

# MASSACHUSETTS WATER RESOURCES AUTHORITY

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# WASTEWATER POLICY & OVERSIGHT COMMITTEE MEETING

to be held on

July 17, 2019

Chair: P. Flanagan

Vice-Chair: J. Walsh Committee Members:

J. Carroll

C. Cook J. Foti

A. Pappastergion

B. Peña

H. Vitale

Location:

100 First Avenue, 2nd Floor

Charlestown Navy Yard

Boston, MA 02129

Time:

11:00 a.m.

# **AGENDA**

#### A. Information

1. Thunderstorm Impacts on Wastewater System Operation

#### B. **Approvals**

- 1. Legal Services Furnished by Special Assistant Attorney General Jonathan Ettinger/Foley Hoag LLP in the Boston Harbor Case, U.S. v. MDC, et al., USDC No. 85-0489-RGS
- 2. Amendments to the MWRA Regulations for Adjudicatory Proceedings, Enforcement and Administrative Penalties, and Sewer Use
- 3. Memorandum of Agreement with the Town of Braintree Regarding MWRA's Use of the Town's Howard Street Pump Station

#### C. **Contract Awards**

- Maintenance Coating Deer Island Treatment Plant: Soep Painting Corp., 1. Contract S583
- 2. Gas Protection System Replacement – Deer Island Treatment Plant: JF White Contracting Co., Contract 7167
- 3. Piping Relocation at the Pelletizing Plant – Fore River Shipyard: Walsh Construction Company II, LLC, Contract 7173
- 4. Technical Assistance Consulting Services – Deer Island Treatment Plant: Brown and Caldwell, Contract 7644; Hazen and Sawyer, PC, Contract 7645; Wright-Pierce, Contract 7646

# MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Wastewater Policy and Oversight Committee
June 19, 2019

A meeting of the Wastewater Policy and Oversight Committee was held on June 19, 2019 at the Authority headquarters in Charlestown. Committee Vice Chair Walsh presided. Present from the Board were Ms. Wolowicz and Messrs. Carroll, Cotter, Flanagan, Pappastergion and Vitale. Messrs. Cook, Foti and Peña were absent. Among those present from the Authority staff were Frederick Laskey, Carolyn Francisco Murphy, David Coppes, Carolyn Fiore, Michele Gillen, John Colbert, Brian Kubaska, Andrew Hildick-Smith, David Duest, Brian Driscoll, Corinne Barrett, Martin McGowan, and Kristin MacDougall. Joseph Favaloro, MWRA Advisory Board, was also in attendance. The meeting was called to order at 10:53 a.m.

# <u>Information</u>

<u>Demolition of Commercial Point CSO Facility Screenings Building</u>

Staff made a presentation. There were questions and answers.

# **Approvals**

\* Sole Source Purchase of 182 Telog Dataloggers for the Wastewater Metering Replacement Project: Telog Instruments, Inc.

Staff made a presentation. There were questions and answers.

The Committee recommended approval (ref. WW B.1).

# **Contract Awards**

\* Chemical Tank Relining and Pipe Replacement – Deer Island Treatment Plant: Walsh Construction Co. II, LLC, Contract 7373

Staff made a presentation. There were questions and answers.

The Committee recommended approval (ref. WW C.1).

<sup>\*</sup> Committee recommendation approved by the Board on June 19, 2019

\* Sole Source Purchase Order for Three Years of Maintenance and Support of the

Process Instrumentation and Control System Human-Machine Interface Software at the

Deer Island Treatment Plant: Emerson Process Management Power and Water

Solutions, Inc

Staff made a verbal presentation. There were questions and answers. The Committee recommended approval (ref. WW C.2).

# **Contract Amendments/Change Orders**

\* Chelsea Creek Headworks Upgrade, BHD/BEC 2015, A Joint Venture: Contract 7161, C.O. 29

Staff made a presentation. There were questions and answers.

The Committee recommended approval (ref. WW D.1).

The meeting adjourned at 11:35 a.m.

<sup>\*</sup> Committee recommendation approved by the Board on June 19, 2019

TO: Board of Directors

Frederick A. Laskey, Executive Director FROM:

DATE: July 17, 2019

**SUBJECT:** Thunderstorm Impacts on Wastewater System Operations

**COMMITTEE**: Wastewater Policy & Oversight

X INFORMATION **VOTE** 

Stephen D. Cullen, Director Wastewater Preparer/Title

David W. Coppes, PE Chief Operating Officer

#### RECOMMENDATION:

For information only.

#### DISCUSSION:

Summer is typically drier than other times of the year; with lower total rainfall and groundwater levels that results in a decrease in average wastewater flow. Tropical storm and hurricane season presents the potential for the greatest impacts on wastewater system operation during this time of year. While extremely unpredictable, these storm systems are usually seen coming days in advance of any impacts, allowing some time for staff preparation.

The changing nature of 'normal' rainfall patterns, however, including the level of intensity and unpredictability of location and extent of thunderstorms presents staff with increased readiness challenges, especially at this time of year. Thunderstorm forecasts are becoming a normal and repeated feature through much of the summer. Faced with a forecast potential for thunderstorms facility staffing is required, whether or not they ultimately occur.

Staff will provide a presentation on some recent thunderstorm events illustrating the unpredictability of where storms hit, how hard they can hit, and how they affect wastewater system flows on a short term basis.

**TO:** Board of Directors

FROM: Frederick A. Laskey, Executive Director

**DATE:** July 17, 2019

**SUBJECT:** Legal Services Furnished by Special Assistant Attorney General

Jonathan Ettinger/Foley Hoag LLP in the Boston Harbor Case

<u>U.S. v. MDC</u>, et al., USDC No. 85-0489-RGS

**COMMITTEE**: Wastewater Policy and Oversight

\_\_ INFORMATION

X VOTE

Michael J. Altieri, Associate General Counsel

Preparer/Title

Carolyn Francisco Murph

General Counsel

# **RECOMMENDATION:**

That the Board approve an increase to the hourly rate at which the Authority compensates Foley Hoag LLP for the legal services furnished by Attorney Jonathan Ettinger in his capacity as a Special Assistant Attorney General in representing the Authority in the Boston Harbor case, from \$460 an hour to \$625 an hour for FY2020 and \$700 an hour for FY2021.

#### **BACKGROUND:**

In 1985, a committee of the MWRA Board of Directors conducted a search for legal counsel to represent the interests of the Authority in the Boston Harbor case, along with other civil actions, which had been or would soon be consolidated with Clean Water Act enforcement suit brought by the Environmental Protection Agency. That search resulted in in the Board's selection and recommendation of the firm Foley Hoag & Eliot (now Foley Hoag LLP). The recommendation was transmitted to the Office of the Attorney General where it was approved by then Attorney General Francis X. Bellotti. Thereafter, Foley Hoag attorney John M. Stevens received an appointment as Special Assistant Attorney General to serve as lead counsel for the Authority in the case.

MWRA's Enabling Act requires that the Attorney General represent the Authority "in any action involving water pollution in which the Authority is a plaintiff or defendant." The appointment by the Attorney General of a private sector counsel as Special Assistant Attorney General meets that requirement of the Enabling Act. Attorney Stevens represented the Authority until his retirement in 2013 when his partner Jonathan Ettinger, who also worked on the Boston Harbor case, was appointed Special Assistant Attorney General to take the role as lead counsel.

The Board last approved an hourly rate increase for the Special Assistant Attorney General in the Boston Harbor case in 2005. Staff confirmed with the Attorney General's Office that the setting and approving of billing rates for a Special Assistant Attorney General is left to the public entity for whom the legal services are provided.

#### **DISCUSSION:**

Foley Hoag's experience and length of service to the Authority in the Boston Harbor case have been invaluable in building and maintaining a high level of credibility as a party before the Federal Court, as well as with other parties in the lawsuit. Attorney Ettinger has dedicated 29 years to the practice of environmental law. His legal services and dedication to the Boston Harbor case have been excellent. The continuity of representation of the Authority in the Boston Harbor case, by competent counsel having the depth and breadth of knowledge and experience of Attorney Ettinger, is of the utmost importance. Among other responsibilities, Attorney Ettinger assists the Authority in filing its biannual court reports, attends to issues that arise in the case and attends hearings that are scheduled by the court.

It is Foley Hoag's practice, as with many Boston area law firms, to adjust billing rates on an annual basis. The Special Assistant Attorney General's hourly rate for the Boston Harbor case was last increased in 2005. While the proposed new hourly rate represents an increase of 36% for FY2020 from the 2005 rate, when applied over the last 14 years the increase is approximately 2.6% a year. The proposed hourly rate for FY2020 of \$625 and FY2021 of \$700 represents a 26% and 18%, respectively, discount from Attorney Ettinger's current rate of \$850 an hour. Foley Hoag will apply a similar discount for associates and paralegals who also work on the case. Staff believe that the proposed rates are reasonable given the expertise of Attorney Ettinger, quality of the legal services provided by Foley Hoag and legal significance of the Boston Harbor case.

Finally, Authority staff will oftentimes and whenever possible draft court filings and other submissions to help keep costs down. Over the last year the time spent by Foley Hoag in the case has been limited given the current status of the case, including reviewing and providing input with respect to compliance and progress report filings with the court, communications with staff and the court and consultation on issues. Fees billed by Foley Hoag over the last two years in the case have been approximately \$21,800.

Attorney Ettinger represents the Authority in the HEEC federal litigation case. He has been instrumental in assisting the Authority in this complex matter, including in the negotiations relating to the installation of the new cable and removal of the existing cable. Foley Hoag also represents the Authority in the DPU proceeding relating to the HEEC cable, and has otherwise provided advice and counsel on related matters. Fees paid to Foley Hoag over the last two years, including for the Boston Harbor case, are approximately \$228,000.

#### **BUDGET/FISCAL IMPACT:**

There are sufficient funds in the FY2020 CEB for the payment of Foley Hoag's legal bills and sufficient funds will be included in the FY2021 CEB.

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

July 17, 2019

SUBJECT:

Amendments to the MWRA Regulations for Adjudicatory Proceedings,

Enforcement and Administrative Penalties, and Sewer Use

**COMMITTEE:** Wastewater Policy & Oversight

**INFORMATION** 

X\_VOTE

Carolyn Francisco Murphy General Counsel

Carolyn M. Fiore, Deputy Chief Operating Officer Rebecca Weidman, Director, TRAC

Preparer/Title

Chief Operating Officer

### **RECOMMENDATION:**

To authorize the adoption of amendments to MWRA's Regulations for Adjudicatory Proceedings (360 CMR 1.00), Enforcement and Administrative Penalties (360 CMR 2.00), and Sewer Use (360 CMR 10.000) (summary chart attached) by publication in the Code of Massachusetts Regulations.

# **DISCUSSION:**

On February 20, 2019, the Board authorized publication of proposed amendments to the MWRA regulations. The amendments are summarized in Attachment 1. These amendments fall into one of the following four categories:

- Changes to incorporate new local limits for the Clinton Sewerage Service Area;
- Changes to incorporate the U.S. Environmental Protection Agency's (EPA) new Pretreatment Regulations for dental office effluent into MWRA's Sewer User Regulations and other revisions to federal regulations;
- Increases to the annual charges paid by permit holders; and
- Changes to clarify regulations to align them with TRAC administrative practices.

Following the February Board meeting and prior to posting the regulations for public comment, one additional revision to 360 CMR 10.004 was made, specifically the definition of Hazardous Waste. On February 22, 2019, EPA amended its regulations pertaining to hazardous waste pharmaceuticals (40 CFR 266.500), effective August 2019. EPA added certain pharmaceuticals to its definition and further established that these may not be disposed through a Sanitary Sewer System. The Authority's definition of Hazardous Waste was inconsistent with the revised federal regulations. The definition of Hazardous Waste in 360 CMR 10.004 has now been

revised to include a strict prohibition on the disposal hazardous waste pharmaceuticals into the Sanitary Sewer System.

# <u>Public Hearing Process:</u>

MWRA has the authority to adopt regulations, published in the Code of Massachusetts Regulations, which have the force of law. Before adopting or amending a regulation, MWRA must provide notice of the proposed regulations in the Massachusetts Register and newspapers, send notice to various specified entities, and allow a period for public comment.

Since the Board's action on February 20, 2019, all statutorily required steps and notices have been completed with respect to the amendment of MWRA's regulations published as 360 CMR 1.00, 2.00, and 10.000. On March 12, 2019, electronic copies of the proposed amendments were sent to the U.S. Environmental Protection Agency (EPA), Region 1. EPA staff responded the same day, stating that they had reviewed the proposed amendments, found them to be consistent with 40 CFR 403, and therefore approved the MWRA's proposed modifications to the regulations. This determination is required in order for MWRA to move forward with the adoption of the proposed amendments.

Copies of the proposed amendments were sent to the Massachusetts Department of Environmental Protection (MassDEP), the Department of Housing and Community Development the Massachusetts Municipal Association, the MWRA Board of Directors, the MWRA Advisory Board, and MWRA's member communities on March 27, 2019. Notice of MWRA's intent to adopt the proposed amendments and of a public hearing to be held in conjunction with the amendments was forwarded to the Massachusetts Secretary of State's Office on April 4, 2019. Notices were separately published in the Boston Globe, Worcester Telegram and Gazette, and Massachusetts Register on April 19, 2019. The publications provided for the statutory notice of a public hearing, which was scheduled for and held on Monday, May 13, 2019 at 10:00 a.m.

# Public Comments:

At the public hearing on May 13, 2019, MWRA staff received no written or oral comments relative to the proposed amendments to the regulations. However, prior to the close of business on May 20, 2019, within the official comment period, written comments were received from the MWRA Advisory Board, Natural System Utilities (NSU), and the Cambridge Department of Public Works.

The Advisory Board reiterated its support for the increases to the permitting and monitoring charges; MWRA proposed the charge increases based on a recommendation from the Advisory Board. NSU and the Cambridge Department of Public Works suggested modifications to the proposed amendment regarding Reclaimed Water Systems (360 CMR 10.023(13) (b)). MWRA's proposed amendment allows for sludge from a MassDEP permitted Reclaimed Water System to be discharged into the Sewerage District, if the discharge is approved and permitted by both the Municipality and the Authority, and the Reclaimed Water System only treats Sanitary Sewage. The commenters proposed to allow a permitted and approved Reclaimed Water System to treat all sewage, which would include permitted industrial and commercial wastewater, not just Sanitary Sewage. In response to these comments, the Authority has further revised the final regulations to allow a permitted and approved Reclaimed Water System to treat all Sewage

except industrial, landfill, construction dewatering, and other permitted discharges. The revised final regulations under 360 CMR 10.023(13) (b) (1) would now read:

Treats only Wastewater that does not require an active permit described in 360 CMR 10.007(a), (e), (f), (g), (h), or (i) for discharge into the Authority Sewerage System.

This limitation was made because MWRA does not have sufficient information to assess the potential impacts of a sludge with concentrated waste from Industrial and other permitted sources on its Sewerage System and Treatment Facilities. The Authority believes that revising the definition as proposed will expand the potential sources of Sewage that can be treated by a permitted Reclaimed Water System, while prohibiting discharges, which could be detrimental. This will allow such systems to accommodate sewage from mixed-use developments, while being protective of the Authority's infrastructure.

Attachment 1 presents a summary table of the amendments. The table identifies the section of the regulations that were amended, the source of the proposed change, a description of the amendment, and an explanation for the amendment. A complete red-line/strike-out version of the final revised regulations will be available in the Board lounge.

# Next Steps

Staff are in the process of modifying permit templates and other documents to incorporate the amendments to the regulations. Upon Board approval and the revision of impacted documents, 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; this will likely happen late summer 2019. This will allow for sufficient time for the FY20 annual billing cycle for TRAC permittees and to issue the new group permit for Dental Discharges in March of 2020.

#### **BUDGET/FISCAL IMPACT:**

The 4.0% across-the-board increase in the Incentive and Other Charges in FY20 and subsequent 3.0% increase across-the board in FY21 through FY24 will generate approximately an additional \$240,480 in revenue in FY20 (this increase includes the new Dental Discharges permit), \$310,694 in FY21, \$384,016 in FY22, \$458,508 in FY23, and \$535,234 in FY24, as compared to the FY19 estimated revenue. The actual amount invoiced each year will vary based on the number of facilities in each permit category. The increases in charges are intended to cover annual increases in TRAC's budget, as well as to recoup a portion of annual operating cost increases that have not been captured since the last Incentive Charge increase in FY12. Collection of permit charges in the last several years were at approximately 98%.

#### **ATTACHMENTS:**

Summary of Regulation Amendments

# EXPLANATION OF PROPOSED AMENDMENTS

The following table outlines the substantive changes made to the three regulations. In addition to these changes, spelling mistakes and grammatical errors were corrected, and defined terms were capitalized in all three sets. These are not listed in this table.

| REGULATION                    | REASON | AMENDMENT   | EXPLANATION OF   |  |
|-------------------------------|--------|---|--|--|
|                               |        |   | AMENDMENT  |  |
|                               |        | 360 CMR 1.00  |  |  |
| 360 CMR 1.04                  | MWRA   | Adds a definition for electronic medium.  | By adding this definition and updating subsequent sections of the regulations, it provides MWRA with the option to accept documents electronically.                            |  |
| 360 CMR 1.06 (1) and (3)      | MWRA   | Explains how to file a document in a timely fashion and when MWRA deems that document has been received.  | Clarifies timeline for submitting and MWRA receiving documents filed in the mail and electronically.   |  |
| 360 CMR 1.06 (5)              | MWRA   | Adds an additional 3 days to the due dates for any items served in paper.   | Adding the additional 3 days better reflects current practices regarding due dates for items served in paper.  |  |
| 360 CMR 1.07 (6)              | MWRA   | Allows filings to be submitted in electronic medium.  | Current regulation does not allow for the electronic submittal of filings.   |  |
| 360 CMR 1.22 (2)              | MWRA   | Explains how discovery requests can be made and adds that they can be made electronically.  | Current regulation does not clearly state how discovery requests can be made   |  |
| 360 CMR 1.24 (9)              | MWRA   | Updates items that can be included as part of the record.   | Adds electronic tapes and copies of documents stored electronically as items that can be included as part of the record.   |  |
|                               |        | 360 CMR 2.00  | •  |  |
| 360 CMR 2.04                  | MWRA   | Adds a definition for electronic medium.  | By adding this definition and updating subsequent sections of the regulations, it provides MWRA with the option to accept documents electronically.                            |  |
| 360 CMR 2.07 (1)              | MWRA   | Allows notices, orders, and rulings to be submitted in electronic medium.   | Current regulation does not allow for the electronic submittal of these notices.   |  |
| 360 CMR 2.22 (4) and (6)      | MWRA   | Clarifies how and when appeals of penalty assessment notices are reviewed.  | Clarifies process in revised regulation.   |  |
| 360 CMR 2.34 (3)              | MWRA   | Clarification regarding when a stipulated penalty becomes final and outlines the interest rate charged to unpaid balances.  | Clarifies process in revised regulation. Reflects language included in 360 CMR 10.103(6).  |  |
| 360 CMR 10.00                 |        |   |  |  |
| 360 CMR 10.004<br>Definitions | MWRA   | Added definitions of 'Centralized Waste Treatment Facility,' 'Construction Site Dewatering,' 'Dental Discharges,' 'Food Processing,' 'Printing,', and 'Reclaimed Water System.' | Definitions added to incorporate new terms utilized in the revised regulations or to include terms in the definitions section previously defined elsewhere in the regulations. |  |

| REGULATION                          | REASON          | AMENDMENT  | EXPLANATION OF<br>AMENDMENT  |
|-------------------------------------|-----------------|--|--|
| 360 CMR 10.004<br>Definitions       | MWRA            | Revised definitions of 'Combined Permit,' 'Group Permit,' and Hazardous Waste.   | Permit definitions revised to incorporate new Dental Discharges permit category. Hazardous Waste definition for revised to incorporate revisions to the federal definition of Hazardous Waste, included in 40 CFR 266.500. |
| 360 CMR 10.006<br>(2) (b)           | MWRA            | Removed unnecessary and confusing text.  | Does not change the intent of the section.   |
| 360 CMR 10.007<br>(1) (g) and (h)   | MWRA            | Inserted 'Group Permit for Dental Discharges' into 1(g) and revised reference to 360 CMR 10.064 (now referred to as a Combined Permit).          | Changes incorporate the new Dental Discharges permit category as types of Group and Combined Permits.  |
| 360 CMR 10.007<br>(4)(f)            | MWRA            | Incorporates requirements for onetime only Discharges into regulations, explaining when and how a onetime only Discharge will be authorized.     | Outlines MWRA's requirements for onetime only Discharges; requirements were previously only documented in guidance. Does not represent a change to existing practice.  |
| 360 CMR 10.007<br>(4) (g)           | MWRA and EPA    | Deletes subsection that states that dental offices in compliance with DEP discharge regulations do not require a MWRA permit.                    | Dental offices may now require a MWRA permit pursuant to 360 CMR 10.065, as adopted to meet the requirements of the new federal dental effluent guidelines.  |
| 360 CMR 10.008<br>(2) (f)           | MWRA            | Removes references to 'monitoring reports' and 'computer diskette.'  | Clarification allows MWRA to accept all sampling, analysis and other reports, not just monitoring reports, to be submitted in paper or electronically. MWRA will no longer accept reports on computer diskette.            |
| 360 CMR 10.009                      | MWRA and<br>EPA | Updates the signatory and certification language to allow for the electronic submission of documents. Removes references to 'computer diskette.' | Gives MWRA the option to accept documents electronically if they are in compliance with 40 CFR Part 3. MWRA will no longer accept reports on computer diskettes.   |
| 360 CMR 10.011<br>(7), (8), and (9) | MWRA            | Reorganizes sections, no substantive changes were made.  | Reorganization is intended to improve comprehension of requirements.   |
| 360 CMR 10.015<br>(3)               | MWRA            | Replaces 'appeal' with 'petition' or 'disputes' and adds clarifying language.  | Provides for consistent use of terminology utilized by MWRA in other regulations. Does not represent a change to existing practice.  |
| 360 CMR 10.023<br>(10) (a) and (b)  | MWRA and<br>EPA | Deletes 10(b) and eliminates reference to the Metropolitan Sewerage Service Area from 10(a).   | The EPA approved revised Local Limits from the Clinton Sewerage Service area, including a change to the FOG limit to 300 mg/L, same limit as the Metropolitan Sewerage Service Area. Therefore, there is no                |

