

MASSACHUSETTS WATER RESOURCES AUTHORITY

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

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PERSONNEL & COMPENSATION COMMITTEE MEETING

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

J. Carroll

P. Flanagan

J. Foti

A. Pappastergion

H. Vitale

J. Walsh

to be held on

Wednesday, April 18, 2018

Location:

100 First Avenue, 2nd Floor

Charlestown Navy Yard

Boston, MA 02129

Time:

10:00 a.m.

AGENDA

A. Approvals

- 1. PCR Amendments
- 2. Appointment of Senior Staff Counsel
- 3. Appointment of Program Manager SCADA Engineering
- 4. Appointment, Director of Tunnel Redundancy Program
- Appointment of Warehouse Manager
- Appointment, Deputy Director of MIS
- 7. Appointment of Manager Compensation

B. Contract Awards

 Occupational and Medical Services: AllOne Health Resources, Inc., Contract A615

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Personnel and Compensation Committee

March 21, 2018

A meeting of the Personnel and Compensation Committee was held on March 21, 2018 at the Authority headquarters in Charlestown. Vice-Chair Cotter presided. Present from the Board were Messrs. Blackmon, Carroll, Flanagan, Foti, Pappastergion, Peña, Vitale and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Karen Gay-Valente, Dave Coppes, Tom Durkin, and Bonnie Hale. The meeting was called to order at 11:00 a.m.

Approvals

*PCR Amendments - March 2018

Staff described the need to create an important new position to direct the design. construction, engineering and procurement for the Metropolitan Tunnel Water Redundancy Program. The Director of Tunnel Redundancy will report to the Executive Director and will supervise managers and staff assigned to the Program. There was detailed discussion and question and answer, including inquiry on overall MWRA staffing totals and whether the new team would be similar to the former Program Management Division (PMD) created to oversee the Boston Harbor Project. Mr. Favaloro of the MWRA Advisory Board agreed with the PMD model in concept for such a big project that requires staff that might not need to be retained once the project was completed. Committee members expressed a desire to see a proposed organization chart. Mr. Laskey stated that he would like to give the proposed candidate, whose appointment would likely come before the Board for approval in the next couple of months, the opportunity to analyze and provide input on what the team's make-up should look like. Thus, a well thought-out organization chart might not be developed before June or July. The Committee recommended approval (with Mr. Foti abstaining) of an amendment to the Position Control Register (ref. agenda item A.1).

The meeting adjourned at 11:15 a.m.

Approved as recommended at March 21, 2018 Board of Directors meeting.

STAFF SUMMARY

TO:

Board of Director

FROM:

Frederick A Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

April PCR Amendments

COMMITTEE: Personnel and Compensation

X VOTE

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Preparer/Title

Michele S. Gillen

Director, Administration

INFORMATION

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 Committee.

April PCR Amendments

There are three PCR amendments to reflect organizational changes in the Operations Division. The amendments reflect changes to existing data positions to create two new data management coordinator positions in the ENQUAL department and one position in the TRAC department. The job descriptions have been redesigned and include updated technical skills to reflect the requirements needed to upgrade data reporting capabilities for permitting, environmental and operational monitoring data. There is also one PCR amendment to reflect organizational changes in the Administration Division.

Operations Organizational Changes

The amendments are:

1. Title and location change to a vacant position in the Engineering Department, Operations Division, Senior Analyst, CSO, Unit 6, Grade 10, to Data Management Coordinator, Unit 6 Grade 10, in the ENQUAL Department to align the title with current staffing needs.

- 2. Title and grade change to a vacant position in the TRAC Department, Operations Division, Data Management Supervisor, Unit 6, Grade 9, to Data Management Coordinator, Unit 6 Grade 10 to align the title and grade with current staffing needs.
- 3. Title change to a filled position in the ENQUAL Department, Operations Division, Sewerage Database Coordinator, Unit 6, Grade 10, to Data Management Coordinator, Unit 6 Grade 10 to align the title with current staffing needs.

Administration Organizational Change

The amendment is:

1. Title, grade and union change to a vacant position in the MIS Department, Administrative Division, Helpline Coordinator, Unit 1, Grade 18, to Customer Support Technician I, Unit 6, Grade 8, to align the position with the organizational structure as recommended in the MIS Five Year Plan.

The first three amendments require approval by the Personnel and Compensation Committee. The fourth amendment requires Board approval after review by the Personnel and Compensation Committee.

BUDGET/FISCAL IMPACT:

The annualized budget impact of this PCR amendment will range in savings from \$40,338 to a cost of \$12,891. The actual cost will depend on the salary rate for the new incumbents. Staff will ensure that the cost increase associated with these PCR amendments will not result in spending over the approved FY18 Wages and Salaries budget.

ATTACHMENTS:

Old Job Descriptions New Job Descriptions

MASSACHUSETTS WATER RESOURCES AUTHORITY POSITION CONTROL REGISTER AMENDMENTS FISCAL YEAR 2018

| REQUIRING PERSONNEL | | |
|---------------------|--|--|
| | | |
| | | |
| | | |

| Number | Current PCR # | V/F | Туре | Current Title | UN | GR | Amended Title | UN | GR | Current/Budget Salary | | timated v Salary | Estimated \$ Imp | | Reason For Amendment |
|--------|---------------------------------------|-----|------|----------------------------------|----|----|--------------------------------|----|----|--------------------------|----------|---------------------|---------------------|---------|---|
| P4 | Operations Engineering 55250149 | v | т | Senior Analyst, CSO | 6 | 10 | Data Management Coordinator | 6 | 10 | N/A | N/A | - N/A | \$0 - | \$0 | To align the title with current needs |
| P5 | Operations TRAC 2210037 | v | T, G | Data Management Supervisor | 6 | 9 | Data Management Coordinator | 6 | 10 | \$80,959 | \$59,996 | - \$89,108 | -\$20,963 - | \$8,149 | To align the title and grade with current needs |
| P6 | Operations ENQUAL 2250016 | F | Т | Sewerage Database Coordinator | 6 | 10 | Data Management Coordinator | 6 | 10 | N/A | N/A | - N/A | \$0 - | \$0 | To align the title with current needs |

| | PCR AMENDMENTS REQUIRING BOARD APPROVAL- April 2018 | | | | | | | | | | | | |
|--------|---|-----|------|----------------------|----|-------------------------------|----|----|--|-------------------------|----------------------|----------|---|
| Number | Current PCR # | V/F | Туре | Current Title | UN | GR Amended Title | UN | GR | Current/Budget Salary | Estimated New Salary | Estimated \$ Impa | | Reason For Amendment |
| B7 | Administration MIS 8610066 | v | T, G | Helpline Coordinator | 1 | 18 Customer Support Tecnician | 6 | 8 | \$68,882 | \$49,507 - \$73,624 | -\$19,375 - | \$4,742 | To align the title and grade with the MIS 5 Year Plan |
| | | | | BOARD TOTAL = | 1 | | | | The second secon | SUBTOTAL: | -\$19,375 - | \$4,742 | |
| | | | | GRAND TOTAL = | 4 | | | | TOTAL ESTIMA | ATED COSTS: | -\$40,338 - | \$12,891 | |



MWRA POSITION DESCRIPTION

POSITION:

Sewerage Quality Database Coordinator

DIVISION:

Operations

DEPARTMENT:

ENQUAD

BASIC PURPOSE:

Develops computing resources in ENQUAD, including loading and checking environmental and operational monitoring data. Coordinates the analysis of Wastewater and Environmental Quality Data from, TRAC, DLS, Plant Systems and Residuals. Provides technical guidance and training to ENQUAD staff. Produces information from Oracle databases. Coordinates data management with department and division information systems.

SUPERVISION RECEIVED

Works under the general supervision of the Project Manager of ENQUAD.

SUPERVISION EXERCISED

None.

- Serves as database administrator for ENQUAD databases by loading and checking large environmental science data sets, and by developing computing procedures to case data entry, checking and editing.
- Coordinates maintenance of a consistent database structure and quality standards for influent, effluent and sludge data coordination with MIS DLS, and Plant Systems.
- Develops and implements automated procedures for downloading and formatting data from the Oracle database for routine and ad-hoc reports and graphics production, using Oracle, ARC/VIEW, ARC/INFO, S-Plus, MicroCal Origin, Excel, and other commercial packages.
- Assists Marine Studies Project Manager in oversight of consultant data management under the Harbor and Outfall Monitoring contract.

- Reviews consultants and staff analyses of monitoring data as needed, particularly reports of contingency plan threshold value exceeds.
- Prepares regular monthly information reports on treatment plant performance, effluent quality and environmental quality for Authority management and staff, the regulatory community and the general public.
- Proposes and develops maps, graphs and figures that usefully summarize scientific data for decision-makers, Authority staff and the public.
- Provides monitoring data to Authority staff, consultants and the public as appropriate.
- Trains staff to use Oracle and desktop tools to access water quality databases.
- Ensures that ENQUAD data management practices promote information sharing and data quality, are consistent with recommendations of the Data Quality Group, and are integrated into Sewerage and Authority information systems.
- Develops and implements computing strategies, in conjunction with MIS, to maximize use of available hardware and software by integrating text, graphics and imaging information across computing platforms.

Performs related duties as required

MIMIMUM REQUIREMENTS

Education & Experience

- (A) A four (4) year college degree in engineering, chemistry, biology, environmental science or related field is required. Appropriate graduate degree preferred; and
- (B) Five (5) to seven (7) years of experience in developing and using relational databases; or
- (C) Any equivalent combination of education and experience.

NECESSARY KNOWLEDGE, SKILLS AND ABILITIES:

(A) Working knowledge of sampling and laboratory methodologies for wastewater and receiving water data collection.

- (B) Demonstrated ability in programming and troubleshooting in a variety of computing environments, particularly MS Windows and DOS. Experience with ARC/INFO Geographic Information System and with distributed computing is preferred.
- (C) Knowledge and understanding of computer hardware and software, computer databases.

Database administration and electronic transfer of information.

- (D)Demonstrated ability to use statistical principles to analyze and present environmental data.
- (E) Demonstrated interpersonal and management skill required to coordinate work among several departments. Demonstrated ability to communicate and work effectively in a team of scientists, engineers and computer professionals.
- (F) Excellent interpersonal, written and oral communication skills required.

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

There are no requirements that weight be lifted or force be exerted in the performance of this job. Specific vision requirements required by this job include close vision, distance 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 noise level in the work environment is a moderately quiet office setting.

October, 2006



MWRA POSITION DESCRIPTION

POSITION:

Data Management Coordinator

DIVISION:

Operations

DEPARTMENT:

Environmental Quality (Water)/Southborough

Environmental Quality (Wastewater)/Charlestown Navy Yard

Toxic Reduction and Control (TRAC)/Chelsea

BASIC PURPOSE:

Develops Departmental computing resources, including loading and checking environmental and operational monitoring data. Assists in the development of computer applications to automate loading, checking, analysis, and reporting of data from various sources. Coordinates the analysis of all data. Develops applications for data visualization. Provides technical guidance, documentation, and training to Departmental staff. Coordinates data management with Department and Division information systems.

SUPERVISION RECEIVED

Works under the general supervision of the Program Manager or Senior Program Manager.

SUPERVISION EXERCISED

May exercise supervision of assigned staff. May direct the work of contract employees and interns.

- Serves as database administrator for Departmental databases by loading and checking large environmental science data sets, and by developing computing procedures to ease data entry, checking and documenting corrections to data sets.
- Integrates Departmental databases with other Operations departments, including the Central Laboratory, Operations, and MIS.
- Develops and implements automated procedures for downloading and formatting data from the database for routine and ad-hoc reports and graphics production,

- using various tools such as Oracle, Access, R, MATLAB, Python, Visual basic, Excel, and/or other commercial packages.
- Assists management staff and others in the development of applications for data visualization. Proposes and develops maps, graphs and figures that usefully summarize scientific data for decision-makers, Authority staff and the public.
- Develops data annotation tools for logging data corrections to raw lab or analyzer data in the department database to allow for corrected data to be extracted for compliance or water quality analysis.
- Prepares regular and ad hoc informational reports for Authority management and staff, the regulatory community and the general public. Provides monitoring data to Authority staff, consultants and the public as appropriate.
- Develops procedures for automated checking of data to trigger review of unusual data.
- Provides ongoing training for staff and technical assistance to facilitate the development and implementation of Departmental projects.
- Ensures that data management practices promote information sharing and that data quality is consistent with department policies and are integrated into Department and Authority information systems.
- Develops and implements computing strategies, in conjunction with MIS, to maximize use of available hardware and software by integrating text, graphics and imaging information across computing platforms.
- Reviews consultants and staff analyses of monitoring data as needed. Provides monitoring data to Authority staff, consultants, and the public as appropriate.
- Maintains current knowledge of policies and procedures related to the implementation and enhancements of departmental information systems and actively participates in analyzing the impact of proposed policies and provides input.
- The Data Management Coordinator/Wastewater coordinates the analysis of wastewater and environmental quality data from TRAC, DLS, Plant Systems and Residuals; coordinates maintenance of a consistent database structure and quality standards for influent, effluent and sludge data coordination with MIS, DLS, and plant systems; and assists the Marine Studies Project Manager in oversight of consultant data management under the Harbor and Outfall Monitoring contract. Reviews consultants and staff analyses of monitoring data as needed, particularly reports of contingency plan threshold value exceedances.

- The Data Management Coordinator/Water coordinates the analysis of water quality data from DLS, Process Book, Operations databases, and other sources; coordinates development and maintenance of a consistent database structure and quality standards for the compilation and management of compliance and other verified data sets, in coordination with MIS, DLS, and Operations; and assists the Program Manager in the development of a dashboard / data visualization application.
- The Toxic Reduction and Control Data Management Coordinator manages TRAC data management in support of the Industrial Pretreatment Program's daily business and EPA reporting requirements; maintains technical knowledge of PIMS, LIMS and WEBsmr application systems; works closely with MIS to identify PIMS/LIMS operational problems and to recommend solutions, and assists with end-user testing.

Performs related duties as required.

MIMIMUM REQUIREMENTS

EDUCTION AND EXPERIENCE

- (A) A four (4) year college degree in information technology, computer science, engineering, chemistry, biology, environmental science or related field is required. Appropriate graduate degree preferred; and
- (B) Five (5) to seven (7) years of experience in developing and using relational databases; and
- (C) Five (5) to seven (7) years of experience relating to the development, maintenance and management of complex computer application systems; of which at least two years include a supervisory role; and
- (D) Experience developing and modifying Crystal Reports; or
- (E) Any equivalent combination of education and experience.

NECESSARY KNOWLEDGE, SKILLS AND ABILITIES:

(A) Working knowledge of sampling and laboratory methodologies for wastewater, water, and/or receiving water data collection

- (B) Knowledge and understanding of computer hardware and software, computer data bases, database administration and electronic transfer of information
- (C) Demonstrated ability to use statistical principles to analyze and present environmental data
- (D) Demonstrated ability in programming and troubleshooting in a variety of computing environments, particularly MS Windows and DOS. Knowledge of Python or other programming language strongly preferred. Knowledge of structured query language (SQL) preferred
- (E) Knowledge of Microsoft Access and Oracle Discoverer preferred. Knowledge of MATLAP, R other statistical programming language preferred
- (F) Demonstrated QA/QC and analytical skills
- (G) Working knowledge of database design and productivity tools and techniques
- (H) Working knowledge of database software including Oracle
- (I) Excellent interpersonal, oral and written communication skills
- (J) Demonstrated decision-making ability
- (K) Experience developing SOPs and developing user support reference materials preferred
- (L) Experience with Pretreatment Management Software (PIMS) and lab Information Management Software (LIMS) preferred

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

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

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, including office equipment or controls, and reach with hands and arms. The employee frequently is required to sit, talk, and hear. The employee is occasionally required to stand and walk, stoop, kneel, crouch or crawl, taste or smell.

There are no requirements that weight be lifted or force be exerted in the performance of this job. Specific vision requirements required by this job include close vision, distance 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 noise level in the work environment is a moderately quiet office setting.

April, 2018



MWRA POSITION DESCRIPTION

POSITION:

Data Management Supervisor

DIVISION:

Sewerage

DEPARTMENT:

Toxic Reduction and Control (TRAC)

BASIC PURPOSE:

Manages the TRAC Data Management Unit responsible for data entry, data quality control and information reporting functions to provide data management and information services in support of TRAC's daily business and quarterly and annual reporting requirements. Maintains technical knowledge of TRAC IS, LIMS, and SMART applications and maintain business knowledge of TRAC's data flow related to these applications. Provides information system services in support of TRAC's Permit Fees, Smart and other outreach projects.

SUPERVISION RECEIVED:

Works under the general supervision of the IS Program Manager.

SUPERVISION EXERCISED:

Exercises close supervision of the data Tracking Assistant and the Head Clerk.

- Develops and implements departmental data entry/quality control procedures related to the maintenance of TRAC IS, LIMS and SMART application systems.
- Supervises the Data Management staff in performing their duties in support of TRAC's business units.
- Works directly with TRAC managers/staff to provide technical assistance and information system services to facilitate the development and implementation of TRAC projects.
- Maintains a current knowledge of policies and procedures related to the implementation and enhancements of departmental information systems participate in analyzing the impact of proposed policies and provide input.

- Identifies TRAC IS/LIMS operational problems at the departmental levels, and communicate their resolution to the Central MIS and departmental managers/staff.
- Assists with the design and development of design specifications for application development activities and manages the technical system testing process and the associated debugging activities.
- Provides ad hoc reporting support to TRAC and Authority staff and provides first level staff support of TRAC's information systems and reporting tools.
- Maintains weekly and annual permit fee invoice generation from the TRAC IS.
- Manages staff skills development and maintain a current knowledge of the software tools in the Authority to recommend and schedule job related training.

Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college program in Management Information Systems (MIS), Computer Science or related field; and
- (B) Five (5) to seven (7) years of experience relating to the development maintenance and management of complex computer application systems; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of database design and productivity tools and techniques.
- (B) Understanding of database programming techniques in the Oracle environment.
- (C) Excellent oral and written communication skills required.

SPECIAL REQUIREMENTS:

None

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 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 sit, and talk or hear. The employee is occasionally required to stand, and walk.

There are no requirements that weight be lifted or force be exerted in performing the duties 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 a moderately quiet office setting.

