6730 includes a preliminary design phase where system simulations are performed, the design parameters for the new CHP system are finalized, grant funding and incentives program opportunities are explored, and several aspects to extract additional resiliency and energy performance from the project are implemented which includes the following.

- **High Performance Building**
  Evaluate and implement efficiency elements to enhance the energy performance of the new CHP building such as HVAC controls, lighting controls, advanced wall assemblies and windows, and building commissioning.

- **Jockey Generator**
  A diesel fueled generator installed as part of the array of digester fueled CHP generators to provide additional resiliency when standby power is necessary.

- **High Temperature Heat Pump**
  Some of the heat generated by the new CHP engines is not hot enough to be used by the Deer Island heat loop. High temperature heat pumps can increase the temperature of this thermal energy so it can be used in the heat loop.

- **Microgrid Control System**
  A microgrid aggregates the control of multiple energy sources allowing the Deer Island energy system to operate in concert thereby easing transitions from grid connected to grid disconnected operation and increasing resilience.

- **Digital Twin**
  A digital twin is a model of an operating physical system that often has a real-time data feed from the operational system into the model. This will allow ongoing monitoring of the operating system for divergence from expected operation allowing for improved troubleshooting and maintenance response. In additional, operational changes can be simulated before implementation in order to evaluate their impact.

The final design of Contract 6730 will include preparation of construction contract plans, specifications, cost estimates and bidding phase assistance.

Procurement Process

On April 24, 2024, MWRA issued a one-step Request for Qualifications Statements/Proposals (RFQ/P) that was publically advertised in the Central Register, the Boston herald, Banner Publications and El Mundo. In addition, a notice of the RFQ/P was sent directly to approximately 60 firms. The RFQ/P included the following evaluation criteria and points: Cost (25 points); Qualifications and Key Personnel (25 points), Experience/Past Performance on Similar Non-Authority Projects and on Authority (25 points), Technical Approach / Capacity / Organization and Management Approach (20 points); Minority and Women-Owned Business Enterprise Participation (5 points).

On June 5, 2024, MWRA received one proposal which was submitted by Burns & McDonnell Engineering Co., Inc. (Burns & McDonnell). The highly complex and specialized nature of the engineering services required under Contract 6730 likely contributed to the limited RFQ/P response. Consultant feedback for not responding to the RFQ/P included: not wanting to propose as a prime consultant and not being able to find a suitable teaming partner to fulfill the project's technical staffing requirements.

The following table represents the cost and level of effort proposed by Burns & McDonnell.

Proposer	**Proposed Cost**	**Proposed Hours**
Burns & McDonnell	$18,610,776*	82,090
Engineer's Estimate	*$16,700,000*	*74,955*

*Award amount was adjusted to $18,377,091 based upon Internal Audit review.

Burns & McDonnell's adjusted proposed cost of $18,377,091 was approximately 10% higher than the Engineer's Estimate of $16,700,000 due primarily to a higher level of effort carried for project administration and preliminary design. The remaining components of Burns & McDonnell's cost

proposal (final design, bidding phase assistance and engineering services during construction) were within 10% of the Engineer's Estimate.

Burns & McDonnell's proposal included highly qualified personnel who have the required experience in combined heat and power projects. Burns & McDonnell presented a multi-disciplinary team, including subconsultants (CDM Smith, Green International, and JK Muir) who have extensive experience on Authority projects. In addition to positive references for performance on past projects, all references indicated that they would rehire the firm. Burns & McDonnell demonstrated a full understanding of the project requirements as evidenced by the site-specific challenges it presented in its Technical Approach and the manner in which it will achieve the project goals. The proposal was well presented and the proposed project team has the capacity to successfully perform the work.

The Selection Committee recommended the award of Contract 6730 to Burns & McDonnell in the amount not to exceed $18,377,091.

BUDGET/FISCAL IMPACTS:

The FY25 Capital Improvement Program includes $16,500,000 for Contract 6730. The recommended contract amount is $18,377,091 or $1,877,091 over the amount in the CIP. This difference will be covered within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

The minimum MBE and WBE participation requirements for this project established at 7.18% and 5.77%, respectively. Burns & McDonnell has committed to 7.18% MBE and 5.77% WBE participation.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 24, 2024
SUBJECT: Design, Engineering Services During Construction and Resident Engineering Services for Cottage Farm CSO Facility PCB Abatement
Weston & Sampson Engineers, Inc.
Contract 7392

COMMITTEE: Wastewater Policy & Oversight

_____ INFORMATION
_X_ VOTE

Michele S. Gillen
Director of Administration

Brian L. Kubaska, P.E., Chief Engineer
Shannon M. Matuschak, P.E., Project Manager
Preparer/Title

for David W. Coppes, P.E.
Chief Operating Officer

RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to select Weston & Sampson Engineers, Inc. to provide Design, Engineering Services During Construction and Resident Engineering Services for Cottage Farm CSO Facility PCB Abatement under Contract 7392, and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the amount not to exceed $3,757,000.41 for a contract term of 52 months from the Notice to Proceed.

DISCUSSION:

MWRA's Cottage Farm Combined Sewer Overflow Facility is located at 660 Memorial Drive in the Cambridgeport district of Cambridge along the northern shore of the Charles River. It consists of two buildings: a main building containing pump and screening equipment and a chemical building, which contains tanks and pump systems for the addition of sodium hypochlorite and sodium bisulfite to disinfect and declorinate combined flows prior to discharge to the Charles River. The main building and its associated underground detention basins were constructed in 1971. A major upgrade to Cottage Farm was completed in 2001, which included the construction of the chemical building.

PCBs in paint and caulking at Cottage Farm were found at concentrations well above the regulatory action level of 50 ppm in the main building. Given the newer construction of the Chemical Building, no hazardous materials have been identified in this building. As reported to the Board on September 14, 2022, MWRA staff have implemented interim measures to limit PCB exposure to allow staff to work safely at the facility until abatement can be designed and implemented. MWRA developed a PCB Abatement Plan to address the PCB-contaminated materials, which was submitted to the EPA on October 28, 2022. The EPA issued a PCB Risk-Based Decontamination and Disposal Approval dated February 27, 2023 for PCB abatement in the main building at Cottage Farm.

The October 2022 PCB Abatement Plan outlined a two-phase process to abate PCBs and complete a full rehabilitation of the main building. Contract 7392 includes the design, engineering services during construction (ESDC) and resident engineering (RE) services for the first phase of the Abatement Plan only. The first phase will focus on the encapsulation and abatement of accessible PCB contaminated materials (approximately 80% to 90% abatement) in the main building. The remaining PCB encapsulation and abatement (10% to 20% of PCB contaminated materials) will occur during the second phase of construction and will be conducted during facility rehabilitation. A future professional services contract will be procured separately for the full facility upgrade and remaining PCB Abatement work under the second phase.

In May 2023, MWRA attempted to procure the phase one design, ESDC and RE services shortly after EPA approved the plan. However, after three extensions of the proposal date and multiple site visits, no proposals were received. Staff then attempted to solicit proposals through the Agency Wide Technical Assistance contracts, limiting the scope to the design task only. Only one of the two technical assistance consultants was willing to propose, although at a proposed cost significantly higher than the engineer's estimate. Staff approached prospective firms with noted experience in PCB abatement work to determine what may have limited consultant interest in the original Request for Qualifications Statements/Proposals (RFQ/P). Feedback was incorporated into the RFQ/P to address these concerns, including clarification of the extent of abatement to be performed under phase one and adjustments to the qualification requirements for key personal that typically manage PCB abatement projects.

The scope of services for this project includes project administration and management, preliminary and final design, hazardous and regulated building materials evaluation, permitting, bidding, engineering services during construction and resident engineering services. Design and bidding services are estimated to take 16 months from the Notice to Proceed. Construction is estimated to take 24 months plus a 12-month warranty period.

Procurement Process

On May 8, 2024, MWRA issued a one-step RFQ/P that was publicly advertised in the Central Register, the Boston Herald, Banner Publications, the Dorchester Reporter, and El Mundo. In addition, 248 firms received notice of the RFQ/P through the MWRA Supplier Portal, and an email notice was sent directly to approximately 60 firms. A total of 23 firms requested the RFQ/P and were added to the plan holders list. On June 12, 2024, MWRA received proposals from the following two firms: Weston & Sampson Engineers, Inc. ("Weston & Sampson"); and GEI Consultants, Inc. ("GEI Consultants"). The RFQ/P included the following evaluation criteria: Cost - 25 points; Qualifications and Key Personnel - 25 points; Relevant Experience and Past

Performance - 25 points; Technical Approach/Capacity/Organization and Management Approach - 20 points; and Minority and Women-Owned Business Enterprise Participation - 5 points. The proposal costs and levels of effort are presented below.

Proposer	Proposed Contract Cost	Level of Effort (Hours)
Engineer's Estimate	*$3,123,842.08*	*18,350*
Weston & Sampson	$3,757,000.41	18,161
GEI Consultants	$5,609,040.57*	25,854

*Adjusted value due to mathematical error

The five voting members on the Selection Committee reviewed, scored and ranked the proposals as follows:

Proposer	Total Points	Final Ranking
Weston & Sampson	391.25	1
GEI Consultants	366.25	2

Weston & Sampson was ranked first by the Selection Committee and received the highest number of points. Weston & Sampson had the lowest cost, which was 20.3% higher than the Engineer's Estimate but 49.3% lower than the second proposal received. Its proposed level of effort is within 1% of the Engineer's Estimate. Weston & Sampson's proposal presented very strong key personnel and past experience working on PCB abatement projects with a strong relationship working with the EPA. The firm has worked as a prime consultant on past MWRA projects and received positive references for performance. Weston & Sampson's proposal also offered MBE and WBE participation that exceeded the participation goal.