| REGULATION                           | REASON          | AMENDMENT   | EXPLANATION OF   |
|--------------------------------------|-----------------|---|--|
|                                      |                 |   | AMENDMENT  need to distinguish between the two Sewerage Service Areas.   |
| 360 CMR 10.023<br>(13)               | MWRA            | Adds an allowance for a Reclaimed Water System permitted by MassDEP and MWRA to discharge sludge resulting from the treatment of Sewage that does not require a permit from MWRA into the Sewerage Service Area.  | This addition allows for reclaimed water systems to operate according to MassDEP and MWRA regulations within MWRA's Sewerage Service Area.   |
| 360 CMR 10.024<br>(2) (b)            | MWRA and<br>EPA | Adds a 9 mg/L Formaldehyde limit to the Local Limits in the Clinton Sewerage Service Area. Also removes reference to Appendix D, which has been incorporated in the Total Toxic Organics (TTO) list (Appendix B) for the Clinton Sewerage Service Area.     | Previously, limits for formaldehyde and the other pollutants listed in Appendix D were established on a facility-by-facility basis. Per the new Local Limits analysis completed as part of the reissuance of the Clinton NPDES permit, MWRA proposed, and EPA approved the adoption of the Metropolitan Sewerage Service Area limit of 9 mg/L for formaldehyde and to incorporating the remaining pollutants from Appendix D into the TTO list (Appendix B). |
| 360 CMR 10.061<br>(5) (b)            | MWRA            | Clarifies that a dental offices exempt from 10.065 and discharge x-ray waste are exempt from the Group Permit for Photo Processing and Printing operations.   | Previously, all dental offices that discharged x-ray waste were exempt from coverage under the Group Permit for Photo Processing and Printing operations. MWRA is maintaining this exemption for dental offices that are also exempt from 10.065.  |
| /360 CMR 10.064<br>(1), (2), and (5) | MWRA            | Removes all specific references to 'Photo Processing and Printing' from the Combined Permit and incorporates references to 10.063 and 10.065.   | Previously, a Combined Permit was for Low Flow and Photo Processing and Printing Permits. With the addition of the Dental Discharges Permit, MWRA may also issue combine permits for Low Flow and Dental Discharges or Low Flow and Food Processing.   |
| 360 CMR 10.065                       | MWRA and EPA    | Creates a new Dental Discharges Permit category. Incorporates requirements from both 40 CFR 441 and 310 CMR 73.000- citing the more stringent of the two regulations. The Dental Discharges group permit is modeled after existing MWRA Group Permit types. | With this new permit category, MWRA is compliant with the new federal dental effluent guidelines (40 CFR 441) and MassDEP's existing dental amalgam regulations (310 CMR 73.00).   |
| 360 CMR 10.091                       | MWRA            | Removes 'dewatering or drainage from a construction site' and replaces it with Construction Site Dewatering.  | Intended to create consistency by using the defined term 'Construction Site Dewatering,' rather than using a separate definition for that term.  |

| REGULATION  | REASON | AMENDMENT   | EXPLANATION OF<br>AMENDMENT   |
|---|--------|---|---|
| 360 CMR 10.092<br>(9)                                     | MWRA   | Adds a requirement that applications must identify both the owner and general contractor. Both will be listed as permittees.  | This requirement holds both the owner of the property and the general contractor doing the work responsible for the terms outlined within the Permit.   |
| 360 CMR 10.101<br>(1) (a), (b), (c), (d),<br>(e), and (f) | MWRA   | Strikes existing list of Permit charges and inserts new ones.   | Increase in rates for permit charges.   |
| 360 CMR 10.101<br>(2) (g) and (l)                         | MWRA   | Adds definitions for Category 10 and D1 Permits.  | Category 10 Permits were previously undefined in the regulations and Category D1 are the new Dental Discharges Group Permit.  |
| 360 CMR 10.101<br>(5)                                     | MWRA   | Removes Permit charge structure for Low Flow and Low Pollutant Permits and replaces it with the Permit Charge structure for the Temporary Construction Dewatering Permit. | The Low Flow and Low Pollutant Permit charge will now be billed annually rather than upon the Permit expiration date. These Permit charges have been incorporated into 10.101 (1). Permit charges for the Temporary Construction Dewatering Permit will now be required at the time the application is submitted and is required for MWRA to process the application. |
| 360 CMR 10.102<br>(1) (a), (b), (c), (d),<br>(e), and (f) | MWRA   | Strikes existing list of monitoring charges and inserts new ones.   | Increase in rates for monitoring charges.   |
| 360 CMR 10.102<br>(1)(f)(5)                               | MWRA   | Strikes second paragraph and moves language to new sections 10.102 (4), (5), and (6)  | This language was out of place and required clarification. See information under the new sections for description of changes.   |
| 360 CMR 10.102<br>(4)                                     | MWRA   | Language moved from section 10.102 (1) (f) (5).   | Clarifies what Permits do not have a monitoring charge associated with them. Does not represent a change from existing practice.  |
| 360 CMR 10.102<br>(5)                                     | MWRA   | Language moved from section 10.102 (1) (f) (5).   | Clarifies that monitoring charges for SIUs are determined based on their status as of June 30 <sup>th</sup> of the previous fiscal year or when a new SIU permit is issued. Does not represent a change from existing practice.   |
| 360 CMR 10.102<br>(6)                                     | MWRA   | Language moved from section 10.102 (1) (f) (5).   | Clarifies how some unique categories of SIUs monitoring charges are assessed. Does not represent a change from existing practice.   |
| 360 CMR 10.102<br>(7) (a), (b), (c), (d),<br>(e), and (f) | MWRA   | Strikes existing list of monitoring charges and inserts new ones.   | Increase in rates for late and non-submittal of reports.  |

| REGULATION            | REASON          | AMENDMENT   | EXPLANATION OF AMENDMENT  |
|-----------------------|-----------------|---|---|
| 360 CMR 10.103<br>(4) | MWRA            | Adds language that requires Category 12 Permit charges to be paid in full upon submission of Permit application.                              | This represents a change in practice: currently, Category 12 Permit charges are due upon the issuance of the Permit. These Permit application reviews require substantial time and effort for review and are often not finalized. In order to recover the upfront costs of reviewing these Permit applications, MWRA is requiring that these Permit charges be paid at the time of application submittal. |
| 360 CMR 10.103<br>(8) | MWRA            | Replaces 'appeal' with 'petition' or 'disputes' and adds clarifying language.   | Provides for consistent use of terminology utilized by MWRA in other regulations. Does not represent a change to existing practice.   |
| Appendix A            | MWRA            | Removes 'Bis (2-Chloroisopropyl Ether)' and adds '2,2'-Oxybis (1-Chloropropane).  | Represents clarification in the chemical that is regulated, does not represent a change in practice.  |
| Appendix B            | MWRA and<br>EPA | Incorporates chemicals listed in Appendix D into Appendix B. Removes 'Bis (2-Chloroisopropyl Ether)' and adds '2,2'-Oxybis (1-Chloropropane). | Chemicals previously listed in Appendix D were regulated on a facility-by-facility basis in the Clinton Sewerage Service Area. These chemicals are now incorporated into the TTO list for purposes of Permit limits.  |
| Appendix D            | MWRA and<br>EPA | Appendix D 'Clinton Sewerage<br>Service Area Facility Specific<br>Limits' is removed and replaced<br>with Appendix E, 'Pesticides.'           | Chemicals previously listed in Appendix D were regulated on a facility-by-facility basis in the Clinton Sewerage Service Area. These chemicals are now incorporated into the TTO list for purposes of Permit limits.  |
| Appendix E            | MWRA            | Appendix E was renamed to Appendix D.   | Does not represent a change in practice.  |

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

**DATE:** 

July 17, 2019

**SUBJECT:** 

Memorandum of Agreement with the Town of Braintree Regarding MWRA's Use

of the Town's Howard Street Pump Station

**COMMITTEE**: Wastewater Policy & Oversight

**INFORMATION** 

X VOTE

Carolyn Francisco Murphy

General Counsel

Michael J. Altieri, Associate General Counsel Stephen D. Cullen, Director Wastewater

Preparer/Title

David W. Coppes, PE

**Chief Operating Officer** 

## **RECOMMENDATION:**

To authorize the Executive Director, on behalf of the Authority, to enter into a Memorandum of Agreement, substantially in the form attached hereto, with the Town of Braintree for a term of five years, for MWRA's use of the Town's Howard Street Pump Station and which provides for payment to the Town for past and future operations and maintenance costs and capital improvements.

## **BACKGROUND:**

In 1962, the Massachusetts Legislature enacted "Chapter 684 – An Act Authorizing MDC To Construct Certain Sewer Works In The Town of Braintree And To Contract With The Town of Braintree For The Disposal Of Sewage From A Low Area In The City Of Quincy." The Act directed the MDC to construct sewers from the City of Quincy's sewer system to the Town of Braintree's Howard Street Pump Station and to contract with the Town for use of the station and discharge sewer.

On September 12, 1962, the MDC and the Town of Braintree entered into an Agreement that allowed MDC to connect to and use the Howard Street Pump Station. The Agreement provided that MDC would pay Braintree annually for use of the Town's sewage facilities. Subsequently, the MDC constructed Sewer Section 125A (a 210-foot, 8-inch vitrified clay pipe) in West Howard Street in Braintree. The MDC sewer went into service on July 1, 1963.

On March 19, 1990, MWRA and the Town of Braintree signed a successor Agreement, with a five-year term, regarding MWRA's use of the Town's Howard Street Pump Station. The Agreement provided that MWRA would make payments to the Town equivalent to 25 percent of the total annual cost of operating, maintaining, and constructing capital improvements to the pump station. While the term of the contract has expired, it contained provisions for continuation in the

absence of a successor agreement. In 2003, with the Board's approval, MWRA made a payment of \$183,603.45 to the Town to settle 10 years of past operating and capital expenditures related to use of the pump station. Over the past 16 years, MWRA and Braintree have had on-again, off-again discussions regarding the Howard Street Pump Station. The last serious discussions, in 2007/2008, resulted in a draft agreement that was not executed by MWRA. During those 16 years, Braintree has not provided MWRA with cost documentation, nor provided MWRA with a bill for operating, maintenance and capital expenses.

# **DISCUSSION:**

MWRA staff were recently contacted by representatives of Braintree regarding capital rehabilitation plans for the Howard Street Pump Station and an inquiry into MWRA's financial participation in the project under the terms of the 1990 Agreement. Preliminary design work for the rehabilitation project commenced in 2014, and has recently been finalized. The station is over 50 years old with two centrifugal pumps, a wet well/dry well configuration and superstructure. The pumps were last replaced around 1980. The channel grinder, flow meter, and generator date back to 2004. The proposed rehabilitation will consist of installing new pumps, grinders, and gates. In addition, the project will include a new HVAC system, electrical service and generator, and an update of the obsolete relay-based control system with new SCADA control. Building systems will also be brought up to code. MWRA staff have since reviewed the basis of design report and will review the final design before bidding later this summer.

During discussions the Town provided, and subsequently certified, cost documentation for past operating and maintenance costs, totaling \$111,213.73, based on the terms of the 1990 Agreement and requested payment from MWRA. These costs include \$34,876.92 for Operations (Utilities - Electricity), and \$76,336.81 for Maintenance (Labor) going back to 2008.

Staff utilized the discussions as an opportunity to re-open negotiations regarding the 1990 Agreement. MWRA staff questioned the proportion of costs assigned to MWRA under the prior Agreement. A limited amount of information on flows at both the pump station and from a temporary meter installed in the MWRA line for an 18 month period was analyzed. While the data set was not complete and there were some questions regarding the accuracy of the information, it was clear that the MWRA flow was less than 25% of the total station flow that had been the basis in the prior Agreement for MWRA payments. Not including one month, which appears to be an outlier, it appears that MWRA flow over the past 18 months has been as high as 18% of the total flow on a monthly basis, with annual average likely closer to 13%.

With this data, MWRA proposed and the Town agreed to the following changes in the terms of the agreement, pending Board approval, going forward:

- MWRA will pay the Town an amount of \$111,213.73 for past operating, maintenance, and any capital costs. This payment will settle all MWRA obligations prior to July 1, 2019.
- MWRA will pay the Town up to 18% of the awarded contract price for the Howard Street Pump Station rehabilitation project upon completion of the project, with a cap of \$342,000.
- The Town of Braintree will furnish, install and maintain a new wastewater flow meter to measure the MWRA flow.
- For Fiscal Year 2020, the MWRA shall pay 13% of the operating, maintenance and other capital costs (as defined in the Agreement) for the Howard Street Pump Station.

Annually on a fiscal year basis commencing in 2021, the average percentage of flow contributed by the MWRA sewer line to the total pumped by the Howard Street Pump Station will be recalculated. This recalculated percentage will be the basis for MWRA's payment of operating and maintenance payments each year, and for other future capital expenses.

• MWRA will not be obligated to pay past operating, maintenance or capital expenses if the Town does not submit a payment request and cost certification within 3 months of the close of the fiscal year.

All payments associated with this Memorandum of Agreement relate to MWRA's use of the Town's Howard Street Pump Station to transport wastewater flow from Quincy. All MWRA wholesale sewer charges are separate and distinct from payments under this Agreement. All MWRA wholesale sewer charges associated with Quincy's flow tributary to the Howard Street Pump Station have been, and will continue to be, charged to Quincy, not Braintree.

Staff believe this is a fair and reasonable agreement for MWRA because:

- Future operating, maintenance and capital payments will be based on a reasonable estimation of MWRA's share of flow;
- MWRA's share of the cost of the current capital improvements has a rational basis which is lower than the prior agreement (25%) and has a not-to-exceed cap; and
- Payment of past operating and maintenance expenses relieves MWRA of all past obligations and is for an amount that could conceivably have been higher.

# **BUDGET/FISCAL IMPACTS:**

The FY20 CEB has \$12,500.00 budgeted for operating expenses for MWRA's use of the Howard Street Pump Station. MWRA has accrued \$189,600.00 since 2003 and will utilize this amount to pay for the past operating expenses and a portion of the anticipated capital expenses. The balance will be absorbed in either the FY21 or FY22 CEB, depending on when the project is completed and proper documentation is submitted to MWRA.

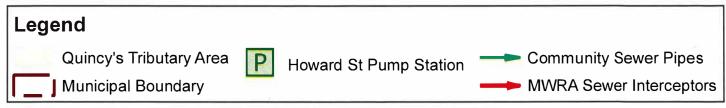
#### **ATTACHMENTS:**

Map of Howard Street Pump Station Service Area Draft Memorandum of Agreement

# Town of Braintree Howard Street Pump Station







# MEMORANDUM OF AGREEMENT BETWEEN THE MASSACHUSETTS WATER RESOURCES AUTHORITY AND THE TOWN OF BRAINTREE REGARDING THE USE OF THE HOWARD STREET PUMP STATION

The Massachusetts Water Resources Authority ("MWRA") a body politic and corporate, a public instrumentality and an independent public authority created by chapter 372 of the Acts of 1984, as amended ("Enabling Act") located at the Charlestown Navy Yard, 100 First Avenue, Boston, MA and the Town of Braintree ("Town"), a municipal Corporation with its principal place of business located at Town Hall, One JFK Memorial Drive, Braintree, MA (collectively, the "Parties") hereby enter into the following Memorandum of Agreement ("MOA").

WHEREAS, pursuant to Section 4(f) of the Enabling Act, MWRA is the successor-in- interest to all rights and liabilities of the Metropolitan District Sewer Commission ("MDC") pertaining to what was formerly the MDC sewer system;

WHEREAS, Chapter 684 of the Acts of 1962 authorized and directed MDC to construct certain sewerage works in the Town and to contract with the Town for the conveyance of sewage from a low lying area in the City of Quincy ("Affected Area") to a wastewater pump station located on Howard Street in the Town, which the Town owns and operates ("Howard Street Pump Station");

WHEREAS, pursuant to Chapter 684 of the Acts of 1962, the Town and MDC entered into an agreement on September 12, 1962 (the "1962 Agreement"), which provided for the transport by MDC of sewage from the Affected Area to the Howard Street Pump Station;

WHEREAS, the Town and the MWRA, as successor to the MDC, renegotiated the 1962 Agreement and entered into a subsequent agreement on March 19, 1990 ("1990 Agreement"), which provided for the continued transport of sewage from the Affected Area to the Howard Street Pump Station;

WHEREAS, pursuant to the 1990 Agreement, MWRA was responsible for payment of twenty-five percent (25%) of the total annual costs of operating, maintaining and making capital improvements to the Howard Street Pump Station;

WHEREAS, beginning in 2014, the Town has contracted for preliminary design work for upgrades to the Howard Street Pump Station and in preparation for final design has recently provided MWRA with a December 2018 Design Basis Report and bid specifications dated April 2019, which includes proposed capital improvements to the facility's: (1) site condition (fencing and drainage); (2) structural and architectural condition; (3) process equipment (e.g., wastewater pumps, grinder, wet well slice gates, etc.); (4) plumbing and HVAC systems; (5) electrical system; and (6) control equipment ("2019 Capital Improvements Project");

WHEREAS, MWRA presently contributes approximately thirteen percent (13%) of the total wastewater flow contributed to the Howard Street Pump Station via MWRA Sewer Section 654—the Howard Street Sewer (formerly designated Sewer Section 125A); and

WHEREAS, the Parties desire to enter into a new agreement, which provides for (i) the continued transport of sewage from the Affected Area to the Howard Street Pump Station and discharge sewer, which reflects the current and future extent of wastewater flow via MWRA Sewer Section 654—the Howard Street Sewer (formerly designated Sewer Section 125A) to such Station; (ii) payment by MWRA of operation and maintenance costs through June 30, 2019 for MWRA's use of the Howard Street Pump Station and discharge sewer; and (iii) payment by MWRA of certain construction costs for the 2019 Capital Improvements Project.

# NOW THEREFORE, the MWRA and the Town agree as follows:

- 1. <u>Mutual Undertakings</u>. The consideration for this MOA shall be the mutual observation and performance by the Parties of all obligations and covenants set forth in this MOA.
- 2. Term. Subject to the termination provisions in paragraph eight, this MOA shall be in effect from the date hereof through June 30, 2025 and shall cover: (i) all payments required by MWRA to the Town for MWRA's use of the Howard Street Pump Station and associated downstream force main and local sewers owned and operated by the Town for a five (5) year period covering MWRA fiscal years 2020 through 2025 (July 1, 2020 through June 30, 2025); (ii) payment by MWRA of maintenance and operation costs through June 30, 2019, for MWRA's use of the Howard Street Pump Station and discharge sewer; and (iii) payment by MWRA of certain construction costs for the 2019 Capital Improvements Project.
- 3. MWRA's Use of Howard Street Pump Station. MWRA's use of the Howard Street Pump Station shall continue in accordance with the terms of this MOA. MWRA's "use" of the Howard Street Pump Station shall be defined as the conveyance of wastewater flow from MWRA Sewer Section 654 (125A) on Howard Street in the Town to the Howard Street Pump Station and discharge sewer. The Town shall be responsible for all costs associated with operation and maintenance of the Howard Street Pump Station and associated downstream force main and local sewers owned and operated by the Town.
  - a. Calculation of Costs FY20. For the MWRA's 2020 fiscal year, MWRA shall pay the Town thirteen percent (13%) of the total annual cost of operating, maintaining, and making necessary "Capital Improvements" to the Howard Street Pump Station. As used herein "Capital Improvements" shall mean any capital improvements (construction and/or renovation) to the Howard Street Pump Station and/or the discharge sewer, other than the 2019 Capital Improvements Project, which is approved in advance by MWRA. The Town shall furnish MWRA with all requested information and documents concerning any proposed Capital

Improvements. MWRA shall not unreasonably withhold its approval of proposed Capital Improvements. For purposes of this sub-paragraph, these costs shall consist of and include the sum of the following three components ("Total Annual Costs"):

- i. Labor costs, which shall be computed as fifty percent (50%) of the total annual payroll costs, incurred in the most recently completed fiscal year, for one labor force employee of the Town Sewer Department, which employee's payroll costs shall be representative of the average of all such employees;
- ii. All electric and telemetry utility costs, incurred in the most recently completed fiscal year, associated with operation of the Howard Street Pump Station; and
- iii. All reasonable capital expenses, incurred in the most recently completed fiscal year (FY2020), associated with the necessary Capital Improvements to the Howard Street Pump Station. The MWRA and the Town shall agree in advance on the need for and the reasonable costs of any project involving capital expenditures, or the debt service associated with same, prior to the Town incurring or committing to such expenditures.

The MWRA shall be responsible for payment of thirteen percent (13%) of the Total Annual Costs ("MWRA's Share of Itemized Annual Costs").

- b. Calculation of Costs Post FY20. Beginning with the MWRA's 2021 fiscal year, and continuing annually for the remaining term of this MOA, MWRA shall recalculate the percentage of the Total Annual Costs to be paid by MWRA in an amount equal to the volume of sewage transported from the Affected Area to the Howard Street Pump Station, divided by the total volume of sewage pumped from the Howard Street Pump Station ("Recalculated Percentage"). On or before July 30, 2021, and not later than July 30<sup>th</sup> each year thereafter, the Town shall provide the two points of sewage flow data to MWRA, in a form acceptable to MWRA, so that MWRA may perform the preceding calculation. Beginning with the MWRA's 2021 fiscal year, Total Annual Costs will be calculated as the sum of the following items:
  - i. Labor costs, which shall be computed as fifty percent (50%) of the total annual payroll costs, incurred in the most recently completed fiscal year, for one labor force employee of the Town Sewer Department, which employee's payroll costs shall be representative of the average of all such employees;
  - ii. All electric and telemetry utility costs, incurred in the most recently completed fiscal year, associated with operation of the Howard Street Pump Station; and

iii. All reasonable capital expenses (excluding expenses for the Capital Improvements), incurred in the most recently completed fiscal year, associated with the necessary capital expenses to the Howard Street Pump Station. The MWRA and the Town shall agree in advance on the need for and the reasonable costs of any project involving capital expenditures, or the debt service associated with same, prior to the Town incurring or committing to such expenditures.

The MWRA shall be responsible for payment of the Recalculated Percentage of the Total Annual Costs ("MWRA's Recalculated Share of Itemized Annual Costs").