August, 1999



MWRA POSITION DESCRIPTION

POSITION:

Data Management Coordinator

DIVISION:

Operations

DEPARTMENT:

Environmental Quality (Water)/Southborough

Environmental Quality (Wastewater)/Charlestown Navy Yard

Toxic Reduction and Control (TRAC)/Chelsea

BASIC PURPOSE:

Develops Departmental computing resources, including loading and checking environmental and operational monitoring data. Assists in the development of computer applications to automate loading, checking, analysis, and reporting of data from various sources. Coordinates the analysis of all data. Develops applications for data visualization. Provides technical guidance, documentation, and training to Departmental staff. Coordinates data management with Department and Division information systems.

SUPERVISION RECEIVED

Works under the general supervision of the Program Manager or Senior Program Manager.

SUPERVISION EXERCISED

May exercise supervision of assigned staff. May direct the work of contract employees and interns.

- Serves as database administrator for Departmental databases by loading and checking large environmental science data sets, and by developing computing procedures to ease data entry, checking and documenting corrections to data sets.
- Integrates Departmental databases with other Operations departments, including the Central Laboratory, Operations, and MIS.
- Develops and implements automated procedures for downloading and formatting data from the database for routine and ad-hoc reports and graphics production,

- using various tools such as Oracle, Access, R, MATLAB, Python, Visual basic, Excel, and/or other commercial packages.
- Assists management staff and others in the development of applications for data visualization. Proposes and develops maps, graphs and figures that usefully summarize scientific data for decision-makers, Authority staff and the public.
- Develops data annotation tools for logging data corrections to raw lab or analyzer data in the department database to allow for corrected data to be extracted for compliance or water quality analysis.
- Prepares regular and ad hoc informational reports for Authority management and staff, the regulatory community and the general public. Provides monitoring data to Authority staff, consultants and the public as appropriate.
- Develops procedures for automated checking of data to trigger review of unusual data.
- Provides ongoing training for staff and technical assistance to facilitate the development and implementation of Departmental projects.
- Ensures that data management practices promote information sharing and that data quality is consistent with department policies and are integrated into Department and Authority information systems.
- Develops and implements computing strategies, in conjunction with MIS, to maximize use of available hardware and software by integrating text, graphics and imaging information across computing platforms.
- Reviews consultants and staff analyses of monitoring data as needed. Provides monitoring data to Authority staff, consultants, and the public as appropriate.
- Maintains current knowledge of policies and procedures related to the implementation and enhancements of departmental information systems and actively participates in analyzing the impact of proposed policies and provides input.
- The Data Management Coordinator/Wastewater coordinates the analysis of wastewater and environmental quality data from TRAC, DLS, Plant Systems and Residuals; coordinates maintenance of a consistent database structure and quality standards for influent, effluent and sludge data coordination with MIS, DLS, and plant systems; and assists the Marine Studies Project Manager in oversight of consultant data management under the Harbor and Outfall Monitoring contract. Reviews consultants and staff analyses of monitoring data as needed, particularly reports of contingency plan threshold value exceedances.

- The Data Management Coordinator/Water coordinates the analysis of water quality data from DLS, Process Book, Operations databases, and other sources; coordinates development and maintenance of a consistent database structure and quality standards for the compilation and management of compliance and other verified data sets, in coordination with MIS, DLS, and Operations; and assists the Program Manager in the development of a dashboard / data visualization application.
- The Toxic Reduction and Control Data Management Coordinator manages TRAC data management in support of the Industrial Pretreatment Program's daily business and EPA reporting requirements; maintains technical knowledge of PIMS, LIMS and WEBsmr application systems; works closely with MIS to identify PIMS/LIMS operational problems and to recommend solutions, and assists with end-user testing.

Performs related duties as required.

MIMIMUM REQUIREMENTS

EDUCTION AND EXPERIENCE

- (A) A four (4) year college degree in information technology, computer science, engineering, chemistry, biology, environmental science or related field is required. Appropriate graduate degree preferred; and
- (B) Five (5) to seven (7) years of experience in developing and using relational databases; and
- (C) Five (5) to seven (7) years of experience relating to the development, maintenance and management of complex computer application systems; of which at least two years include a supervisory role; and
- (D) Experience developing and modifying Crystal Reports; or
- (E) Any equivalent combination of education and experience.

NECESSARY KNOWLEDGE, SKILLS AND ABILITIES:

(A) Working knowledge of sampling and laboratory methodologies for wastewater, water, and/or receiving water data collection

- (B) Knowledge and understanding of computer hardware and software, computer data bases, database administration and electronic transfer of information
- (C) Demonstrated ability to use statistical principles to analyze and present environmental data
- (D) Demonstrated ability in programming and troubleshooting in a variety of computing environments, particularly MS Windows and DOS. Knowledge of Python or other programming language strongly preferred. Knowledge of structured query language (SQL) preferred
- (E) Knowledge of Microsoft Access and Oracle Discoverer preferred. Knowledge of MATLAP, R other statistical programming language preferred
- (F) Demonstrated QA/QC and analytical skills
- (G) Working knowledge of database design and productivity tools and techniques
- (H) Working knowledge of database software including Oracle
- (I) Excellent interpersonal, oral and written communication skills
- (J) Demonstrated decision-making ability
- (K) Experience developing SOPs and developing user support reference materials preferred
- (L) Experience with Pretreatment Management Software (PIMS) and lab Information Management Software (LIMS) preferred

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

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

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, including office equipment or controls, and reach with hands and arms. The employee frequently is required to sit, talk, and hear. The employee is occasionally required to stand and walk, stoop, kneel, crouch or crawl, taste or smell.

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

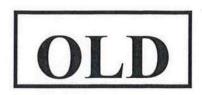
WORK ENVIRONMENT:

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

April, 2018



MWRA POSITION DESCRIPTION

POSITION:

Sewerage Quality Database Coordinator

DIVISION:

Operations

DEPARTMENT:

ENQUAD

BASIC PURPOSE:

Develops computing resources in ENQUAD, including loading and checking environmental and operational monitoring data. Coordinates the analysis of Wastewater and Environmental Quality Data from, TRAC, DLS, Plant Systems and Residuals. Provides technical guidance and training to ENQUAD staff. Produces information from Oracle databases. Coordinates data management with department and division information systems.

SUPERVISION RECEIVED

Works under the general supervision of the Project Manager of ENQUAD.

SUPERVISION EXERCISED

None.

- Serves as database administrator for ENQUAD databases by loading and checking large environmental science data sets, and by developing computing procedures to case data entry, checking and editing.
- Coordinates maintenance of a consistent database structure and quality standards for influent, effluent and sludge data coordination with MIS DLS, and Plant Systems.
- Develops and implements automated procedures for downloading and formatting data from the Oracle database for routine and ad-hoc reports and graphics production, using Oracle, ARC/VIEW, ARC/INFO, S-Plus, MicroCal Origin, Excel, and other commercial packages.
- Assists Marine Studies Project Manager in oversight of consultant data management under the Harbor and Outfall Monitoring contract.

- Reviews consultants and staff analyses of monitoring data as needed, particularly reports of contingency plan threshold value exceeds.
- Prepares regular monthly information reports on treatment plant performance, effluent quality and environmental quality for Authority management and staff, the regulatory community and the general public.
- Proposes and develops maps, graphs and figures that usefully summarize scientific data for decision-makers, Authority staff and the public.
- Provides monitoring data to Authority staff, consultants and the public as appropriate.
- Trains staff to use Oracle and desktop tools to access water quality databases.
- Ensures that ENQUAD data management practices promote information sharing and data quality, are consistent with recommendations of the Data Quality Group, and are integrated into Sewerage and Authority information systems.
- Develops and implements computing strategies, in conjunction with MIS, to maximize use of available hardware and software by integrating text, graphics and imaging information across computing platforms.

Performs related duties as required

MIMIMUM REQUIREMENTS

Education & Experience

- (A) A four (4) year college degree in engineering, chemistry, biology, environmental science or related field is required. Appropriate graduate degree preferred; and
- (B) Five (5) to seven (7) years of experience in developing and using relational databases; or
- (C) Any equivalent combination of education and experience.

NECESSARY KNOWLEDGE, SKILLS AND ABILITIES:

(A) Working knowledge of sampling and laboratory methodologies for wastewater and receiving water data collection.

- (B) Demonstrated ability in programming and troubleshooting in a variety of computing environments, particularly MS Windows and DOS. Experience with ARC/INFO Geographic Information System and with distributed computing is preferred.
- (C) Knowledge and understanding of computer hardware and software, computer databases.

Database administration and electronic transfer of information.

- (D) Demonstrated ability to use statistical principles to analyze and present environmental data.
- (E) Demonstrated interpersonal and management skill required to coordinate work among several departments. Demonstrated ability to communicate and work effectively in a team of scientists, engineers and computer professionals.
- (F) Excellent interpersonal, written and oral communication skills required.

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

There are no requirements that weight be lifted or force be exerted in the performance of this job. Specific vision requirements required by this job include close vision, distance 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 noise level in the work environment is a moderately quiet office setting.

October, 2006



MWRA POSITION DESCRIPTION

POSITION:

Data Management Coordinator

DIVISION:

Operations

DEPARTMENT:

Environmental Quality (Water)/Southborough

Environmental Quality (Wastewater)/Charlestown Navy Yard

Toxic Reduction and Control (TRAC)/Chelsea

BASIC PURPOSE:

Develops Departmental computing resources, including loading and checking environmental and operational monitoring data. Assists in the development of computer applications to automate loading, checking, analysis, and reporting of data from various sources. Coordinates the analysis of all data. Develops applications for data visualization. Provides technical guidance, documentation, and training to Departmental staff. Coordinates data management with Department and Division information systems.

SUPERVISION RECEIVED

Works under the general supervision of the Program Manager or Senior Program Manager.

SUPERVISION EXERCISED

May exercise supervision of assigned staff. May direct the work of contract employees and interns.

- Serves as database administrator for Departmental databases by loading and checking large environmental science data sets, and by developing computing procedures to ease data entry, checking and documenting corrections to data sets.
- Integrates Departmental databases with other Operations departments, including the Central Laboratory, Operations, and MIS.
- Develops and implements automated procedures for downloading and formatting data from the database for routine and ad-hoc reports and graphics production,

- using various tools such as Oracle, Access, R, MATLAB, Python, Visual basic, Excel, and/or other commercial packages.
- Assists management staff and others in the development of applications for data visualization. Proposes and develops maps, graphs and figures that usefully summarize scientific data for decision-makers, Authority staff and the public.
- Develops data annotation tools for logging data corrections to raw lab or analyzer data in the department database to allow for corrected data to be extracted for compliance or water quality analysis.
- Prepares regular and ad hoc informational reports for Authority management and staff, the regulatory community and the general public. Provides monitoring data to Authority staff, consultants and the public as appropriate.
- Develops procedures for automated checking of data to trigger review of unusual data.
- Provides ongoing training for staff and technical assistance to facilitate the development and implementation of Departmental projects.
- Ensures that data management practices promote information sharing and that data quality is consistent with department policies and are integrated into Department and Authority information systems.
- Develops and implements computing strategies, in conjunction with MIS, to maximize use of available hardware and software by integrating text, graphics and imaging information across computing platforms.
- Reviews consultants and staff analyses of monitoring data as needed. Provides monitoring data to Authority staff, consultants, and the public as appropriate.
- Maintains current knowledge of policies and procedures related to the implementation and enhancements of departmental information systems and actively participates in analyzing the impact of proposed policies and provides input.
- The Data Management Coordinator/Wastewater coordinates the analysis of wastewater and environmental quality data from TRAC, DLS, Plant Systems and Residuals; coordinates maintenance of a consistent database structure and quality standards for influent, effluent and sludge data coordination with MIS, DLS, and plant systems; and assists the Marine Studies Project Manager in oversight of consultant data management under the Harbor and Outfall Monitoring contract. Reviews consultants and staff analyses of monitoring data as needed, particularly reports of contingency plan threshold value exceedances.

- The Data Management Coordinator/Water coordinates the analysis of water quality data from DLS, Process Book, Operations databases, and other sources; coordinates development and maintenance of a consistent database structure and quality standards for the compilation and management of compliance and other verified data sets, in coordination with MIS, DLS, and Operations; and assists the Program Manager in the development of a dashboard / data visualization application.
- The Toxic Reduction and Control Data Management Coordinator manages TRAC data management in support of the Industrial Pretreatment Program's daily business and EPA reporting requirements; maintains technical knowledge of PIMS, LIMS and WEBsmr application systems; works closely with MIS to identify PIMS/LIMS operational problems and to recommend solutions, and assists with end-user testing.

Performs related duties as required.

MIMIMUM REQUIREMENTS

EDUCTION AND EXPERIENCE

- (A) A four (4) year college degree in information technology, computer science, engineering, chemistry, biology, environmental science or related field is required. Appropriate graduate degree preferred; and
- (B) Five (5) to seven (7) years of experience in developing and using relational databases; and
- (C) Five (5) to seven (7) years of experience relating to the development, maintenance and management of complex computer application systems; of which at least two years include a supervisory role; and
- (D) Experience developing and modifying Crystal Reports; or
- (E) Any equivalent combination of education and experience.

NECESSARY KNOWLEDGE, SKILLS AND ABILITIES:

(A) Working knowledge of sampling and laboratory methodologies for wastewater, water, and/or receiving water data collection

- (B) Knowledge and understanding of computer hardware and software, computer data bases, database administration and electronic transfer of information
- (C) Demonstrated ability to use statistical principles to analyze and present environmental data
- (D) Demonstrated ability in programming and troubleshooting in a variety of computing environments, particularly MS Windows and DOS. Knowledge of Python or other programming language strongly preferred. Knowledge of structured query language (SQL) preferred
- (E) Knowledge of Microsoft Access and Oracle Discoverer preferred. Knowledge of MATLAP, R other statistical programming language preferred
- (F) Demonstrated QA/QC and analytical skills
- (G) Working knowledge of database design and productivity tools and techniques
- (H) Working knowledge of database software including Oracle
- (I) Excellent interpersonal, oral and written communication skills
- (J) Demonstrated decision-making ability
- (K) Experience developing SOPs and developing user support reference materials preferred
- (L) Experience with Pretreatment Management Software (PIMS) and lab Information Management Software (LIMS) preferred

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

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

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, including office equipment or controls, and reach with hands and arms. The employee frequently is required to sit, talk, and hear. The employee is occasionally required to stand and walk, stoop, kneel, crouch or crawl, taste or smell.

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

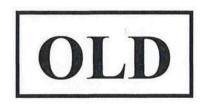
WORK ENVIRONMENT:

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

April, 2018



MWRA POSITION DESCRIPTION

POSITION:

Helpline Coordinator

DIVISION:

Administration

DEPARTMENT:

Management Information Systems (MIS)

BASIC PURPOSE:

Provides Helpline support for reporting, logging, resolving or referring user issues/problems encountered with the standard suite of microcomputer products or minicomputer applications.

SUPERVISION RECEIVED:

Works under the general supervision of the Program Manager, MIS.

SUPERVISION EXERCISED:

None.

- Staffs Helpline phone to receive Helpline calls, analyze caller information, develops clear and concise problem statements, and log into call database.
- Maintains a level of technical proficiency commensurate with installed base of microcomputer software and minicomputer applications and uses that proficiency to diagnose and resolve user problems when possible.
- Investigates, diagnoses, tests and resolves or refers Helpline calls to appropriate staff, a
 wide variety of microcomputer hardware, software, peripheral device and network
 problems reported by users through the Helpline.
- Produces statistical reports on the Helpline operation using the Configuration
 Management System, which summarizes the number of calls received and serviced based
 on the open and response level criteria.
- Participates on microcomputer hardware, software or network project teams to assist with

the introduction of new or modified microcomputer technology.

 Coordinates problem reporting with appropriate staff and various hardware and software vendor representatives, as necessary.

SECONDARY DUTIES:

Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Understanding of computer hardware and software as normally acquired through a two (2) year college program in a related field; and
- (B) Demonstrated knowledge of Macintosh and microcomputer environment as normally acquired through one (1) to three (3) years in a related field; or
- (C) Any equivalent combination of education and/or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Proficiency with the standard suite of PC software applications employed within the Authority, including the entire MicroSoft Office suite.
- (B) Ability to effectively diagnose and interpret problems on a variety of microcomputer hardware, software and peripheral devices and to define appropriate resolutions.
- (C) Excellent interpersonal, oral and written communication skills are required.

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

The employee must frequently lift and/or move up to 25 pounds and occasionally lift and/or move up to 50 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 occasionally works in various field settings and in an office environment. The employee is occasionally exposed to risk of electrical shock.

The noise level in the work environment is a moderately loud office setting.

March 2016



MWRA POSITION DESCRIPTION

POSITION:

Customer Support Technician I

DIVISION:

Administration

DEPARTMENT:

Management Information Systems (MIS)

BASIC PURPOSE:

Provides Helpline support for reporting, logging, resolving or referring user issues/problems encountered with the standard suite of microcomputer products or minicomputer applications. Provides Tier 1 user support, including troubleshooting hardware, software and peripheral problems. Assists MWRA users with the introduction to new or modified microcomputer environments. Configures and installs hardware, software and peripheral products, for the MWRA users.

SUPERVISION RECEIVED:

Works under the general supervision of the Program Manager, MIS Operations. On specific IT projects may be supervised by a team lead or project manager.

SUPERVISION EXERCISED:

None

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Tier 1 support for all user requests including Helpline coverage.
- Configures tests and installs microcomputer hardware, software, and peripheral products for the MWRA.
- Staffs Helpline phone to receive Helpline calls, analyze caller information, develops clear and concise problem statements, and log into call Service Desk Application.
- Investigates, diagnoses, tests and resolves or refers Helpline calls to appropriate staff, a wide variety of microcomputer hardware, software, peripheral device and network problems reported by users through the Helpline.
- Participates on microcomputer hardware, software or network project teams to assist with the introduction of new or modified microcomputer technology.

Page 1 of 3

- Coordinates problem reporting with appropriate staff and various hardware and software vendor representatives, as necessary.
- Follows all established documentation within Service Desk application/databases.