GEI Consultants was ranked second by the Selection Committee. GEI Consultants' cost was much higher than Weston & Sampson's cost and was 79.6% above the Engineer's Estimate. Its proposed level of effort is 40.9% above the Engineer's Estimate. GEI Consultants submitted a strong proposal with a very qualified project team demonstrating relevant technical expertise; however, some selection committee members saw the use of seven subconsultants as a hindrance to a timely and cost effective project execution. Additionally, GEI Consultants did not meet the MBE/WBE criteria or request a partial MBE/WBE waiver.

Based on final rankings, the Selection Committee recommends the award of this contract to Weston & Sampson Engineers, Inc. in the amount of $3,757,000.41 and for a contract term of 52 months from the Notice to Proceed.

BUDGET/FISCAL IMPACTS:

The FY25 CIP includes $2,700,000 for Contract 7392. The award amount is $3,757,000.41 or $1,057,000.41 over the CIP amount. This difference will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

The minimum MBE and WBE participation requirements for this project were established at 7.18% and 5.77% respectively. Weston & Sampson has committed to 11.52% MBE and 5.85% WBE participation, which exceeds the requirements.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 24, 2024
SUBJECT: Oxygen Generation Facility Services, Deer Island Treatment Plant
Solutionwerks Inc.
Contract S619

COMMITTEE: Wastewater Policy & Oversight

_____ INFORMATION
_X_ VOTE

Michele S. Gillen
Director of Administration

Chad Whiting, Deputy Director, Deer Island Treatment Plant
David F Duest, Director, Deer Island Treatment Plant
Preparer/Title

for
David W Coppes, P.E.
Chief Operating Officer

RECOMMENDATION:

To approve the award of Contract S619, Oxygen Generation Facility Services, Deer Island Treatment Plant, to the lowest responsive and eligible bidder, Solutionwerks Inc., in the amount of $3,512,500.00, for the contract term of 1095 calendar days from the Notice to Proceed.

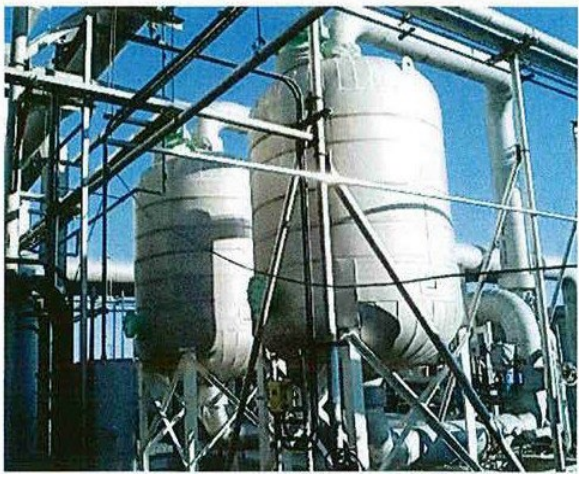
DISCUSSION:

Secondary wastewater treatment at Deer Island employs a pure oxygen activated sludge biological process. A biomass of microorganisms is developed and maintained to remove dissolved solids and other undesirable compounds remaining in wastewater after primary treatment. Deer Island's Cryogenic Oxygen Generation facility (Cryo Plant) generates 97% pure oxygen, which is used in place of atmospheric air containing only 21% oxygen. The utilization of 97 % pure oxygen allows for a smaller footprint for the secondary reactors where the oxygen is fed to the microorganisms.

The Cryo Plant consists of two process trains, individually capable of producing approximately 90-150 tons of 97% pure gaseous oxygen per day via a process known as fractional distillation. This process purifies atmospheric air, liquefies the air below -300 degrees Fahrenheit, and then evaporates off the nitrogen component leaving pure oxygen for use in the secondary treatment process.

Typically, only one process train is required to be in operation continuously to meet the oxygen demand of the secondary treatment process. If a problem arises causing the shutdown of the oxygen generation trains, the 1,000-ton liquid oxygen storage tank can provide enough oxygen for approximately seven days of operation. Startup of an offline process train can take up to four days to start producing oxygen in sufficient quantities to meet secondary operational needs.

Air Compressor Building with Air Intake Ducts



Two Mole Sieves for Air Purification

Six-Ton Liquid Oxygen (LOX) Transfer Tank

1,000-Ton LOX Storage Tank (in background) and Two "Cold Boxes"

The scope of work under this contract includes two scheduled annual service visits per year (one for each oxygen train), twelve scheduled monthly service visits per year, as-needed training for MWRA staff, emergency and non-emergency on-call assistance, and the servicing of ancillary equipment, such as four main air compressors and three air chillers. Allowances have been included for consumable parts, materials, factory-authorized service technicians, airline transportation and travel expenses, miscellaneous specialized tools, and fire department services. These allowances will only be expended as actual costs are incurred. The total estimated value of the facility and all of the associated equipment maintained under this contract is approximately $79 million.

Procurement Process

For the past several contract cycles, this competitively bid contract for maintenance services has resulted in the participation of only one bidder, Solutionwerks Inc. On November 10, 2022, Solutionwerks informed MWRA that it would be unable to bid on an upcoming three-year contract as it has been configured in the past, because key staff, including the owner, would be transitioning into retirement or semi-retirement. This notice, along with the need to perform some capital repairs and the need to improve competitive bidding for this type of work, led to the procurement of a Chapter 149 construction contract.

In February 2024, staff advertised a Chapter 149 contract to address some capital repair needs, in advance of an upcoming rehabilitation project of the entire Oxygen Generation Facility, combined with the maintenance services now included in this contract. The combination of the capital repairs and the specialized maintenance services required for the facility resulted in a single bid far in excess of the Engineer's Estimate. This was despite concerted outreach to potential bidders by staff. Potential bidders capable of working with oxygen facilities were not interested in the work for several reasons, including the size of the contract, retirements and downsizing, and lack of sufficient field staff.

Staff re-examined and revised the scope of work, removing most of the capital work to address ambiguities in the specifications, and issued this non-professional services contract to ensure continued specialized support for the facility. The capital work removed from the scope of this contract will be procured separately. Engineering staff are actively working on specifications to procure bids for those projects as soon as September 2024.

This rebid of Contract S619 was publicly advertised in the Boston Herald, the Dorchester Report, Banner Publications, El Mundo and the Central Register. The bid documents were made available for public downloading on MWRA's Supplier Portal (Event 5942). Bids were opened on June 27, 2024. One bid was received as follows:

BIDDER	**BID PRICE**
Solutionwerks, Inc.	$3,512,500
Engineer's Estimate	*$3,200,000*

The value of the previous facility services contract, S587, including amendments is $2,970,450. Staff increased the Engineer's Estimate for Contract S619 to $3,200,000 to provide for increased allowance levels required to maintain support for the aging facility. Solutionwerks' bid, at $3,512,500, is 9.8% over the Engineer's Estimate. The reasons for the increase over the Engineers Estimate appears to be based on a higher than anticipated bid for Line Item 1 (annual turnaround services) and Line Item 2 (on call and training services). Staff reviewed Solutionwerks' bid and determined that it is reasonable, complete, and complies with all of the requirements of the bid specifications.

Since November of 2022, succession planning within Solutionwerks, Inc. is clearer. Key personnel have not yet fully retired and the company has successfully hired and trained two new qualified technicians capable of performing the work under this contract. Solutionwerks Inc.'s business plan moving forward is to provide reliable oxygen facility support services for decades to come. References were checked and found to be favorable. Solutionwerks has successfully performed this

work for MWRA under prior contracts. Staff have been satisfied with the firm's past performance on the current and previous contracts. Solutionwerks, Inc. has an excellent track record of providing safe and reliable services. Staff are of the opinion that Solutionwerks possesses the skill, ability, and integrity necessary to perform the work under this contract and are qualified to do so. As mentioned previously, Solutionwerks has also hired additional staff to assure continuity in its operations as existing staff transition into retirement. Therefore, staff recommend the award of this facility services contract to Solutionwerks, Inc. as the lowest responsive bidder.

BUDGET/FISCAL IMPACTS:

There are sufficient funds available for the first portion of this contract in Deer Island's FY25 Current Expense Budget. Appropriate funding will be included in subsequent CEB requests for the remaining term of the contract.

MBE/WBE PARTICIPATION:

There were no MBE/WBE participation requirements established for this contract due to the limited opportunities for subcontracting.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 24, 2024
SUBJECT: Overview of Water Pipeline Maintenance Leak Repairs at MWRA

COMMITTEE: Water Policy and Oversight

x INFORMATION
VOTE

Valerie Moran, P.E., Director, Waterworks
Lisa Bina, P.E., Deputy Director, Waterworks
Michael J. McCarthy, P.E., Director, Metropolitan Operations
Preparer/Title

for David Coppes, P.E.
Chief Operating Officer

RECOMMENDATION:

For information only.

DISCUSSION:

The MWRA Metropolitan Water distribution system is comprised of approximately 300 miles of pipelines, over 5500 valves, 11 pump stations, and 11 water storage tanks. On average, MWRA's Metropolitan Operations staff repair 20 leaks per year and replace or repair an annual average of 16 main line valves and ten blow-off valves. Metropolitan Operations is composed of four groups: Water Valves, Operation Control Center (OCC), Pipeline Maintenance, and Inspection. Each group plays a part in the detection and repair of leaks. The Inspection group listens on water mains and detects leaks, the OCC Area Supervisor monitors the system and notices problems, the valve crews provide for isolation of the pipelines, and the pipeline group performs the actual repairs. Operations Engineering also plays a role in leak repairs by obtaining required permits, coordinating with communities, and evaluating the hydraulic impacts to the system if an isolation is required. If impacts are considered unacceptable, staff from Operations Engineering develop plans to mitigate those impacts to ensure an acceptable level of service is maintained while the pipeline is isolated. Leaks can be located on pipelines that range in size from 12-inch to 72-inch and materials that are steel, cast iron, ductile iron, concrete and High Density Polyethylene. The Pipeline Maintenance Group consists of three crews; each consisting of a Senior Foreman, two Construction Pipelayers, two Laborers and a Heavy Equipment Operator. The crew is supported by Welders and Facility Specialists as needed. Leak repairs range in complexity. This staff summary will describe a difficult leak that occurred during fiscal year 2023 to illustrate many aspects of coordination that are involved in these repairs. The particular leak described required ingenuity and multiple resources.