# c. Invoicing and Payment.

- i. Annually and within three months following completion of the MWRA fiscal year, the Town shall submit to the MWRA Chief Operating Officer a Request for Payment and detailed Cost Certificate showing the Town's itemized Total Annual Costs for the completed MWRA fiscal year. Such Costs shall be calculated for each fiscal year, comprising the period from July 1 to June 30. If the Town fails submit a Request for Payment and detailed Cost Certificate within three months following the completion of the MWRA fiscal year, MWRA will not be responsible for payment of any costs incurred by the Town for that corresponding fiscal year.
- ii. Upon receipt of both a written Request for Payment and Cost Certificate, the MWRA shall have the opportunity to review, audit, and/or verify the components of the Total Annual Costs and, if necessary, request further information and documentation substantiating the Costs shown. Upon acceptance of the Total Annual Costs shown in the Request for Payment and Cost Certificate, the MWRA shall make payment to the Town for MWRA's Share of the Itemized Annual Costs or MWRA's Recalculated Share of Itemized Costs. MWRA reserves the right to dispute, in whole or in part, the accuracy of the Cost Certificate or any of the Total Annual Costs submitted therein, but agrees to not unreasonably withhold its acceptance of the Cost Certificate. MWRA shall notify the Town if any of the Total Annual Costs are disputed and may withhold payment on such disputed Costs. The Parties shall attempt in good faith to resolve the dispute, and the MWRA shall pay the Town all undisputed sums.
- 4. Payment of Prior O&M Costs Through June 30, 2019. The Town has represented that MWRA's 25% share of the costs of operation and maintenance for the Howard Street Pump Station pursuant to the 1990 Agreement is \$111,213.73 ("Prior O&M Costs"). Within 15 days after receipt from the Town of documentation substantiating the Prior O&M Costs, including labor and utility cost records, as well as an executed Cost Certificate attesting

that the Prior O&M Costs are true and accurate, MWRA shall pay the Town the Prior O&M Costs. Upon the Town's receipt of payment of the Prior O&M Costs: (i) the MWRA shall be deemed to have fully satisfied any and all obligations under the 1990 Agreement and no further funds shall be due the Town under the 1990 Agreement or for MWRA's use of the Howard Street Pump Station and discharge sewer through June 30, 2019; and (ii) the Town shall be deemed to have released and forever discharged MWRA from any and all claims arising out of the 1990 Agreement, including without limitation payment of all costs incurred through June 30, 2019, for the operation, maintenance, and any capital improvements of the Howard Street Pump Station and the discharge sewer.

- 5. 2019 Capital Improvements Project. The Town has represented that its current engineer's estimate for the construction costs for the 2019 Capital Improvements Project is \$1.9 million. Subject to the provisions set forth herein, MWRA agrees to pay 18% of the sum of the original construction contract awarded ("Original Contract Sum") for the 2019 Capital Improvements Project. Provided however, if the final adjusted construction contract sum, after project completion and accounting for all change orders and credits ("Final Adjusted Contract Sum") is less than the Original Contract Sum, MWRA shall pay 18% of the Final Adjusted Contract Sum. Notwithstanding the above and provided further, MWRA's payment to the Town for the 2019 Capital Improvements Project shall not, in any event, exceed \$342,000, which shall be MWRA's cap for payment of costs arising out of the 2019 Capital Improvements Project. For purposes of clarity, should the Original Contract Sum or Final Adjusted Contract Sum exceed the cap of \$342,000, MWRA's obligation relating to the 2019 Capital Improvements Project shall be limited to \$342,000. Except as provided in this paragraph 5, MWRA shall have no responsibility or liability of any kind for any costs or expenses incurred by the Town or any third party arising out of or relating in any way to the 2019 Capital Improvements Project. No later than three months after the execution of a certificate of substantial completion and final payment to the general contractor by the Town for the 2019 Capital Improvements Project the Town shall furnish a Request for Payment and Cost Certificate (attesting to the true and accurate nature of the costs) to MWRA for payment, consistent with the provisions herein. Such Request and Certificate shall include a copy of the construction contract, contractor Payment to the Town for the 2019 Capital requisitions, and payment records. Improvements Project shall be subject to the audit and dispute provisions of paragraph 3.c above.
- 6. Meter. At its sole cost and expense the Town shall furnish, install and maintain, for the term of this Agreement and any extensions thereto, a meter approved by MWRA, to monitor and record (by way of flow data) the conveyance of wastewater flow from MWRA Sewer Section 654 (125A) on Howard Street in the Town to the Howard Street Pump Station and discharge sewer.
- 7. <u>Amendments.</u> This Agreement may be amended from time-to-time by mutual agreement in writing executed by the Parties.

- 8. MOA Extension/Termination. Prior to expiration of this MOA Agreement on June 30, 2025, the Parties shall in good faith renegotiate the terms of this MOA. If the Parties fail to agree on the terms of a new agreement the terms of this MOA shall remain in full force until a new agreement is executed or until such time as the MWRA is no longer in need of the use of the Howard Street Pump Station. Provided, however, that if this MOA remains in effect after June 30, 2025, because the Parties are unable to agree on terms for a new agreement, the MWRA's Recalculated Share of Itemized Annual Costs shall continue to be adjusted pursuant to paragraph 3.b., above.
- 9. <u>Notice.</u> The Town shall send any written notices to the Executive Director of MWRA, with a copy to the MWRA's Chief Operating Officer, at MWRA's principal place of business. MWRA shall send written notices to the Mayor of the Town, with a copy to the Director of the Department of Public Works, at the Town's principal place of business.

| IN WI | TNESS WHEREOF, the Parties, intending to be legally be    | ound, have exect | ated this MOA |
|-------|---|------------------|---------------|
|       | seal, each by its duly authorized representatives on this |                  |               |
|       |   |                  |               |
| MASS  | ACHUSETTS WATER RESOURCES AUTHORITY                       |                  |               |
|       |   |                  |               |
| BY:   |   |                  |               |
|       | Frederick A. Laskey, Executive Director                   |                  |               |
|       | Duly Authorized   |                  |               |
|       |   |                  |               |
| TOWN  | N OF BRAINTREE  |                  |               |
|       |   |                  |               |
| BY:   |   |                  |               |
|       | Joseph C. Sullivan, Mayor                                 |                  |               |

**Duly Authorized** 

TO:

Board of Directors

**FROM:** 

Frederick A. Laskey, Executive Director

DATE:

July 17, 2019

**SUBJECT:** 

Maintenance Coating Contract – Deer Island Treatment Plant

Soep Painting Corporation

Contract S583

**COMMITTEE:** Wastewater Policy & Oversight

David F. Duest, Director, Deer Island WWTP Richard J. Adams, Manager, Engineering Services INFORMATION

X VOTE

Michele S. Gillen

Director of Administration

David W. Coppes ....

Chief Operating Officer

# **RECOMMENDATION:**

Preparer/Title

To approve the award of Contract S583, Maintenance Coating Contract, Deer Island Treatment Plant, to the lowest eligible and responsible bidder, Soep Painting Corporation and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the amount of \$2,495,000, for a contract term of 600 calendar days from the Notice to Proceed.

#### **BACKGROUND:**

The Contract S583 scope of work contains the following three major components: rehabilitation of the coatings in eight scum wells, six carbon adsorbers and four digester overflow boxes. The

rehabilitation consists of cleaning, inspection, steel and concrete repair(s) and coating installation. The digester overflow boxes will also have the steel ladders and railings removed and replaced with fiber reinforced plastic ladders and railings.

Figure 1 shows the location of each work area.



The Deer Island Treatment Plant has two scum wells for each of the four primary clarifiers for a total of eight. The scum wells continually mix the scum to enable pumping of the scum to the residuals area for processing.

The scum wells are located in highly corrosive areas, are constructed of concrete and coated with an epoxy based coating for protection from hydrogen sulfide based corrosion. The coatings are periodically inspected. They have degraded to a point where they need to be recoated or replaced. This contract includes cleaning, inspecting, repairing (if necessary) and recoating of all eight primary scum wells.

Figure 2 is a photo of the north wall of the scum well in Scum Building A2. As seen from the photo, there is limited coating remaining and concrete degradation has started. An algae film is also noticeable on the concrete, which promotes hydrogen sulfide corrosion.

Figure 2 – Scum Well

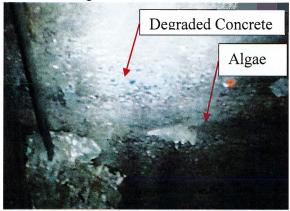


Figure 3 – West Odor Control Adsorbers



The Deer Island Treatment Plant also has a number of odor control facilities, which treat odorous air removed from wastewater treatment. The coatings on six odor control adsorbers in three odor control facilities will be rehabilitated as follows: East Odor Control Facility (three adsorbers), West Odor Control Facility (two adsorbers) and Residuals Odor Control Facility (one adsorber).

The odorous gases and volatile organic compounds treated by the carbon adsorbers are highly corrosive. The carbon adsorbers are constructed of steel with an internal coating for protection from corrosion. As part of ongoing maintenance, the carbon adsorbers are emptied and the carbon grating, screens and adsorbers are inspected for corrosion. As a result of the inspections, the adsorbers require internal coating rehabilitation. The repairs included in this contract include carbon and carbon grating removal, thorough cleaning and inspection and, if necessary, weld repairs and internal coating re-application. The weld repairs will likely damage the exterior of the adsorbers. Where this occurs, the contract includes repainting of the exterior welded areas.

Figure 4 – Digester Overflow Box



The digester overflow boxes receive digested sludge overflowing through telescoping sludge withdrawal pipes. The steel digested sludge overflow boxes are externally located at the top of the digester. The heated sludge is corrosive and the sludge with the enclosed overflow box creates a humid corrosive environment. The coating on the steel overflow boxes is failing. Additionally, the handrails, toe plates and ladders, also constructed of steel, are also corroded.

The Digester Module 3 overflow box coatings will be cleaned, inspected, repaired

and recoated. The steel handrails, toe plates and ladders will be removed and fiber reinforced plastic handrails, toe plates and ladders will be installed.

The digested sludge overflow box on the top of Module 3 Digester 2 is shown in Figure 4. The coating is flaking, rust is apparent on the wall of the overflow box and the ladder is corroded. Digester Module 3 is the only module with steel overflow boxes. Modules 1 and 2 were designed with overflow boxes constructed of concrete.

# **Procurement Process**

Contract S583 was advertised in the Central Register, the Boston Herald, El Mundo, Banner Publication and COMMBUYS and bid in accordance with Chapter 149 of Massachusetts General Laws. General Bids were opened on June 11, 2019 from three contractors as follows:

| <u>Bidders</u>                  | Bid Amount  |
|---------------------------------|-------------|
| Engineer's Estimate             | \$2,275,000 |
| Atlas Painting and Sheeting Co. | \$2,020,000 |
| Soep Painting Corporation       | \$2,495,000 |
| John W. Egan Co. Inc.           | \$3,508,990 |

Atlas' bid was deemed non-responsive because it did not include the DCAMM Update Statement as required by statute and in the "Instructions to Bidders".

Staff interviewed representatives from Soep and reviewed the bid in detail, which is approximately 10% higher than the Engineer's Estimate. Soep representatives stated the specifications and drawings were clear, and explained the firm's approach to completing all three portions of work. The approach as outlined was thorough and consistent with the bid documents. It indicated that the digester overflow boxes are the most difficult portion of the work. Discussions regarding the cost included for this work demonstrated that the Engineer's Estimate was low. Soep clearly found this work more difficult due to its complexity and logistics. Staff have determined that the bid is complete, reasonable and includes the payment of prevailing wages, as required. References for Soep were checked and found to be favorable. Soep has successfully completed numerous construction contracts at Deer Island and is currently the painting filed sub-contractor on Contract 7428, Gravity Thickener Rehabilitation. Based on the information received during the interview,

staff are of the opinion that Soep understands the nature and complexity of the project, has the skill, and ability necessary to complete the work, and is qualified to do so.

Therefore, staff recommend that Contract S583 be awarded to Soep Painting Corporation as the lowest responsible and eligible bidder.

# **BUDGET/FISCAL IMPACT:**

There are sufficient funds in the FY20 CEB. Sufficient funds will be included in subsequent CEB Budgets for the remaining term of the contract.

# **MBE/WBE PARTICIPATION:**

The MBE and WBE participation requirements for this contract were established at 7.24% and 3.6%, respectively.

3

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

June 27, 2019

**SUBJECT:** 

Deer Island Treatment Plant

Gas Protection System Replacement - Phase 1

J. F. White Contracting Company

MWRA Contract 7167

**COMMITTEE:** Wastewater Policy & Oversight

David F. Duest, Director, Deer Island WWTP Richard J. Adams, Manager, Engineering Services

Phillip Szottfried, Sr. Program Manager

INFORMATION

X VOTE

Michele S. Gillen

Director of Administration

David W. Coppes, P.E.

Chief Operating Officer

RECOMMENDATION:

Preparer/Title

To approve the award of Contract 7167, Deer Island Treatment Plant, Gas Protection System Replacement, Phase I, to the lowest eligible and responsible bidder J. F. White Contracting Company and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the amount of \$1,402,995, for a contract term of 540 calendar days from the Notice to Proceed.

# **BACKGROUND:**

The Winthrop Terminal and North Main Odor Control Facilities utilize gas detection systems to monitor hazardous oxygen, hydrogen and methane gas levels. The fixed-gas sensors are located in strategic areas throughout each of the facilities.

Contract 7167 is for phase I of the gas monitoring system replacement. The gas monitors at North Main Odor Control and Winthrop Control Facilities are obsolete and staff can no longer obtain spare parts. Therefore, these sensors were selected to be replaced in Phase I.

Under this Contract, all the fixed gas sensors will be replaced and the gas detection controls will be upgraded with new programmable logic controllers. Construction will be sequenced to complete one facility at a time, and will provide temporary gas monitoring during the construction period.



Figures 1 thru 4 show the location of each work area.



Figure 1 – Winthrop Control Panel



Figure 3 – North Main Odor Control Panel

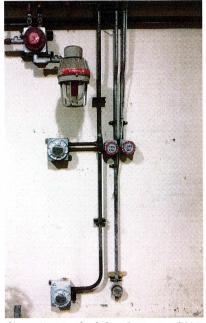


Figure 2 – Typical Gas Detector (WTF)



Figure 4 – Typical Gas Detector (NMOC)

Subsequent contracts will include replacement of the gas monitors at the South Main Pump Station, the Grit Facility, Modules 1 to 3 of the Digester Complex, East and West Odor Control Facilities, and the primary treatment galleries.

# **Procurement Process**

Contract 7167 was advertised in the Central Register, the Boston Herald, El Mundo, Banner Publication and COMMBUYS and bid in accordance with Chapter 149 of Massachusetts General Laws. General Bids were opened on June 14, 2019 from two contractors as follows:

BiddersBid AmountEngineer's Estimate\$1,150,000.00J. F. White Contracting Company\$1,402,995.00Fall River Electrical Assoc.\$1,693,928.00

Staff interviewed representatives from J. F. White Contracting Company and reviewed the bid in detail, which is approximately 22% higher than the Engineer's Estimate. Representatives from J. F. White Contracting Company indicated that they had a full understanding of the specifications and drawings. They explained their approach to complete the work and the approach outlined was consistent with the bid documents. After the interview, it became apparent that the Engineer's Estimate did not accurately reflect the pricing associated with the complexities involved with the installation of some of the conduits, effort associated with swapping out the gas detection units, and the staging complexities involved with the replacement of new sensor units. Staff determined that the J. F. White Contracting Company estimate was reasonable, thorough and acceptable. Staff have determined that the bid is complete, reasonable, and includes the payment of prevailing wages as required.

References for J. F. White Contracting Company were checked and found to be favorable. J. F. White Contracting Company has also completed numerous construction contracts on Deer Island and is currently performing the Variable Frequency Drive Upgrade, Contract 6875. Based on the information received during the interview, DCAMM ratings review and reference checks, staff are of the opinion that J. F. White Contracting Company understands the nature and complexity of the project, has the skill and ability necessary to complete the work, and is qualified to do so.

Therefore, staff recommend that Contract 7167 be awarded to J. F. White Contracting Company as the lowest responsible and eligible bidder.

# **BUDGET/FISCAL IMPACT:**

The FY20 CIP includes \$1,000,000 for Contract 7167. The award amount is \$1,402,995 or \$402,995 over budget. This amount will be absorbed within the five-year spending cap.

#### **MBE/WBE PARTICIPATION:**

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

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

July 17, 2019

**SUBJECT:** 

Piping Relocation at the Pelletizing Plant

Walsh Construction Company II, LLC

Contract 7173

**COMMITTEE**: Wastewater Policy & Oversight

**INFORMATION** 

X VOTE

Michele S. Gillen

David Duest, Director, Deer Island WWTP
<u>Richard J. Adams, Manager, Engineering Services</u>
Preparer/Title

Chief Operating Officer

Director of Administration

# **RECOMMENDATION:**

To approve the award of Contract 7173, Piping Relocation at the Pelletizing Plant, to the lowest responsible and eligible bidder, Walsh Construction Company II, LLC and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of \$4,250,445, for a contract term of 450 calendar days from the Notice to Proceed.

# **DISCUSSION:**

The Biosolids Processing Facility (Pelletizing Plant), located in the City of Quincy, was constructed in 1991 (see Figure 1). The facility allowed the MWRA to eliminate the decades-old practice of discharging sludge directly into Boston Harbor.

Sludge is collected by Deer Island Treatment Plant's primary and secondary treatment and is further processed in the anaerobic digesters. The remaining sludge from the digesters is temporarily stored and then pumped seven miles through a pair of conduits located in the Inter-Island Tunnel to the Pelletizing Plant. There it is dewatered in centrifuges and dried in thermal dryers. The resulting product is fertilizer pellets that are beneficially used and marketed as a Class A fertilizer.

The Pelletizing Plant is operated and maintained under contract to MWRA by New England Fertilizer Company (NEFCO). The current Contract began in 2001 and was extended by an amendment in 2015 to December 2020. The request for Qualification/Proposals for the next contract is expected to be advertised in early 2020.



Figure 1 - Pelletizing Plant

The Pelletizing Plant processes sludge received from the Deer Island Treatment Plant via two conduits in the inter-island tunnel. The sludge is processed into Class A Exceptional Quality fertilizer pellets and are distributed to nine 34,000 cubic feet storage silos. Five of the silos are adjacent to the plant while four of the silos are located approximately 500 feet away down the access road from the plant (figure 2). The pellets are distributed to the four remote silos through four 5-inch galvanized steel pipes. The remote silos account for approximately 45% of the plant's pellet storage capacity. Pellets from the storage silos are then placed onto trains or trucks to transport to end users.

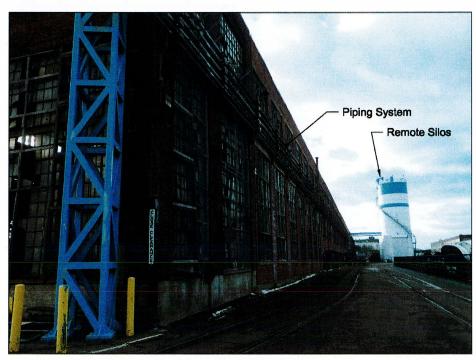


Figure 2 – Pellet Piping

The pellet piping conveyance system was originally installed on the exterior northern wall of Building No 11 in the Fore River shipyard (figure 2). MWRA executed a Letter of Intent with March Fourth, LLC to sell the building in August 2012. March Fourth demolished the entire building in 2018 after a portion of the roof collapsed. The existing pipeline system has been removed and is presently out of service. The remote silos cannot be utilized for storage of pellets until the new pipe system is replaced.

With the loss of storage, NEFCo has been required to move some of the pellets that would normally be stored in the remote silos, at a higher cost. Staff provided an update to the Board on the pipe system situation at the January 16, 2019 meeting. The Board approved Amendment 2 to Contract S345, Operations and Maintenance of the Fore River Pelletizing Plant, for an amount not to exceed \$440,000 to cover the additional costs through December 31, 2020.

Under this contract, staff anticipate the new piping system will be installed and fully functional before the end of December 2020. The work includes demolition of an existing 10-inch storm drain line, reconfiguration of the existing electrical duct bank system, reconfiguration of a portion of the existing railroad tracks, installation of 31 standalone pipe supports and associate pneumatic and pellet conveyance piping systems, temporary power during construction and the disposal of hazardous materials.

#### **Procurement Process**

Contract 7173 was bid in accordance with Chapter 149 of Massachusetts General Laws and publicly advertised in the Central Register, Boston Herald, Banner Publications and El Mundo. General bids were received, opened and reviewed on June 26, 2019, from the following three contractors:

| Bidders                            | Bid Amount  |
|------------------------------------|-------------|
| Engineer's Estimate                | \$3,200,000 |
| Walsh Construction Company II, LLC | \$4,250,445 |
| William M. Collins Co., Inc.       | \$5,658,061 |
| IPC Lydon, LLC                     | \$6,187,762 |

Walsh Construction Co. II, LLC's bid was the lowest at \$4,250,445, which is \$1,050,445 or 32.8% higher than the Engineer's Estimate.

Staff reviewed Walsh Construction Company II, LLC bid in detail, and conducted a formal interview with the Contractor on July 1, 2019. Staff have determined that the bid is complete, reasonable, and includes the payment of prevailing wages as required. As a result of the bid review, Contractor interview and discussions with the Designer (Stantec Consulting Services, Inc.), MWRA staff have determined that the Engineer's Estimate did not include: (1) \$325,000 for Safety and Quality Control Managers and Licensed Site Professional during the construction phase, (2) \$210,000 for mechanical equipment, (3) \$170,000 for the standalone pipe supports, (4) \$137,000 for work associated with the railroad track modifications and (5) \$78,000 in demolition. These five items account for the majority of the difference between the Engineer's Estimate and the lowest bid. References for Walsh Construction Company II, LLC were checked and found to be favorable.

Based upon the information received during the interview, staff are of the opinion that Walsh Construction Company II, LLC understands the scope, nature, and complexity of the project, has the skill, ability, and integrity necessary to complete the work, and is qualified to do so.

Therefore, staff recommend that Contract 7173 be awarded to Walsh Construction Company II, LLC as the lowest responsible and eligible bidder.

# **BUDGET/FISCAL IMPACT:**

The FY20 Capital Improvement Program includes \$3,150,000 for the Piping Relocation project. The award amount is \$4,250,445 or \$1,100,445 over budget. 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. The Affirmative Action and Compliance Unit has reviewed the bid and has determined that it meets these requirements.