Perform related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Understanding of computer hardware and software as normally acquired through a two (2) year college program in a related field; and
- (B) Demonstrated knowledge of Macintosh and microcomputer environment as normally acquired through one (1) to three (3) years in a related field; or
- (C) Any equivalent combination of education and/or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of microcomputer hardware, software and peripheral operation.
- (B) Ability to effectively diagnose and interpret problems on a variety of microcomputer hardware, software and peripheral devices and to define appropriate resolutions.
- (C) Excellent analytical and interpersonal skills.
- (D) Written and oral communication skills are required.
- (E) Knowledge of the following:
 - 1. Operating System/Environments: Current Microsoft Windows Desktop and Server Operating Systems, Mac OS X.
 - 2. Desktop Productivity Software: Current Microsoft Office Suite.
 - 3. Groupware/Messaging Software: Microsoft Exchange and Internet Explorer.
 - 4. Graphics/Presentation Software: Corel Draw, PowerPoint, Visio, Adobe Suite, AutoCAD, Fast Stone and Arc Info Suite.
 - 5. Hardware Environment: Desktops, mobile devices multifunctional devices, audio-visual equipment and various peripherals.
 - Network: Ethernet, TCP/IP, Wireless Networks, Active Directory and DNS concepts;

SPECIAL REQUIREMENTS:

A+ or a specific OEM certification ITIL Foundations Certification version 3

Or the ability to obtain within 1 year.

TOOLS AND EQUIPMENT USED:

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

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

The employee must frequently lift and/or move up to 25 pounds and occasionally lift and/or move up to 50 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 occasionally works in various field settings and in an office environment. The employee regularly works near moving mechanical parts, and is occasionally exposed to risk of vibration. The employee is occasionally exposed to risk of electrical shock.

The noise level in the work environment is a moderately loud office setting.

March 2018

STAFF SUMMARY

To:

Board of Directors

From:

Frederick A. Laskey, Executive Director

Date:

April 18, 2018

Subject:

Appointment of Senior Staff Counsel for Labor/Employment

COMMITTEE: Personnel & Compensation

Karen Gay Valente, Dir. Human Resources

John S. Chinian, Associate General Counsel

Preparer/Title

INFORMATION

Steven A. Remsberg, General Counsel

Division Director Approval

RECOMMENDATION:

To approve the appointment of Donna McMahon as Senior Staff Counsel for Labor/Employment (Grade 13, Confidential) in the Law Division at an annual salary of \$109,341.22, effective on a date to be determined by the Executive Director.

DISCUSSION:

The Law Division is a full service provider of legal services to the MWRA. Its purpose is to provide legal representation and advice in support of MWRA's mission. The Division is organized into 3 practice groups, one of which is the labor/employment and administrative law group. This group represents the Authority in labor and employment cases, including arbitrations, mediations, and administrative adjudications in various forums, including the State Department of Labor Relations and the Massachusetts Commission against Discrimination. It is also responsible for providing legal advice to managers concerning labor and employment issues, advice on the interpretation of the Enabling Act, and advice on general law issues such as ethics law and the MWRA's Code of Conduct. The group has been staffed by an Associate General Counsel, 2 Senior Staff Counsels and a Staff Counsel.

One of the two Senior Staff Counsel positions has become vacant upon the retirement of the incumbent. The position reports to the Associate General Counsel, Labor/Employment and is responsible for representing the MWRA in various forums with respect to labor and employment matters, providing legal advice concerning labor and employment issues to managers, and assisting in civil litigation cases.

SELECTION PROCESS:

The position of Senior Staff Counsel, Labor/Employment was posted internally and one candidate applied for this position. The General Counsel and Associate General Counsel, Labor/Employment interviewed the single candidate and Ms. Donna McMahon was determined to be qualified for the position based on her education and experience.

Ms. McMahon has 6 ½ years of experience as Staff Counsel at the MWRA in the labor and employment area, with an additional 4 years of experience as Assistant Manager of Labor Relations at the MWRA, and 11 years as a paralegal at the Authority and in private practice. As Staff Counsel, Ms. McMahon has represented the MWRA in numerous arbitration cases, as well as in other administrative forums, including the MCAD, the State Department of Labor Relations, the State Division of Unemployment Assistance and the Massachusetts Department of Industrial Accidents. She has advised management on a range of labor and employment issues, including benefits and developments in employment law, and in support of the Human Resources Department in such areas as grievance processing, and the development of employment related policies.

Ms. McMahon received a Bachelor of Arts degree from Eastern Washington University and a J.D. from Southern New England School of Law. She has been a member in good standing of the Massachusetts Bar since June 2004.

BUDGET/FISCAL IMPACT:

Funds for this position are budgeted within the FY18 CEB.

ATTACHMENTS:

Resume of Donna McMahon Position Description Organization Chart

DONNA A. MCMAHON

Admitted Massachusetts Bar

June 2004

KEY WORK EXPERIENCE

Staff Counsel, Labor and Employment Massachusetts Water Resources Authority, Boston, MA September 2014 to present May 2005 to July 2008

- Represents management as legal counsel at internal arbitrations and in cases before the
 Massachusetts Commission Against Discrimination, the Massachusetts Dept. of Labor Relations,
 the Massachusetts Div. of Unemployment Assistance, the Massachusetts Dept. of Industrial
 Accidents and the Massachusetts Superior Court
- · Analyzes and provides advice to management regarding new or changes to existing laws
- Responds to public records requests

Assistant Manager of Labor Relations

July 2008 to September 2014

Massachusetts Water Resources Authority, Boston, MA

- · Served as presiding officer in final step of grievance procedure
- · Provided support to legal counsel in arbitration cases
- Served as member of management collective bargaining negotiating team
- Served as alternate trustee on MOSES Health and Welfare Trust Fund Board
- Represented management as legal counsel in cases before the Massachusetts Div. of Unemployment Assistance

Paralegal, Labor and Employment

May 2001 to May 2005

Massachusetts Water Resources Authority, Boston, MA

- · Prepared files for arbitration and assisted management-side attorneys at arbitration hearings
- · Drafted post-hearing arbitration briefs
- Assisted management-side attorneys with cases before the Massachusetts Superior Court, the
 Massachusetts Commission Against Discrimination, the Massachusetts Div. of Labor Relations,
 the Massachusetts Div. of Unemployment Assistance, the Massachusetts Dept. of Industrial
 Accidents and with investigations into employee misconduct
- · Conducted legal research on a wide range of labor and employment matters
- Drafted monthly reports regarding the status of all Labor and Employment Division cases

Law Clerk, Litigation

November 1998 to May 2001

Paul A. Epstein, Esquire

Law Offices of Spillane & Epstein, P.C., Hanover, MA

- Drafted settlement demands, complaints and motions
- Conducted legal research on issues related to tort law and consumer protection law

Paralegal, Litigation

August 1997 to November 1998

Law Offices of Michael A. Rudman, P.C., Fall River, MA

Paralegal, Litigation

November 1991 to July 1995

Law Office of Morton Povman, P.C., Forest Hills, NY

EDUCATION

Southern New England School of Law, North Dartmouth, MA

Juris Doctor

City University of New York at Queens College, Flushing, NY Graduated with distinction

Paralegal Certificate

Eastern Washington University, Cheney, WA

Bachelor of Arts, Government

Trained Mediator: Completed forty hours of mediation training in March 2007 at Mediation Works Inc., Boston, MA in accordance with M.G.L. ch. 233, Section 23C

MWRA POSITION DESCRIPTION

POSITION:

Senior Staff Counsel

DIVISION:

Law

DEPARTMENT:

Law

BASIC PURPOSE:

Provides legal analysis, advice, and representation to the Authority as requested by the General Counsel and Associate General Counsel.

SUPERVISION RECEIVED:

Works under the general supervision of General Counsel or an Associate General Counsel as assigned.

SUPERVISION EXERCISED:

Exercises close supervision of a legal assistant and support staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Conducts litigation in courts and before administrative bodies of behalf of the Authority.
- Handles substantive legal matters in the following areas; real estate, contracts, environmental, labor/employment, administrative and litigation.
- Determines the applicability of federal, state and local laws and regulations.
- Produces legal documents.
- Develops and promulgates rules, regulations and policies.
- Construes and applies the Authority's enabling statute.
- Analyzes and drafts legislation.

SECONDARY DUTIES:

• Performs related duties as required.

Page 1 of 3

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Analytical and writing skills as normally attained through a four (4) year college program. JD in law is required; and
- (B) Admittance to the bar to practice law in Massachusetts or eligibility to practice under rules of reciprocity is required; and
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Understanding of legal areas such as real estate, contracts, environmental, labor/employment, litigation administrative and drafting legislation and regulations as acquired by a minimum of three (3) to six (6) years of related experience.
- (B) Strong analytical, organizational, and oral and written communications skills are required.

SPECIAL REQUIREMENTS:

Massachusetts Bar 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.

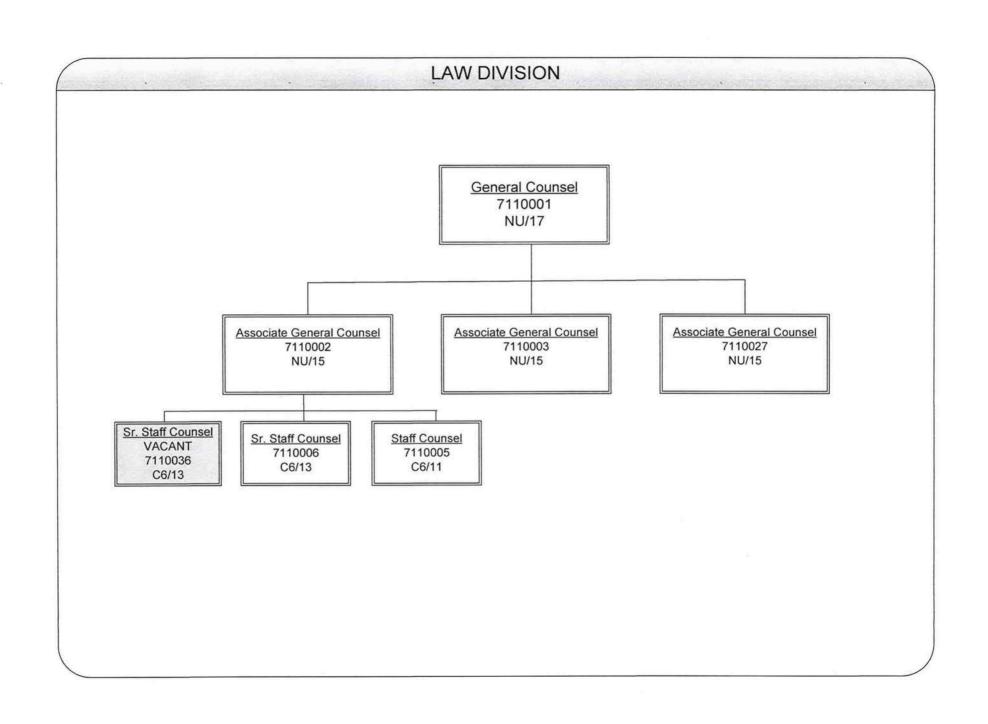
There are no requirements that weight be lifted or force be exerted in the performance of this job. Specific vision abilities required by this job include close vision, and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment 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.

February 2018



STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Appointment of Program Manager, SCADA Engineering

COMMITTEE: Personnel & Compensation

INFORMATION

X VOTE

Karen Gay-Valente, Director, Human Resources John Vetere, Deputy Chief Operating Officer Gus Serino, Manager, SCADA & Process Control Preparer/Title

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

RECOMMENDATION:

To approve the appointment of Norman Green, to the position of Program Manager, SCADA Engineering (Unit 9, Grade 29), at an annual salary of \$ 110,228.55, commencing on a date to be determined by the Executive Director.

DISCUSSION:

MWRA's SCADA system provides monitoring and/or control of approximately 100 water and wastewater transport facilities across MWRA's service area. SCADA engineers and technicians are responsible for SCADA system operation, maintenance and security, including maintenance and configuration of field instrumentation, programmable logic controllers (PLCs), human-machine interface PCs, network and security equipment. SCADA staff also support several MWRA departments including Maintenance, Engineering, Construction and Water Quality.

The position of Program Manager, SCADA became vacant upon the promotion of the prior incumbent, and it reports to the Senior Program Manager, SCADA. The Program Manager, SCADA Engineering is responsible for the East SCADA Engineering group, which includes all the metropolitan water and wastewater facilities, as well as multiple water metering sites used for monitoring system conditions.

Selection Process

The position of Program Manager, SCADA Engineering was posted internally and externally. Three candidates, two internal and one external, submitted applications. All were determined to have met the minimum qualifications and were referred for an interview. The Manager, SCADA and Process Control, the Senior Program Manager, SCADA and a representative of MWRA's Affirmative Action and Compliance Unit interviewed the three candidates. Upon completion of the interviews, it was determined that Mr. Norman Green was the best candidate to fill the position based on his experience and education.

Mr. Green has more than 25 years of experience building, troubleshooting, and improving upon MWRA's SCADA system. Mr. Green began his career at MWRA in 1990 as a SCADA Technician and served in the SCADA technicians group for 10 years. During his time as a SCADA technician, he was able to gain experience with the startup, maintenance and automation of the metro water pump stations, water storage tanks, and water meters. In 2006, Mr. Green was promoted from the SCADA Technician group to the position of Senior Monitoring & Controls Engineer in the SCADA Engineering group, a role in which he served for six years. During his time as a Senior Monitoring & Controls Engineer, Mr. Green gained experience working on the western water and sewer SCADA systems. Mr. Green was promoted into his current position, Project Manager, SCADA Engineering, in 2012, where he was able to build his experience and skills in managing larger more complex projects, such as the Chelsea Screen House Rehabilitation project and the SCADA Active Directory Project. As a Project Manager, SCADA Engineering, Mr. Green was able to gain valuable experience in a supervisory role. In all of his roles in the MWRA SCADA department, Mr. Green demonstrated a positive, professional demeanor and has become a valued member of the MWRA and the SCADA department.

Mr. Green has a Bachelor of Science in Electronics Systems Engineering Technology from Wentworth Institute of Technology. He maintains a MA Grade II Water Treatment Operator License (in Training), a MA Wastewater Treatment Plant Operators License Grade 2M, and a MA Grade II Wastewater Collections Operator's License, as well as, a General Radiotelephone Operators License and certificates in Radio Signals and System Repair and in Avionics from the US Air force.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the FY18 Current Expense Budget to fund this position.

ATTACHMENTS:

Resume of Mr. Norman Green Position Description Organization Chart

SUMMARY

A Resourceful, Self-motivated Technical Project Manager skilled in streamlining operations and maintaining on time schedules to ensure maximum customer satisfaction. Driven to achieve results and provides leadership in attaining long-term success of MWRA Water and Waste Water projects.

EXPERIENCE

MASSACHUSSETTS WATER RESOURCES AUTHORITY Chelsea, Massachusetts

Project Manager, 2012-Present

Oversees and executes the management of contracted services to the MWRA SCADA System. Develops, deploys, modifies, and troubleshoots the SCADA Network. Programs and modifies Plc as needed to support the Operations and Maintenance Department. This includes providing vision and direction; assisting with the implentation of modified controls for new or refurbished facilities; making range change when needed; and troubleshooting control system to provide smooth and efficient operation.

- Programs and provides system configuration in supporting the installation of instruments & control equipment.
- Manages projects through extensive customer support and technical coordination.
- Manages and coordinates the SCADA work done at: Chelsea Creek Screen House upgrade, Caruso generator replacement, PP Solenoids, SMRTU rain gauge, NN Odor Control Fan modification, Cabinet Key installation, Hingham and Quincy Tank replacement and Active Directory startup and lock installations.
- Ensures passwords, firewalls and routers are updated as new sites, equipment and personnel are on boarded.
- Works with Sr. Program Managers and Construction Coordinators on ongoing SCADA projects and inserts corrective
 measures when needed to keep project in compliance with the MWRA's standards.
- Collaborates with multiple departments and SCADA engineers to resolve the needs of the Operations
 Department. Manages direct reporting staff by assigning tasks and workloads that maximizes their potential.
- Verify that workflows are functioning effectively and efficiently. Regularly troubleshoots issues with Maintenance supervisors as needed. Tactfully maintains good Vendor Relationships within the MWRA's infrastructure while moving projects forward. Shows diplomacy when working with contractors and consultants as it pertains to SCADA operations during startups and modifications. Certify MWRA's guidelines and standards are followed to protect the Authority's assets. Directs escalations for on-going projects
- Field Acceptance and Operational Ready Test before putting systems online.
- Workload Planning & Prioritization: Worked frequently with RS-232,RS-485,V.35 and various communications signaling standards.
- Managed the coordinated the efforts in tightening physical security by installing intrusion switches to all SCADA cabinets that has network connectivity.
- Worked with procurement managers, lock and bonded key vendors in ordering handles, locks and lock cores to protect MWRA's SCADA infrastructure from malicious activities.
- Programs Plc to monitor and alarm on intrusion as it relates to SCADA.
- Adds extra security to Plc to alarm on rouge program change.
- Manages, and coordinates the efforts of other Team members in order to meet time sensitive project deadlines.
- Conferred with Operation Managers and develop solutions to daily work and related problems.
- Ensured new design or new instrumentation works as designed and are displayed correctly to our HMI.
- Guided software upgrades and system expansion and patches.
- Wrote procedures for programming SCADA hardware & for new SCADA PC deployment.
- On call for timely response and directs personnel to impacted sites during emergencies.

Senior Monitoring/Control Engineer, 2006-2012

- Responsible for the maintenance of major Waste Water treatment facilities. Duties included: Programmed various 4-20 Ma
 input and output devices to Plc for monitoring and controlling waste water treatment processes.
- Programmed and modified plc programs to run conveyors, valves, gates, dispensing of chemicals to remove and treat waste.
- Edited database. Programmed and modified Plc & HMI to meet the varying needs of Water and Transport Operations.
- Troubles shoot system when malfunction occurs.
- Assisted managers and SCADA operators with daily operational problems.
- Diagnosed Hmi and network problems in the field.
- Maintained and modified database as new devices are added.