Section 84 Leak Repair - Malden

On December 7, 2022, the City of Malden notified staff of water surfacing at the northwest corner of Medford Street and Canal Street. MWRA's Section 84 pipeline is located at this location.

Section 84 is a 48-inch main installed in the 1960s that runs along Canal Street south to Converse Way and is one of the critical pipelines that conveys water from Shaft 9A of the City Tunnel to the communities of the Northern High System (NHS) (Figure 1). The Northern High System supplies over 337,000 people. Leak detection personnel inspected the site and heard noise at the location where the 48-inch main transitions from concrete pipe to steel prior to crossing under MWRA's Low Service Section 6 pipeline on Medford Street. Staff from Operations Engineering utilized the MWRA's hydraulic model to determine system impacts and if an isolation was required. The model results indicated that the level of service to the NHS communities remained acceptable, provided that water demand remained low, otherwise there would be a noticeable decrease in pressures dropping below acceptable levels. Additional modeling was performed, and it was determined that by opening a connection to the adjacent Fells service area, the likelihood of any impacts caused by additional demand would be reduced.

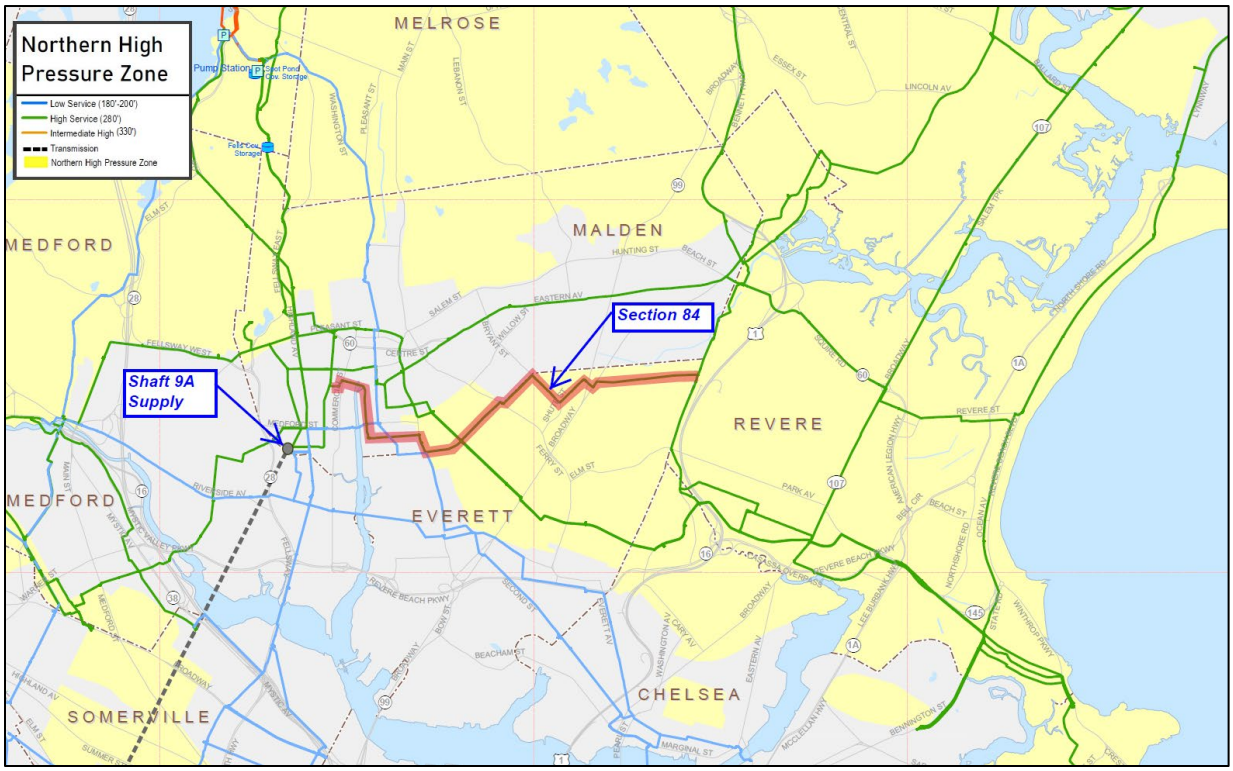


Figure 1 Section 84 Location

The leaking segment of pipe was encased in approximately 12 to 15 inches of concrete when constructed as noted on the record drawings (Figure 2). Water pipeline crews mobilized to the site to begin excavation on December 8, 2022. The line was isolated and the system was reconfigured by opening the NHS up to the Fells service area; system flows and pressures were monitored before and after the isolation. The system reacted as expected. Prior to the removal of concrete, a 12-inch water main owned by the City of Malden that runs through the area needed to be removed. Operations Engineering staff reviewed Malden's distribution system with personnel from the City to determine the hydraulic impacts of isolating this main. It was determined that two new gate valves needed to be installed in order to maintain supply to adjacent buildings. Once the 12-inch main was removed, personnel began the arduous task of removing the concrete encasement on one half of the pipeline. All work was put on hold around the December holidays due to City restrictions as well as limited staffing that delayed our ability to complete the work necessary to

locate the leak. On January 24, the leak location was found and plugged (Figure 3); however, the exposed portion of pipe surrounding the leak was heavily pitted so further pipe assessment and repairs were determined to be necessary prior to reactivation.

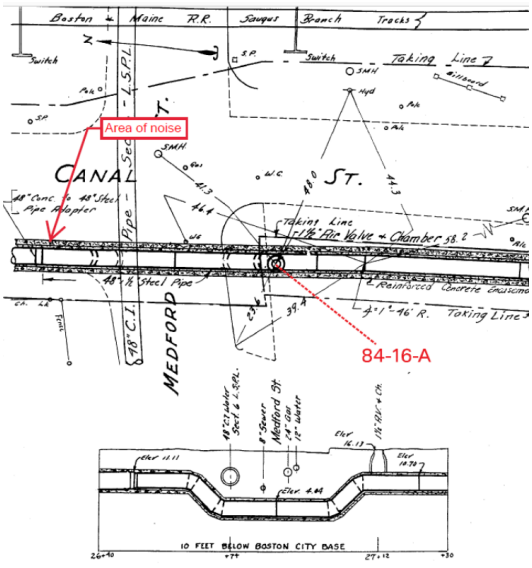


Figure 2 Leak Location

Figure 3. Leak Prior To Plug Installation

A testing firm was brought in to complete an evaluation of the pipeline and determine its structural integrity. The inspection was completed on February 2, 2023 and it was determined that the bottom of the pipe had lost substantial thickness due to corrosion. The recommended repair was the welding of rolled steel plates on approximately a seven-foot length on the bottom of the pipe. To complete this repair the entire concrete encasement needed to be removed from the circumference of the pipeline (Figure 4). To allow for the concrete removal, the excavation had to be expanded, which required the support of a NGRID Electric utility pole for 16 days (Figure 5). The concrete removal was difficult, labor intensive work, and required utilizing hand operated pneumatic tools. Once the concrete was removed, MWRA welders welded the rolled steel to the pipeline (Figure 6) and the pipeline was filled to inspect for any leaks.

After the rolled steel was welded to the pipe and no additional leaks were detected, the rebar and concrete encasement needed to be reinstalled. MWRA structural engineers prepared a design, including drawings, which were utilized by Facility Specialists and Water pipeline personnel to build the necessary formwork and to install the appropriate steel rebar. This work was completed and the concrete placed in two separate pours (Figure 7). The excavation was backfilled to allow for the removal of the utility pole support and the reinstallation of the Malden 12-inch water main. The pipeline was then disinfected by Metro Water Valve personnel and was placed back into service on April 3, 2023, before warm weather demand increased and impacted service. Final pavement was placed on April 3, 2023 and the roadway reopened.

BUDGET/FISCAL IMPACTS:

The total cost (labor, materials, and equipment) for this difficult leak repair was $281,520 and was covered under the Current Expense Budget.

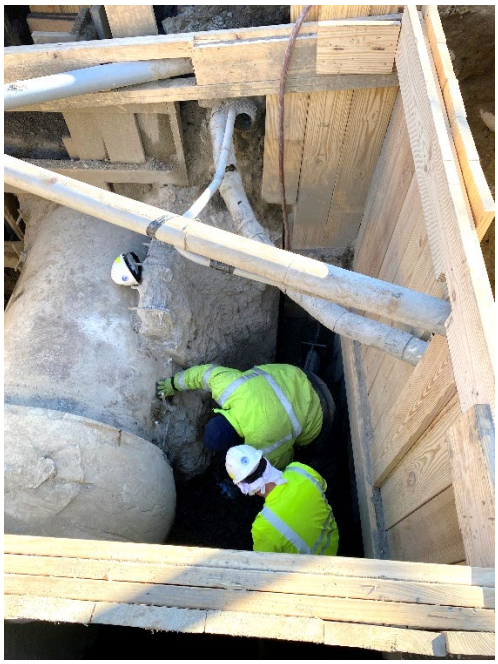


Figure 4 – Concrete Removal

Figure 5 – Utility Pole Support

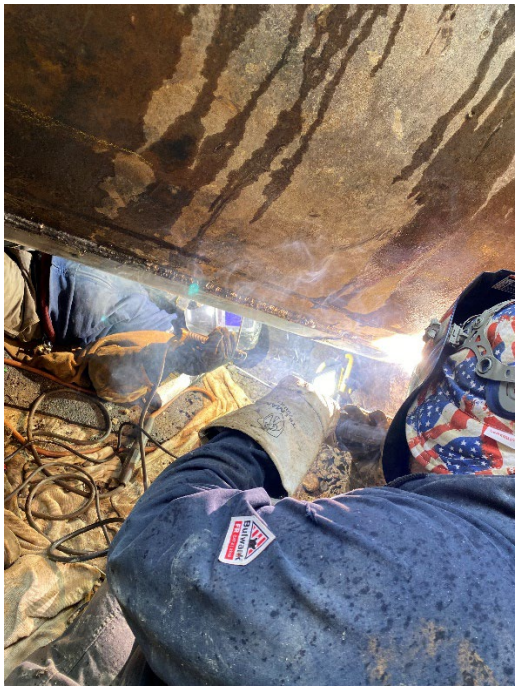


Figure 6 – Welding Rolled Steel Plates

Figure 7 – Rebar and Concrete Installation

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 24, 2024
SUBJECT: Carroll Water Treatment Plant SCADA System Improvements
LeVangie Electric Company, Inc.
Contract 7582, Change Order 14