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

**DATE:** 

July 17, 2019

**SUBJECT:** 

Technical Assistance Consulting Services – Deer Island Treatment Plant

Brown and Caldwell - Contract 7644 Hazen and Sawyer, PC - Contract 7645

Wright-Pierce - Contract 7646

**COMMITTEE:** <u>Wastewater Policy & Oversight</u>

INFORMATION

X\_VOTE

Michele S. Gillen

Director of Administration

David Duest, Director, Deer Island WWTP Richard J. 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 select Brown and Caldwell, Hazen and Sawyer, P.C., and Wright-Pierce to provide as-needed technical assistance consulting services for the Deer Island Treatment Plant and to authorize the Executive Director, on behalf of the Authority, to execute Contract 7644 with Brown and Caldwell, Contract 7645 with Hazen and Sawyer, P.C. and Contract 7646 with Wright-Pierce, each in an amount not to exceed \$1,800,000 each and for a contract term of three years from the Notice to Proceed.

# **DISCUSSION:**

Over the past 20 years, MWRA has awarded many as-needed technical assistance contracts to supplement in-house staff on high priority or unanticipated projects for the Deer Island Treatment Plant and to provide expertise on short-term assignments requiring specialized engineering disciplines that are not cost effective for MWRA to maintain on an in-house basis. Under previous technical assistance contracts at the plant, MWRA has issued task orders for a wide variety of design and inspection services, including:

- Internal and external chemical tank inspections
- Miscellaneous upgrades and repairs at the Clinton Wastewater Treatment Plant
- Roof replacement for multiple buildings
- Corrosion evaluation on various process equipment, concrete tanks and pipeline systems
- Evaluating alternatives for the replacement of current rotary drum dryers at the Pelletizing facility
- Emergency Repair of Gravity Thickener No. 5 Center Column

These contracts include several specialized engineering disciplines such as architecture, geotechnical, surveying, fire protection, control systems, chemical, corrosion and odor control, permitting, and security. The contracts are written to ensure that adequate resources are available to quickly and comprehensively respond to MWRA's needs, particularly when emergency or unanticipated situations arise.

The Deputy Chief Operating Officer is required to approve task orders up to and including \$50,000; and the Chief Operating Officer must approve any task order greater than \$50,000 and up to and including \$100,000. In the event that a Task Order greater than \$100,000 is needed, the Chief Operating Officer will confer with the Executive Director prior to approval.

## **Procurement Process**

On June 8, 2019, MWRA issued a one-step Request for Qualifications Statements/Proposals (RFQ/P) that was publicly advertised in the Central Register, Boston Herald, Banner Publication and El Mundo. On June 26, 2018, proposals were received from the following 6 firms: AECOM Technical Services, Inc., Brown and Caldwell, Hazen and Sawyer, P.C., Kleinfelder Northeast, Inc., Stantec Consulting Services Inc. and Wright-Pierce. The RFQ/P included the following evaluation criteria and points: Cost - 25 points; Qualifications and Key Personnel - 25 points; Experience/Past Performance - 25 points; Capacity/Organization and Management Approach - 12 points; Technical Approach - 10 points; and MBE/WBE Participation - 3 points.

Since the exact scope and estimated labor hours that will ultimately be required under the contract are unknown, staff developed a sample cost exercise designed to compare the costs of the proposers. MWRA provided an approximate total number of hours that may be expended based on the average annual distribution of hours from prior technical assistance contracts, and required the proposers to provide average chargeable hourly rates per labor category, including multipliers incorporating indirect costs and profit. Proposers' submitted rates were inserted into the formula and the results are as follows:

| PROPOSER                         | SAMPLE COST EXERCISE ESTIMATE |
|----------------------------------|-------------------------------|
| Brown and Caldwell               | \$1,668,045.09*               |
| AECOM Technical Services, Inc.   | \$1,756,043.39*               |
| Wright-Pierce                    | \$1,759,136.97                |
| Stantec Consulting Services Inc. | \$1,793,782.87                |
| Engineer's Estimate              | \$1,800,000.00                |
| Kleinfelder Northeast, Inc.      | \$1,823,781.97*               |
| Hazen and Sawyer, P.C.           | \$1,827,821.44*               |

\*Reflects corrections made due to minor mathematical errors/rounding.

The sample cost exercise estimates ranged from 7.3% below to 1.6% above the Engineer's Estimate. The five voting members on the Selection Committee reviewed, scored and ranked the proposals as follows:

|                                  |             | Order of  |         |
|----------------------------------|-------------|-----------|---------|
|                                  | Total       | Prefence* |         |
| Proposer                         | Final Score | Points    | Ranking |
| Hazen and Sawyer, P.C.           | 408.0       | 6         | 1       |
| Wright-Pierce                    | 365.4       | 12        | 2       |
| Brown and Caldwell               | 345.4       | 19        | 3       |
| Kleinfelder Northeast, Inc.      | 343.1       | 20        | 4       |
| Stantec Consulting Services Inc. | 330.5       | 22        | 5       |
| AECOM Technical Services, Inc.   | 304.7       | 26        | . 6     |

\*Order of Preference represents the sum of individual Selection Committee members' rankings where the firm receiving the highest number of points is assigned a "1", the firm receiving the next highest number of points is assigned a "2," and so on.

Hazen and Sawyer was ranked first by four of the five of the Selection Committee members and received the highest number of points in four of the evaluation categories. The Selection Committee was in agreement that Hazen's proposal was excellent. Although Hazen had the highest overall price in the cost exercise, Hazen requested only one salary waiver and offered a reduced fee of 2%, included key personnel with excellent qualifications and experience, and submitted a very strong technical approach. Hazen's cost exercise was about 1% greater than the Engineer's Estimate. The proposed project team has extensive relevant experience, including working for the MWRA on several technical assistance contracts and Nut Island evaluation and design projects. Hazen also proposed numerous multidisciplinary key personnel and specialty subconsultants. Hazen is also the current Consultant for one of the Agency-Wide Technical Assistance Consulting Services contracts (Contract 7604). Hazen's references on both Authority and non-Authority projects were excellent. Authority staff reported that Hazen's performance on the existing and past Technical Assistance contracts has been very good to excellent, and the proposed Project Manager is very organized, has good technical knowledge, and has been very responsive to MWRA needs and requirements. Hazen's Technical Approach was excellent, and demonstrated a clear understanding of the process, including an evaluation of alternatives, emphasis on communication, the importance of quality assurance/quality control and management and execution of short notice assignments.

Wright-Pierce proposed the third lowest cost and was ranked second overall by the Selection Committee members. Three of the five Selection Committee member ranked Wright-Pierce second, with the two other members ranking it third. Wright-Pierce's cost exercise was approximately 2% lower than the Engineer's Estimate. The firm provided excellent key personnel. Wright-Pierce's proposal identified several multidisciplinary personnel that would be available to work on this contract. Wright-Pierce identified Green International Affiliates specialty subconsultants as part of the team, which will be utilized for Civil and Architecture work. Key personnel appear to be well qualified and meet the experience requirements. The external Wright-Pierce references for both water and wastewater projects are excellent.

Brown and Caldwell proposed the lowest cost and was ranked third overall by Selection Committee members. The Selection Committee was in agreement that Brown and Caldwell's proposal was very good. In addition to Brown and Caldwell low cost, it also included a 7% cap on the fee. In addition, it included key personnel with very good qualifications and experience, and included a strong technical approach. The proposed project team has extensive relevant wastewater experience, including working for the MWRA on two prior Deer Island technical assistance

contracts. Brown and Caldwell is currently the Consultant for one of the Deer Island Technical Assistance Consulting Services contracts (Contract 7501). Brown and Caldwell's references on both Authority and non-Authority projects were good. MWRA staff reported that Brown and Caldwell's performance on the existing and past Technical Assistance contracts has been good overall, and the proposed Project Manager is well organized, has good technical knowledge, and has been very responsive to MWRA needs and requirements. Finally, Brown and Caldwell's Technical Approach was good, and demonstrated a clear understanding of the MWRA process.

Based on final rankings, and for the reasons set forth above, the Selection Committee recommends the award of Contract 7644 to Brown and Caldwell, Contract 7645 to Hazen and Sawyer, P.C. and Contract 7646 to Wright-Pierce., each in an amount not to exceed \$1,800,000 and for a contract term of 36 months from the Notice to Proceed.

## **BUDGET/FISCAL IMPACT:**

The FY20 Capital Improvement Program budget includes \$2,800,000 each for three 3-year Deer Island Technical Assistance Consulting Services contracts (Contract 7644, Contract 7645 and Contract 7646).

## **MBE/WBE PARTICIPATION:**

The Affirmative Action and Compliance unit established a MBE/WBE participation requirement of 0% for this contract. However, Hazen and Sawyer proposed 2% WBE, Wright-Pierce proposed 0% and Brown and Caldwell proposed < 3% MBE and < 3% WBE participation, which becomes a requirement for this contract.



## MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard 100 First Avenue, Building 39 Boston, MA 02129

Telephone: (617) 242-6000

Fax: (617) 788-4899 TTY: (617) 788-4971

## WATER POLICY & OVERSIGHT COMMITTEE MEETING

## to be held on

Wednesday, July 17, 2019

Chair: B. Peña Vice-Chair: C. Cook Committee Members:

J. Carroll

J. Foti

A. Pappastergion

H. Vitale J. Walsh

J. Wolowicz

Location:

100 First Avenue, 2nd Floor

Charlestown Navy Yard

Boston, MA 02129

Time:

Immediately following Wastewater Committee

## **AGENDA**

## A. Contract Awards

1. Section 22 Rehabilitation Alternative Analysis and Environmental Permitting: Black & Veatch, Contract 7155

## B. <u>Contract Amendments/Change Orders</u>

 Bellevue 2 and Turkey Hill Water Tank Painting Project: Worldwide Industries Corp., Contract 7634, Change Order 7

## //1//19

## MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the
Water Policy and Oversight Committee
June 19, 2019

A meeting of the Water Policy and Oversight Committee was held on June 19, 2019 at the Authority headquarters in Charlestown. Committee Member Pappastergion presided. Present from the Board were Ms. Wolowicz and Messrs. Carroll, Cotter, Foti, Flanagan, Vitale and Walsh. Messrs. Cook and Peña were absent. Among those present from the Authority staff were Frederick Laskey, Carolyn Francisco Murphy, David Coppes, Carolyn Fiore, Ethan Wenger, Mark Johnson and Kristin MacDougall. The meeting was called to order at 11:35 a.m.

## **Contract Awards**

Section 22 Rehabilitation Alternative Analysis and Environmental Permitting: Black & Veatch, Contract 7155

There were questions and answers. Item postponed (ref. W A.1).

## **Other Business**

Ms. Wolowicz discussed concerns brought to her attention regarding the condition of the Quabbin Cemetery. (Mr. Foti joined the meeting.) There was discussion. (Mr. Pappastergion briefly left and returned to the meeting during discussion.) Staff will review the matter further and provide an update at a future Board meeting.

The meeting adjourned at 12:03 p.m.

## STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

July 17, 2019

**SUBJECT:** 

Section 22 Rehabilitation Alternatives Analysis and Environmental Permitting

Black & Veatch Corporation

Contract 7155

**COMMITTEE**: Water Policy & Oversight

INFORMATION

X VOTE

Michele S. Gillen

Director of Administration

John P. Colbert, P.E., Chief Engineer Paul T. Rullo P.E., Program Manager

Preparer/Title

David W. Coppes, P.E.

Chief Operating Officer

This item was postponed at the May 29, 2019 and the June 19, 2019 Board Meetings so that staff could provide further information for the Board's review and to revise staff's recommendation to the Board.

## **RECOMMENDATION:**

To approve the recommendation of the Consultant Selection Committee to award Contract 7155, Section 22 Rehabilitation Alternatives Analysis and Environmental Permitting, to Black & Veatch Corporation, and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the amount of \$2,870,000 for a contract term of 36 months from the Notice to Proceed. Following the notice to proceed, MWRA staff shall provide the Board quarterly updates of the condition assessment program and upcoming planned condition assessment activities.

## **BACKGROUND:**

MWRA's Section 22 is part of the Southern High service area that provides drinking water to five Quincy revenue meters and one Boston revenue meter and delivers water to the Blue Hills Covered



Figure 1 – Marsh between Rte. 93 and Granite Ave., Milton

Storage facility. The northern portion of Section 22 is the focus of this project, which is a 48-inch diameter steel water main installed in 1957. In addition to the 16,000 linear feet of the northern portion of Section 22, this project also includes 6,000 linear feet of Section 21 which is a 24-inch diameter cast iron water main installed in 1896. Section 21 provides an operational interconnection between the northern portion of Section 22 and Section 107 (see attached map).



Figure 1 - Section 22 under the Neponset River, Boston/Milton

Black & Veatch was the Consultant on the Southern Spine Distribution Mains Project, Contract 6290, which included redundant pipeline Section 107 and rehabilitation of the entire length of Section 22. However, due to an alternatives analysis and environmental permitting issues, it was decided that the work of this project, the northern portion of Section 22, would be bid at a later date.

The scope of the contract includes condition assessment, evaluation, alternatives analysis, and permitting for replacement or rehabilitation of over 4 miles of Sections 21 and 22 piping. Approximately 1.2 miles of this pipe is within DCR's Neponset River Estuary, which is designated by the Commonwealth as an Area of Critical Environmental Concern (ACEC). Section 22 includes a crossing of both the Neponset River and Route 93. To support appropriate decision making regarding the upgrade of the pipelines, a preplanning assessment phase, condition assessment program, evaluation and alternatives analysis will be completed. Depending upon the results of the alternatives analysis, an Environmental Impact Report will likely be required which is included in the scope of services of this Contract.



Figure 2 - Route 93 crossing near Granite Avenue, Milton

The preplanning assessment phase will include a review of leak and maintenance history, a review of as-built drawings, easement review and a review of hydraulic operating conditions. Hydraulic analysis will be completed to evaluate the appropriate diameter of the proposed piping alternatives and determine if a smaller diameter can be used.

The field condition assessment program includes many technologies to determine

the pipe condition so that a decision can be made to repair or replace the pipeline and to determine the construction methods to use. The technologies include:

- Geotechnical borings to identify soil corrosivity and environmental hazardous materials.
- Acoustic leak detection to determine if there are any active leaks on the pipelines.
- Internal pipe inspection to identify pipe wall loss and corrosion pits through the use of an intelligent pipe pig that measures pipe thickness as it moves through the pipeline.

• Field test pits to determine the exterior pipe condition, pier condition and remaining pipe life. Pipe coupons will be removed from the piping and sent for material testing to determine the pipe wall thickness and corrosion mechanisms.

The field program will be initiated with four field test pits to provide an evaluation of the pipe condition. The location of test pits will be based upon leak history, known pipe information and soil conditions. If the initial test pit review determines the pipe is compromised, additional condition assessment will not be completed. This may result in a significant reduction in the cost of the condition assessment program.

If the field test pits determines the pipe condition is acceptable, additional condition assessment will be considered including internal non-destructive testing, leak testing, additional geotechnical borings and additional test pits.

The field program results will determine which sections of pipeline require rehabilitation or replacement. The cost of rehabilitation of a 48" pipe using cleaning and lining is approximately \$400 a linear foot compared to a cost of over \$1000 a linear foot for pipe replacement. Significant construction savings will be realized if the condition assessment determines that the piping is in good condition and clean and lining is viable for the pipelines.

An alternative analysis will then be completed to review rehabilitation techniques, including cleaning and cement lining or slip lining, which will be evaluated along with pipeline materials for replacement areas. For the Neponset River Estuary and Route 93 crossings, trenchless replacement techniques will be considered including horizontal directional drilling or micro tunneling. A recommended alternative will be developed and used for permitting activities including an Environmental Notification Form and an Environmental Impact Report, if required.

The largest cost component of this project is the pipeline condition assessment with a total not-to-exceed cost of \$1,625,890. The pipeline condition assessment will progress in a planned sequential process to ensure that only required testing is being performed. The pipeline condition assessment costs are conservative for this project due to the location of the pipeline in the ACEC, a crossing of the Neponset River, and a crossing of Route 93. Any additional analysis will provide benefits in the final design to ensure a cost effective repair or replacement alternative is selected.

The Pipeline Condition Assessment Costs include the following:

| Pipeline Condition Assessment          | \$ 578,196 |
|--|------------|
| Review of past leaks and documentation |            |
| Permitting for test areas              |            |
| Boring Plan                            |            |
| Geotechnical analysis and Data Report  |            |
| Construction Zone Safety Plans         |            |
| Hazardous soil review                  |            |
| Groundwater analysis                   |            |
| Corrosion analysis                     |            |
| Test Pit Plan                          |            |

| Condition Assessment Technical Memorandum |              |
|---|--------------|
| Subcontractors                            |              |
| Leak Detection Survey                     | \$ 54,050    |
| Borings                                   | \$ 348,644   |
| Internal Pipe Inspection                  | \$ 275,000   |
| Test Pits                                 | \$ 370,000   |
| Total                                     | \$ 1,625,890 |

The second largest cost is the environment assessment cost of \$440,282

| Environmental Assessment and Environmental Technical Memorandum | \$ 143,918 |
|---|------------|
| Alternatives Report and Environmental Notification Form         | \$ 101,181 |
| Environmental Impact Report                                     | \$ 195,183 |
| Total   | \$ 440,282 |

The remaining costs of \$284,700 are for project management, water system hydraulic analysis and review of the project's technical and historical background. An allowance of \$500,000 is included for police details, traffic control, pavement restoration of test pits and additional test pits, if necessary.

A review of other recent water pipeline projects was completed to compare to this project's costs. The proposed cost for this pipeline condition assessment is \$74 per linear foot. Additional condition assessment is required on this project that is not normally completed as part of pipeline rehabilitation projects:

- Test pits in wetlands that require additional permitting.
- Test pits and assessment of pipe pier supports.

The following two recent projects were used to compare pipeline condition assessment costs.

- Weston Aqueduct Supply Mains 3 is currently in design (60%) to determine a repair, or replacement, strategy for 50,000 linear foot of 60-inch diameter pipeline. The pipeline condition assessment cost was \$3,000,000 or \$60 per linear foot as planned in 2013. Inflated to 2019 the cost is \$72 per linear foot.
- Water Sections 50 and 57 and Sewer Sections 19/20/21 is currently in design (60%) and includes 20,000 linear feet of 20-inch and 48-inch diameter pipe and 11,000 linear feet of 51-inch x 54-inch to 56-inch x61-inch brick sewers. The pipeline condition assessment of the water pipeline was completed in 2018 at a cost of \$1,450,000 or \$72 per linear foot. Inflated to 2019 the cost is \$74 per linear foot.

The cost of the condition assessment of this project is reasonable based upon the review of the recent data.

### **Procurement Process**

On March 2, 2019, MWRA issued a one-step Request for Qualifications Statements/Proposals (RFQ/P) that was publicly advertised in the Central Register, Boston Herald, Banner Publication and El Mundo. 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 Past Performance on Authority Projects (25 points); Technical Approach, Capacity, and Organizational & Management Approach (20 points); Minority/Woman Business Enterprise (5 points).

On April 11, 2019, MWRA received proposals from the following three firms: Black & Veatch, Hazen and Sawyer, and Kleinfelder. The following represent the cost and level of effort proposed by each firm:

| Proposer            | Proposed Cost   | Other Direct Costs** | Proposed Hours |
|---------------------|-----------------|----------------------|----------------|
| Black & Veatch      | \$2,870,000.00  | \$1,633,636          | 8,863          |
| Kleinfelder         | \$3,108,086.80* | \$2,043,288          | 8,070          |
| Hazen Sawyer        | \$4,395,884.00  | \$2,166,427          | 14,498         |
| Engineer's Estimate | \$2,160,000.00  | \$1,260,000          | 6,400          |

<sup>\*</sup> Reflects corrections due to mathematical errors.

The Selection Committee met on May 8, 2019 to evaluate and rank the proposals; the results are presented below.

|                  | Total       | Order of Preference* |         |
|------------------|-------------|----------------------|---------|
| Proposer         | Final Score | Points               | Ranking |
| Black & Veatch   | 408.0       | 6                    | 1       |
| Kleinfelder      | 376.0       | 9                    | 2       |
| Hazen and Sawyer | 340.5       | 15                   | 3       |

<sup>\*</sup>Order of Preference represents the sum of the individual Selection Committee member's rankings where the firm receiving the highest number of points is assigned a "1," the firm receiving the next highest number of points is assigned a "2," and so on.

Black & Veatch presented the lowest price, approximately 7.7% lower than the second-ranked Kleinfelder, while providing nearly 800 more hours than Kleinfelder. Staff also reviewed Black & Veatch's proposal against the engineer's estimate. While all three proposals significantly exceeded the engineer's estimate, Black & Veatch's price was closest at \$710,000 above the engineer's estimate. Upon review, staff attribute the price difference to three areas: engineering costs associated with the pipeline condition assessment (\$400,000), specialty subcontractor costs to perform the pipeline condition assessment (\$250,000), and project management (\$60,000). The scope of services has been expanded to require the Consultant's project engineer be on site when subcontractors are performing field work and to include additional borings in the Neponset River

<sup>\*\*</sup> Consultant's Other Direct Costs include subcontractor's costs for the pipeline condition assessment program (geotechnical and environmental borings, leak detection survey, test pits, nondestructive internal pipe testing, pipeline coupon sampling, and laboratory analysis) and allowances.

Estuary. The engineer's estimate was not updated to include the cost for this additional scope. Staff also underestimated the project management hours required to supervise the large project team of engineering firms and utility subcontractors. Also, the pipeline condition assessment program was underestimated. Correcting for these variances, and considering the substantially higher hours offered, the Consultant Selection Committee considered the overall cost presented by Black & Veatch reasonable.

Black & Veatch offered well-qualified personnel who have extensive and relevant experience in performing pipeline condition assessments, planning, environmental permitting, design of large diameter pipelines, and significant knowledge of the operational requirements of the MWRA system. A subconsultant to Black & Veatch, VHB, has extensive experience with the MEPA process and is currently the lead environmental permitting firm for MassDOT's South Coast Rail project.

The Black & Veatch team provided extensive documentation of its experience and past performance. In addition to positive references for performance on significant similar out of state projects, the firm has successfully managed several pipeline projects for MWRA including the Southern Spine Distribution Mains Section 107 located in Boston, Milton, and Quincy, and the rehabilitation of the southern portion of Section 22. Black & Veatch has also successfully worked on other MWRA water main and pump station projects. The Selection Committee determined that Black & Veatch proposed a highly qualified team with appropriate past experience. Black & Veatch also demonstrated a full understanding of the project requirements in its Technical Approach, and has the capacity, organization and management approach necessary to manage and complete the project.

The Selection Committee concluded that both the Kleinfelder team and the Hazen and Sawyer team, although capable of performing the work, do not have the depth and experience offered by the Black & Veatch team, and their costs were less competitive.