- Trended data points for operational, statistical or billing usage.
- Installed monthly software patches for reliability and for enhanced security.
- Responded to Operation changes and fixes in the field and in the Control Center.
- Collaborated with Program Managers and SCADA Technicians in solving problems and advancing projects onward
- Setting-up remote view nodes for Directors, Superintendents and Program managers.
- Interacted with Verizon personnel to troubleshoot and resolve communication issues.
- Supervises and provides managerial and technical oversight of the SCADA Technicians.

Senior SCADA Technician/SCADA Technician, 1990-2000 & 2003-2006

Primary point of contact person in the field during start-up and modernization of pump stations water tanks, water meters and new installations. The areas focused on are SCADA (Supervisory Control and Data Acquisition), communications, instrumentation, networking, security and the telemetry spectrum. Projects served: 58 communities with thousands of ratepayers in eastern Massachusetts, which included:

- Minimized rate increases by implementing (in-house), the refurbishing, installation and startup of monitoring and control signals and data circuits for over 200 water meters (Telogs), pump stations, reservoirs and storage tanks.
- Supervised on site contractors in the removal and replacement of four major electronic enclosures containing the instrumentation and control system for Waltham, Newton and other surrounding cities. Worked with contractors in the installation of microwave towers, radio enclosures, and the installation of computer enclosures for the Operations and Control Center. All work was in compliance with MWRA and OSHA standards.
- Performed preliminary path studies of proposed microwave links as well as frequency interference and intermodulation studies at microwave radio sites.
- Installed, repaired and servicing digital channel banks and DSU/CSU high-speed modems.
- Saved the Authority monies by designing in house tester to program and calibrate DGH modules and by calibrating Local Oscillator in SS radios when frequency drifts.
- Used service monitors, spectrum analyzer, watt meters, oscilloscopes, frequency counters, and BER test sets as troubleshooting aids.
- Scheduled work for junior staff based on individual expertise.
- Created training/reference tools including diagrams and drawings of new and existing sites.
- Improved worker safety by creating and revising safety policies and procedures for working on microwave towers, confined space and water tanks.
- Performed preventative maintenance of radio sites, generating work orders and tracking site malfunctions.
- Trained and mentored nine technicians enabling them to assume their duties more rapidly.
- Resolved disputes between union and management while serving as union representative.

ADDITIONAL EXPERIENCE

L-3 COMMUNICATIONS, Woburn, Massachusetts, Customer Service Technician, 2003-2003.

- Provided support to Airports in the Northeast: Tasked with installing, troubleshooting, and maintaining X-ray and explosive CT based security systems using built in diagnostics and external test equipment.
- Debug complex electronic and electromechanical assemblies.
- Interfaced with internal groups and Massport personnel while exercising good judgment in assuring CT machine are functioning which facilitated timely air plane departures.
- Performed technical and operator training to FAA and TSA staff.
- Provided feedback to department Project Managers and baggage conveyor engineers.

CTC/CHOICE ONE COMMUNICATIONS, Waltham, Massachusetts, Network Operations Technician, 2002-2002.

- Managed and monitored major ILEC consisting of voice, data, and Internet services.
- Carrier data is DS1 Up to OC-48. This is a WAN encompassing the northeast from Maine to Virginia and Ohio.
- Dispatched technicians to trouble sites after verifying problem using Cisco and Acterna troubleshooting aids.
- Ensured proper escalation procedures are followed during outages.
- Daily activities consisted of interacting with vendors such as Neon, Charter, Fibertech, Metromedia, Verizon, Global Crossing, Williams Communication and Sprint while troubleshooting or during turn up of new systems for customers.
- The ATM and Optical backbones are Cisco based consisting of Cisco Transport Controller, Power Path Mgx, Bpx, Cerent 15454, and 15800,15216 Oadm and Dwdm.

TELLABS OPERATIONS INC, Lisle, IL, Field Service Engineer, 1999-2002

- Lead engineer on site during Internet build out for incoming cell, data voice over Ip and data users consisting of financial, municipality, hospitality and 911 services. Expansion consisted of: Provisioning, testing and the turn up of DS1, DDS1, and DS3, OC-3, OC-12, OC-48 in all major Control Centers.
- Testing of port bay, expansions consisting of port shelves and Core expansions on networks

EDUCATION

Wentworth Institute of Technology, Boston Massachusetts B.S., Electronics System Engineering Technology

CERTIFICATIONS

- United States Air Forces Avionics School, Champaign, Illinois(4years served)
- United States Army Radio School, Augusta, Georgia
- Tellabs Titan 5500 Digital Crossconnect System
- Verity 3300 Echo Cancellor
- Cisco Router Training
- Tellabs 6500 Communication Switch
- Intellution (IFix) Software School
- Allen Bradley Programmable Logic Controller School
- Aircraft maintenance management school
- Supervisor and Management Training

LICENSES

General Radiotelephone Operators License, Ham Radio Operators License, Grade II Wastewater Operators license. Grade II Water Operators license, Grade II Distribution License.

COMPUTER SKILLS

Microsoft Office Suite, Lawson, Windows 7, Windows 10, Maximo

MWRA POSITION DESCRIPTION

POSITION:

Program Manager, SCADA (Engineering)

PCR#:

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. Is required to be on-call for emergencies twenty-four (24) hours a day, seven (7) days a week.

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 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.
- (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 7.
- (C) Working knowledge of EIA RS-232, RS-422, RS-485, V.35, X.25, 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.

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.

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.

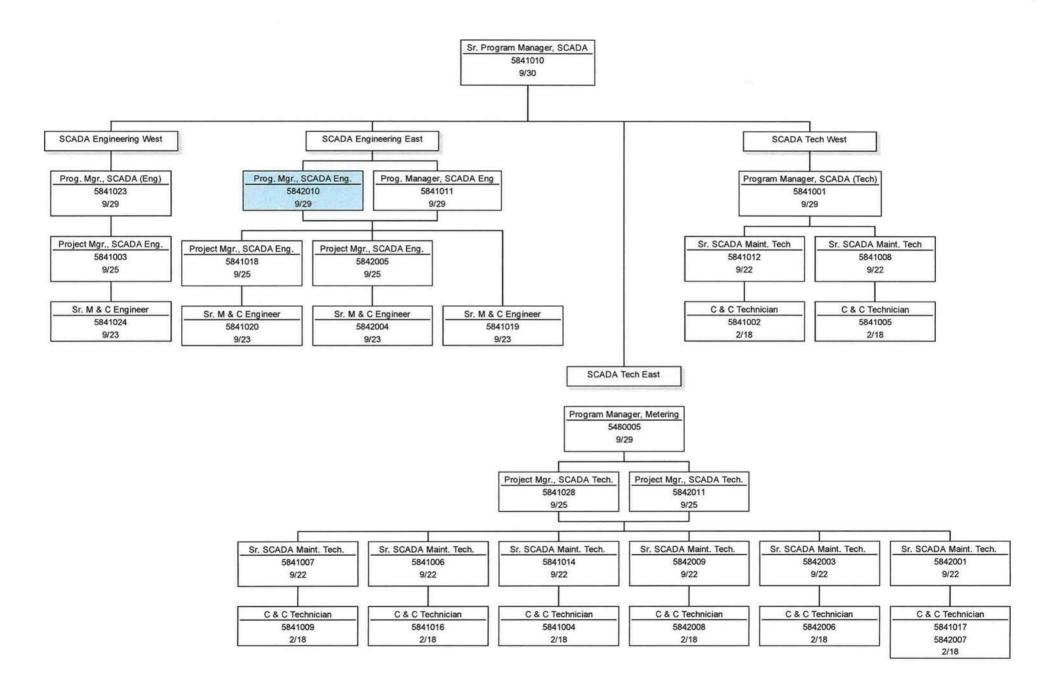
While performing the duties of this job, the employee regularly works in an office environment. The employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee 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.

August 2017

SCADA Maintenance & Process Control

April 2018



STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18 2018

SUBJECT:

Appointment of Director, Tunnel Redundancy Program

COMMITTEE: Personnel & Compensation

INFORMATION

X VOTE

RECOMMENDATION:

To approve the appointment of Ms. Kathleen M. Murtagh to the position of Director, Tunnel Redundancy Program, (Non-Union, Grade 17), at the recommended annual salary of \$180,000, and to authorize the Executive Director to enter into an employment contract with Kathleen M. Murtagh to provide her services to the Authority for a three-year period commencing on a date to be determined by the Executive Director. Ms. Murtagh will also be provided with \$700 per month car allowance in lieu of an MWRA vehicle.

DISCUSSION:

The position of Director, Tunnel Redundancy Program is a new position created at the March 2018 meeting of the Board of Directors. The position was created to oversee and direct the design. construction, engineering and procurement tasks associated with the Metropolitan Tunnel Redundancy project, which was discussed in great detail at a Special Meeting of the Board of Directors on October 6, 2016. On February 15, 2017, the Board voted to approve the MWRA staffpreferred alternative to construct a northern and a southern deep rock tunnel from the Hultman Aqueduct and MetroWest Water Supply Tunnel to the Weston Aqueduct Supply Main 3, and to the Southern Spine water mains for the purpose of providing redundancy for the Metropolitan Tunnel System (City Tunnel, City Tunnel Extension and Dorchester Tunnel). The Board also directed staff to proceed with preliminary design, geotechnical investigations and Massachusetts Environmental Policy Act (MEPA) review of the project. Following the recommendation of the MWRA Advisory Board, the staffing plan for the project will emulate the Program Management model used on the Boston Harbor Project. The scope of the project requires an individual with high level management skills and demonstrated successful oversight of major civil engineering and construction projects. The position will be responsible for project implementation start up and maintenance, and responsible for meeting schedules, budget, environmental compliance, safety and technical objectives.

Ms. Murtagh has served as the Vice President at CDM Smith since 1997 and has more than 28 years of geotechnical engineering experience overseeing a broad range of civil engineering projects. Prior to her employment at CDM Smith, Ms. Murtagh worked as a Geotechnical Engineer at Haley and Aldrich, Inc.

Ms. Murtagh has extensive tunneling experience, having worked on at least 50 projects of varying size and methods. Some of the more notable projects include Loudoun Water, Virginia's new water treatment plant and finished water transmission system project which included a rock tunnel; the Southwest Water Transmission Main in Charlotte, North Carolina which involved constructing tunnel crossings using TBM and pipe jacking methods; the Briar Creek Relief Sewer project, also in Charlotte, which included a 12-mile, 72-inch sewer pipeline with ten tunnel crossings; and the Regeneron Sewer in Rensselaer, New York installing sewers beneath an active Amtrak railroad crossing via pipe jacking, boring and micro-tunneling.

Ms. Murtagh's experience also includes work on countless projects related to pipelines, building retaining structures, water and wastewater plants, landfills, tanks, waterfront structures, recreational facilities and geothermal systems.

During MWRA's May 2010 water main break, she provided critical technical expertise on issues related to recovering important pieces of the failed coupling for forensic evaluations. Her extensive technical expertise in the geotechnical aspects of pipeline designs, soil structure interaction, dewatering and risk management proved essential to aiding the MWRA through its largest water supply interruption. She was also instrumental in the repair of the Charlestown wind turbine's sinking foundation. Additionally, Ms. Murtagh is currently serving as the Lead Geotechnical Engineer for numerous MWRA projects including MWRA Section 36 in Waltham, Section 109 extension in Lynnfield, Section 23, 24 and 47 in Watertown and surrounding areas, and MWRA WASM3 in Weston and surrounding areas.

Ms. Murtagh has served in multiple staff management roles overseeing up to 30 technical staff throughout the eastern US; overseeing all aspects of hiring, performance management/appraisals, work distribution, utilization, training, and quality management. In her role as the Division Quality Manager for a group of approximately 60 geotechnical professional staff, she established quality procedures and standards for calculation and field logs, reports, technical specification, and document management, as well as establishing and leading for over a decade CDM Smith's inhouse Geotechnical Loss Prevention Training Programs (a.k.a. risk management training).

Ms. Murtagh has the vision, conceptual skills and ability to strategically plan and effectively manage the Tunnel Redundancy Program. She has extraordinary leadership abilities, exceptional management skills, is decisive and highly adept at problem solving - all of which are critical to the successful management of this complex project.

Ms. Murtagh holds both a Bachelor's and Master's Degree in Civil Engineering. She is a registered PE in Massachusetts as well as thirteen other states.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the FY18 CEB for this position.

ATTACHMENTS:

Position Description Resume of Kathleen M. Murtagh Organizational Chart

Kathleen M. Murtagh, P.E.

Ms. Murtagh has over 28 years of geotechnical engineering experience in a broad range of civil engineering projects. She has experience in projects related to tunnels, pipelines, buildings, retaining structures, water and wastewater treatment plants, landfills, tanks, waterfront structures, recreational facilities, and geothermal systems. She has served as the project manager, geotechnical engineer of record, and technical reviewer responsible for field investigations, laboratory testing, analysis, design, report preparation, specification preparation, and construction monitoring on numerous projects.

Ms. Murtagh's experience includes determining foundation design requirements and evaluating geotechnical aspects of site development for a variety of projects. She has extensive experience with designing and construction of temporary excavation support systems and deep shafts; retaining walls; tunneling and trenchless pipe installation methods; and many types of deep and shallow foundations, including piles, drilled shafts, and spread footing foundations.

Ms. Murtagh's experience extends to alternative delivery methods including design build, construction management at risk, and program management of various project types including site development and facilities, infrastructure, water front structures, pipelines and tunnels. She has extensive experience in risk management and has been involved with litigation support.

Project Experience

Tunneling, Microtunneling, and Pipe Jacking

Lead Geotechnical Engineer, Water Treatment Plant and Finished Water Transmission main, Loudoun Water, Virginia. Ms. Murtagh served as the lead geotechnical engineer and geotechnical engineer of record for Loudoun Water's new water treatment plant and finished water transmission system project which included a rock tunnel below Goose Creek.

Geotechnical Engineer of Record, Briar Creek Relief Sewer, Charlotte, North Carolina. Ms. Murtagh was the Geotechnical Engineer of Record for for 38,000 linear feet of 72 to 48-inch diameter relief sewer pipeline. Ten (10) tunnel crossings were constructed using tunneling or pipe jacking methods. Tunneling methods included hard rock TBM and hand mined soil tunnels using liner plates.

Geotechnical Engineer of Record, Southwest Water Transmission Main, Charlotte, North Carolina. Ms. Murtagh served as the Geotechnical Engineer of Record for 62,000 linear feet of 72-inch diameter water pipeline. Twelve (12) tunnels crossing were constructed using tunneling or pipe jacking methods. Tunneling methods included hard rock TBM, soft ground TBM, and hand mined soil tunnels using liner plates.

Lead Geotechnical Engineer, Regeneron Sewer, Rensselaer, New York. Ms. Murtagh served as the lead geotechnical engineer for 18- and 30-inch diameter sewers cross beneath two separate (1-track and 3-track) active Amtrak railroad crossings which were installed via pipe jack and boring, while the 42-inch-diameter casing pipe of the 30-inch-diameter sewer carrier pipe was installed via microtunneling.

Education

M.S. - Civil Engineering, Virginia Polytechnic Institute and State University, 1989

B.S. - Civil Engineering, University of New Hampshire, 1988

Registration

Professional Engineer:
Massachusetts (1994),
Pennsylvania,
North Carolina,
Virginia, New York,
Kansas, Illinois, Texas,
New Hampshire,
Connecticut, Rhode
Island, Michigan, and
Maryland

Work History

CDM Smith, Boston MA. July 1997 – Present. Vice President (current title)

Haley & Aldrich, Boston, MA. June 1990 - June 1997. Geotechnical Engineer. Lead Geotechnical Engineer, MWRA Sudbury Aqueduct Pressurization and Connections: Alternatives Analysis and MEPA Review, Massachusetts. Ms. Murtagh is serving as the lead geotechnical engineer for this Massachusetts Water Resources Authority (MWRA) project. Ms. Murtagh is part of a team that will evaluate a series of alternatives for the Sudbury Aqueduct Pressurization and Alternatives with an eye towards providing redundancy for the City Tunnel system while preserving future flexibility, evaluating a robust range of options including surface pipelines, tunnels and sliplining of the Sudbury Aqueduct.

Water and Wastewater Infrastructure and Treatment Facilities

Technical Reviewer, Northeast Water Purification Plant Expansion Project, City of Houston, Texas. Ms. Murtagh is currently serving as a senior level technical reviewer for all geotechnical aspects of the Phase II expansion of the Northeast Water Purification Plant in Houston, Texas. As part of the design-built team of the \$1.6 billion project, Ms. Murtagh assists the joint venture design and construction team in a partnership with the City and four regional water authorities in the largest progressive design-build project of its kind presently underway in the United States. The project will expand the Northeast Water Purification Plant from 80 million gallons per day (mgd) to 400 mgd.

Geotechnical Engineer of Record, Flushing Bay High Level Interceptor Improvements, Queens, New York. This NYCDEP project included modifications to five regulators located under the congested, busy streets of Queens, NY. Traffic control, site access restriction, maintenance of traffic, non-existent staging areas, overhead constraints, existing sensitive utilities and structures protection and limited construction work hours are some of the additional challenges to the project.

Lead Geotechnical Engineer, Tunnel Dewatering Pump Station & Enhanced Clarification Facility, DC Water Blue Plains Advanced Wastewater Treatment Plant, Washington DC. The design-built project for the TDPS & ECF included various deepfoundation-supported buildings and a pump station structure inside a tunnel dewatering shaft that is over 180 feet deep.

Geotechnical Design Engineer, CAT-DEL UV Facility, NYC Water Supply System. Ms. Murtagh provided extensive design services for the Catskill and Delaware (CAT-DEL) Ultraviolet Light Disinfection Facility (UV Facility) at the Eastview site in Mount Pleasant and Greenburgh, Westchester County, New York. At an ultimate design capacity of 2,400-mgd, the CAT-DEL Facilities will be the largest capacity treatment plant of its kind in the world with costs over \$1B. The project includes excavations up to 100 ft deep

Project Geotechnical Engineer, Major Design Packages for Deer Island Treatment Facility, Boston, Massachusetts. Ms. Murtagh participated in the design of several major design packages for the MWRA Deer Island Treatment Facility in Boston, Massachusetts.