COMMITTEE: Water Policy & Oversight

____ INFORMATION
_X_ VOTE

Martin E. McGowan, Director, Construction
James Snow, Construction Coordinator
Preparer/Title

David W. Coppes, P.E.
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 14 to Contract 7582, Carroll Water Treatment Plant SCADA System Improvements, with LeVangie Electric Company, Inc., for an amount not-to-exceed $120,000, increasing the contract amount from $13,526,674.07 to $13,646,674.07, and extending the contract term by 548 calendar days from October 2, 2024 to April 3, 2026.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 7582 in an amount not-to-exceed the aggregate of $1,000,000 and 180 days in accordance with the Management Policies and Procedures of the Board of Directors.

DISCUSSION:

Contract 7582 replaces legacy equipment at the Carroll Water Treatment Plant and implements updated control system standards to enhance cybersecurity and redundancy, ensure future reliability and maintain secure plant operations. The work of this construction contract includes the supply and installation of replacement instrumentation panels, Programmable Logic Controllers (PLCs), Uninterrupted Power Supply backup power, fiber-optic communication network, wiring between the existing panels, and new equipment and refurbishment of the operator control room. A new server room equipped with HVAC and fire suppression systems will be constructed to house redundant computer hardware supporting active and backup SCADA systems. The existing control system is in continuous operation and the sequencing of the cutover from old to new equipment without interruption to plant operations is a key project constraint. This contract will install the replacement equipment and communication network in parallel to the existing system to allow a staged cutover that will be completed in close coordination with MWRA staff. A preliminary schedule has been developed that will allow some panels to be powered down and taken off line one at a time, while other panels will need to stay active while individual signals are moved to new PLCs one at a time. Some of the work will be allowed to be conducted only during winter months while half of the Carroll Plant is out of service for maintenance.

This Change Order

Change Order 14 consists of the following two items:

Extend the Contract Time by 365 Calendar Days $0.00

The SCADA system upgrade includes the fabrication of seventeen new control panels installed adjacent to the existing control panels that will serve as the interface between the new and existing control systems. All of the new control panels are constructed using multiple proprietary components to provide reliability and consistency across the Authority-wide SCADA system. The Notice to Proceed was issued in September 2021 with an expectation that new control system equipment would be furnished in time for the control panels to be fabricated and delivered to the site by the end of 2022. After commencement of the Contract, the Contractor notified the Authority that several components for the new control panels had long lead times resulting from global supply chain issues. Delivery of these devices delayed the fabrication and delivery of the seventeen control panels by twelve months, pushing the completion of the control panels from the end of 2022 to the end of 2023. Given the supply chain issues were unforeseen and beyond the Contractor's reasonable control, a time extension of 365 calendar days is warranted at no additional cost to the Authority.

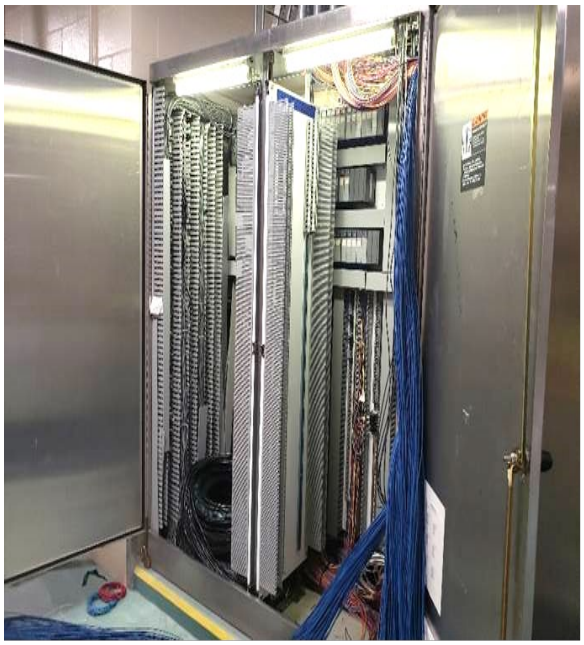
Typical SCADA Control Panel with Multiple Proprietary Components

This item was identified by MWRA staff as an unforeseen condition. MWRA staff, the Consultant, and the Contractor have agreed to extend the contract term by 365 calendar days from October 2, 2024 to October 2, 2025 at no additional cost.

Extend the Contract Time by 183 Calendar Days Not-to-Exceed $120,000

In addition to the supply chain delays mentioned above, there have been change orders for additional work that have impacted the overall project schedule. Change Order 9 was executed to furnish and install additional network switches and firewall equipment to comply with the U.S. Environmental Protection Agency's latest guidance manual for SCADA cyber security measures. This guidance manual was published in March 2023 after commencement of the contract and includes best practices to address the rapidly changing threats to cyber security. Change Orders 10 and 13 were executed to furnish and install backplane sub-panels inside the existing SCADA control panels and perform additional testing prior to the staged cutover process. This design change was deemed necessary by Authority staff to lessen the risk to the plant operations by reducing the demolition of existing wires and installation and termination of live wires inside active panels.

These three change orders have directly impacted the critical path beyond the initial supply chain delay. At the time these change orders were executed, staff were still evaluating the Contractor's updated project schedule to substantiate the duration for their requested time extension. The current project schedule now indicates the Contractor will complete the control system hardware



New Backplane Sub-Panel in Existing Control Panels

Terminating Control Wires on New Backplane Sub-Panel

and testing in the fall of 2024, followed by the commencement of the system cutover, with the final cutover and functional testing completed in early spring 2026. As a result of the schedule evaluation, staff have determined the cumulative delays associated with these changes warrant a time extension of 183 calendar days. The Contractor is requesting additional compensation for certain additional costs pursuant to Article 13 of the contract's general conditions. As an example, other direct costs may include rental for office space, staging areas, utilities, bonds and insurance. Staff will carefully review the requested costs to determine what is compensable under the terms of the contract.

This item was identified by MWRA staff as an unforeseen condition and design change. MWRA staff, the Consultant, and the Contractor have agreed to extend the contract term by 183 calendar days from October 2, 2025 to April 3, 2026 for an amount not-to-exceed $120,000.

This cumulative time extension of 548 calendar days will also impact Contract 7581with Arcadis U.S., Inc., which is providing engineering services during construction as well as resident engineering services. Because the Contractor will be on site longer, the Consultant will also need to extend its construction phase services. These impacts are currently being evaluated and staff expect to present an amendment to Contract 7581 for the Board's consideration at a future meeting.

CONTRACT SUMMARY:

	Amount	**Time**	**Dated**
Original Contract:	$12,905,000.00	1,127 Days	09/01/21
CHANGE ORDERS:			
Change Order 1*	$24,159.87	0 Days	03/07/22
Change Order 2*	$119,374.50	0 Days	09/30/22
Change Order 3*	$5,957.52	0 Days	12/09/22
Change Order 4*	$14,120.95	0 Days	12/23/22

Change Order 5*	$91,534.68	0 Days	03/07/23
Change Order 6*	$7,470.77	0 Days	07/13/23
Change Order 7*	$20,000.00	0 Days	08/09/23
Change Order 8*	$22,562.04	0 Days	11/10/23
Change Order 9*	$35,455.45	0 Days	01/30/24
Change Order 10*	$163,496.23	0 Days	02/15/24
Change Order 11*	$22,542.06	0 Days	02/26/24
Change Order 12*	$20,000.00	0 Days	03/25/24
Change Order 13*	$75,000.00	0 Days	06/21/24
Change Order 14	$120,000.00	548 Days	Pending
Total Change Orders:	$741,674.07	548 Days	
Adjusted Contract:	$13,646,674.07	1,675 Days	

*Approved under delegated authority

If Change Order 14 is approved, the cumulative value of all change orders to this contract will be $741,674.07 or 5.7% of the original contract amount. Work on this contract is approximately 88% complete.

BUDGET/FISCAL IMPACTS:

The FY25 CIP includes $13,487,384 for Contract 7582. Including this change order for $120,000, the adjusted subphase total will be $13,646,674.07 or $159,290.07 over the CIP amount. This amount will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

The MBE and WBE participation requirements for this contract were established at 7.24% and 3.6%, respectively. However, LeVangie Electric Company, Inc. has been approved for a partial waiver for MBE and WBE participation requirements. The Contractor will be notified that these requirements are still expected to be met.

STAFF SUMMARY

TO: Board of Director
FROM: Frederick A Laskey, Executive Director
DATE: July 24, 2024
SUBJECT: July 2024 PCR Amendments

COMMITTEE: Personnel and Compensation

____ INFORMATION
__X__ VOTE

Wendy Chu, Director of Human Resources
Preparer/Title

Michele S. Gillen
Director, Administration

RECOMMENDATION:

To approve amendments to the Position Control Register (PCR) included in the attached chart.