Based on the voting of the Selection Committee, staff recommend the award of this contract to Black & Veatch Corporation in the amount of \$2,870,000.

## **BUDGET/FISCAL IMPACT:**

The FY19 CIP includes a budget of \$1,000,000 for Contract 7155; the recommended contract amount is \$2,870,000 or \$1,870,000 over budget. This amount will be covered within the five-year CIP spending cap. The Draft Final FY20 CIP includes a budget of \$2,900,000.

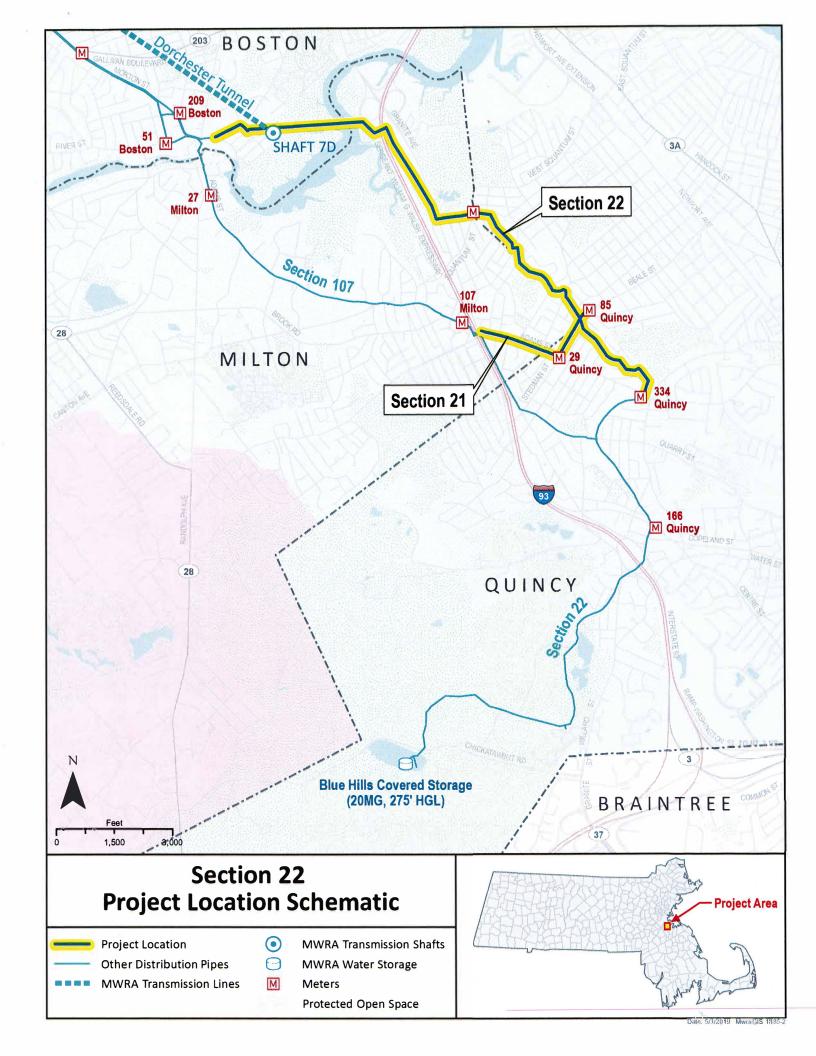
## **MBE/WBE PARTICIPATION**:

The MBE and WBE participation requirements for this contract were established at 7.18% and 5.77%, respectively. Black & Veatch proposed 25.4% MBE and 15.6% WBE participation which becomes a requirement for this contract.

## **ATTCHMENT:**

Section 22 – Project Map

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### STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

**DATE:** 

July 17, 2019

**SUBJECT:** 

Bellevue 2 and Turkey Hill Water Tank Painting Project

Worldwide Industries Corp. Contract 7634, Change Order 7

**COMMITTEE**: Water Policy & Oversight

INFORMATION

X VOTE

Corinne M. Barrett, Director, Construction <u>Jeffrey Bina, P.E. Construction Coordinator</u> 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 7 to Contract 7634, Bellevue 2 and Turkey Hill Water Tank Painting Project, for an amount not to exceed \$250,000.00, increasing the contract from \$4,150,249.17 to \$4,400,249.17, and extending the contract term by 60 calendar days from July 30, 2019 to September 28, 2019.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 7634 in an amount not to exceed the aggregate of \$250,000, in accordance with the Management Policies and Procedures of the Board of Directors.

## **DISCUSSION:**

The Bellevue 2 Tank, located in Boston, is a 3.7 million gallon (MG) welded steel water tank, 100 feet in diameter and 64 feet high. The tank was built in 1955 and operates within the Southern Extra High Pressure Zone. The tank is equipped with an impressed current cathodic protection system that is being replaced.

The Turkey Hill Tank, located in Arlington, is a 2.0 MG welded steel standpipe tank, operating in the Northern Extra High Pressure Zone. It is 75 feet in diameter and 65 feet high. The tank was built in 1945 and a mechanical mixer was installed in 2017. The tank is equipped with an impressed current cathodic protection system which needs to be replaced.

Both the Bellevue 2 and Turkey Hill steel water storage tanks were last painted in 1997. MWRA performs water tank inspections every three to five years. Recent inspections identified the need to repaint both the interior and the exterior of both tanks and perform miscellaneous structural repairs. Repainting includes removal of the existing coating to bare metal prior to the application of the new coating system. There are also concrete repairs to be made at the bases of the tanks, and the temporary removal of cell and telecommunication equipment at Turkey Hill. Scaffolding has been

designed and been erected, and is supporting the relocated cell equipment during the tank painting. Upon completion of the painting, the cell equipment will be reinstalled on the tank.

## This Change Order

Change Order 7 consists of the following item:

Remove and Dispose of Delaminated Foundation Wall Surfaces, Prepare the Concrete Substrate, Perform Repairs and Extend the Contract Time by 60 Calendar Days

Not to Exceed \$250,000.00

At the Turkey Hill water tank, contract documents include limited repair work to the concrete foundation. The contract documents direct the Contractor to replace the top three feet of deteriorated concrete foundation and allow for up to 60 square feet of additional spall repairs by removing deteriorated concrete, cleaning and preparing the substrate and placing new repair mortar. Upon



Concrete Foundation at Turkey Hill Tank showing existing rebar and extensive delamination

feet for a total area of approximately 1,452 square feet.

Repair recommendations call for removal and disposal of all delaminated cementitious material to sound substrate; then a new cementitious repair with appropriate reinforcing steel and anchoring methods, and repair of any structural cracks.

Due to the extensive concrete repairs required on

commencing demolition of the delaminated sections of the foundation, it became apparent that the condition of the concrete was worse than anticipated and is widespread over the surface area. Further investigation by the design engineer indicates that over 80 percent of the foundation wall top and side surfaces have extensive delamination of earlier cementitious repairs done in 1956 and again in 1999. This damage in the concrete is primarily due to multiple freeze-thaw cycles over the last 63 years eventually causing failure. The foundation has a maximum height of 6 feet and a circumference of approximately 242

Due to the extensive concrete repairs required on the foundation it is necessary to extend the contract time by 60 calendar days to allow for completion of this work.

The approved PCO for this item was identified by MWRA staff as an unforeseen condition. MWRA staff and the Contractor have agreed to a not to exceed amount of \$250,000.00 for this additional work; and to extend the contract term by 60



Core Sample from Foundation Showing Deteriorated Concrete

calendar days from July 30, 2019 to September 28, 2019. Work associated with this proposed change order has not begun.

## **CONTRACT SUMMARY:**

| AMOUNT              | TIME   | DATED   |
|---------------------|--|---|
| \$3,962,463.00      | 180 Days   | 08/22/18  |
|                     |  |   |
|                     |  |   |
| \$10,000.00         | 0 Days   | 11/19/18  |
| \$6,588.77          | 0 Days   | 01/15/19  |
| \$120,104.80        | 102 Days   | 02/04/19  |
| \$47,250.00         | 0 Days   | 03/19/19  |
| \$3,842.60          | 0 Days   | 05/28/19  |
| \$0.00              | 60 Days  | 06/18/19  |
| <u>\$250,000.00</u> | <u>60 Days</u>   | Pending   |
| \$437,786.17        | 222 Days   | _   |
| \$4,400,249.17      | 402 Days   |   |
|                     | \$10,000.00<br>\$6,588.77<br>\$120,104.80<br>\$47,250.00<br>\$3,842.60<br>\$0.00<br>\$250,000.00<br>\$437,786.17 | \$3,962,463.00 180 Days \$10,000.00 0 Days \$6,588.77 0 Days \$120,104.80 102 Days \$47,250.00 0 Days \$3,842.60 0 Days \$0.00 60 Days \$250,000.00 60 Days \$437,786.17 222 Days |

<sup>\*</sup>Approved under delegated authority

If Change Order 7 is approved, the cumulative total value of all change orders to this contract will be \$437,786.17 or 11.0% of the original contract amount. Work on this project is approximately 80% complete.

## **BUDGET/FISCAL IMPACT:**

The FY20 Capital Improvement Program includes a budget of \$4,153,907.00 for Contract 7634. Including this change order for \$250,000.00, the adjusted subphase total will be \$4,400,249.17 or \$246,342.17 over budget. This amount will be absorbed within the five-year CIP spending cap.

## **MBE/WBE PARTICIPATION:**

The MBE and WBE participation requirements for this contract have been established at 7.24% and 3.6 %, respectively. Given the limited opportunities for subcontracting and the Contractor's good faith efforts to secure participation, the Affirmative Action Compliance Unit has waived the MBE and partially waived the WBE requirements.

# Frederick A. Laskey

**Executive Director** 

## **MASSACHUSETTS WATER RESOURCES AUTHORITY**

Charlestown Navy Yard 100 First Avenue, Building 39 Boston, MA 02129

Telephone: (617) 242-6000

Fax: (617) 788-4899

TTY: (617) 788-4971

## PERSONNEL & COMPENSATION COMMITTEE MEETING

## to be held on

Wednesday, July 17, 2019

Chair: J. Wolowicz Vice-Chair: K. Cotter Committee Members:

J. Carroll

P. Flanagan

J. Foti A. Pappastergion

H. Vitale

J. Walsh

100 First Avenue, 2nd Floor Location:

Charlestown Navy Yard

Boston, MA 02129

Time:

Immediately following Water Committee

## **AGENDA**

### A. **Approvals**

- 1. PCR Amendments - July 2019
- 2. Appointment of Director, Management Information Systems, Administration Division

## MASSACHUSETTS WATER RESOURCES AUTHORITY

## Meeting of the Personnel and Compensation Committee June 19, 2019

A meeting of the Personnel and Compensation Committee was held on June 19, 2019 at the Authority headquarters in Charlestown. Committee Chair Wolowicz presided. Present from the Board were Messrs. Carroll, Cotter, Foti, Flanagan, Pappastergion, Vitale and Walsh. Messrs. Cook and Peña were absent. Among those present from the Authority staff were Frederick Laskey, Carolyn Francisco Murphy, David Coppes, Carolyn Fiore, Michele Gillen, Andrea Murphy and Kristin MacDougall. The meeting was called to order at 12:04 p.m.

## **Approvals**

## \* FY2020 Non-Union Compensation

The Committee recommended approval (ref. P&C A.1).

## \* Appointment of Budget Director, Finance Division

There were questions and answers.

The Committee recommended approval (ref. P&C A.2).

## \* Appointment of Program Manager, Energy Management, Deer Island

There was brief discussion and questions and answers.

The Committee recommended approval (ref. P&C A.3).

## \* Extension of Employment Contract for Copy and Supply Clerk, Administration Division

The Committee recommended approval (ref. P&C A.4).

<sup>\*</sup> Committee recommendation approved by the Board on June 19, 2019

## \* Authority Accountability and Transparency Act Compliance

Committee Chair Wolowicz recommended that the meeting adjourn and reconvene at 1:00 p.m. to discuss executive compensation, independent of MWRA management (ref. P&C B.1).

The meeting adjourned at 12:08 p.m.

\*\*\*

## Annual Meeting of the Personnel and Compensation Committee Independent of Management

The Committee and MWRA staff reviewed meeting procedures. The meeting was then called to order at 1:06 p.m. in compliance with the provisions of the above-referenced Act. The only MWRA staff member present at the meeting was Kristin MacDougall, Assistant to the Board of Directors. Andreae Downs (WAC Executive Director) was also in attendance. Members of the Committee analyzed and assessed the data provided regarding executive compensation at comparable state agencies and authorities, as well as for-profit private sector employees, and national water and wastewater utilities. There was general discussion. It was observed that the level of MWRA compensation was in the mid- to lower range of similar positions at other entities (ref. item P&C B.1) and, in particular, in the case of the position of Executive Director.

The meeting adjourned at 1:14 p.m.

<sup>\*</sup> Committee recommendation approved by the Board on June 19, 2019

## STAFF SUMMARY

TO:

Board of Director

FROM:

Frederick A Laskey, Executive Director

DATE:

July 17, 2019

**SUBJECT:** 

July PCR Amendments

**COMMITTEE**: Personnel and Compensation

**INFORMATION** 

**VOTE** 

Andrea Murphy, Director of Human Resources

Preparer/Title

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 must be approved by the Personnel 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 PCR Amendments**

There are four PCR Amendments this month.

The amendments are:

## Organizational Changes

- 1. Title and grade change to one vacant position in the Administration Division, Materials Management department from Inventory Control Supervisor Unit 2 Grade 18, to Asset Control Supervisor Unit 2 Grade 19 to meet staffing needs for Deer Island.
- 2. Title and grade change to one vacant position in the Operations Division, SCADA Department from Senior Monitoring and Control Engineer, Unit 9 Grade 23 to Project Engineer, Monitoring and Control Unit 9 Grade 21 to meet staffing needs and create a career
- 3. Creation of a new position in the Operations Division, SCADA Department as a Program Manager, SCADA Engineering Unit 9 Grade 29 to meet staffing needs on engineering projects and cybersecurity.

4. Title and grade change to one vacant position in the Operations Division, Planning Department from Project Engineer, Unit 9 Grade 21 to Project Manager, GIS Unit 9 Grade 25 to meet staffing needs in the GIS area.

The first two amendments require approval by the Personnel and Compensation Committee. The last two amendments require Board approval after review by the Personnel and Compensation Committee.

## **BUDGET/FISCAL IMPACT:**

The annualized budget impact of these PCR amendments will be a maximum cost of \$142,429. Staff will ensure that the cost increase associated with these PCR amendments will not result in spending over the approved FY20 Wages and Salaries budget.

## **ATTACHMENTS:**

Old Job Descriptions New Job Descriptions

## MASSACHUSETTS WATER RESOURCES AUTHORITY POSITION CONTROL REGISTER AMENDMENTS FISCAL YEAR 2020

|        |   |     |      | PCR A                                       | AMENDI | MEN.     | TS REQUIRING PERSONNEL &                 | CON | IPENS | SATION COMMITTE | E APPROVAL | - July 17, 201 | 9         |          |  |
|--------|---|-----|------|---|--------|----------|--|-----|-------|-----------------|------------|----------------|-----------|----------|--|
|        | Current   |     |      |   |        |          |  |     |       | Current/Budget  | Estir      | mated          | Estimate  | d Annual | Reason   |
| Number | PCR#  | V/F | Тур  | e Current Title                             | UN     | GR       | Amended Title                            | UN  | GR    | Salary          | New        | Salary         | \$ Im     | pact     | For Amendment                                      |
| P1     | Administration<br>Materials Management<br>8820015 | v   | Т,   | G Inventory Control Supervisor              | 2      | 18       | Asset Control Supervisor                 | 2   | 19    | \$84,011        | \$61,155   | - \$88,154     | -\$22,856 | \$4,143  | To meet staffing needs for Deer Island.            |
| P2     | Operations<br>SCADA<br>5841020                    | v   | Τ, ( | G Senior Monitoring and Control<br>Engineer | 9      | 1        | Project Engineer, Monitoring and Control | 9   | 21    | \$101,240       | \$66,332   | - \$92,263     | -\$34,908 |          | To meet staffing needs and create a career ladder. |
|        | PERSONNEL &                                       | CON | /PEI | NSATION COMMITTEE TOTAL=                    | 2      | <u> </u> |  |     |       |                 | TOTAL:     |                | -\$57,764 | \$4,834  |  |

| •      | PCR AMENDMENTS REQUIRING BOARD APPROVAL - July 17, 2019 |     |      |                    |     |    |                                       |    |    |                |           |             |           |             |  |
|--------|---|-----|------|--------------------|-----|----|---------------------------------------|----|----|----------------|-----------|-------------|-----------|-------------|--|
|        | Current   |     |      |                    | ]   |    |                                       |    |    | Current/Budget | Esti      | nated       | Estimate  | ed Annual   | Reason   |
| Number | PCR#  | V/F | Туре | e Current Title    | UN  | GR | Amended Title                         | UN | GR | Salary         | New       | Salary      | \$ Լր     | npact       | For Amendment  |
| B1     | Operations<br>SCADA<br>N/A                              | N/A | N/A  | N/A                | N/A |    | Program Manager, SCADA<br>Engineering | 9  | 29 | \$0            | \$92,357  | \$128,958   | \$92,357  |             | To meet staffing needs on engineering and cybersecurity. |
| B2     | Operations<br>Planning<br>1510019                       | v   | Т, С | G Project Engineer | 9   | 21 | Project Manager, GIS                  | 9  | 25 | \$92,263       | \$79,356  | - \$110,568 | -\$12,907 | \$18,305    | To meet staffing needs in the GIS area.                  |
|        |   |     |      | BOARD TOTAL =      | 2   | 1  |                                       | -  |    | TOTAL ESTIMAT  |           |             | \$79,450  | - \$147,263 |  |
|        |   |     |      | GRAND TOTAL =      | 4   |    |                                       |    |    | TOTAL ESTIMAT  | ED COSTS: |             | \$21,686  | - \$142,429 |  |

## MWRA POSITION DESCRIPTION



**POSITION:** Inventory Control Supervisor

PCR#:

**DIVISION:** Operations

**DEPARTMENT:** Procurement, Maintenance

## **BASIC PURPOSE:**

Supervises assigned employees involved in the function of stock requisitioning activities, inventory control, and stock issuance and returns. Supervises the efficient utilization of the purchasing and inventory control system. Supports planning efforts conducted by the Maintenance work coordination center. May perform duties of the Warehouse/Inventory Control Manager as required.

## **SUPERVISION RECEIVED:**

Works under the general supervision of the Warehouse/Inventory Control Manager.

## **SUPERVISION EXERCISED:**

Exercises close supervision of the Inventory Control Specialists and other employees assigned.

## **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Supervises efforts for the development of, and recommends new or revised inventory control system reports, systems and procedures changes in work flow, report formats, employees training, etc. Obtains the assistance and cooperation of related functions, such as MIS, Procurement, Maintenance, etc. as required for efficient implementation.
- Supervises periodic inventory audits to identify where recorded information does not reflect actual inventory levels, and recommends and implements corrective action.
- Supervises the efficient utilization of the computer based inventory control system to accurately reflect the issuance, receipt, and transfer of all items, and the count to materials on hand, in accordance with MWRA policies and procedures.
- Reviews any required changes to the Item Master file, and submits to the Warehouse

Managers office for approval.

- Supervises and performs activities to monitor the Inventory Master Records, to assure the
  efficient recording, revision, and utilization of a re-order points, unit costs, and lead
  times.
- Coordinates with the Deer Island staff and MWRA Procurement Department the replenishment of supplies materials equipment and relevant contract services to assure adequate on site inventory.
- Assures stock and non-stock requests for pending work orders are expedited and coordinates with the Maintenance Planning and scheduling Department of efficient Kiting procedures.
- Documents and maintains reports and records for all warehouse functions including material and equipment supplies movement (in-out).
- Identifies and coordinates the disposition of slow moving and/or obsolete material.
- Supervises the physical inventory process in accordance with MWRA, state regulatory and auditing requirements and prepares reports on inventory value.
- Develops and implements a plan for efficient space utilization of the warehouse.
- Recommends improvements to the warehouse management system.
- Ensures warehouse workers follow policies and procedures for materials relative to SARA and safety regulations.
- Utilizes personal computers, data terminals and specialized software packages for material replenishment, inventory control, etc.
- Develops and provides training to assigned staff.
- Reviews quality of work performed and assures that work assigned is completed in accordance with established standards.
- Reviews assigned employees performance in accordance to MWRA procedures.
- Assists employees with preparation of injury and illness reports, safety work orders and maintenance work order requests.
- Assists in maintaining harmonious labor management relations through proper

application of collecting bargaining agreement provisions and established personnel policies.

## **SECONDARY DUTIES:**

Performs other related duties as required.

## **MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) A high school education or the equivalent; and
- (B) Requires from (3) three to (5) five years of warehouse work experience; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) A working knowledge of the principals, procedures, methods and practices of warehousing, procurement and inventory management.
- (B) The ability to plan, organize, direct and assign duties to subordinates as obtained though the successful completion of a supervisory training program or approved substitution.
- (C) Familiarity with the use of bar coding systems another methods of identifying stock is desirable.
- (D) Basic reading, writing, math, science and oral communication skills.

## **SPECIAL REQUIREMENTS:**

Must have Massachusetts Hoisting Operator's License (1C) or acquire within 6 months of appointment.

## **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

Page 3 of 4

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.

The employee must regularly lift and/or move up to 10 pounds. 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 a moderately quiet office setting.

## MWRA POSITION DESCRIPTION



**POSITION:** Asset Control Supervisor

PCR#:

**DIVISION:** Administration & Finance

**DEPARTMENT:** Procurement, Materials Management

## **BASIC PURPOSE:**

Supervises assigned employees involved in the function of asset and inventory control, asset issuance and returns. Supervises the operation, maintenance and audit of various MWRA asset control systems and associated databases. Supervises the efficient utilization of the purchasing and inventory control system. Supports planning efforts conducted by Operations Maintenance work coordination center.

## **SUPERVISION RECEIVED:**

Works under the general supervision of the Materials Manager.

## **SUPERVISION EXERCISED:**

Exercises close supervision of the Inventory Control Specialists and other employees assigned.

## **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Review detailed and written asset control procedures to ensure that all assets purchased under the Property Pass program are tracked and accounted for, including MIS materials.
- Reviews and recommends required changes to Property Pass files, and submits to the Materials Manager for approval.
- Performs activities to monitor the Property Pass Records, to assure the efficient recording, revision, and utilization of reorder points, unit costs, and lead times.
- Documents and maintains reports and records for all asset functions including movement of materials, tools, and equipment.
- Develops and implements a plan for efficient space utilization of the Property Pass areas.