Pipelines

Technical Expert, MWRA Water Main Break, Weston, Massachusetts. In May 2009 when a coupling on a 10 ft diameter water main, serving the metro Boston area, failed leaving over 2 million people boiling their drinking water, Ms. Murtagh was one of a select group of engineers called to assist the MWRA. Over the following days, weeks and months she provided technical expertise to the MWRA on issues including recovering important pieces of the failed coupling for forensic evaluations. Her extensive technical expertise in the geotechnical aspects of pipeline design, soil structure interaction, dewatering, and risk

Professional Activities

Member, American Society of Civil Engineers

Boston Society of Civil Engineers, served as the Chair for the Geo-Institute Executive Committee

Organizing Committee Member, Soil and Rock America (SARA) conference 2003 management proved essential to aiding the MWRA through one of the largest municipal water supply interruptions it had ever faced.

Ms Murtagh served/is serving as the Lead Geotechnical Engineer for the following project:

- Forensic Evaluation of Fail Slope and Trunk Sewer Preliminary Assessment, Yonkers, New York.
- MWRA Section 36/New 11B Interconnection/Watertown Section/Waltham Connection.
- MWRA Section 109 Extension, Lynnfield, Massachusetts.
- MWRA Section 23, 24, and 47, Watertown, Newton, and Boston, Massachusetts.
- MWRA WASM 3, Weston, Waltham, Belmont, Arlington, Somerville, Massachusetts.
- BWSC Bulfinch Triangle, Boston, Massachusetts.

Towers and Wind Turbine Foundations

Engineer of Record, National Grid Transmission Towers, Fall River and Somerset, Massachusetts. Ms. Murtagh served as the Engineer of Record for two sets of monopole replacement towers extending electrical transition lines over the Taunton River from Fall River to Somerset Massachusetts. The tower, extending over 200 ft tall, replace existing sets of aging shorter lattice grid towers

Lead Geotechnical Engineer, Wind Turbine Foundation, Lynn, Massachusetts. Ms. Murtagh served as the lead geotechnical engineer for the foundation design, bidding and construction support for a 180-foot (600 kW) wind turbine.

Lead Geotechnical Engineer, Forensic Evaluation of Wind Turbine Foundation, Boston, Massachusetts. Ms. Murtagh assisted the MWRA in a forensic evaluation of a recently constructed wind turbine foundation that had experienced an unusual amount of settlement. The proprietary foundation system, i.e., floating pile anchor system, was found to have settled excessively and unexpectedly under the design loading conditions. She evaluated the potential for differing site conditions and the soil-structure interaction of the foundation system. She worked with the MWRA, structural engineers, contractor, and original foundation system designer to determine the steps necessary to stabilize the existing foundation system, evaluate the cause of the settlement, and design a supplemental foundation.

Publications

Murtagh, K. "A Red Hot Challenge for the Underground Industry", Published in the *Tunneling Journal*, October 2010.

Murtagh, K. "Tunneling Under Charlotte – A Case Study for the Southwest Water Main – The Largest Potable Water Main in the Carolinas." *North Carolina AWWA/WEA Annual Conference* (Greensboro: November 2006).

Murtagh, K. "Pile Raft Foundations." *Boston Society of Civil Engineers Section Newsletter*, December 2003.

Murtagh, K. "Expansion and Rehabilitation of the State Fish Pier in Gloucester, Massachusetts." Fourth International Conference on Case Histories in Geotechnical Engineering (St. Louis, Missouri: March 1998).

MWRA POSITION DESCRIPTION

| 1 Obilion in Biretor of Funder freedomental Freedomental | POSITION: | Director of Tunnel Redundancy Program |
|--|-----------|---------------------------------------|
|--|-----------|---------------------------------------|

DIVISION:

DEPARTMENT:

BASIC PURPOSE:

Directs the design, construction, engineering and procurement for the Metropolitan Tunnel Water Redundancy Program.

SUPERVISION RECEIVED:

Reports directly to and acts under the supervision of the Executive Director.

SUPERVISION EXERCISED:

Exercises close supervision of Managers and staff assigned to the program.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Directs and controls the design, construction, engineering and procurement activities for the Metropolitan Tunnel Redundancy Program from capital delivery to operations start up and maintenance, meeting approved time, cost, environmental compliance, safety, and technical objectives.
- Establishes guidelines, and reviews plans, estimates, reports and recommendations prepared by staff and outside contractors for the Metropolitan Tunnel Redundancy Program.
- Negotiates, recommends and manages contracted services and equipment contracts.
- Develops and monitors program master schedules and budgets and coordinates program scheduling and sequencing with planned project financing.
- Ensures adequate allocation of staff and financial resources for successful implementation of capital and maintenance project delivery.
- Manages the impacts of MWRA operations and construction on community water/sewer systems, through coordination with community system managers.

- Works collegially with other MWRA divisions and departments to ensure the goals, objectives and strategies of the Metropolitan Tunnel Redundancy Program are achieved.
- Develops and directs implementation of risk management, safety and quality control programs for the project.

• SECONDARY DUTIES:

• Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A bachelor's degree in sanitary, civil or mechanical engineering, business, management or associated field. Advanced degree or other significant post-graduate educational experience in an engineering discipline preferred.
- (B) Knowledge of the principles and practices of tunnel project management as acquired by twelve (12) to fifteen (15) years experience in design and construction phase of major civil engineering projects, including a minimum of six (6) years experience in a managerial position; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Excellent engineering and analytical skills.
- (B) Excellent oral and written communication skills required.
- (C) Familiarity with automated project management financial and CADD/CAM program preferred.
- (D) Expert familiarity and management competence in the planning, regulation and operation of water systems.
- (F) Ability to work with personnel at various organizational levels, to balance competing priorities and to manage personnel and resources as required.
- (G) Ability to provided technical leadership to subordinate employees, as well as the proven ability to inspire confidence in customers and the general public.

SPECIAL REQUIREMENTS:

Massachusetts Motor Vehicle Operators License.

Massachusetts registration as Professional Engineer or eligible through reciprocity.

TOOLS AND EQUIPMENT USED:

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

PHYSICAL DEMANDS:

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

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

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

WORK ENVIRONMENT:

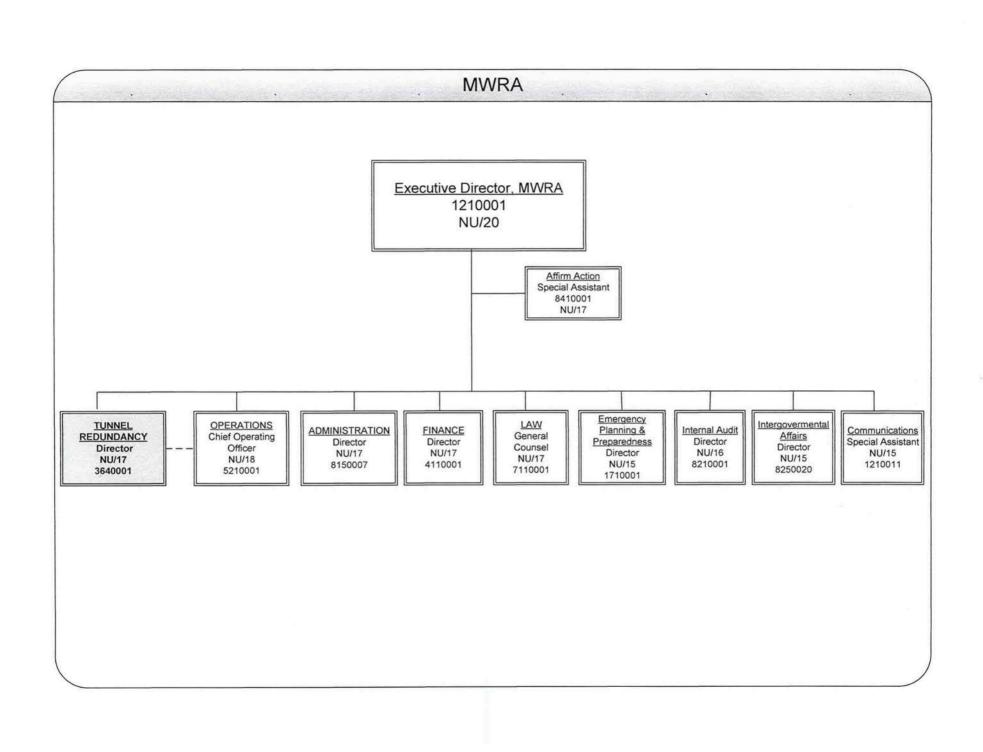
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

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

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

March 2018

Page 3 of 3



STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Appointment of Warehouse Manager, Deer Island

COMMITTEE: Personnel & Compensation

_INFORMATION

X VOTE

Karen Gay-Valente, Director, Human Resources Carolyn Francisco Murphy, Director, Procurement

Stephen Coffey, Materials Manager

Preparer/Title

Director of Administration

RECOMMENDATION:

To approve the appointment of Ms. Mary Lisa Freeman to the position of Warehouse Manager, Deer Island (Unit 6, Grade 12) at the recommended salary of \$82,158.69 commencing on a date to be determined by the Executive Director.

DISCUSSION:

The Deer Island Warehouse Manager position became vacant upon the promotion of the incumbent. This position reports to the Materials Manager and oversees the Deer Island inventory control functions for materials and supplies in accordance with the Authority's materials management and purchasing policies and procedures. Responsibilities of this position include management of the Deer Island Warehouse staff, and all warehousing and inventory control activities such as stock replenishment, inventory control, shipping, receiving and issuance functions. The Warehouse Manager also ensures the availability of supplies and materials for Deer Island Maintenance and Operations.

Selection Process

The position of Warehouse Manager, Deer Island was posted internally. Four qualified candidates were referred for interviews, which were conducted by the Materials Manager, Employment Manager and Director of Procurement. Upon completion of the interviews, Ms. Mary Lisa Freeman was selected as the most qualified candidate for this position.

Ms. Freeman has twenty-three years of experience working in warehousing. Ms. Freeman joined the MWRA in early 2015 as a Materials Handler. In that role she performed a variety of warehousing tasks involving the handling, kitting, issuing and counting of materials and the maintenance of inventory records. She also assisted in documenting, recording, adjusting and reporting on all inventory activities. Later in 2015, Ms. Freeman was promoted to the position of Inventory Control Specialists where she was responsible for inventory control, purchase requisitioning and the receipt,

storage and handling of supplies and materials. Prior to her employment at MWRA, Ms. Freeman held various warehousing positions including materials handler for a utility company, buyer/inventory coordinator at a power plant and a materials coordinator for a private business. Ms. Freeman also served as union steward of IBEW, Local 396 where she was involved with personnel issues and union disputes.

For the past five months Ms. Freeman has served as the Acting Deer Island Warehouse Manager. In that capacity she has successfully managed all warehouse activities including shipping, receiving, kitting, cycle counts, storing of new inventory and replenishment of materials. Ms. Freeman's transition into the acting position has been seamless with no interruption of work flow or production.

Ms. Freeman has demonstrated the ability to handle all aspects of warehousing, as well as personnel issues. She has in-depth knowledge and experience in inventory management, automated inventory systems, surplus property and with the Maximo and Lawson systems. Ms. Freeman is widely respected by her colleagues and is the best qualified candidate for this position.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position within the FY2018 CEB. The recommended salary is in accordance with the Authority's policy for Unit 6 employees.

ATTACHMENTS:

Resume of Ms. Freeman Position Description Materials Management Department Organizational Chart

MARY LISA FREEMAN

OBJECTIVE: To obtain a position utilizing my inventory control, warehousing, as well as, my purchasing

experience.

EXPERIENCE:

9/2015-PRESENT

MWRA Boston, MA

INVENTORY SPECIALIST

- Perform a variety of tasks involving inventory control, purchase requisitioning, and the receipt, storage, and handling of supplies and materials
- Assists with other related warehouse duties such as cycle counts and report any inventory discrepancies.
- Work with plant personnel and vendors to ensure materials are properly ordered and deliver in a timely manner

1/2015-9/2015

MWRA Boston, MA

MATERIAL HANDLER

- Performed variety of warehouse tasks such as kitting, issuing, and shipping/receiving
- Performed routine cycle counts and investigated discrepancies using Lawson and Maximo
- Assisted plant personnel to ensure requisitioned materials are met in a timely and courteous manner
- Operated forklifts and other warehouse equipment

2012-2014

DEEP SEA SYSTEMS, INC. Cataumet, MA

MATERIAL COORDINATOR

- Received, stored, issued and expedited various materials for underwater vehicles for the offshore oil and gas industries
- Worked closely with the purchasing, accounts payable, engineering personnel, as well as, vendors to ensure all products met specification requirements for customer satisfaction
- Prepared schedule for upcoming shipments
- Performed monthly cycle counts and investigated discrepancies using the PeopleSoft inventory system
- Prepared documents for domestic and international shipment using both Fed-Ex and UPS
- Operated various warehouse tools and equipment

2007-2010

MIRANT/CANAL

Sandwich, MA

INVENTORY COORDINATOR

- Received, shipped, stored power plant materials, and reviewed purchase orders
- Reconciled book balances and researched discrepancies using Excel and the Maximo inventory system
- Performed routine audits for accuracy utilizing a monthly cycle count program
- Worked with plant personnel and vendors to ensure products were properly quoted, ordered, and delivered
- Performed various forms of housekeeping and proper handling of all hazardous materials with the use of forklifts, basic hand and power tools, other warehouse equipment

1998-2007

EXELON POWER/NEW BOSTON STATION

Boston, MA

BUYER/INVENTORY COORDINATOR

- Negotiated, prepared, and administered the purchasing of a wide variety of power plant materials
- Coordinated and monitored receiving, storage, and distribution of all supplies
- Processed purchase orders, invoices, and interacted with external vendors and contractors
- Prepared responses to audits and other administrative office practices and procedures
- Assumed a leadership role in learning and implementing OSHA regulations
- Assisted maintenance technicians during outages and operated forklifts and various warehouse equipment
- Worked with Word, Excel, and Passport inventory system

1993-1998

BOSTON EDISON

Watertown, MA

MATERIAL HANDLER

- Maintained inventory of supplies critical to the electrical distribution business
- Established a warehouse inventory system at the company's Hyde Park facility
- Reconciled book balances and researched discrepancies with the MMAPPS inventory system
- · Worked with vendors on the handling and the disposal of hazardous materials in a timely manner
- Operated forklifts, hand tools, and other warehouse equipment

1991-1993

BOSTON EDISON

Boston, MA

ADMINISTRATIVE ASSISTANT

- Provided administrative support such as filing, maintaining confidential records, data entry, payroll
- · Interacted with external vendors, contractors, and customers

1986-1991

BOSTON EDISON

Boston, MA

CUSTOMER SERVICE REPRESENTATIVE/METER READER

- Assisted customers with bill inquiries and establishing and maintaining accounts
- · Handled emergency outage calls as needed
- Interacted with customers in the field and over the phone with a courteous and tactful manner
- Assisted administrative support to colleagues

EDUCATION: 1984

AQUINAS JR. COLLEGE

Newton, MA

Associate's Degree

Executive Secretarial Program

SPECIALIZED SKILLS/CERTIFICATIONS:

- Professional Certification in Customer Service by NFR Foundation
- · Microsoft Office products
- Various inventory control programs Passport, Maximo, Peoplesoft, Lawson
- Hoisting Engineer 1C License HE-164428
- Massachusetts CDL Class B License
- Heartsaver CPR/AED Certified

MWRA POSITION DESCRIPTION

POSITION:

Warehouse Manager

DIVISION:

Administration

DEPARTMENT:

Materials Management

BASIC PURPOSE:

Manages all warehouse activities at assigned location including stock replenishment, inventory control, shipping, receiving and issuance functions. Ensures comprehensive and efficient support or availability of supplies and materials for several of the Authority's operating units and any other divisional units in the assigned district. Also working with the Authority's Surplus Property Committee coordinates the storing and disbursement of all the Authority's declared surplus equipment and material.

SUPERVISION RECEIVED:

Reports directly to the Materials Manager.

SUPERVISION EXERCISED:

Exercises close supervision over the Warehouse Supervisors and Materials Handler.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Manages the activities of the shipping, receiving, and storing of inventory items at assigned site.
- Manages the replenishment of all supplies, materials, and relevant contract services; ensures adequate on-site inventory to support the Authority's needs.
- Manages the efficient utilization of the computer-based inventory control system, providing the information required for the timely availability of all materials for the Authority's southern operating units.
- Manages the establishment and maintenance of the Inventory Master Record, to reflect and effectively utilize data on reorder points, unit costs, and lead times.
- Provides all safety-related material for the entire Authority.

- Ensures cooperative efforts among related functions, such as MIS, Procurement, Maintenance, Operations, Finance, etc., to assure the accuracy and efficiency of the purchasing and inventory control system.
- Manages the development and maintenance of computer-based inventory control reports and related systems and procedures.
- Ensures the organized receiving and completion of associated procurement documentation for all supplies and materials.
- Manages the SARA (Superfund Amendments and Reauthorization Act of 1986) program for all materials received and disbursed by the warehouse.
- Coordinates with other plant managers the short and long-term needs for supplies and materials.
- Monitors vendor performance and service delivery and manages sales representatives in cooperation with Procurement.
- Initiates, coordinates and evaluates training for all warehouse personnel.
- Evaluates assigned employees performance according to MWRA procedures.
- Promotes the MWRA safety programs by supporting the supervisor's weekly safety
 meetings, holding monthly safety meetings and keeping informed on the staff's safety record.
- Administers the application of collective bargaining provisions and personnel policies in the workplace. Serves as Step 1 grievance hearing officer.
- Designs and develops long-range plans for staffing and efficient space utilization.
- Provides support to the Surplus Property Committee in administrative duties, including such
 things as processing and tracking the surplus property requests, arranging for storage if
 necessary and assists in the disposition of surplus property.
- Provides information and assistance to parties interested in purchasing surplus property.
- Works in coordination with all divisions to determine how/what pieces of surplus material
 can be re-used by the Authority.

SECONDARY DUTIES:

• Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college program in Business Administration program or related field; and
- (B) Seven (7) to nine (9) years of experience in materials management of which at least two (2) must be in a supervisory capacity; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of inventory management and standard business procedures.
- (B) Excellent interpersonal, written and oral communications skills.
- (C) Experience and knowledge in automated inventory systems or other data management systems.
- (D) Experience in MSWord, Excel and Access is desirable.
- (E) Familiarity with types or parts normally used in a maintenance organization.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle License.