DISCUSSION:

The Position Control Register lists all positions of the Authority, filled and vacant. It is updated as changes occur and it is published at the end of each month. Any changes to positions during the year are proposed as amendments to the PCR. All amendments to the PCR, except those resulting only in a change in title or cost center, must be approved by the Personnel and Compensation Committee of the Board of Directors. All amendments resulting in an upgrade of a position by more than one grade level, and/or an amendment which creates a position increasing annual cost by $10,000 or more, must be approved by the Board of Directors after review by the Personnel and Compensation Committee.

July 2024 PCR Amendments

There are four PCR Amendments this month.

Organizational Changes:

1. Title and grade change to one vacant position in the Operations Division, Deer Island Process Control Department from a Junior Sanitary Engineer (Unit 9, Grade 20) to Staff Engineer (Unit 9, Grade 19) to better meet staffing needs.

2. Title and grade change to one vacant position in the Operations Division, Grounds Maintenance Department from a Skilled Laborer (Unit 2, Grade 11) to OMC Laborer (Unit 2, Grade 13) to better meet staffing needs.

3. Creation of a new position in the Operations Division, Planning Department for a Program Manager (Hydrologic and Hydraulic Modeling) (Unit 9, Grade 29) to better meet staffing needs.

4. Title and grade change to one vacant position in the Operations Division, Meter Maintenance Department from a Junior Instrument Technician (Unit 2, Grade 16) to Technical Supervisor, Meter Maintenance (Unit 2, Grade 21) to better meet staffing needs.

BUDGET/FISCAL IMPACT:

The annualized budget impact of these PCR amendments will be a maximum cost of $158,953. Staff will ensure that the cost associated with these PCR amendments will not result in spending over the approved FY25 Wages and Salaries budget.

ATTACHMENTS:
Job Descriptions

(Revised)

MASSACHUSETTS WATER RESOURCES AUTHORITY
POSITION CONTROL REGISTER AMENDMENTS
FISCAL YEAR 2024

PCR AMENDMENTS REQUIRING BOARD APPROVAL - July 24, 2024

Number	Current PCR #	V/F	Type	Current Title	UN	GR	Amended Title	UN	GR	Current/Budget Salary	Estimated New Salary			Estimated Annual $ Impact			Reason For Amendment
B1	Operations Deer Island Process Control 2210019	V	T, G	Junior Sanitary Engineer	9	20	Staff Engineer	9	19	$101,749	$69,627	-	$97,226	-$32,122	-	-$4,523	To better meet staffing needs.
B2	Operations Grounds Maintenance 5411019	V	T, G	Skilled Laborer	2	11	OMC Laborer	2	13	$68,658	$60,159	-	$60,159	-$8,499	-	-$8,499	To better meet staffing needs.
B3	Operations Planning TBD	N/A	N/A	N/A	N/A	N/A	Program Manager (Hydrologic and Hydraulics Modeling)	9	29	$0	$106,527	-	$149,192	$106,527	-	$149,192	To better meet staffing needs.
B4	Operations Meter Maintenance 5844032	V	T, G	Senior Instrument Technician	2	16	Technical Supervisor, Meter Maintenance	2	21	$88,228	$77,032	-	$111,011	-$11,196	-	$22,783	To better meet staffing needs.
				BOARD TOTAL =	4						**TOTAL:**			$54,710	-	$158,953	

MWRA
POSITION DESCRIPTION

OLD

POSITION: Junior Sanitary Engineer

DIVISION: Operations

DEPARTMENT: Process Control/Deer Island

BASIC PURPOSE:

Performs engineering related tasks as directed.

SUPERVISION RECEIVED:

Works under the general supervision of the Program Manager, Process Engineering.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Performs Sanitary engineering work and related activities relative to STP maintenance programs.
- Provides technical assistance to the maintenance staff.
- Assists in the development of preventive maintenance programs.
- Reviews plans and specifications; meets with consultants and vendors.
- Prepares written engineering reports as needed.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

(A) A Bachelor's of Science Degree in related engineering or science field; and

(B) Four (4) years directly related experience in addition to the experience requirement listed below may be substituted for the education requirements; or

(C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

(A) Knowledge of sanitary engineering principles and practices.

(B) Understanding of applicable laws, regulations and practices applied to the administration of sanitary engineering program.

(C) Ability to establish and maintain an effective working relationship with supervisors, associates, subordinates and the public.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operators License or equivalent.

TOOLS AND EQUIPMENT USED:

Power and hand tools, mobile radio, telephone, personal computer including word processing and other software, copy and fax machine.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. The employee

occasionally is required to site, stand and walk. The employee is frequently required to climb or balance; stoop, kneel, crouch, or crawl; taste or smell.

The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 100 pounds. Specific vision abilities required by this job include close vision, distance, color vision, peripheral vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high, precarious places ad is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.

The noise level in the work environment is usually loud in field settings, and moderately quiet in office settings.

August 1999

MWRA
POSITION DESCRIPTION

NEW

POSITION: Staff Engineer

DIVISION: Operations

DEPARTMENT: Engineering & Construction, Planning, Operations Engineering, Capital Engineering Deer Island, Metro Process Control

BASIC PURPOSE:

Participates in the development, execution, and management of various electrical engineering, engineering or construction engineering and maintenance projects. Provides engineering or electrical engineering expertise and data analysis for the planning, design, and construction of projects for wastewater and waterworks systems and facilities.

SUPERVISION RECEIVED:

Works under the general supervision of senior staff.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Works on tasks related to the evaluation, planning, design, electrical modification / replacement or construction of facilities or equipment for wastewater treatment plants, wastewater pumping stations, CSO facilities, headworks facilities, collection system components, water treatment facilities, water pumping stations, distribution and transmission lines, and support buildings and equipment.

- Participates in the preparation of concept and preliminary design reports, designs, and cost estimates. Participates in the development, implementation and monitoring of construction and service contracts, plans and specifications for proposed electrical modifications / replacements, permit applications and permits. Participates in shop drawing reviews.

- Utilizes Authority databases to gather and summarize facility and system operational data and assists senior engineering staff with evaluation and presentation of operational data.

- Participates in the development of calculations, design documents and the gathering of information for inclusion in engineering reports, construction activities, proposed electrical

modifications / replacements, technical or planning studies, and system and facility evaluations.

- Participates in the engineering resolution and recommendations to electrical engineering problems.

- Participates in overseeing the work of professional engineering consultants, including electrical engineering consultants, as well as construction firms for quality and responsiveness of work products, budgets and schedules, and conformance to contract terms.

- Participates in the inspection of construction, electrical or maintenance work for conformance to plans and specifications, and makes minor revisions to meet local conditions encountered in field; plans sequence of work with contractors on jobs and submits progress reports. Acts as a Resident Engineer on minor construction projects.

- Requires participation in emergency response to any/all MWRA emergencies if assigned to Operations Engineering or Metro Process Control.

- Participates in contract administration tasks.

SECONDARY DUTIES:

- Drafts internal or external memoranda, correspondence, reports, and specifications.

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

(A) A bachelors' degree in electrical engineering, engineering or related field required; and

(B) One (1) to two (2) years of design, construction or electrical engineering experience preferred: or

(C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

(A) Familiarity with computer software packages such as MS Word, Excel, and AutoCad.

(B) Demonstrated written and oral communication skills.

SPECIAL REQUIREMENTS:

Valid Mass Class D Drivers license for Operations Engineering and Construction Departments

TOOLS AND EQUIPMENT USED:

Office equipment as normally associated with the use of telephone, personal computer including word processing and other software, copy and fax machine.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools or controls and reach with hands and arms. The employee frequently is required to sit and talk or hear. The employee is occasionally required to walk; stand; climb or balance; stoop, kneel, crouch, or crawl; taste or smell.

The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, depth perception, peripheral vision and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts, and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals and risk of electrical shock.

The noise level in the work environment is usually loud in field settings and moderately quiet in an office setting.

February 2018

MWRA
POSITION DESCRIPTION

OLD

POSITION: Skilled Laborer

DIVISION: Operations / Support

DEPARTMENT: Multiple Departments

BASIC PURPOSE:

Performs routine and skilled manual tasks as assigned. Assists operations, maintenance and skilled trades staff as required. May be required for overtime in extended workday and emergency situations. May be required for regular, on-call rotations.

SUPERVISION RECEIVED:

Works under the general supervision of a foreman or supervisor.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Performs manual tasks requiring some specialized skill in assisting valve foremen, mechanics, electricians, masons, plumbers, carpenters and other skilled tradesmen.
- Assists in the maintenance and operation of vehicles and equipment such as pickup trucks, tractors, mowers, pumps, cement mixers, air compressors and snow removal equipment.
- Assists in loading, moving and transporting materials, equipment, freight and supplies, and assists in the handling and storage of stock.
- Assists in the maintenance and repair of heavy vehicles, and equipment as needed.
- Assists in the repair of electrical and mechanical equipment.
- Assists in the upkeep and cleaning of MWRA equipment, grounds and roadways.
- Uses and makes minor repairs to small tools and simple mechanical equipment such as chain saws, brush kings, weedeaters, etc.
- Performs general housekeeping and maintenance tasks, which include, but are not limited to, vacuuming, washing of floors, upkeep of rest rooms and conference room areas.

- Gases, oils and greases trucks, automobiles and miscellaneous grounds maintenance facilities.

- Works as a member of a multi-person crew, as needed.

- Assists in the handling, storage, loading and unloading of stock.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

(A) Basic reading, writing, mathematical and oral communication skills as normally attained through a high school education; or

(B) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

(A) Working knowledge of the use of common tools, construction and sewer maintenance equipment, and of one or more of the mechanical or building trades.

(B) Ability to operate light automotive trucks and equipment, snow plows, pickup trucks and power-driven grounds maintenance equipment.