- Recommends improvements to the Property Pass management system.
- Ensures Property Pass staff follows policies and procedures for materials relative to SARA and safety regulations.
- Performs and/or supervise periodic audits to identify where recorded information does not reflect actual asset levels, and recommends and implements corrective action.
- Performs data entry and supervises the efficient utilization of computer based inventory
  control systems to accurately reflect the issuance, receipt, transfer, maintenance and audit
  of assets, in accordance with MWRA policies and procedures.
- Assures asset requests for pending work orders are expedited. Coordinates with MIS and Operations Departments to ensure efficient kitting procedures.
- Supervises the physical asset control process in accordance with MWRA, state regulatory and auditing requirements and prepares reports on asset value.
- Supervises efforts for the development of, and recommends new or revised asset control system reports, systems and procedure changes in work flow, report formats, employees training, etc. Obtains the assistance and cooperation of related functions, such as MIS, Procurement, Maintenance, etc. as required for efficient implementation.
- Supervises the efficient utilization of the computer based inventory control system to accurately reflect the issuance, receipt, and transfer of all items, and the count to materials on hand, in accordance with MWRA policies and procedures.
- Coordinates with the Operations staff and MWRA Procurement Department for the replenishment of materials, equipment and relevant assets to assure adequate on site inventory.
- Identifies and coordinates the disposition of surplus or obsolete material.
- Supervises the physical inventory process in accordance with MWRA, state regulatory and auditing requirements and prepares reports on asset value.
- Utilizes personal computers, data terminals and specialized software packages for asset control, etc.
- Develops and provides training to assigned staff.
- Reviews quality of work performed and assures that work assigned is completed in accordance with established standards.

- Reviews assigned employees performance in accordance to MWRA procedures.
- Assists employees with preparation of injury and illness reports, safety work orders and maintenance work order requests.
- Assists in maintaining harmonious labor management relations through proper application of collecting bargaining agreement provisions and established personnel policies.

## **SECONDARY DUTIES:**

• Performs other related duties as required.

## **MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) A high school education or the equivalent; and
- (B) (2) years supervisory or management experience;
- (C) Requires from (4) four to (6) six years of asset control experience; or
- (D) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) A working knowledge of the principals, procedures, methods and practices of warehousing, procurement and inventory management.
- (B) The ability to plan, organize, direct and assign duties to subordinates as obtained though the successful completion of a supervisory training program or approved substitution.
- (C) Familiarity with the use of bar coding systems and other methods of identifying stock is desirable.
- (D) Proficiency with microcomputer software such as word processing, spreadsheets, and database management.
- (C) Ability to work independently in designing, executing and presenting analyses of detailed asset control issues.

(E) Excellent interpersonal, oral and written communication skills.

## **SPECIAL REQUIREMENTS:**

Must have Massachusetts Hoisting Operator's License (1C) or acquire within 6 months of appointment.

## **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.

The employee must regularly lift and/or move up to 10 pounds. 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 a moderately quiet office setting.

August 2013

## MWRA POSITION DESCRIPTION



**POSITION:** Senior Monitoring & Control Engineer

**DIVISION:** Operations

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

## **BASIC PURPOSE:**

Participates in the design, development, operation and maintenance of the Authority's Water and Wastewater Supervisory Control and Data Acquisition (SCADA) systems. Required to be on-call for emergencies 24 hours a day, 7 days a week.

## **SUPERVISION RECEIVED:**

Works under the general supervision of the Project Manager, SCADA Engineering.

## **SUPERVISION EXERCISED:**

May exercise close supervision of technical and support staff.

## **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Designs, develops, installs and troubleshoots control logic for programmable logic controllers (PLCs) and control system software.
- Designs, develops, installs and troubleshoots Human Machine Interface (HMI) software.
- Assists with the installation, maintenance and troubleshooting of the SCADA network and SCADA PCs.
- Insures in-house and consultant compliance with the SCADA Standards.
- Assists with the installation, maintenance and monitoring of SCADA security systems.
- Assists in the training of staff on the monitoring and control systems.
- Updates records and documentation on SCADA network, PC and PLC installations.
- Assists in the management of SCADA databases and coordinates any necessary changes.

 Maintains SCADA data backups through local node collection and networked archive collection systems.

## **SECONDARY DUTIES:**

• Performs related duties as required.

## **MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) A Bachelor of Science degree in Electronic/Electrical engineering or in a closely related field; and
- (B) Five (5) years experience in the design, installation, operation and maintenance of process control systems of which a minimum of two (2) years related to water or wastewater industry; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Working knowledge of ladder logic and HMI programming.
- (B) Thorough knowledge of PCs, Windows operating systems, Ethernet, network equipment, spreadsheet, and database software
- (C) Ability to troubleshoot to the component level utilizing a variety of electronic test equipment as well as computer driven diagnostics.
- (D) Familiarity with water distribution and treatment systems or wastewater collection and treatment systems.
- (E) Thorough understanding of water and wastewater instrumentation.
- (F) Thorough knowledge of electrical/electronic wiring practices.
- (G) Familiarity with CAD program.
- (H) Demonstrated ability to plan and organize projects, and direct and train others.

(I) Demonstrated interpersonal, written and verbal communication skills.

## **SPECIAL REQUIREMENTS:**

A valid Massachusetts Class D Motor Vehicle Operators License.

Any level of a valid Massachusetts Water Distribution License, Water Treatment License, Wastewater Operator's License or Wastewater Collection System Certification or the ability to obtain within six (6) months.

Ability to pass the Confined Space Entry Training within six months.

## **TOOLS AND EQUIPMENT USED:**

Metering oscilloscopes, signal generator, 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.

November 2013

## MWRA POSITION DESCRIPTION



**POSITION:** 

Project Engineer, Monitoring & Control

**DIVISION:** 

**Operations** 

**DEPARTMENT:** 

**SCADA** 

## **BASIC PURPOSE:**

Develops, operates, and maintains the Authority's Water and Wastewater Supervisory Control and Data Acquisition (SCADA) systems.

## **SUPERVISION RECEIVED:**

Works under the general supervision of the Project Manager, SCADA Engineering.

## **SUPERVISION EXERCISED:**

None.

## **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Develops, installs and troubleshoots control logic for programmable logic controllers (PLCs) and control system software.
- Develops, installs and troubleshoots Human Machine Interface (HMI) software.
- Assists with installing, maintaining, and troubleshooting the SCADA network and SCADA PCs.
- Assists with the installing, maintaining, and monitoring SCADA security monitoring systems and other critical infrastructure cyber security strategies.
- Updates records and documentation on SCADA network, PC and PLC installations.
- Assists in managing SCADA databases and coordinates any necessary changes.
- Maintains SCADA data backups through local node collection and networked archive collection systems.

## **SECONDARY DUTIES:**

• Performs related duties as required.

## MINIMUM QUALIFICATIONS:

## Education and Experience:

- (A) A Bachelor of Science degree in Electronic, Electrical, Mechanical, or Chemical Engineering or Computer Science or in a related field; and
- (B) At least one (1) year of experience in the design, installation, operation and maintenance of process control systems; or
- (C) Any equivalent combination of education and experience.

## Necessary Knowledge, Skills and Abilities:

- (A) Thorough knowledge of PCs, Windows operating systems, Ethernet, network equipment, spreadsheet, and database software
- (B) Ability to troubleshoot to the component level utilizing a variety of electronic test equipment as well as computer driven diagnostics.
- (C) Thorough knowledge of electrical/electronic wiring practices.
- (D) Familiarity with CAD program.
- (E) Demonstrated ability to plan and organize projects.
- (F) Demonstrated interpersonal, written and verbal communication skills.
- (G) Preferred knowledge: Working knowledge of ladder logic and HMI design; familiarity with water distribution and treatment systems or wastewater collection and treatment; understanding of water and wastewater instrumentation systems; knowledge of industrial control system cyber security.

#### **SPECIAL REQUIREMENTS:**

A valid Massachusetts Class D Motor Vehicle Operators License.

Vendor training certification in at least one of the following disciplines: HMI Software, PLC Programming Software, MSCE or Cisco preferred.

Ability to pass the Confined Space Entry Training within six months.

Participates in on-call rotation assignments if needed. In the absence of volunteers, may be required to be on-call or report for overtime/comp time in an inverse seniority pool.

#### **TOOLS AND EQUIPMENT USED:**

Metering oscilloscopes, signal generator, 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 2019** 





**POSITION:** Program Manager, SCADA (Engineering)

**DIVISION:** Operations

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

#### **BASIC PURPOSE:**

Provides supervision and technical support for the Authority's Supervisory Control and Data Acquisition (SCADA) security, networking, process data interfacing with management information systems, and all software control and monitoring aspects of the SCADA system.

#### **SUPERVISION RECEIVED:**

Works under the general supervision of the Senior Program Manager, SCADA.

#### **SUPERVISION EXERCISED:**

Exercises general supervision of SCADA Project Managers and Senior Monitoring & Control Engineers.

#### **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Manages and supervises the design, installation and maintenance of SCADA security including:
  1) installing security patches and upgrades to all SCADA PC operating systems, firewalls, security software, and routers; 2) maintaining password controls on SCADA PCs and PLCs; 3) maintaining rules on security devices and software, and monitoring security logs.
- Manages and supervises the design, installation and maintenance of the Water and Wastewater SCADA networks for PCs and PLCs.
- Manages and supervises the design, installation and maintenance of the SCADA interface to the Authority's management information system including: 1) managing tags and data collection; 2) maintaining data historian interface servers; and 3) coordinating with MIS staff.
- Coordinates extensively with the other Program Manager SCADA Engineering to make sure that the eastern and western systems remain uniform and that new initiatives are mutually agreed upon.
- Manages and supervises SCADA personnel in the enhancement, expansion and maintenance of all software aspects of the Authority's SCADA system. This includes: 1) enhancing PLC and HMI programs as needed; 2) overseeing the programming, testing and start-up work of

- consultants and integrators; 3) insuring strict compliance with software backup schedules; and 4) upgrading the HMI software to more recent releases as needed.
- Supervises the in-house design and installation of new and modified monitoring and control systems including preparation of project scope and P&ID drawing through user interview, the PLC and HMI programming, testing, startup, documentation and training.
- Manages and supervises advanced corrective maintenance of SCADA equipment and systems.
- Prepares technical specifications and budget estimates for SCADA equipment and systems.
- Participates in the development of SCADA standards. Reviews consultant and in-house staff design for conformance to SCADA standards.
- Prepares written and computer generated reports. Oversees daily work schedules of system maintenance and enhancement.
- Manages the creation and maintenance of up to date records and documentation on SCADA network, PC, PLC and security installations.
- Oversees the management of the SCADA tag databases and the coordination of any necessary changes.
- Motivates, assists and trains staff in the development and troubleshooting of SCADA hardware and software.
- Monitors and reports on staff productivity and utilization. Recommends and institutes improvements on same.

#### **SECONDARY DUTIES:**

• Performs related duties as required.

#### **MINIMUM QUALIFICATIONS:**

#### Education and Experience:

- (A) Four (4) year college program in Electronic, Electrical, or Mechanical Engineering or a related field; and
- (B) Seven (7) to nine (9) years experience in the design, installation, operation and maintenance of SCADA systems of which three (3) to five (5) years should be in a supervisory capacity and four (4) of which should be in a water or wastewater related industry; and
- (C) Five (5) to seven (7) years of ladder logic and HMI programming experience; or Page 2 of 4

(D) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Working knowledge of cyber security as it relates to SCADA systems.
- (B) Thorough working knowledge of Ethernet, routers, switches, servers, firewalls, personal computers and Windows operating system.
- (C) Working knowledge of EIA RS-232, RS-422, RS-485, and other communications signaling standards and protocols.
- (D) Ability to test and troubleshoot to the component level using a variety of electronic test equipment as well as computer driven diagnostics.
- (E) Familiarity with both waterworks and wastewater treatment and distribution/collection systems.
- (F) Thorough knowledge of electrical/electronic wiring practices.
- (G) Demonstrated ability to plan, organize, direct, train and assign duties to subordinates.
- (H) Demonstrated interpersonal, written and verbal communication skills.
- (I) Working knowledge of AutoCad or equivalent CAD design program, spreadsheet and database programs.

#### **SPECIAL REQUIREMENTS:**

Vendor training certification in at least one of the following disciplines: HMI Software, PLC Programming Software, MSCE or Cisco preferred.

A valid Massachusetts Grade II Drinking Water Distribution or Treatment license or a Grade II Wastewater Collection System certification, or a Grade III Wastewater Treatment Plant license or the ability to obtain one of the above within six (6) months.

A valid Massachusetts Drivers License required.

Ability to obtain a FCC General Radiotelephone Operators License within six (6) months.

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

Security certification such as CISSP or GIAC required within six (6) months of employment.

<u>Participates in on-call rotation assignments if needed.</u> In the absence of volunteers, may be required to be on-call or report for overtime/comp time in an inverse seniority pool.

#### **TOOLS AND EQUIPMENT USED:**

Electronic test equipment, computers, PLCs, hand tools, climbing and fall retrieval equipment, mobile radio, etc.

#### 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 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, 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 regularly works in an office environment. 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 office settings.

**July 2019** 

#### MWRA POSITION DESCRIPTION



**POSITION:** Project Engineer

PCR#:

**DIVISION:** Planning

**DEPARTMENT:** Planning

#### **BASIC PURPOSE:**

Assists, under supervision of senior staff, in the completion of various ongoing projects in the Planning Department of the Operating Division.

#### **SUPERVISION RECEIVED:**

Works under the general supervision of Senior Staff in the Planning Department.

#### **SUPERVISION EXERCISED:**

None.

#### **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Assists in the preparation of maps and report graphics using the Authority's Esri Geographic Information Systems (GIS) software including maps of:
  - 1. the water and sewer system,
  - 2. watershed areas.
  - 3. pipeline, water-tunnel, sewer-interceptor routes, and
  - 4. water distribution and sewer-system schematics.
- Assists in the analysis of geographic-based data including projects supporting:
  - 1. water quality assessment,
  - 2. sewerage catchment basin determination,
  - 3. hydraulic pressure zone analysis,
  - 4. water and wastewater facilities mapping, and
  - 5. water and wastewater facilities siting.
- Participates in the management of all phases of consultant selection and supervision of
  professional services contracts, including the development of scope of services, plans and
  specifications, cost estimates, work schedules, technical review of consultant work,
  negotiations, and preparation of contract award recommendations.

- Assists in the oversight of consultant contracts, including monitoring project progress, review and approval process for invoices, contracts, and amendments and providing such information for department monthly reports, CIP and CEB reports.
- Assists in the development of staff skills through the cooperative production of analytical procedures.
- Assists other departments and divisions with GIS-related projects.

#### **SECONDARY DUTIES:**

• Performs special tasks, project and other related duties as required.

#### MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Knowledge of principles and practices of computer mapping or cartography as normally attained through a four (4) year college course in cartography, geography, engineering or a related field; and
- (B) Educational background or work experience using Geographic Information Systems, particularly Esri GIS software programs; and
- (C) Understanding of GIS, CAD/hydraulic models for water or wastewater projects as acquired by two (2) to five (5) years experience; or
- (D) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Proficiency in the use of Esri GIS software products.
- (B) Familiarity with computer software packages such as MSWord, Access and Excel.
- (C) Demonstrated ability to communicate technical information (verbally, graphically and in writing) in a clear, understandable and unambiguous manner.
- (D) Demonstrated abilities to work as part of an interdisciplinary project team and to develop and maintain productive working relationships with external parties.

#### **SPECIAL REQUIREMENTS:**

None.

#### **TOOLS AND EQUIPMENT USED:**

Office equipment as normally associated with the use of telephone, personal computers including word processing and other software, copy, scanning 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 sit, talk or hear. The employee is regularly required to use hands to finger, handle, feel or operate objects, including office equipment, or control and reach with hands and arms. The employee is frequently required to stand and walk.

There are no requirements that weight be lifted or force be 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 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.

January, 2001

#### MWRA

#### POSITION DESCRIPTION



**POSITION:** 

Project Manager, GIS

PCR#:

**DIVISION:** 

Operations

**DEPARTMENT:** 

Planning

#### **BASIC PURPOSE:**

Manages various Geographic Information Systems (GIS) projects such as the GIS data exchange program with member communities. Provides technical assistance including data design and development, automating workflows to improve productivity and efficiency, and leveraging web apps to support the needs of Planning and other departments.

#### **SUPERVISION RECEIVED:**

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

#### **SUPERVISION EXERCISED:**

Provides supervision to other GIS staff and interns as needed.

#### **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Develops a GIS data exchange program with member communities and leads in the development and maintenance of member communities' water/wastewater GIS data for inhouse planning and operational use.
- Coordinates with team members to oversee the Authority's GIS data updates, including determining data collection methods and standards and establishing/maintaining data development procedures and quality control; and leads in the developing, managing, and maintaining web applications to make the Authority's GIS data and maps available for use by

Page 1 of 4 U 9 Gr 25

- MWRA staff and the general public.
- Coordinates developing and maintaining metadata for the Authority's GIS data.
- Participates in producing and documenting maps requested by staff and all high quality specialty maps, including setting standards for map creations.
- Analyzes information system needs and recommends solutions and appropriate hardware/software to streamline and improve efficiency of data and map production work.
- Coordinates with team members and other Operations Department staff to obtain data on actual field conditions in order to refine GIS data and keep them current.
- Performs analytical services for operational issues using various analytical tools. Produces
  maps, charts, graphs, reports, and info graphics for presentations as needed including for
  emergency situations.
- Provides technical assistance to other departments on mapping and GIS-related projects.
- Assists in developing scopes of work, participates in consultant selection and oversees budgetary and technical work for contracts.

#### **SECONDARY DUTIES:**

• Performs special tasks, projects and other related duties as required.

#### MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A Bachelor's degree in GIS, computer science, geography, engineering, planning, or a related field; and
- (B) Five (5) to seven (7) years of experience with GIS application design, workflow automation, database design, data development, or data conversion; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) In-depth knowledge of principles and practices of GIS and applications.
- (B) Working knowledge of GIS and database structures including demonstrated ability to perform advanced spatial analysis and data conversion/manipulation using a variety of software tools and scripts to automate geoprocessing workflows.
- (C) Proficiency in the use of Esri's GIS software such as ArcGIS Pro and ArcGIS Desktop. Knowledge of ArcGIS Server, Portal for ArcGIS, and ArcGIS Online is preferred.
- (D) Knowledge of industrial control system cyber security, a plus.
- (E) Working knowledge of other computer packages such as AutoCAD, MS Office Suite, and MS Access.
- (F) Demonstrated ability to communicate technical information effectively, both verbally, graphically and in writing as well as the ability to translate staff needs into solutions using the best tool for the task based on previous experience and knowledge.
- (G) Demonstrated ability to serve as a GIS project leader including the development of technical approach, budget, scheduling, and quality assurance.
- (H) Demonstrated ability to create and maintain good working relationships and collaborations internally and externally while being able to work independently and take initiative to work as part of an interdisciplinary project team and to develop and maintain working relationships with external parties.

#### **SPECIAL REQUIREMENTS:**

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

#### **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 2019

#### STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

July 17, 2019

**SUBJECT:** 

Appointment of Director, Management Information Systems, Administration

Division

**COMMITTEE:** Personnel & Compensation

INFORMATION

X\_VOTE

Andrea Murphy, Director, Human Resources

Preparer/Title

Director of Administration

#### **RECOMMENDATION:**

To approve the appointment of Ms. Paula Weadick to the position of Director, Management Information Systems (Non-Union, Grade 16) at an annual salary of \$162,825, commencing on a date to be determined by the Executive Director.

#### **DISCUSSION:**

The position of Director, Management Information Systems (MIS) will become vacant with the resignation of the incumbent effective July 26, 2019. The Director of MIS is responsible for providing critical and secure financial, administrative and operational information technology applications and services to the Authority that are essential to day-to-day operations and are necessary to carry out the Authority's mission. The Director is responsible for recommending, developing, and implementing a long-term integrated information technology strategy to meet the overall needs of the Authority. The Director oversees a staff of approximately 55 people and supervises six direct reports, including a deputy and three technical managers. The Director also oversees an operational budget of approximately \$14,830,000 (FY20 CEB) and a capital budget of \$7,000,000 (FY20 CIP).

Ms. Weadick has over 30 years of IT experience, including 5 years at the MWRA. She currently serves as the Deputy Director of MIS. In this capacity, Ms. Weadick is responsible for the timely and cost-effective delivery of information technology projects and services and day-to-day information technology operations while ensuring an appropriate level of security. Ms. Weadick is also responsible for MIS staffing and employee matters and, in the absence of the Director, MIS, she serves as the acting Director. During this time, Ms. Weadick has successfully overseen several critical projects, including the recent PC and Windows 10 upgrades.

Ms. Weadick directed the virtualization of the infrastructure for all public facing applications, designed and implemented audio-visual upgrades, replaced remote office network infrastructure, conducted a third email phishing assessment, and the planned and designed infrastructure upgrades for Active Directory, Exchange, and Windows Server operating system.

Prior to her appointment as the Deputy Director, Ms. Weadick served for four years in MIS as the Manager of Security, Architecture and Engineering, responsible for cyber security awareness, IT asset management, IT design and architecture, as well as IT security. During that time, she successfully oversaw workforce mobilization efforts, the upgrade to Microsoft Office 2016, the implementation of a secure file transfer and the upgrade to the Authority's cyber security programs.

Prior to joining MWRA, Ms. Weadick served as the Manager of Information Technology for Gem Group of Lawrence, Massachusetts where she was responsible for the development, implementation and operation of corporate wide business applications, networks and telephone systems. She previously held the position of Technical Support and Helpdesk Manager where she was responsible for incident, problem, asset and patch management programs along with hardware procurement and maintenance.

Prior to her roles at Gem Group, Ms. Weadick was a Lead Systems Support Specialist and Project Manager for Avnet of Peabody, where she managed projects associated with company acquisitions and consolidations.

Ms. Weadick is highly regarded by staff, including senior managers, for her effective management and communication abilities as well as her strong technical background and knowledge. Several of the efforts that she has lead, like the PC upgrade, required considerable coordination with MIS staff, outside vendors and staff Authority-wide. She successfully led these critical projects with minimal operational disruption.

Ms. Weadick possesses a Bachelor of Science in Electrical Engineering from the University of Massachusetts, Amherst. She also holds for the following certifications:

- ITIL Foundations Certification IT Service Management version 3.
- Global Information Assurance Certification (GIAC) Security Leadership (GSLC).
- ITIL Intermediate Certification ITIL® Service Lifecycle: Service Transition

#### **BUDGET/FISCAL IMPACT:**

There are sufficient funds in the FY20 CEB for this position.