TOOLS AND EQUIPMENT USED:

Office machines such as the telephone, personal computer 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 the essential duties.

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

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

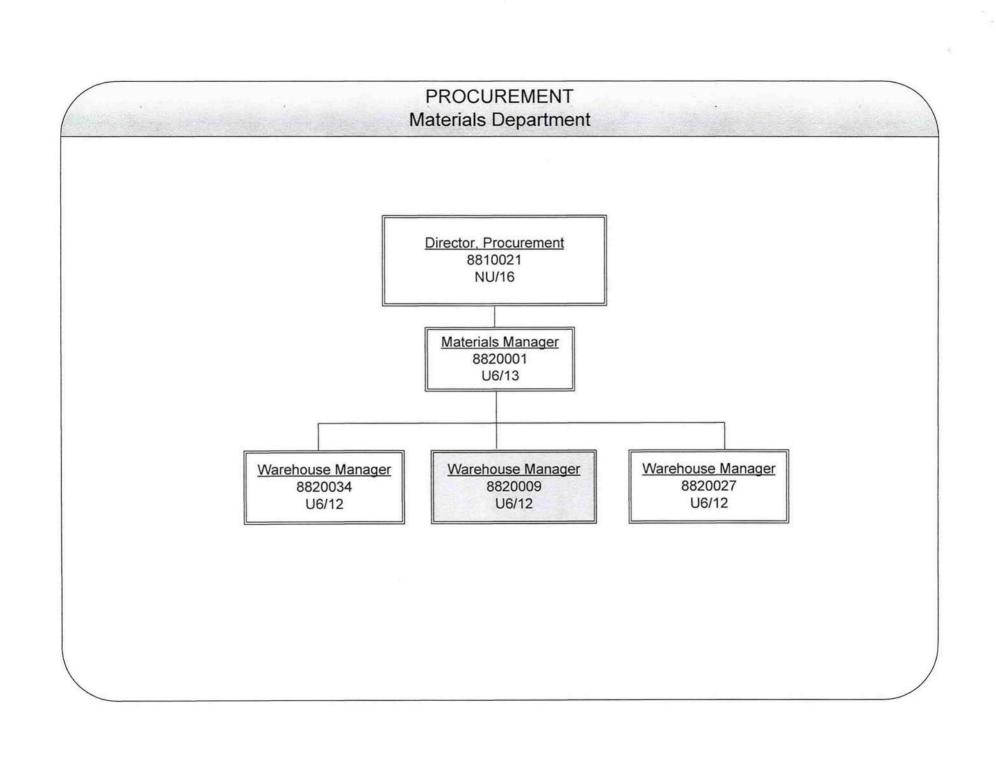
WORK ENVIRONMENT:

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 regularly works in a field/office environment. The employee regularly works near moving mechanical parts, is frequently exposed to wet and/or humid conditions, and is occasionally exposed to fumes and airborne particles, toxic or caustic chemicals and the risk of electric shock.

The job is hearing protection required and the noise level in the work environment is very loud in field settings and moderately loud at treatment facilities.

July, 2000



STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Appointment of Deputy Director, Management Information Systems, Administration

COMMITTEE: Personnel & Compensation

INFORMATION

X VOTE

Karen Gay-Valente, Director, Human Resources

Russell J. Murray, Jr., Director, MIS

Preparer/Title

Michele S. Gillen

Director, Administration

RECOMMENDATION

To approve the appointment of Ms. Paula Weadick to the position of Deputy Director, Management Information Systems (MIS), Non-Union, Grade 15 at an annual salary of \$143,000.00, commencing on a date to be determined by the Executive Director.

DISCUSSION:

The MIS Department provides secure financial, administrative and operational information technology applications and services necessary to carry out the Authority's mission. These technologies increase operational efficiencies, improve management performance and enhance staffs' ability to access critical data. MIS also provides critical cyber security programs and protocols to protect sensitive data and information. MWRA's business processes are increasingly automated and the various technologies evolve at very fast rate, making MIS a critical function for the agency.

The Deputy Director, MIS position was established at the February 2018 Board of Directors' meeting. The position reports directly to the Director, MIS will develop, direct, and administer plans and programs that address the timely and cost effective delivery of information technology projects while ensuring an appropriate level of cyber security. The Deputy Director will also act as the MIS Director in his absence.

Selection Process

This position of Deputy Director, MIS was posted internally and one candidate applied. The candidate, Ms. Paula Weadick, was interviewed by the Director of Administration and the Director of MIS. Ms. Weadick was determined to be qualified for this position based on her experience, skills, knowledge, and education.

Ms. Paula Weadick has over 29 years of experience in the information technology industry of which the last 4 years have been with the MWRA as the Manager of IT Security, Architecture and Engineering. In this capacity, Ms. Weadick oversees the MWRA Cyber Security Awareness Program and the IT Asset Management Program, and supervises the IT Architects and the Senior Program Manager, IT Security. She has led the design and implementation of a secure mobile

workforce platform for both Construction Coordinators and Maintenance Crews and continues to oversee further workforce mobilization efforts. She has also overseen the successful implementation of secure file transfer, WiFi Upgrades, Office 2016 upgrade, data backup solution, and the upgrade to the Authority's cyber security posture. These efforts required considerable coordination with other MIS staff and the end users.

Prior to joining MWRA, Ms. Weadick served as the Manager of Information Technology for the 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, Massachusetts where she managed projects associated with company acquisitions and consolidations. These projects required her to manage virtual teams across diverse geographical locations while integrating heterogeneous environments and consolidating systems and data. Earlier in her career, Ms. Weadick held the position of Sr. Network Administrator for M/A-COM of Burlington, Massachusetts.

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

- Global Information Assurance Certification in Security Leadership
- Microsoft Certified Systems Engineer
- Certified Citrix Administrator
- Information Technology Infrastructure Library (ITIL) Certification Foundations
- Information Technology Infrastructure Library (ITIL) Certification Transition
- Bentley Leadership Program

Based on her education, certifications and experience managing complex technical solutions for a variety of industries and ability to manage technical staff to successful solution implementations, Ms. Weadick is well qualified for the position of Deputy Director, MIS. She is highly regarded by her supervisor and her MIS colleagues as well as her peers across the agency.

BUDGET/FISCAL IMPACT:

Sufficient funds are included in the FY18 CEB for this position.

ATTACHMENTS:

Resume of Paula Weadick Position Description MIS Organization Chart

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

Manager Security, Architecture and Engineering, MIS Massachusetts Water Resources Authority Chelsea, MA

2014 - present

Plans, direct, 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, deployment 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
- 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.
- 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.
- 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 a 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

- Transferred from Project Engineering role to Network Administrator.
- Sole support for 250 users, including pcs and AS400 terminals
- 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

MWRA POSITION DESCRIPTION

POSITION:

Deputy Director, MIS

DIVISION:

Administration

DEPARTMENT:

Management Information Systems (MIS)

BASIC PURPOSE:

Plans, directs, and oversees the operations and budget of the Information Technology (IT) Operations and IT Security, Architecture & Engineering sections. 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, deployment and operation of information systems and technology solutions to meet business and operational needs across the organization.

SUPERVISION RECEIVED:

Works under the direct supervision of the Director, MIS. Acts as the Director, MIS in the absence of the Director.

SUPERVISION EXERCISED:

Manages IT professional, technical and administrative employees assigned to the IT Operations and IT Security, Architecture & Engineering sections.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

Management

- Provides oversight and direction to the employees in the operating sections in accordance
 with the organization's policies and procedures. Identifies needed improvements to work
 practices and works with Director, MIS and Labor Relations staff to bring about changes.
- Manages the preparation and maintenance of reports necessary to carry out the functions of the department. Prepares periodic reports for management, as necessary or requested, to track strategic goal accomplishment.
- Provides final recommendation on staffing levels. Works with Human Resources staff to recruit, interview, select, hire, and employ an appropriate number of employees.
- Mentors and develops staff, including overseeing new employee on-boarding and providing career development planning and opportunities. Encourages employees to take responsibility for their jobs and goals. Delegates responsibility as appropriate and expects accountability and regular feedback.

- Fosters a spirit of teamwork that allows for disagreement over ideas, conflict and conflict resolution, as well as the appreciation of diversity. Communicates organizational information through department meetings, one-on-one meetings, and appropriate email, and regular interpersonal communication.
- Leads employees using a performance management and development process that provides an overall context and framework to encourage employee contribution and includes goal setting, feedback, and performance development planning. Leads employees to meet the organization's expectations for productivity, quality, and goal accomplishment.
- Maintains employee work schedules including assignments, job rotation, training, vacations and approved leaves. Provides coverage for absenteeism, and overtime scheduling as needed.
- Assist in maintaining harmonious labor management relations through proper applications of
 collective bargaining agreement provisions and established personnel policies.
- Prepare for and hears Step-One grievances and pre-disciplinary hearings.
- Participate in collective bargaining negotiations.

IT Security, Architecture & Engineering

- Develops and implements an enterprise technical reference model. Responsible for the
 establishment of technical standards associated with information technology domains
 required to implement the Authority's systems.
- Responsible for information technology architecture and engineering activities. Ensures that technical blue prints for specific IT solutions are provided.
- Responsible for the development and maintenance of data architecture models, policies and standards that govern which data are collected, and how it is stored, arranged, integrated, and put to use in data systems and in organizations.
- Responsible for the development and maintenance of the policies, standards and procedures associated with the Information Security Program.
- Responsible for the development and maintenance of the IT Asset and Configuration
 Management Program including policies, standards and procedures to ensure that assets are
 identified, controlled, and managed.
- Oversees capacity management. Responsible to ensure that cost-justifiable system capacity is available to meet current and future business needs.
- Oversees technical problem management. Responsible for developing and managing the lifecycle of all problems from identification to removal.
- Estimates the financial impact of technical architecture alternatives as required. Manages
 expenses to sections budget.
- Responsible for the development and management of the IT change management process to
 ensure that all changes are prioritized, planned, tested, implemented, documented, and
 reviewed in a controlled manner.

IT Operations

- Direct and over sees the IT Operations Manager including the following teams:
 - System and Data Base Administration
 - o Network Administration and Security Operations
 - Customer Support Services
- Responsible for the development of Policies and Procedures for the management and maintenance of the IT infrastructure
- Responsible for the oversite of Information Technology Service Management Processes including: Incident, Event, Access, Request Fulfillment, IT Operations and Release

SECONDARY DUTIES:

Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college degree program in a computer science, information technology or related field is required. Advance degree preferred; and
- (B) Eight (8) to ten (10) years of experience in IT architecture, engineering and security of which 4 years must be in a supervisory or managerial capacity overseeing an IT multi-discipline functional section; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Excellent analytical and technical skills.
- (B) Excellent written and verbal communication skills. Exceptional interpersonal skills in areas such as teamwork, facilitation and negotiation.
- (C) Excellent planning and organizational skills.
- (D) Strong leadership skills.
- (E) Knowledge of all components of a technical architecture; understanding of network architecture, service oriented architecture and object-oriented analysis and design.
- (F) Skill with CSS, HTML, one or more JavaScript frameworks, and AJAX, Microsoft's .Net framework

SPECIAL REQUIREMENTS

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

ITIL Foundations Certification version 3 and at least two from the following list:

IPRC - ITIL Practitioner - Release and Control

MCSE - Microsoft Certified Solution Expert

MCSD - Microsoft Certified Solution Developer

CISM - Certified Information Security Manager

CISSP - Certified Information Systems Security Professional

VCP5-DCV: VMware Certified Professional 5 - Data Center Virtualization

Cisco CCIE - Cisco Certified Internetwork Expert

PMP - Project Management Professional

CCP - Citrix Certified Professional

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.

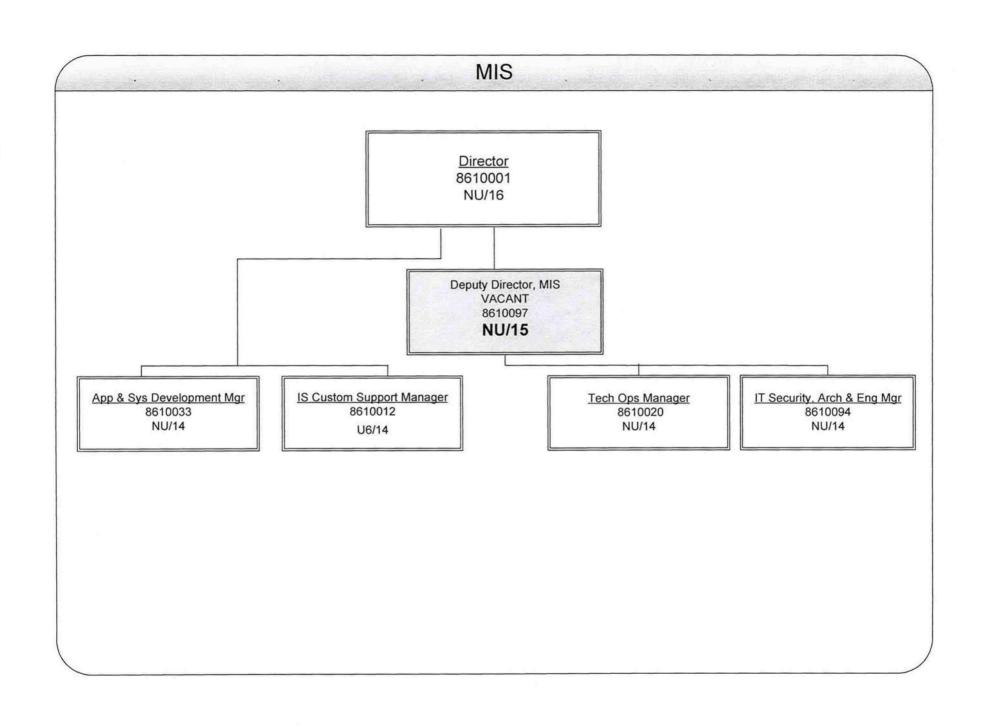
The employee must occasionally lift and/or move up to 10 pounds. Specific vision abilities required by this job include close vision and color vision, and the ability to adjust focus.

WORK ENVIRONMENT:

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

The noise level in the normal work environment is quiet.

February 2018



STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Appointment of Manager, Compensation, Human Resources, Administration

Division

COMMITTEE: Personnel & Compensation

Director, Human Resources

Preparer/Title

INFORMATION

X VOTE

minesson Michele S. Gillen

Director, Administration

RECOMMENDATION:

To approve the appointment of Ms. Natalie Wadzinski to the position of Manager, Compensation, Human Resources (Non-Union, Grade 14) at an annual salary of \$116,000.00, commencing on a date to be determined by the Executive Director.

DISCUSSION:

MWRA's Human Resources Department is responsible for the overall management of MWRA employment issues, enabling employees to contribute successfully to MWRA's goals and objectives through effective recruitment, labor management, training and employee benefits management. The department consists of the following units; Compensation, Employment, Benefits, Labor Relations and Training.

The position of Manager of Compensation became vacant upon the retirement of the incumbent. The position reports directly to the Director of Human Resources and is responsible for all activities associated with the day-to-day compensation administration, maintaining the MWRA classification system, preparing staff summaries and other personnel information needed for presentations to the Board of Directors, providing salary information and costing analysis during collective bargaining negotiations and processing all employee pay changes including any changes necessary as a result of collective bargaining agreements.

Selection Process

The position of Manager Compensation was posted internally and externally. Twenty-two candidates applied, six of which were determined to have met the minimum qualifications. The Director of Human Resources, the Special Assistant for Affirmative Action and the Employment Manager interviewed four of the six candidates, as two declined an interview. Upon completion of the interviews, it was determined that Natalie Wadzinski was the best candidate to fill the position based on her experience, qualifications and education.

Ms. Wadzinski has extensive experience managing classification and compensation functions. Ms. Wadzinski worked at the Commonwealth of Massachusetts Human Resources Department for more than twenty-two years. At HRD, Ms. Wadzinski evaluated both unionized and non-union job classifications, developed job descriptions, recommended changes to position classifications when necessary and conducted salary surveys. Ms. Wadzinski was also responsible for HR policy research, policy development, workforce planning, succession planning activities, volunteer program implementation and employee engagement surveys. Finally, Ms. Wadzinski was responsible for providing cost analyses to the HRD Office of Employee Relations during statewide collective bargaining negotiations. Prior to her employment at the Commonwealth, Ms. Wadzinski worked at the Wentworth Institute of Technology for four years where she was responsible for recruitment and benefits administration. Ms. Wadzinski is known to be a hard worker, with a wealth of broad Human Resources knowledge. She is analytical and possesses excellent verbal and written communication skills.

Ms. Wadzinski has a Bachelor's degree in Industrial and Labor Relations from Cornell University.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the FY18 Current Expense Budget for this position.

ATTACHMENTS:

Resume of Natalie Wadzinski Position Description Organization Chart

Natalie Wadzinski

Bachelor of Science degree in Industrial and Labor Relations, Cornell University, Ithaca, NY

Computer Skills: Advanced proficiency in Microsoft Word, Access; Excel, PowerPoint, Survey Monkey

Professional Experience:

Commonwealth of Massachusetts Human Resources Division Boston, MA (July 1995-Dec. 2017)

Performed a variety of roles in human resources for 22 years including coordinating employee volunteer program and workplace giving campaign, administering benefit programs, conducting best practices research, and writing policies and white papers on human resource topics.

- Civic engagement and leave programs: Managed annual voluntary employee charitable campaign and employee volunteer program including marketing, developing policies, performing outreach to non-profits, writing a monthly newsletter, organizing volunteer events, and generating reports. Served as consultant to agencies on the Family and Medical Leave policies (enhanced FMLA) and administered voluntary sick leave bank for state employees.
- Surveys and research: Analyzed results of biennial employee engagement survey. Developed
 and conducted national and local salary, benefit, and policy surveys to identify best practices
 used by leading private and public sector organizations. Conducted literature searches on HR
 topics. Designed two customer satisfaction surveys to assess organizational effectiveness.
 Served as key researcher on best practices on family friendly policies.
- **Talent Management**: Prepared and analyzed HR data for Workforce Planning and Succession Planning. Wrote portions of the resource guide and helped develop and map out the business processes. Prepared annual workforce plan for the Human Resources Division.
- Onboarding: Led workgroup to develop first statewide employee orientation guide and standardized onboarding materials.
- **System Administration**: Served as project manager for implementation and as statewide administrator of SuccessFactors web-based management performance appraisal system for 3,500 managers. Developed job aids and delivered computer-based training.
- Classification and Compensation: Provided classification and compensation technical assistance to human resources staff at assigned state agencies. Issued decisions on classification appeals and defended same at Civil Service Commission hearings. Evaluated management positions using the Hay Guide Chart point factor profile method.
- Labor Relations: Served on management team in collective bargaining negotiations including development contract language proposals, researched current public sector practices, and prepared cost estimates.