(C) Ability to perform manual labor of semi-skilled nature, use/make minor repairs to small tools and simple mechanical equipment.

(D) Basic knowledge of the operation and maintenance of facilities.

(E) Ability to perform heavy manual labor for extended periods of time, under varying climatic conditions.

(F) Ability to follow oral and written instructions.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operator's License required.

TOOLS AND EQUIPMENT USED:

Motor vehicle, power and hand tools, mobile radio, telephone and beeper.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms and to talk and hear. The employee is occasionally required to stand, walk, talk or hear, sit, climb or balance. The employee is frequently required to stoop, kneel, crouch or crawl.

The employee must frequently lift and/or move up to 25 pounds and occasionally lift and/or move more than 100 pounds. Specific vision abilities required by this job include close vision, distance and peripheral vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee regularly works in outside weather conditions. The employee regularly works near moving mechanical parts and is occasionally exposed to wet and/or humid condition and vibration. The employee occasionally works in precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals and risk of electric shock. May be required for overtime in extended workday and emergency situations. May be required for regular, on-call rotations.

The noise level in the work environment is very loud in field settings, and moderately loud at other work locations.

February 2000

MWRA
POSITION DESCRIPTION

NEW

POSITION: OMC Laborer

DIVISION: Operations

DEPARTMENT: Wastewater Operations, Western Operations, Equipment Maintenance, Metro Pipe Maintenance

BASIC PURPOSE:

Performs routine and skilled manual tasks as assigned. Assists operations, maintenance and skilled trades staff as required. May be required for overtime in extended workday and emergency situations. May be required for regular, on-call rotations.

SUPERVISION RECEIVED:

Works under the general supervision of a foreman or supervisor.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Performs tasks requiring some specialized skill in the maintenance and operation of equipment such as pickup trucks, pump trucks, tractors, mowers, pumps, generators and pneumatic tools, cement mixers, air compressors, snow removal equipment, sewer maintenance equipment, etc.

- Performs manual tasks requiring some specialized skill or knowledge in assisting skilled tradesmen engaged in construction, maintenance and repair work, including minor adjustments and repair of equipment.

- Performs a variety of manual tasks in connection with valve operations, pipeline construction and maintenance such as cleaning culverts and drains, digging ditches, spreading asphalt, caulking lead joints, and assisting in valve installations, repair of valves and pipeline under pressure 6” to 72” in diameter and the chlorination of water mains.

- Gases, oils and greases trucks, automobiles and miscellaneous grounds maintenance equipment.

- Performs a variety of manual tasks in connection with building and grounds maintenance work such as grass cutting, shoveling snow, repair of fences, disposing of trash and maintaining general building cleanliness.

- Assists personnel of a higher grade in all aspects of plant maintenance and repairs, including but not limited to diesel engine overhaul, positive displacement pump overhaul and repair, centrifugal pump overhaul and repair, re-chaining of grit channels and sedimentation tanks and building concrete structures.

- Assists in the repair of electrical and mechanical equipment.

- Assists in upkeep and cleaning of MWRA equipment, structures and facilities such as screen chambers, tidegates and regular chambers.

- Assists in the handling and storage of stock, loads, unloads, moves and transports material, equipment, freight and supplies.

- Works as a member of a multi-crew, as needed.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

(A) A high school diploma or GED; or

(B) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

(A) Working knowledge of the use of common tools, construction and sewer maintenance equipment, and of one or more of the mechanical or building trades.

(B) Ability to operate various types of vehicles and equipment including light automotive trucks and equipment, ten-wheel dump trucks, snow plows, pickup trucks, tractors and power-driven grounds maintenance equipment.

(C) Ability to perform manual labor of semi-skilled nature, use/make minor repairs to small tools and simple mechanical equipment.

(D) Basic knowledge of the operation and maintenance of facilities.

(E) Ability to perform heavy manual labor for extended periods of time, under varying climatic conditions.

(F) Ability to follow oral and written instructions.

SPECIAL REQUIREMENTS:

Must possess a current valid Class B Massachusetts Commercial Drivers License.

Will be subject to the MWRA Controlled Substance and Alcohol Testing Policy and the random drug-testing program.

TOOLS AND EQUIPMENT USED:

Motor vehicle, power and hand tools, mobile radio, telephone, beeper.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. The employee is occasionally required to stand, walk, talk or hear, sit, climb or balance. The employee is frequently required to stoop, kneel, crouch or crawl.

The employee must frequently lift and/or move up to 25 pounds and occasionally lift and/or move more than 100 pounds. Specific vision abilities required by this job include close vision, distance and peripheral vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job**,** the employee regularly works in outside weather conditions. The employee regularly works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.

The noise level in the work environment is very loud in field settings, and moderately loud at other work locations.

May 2001

MWRA
POSITION DESCRIPTION

NEW

POSITION: Program Manager (Hydrologic and Hydraulic Modeling)

DIVISION: Operations

DEPARTMENT: Planning

BASIC PURPOSE:

Oversees the use, upgrading, and management of the wastewater collection system and water distribution system hydrologic and hydraulic models.

SUPERVISION RECEIVED:

Works under the general supervision of the Senior Program Manager of the Mapping, Modeling and Data Analysis Group.

SUPERVISION EXERCISED:

Supervises Project Manager – Hydraulic and Hydrologic Modeling and Senior Engineer – Hydraulic and Hydrologic Modeling.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Supervises water and wastewater hydraulic modelers in the Planning Department, and provides technical support and expert guidance, as needed, to modelers in other departments.

- Coordinates with staff in Planning, Engineering, and Operations to scope modeling needs for operational projects and both in-house and external design projects.

- Presents modeling results and recommendations to managers in Planning, Engineering and Operations, and external consulting firms to support water and wastewater planning and design projects. Reviews modeling done by members of the modeling team and oversees the production of modeling reports with summary level conclusions and recommendations for design decisions.

- Oversees the management of the master files of the wastewater and water systems hydrologic and hydraulic models and development of upgrades and future networks/input files. Issues new files to users with appropriate documentation.

- Manages and negotiates contracts with consulting engineering firms, software development and application firms, and software vendors.

- Participates in consultant selection procedures and contract negotiations for projects. Additionally, oversees all phases of consultant selection for assigned projects including development of scope of services, specifications, cost estimates, work schedules, negotiations, and preparations of contract award recommendations. Ensures compliance with contract budgets, schedules and terms.

- Supervises or performs modeling and analytical services, as needed for operational issues, including emergency situations.

- Oversees the periodic calibrations and verifications of models using MWRA wastewater or water metering data.

- Assists in meeting NPDES permit reporting requirements for CSO discharges.

- Provides leadership and team organization as Planning, Operations and Engineering staff to work towards integrating future models with other applications such as SCADA, and NEXRAD Radar data and other related systems in order to expand the capabilities of the model (move to real time predictability).

- Supports the project managers in Operations and Engineering with work being done by consulting engineering firms or in-house staff on the study and design of capital projects.

- Oversees the Operations, GIS, and/or database staff to obtain data on actual field conditions in order to refine data files for the hydraulic model and keep them current.

- Coordinates with the MIS Department regarding purchase of hardware, software and maintenance contracts. Prepares annual and supplementary budget requests for the modeling program.

- Oversees the creation or creates new models or expands available models, as needed, to include member communities' systems and subsystems within the MWRA network. Coordinates with member communities' model development efforts to encourage sharing of model input files and supporting data.

- Meets with community representatives to present/discuss results of modeling work and address community needs as necessary.

- Provides technical assistance and training to other staff related to the system models and their upgrades and master files.

- Ensures compliance with MWRA policies, procedures and directives, and with regulatory requirements and applicable engineering standards. Ensures all activities are coordinated with MWRA divisions and outside concerns as appropriate.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

(A) A Bachelor's degree in civil, sanitary, or environmental engineering or related field with an emphasis on hydraulic engineering; and

(B) At least seven (7) years of experience in wastewater and/or water facilities hydrologic and hydraulic analysis utilizing computer modeling and other wastewater/water facility operational or engineering experience of which three (3) years must be in a supervisory or project management capacity; or

(C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

(A) Demonstrated knowledge and skill in using computer applications, such as hydrologic and hydraulic models of water and wastewater systems, (e.g. HYDROWORKS/ InfoWorks, InfoWater, SWMM, XP-SWMM), databases, GIS and data collection systems. Demonstrated knowledge and skill in the calibration and verification of complex hydrologic and hydraulic computer models.

(B) Ability to manage staff, including to organize, direct, train, assign duties to, supervise, motivate, and evaluate staff.

(C) Proven written, and oral communication skills, and demonstrated organizational skills. Demonstrated ability to gather, analyze and present technical information in a clear and understandable manner.

(D) Working knowledge of GIS and database structures.

(E) Ability to develop and maintain cooperative work relationships with staff across the MWRA and with engineering consultants.

(F) Knowledge of principles and practices of engineering.

(G) Demonstrated ability to work effectively as part of a project team and also to function independently with minimal supervision.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operators License

A Registered Professional Engineers License is preferred.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated, with the use of telephone**,** personal computer including word processing and other software, copy and fax machine**.**

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to sit, talk or hear. The employee is regularly required to use hands to finger, handle, feel or operate objects, including office equipment, or controls and reach with hands and arms. The employee frequently is required to stand and walk.

There are no requirements that weight is lifted or force is exerted in the performance of this job. Specific vision abilities required by this job include close vision, and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job**,** the employee regularly works in an office environment.

The noise level in the work environment is usually moderately quiet.

July 2024

MWRA
POSITION DESCRIPTION

OLD

POSITION: Senior Instrument Technician (Metering and Monitoring)

DIVISION: Operations

DEPARTMENT: Field Operations,/Operations Support/Metering & Monitoring

BASIC PURPOSE:

Supervises and participates in the maintenance, repair, installation and calibration of electronic metering equipment and other instrumentation.