# MWRA POSITION DESCRIPTION

**POSITION:** Director, Management Information Services

PCR#:

**DIVISION:** Administration

**DEPARTMENT:** Management Information Services (MIS)

#### **BASIC PURPOSE:**

Develops, recommends and implements an integrated information technology strategy which meets the overall needs of MWRA and its operating units. Oversees the development and implementation of strategic and tactical plans for automation/technology, applications, information systems training, telecommunications, and cyber-security. Manages department staff in the successful execution of information technology plans and operations including all data center activities, network and telecommunications operations and applications as well as the cyber security program.

#### **SUPERVISION RECEIVED:**

Reports to the Director, Administration.

#### SUPERVISION EXERCISED:

Supervises five direct reports (a Deputy Director of MIS, 2 technical managers and 2 administrative support staff) and an overall department staff of approximately 60.

#### **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Develops and implements, in conjunction with other senior managers, the long-term vision and strategy for information systems and technology for MWRA.
- Provides leadership and direction for all information systems, telecommunications and technology activities within MWRA, and between operating units and outside technical consultants.
- Oversees all technology improvements and support for the Emergency Operations Center.

- Manages department staff in the successful execution of information technology plans and operations including all data center activities, network and telecommunications operations and applications.
- Ensures excellent customer service and support of applications for all end users.
- Oversees a comprehensive cyber-security program to reduce risk of threats, breaches, intrusions, and system downtime.
- Coordinates the total use of all information-related technologies within MWRA including as appropriate, desktop applications, SCADA, PICS and Security.
- Oversees information management in compliance with all applicable laws and regulations.
- Develops and implements a strong functional organization required to carry out the information technology strategy and plans.
- Oversees preparation and management of current expense and capital budgets impacting the department and specific management information systems projects and activities for MWRA.
- Recruits, develops, and retains technical and professional staff within a unionized environment.

#### **SECONDARY DUTIES:**

Perform related duties as required.

#### **DESIRED MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) A Bachelor's degree in computer science, information technology, management science, or a related field. A Master's degree in related field is preferred; and
- (B) Ten (10) to twelve (12) years of experience in information technology, of which five (5) years must be in a managerial capacity (with a preference for experience managing large Information Technology Units), or
- (C) Any equivalent combination of education and/or experience.

#### Necessary Knowledge, Skills and Abilities:

- (A) Technical knowledge in a broad range of technologies and systems sufficient to understand issues and to develop and implement information technology solutions to business problems. Includes, but is not limited to knowledge of:
  - a. Several programming languages
  - b. WEB-based interfaces and reporting tools (such as, ASP, JAVA, SQL, .NET, XML, C++, HTML, Crystal Reports, etc.)
  - c. multi-site and complex data networks and topologies;
  - d. cyber-security products and controls
  - e. current hardware and technologies (including PCs, laptops, servers, switches, SANs, OCR, GPS, OC, software, telecommunication devices (PBXes, iPhone, and radios a plus);
  - f. various operating systems (including Unix and current Microsoft PC and server offerings); DBMS (Oracle and/or SQL)
  - g. ERPs and related financial and administrative applications and systems (Lawson and Hyperion a plus
  - h. maintenance management, asset management and inventory applications (MAXIMO a plus)
  - i. geographical and geo-spatial products (ARC/Info a plus);
  - j. environmental, manufacturing or pharmaceutical applications (laboratory management, permitting and instrumentation a plus)
  - k. Intranet and Internet platforms
  - l. Exchange
  - m. PC software (such as Microsoft Office, AutoCad, etc.).
- (B) A strong track record of accomplishments in moving an information technology operation into a leading position within an organization.
- (C) Strong managerial skills and a proven ability to direct and coordinate staff resources to successfully deliver services and products in a diverse technology environment.
- (D) Demonstrated skills in managing complex, diverse information technology projects.
- (E) Strong orientation to business goals, objectives, and bottom line results.
- (F) Excellent analytical, interpersonal, written and oral communication skills are also required.
- (G) Demonstrated ability to consistently achieve both short-term and long-term objectives.

#### **SPECIAL REQUIREMENTS:**

- A valid Massachusetts Class D Motor Vehicle Operators License.
- ITIL Foundations Certification IT Service Management version 3 or 4.
- Global Information Assurance Certification (GIAC) Security Leadership (GSLC).
- ITIL Intermediate certification in one module from either the Service Lifecycle or the Service Capability area or the ability to obtain within one year.
- Master Project Manager Certification (American Academy of Project Management) or Project Management Professional (PMP) or equivalent or the ability to obtain within one year.

#### **TOOLS AND EQUIPMENT USED:**

Office equipment as normally associated with the use of telephone, personal computers including word processing and other software, 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 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 and stand.

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

#### **WORK ENVIRONMENT:**

The work 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 works in an office environment. The noise level in the work environment is a moderately quiet office setting.

**July 2019** 

Page 4 of 4

#### PAULA WEADICK

#### **IT Management**

TECHNOLOGY & BUSINESS STRATEGY -PROJECT MANAGEMENT -TECHNOLOGY INFRASTRUCTURE FINANCIAL MANAGEMENT & COST CONTROL -PROCESS IMPROVEMENT - REGULATORY COMPLIANCE REMOTE AND ON-SITE SERVICE -CHANGE MANAGEMENT - VENDOR MANAGEMENT

IT manager with experience providing strategic vision for and the delivery and support of information technology enabled business systems. Deep technical background with excellent business acumen, managerial expertise and interpersonal skills. Proven ability to bridge technology and business goals to provide productive solutions. Experience interfacing with key business units including Marketing, Finance, Operations and Sales. Excellent communicator, with emphasis on building strong client relationships.

#### PROFESSIONAL EXPERIENCE

#### Massachusetts Water Resources Authority Chelsea, MA

MWRA is a Massachusetts public authority established by an act of the Legislature in 1984 to provide wholesale water and sewer services to 3.1 million people and more than 5,500 large industrial users in 61 metropolitan Boston communities.

#### Deputy Director, MIS (2018-present)

Plans, directs, and oversees the operations and budget of the Information Technology (IT) Operations and IT Security, Architecture, and Engineering section. Plans and maintains work systems, procedures, and policies that enable and encourage the optimum performance of assigned staff and other IT resources. Oversees the development, implementation, development and operations of information systems and technology solutions to meet business and operational needs across the organization. Manages the preparation and maintenance of reports necessary to carry out the functions of the department.

#### Manager Security, Architecture and Engineering, MIS (2014 – 2018)

Plans, directs, and oversees the operations and budget of the Information Technology Security, Architecture, and Engineering section. Plans and maintains work systems, procedures, and policies that enable and encourage the optimum performance of assigned staff and other IT resources. Oversees the development, implementation, development and operations of information systems and technology solutions to meet business and operational needs across the organization.

#### Gem Group, Lawrence, MA

2003 -2014

The Gem Group is a premier supplier of bags, business accessories, gifts and writing instruments in the promotional products industry. Gem is ranked as the 17th largest supplier by Advertising Specialty Institute.

#### Manager of Information Technology (2011-2014)

Provide leadership as head of Information Technology department reporting directly to CFO. Manage a team of 5 in maintaining highly available infrastructure 24x7 and 450+ end-users. Define strategy for growth and scalability while minimizing costs and business risks. Manage the support of all computers, business systems, network, and

telecommunications systems. Develop and document policies and procedures. Implement continuous improvement framework and training to ensure IT operations evolves to meet changing needs.

- Collaborate with functional department leaders and executive teams to develop annual strategic goals and objectives.
- Deliver IT services while achieving 99.9% system uptime and driving significant value through IT investments.
- Improved business continuity by implementing redundant internet connections and implementing internal server virtualization.
- Realized \$65,000 reduction in OpX by re-negotiated vendor contracts.
- Develop an extremely high performing team. Identifying individual and team development opportunities. Two team members have received the employee of the month award.
- Engaged team in Lean methodologies to realize efficiencies including reduced pc setup time by 40%.
- Designed and implemented wireless system to support growth in wireless devices and increase security.
- o Facilitate companywide Windows7 and Office 2010 rollout.

#### Helpdesk Manager/Technical Support Manager (2007 -2011)

Manage a team of three technicians servicing 300 end users reporting to the IT Director. Responsible for all IT support services including asset management, patch management, hardware procurement and maintenance.

- Rapidly promoted from Helpdesk Supervisor after having been recruited to improve customer satisfaction in Helpdesk service deliver.
- Administration and maintenance of Citrix environment in support of remote users, vendors and third party contractors.
- Migrated server backups from tape to cloud
- Monthly reporting of Helpdesk statistics and server uptime.
- Implemented cloud backups solution for mission critical servers and mobile users.
- Helpdesk Supervisor
- Developed service delivery goals, procedures and metrics to realize improved customer satisfaction rating by 25% in one year.
- Lead a team of three Helpdesk Technicians.
- Identified development opportunities to improve team effectiveness.
- o Responsible for inventory management and procurement of end-user workstations.
- Lead enterprise wide desktop OS and hardware upgrade project within established timelines.
- Automated pc deployments utilizing script and checklist to decrease time to deploy and follow up requests.
- o Received Employee of the Month award 8 months after hired

#### Avnet, Peabody, MA 1994 -2003

Avnet is a leading distributor of electronic components and computer products servicing customers worldwide.

#### Project Manager

Promoted from Lead System Support Specialist. Recognized for excellence in customer focus and attention to detail. Managed multiple projects including company acquisitions, hardware and software upgrades.

- Implemented \$300,000 network upgrades project on time and under budget for a \$60,000 saving.
- Managed virtual team of 8-12 across multiple geographic locations.

Coordinated technology efforts for 2 separate acquisitions including migrating information systems to Avnet systems. Converted all sites on-time and on-budget.

#### M/A-COM, Burlington, MA 1989 -1994

Developer and manufacturer of military and commercial semiconductors and components.

#### Sr. Network Administrator

- o Transferred from Project Engineering role to Network Administrator.
- o Sole support for 250 users, including pcs and AS400 terminals
- o Generate monthly reports for business units utilizing Cognos software.

#### **TECHNICAL ACUMEN**

Active Directory, Exchange, Citrix, Vmware, Windows 2008, 2012, VPN, SAN technologies, Dell Kace, VOIP

#### **EDUCATION**

Bachelors of Science in Electrical Engineering

University of Massachusetts -Amherst

ITIL v3 Foundations Certification

ITIL Practitioner - Transition

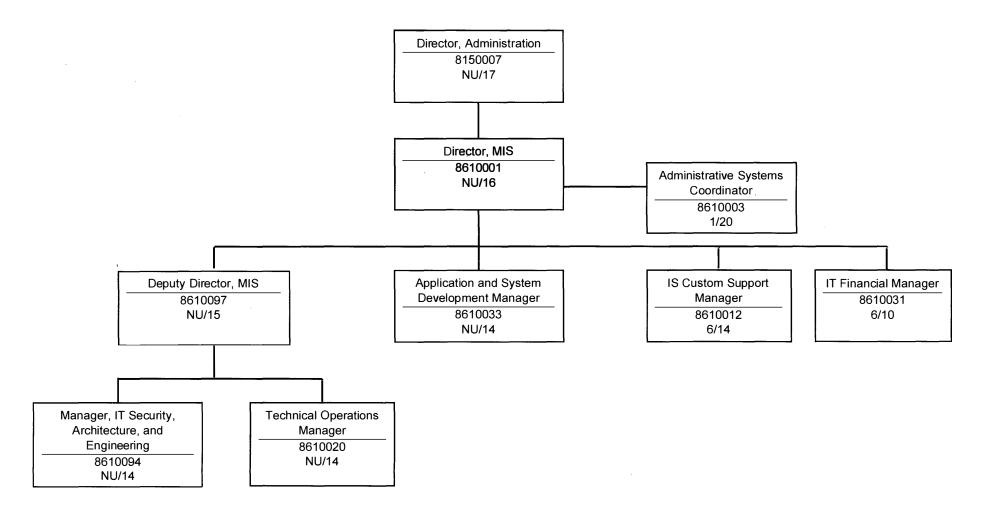
**GIAC Security Leadership** 

Bentley Effective Leadership Program

### **Administration Division**

# **MIS** Department

July 2019





### MASSACHUSETTS WATER RESOURCES AUTHORITY

Charlestown Navy Yard 100 First Avenue, Building 39 Boston, MA 02129

Telephone: (617) 242-6000

Fax: (617) 788-4899

TTY: (617) 788-4971

#### ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING

#### to be held on

Chair: H. Vitale

Vice-Chair: J. Foti

Committee Members: J. Carroll

J. Carroll C. Cook

K. Cotter A. Pappastergion

B. Peña

J. Walsh

Wednesday, July 17, 2019

100 First Avenue, 2nd Floor

Charlestown Navy Yard

Boston, MA 02129

<u>Time:</u>

Location:

Immediately following P&C Committee

#### **AGENDA**

#### A. Information

1. Delegated Authority Report – June 2019

#### MASSACHUSETTS WATER RESOURCES AUTHORITY

# Meeting of the Administration, Finance and Audit Committee June 19, 2019

A meeting of the Administration, Finance and Audit Committee was held on June 19, 2019 at the Authority headquarters in Charlestown. Committee Chair Vitale presided. Present from the Board were Messrs. Carroll, Cotter, Flanagan, Pappastergion and Walsh and Ms. Wolowicz. Messrs. Cook, Foti and Peña were absent. Among those present from the Authority staff were Frederick Laskey, Carolyn Francisco Murphy, David Coppes, Carolyn Fiore, Thomas Durkin, Michele Gillen, David Duest, Russell Murray, Stephen Estes-Smargiassi, Michael Cole, James Coyne, Leo Norton, Michael McDonald, Denise Breiteneicher and Kristin MacDougall. Joseph Favaloro, MWRA Advisory Board, was also in attendance. The meeting was called to order at 10:21 a.m.

#### <u>Information</u>

### <u>Delegated Authority Report – May 2019</u>

There was discussion and questions and answers. Ms. Wolowicz commended MWRA for its proactive efforts toward sexual harassment prevention training.

# FY19 Financial Update and Summary as of May 2019

Staff made a verbal presentation. There was discussion and questions and answers.

### <u>Approvals</u>

# \* FY20 Capital Improvement Program

Staff made a verbal presentation. The Committee recommended approval (ref. AF&A B.1).

<sup>\*</sup> Committee recommendation approved by the Board on June 19, 2019

#### \* FY20 Current Expense Budget

Staff made a verbal presentation. There was discussion and question and answers. (Mr. Carroll joined the meeting during the presentation.) Mr. Pappastergion commended MWRA staff for reducing the combined assessment increase from 3.15% to 3.07%. Mr. Pappastergion also requested monthly variance reports on Watershed Management expenses and vacancy rates, beginning in FY2020. MWRA Advisory Board Executive Director Favaloro commended MWRA staff for their efforts in preparing the budget. Mr. Laskey thanked Board members, the AF&A Committee and its Chair, the MWRA Advisory Board and MWRA finance staff.

The Committee recommended approval (ref. AF&A B.2).

#### \* Final FY20 Water and Sewer Assessments

Staff made a verbal presentation. On behalf of the MWRA Board of Directors and the Boston Water and Sewer Commission, Committee Chair Vitale thanked MWRA and MWRA Advisory Board staff for a well thought out, effective and efficient budget process.

The Committee recommended approval (ref. AF&A B.3).

#### \* Increase to Cost of Living Adjustment Base for Retirees

Staff made a verbal presentation.

The Committee recommended approval (ref. AF&A B.4).

# \* Delegation of Authority to Execute Contracts for the Purchase and Supply of Electric Power for the MWRA Profile Accounts

Staff made a verbal presentation. There were questions and answers.

The Committee recommended approval (ref. AF&A B.5).

The meeting adjourned at 10:53 a.m.

<sup>\*</sup> Committee recommendation approved by the Board on June 19, 2019

#### STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

July 17, 219

**SUBJECT:** 

Delegated Authority Report – June 2019

COMMITTEE: Administration, Finance & Audit

Linda Grasso, Admin. Systems Coordinator

Barbara Aylward, Administrator A & F

X INFORMATION

VOTE

Michele S. Gillen

Director, Administration

Douglas J. Rice

Director of Procurement

#### **RECOMMENDATION:**

Preparer/Title

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period June 1 - 30, 2019.

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 \$25,000; and
- Amendments to the Position Control Register, if applicable.

#### **BACKGROUND:**

The Board of Directors' Management Policies and Procedures, as amended by the Board's vote on February 21, 2018, delegate authority to the Executive Director to approve the following:

#### **Construction Contract Awards:**

Up to \$1 million if the award is to the lowest bidder.

#### **Change Orders:**

Up to 25% of the original contract amount or \$250,000, 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 \$100,000 and one year with a firm; or up to \$50,000 and one year with an individual.

#### Non-Professional Service Contract Awards:

Up to \$250,000 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 \$1 million if the award is to the lowest bidder.

#### Amendments:

Up to 25% of the original contract amount or \$250,000, 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, 2019

| NO.  | DATE OF AWARD | TITLE AND EXPLANATION  | CONTRACT | AMEND/CO | COMPANY                          | FINANCIAL IMPACT |
|------|---------------|--|----------|----------|----------------------------------|------------------|
| C-1. | ,,            | INSTALLATION OF ENERGY-EFFICIENT LED AND SITE LIGHTING AT THE SOUTHBOROUGH FACILITY  AWARD OF ENERGY EFFICIENT CONTRACT TO EVERSOURCE PREQUALIFIED VENDOR FOR INSTALLATION OF ENERGY-EFFICIENT LED INTERIOR AND  SITE LIGHTING AT THE SOUTHBOROUGH FACILITY FOR A TERM OF 150 CALENDAR DAYS. REBATE TOTALING \$13,928 WILL BE RECEIVED FROM  EVERSOURCE UPON PROJECT COMPLETION, RESULTING IN A PAYBACK PERIOD OF 11.5 YEARS.  | OP-398   | AWARD    | RISE ENGINEERING                 | \$99,543.00      |
| C-2. | 06/13/19      | CHELSEA CREEK HEADWORKS UPGRADE  DESIGN, FURNISH AND INSTALL A DIRECT SPARK ON OIL IGNITION SYSTEM AND REINSTALL ONE OF THE EXISTING OIL-FIRED BURNERS ON A TEMPORARY BASIS; INSTALL VENDOR FURNISHED PRESSURE REGULATOR VALVE, SAFETY RELIEF VALVE, AIR FILTER, PRESSURE GAUGE WITH ASSOCIATED PIPING, FITTINGS AND SENSING LINES FOR PNEUMATIC EJECTION SYSTEM; FURNISH AND INSTALL FIBERGLASS REINFORCED PLASTIC (FRP) INSPECTION PORTS WITH CLEAR COVERS AND REPLACE FOR COVERS WITH CLEAR COVERS; FURNISH AND INSTALL FIBERGLASS REINFORCED PLASTIC (FRP) INSPECTION PORTS WITH CLEAR COVERS AND EVALVES FURNISH AND INSTALL AND INSTALL NEW SECTIONS OF EXHAUST AIR DUCTWORK AND BYPASS DAMPERS; FURNISH AND INSTALL TEMPORARY CONDUITS, WIRE AND CONTROL PANELS TO CONNECT THE NEW SCREENINGS EJECTION EQUIPMENT TO THE EXISTING PNEUMATIC CONTROL SYSTEM; FURNISH AND INSTALL A NEW WELDING RECEPTACLE WITH CONDUIT AND WIRE; FURNISH AND INSTALL PIPING AND VALVES TO PROVIDE CROSS-CONNECTION BETWEEN THE NEW AND EXISTING PROCESS AIR AND INSTRUMENT AIR SYSTEMS. | 7161     | 28       | BHD/BEC 2015,<br>A JOINT VENTURE | \$213,402.00     |
| C-3. | 06/14/19      | CENTRIFUGE SERVICES DEER ISLAND TREATMENT PLANT FINAL BALANCING CHANGE ORDER TO DECREASE THE FOLLOWING BID ITEMS TO REFLECT ACTUAL QUANTITIES USED: INSPECTION, SERVICING AND TRANSPORTATION OF CENTRIFUGE UNITS INCLUDING ROTATING ASSEMBLIES AND GEAR BOXES, REPLACEMENT PARTS AND AUTHORIZED FACTORY SERVICE REPRESENTATIVES.   | S537     | 1        | ALFA LAVAL, INC.                 | (\$107,222.08)   |
| C-4. | 06/19/19      | THERMAL AND HYDRO POWER PLANT MAINTENANCE DEER ISLAND TREATMENT PLANT FINAL BALANCING CHANGE ORDER TO DECREASE THE FOLLOWING BID ITEMS TO REFLECT ACTUAL QUANTITIES USED: NON-EMERGENCY AND EMERGENCY MAINTENANCE REPAIR SERVICES, REPLACEMENT PARTS AND AUTHORIZED FACTORY SERVICE REPRESENTATIVES.   | \$551    | 5        | IPC LYDON, LLC                   | (\$590,381.00)   |