Wentworth Institute of Technology, Boston, MA

1991 to 1995

Performed a variety of responsibilities human resources for 4 years including Human Resources Coordinator and Human Resources Assistant

- Provided professional technical support in all facets of recruitment, benefits, employee communication, and training 400 employees at three campus locations.
- Administered tuition assistance, dependent care, retiree medical, MBTA pass, and computer loan benefit programs.

Testa, Hurwitz & Thibeault Boston, MA Curley & Curley, P.C. Boston, MA Paralegal 1990-1991

MWRA POSITION DESCRIPTION

POSITION:

Manager of Compensation

DIVISION:

Administration

DEPARTMENT:

Human Resources

BASIC PURPOSE:

Manages the Authority's compensation functions, including implementation of programs, day-to-day administration and the development of a MWRA strategy with regards to total compensation during collective bargaining.

SUPERVISION RECEIVED:

Works under the general supervision of the Director of Human Resources.

SUPERVISION EXERCISED:

Exercises general supervision over a Senior Human Resources Analyst, and project supervision over support staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Formulates, recommends and manages the implementation of total compensation strategies and data collection and maintenance programs, policies and procedures.
- Manages the section's functions to ensure that all programs meet current and future employee and agency needs and comply with applicable state and federal laws.
- Manages the Position Control Register and all proposed changes including all approvals and preparing materials for the Board meetings.
- Manages all job descriptions and all proposed changes.
- Manages all processing of personnel actions and implements contract changes in the HR/PR System.
- Evaluates the adequacy and appropriateness of existing levels and types of compensation and recommends adjustments as may be required.

Page 1 of 4

- Evaluates new and modified non-union positions according to the Authority's classification system in order to maintain a consistent application of the system. Oversees job audits to assess responsibilities of Authority positions and recommends changes to position grade levels as appropriate.
- Oversees the development of wage and salary proposals for collective bargaining negotiations and provides costing and other assistance as needed to the Labor Relations section.
- Conducts salary surveys for the Authority and recommends changes to the Authority's salary structure based on survey information.
- Reviews all positions for correct application of the Fair Labor Standards Act, positions
 requisitions and hiring packages for consistency with collective bargaining agreements and
 salary guidelines.
- Oversees responses to all public information requests and legal requests with electronic and hard copy information.
- Oversees special projects and initiatives such as conducting assigned research, report
 preparation, writing and editing departmental policies and procedures and manages the
 Authority-wide implementation of resulting programs.
- Participates in all Management Information Systems (MIS) development projects and serves as a liaison in the development of specifications and in planning the implementation of new Human Resources/Payroll system enhancements.

SECONDARY DUTIES:

· Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four-(4) year college program in education, human resources, public management or related field. An advanced degree preferred; and
- (B) Eight (8) to ten (10) years experience in applying compensation principles and applicable state and federal laws and regulations, of which at least three (3) years are in a supervisory and/or managerial capacity. Public sector experience strongly preferred;

- (C) Ability to effectively communicate in both oral and written form, including ability to compose technical abstracts drawn from reviewing employee workplace functionality;
- (D) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated analytical and financial skills in developing cost proposals and assessing impact;
- (B) Demonstrated experience with HRIS systems and databases.
- (C) Demonstrated experience with classification systems.
- (D) Excellent written and oral communication skills.

SPECIAL REQUIREMENTS:

• A valid Massachusetts Class D Motor Vehicle Operators 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 the 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 required to sit, talk or hear. The employee is frequently required to use hands to finger, handle or operate objects including office equipment, controls and reach with hands and arms. The employee is occasionally required to stand and walk.

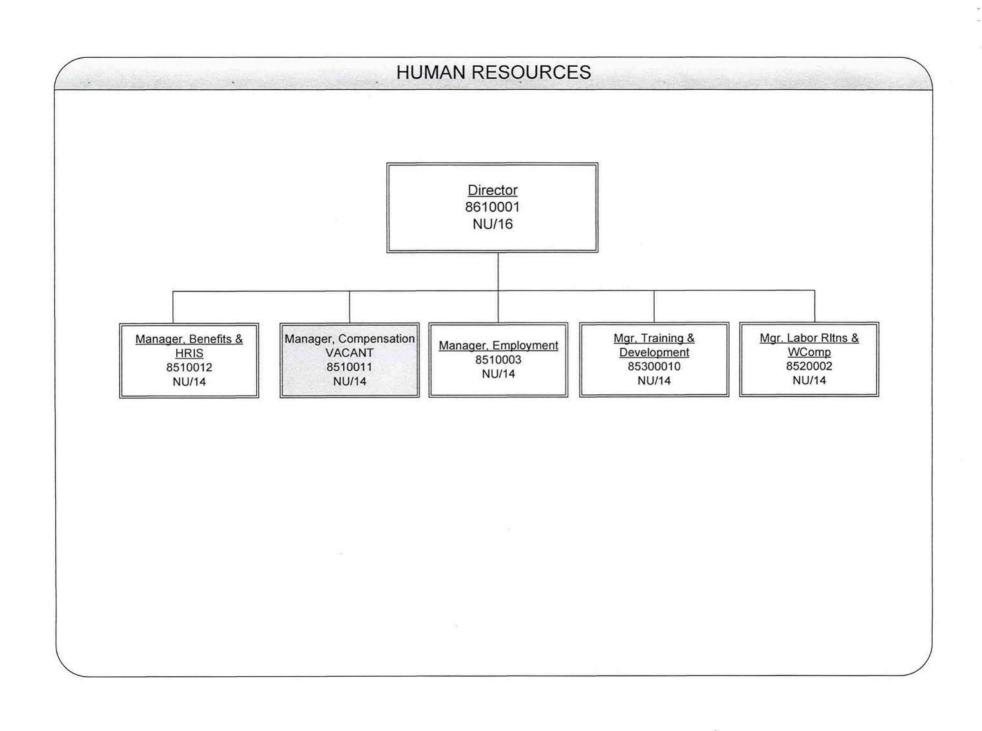
There are not requirements that weight be lifted or force be exerted in performing the duties of this job. Specific vision abilities required by this job include close vision and the ability to focus.

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 employees regularly works in an office environment.

The noise level in the work environment is moderately quiet.

November 2017



STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Occupational and Medical Services

AllOne Health Resources, Inc.

Contract A615

COMMITTEE: Personnel & Compensation

INFORMATION

X VOTE

Karen Gay-Valente, Director, Human Resources

Preparer/Title

Michele S. Gillen

Director of Administration

RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to select AllOne Health Resources. Inc. to provide medical services and consultation for occupational health programs and to authorize the Executive Director, on behalf of the Authority, to execute a contract with AllOne Health for an amount not to exceed \$124,825.00 for a contract term of 36 months.

DISCUSSION:

Medical services such as medical evaluations and pre-employment physicals are an important component of MWRA's compliance with occupational safety and health standards and Department of Transportation testing regulations for commercial drivers. MWRA also uses medical services to ensure that MWRA employees are fully capable of performing the essential functions of their jobs and to assess health or safety risks to MWRA employees, such as the ability to safely wear personal protective equipment.

This medical services contract will include tests, examinations, and evaluations such as respirator medical evaluations, pre-employment physicals, assessments regarding ability to perform job functions and other special services as required. Drug and alcohol testing is performed under a separate contract.

Procurement Process:

On February 15, 2018, MWRA issued a one-step Request for Qualifications Statement/Proposal (RFQ/P) that was publically advertised in the Goods and Services Bulletin, Boston Herald, Banner Publication and El Mundo. In addition, six firms were notified of the procurement opportunity. The RFO/P included the following evaluation criteria: Cost – 40 points; Capacity – 20 points; Experience and Past Performance - 15 points; Qualifications and Key Personnel - 20 Points; Technical Approach/Organization and Management Approach – 5 points.

MWRA received proposals from three firms: AllOne Health Resources, Inc., Cambridge Health Alliance and Mount Auburn Hospital. The Selection Committee reviewed, scored, and ranked the proposals as follows:

| FIRM | PROPOSED COST | TOTAL POINTS | *ORDER OF PREFERENCE/ TOTAL SCORE | FINAL RANKING | |
|---------------------------|------------------|-----------------|---|------------------|--|
| AllOne Health | \$124,825.00 | 437 | 5 | 1 | |
| Cambridge Health Alliance | \$108,994.94 | 370.25 | 10 | 2 | |
| Mount Auburn Hospital | \$ 227,262.00 | 153.2 | 15 | 3 | |

^{*}Rank represents the sum of the 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.

AllOne was ranked first by all Selection Committee members. AllOne's proposal was extremely organized and thoroughly addressed all the components of the RFQ/P. Of the three proposals, AllOne provided the highest number of facilities located throughout the state, thereby accommodating MWRA's geographically diverse work force. AllOne also clearly described its onsite services, management approach, scheduling methodologies, and operational approach. Authorized MWRA employees can utilize AllOne's secure website 24/7 to generate reports and schedule appointments, among other things. AllOne also delineated superior experience and past performance in comparison to the other proposers. AllOne provides medical services to over 100 Massachusetts cities and towns along with many private corporations and its specific references were state agencies (Mass State Police, Mass DEP and Mass DCR) with similar needs as the MWRA. These external references all provided favorable references and as the MWRA's current provider, AllOne has performed well. Further, AllOne was the only proposer to provide detailed information and qualifications regarding its key personnel. In fact, AllOne was the only proposer which attached resumes of its key personnel to its proposal. Finally, AllOne provided the MWRA with its technical approach on all five tasks delineated in the RFQ/P. AllOne's price proposal was the second lowest price proposal and was approximately \$5,000 per year higher than Cambridge Health Alliance.

Cambridge Health was ranked second by all Selection Committee members. While Cambridge Health's proposed costs were the lowest, its overall proposal lacked clarity, which created concerns. More specifically, its capacity to perform the work in this contract was questioned as its response in this category was less than clear. Cambridge Health specified three facilities in and around Boston and then referenced that it had "more than 20 primary care practices," but provided no other information as to the whereabouts of those facilities or when those facilities would be utilized. Also, Cambridge Health only provided qualifications information on two employees, once again creating concern about how it could adequately service MWRA's needs. Further, Cambridge Health failed to address its technical and management approach in four of the five tasks delineated in the RFQ/P. Finally, Cambridge Health qualified its costs with respect to transfer of medical records even though an allowance for that task was incorporated into the RFQ/P, thereby creating further uncertainty among the Selection Committee members.

Mount Auburn Hospital provided the highest cost proposal. The proposal lacked details regarding how the MWRA's workforce would be served, failed to identify key personnel that would work with MWRA staff and failed to explain how the MWRA's geographically disperse workforce would be served.

Based on the final rankings and for the reasons set forth above, the Selection Committee recommends the award of this contract to AllOne Heath Resources, Inc. in an amount not to exceed \$124,825.00.

BUDGET/FISCAL IMPACT:

× × × 4

The FY18 Current Expense Budget includes funding for this contract. The FY19 Current Expense Budget will include funding for the remaining portion of this contract.

MBE/WBE UTILIZATION:

There are no MBE/WBE participation requirements 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

ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING

Chair: H. Vitale Vice-Chair: J. Foti Committee Members:

A. Blackmon J. Carroll

K. Cotter

A. Pappastergion

B. Peña J. Walsh to be held on

Wednesday, April 18, 2018

Location:

100 First Avenue, 2nd Floor Charlestown Navy Yard

Boston, MA 02129

Time:

Immediately following Personnel Comm.

AGENDA

Information A.

- 1. Delegated Authority Report - March 2018
- 2. FY18 Financial Update and Summary as of March 2018

Contract Awards B.

- Technical Assistance Consulting Services Hazardous Materials, 1. Geosphere Environmental Management, Inc., Contract 605TA; and Green Seal Environmental, Inc., Contract 606TA
- Renewable and Alternative Energy Portfolio Services, Next Grid Markets, 2. LLC, Contract RPS-68
- Maintenance and Support of the Integrated Financial, Procurement and 3. Human Resources/Payroll Management System: Infor Global Solutions

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Administration, Finance and Audit Committee

March 21, 2018

A meeting of the Administration, Finance and Audit Committee was held on March 21, 2018 at the Authority headquarters in Charlestown. Chairman Vitale presided. Present from the Board were Messrs. Blackmon, Carroll, Cotter, Flanagan, Foti, Pappastergion, Peña, and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Michele Gillen, Charlie Fino, Tom Durkin, Carolyn Francisco Murphy, Russ Murray, Kathy Soni, Matt Horan, Nava Navanandan, Mark Johnson and Bonnie Hale. The meeting was called to order at 11:20 a.m.

Information

Vehicle Fleet Update

In response to discussions held at the previous month's committee meeting, staff gave an in-depth presentation on the MWRA fleet, the types and ages of equipment it includes, the purchase/replacement process, the sale of surplus vehicles and equipment, etc. There was general discussion and question and answer (the materials are on file with the records of the meeting).

There was brief question and answer on the remaining two information items:

- Delegated Authority Report February 2018
- FY2018 Financial Update and Summary as of February 2018.

<u>Approvals</u>

*Appointment of Proxy for the Fore River Railroad Corporation

The Committee recommended approval of the appointment of proxy for the FRRC (ref. agenda item B.1).

(Messrs. Foti and Pappastergion left the meeting.)

*Adoption of the Seventy-Eighth Supplemental Resolution

The Committee recommended approval of the 78th Supplemental Resolution (ref. agenda item B.2).

*Amendments to Capital Finance Management Policy

The Committee recommended approval of amendments to the Capital Finance Management Policy (ref. agenda item B.3)

Electronic Document Management System

Staff gave a brief presentation and described the need for the new system. There was general discussion and question and answer. (Messrs. Foti and Pappastergion returned to the meeting during the discussion.) The Committee recommended approval of authorizing staff to proceed with the procurement of an Electronic Document Management System (ref. agenda item B.4).

Contract Awards

*Metropolitan Operations Paving: Sunshine Paving Corporation, Contract OP-354

Staff summarized the replacement paving contract and there was general discussion and question and answer. The Committee recommended approval of the contract award (ref. agenda item B.5).

Contract Amendments/Change Orders

*Assignment and Assumption of Contract OP-337, Purchase and Supply of Electric Power for MWRA Profile Accounts, from TransCanada Power Marketing Ltd. to EDF Energy Services, LLC, and Amendment 1

The Committee recommended approval of Amendment 1 (ref. agenda item D.1).

The meeting adjourned at 12:05 p.m.

^{*} Approved as recommended at March 21, 2018 Board of Directors meeting.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Delegated Authority Report - March 2018

COMMITTEE: Administration, Finance & Audit

X INFORMATION VOTE

lichele S. Gillen

Linda D'Addario, Admin. Systems Coordinator Barbara Aylward, Administrator A & F

Preparer/Title

Director, Administration

Carolyn Francisco Murphy

Director of Procurement

RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period March 1-31, 2018.

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 October 14, 2009, 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 MARCH 1 - 31, 2018

| NO. | DATE OF AWARD | TITLE AND EXPLANATION | CONTRACT | AMEND/CO | COMPANY | FINANCIAL IMPACT |
|------|---------------|--|----------|----------|------------------------------------|------------------|
| C-1. | 03/07/18 | SECTION 14 WATER PIPELINE RELOCATION - MALDEN UNANTICIPATED SITE CONFLICTS REQUIRED A DEMOBILIZATION, REMOBILIZATION AND CONTRACT TIME EXTENSION OF 180 CALENDAR DAYS. | 6957 | 2 | ALBANESE BROTHERS, INC. | \$84,399.65 |
| C-2. | 03/21/18 | MISCELLANEOUS FENCING AND GATES INCREASE MATERIALS ALLOWANCE WITH MARKUP AND EXTEND CONTRACT TERM BY 180 CALENDAR DAYS FOR ECHO BRIDGE WORK. | 6760X | 1 | PREMIER FENCE, LLC | \$162,840.00 |
| C-3. | ,, | EMERGENCY REPAIR OF GRAVITY THICKENER NO. 6 - DEER ISLAND TREATMENT PLANT AWARD OF A CONTRACT TO THE LOWEST RESPONSIVE BIDDER FOR THE EMERGENCY REPAIR OF GRAVITY THICKENER NO. 6 AT THE DEER ISLAND TREATMENT PLANT FOR A TERM OF 60 CALENDAR DAYS. | \$577 | AWARD | WALSH CONSTRUCTION COMPANY II, LLC | \$475,315.10 |