SUPERVISION RECEIVED:

Works under the supervision of Supervisor of Water/Wastewater Meter Maintenance

SUPERVISION EXERCISED:

May supervise individual Technicians or crews of Instrument Technicians and Junior Instrument Technicians.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Supervises and participates in shop and fieldwork calibrating, troubleshooting, installing, repairing and maintaining electronic metering equipment, gas monitors, differential pressure instruments, transmitters, recorders, etc.

- Examines malfunctioning instruments, tests mechanisms and circuitry for defects. Troubleshoots equipment and replaces defective parts, reassembles the instrument and adjust all levels and signals to ensure accurate data.

- Supervises a work crew, records work completed, equipment and parts utilized, time spent on a job and summarizes in weekly reports.

- Supervises the safe and orderly maintenance of all tools, materials, equipment, vehicles and facilities.

- Orders and maintains all necessary supplies.

- Follows all MWRA safety policies and procedures to ensure a safe work environment.

- Supervises and/or performs plumbing duties related to metering.

- Utilizes Maximo to input and extract data.
- Utilizes Telog software to review meter data.
- Performs light maintenance independently or as part of a team. Light maintenance shall include but not limited to:
    - Inspects and troubleshoots various systems and equipment
    - Installs and retrofits/new equipment related to plant systems.
    - Modifies and/or aligns existing equipment to specifications.
    - Sets up ladders, staging and rigging and utilizes hoists, jacks, dollies, lifts, etc. for proper access to job and to remove and install equipment.
    - Operates portable pumping, ventilation and other equipment necessary to support and accomplish assigned tasks.
    - Greases and lubricates, replaces oil reserves, minor packing adjustments and opens hatches.
    - Installs safety rails, changes light bulbs and replaces HVAC filters.
    - Removes snow from immediate work area in order to perform tasks.
    - Routine testing, lockout/tagout, operation (startup/shutdown) and adjustment of process equipment.
    - Performs necessary cleanup and housekeeping for work area and other light maintenance tasks.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

(A) A two (2) year college program in electronics or related field or successful completion of MWRA approved courses; and

(B) One (1) to three (3) years of experience in electronics, electricity, mechanics and hydraulics with at least one (1) year as a supervisor in a work order-driven environment; or

(C) Three (3) years of paid experience in the electronics field may be substituted for supervisory experience; or

(D) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

(A) Familiarity with the care and use of electronic test equipment as well as other hand and power tools.

(B) Ability to read, interpret and work from blueprints, site drawings, schematics, wiring diagrams and other diagrams.

(C) Ability to supervise, plan and schedule crew activities and complete work assignments.

(D) Ability to understand and follow written and oral instructions.

(E) Working knowledge of computers.

(F) Skill in the operation of the listed tools and equipment.

(G) Ability to prepare and maintain records in a legible and orderly fashion.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operators License.

Complete competency based training program related to **ESSENTIAL DUTIES AND RESPONSIBILITIES** as outlined above and successfully demonstrates required competencies.

Successful completion of Confined Space training with MWRA certification within six (6) months of employment may be required.

Must have the ability to raise a 180-pound co-worker from a metering sewer manhole in a reasonable amount of time using a DBI/SALA tripod/winch system.

TOOLS AND EQUIPMENT USED:

Electronic test equipment, programmable logic computers, climbing and fall retrieval equipment, personal computer including word processing and other software, hand tools, mobile radio, copy and fax machines.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. The employee occasionally is required to sit, stand and walk. The employee is frequently required to climb, balance, stoop, kneel, crouch, crawl, taste or smell.

The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 100 pounds. Specific vision abilities required by this job include close vision, distance, color vision, peripheral vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high, precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.

The noise level in the work environment is usually loud in field settings, and moderately quiet in other work locations.

August 2023

MWRA
POSITION DESCRIPTION

NEW

POSITION: Technical Supervisor, Meter Maintenance

DIVISION: Operations

DEPARTMENT: Field Operations/Metering and Monitoring

BASIC PURPOSE:

Coordinates all water and wastewater meter maintenance activities and supervises meter maintenance personnel.

SUPERVISION RECEIVED:

Works under the general supervision of the Program Manager, Metro Meter Maintenance. Receives functional supervision of the Program Manager, Meter Data on specific assignments.

SUPERVISION EXERCISED:

Exercises general supervision one team of Senior Instrument Technicians, Instrument Technicians, and Junior Instrument Technicians.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Oversees all aspects of water and wastewater meter maintenance, including, but not limited to, preventive, corrective and reactive maintenance, troubleshooting existing sites and new installations.

- Ensures a safe work environment for all meter maintenance personnel, through audits, training and adherence to safety policy and procedures.

- Assists Program Manager, Metro Meter Maintenance in the performance of field audits/inspections on all maintenance crews and takes part in maintenance activities as required.

- Records and monitors employee time and attendance.

- Directs personnel and conducts maintenance activities in an optimal manner to maximize wrench time and minimize travel time, crew mobilization/demobilization, wastewater meter downtime and water meter estimations.

- Utilizes MAXIMO for work order entry and reporting requirements and also utilizes Microsoft Office products such as EXCEL, Word and Outlook.

- Deploys communications data loggers at both permanent and temporary metering sites in collaboration with meter data group and inspectional services group.

- Utilizes the Telog Enterprise Client and Telog Connection Client software to access individual water and wastewater meter data during install and calibration as well as extract existing data for analysis.

- Maintains an accurate database for all test/repair activities. Performs data entry, data analysis and generates reports from database.

- Examines equipment and checks for defects and items requiring repair. Prepares defective equipment for return to vendor for repair/replacement and maintains records for all transactions.

SECONDARY DUTIES:

- Run 2 and 3 person crews on days when staff availability is limited. Tests, troubleshoots and repairs all electronic and mechanical equipment associated with the wastewater/water metering system. Tests and repairs electronic equipment down to the circuit board component level.

- Assists management with all budgetary, procurement, engineering, design and personnel matters related to the maintenance of the water and wastewater metering systems and metering personnel.

- Assists the Program Manager – Meter Data with coordinating activities with internal customers (i.e., planners/schedulers, data analysts, engineering staff, operations staff, etc.) and external customers (i.e., city and town officials, consultants, police details, etc.).

- Assists the Program Manager – Meter Data with Managing the use and tracking of the vehicles, equipment and tolls utilized by metering personnel.

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

(A) A high school diploma or GED is required. An Associate's degree in any Environmental or technical field may substitute for two years of the required experience; or successful completion of an Authority-approved metering training program; and

(B) At least seven (7) years of experience in the maintenance of a large water or wastewater metering system with at least five three (3) years supervisory experience. Completion of MWRA Supervisory Training can be substituted for the supervisory requirement; or

(C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

(A) Knowledge of operational theory, maintenance practices and equipment required to maintain a water/wastewater metering system.

(B) Knowledge of the MAXIMO system.

(C) Demonstrated skill in using Microsoft Office programs including Word, Excel, and Outlook.

(D) Ability to supervise and coordinate meter maintenance crew activities in a manner that maximizes wrench time and optimizes meter maintenance effectiveness.

SPECIAL REQUIREMENTS:

Grade 1 Collection Systems Operator Certification or Grade 1 Water Distribution System license is required. Grade 4 is preferred for each.

Must immediately enroll in approved electronic technician or instrumentation training program and successful completion program within 18 months.

A valid Massachusetts Class D Motor Vehicle Operator's License is required.

Must successfully complete the MWRA confined space entry program within six (6) months of appointment.

ISA Control Systems Technician Certification is preferred.

TOOLS AND EQUIPMENT USED:

Electronic test equipment, PLCs, climbing and fall retrieval equipment, personal computer, including word processing and other software, hand tools, mobile radio, copy and fax machines.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools or controls and reach with hands and arms. The employee is regularly required to walk, sit, climb or balance; stoop, kneel, crouch or crawl.

The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities, required by this job include close vision, distance vision, color vision, depth perception and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee frequently works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee occasionally works in high, precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals and risk of electrical shock.

The noise level in the work environment is usually loud in field settings and moderately quiet in office settings.

July 2024

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 24, 2024
SUBJECT: Delegated Authority Report – June 2024

COMMITTEE: Administration, Finance & Audit

X INFORMATION
___ VOTE

Michele S. Gillen
Director, Administration

Barbara Aylward, Administrator A & F
Karen Smith, Administrative Systems Coor.
Preparer/Title

Douglas J. Rice
Director of Procurement

RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period June 1 - 30, 2024.

This report is broken down into three sections:

- Awards of Construction, non-professional and professional services contracts and change orders and amendments in excess of $25,000, including credit change orders and amendments in excess of $25,000;
- Awards of purchase orders in excess of $90,000; and
- Amendments to the Position Control Register, if applicable.

DISCUSSION:

The Board of Directors' Management Policies and Procedures, as amended by the Board's vote on February 16, 2022, delegate authority to the Executive Director to approve the following:

Construction Contract Awards:

Up to $3.5 million if the award is to the lowest bidder.

Change Orders:

Up to 25% of the original contract amount or $1,000,000.00, whichever is less, where the change increases the contract amount, and for a term not exceeding an aggregate of six months; and for any amount and for any term, where the change decreases the contract amount. The delegations for cost increases and time can be restored by Board vote.

Professional Service Contract Awards:

Up to $1,000,000 and three years with a firm; or up to $200,000 and two years with an individual.

Non-Professional Service Contract Awards:

Up to $1,000,000 if a competitive procurement process has been conducted, or up to $100,000 if a procurement process other than a competitive process has been conducted.

Purchase or Lease of Equipment, Materials or Supplies:

Up to $3.5 million if the award is to the lowest bidder.

Amendments:

Up to 25% of the original contract amount or $500,000, whichever is less, and for a term not exceeding an aggregate of six months.

Amendments to the Position Control Register:

Amendments which result only in a change in cost center.