#### PURCHASING DELEGATED AUTHORITY ITEMS JUNE 1 - 30, 2019

| NO.  | DATE OF AWARD |  |           | AMENDMENT                               | COMPANY   | FINANCIAL IMPACT                          |
|------|---------------|--|-----------|---|---|---|
| P-1  |               | PURCHASE OF ONE STEEL PIPE CONCENTRIC FITTING  AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR ONE STEEL PIPE CONCENTRIC FITTING FOR THE DEER ISLAND TREATMENT PLANT.  | WRA-4675Q | ======================================= | E.J. PRESCOTT CO.   | \$47,956.00                               |
| P-2  | 06/07/19      | PEST CONTROL SERVICES  AWARD OF A TWO-YEAR PURCHASE ORDER UNDER STATE CONTRACT FAC92 TO THE LOWEST RESPONSIVE BIDDER FOR PEST CONTROL SERVICES AT VARIOUS FIELD OPERATIONS SITES.  | WRA-4705Q |   | A-1 EXTERMINATORS,<br>INC.                                | \$74,020.00                               |
| P-3  | 06/07/19      | ENTERPRISE RESOURCE PLANNING ASSESSMENT AWARD OF A PURCHASE ORDER UNDER STATE BLANKET CONTRACT ITS59 TO EVALUATE CURRENT INFOR/LAWSON ERP SYSTEM AND HELP STAFF DETERMINE WHETHER OR NOT TO KEEP AND UPGRADE.  |           |   | GARTNER, INC.   | \$95,816.00                               |
| P-4  | 06/07/19      | MAINTENANCE AND SUPPORT FOR HEWLETT PACKARD ENTERPRISE EQUIPMENT AWARD OF A ONE-YEAR PURCHASE ORDER UNDER STATE CONTRACT ITC47 TO THE LOWEST RESPONSIVE BIDDER FOR HEWLETT PACKARD ENTERPRISE EQUIPMENT  | WRA-4701Q |   | HEWLETT PACKARD<br>ENTERPRISE COMPANY                     | \$238,777.82                              |
| P-5  | 06/10/19      | SUPPLY AND DELIVERY OF SODIUM HYPOCHLORITE AMENDMENT NO. 1 TO PURCHASE ORDER FOR THE SUPPLY AND DELIVERY OF SODIUM HYPOCHLORITE TO VARIOUS WASTEWATER LOCATIONS, AND CLINTON WASTEWATER TREATMENT PLANT.   | WRA-4532  | 1                                       | UNIVAR USA, INC.  | \$25,000.00                               |
| P-6  | 06/11/19      | VMWARE VSPHERE LICENSES MAINTENANCE AND SUPPORT AWARD OF A ONE-YEAR PURCHASE ORDER UNDER STATE CONTRACT ITS58 TO THE LOWEST RESPONSIVE BIDDER FOR VMWARE VSPHERE LICENSES MAINTENANCE AND SUPPORT FOR VIRTUAL SERVICES.  | WRA-4704Q |   | CDW-G LLC   | \$69,112.03                               |
| P-7  | 06/11/19      | PURCHASE OF A REPLACEMENT ALGAE MONITORING SYSTEM AWARD OF A SOLE SOURCE PURCHASE ORDER FOR A REPLACEMENT ALGAE MONITORING SYSTEM FOR SOURCE WATER RESERVOIR.  |           |   | FLUID IMAGING<br>TECHNOLOGIES, INC.                       | \$80,450.00                               |
| P-8  | 06/13/19      | FLOOD PROTECTION STOP PLANK BARRIERS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR FLOOD PROTECTION BARRIERS FOR BRAINTREE-WEYMOUTH, HOUGHS NECK, QUINCY, AND SQUANTUM PUMP STATIONS   | WRA-4650  |   | PS INDUSTRIES<br>INCORPORATED                             | \$106,245.00                              |
| P-9  | 06/17/19      | VIBRATION ANALYSIS TRAINING AND SUPPORT SERVICES AWARD OF THREE SEPARATE THREE-YEAR PURCHASE ORDER CONTRACTS TO PROVIDE VIBRATION ANALYSIS TRAINING AND SUPPORT SERVICES AT THE DEER ISLAND TREATMENT PLANT, VARIOUS FIELD OPERATIONS SITES, AND WESTERN OPERATIONS FACILITIES.        | WRA-4689  |   | M&B ENGINEERED SOLUTIONS, INC.                            | \$86,565.00<br>\$61,360.00<br>\$44,050.00 |
| P-10 | 06/19/19      | TRASH AND SINGLE STREAM RECYCLING SERVICES AWARD OF A TWO SEPARATE TWO-YEAR PURCHASE ORDER CONTRACTS FOR TRASH AND SINGLE STREAM RECYCLING SERVICES FOR VARIOUS FACILITIES AND THE CLINTON WASTEWATER TREATMENT PLANT.   | WRA-4707  |   | DBI WASTE SYSTEMS, INC.<br>ALLIED WASTE SERVICES,<br>INC. | \$147,792.00<br>\$31,237.84               |
| P-11 | 06/24/19      | PURCHASE OF SPARE COMPONENTS AWARD OF SOLE SOURCE PURCHASE ORDER FOR SPARE COMPONENTS FOR FUJI OZONE TREATMENT SYSTEM AT THE JOHN J. CARROLL WATER TREATMENT PLANT.  |           |   | AQUA-AEROBIC<br>SYSTEMS, INC.                             | \$84,001.79                               |
| P-12 | 06/26/19      | PURCHASE OF SEVEN BI-DIRECTIONAL AMPLIFIERS AWARD OF A PURCHASE ORDER UNDER STATE CONTRACT ITT57 TO THE LOWEST RESPONSIVE BIDDER FOR SEVEN BI-DIRECTIONAL AMPLIFIERS FOR TWO WAY RADIO COMMUNICATIONS SYTEM REQUIRED BY THE BOSTON FIRE DEPARTMENT AT THE DEER ISLAND TREATMENT PLANT. | WRA-4708  |   | CYBER COMMUNICATIONS SOLUTIONS, INC.                      | \$138,460.00                              |
| P-13 | 06/27/19      | PURCHASE OF FOUR AIR HANDLING UNITS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR FOUR AIR HANDLING UNITS FOR THE DEER ISLAND TREATMENT PLANT.   | WRA-4678  |   | HTS ENGINEERING   | \$42,500.00                               |
| P-14 | 06/27/19      | PURCHASE OF TWO FLUIDON ALERT SYSTEM MICROBIOLOGICAL ANALYZERS AWARD OF A SOLE SOURCE PURCHASE ORDER FOR TWO ALERT SYSTEM MICROBIOLOGICAL ANALYZERS  |           |   | FLUIDION US, INC.   | \$46,194.00                               |
| P-15 | 06/27/19      | PURCHASE OF ONE NEW TEN-WHEEL DIESEL POWERED DUMP TRUCK AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR ONE NEW TEN-WHEEL DIESEL POWERED DUMP TRUCK  | WRA-4709  |   | BOSTON FREIGHTLINER, INC.                                 | \$158,971.00                              |
| P-16 | 06/28/19      | PURCHASE OF TWO SOLAR POWERED VARIABLE MESSAGE BOARDS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR TWO SOLAR POWERED VARIABLE MESSAGE BOARDS FOR THE CHELSEA FACILITY.  | WRA-4711Q |   | ATS EQUIPMENT,<br>INC.                                    | \$27,398.00                               |
| P-17 | 06/28/19      | PURCHASE OF ONE AUTOMATED CYANIDE ANALYZER AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR ONE AUTOMATED CYANIDE ANALYZER FOR THE DEPARTMENT OF LABORATORY SERVICES.   | WRA-4702Q |   | O.I. CORPORATION  | \$44,994.65                               |
| P-18 | 06/28/19      | ASSET ENROLLMENT IN THE FORWARD CAPACITY DEMAND RESPONSE PROGRAM AWARD OF A PURCHASE ORDER UNDER STATE CONTRACT FAC89DESIGNATEDDCAMM TO ENROLL MWRA ASSETS IN THE FORWARD CAPACITY DEMAND RESPONSE   |           |   | ENERWISE GLOBAL TECHNOLOGIES INC.                         | \$65,882.00                               |

| NO.  | DATE OF AWARD | TITLE AND EXPLANATION   | CONTRACT AMENDMENT |  | COMPANY   | FINANCIAL IMPACT |  |
|------|---------------|---|--------------------|--|-----------|------------------|--|
|      |               | PROGRAM AND THE CONNECTED SOLUTIONS PROGRAM.  |                    |  |           |                  |  |
| P-19 | 06/28/19      | PURCHASE OF 1,500 MICROSOFT WINDOWS 10 ENTERPRISE LICENSES WITH THREE-YEAR SOFTWARE ASSURANCE AWARD OF A PURCHASE ORDER UNDER STATE CONTRACT ITS58 TO THE LOWEST RESPONSIVE BIDDER FOR 1,500 MICROSOFT WINDOWS 10 ENTERPRISE LICENSES WITH THREE-YEAR SOFTWARE ASSURANCE. | WRA-4719Q          |  | CDW-G LLC | \$284,900.00     |  |

#### POSITION CONTROL REGISTER (PCR) LOCATION CHANGES JUNE 2019

| DATE OF CHANGE | POSITION TITLE                            | CURRENT PCR# | CURRENT COST CENTER              | NEWPCR# | NEW COST CENTER                        | REASON FOR CHANGE                            |
|----------------|---|--------------|----------------------------------|---------|--|--|
| 6/29/2019      | Director, SCADA,<br>Metering & Monitoring | 1710001      | Office of Emergency Preparedness | 5841029 | Operations – SCADA Maintenance (Water) | Employee reassignment.                       |
| 6/29/2019      | Manager, Emergency<br>Planning            | 1710006      | Office of Emergency Preparedness | 1510034 | Operations – Planning                  | Employee reassignment due to reorganization. |
| 6/29/2019      | Program Manager,<br>Security Safety       | 1710009      | Office of Emergency Preparedness | 1510035 | Operations – Planning                  | Employee reassignment due to reorganization. |

### MASSACHUSETTS WATER RESOURCES AUTHORITY



Charlestown Navy Yard 100 First Avenue, Building 39 Boston, MA 02129

> Telephone: (617) 242-6000 Fax: (617) 788-4899

> > TTY: (617) 788-4971

#### **BOARD OF DIRECTORS' MEETING**

Chair: K. Theoharides
Vice-Chair: J. Carroll

Secretary: A. Pappastergion

Board Members:

C. Cook K. Cotter

P. Flanagan J. Foti

B. Peña

H. Vitale J. Walsh

J. Wolowicz

to be held on

Wednesday, June 19, 2019

100 First Avenue, 2nd Floor

Charlestown Navy Yard

Boston, MA 02129

<u>Time:</u> 1:00 p.m.

#### <u>AGENDA</u>

- I. APPROVAL OF MINUTES
- II. REPORT OF THE CHAIR
- III. REPORT OF THE EXECUTIVE DIRECTOR

Location:

IV. BOARD ACTIONS

#### A. Approvals

- Legal Services Furnished by Special Assistant Attorney General Jonathan Ettinger/Foley Hoag LLP in the Boston Harbor Case, U.S. v. MDC, et al., USDC No. 85-0489-RGS (ref. WW B.1)
- Amendments to the MWRA Regulations for Adjudicatory Proceedings, Enforcement and Administrative Penalties, and Sewer Use (ref. WW B.2)
- 3. Memorandum of Agreement with the Town of Braintree Regarding MWRA's Use of the Town's Howard Street Pump Station (ref. WW B.3)
- 4. PCR Amendments July 2019 (ref. P&C A.1)
- 5. Appointment of Director, Management Information Systems, Administration Division (ref. P&C A.2)

#### **B.** Contract Awards

- 1. Maintenance Coating Deer Island Treatment Plant: Soep Painting Corp., Contract S583 (ref. WW C.1)
- 2. Gas Protection System Replacement Deer Island Treatment Plant: JF White Contracting Co., Contract 7167 (ref. WW C.2)
- 3. Piping Relocation at the Pelletizing Plant Fore River Shipyard: Walsh Construction Company II, LLC, Contract 7173 (ref. WW C.3)
- 4. Technical Assistance Consulting Services Deer Island Treatment Plant: Brown and Caldwell, Contract 7644; Hazen and Sawyer, PC, Contract 7645; Wright-Pierce, Contract 7646 (ref. WW C.4)
- 5. Section 22 Rehabilitation Alternative Analysis and Environmental Permitting: Black & Veatch, Contract 7155 (ref. W A.1)

#### C. Contract Amendments/Change Orders

1. Bellevue 2 and Turkey Hill Water Tank Painting Project: Worldwide Industries Corp., Contract 7634, Change Order 7 (ref. W B.1)

#### V. OTHER BUSINESS

#### VI. CORRESPONDENCE TO THE BOARD

#### VII. EXECUTIVE SESSION

#### A. Real Estate:

777 Dedham Street, Canton – Relocation of the Authority's Access Easement for its New Neponset Valley Sewer and Neponset Valley Force Main: Declaration of Easement as Surplus to MWRA's Needs

#### B. Litigation:

Settlement Authority for Workers' Compensation Claim

<u>Isabelle Quinn v. MWRA, et al., Suffolk Sup. Ct. No. 1884CV03544E:</u> Litigation Strategy

#### VIII. ADJOURNMENT

#### MASSACHUSETTS WATER RESOURCES AUTHORITY

# Meeting of the Board of Directors June 19, 2019

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on Wednesday, June 19, 2019 at the Authority headquarters in Charlestown. Vice Chair Carroll presided. Present from the Board were Ms. Wolowicz and Messrs. Cotter, Flanagan, Foti, Pappastergion, Vitale and Walsh. Secretary Theoharides and Messrs. Cook and Peña were absent. Among those present from the Authority staff were Frederick Laskey, Executive Director, Carolyn Francisco Murphy, General Counsel, David Coppes, Chief Operating Officer, Carolyn Fiore, Deputy Chief Operating Officer, Thomas Durkin, Director of Finance, Michele Gillen, Director of Administration, and Assistant Secretaries Ria Convery and Kristin MacDougall. The meeting was called to order at 1:18 p.m.

#### APPROVAL OF MAY 29, 2019 MINUTES

Upon a motion duly made and seconded, it was

Voted: to approve the minutes of the Board of Directors' meeting of May 29, 2019 as presented and filed with the records of the meeting.

#### REPORT OF THE EXECUTIVE DIRECTOR

Mr. Laskey updated the Board on CSO post-construction assessment with respect to the court report filings and coordination of next steps with DEP and EPA. He also reported that the EPA gave the Charles River a grade of B this year, down from an A- last year, due to more rainfall.

He also noted that MWRA staff met with the Lynn Water and Sewer Department to review alternatives to a new sewer treatment plant and outfall. He also reported that MWRA staff met with representatives of Suffolk Downs and the Cities of Boston and Revere to discuss water and sewer infrastructure needs for a planned new development. Finally, he noted that the implementation of the Paid Family Medical Leave Act has been delayed by three months.

#### <u>APPROVALS</u>

#### FY20 Capital Improvement Program (ref. AF&A B.1)

Upon a motion duly made and seconded, it was

<u>Voted</u>: to approve the FY20 Capital Improvement Program with a total budget of \$199.5 million for FY20 including \$164.1 million in project spending and \$35.4 million in community assistance.

#### Final FY20 Current Expense Budget (ref. AF&A B.2)

Upon a motion duly made and seconded, it was

<u>Voted:</u> to adopt the final FY20 Current Expense Budget (CEB) set forth in Attachments A, B and C as presented with current revenue and expense of \$792,248,420, Further, it was <u>voted:</u> to adopt the Final FY20 Operating Budget (Trustee's Budget) set forth in Attachment D as presented.

#### Final FY20 Water and Sewer Assessments (ref. AF&A B.3)

Upon a motion duly made and seconded, it was <a href="Voted">Voted</a>; to adopt the following effective July 1, 2019:

(1) Water system assessments of \$258,751,692 and sewer system assessments of \$503,015,308 for FY20; (2) FY20 sewer assessments of \$500,000 for the Town of Clinton and \$375,767 for the Lancaster Sewer District; (3) FY20 charge to the City of Worcester of \$208,773 representing approximately 7.9% of the direct operating expenses for the Clinton Wastewater Treatment Plant; (4) FY20 water assessments of \$3,604,721 for the City of Chicopee, \$723,584 for South Hadley Fire District # 1, and \$817,806 for the Town of Wilbraham; (5) a wholesale water rate of \$4,021.42 per million gallons; and (6) a retail sewer rate of \$7,859.49 per million gallons.

### Increase to Cost of Living Adjustment Base for Retirees (ref. AF&A B.4)

Upon a motion duly made and seconded, it was

Voted: Pursuant to Section 19 of Chapter 188 of the Acts of 2010, to approve the MWRA Employees' Retirement Board's vote of June 4, 2019 to accept an increase in the maximum base amount on which the retiree cost-of-living adjustment is

calculated from \$13,000 to \$14,000 effective July 1, 2019 and to \$15,000 effective July 1, 2020.

# <u>Delegation of Authority to Execute Contracts for the Purchase and Supply of Electric</u> <u>Power for the MWRA Profile Accounts (ref. AF&A B.5)</u>

Upon a motion duly made and seconded, it was

<u>Voted:</u> to authorize the Executive Director, on behalf of the Authority, to execute contracts for the supply of electric power to the Profile Accounts with the lowest responsive and responsible bidder, for the period and pricing structure selected, as determined by staff to be in MWRA's best interest, and for a contract supply term not to exceed 37 months. This delegation of authority is necessary because MWRA will be required to notify the selected bidders within a few hours of bid submittal to lock-in the bid prices in a constantly changing market.

# Sole Source Purchase of 182 Telog Dataloggers for the Wastewater Metering Replacement Project: Telog Instruments, Inc. (ref. WW B.1)

Upon a motion duly made and seconded, it was

<u>Voted:</u> to approve the award of a sole source purchase order for 182 Telog RU-35 dataloggers with preinstalled 4G LTE compatible wireless modems, 4G antennas and interface cables to Telog Instruments, Inc. and authorize the Executive Director to execute said purchase order in the amount of \$484,848.

# FY2020 Non-Union Compensation (ref. P&C A.1)

Upon a motion duly made and seconded, it was

<u>Voted:</u> that the Board of Directors take the following actions for MWRA's FY20 non-union compensation review:

(A) Authorize the Executive Director to implement a 3% across-the-board compensation adjustment for non-union managers effective with the first FY20 payroll; and (B) Approve a revision to the non-union salary ranges for FY20 presented in Attachment A and filed with the records of the meeting.

#### Appointment of Budget Director, Finance Division (ref. P&C A.2)

Upon a motion duly made and seconded, it was

<u>Voted:</u> to approve the appointment of Mr. Michael J. Cole, Jr. to the position of Budget Director, Finance Division (Non-Union, Grade 16) at an annual salary of \$135,000 commencing on a date to be determined by the Executive Director.

#### Appointment of Program Manager, Energy Management, Deer Island (ref. P&C A.3)

Upon a motion duly made and seconded, it was

<u>Voted:</u> to approve the appointment of Mr. Robert Huang to the position of Program Manager, Energy Management (Unit 9, Grade 29), at an annual salary of \$128,958.93, commencing on a date to be determined by the Executive Director.

# Extension of Employment Contract for Copy and Supply Clerk, Administration Division (ref. P&C A.4)

Upon a motion duly made and seconded, it was

<u>Voted:</u> to approve the extension of an employment contract for Mr. Ward Merithew, Copy and Supply Clerk, Facilities Management Department, for a period of one year from July 1, 2019 to June 30, 2020, at the current hourly rate of \$15.76 per hour for an annual compensation not to exceed \$12,292.80.

#### **CONTRACT AWARDS**

<u>Chemical Tank Relining and Pipe Replacement - Deer Island Treatment Plant: Walsh</u> <u>Construction Co. II, LLC, Contract 7373 (ref. WW C.1)</u>

Upon a motion duly made and seconded, it was

<u>Voted:</u> to approve the award of Contract 7373, Chemical Tank Relining and Pipe Replacement, Deer Island Treatment Plant, to the lowest eligible and responsible bidder, Walsh Construction Company II, LLC and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the amount of \$8,504,505, for a contract term of 850 calendar days from the Notice to Proceed.

Sole Source Purchase Order for Three Years of Maintenance and Support of the Process Instrumentation and Control System Human-Machine Interface Software at the

<u>Deer Island Treatment Plant: Emerson Process Management Power and Water Solutions, Inc. (ref. WW C.2)</u>

Upon a motion duly made and seconded, it was

<u>Voted:</u> to approve the award of a sole source purchase order contract for maintenance and support of the Process Instrumentation and Control System Human-Machine Interface Software at the Deer Island Treatment Plant, to Emerson Process Management Power & Water Solutions, Inc., and to authorize the Executive Director to execute said purchase order contract in an amount of \$206,405.00, for a period of three years, from August 1, 2019 through July 31, 2022.

Section 22 Rehabilitation Alternative Analysis and Environmental Permitting: Black & Veatch Corporation, Contract 7155 (ref. W A.1)

Item postponed.

#### **CONTRACT AMENDMENTS/CHANGE ORDERS**

Chelsea Creek Headworks Upgrade, BHD/BEC 2015, A Joint Venture: Contract 7161, C.O. 29 (ref. WW D.1)

Upon a motion duly made and seconded, it was

<u>Voted:</u> to authorize the Executive Director, on behalf of the Authority, to approve Change Order 29 to Contract 7161, Chelsea Creek Headworks Upgrade, with BHD/BEC 2015, A Joint Venture, for an amount not to exceed \$400,000.00, increasing the contract amount from \$80,985,612.46 to \$81,385,612.46, with no increase in contract term.

Further, it was <u>voted</u>: to authorize the Executive Director to approve additional change orders as may be needed to Contract 7161 in an amount not to exceed the aggregate of \$250,000, in accordance with the Management Policies and Procedures of the Board of Directors.

#### **OTHER BUSINESS**

Review of Salary for Chief Operating Officer, Chief Financial Officer and General

Counsel

Upon a motion duly made and seconded, it was

<u>Voted:</u> to increase the current salary of David W. Coppes, Chief Operating Officer, Thomas Durkin, Director of Finance and Carolyn Francisco Murphy, General Counsel, by 3%, effective the first FY20 payroll.

#### Review and Extension of Contract and Appointment for Executive Director

Voted: (A) to rate the performance of Frederick A. Laskey, Executive Director, for Fiscal Year 2019 as excellent; (B) to extend the term of the Executive Director's employment agreement and his appointment as the Executive Director by one year through June 30, 2022; and (C) to increase his current salary by 3% with an additional salary adjustment of \$7,678.89, effective July 1, 2019.

#### **CORRESPONDENCE TO THE BOARD**

Letter From Massport Regarding Easement for New HEEC Cable

(Mr. Foti recused himself and temporarily left the meeting.) There was brief discussion and the item was tabled for further discussion at a future meeting.

#### **EXECUTIVE SESSION**

Wolowicz

It was moved to enter executive session to discuss litigation and thereafter to return to open session solely for the purpose of adjournment. (Mr. Foti returned to the meeting). Upon a motion duly made and seconded, a roll call vote was taken in which the members were recorded as follows:

| <u>Yes</u>    | <u>No</u> | <u>Abstain</u> |
|---------------|-----------|----------------|
| Carroll       |           |                |
| Cotter        |           |                |
| Foti          |           |                |
| Flanagan      |           |                |
| Pappastergion |           |                |
| Vitale        |           |                |
| Walsh         |           |                |

<u>Voted:</u> to enter executive session for the purpose of discussing strategy with respect to litigation in that such discussions may have a detrimental effect upon the litigation and negotiating positions of the Authority.

\* \* \* \*

#### **EXECUTIVE SESSION**

\* \* \*

The meeting returned to open session and adjourned at 2:07 p.m.

Approved: July 17, 2019

Attest:

Andrew M. Pappastergion, Secretary