BUDGET/FISCAL IMPACT:

Recommendations for delegated authority approval include information on the budget/fiscal impact related to the action. For items funded through the capital budget, dollars are measured against the approved capital budget. If the dollars are in excess of the amount authorized in the budget, the amount will be covered within the five-year CIP spending cap. For items funded through the Current Expense Budget, variances are reported monthly and year-end projections are prepared at least twice per year. Staff review all variances and projections so that appropriate measures may be taken to ensure that overall spending is within the MWRA budget.

Construction & Professional Services Delegated Authority Items June 1 – 30, 2024

No.	Date of Award	Title and Explanation	Contract	Amend/CO	Company	Value
C-1	**06/04/24**	**Fuel Storage Tank Maintenance Service** Final balancing change order to decrease the following bid items: Provide monthly inspections at two facilities, Class C Operator training, Tank and line tightness testing, Scheduled cathodic protection testing, Sump pump outs, Non-Emergency and Emergency on-call services, Replacement parts, COVID-19PPD and rental equipment.	**OP-417**	**2**	**Mass Tank Inspections Services, LLC**	**($171,271.80)**
C-2	**06/10/24**	**Western Operations Center, Building #279 Roof Painting** Final balancing change order to decrease the following bid items: Mobilization, cleaning and prepping existing surface, Miscellaneous repair services.	**W346**	**1**	**JB Cleaning & Painting Services, Inc.**	**($67,015.07)**
C-3	**06/10/24**	**Regulatory Compliance Services at Former General Dynamics Shipyard** Award of a contract to the highest ranked proposer for the regulatory compliances services at the former General Dynamics Shipyard for a term of 36 months.	**OP-472**	**Award**	**BETA Group, Inc.**	**$178,650.00**
C-4	**06/10/24**	**Technical Assistant Consultant Services, Hazardous Materials** Award of a contract to the highest ranked proposer for hazardous materials technical assistance consultant services for a term of three years.	**620TA**	**Award**	**Hydo-Environmental Technologies, Inc.**	**$332,750.00**
C-5	**06/10/24**	**Technical Assistant Consultant Services, Hazardous Materials** Award of a contract to the highest ranked proposer for hazardous materials technical assistance consultant services for a term of three years.	**621TA**	**Award**	**BETA Group, Inc.**	**$332,750.00**
C-6	**06/14/24**	**Key Project Work Crew Services at Deer Island and Nut Island** Award of a contract to a non-profit, Department of Children and Families approved organization to perform additional landscaping and public access area cleaning services at Deer Island and Nut Island for a term of seven months.	**OP-479**	**Award**	**Roca, Inc.**	**$50,000.00**
C-7	**06/24/24**	**Fire Protection Sprinkler System Service** Final balancing change order to decrease the following bid items: Fire protection sprinkler system testing services, Non-emergency and emergency repair services and replacement parts.	**OP-428**	**3**	**J.C. Cannistraro**	**($39,673.73)**
C-8	**06/20/24**	**John J. Carroll Water Treatment Plant SCADA System Improvements** Perform and document operation readiness testing for existing devices prior to cutover.	**7582**	**13**	**LeVangie Electric Company, Inc.**	**$75,000.00**

C-9	**06/24/24**	**Southborough Headquarters Electrical System Upgrades** Relocate the electrical duct bank at multiple locations; Excavate ledge and bituminous concrete pavement; Neutral connection at utility meter; Turnover existing 60-kilowatt natural gas generator.	**7425**	**8**	**Dagle Electric Construction, Corp.**	**$98,353.00**
C-10	**06/24/24**	**Top of Shaft 5 Interim Improvements Resident Engineering Services** Award of a contract to the highest ranked proposer for Top of Shaft 5 interim improvements resident engineering services for a term of 24 months.	**7702**	**Award**	**Mott, MacDonald, LLC**	**$882,215.69**
C-11	**06/28/24**	**Rehabilitation of WASM 3 Sections W 11/W 12/W 16/51 (Medford, Somerville and Arlington)** Final balancing change order to decrease the following bid items: Transport and dispose of Group 1A, 1B and 1C soils, Police details services, Work by utility companies and Fire department services.	**6544**	**10**	**Albanese D&S, Inc.**	**($936,350.16)**
C-12	**06/28/24**	**Prison Point CSO Facility Improvements – Discharge Header Rehabilitation** Final balancing change order to decrease the following bid items: Time and materials necessary to perform work order in Change Order No. 3, Item 2; Three welded steel patch plates on the exterior of the discharge pipe, Price adjustment allowance.	**8013**	**5**	**R. Zoppo Corp.**	**($66,466.64)**
C-13	**06/28/24**	**Braintree-Weymouth Pump Station Improvements Design/ESDC** Increase the level of effort to conduct the review of and response to the Contractor's request for information; Factory acceptance testing for technical support during construction.	**7435**	**3**	**Wright-Pierce**	**$128,000.00**
C-14	**06/28/24**	**Braintree-Weymouth Pump Station Improvements** Modify structural steel building addition, Extend contract term by 161 calendar days from June 20, 2024 to November 28, 2024.	**7366**	**6**	**Walsh Construction Co. II, LLC**	**$250,000.00**
C-15	**06/28/24**	**Northern Extra High Pressure Zone Improvements Section 63 (Lexington)** Additional water services to Town of Lexington's 16-inch water main; Install additional temporary and permanent services; Remove, handle and dispose of asbestos cement sewer pipe.	**6522**	**6**	**Albanese D&S, Inc.**	**$362,075.97**

Purchasing Delegated Authority Items June 1-30, 2024

No.	Date of Award	Title and Explanation	Company	Value
P-1	**6/7/24**	**Purchase Order Contract for Gartner IT Executive + Delegate Subscription Renewal - *State Contract ITS80*** The Gartner subscription provides the best single source for timely strategic advice to enhance the effectiveness and efficiency of the MIS Department. The benefits include a cost effective solution to access independent expert advice in both public and private sector perspectives. Through this subscription, the MWRA will receive unmetered analyst time, which includes document review (e.g., RFPs, policies and procedures) and enhanced research specific to MWRA IT Projects.	**Gartner, Inc.**	**$129,408.00**
P-2	**6/7/24**	**Sole Source Purchase Order for the Repair of One Chiller** Chiller Unit 1 at Deer Island is currently operating at 50% of its rated capacity. Daikin inspected Chiller 1 and identified significant work required to return the chiller unit to full operational status. This work is urgent to return Chiller 1 to full operational status and improve chiller reliability until the CIP replacement project is complete.	**Daikin Applied Americas, Inc.**	**$169,500.00**
P-3	**6/7/24**	**Purchase Order Contract for Infor/Lawson Enterprise Resource Planning Consultant - *State Contract ITS77 Cat2b*** The Systems Analyst Programmer III position in the Enterprise Resource Planning (ERP) team in MIS has been vacant since 2022. This position has been posted multiple times and to date, no qualified applicant have applied. While staff continue to try to fill the vacancy, MWRA needs functional and technical expertise to augment current staffing and to assure adequate support of the migration from the current Infor/Lawson Enterprise Resource Planning System (ERP) to Infor Cloud Suite1. This contract provides a resource with functional and technical expertise in the Infor Lawson and Infor CloudSuite ERP application.	**McInnis Consulting Services, Inc.**	**$247,065.00**
P-4	**6/10/24**	**Sole Source Purchase Order for One Year of Maintenance and Support for Process Information Software** The PI software product contains two applications. The first application, called PI, is the MWRA standard for SCADA and Process Control data management. The second application, called Process Book, is the tool used for graphic display of trend and real-time data.	**OSI Software, Inc.**	**$125,344.00**

No.	Date of Award	Title and Explanation	Company	Value
P-5	**6/25/24**	**Three-Year Purchase Order Contract for Air Emissions Compliance Testing** Air emissions compliance testing is required at the Deer Island Treatment Plant and the Pelletizing Plant in accordance with Massachusetts Department of Environmental Protection (DEP) air permit for each facility. In addition to onsite emissions compliance testing, this contract provides for site-specific pretest protocols and emissions compliance test reports required by the DEP.	**Gammie Air Monitoring, LLC**	**$95,370.00**
P-6	**6/25/24**	**Purchase Order Contract for the Inspection and Repair of One Roots Blower** The Deer Island Treatment Plant has three Dresser Roots centrifugal blowers in the Central Blower Facility that supply and distribute low-pressure air. This award provides labor and materials to repair one of the centrifugal blower at the vendor's facility.	**The Maher Corporation**	**$141,000.00**
P-7	**6/25/24**	**Purchase Order for One Odor Control Fan Assembly** There are six centrifugal fans installed in the Residuals Odor Control area that were installed in 1998 under the Boston Harbor Project. Staff perform preventative and predictive maintenance tasks on this equipment. Recent predictive maintenance task results indicate that one of the centrifugal fans is reaching the end of its useful life due to corrosion.	**Valve Industries, Inc.**	**$194,250.00**
P-8	**6/25/24**	**One-Year Purchase Order Contract for the Supply and Delivery of Aqua Ammonia** At the Carroll Water Treatment Plant, aqua ammonia is added after sodium hypochlorite so that it combines with free chlorine to form monochloramines for secondary disinfection. Compared to the existing contract, the cost per gallon decreased by 5% or $0.0706 per gallon.	**Borden and Remington Corporation**	**$270,356.80**
P-9	**6/26/24**	**Sole Source Purchase Order for 200 Cross and Longitudinal Collector Flights** Cross and longitudinal collector flights in the primary and secondary clarifiers at Deer Island are lightweight fiberglass "paddles" that extend across each clarifier to push floatable materials (scum) towards tip tubes located at the top of each clarifier. This purchase order will replace 200 cross and longitudinal collector flights to replenish the current warehouse inventory.	**Evoqua Water Technologies, LLC**	**$96,228.00**