PURCHASING DELEGATED AUTHORITY ITEMS MARCH 1 - 31, 2018

| NO. | DATE OF AWARD | TITLE AND EXPLANATION | CONTRACT | AMENDMENT | COMPANY | FINANCIAL IMPACT |
|------|---------------|--|-----------|-----------|----------------------------------|------------------|
| P-1. | 03/07/18 | PURCHASE OF ACTIVATED CARBON AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THE REPLACEMENT OF ACTIVATED CARBON AT THE BRAINTREE WEYMOUTH INTERMEDIATE PUMP STATION FACILITY. | WRA-4479 | | CARBON ACTIVATED CORPORATION | \$90,800.00 |
| P-2 | 2001/70100FC | PURCHASE OF TRAINING SERVICES AWARD OF A TWO-YEAR PURCHASE ORDER TO PROVIDE ANALYSIS OF OIL, GREASE LUBRICANTS, AND FUEL OIL, AND RELATED TRAINING SERVICES FOR THE DEER ISLAND TREATMENT PLANT. | WRA-4486 | | TRIBOLOGIK CORPORATION | \$61,000.00 |
| P-3. | | INFOR/LAWSON-MAXIMO TECHNICAL AND SUPPLEMENTAL SUPPORT AWARD OF A PURCHASE ORDER UNDER STATE CONTRACT #ITS63 TO THE LOWEST RESPONSIVE BIDDER FOR INFOR/LAWSON-MAXIMO TECHNICAL AND SUPPLEMENTAL SUPPORT. | WRA-4457Q | | OVERTURE PARTNERS, LLC | \$98,231.25 |
| P-4 | | MAINTENANCE AND SUPPORT FOR SYMANTEC ENTERPRISE VAULT FILE SYSTEM ARCHIVING AND CLEARWELL IDENTIFICATION AND COLLECTION LICENSES AWARD OF A PURCHASE ORDER UNDER STATE CONTRACT #ITS58 TO THE LOWEST RESPONSIVE BIDDER FOR ONE YEAR OF MAINTENANCE AND SUPPORT FOR SYMANTEC ENTERPRISE VAULT FILE SYSTEM ARCHIVING AND CLEARWELL IDENTIFICATION AND COLLECTION LICENSES. | WRA-4498Q | | SHI INTERNATIONAL CORPORATION | \$50,723.90 |
| P-5 | | PURCHASE OF MAINTENANCE AND SUPPORT OF IVANTI ENTERPRISE MANAGEMENT SUITE AWARD OF A PURCHASE ORDER UNDER STATE CONTRACT #ITS58 TO THE LOWEST RESPONSIVE BIDDER FOR ONE YEAR OF MAINTENANCE AND SUPPORT FOR INVANTI ENTERPRISE MANAGEMENT SUITE. | WRA-4497Q | | INSIGHT DIRECT, USA | \$52,524.26 |
| P-6 | 03/23/18 | DIVER ASSISTED SUCTION HARVESTING AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR DIVER ASSISTED SUCTION HARVESTING OF INVASIVE AQUATIC PLANTS AT SUDBURY RESERVOIR. | WRA-4471Q | | AE COMMERCIAL DIVING SERVICES | \$28,000.00 |
| P-7 | 03/26/18 | PURCHASE OF ONE VERTICAL TURBINE 10-INCH FIRE PUMP AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR ONE VERTICAL TURBINE 10-INCH FIRE PUMP FOR THE NUT ISLAND HEADWORKS. | WRA-4499Q | | CHAS G ALLEN. INC. | \$31,999.00 |
| P-8 | 03/26/18 | AQUATIC INVASIVE MACROPHYTE SURVEY AND WATER QUALITY ANALYSIS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR AQUATIC INVASIVE MACROPHYTE SURVEY AT MWRA/DCR SOURCE AND EMERGENCY RESERVOIRS, AND WATER QUALITY ANALYSIS AT MWRA EMERGENCY RESERVOIRS. | WRA-4475 | | ESS GROUP, INC. | \$78,050.00 |
| P-9 | 03/26/18 | REPLACEMENT OF TWO GAS CHROMATOGRAPH/MASS SPECTROMETERS AWARD OF A SOLE SOURCE PURCHASE ORDER FOR THE REPLACEMENT OF TWO GAS CHROMATOGRAPH/MASS SPECTROMETERS FOR THE CENTRAL LABORATORY AT THE DEER ISLAND TREATMENT PLANT. | | | AGILENT TECHNOLOGIES, INC. | \$214,792.70 |
| P-10 | 03/26/18 | SUPPLY AND DELIVERY OF CARBON DIOXIDE AWARD OF A ONE-YEAR PURCHASE ORDER FOR THE SUPPLY AND DELIVERY OF CARBON DIOXIDE TO THE JOHN J. CARROLL WATER TREATMENT PLANT. | WRA-4495 | | LINDE LLC. | \$356,400.00 |
| P-11 | 03/28/18 | PURCHASE OF REPLACEMENT PARTS FOR ACTIVATED SLUDGE PUMPS AWARD OF PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR REPLACEMENT PARTS FOR THE ACTIVATED SLUDGE PUMPS AT THE DEER ISLAND TREATMENT PLANT. | WRA-4493 | | DIVERSIFIED PUMP COMPANY | \$78,030.00 |

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

FY18 Financial Update and Summary Through March

COMMITTEE: Administration, Finance & Audit

Kathy Soni, Budget Dire

Louise L. Miller, Budget Manage

Preparer/Title

X INFORMATION

homas J. Durkin

VOTE

Director, Finance

RECOMMENDATION:

For information only. This staff summary provides the financial results and variance highlights for Fiscal Year 2018 through March, comparing actual spending to the budget.

DISCUSSION:

The total Year-to-Date variance for the FY18 CEB is \$11.2 million, due to lower direct expenses of \$5.5 million offset by higher indirect expenses of \$257,000, and higher revenue of \$6.0 million.

In March, MWRA set aside \$1.7 million in favorable Capital Finance variance into the Defeasance Account with the intention of using these funds to defease debt and provide rate relief in future years. Targeted defeasances are a critical component of the Authority's multi-year rate management strategy. As of March, the defeasance account balance is \$7.0 million. This favorable variance is the result of the lower than budgeted variable rates and timing of the SRF (State Revolving Funds) borrowing. Staff have already identified candidates for year-end defeasance and included the impact of the FY18 defeasance in the Proposed FY19 budget and planning estimates.

The year-end favorable variance is projected at \$26.8 million, of which \$15.1 million is related to debt service. Beyond debt service savings, staff project a surplus of approximately \$11.7 million at year-end of which \$4.1 million would be from lower direct expenses, \$6.8 million from greater than budgeted revenues, and the receipt of \$0.9 million Debt Service Assistance, offset by \$83,000 in Indirect Expenses. The higher than budgeted revenue is related to a \$4.2 million receipt from the settlement between various State Attorneys General and Barclays PLC for attempting to manipulate the LIBOR market, and higher investment income of approximately \$2.0 million.

At the May Board meeting, staff will provide the Final FY18 year-end projections.

Total year-to-date variance for the FY18 CIP is \$1.7 million or 1.4% over budget.

FY18 Current Expense Budget

The CEB expense variances for Fiscal Year 2018 through March by major budget category were:

- Net Lower Direct Expenses of \$5.5 million, or 3.3% under budget. Spending was lower for Wages & Salaries, Maintenance, Fringe Benefits, Chemicals, Worker's Compensation, Other Materials, Professional Services, and Training and Meetings. This is offset by higher spending on Overtime, Utilities, and Other Services.
- Net Higher Indirect Expenses of \$257,000, or 1.0%, due to higher spending for Insurance offset by lower Watershed reimbursements and lower expenses for the existing HEEC cable.
- Debt spending is at budget level after transferring \$1.7 million to the defeasance account, representing the favorable year-to-date variance.

FY18 Budget and FY18 Actual Year-to-Date Variance by Expenditure Category (in millions)

| | FY18 Budget YTD | FY18 Actual YTD | \$ Variance | % Variance | |
|-------------------|--------------------|--------------------|-------------|------------|--|
| Direct Expenses | \$165.1 | \$159.6 | -\$5.5 | -3.3% | |
| Indirect Expenses | \$26.2 | \$26.4 | \$0.3 | 1.0% | |
| Capital Financing | \$335.6 | \$335.6 | \$0.0 | 0.0% | |
| Total | \$526.9 | \$521.7 | -\$5.2 | -1.0% | |

Totals may not add due to rounding

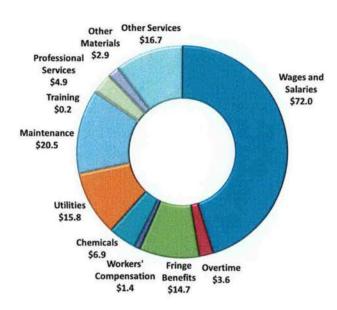
Year-to-date Revenues of \$563.6 million were \$6.0 million, or 1.1% over budget, reflecting a \$4.2 million receipt from the settlement between various State Attorneys General and Barclays PLC for attempting to manipulate the LIBOR market. LIBOR is a standard financial index used to set the cost of various variable-rate loans. Revenues were also over budget by \$1,228,000 mostly for favorable returns on investment income (short-term rates were higher than budgeted: 1.39% vs.1.05%), \$228,000 for the final payment of a class action lawsuit settlement for derivative agreements, \$225,000 for disposal of surplus material.

Please refer to Attachment 1 for a more detailed comparison by line item of the budget variances for the year to date.

Direct Expenses

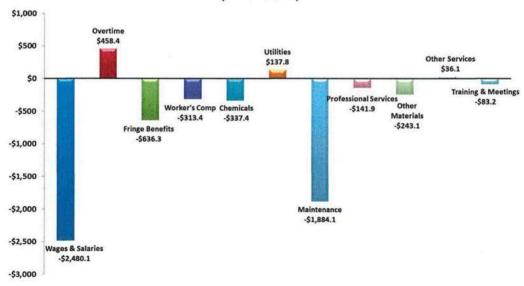
Year-to-date direct expenses totaled \$159.6 million, \$5.5 million, or 3.3%, less than budgeted.

FY18 Year-to-Date Direct Expenses (in millions)



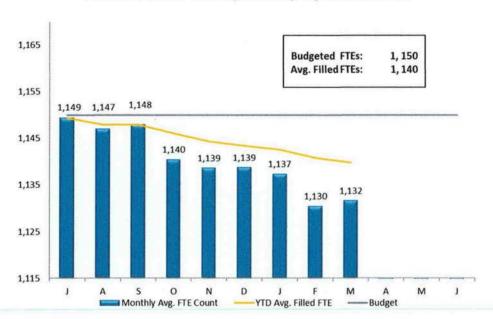
Lower than budgeted spending for Wages & Salaries, Maintenance, Fringe Benefits, Chemicals, Worker's Compensation, Other Materials, Professional Services, and Training and Meetings was partially offset by higher spending for Overtime, Utilities, and Other Services.

FY18 Year-to-Date Direct Expense Variance (in thousands)



Wages and Salaries

Wages and Salaries are under budget by \$2.5 million, or 3.3%. Year to date, there have been 10 fewer average FTEs (1140 versus 1,150 budget), lower average new hire salaries versus retirees and the timing of backfilling vacant positions, which has contributed to Regular Pay being under budget.



FY18 MWRA Full Time Equivalent (FTE) Position Trend

Maintenance

Maintenance was under budget by \$1.9 million, or 8.4%. While there were numerous components to the underspending for Maintenance year-to date, underspending at Deer Island included timing of the door replacement project and of instrumentation upgrades and motor replacements, and timing of purchases of various items such as CTG spare parts, rolling stock (electric vehicles), and the W3 strainer on the non-potable water system. Underspending in Field Operations due in part to timing of the HVAC upgrades at the Braintree-Weymouth Pump Station and Chelsea facility, offset by overspending for Pipeline Materials primarily for Water Pipeline Maintenance, Pipeline Services for timing of manhole replacement contract, and timing of cleaning of Headworks HVAC ducts.

Fringe Benefits

Fringe Benefit spending was lower than budgeted by \$636,000, or 4.2%, primarily for lower Health Insurance costs of \$507,000 due to fewer employees and retirees than budgeted participating in health insurance plans, and the shift from family to individual plans, which are less expensive. Unemployment Insurance was also lower than budgeted by \$51,000 and Medicare payments by \$46,000.

Worker's Compensation

Through March, Worker's Compensation expenses were lower than budget by \$313,000, or 18%. The lower Worker's Compensation expenses were primarily due to reductions in payments and reserves resulting from settlement of five claims and resolution of a number of claims through return to work. Medical payments and reserves were lower than budget by \$191,000. Compensation payments and reserves were lower than budget by \$82,000. Expense payments and reserves were lower than budget by \$40,000. It should be noted that the Worker's Compensation budget is spread evenly every month during the course of the year and can result in wide monthly variations which cannot be predicted.

Chemicals

Year-to-date, Chemicals were lower than budget by \$337,000, or 4.6%. The majority of the variance for Chemicals was the result of lower flows both at Deer Island and the Carroll Plant, 13% and 5% respectively, the quality of the influent at Deer Island and the water quality at the Carroll Plant. Underspending for Soda Ash of \$302,000 primarily at CWTP; Activated Carbon of \$96,000 at DITP; Sodium Hypochlorite of \$74,000 primarily at DITP, offset by over spending at CWTP; Carbon Dioxide of \$69,000 at CWTP; Hydrofluosilicic Acid of \$69,000 at CWTP; and Sodium Bisulfite of \$63,000 primarily at DITP and CWTP. This is offset by over spending on Hydrogen Peroxide of \$296,000 at DITP and Ferric Chloride of \$111,000 also at DITP due to odor control and struvite control respectively. It is important to note that Chemicals variances are also based on deliveries which in general reflect the usage patterns. However, the timing of deliveries is an important factor. For instance, the underspending for Activated Carbon is due to the timing of the change out of carbon beds at DITP later in the year than budgeted.

Professional Services

Professional Services are under budget by \$142,000, or 2.8%. The overall underspending year-to-date is due to timing of As-needed Engineering Services in Operations and Legal services in Administration and Treasury. The underspending is offset by overspending in the year for unbudgeted testing for algae at Chestnut Hill Reservoir, a red tide study, and legal services in the Law Department.

Training & Meetings

Training & Meetings expenses are less than budgeted by \$83,000, or 27.1% due to timing.

Overtime

Overtime expenses year-to-date are higher than budgeted by \$458,000, or 14.8%, which is an increase since February. The overspending year-to-date was mainly in Metro Maintenance and Water Operations for maintenance and emergency leak repairs, wet weather and snow removal; and Wastewater Operations and at Deer Island for wet weather events. Field Operations performed off-hours maintenance work, reported in prior monthly

financial staff summaries, to alleviate project backlogs due to staff vacancies in Western Water Operations, replaced manhole covers and frames prior to a major repaving project, and replaced an HVAC unit at the Chelsea facility. The overspending was offset by year-to-date lower spending for Laboratory Services and Administration. The \$182,000 overspending in March was due to the three Nor'easters in March.

Other Services

Other Services were essentially on budget with overspending of \$36,000, or 0.2%. There were numerous components over budget, including Sludge Pelletization of \$209,000 due to higher year-to-date quantities related in part to struvite control during the cleaning of one digester. This was offset by lower spending in Other Services of \$187,000 for a number of services, including timing of remediation projects managed by Real Property/Environmental Management and timing of Technical Assistance for Lead issues.

Other Materials

Other Materials were less than budgeted by \$243,000, or 7.7%. There were various items under budget, including Health and Safety Materials at DITP, and Vehicle Expenses due to lower than budgeted fuel prices. A variety of items are over budget including Vehicle Purchase and Computer Hardware due to timing of purchases.

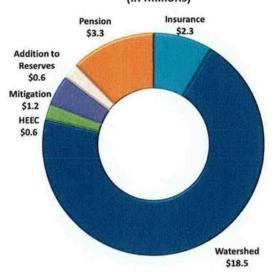
Utilities

Utilities are overspent by \$138,000, or 0.9%. Diesel fuel overspending is a net of \$491,000 for purchasing \$689,000 at DITP in December 2017 which was budgeted in May 2018, offset by \$198,000 underspending in FOD due to favorable pricing year-to-date. Diesel Fuel overspending is offset by underspending in Electricity of \$310,000 primarily in FOD due to favorable pricing (approx. 2¢ under budget per kwh through December) resulting in \$379,000 under budget, offset by overspending at DITP of \$98,000.

Indirect Expenses

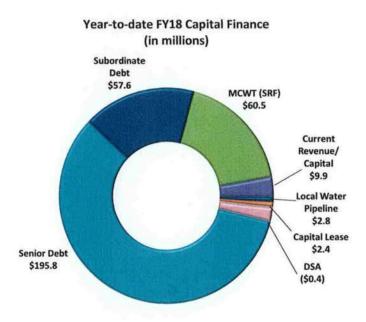
Year-to-date Indirect Expenses totaled \$26.4 million, which is \$257,000, or 1.0% greater than budgeted, due to higher Insurance claims of \$818,000 resulting from the outcome of a recent litigation, offset by lower Insurance premiums of \$40,000. Watershed costs are lower than budget by \$376,000 resulting from an over-accrual at the end of FY17 of Watershed operating expenses of \$286,000 and lower than budgeted PILOT payments of \$90,000. HEEC charges are under budget by \$129,000 for the existing cross-harbor cable.

FY18 Year-to-date Indirect Expenses-YTD (in millions)



Capital Financing

Capital Financing expenses include the principal and interest payment for fixed debt, the variable subordinate debt, the Massachusetts Clean Water Trust (SRF) obligation, the commercial paper program for the local water pipeline projects, current revenue for capital, and the Chelsea facility lease payment.

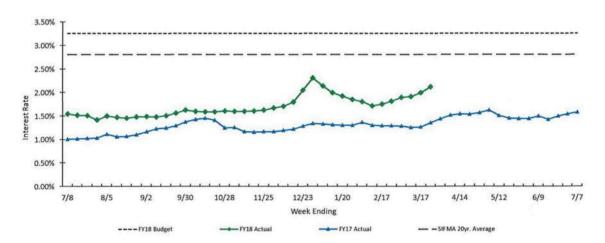


Year-to-date Capital Financing expenses for FY18 totaled \$335.6 million, which was on budget after the transfer of \$1.7 million to the Defeasance Account, which brings the balance of the Defeasance Account to \$7.0 million year-to-date. The favorable impact of

the short-term variable rates is \$6.0 million year-to-date, and \$1.0 million relates to the timing of SRF borrowing. As in the past, staff have already identified candidates for the planned FY18 defeasance which will have favorable impacts in the FY19-22 period.

The graph below reflects the FY18 actual variable rate trend by week year-to-date against the FY18 Budget.

Weekly Average Interest Rate on MWRA Variable Rate Debt (Includes liquidity support and remarketing fees)



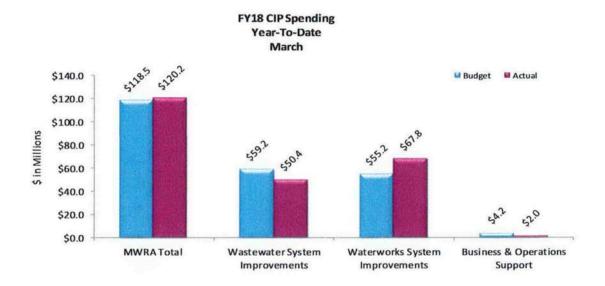
Revenue & Income

Year-to-date Revenues of \$563.6 million were \$6.0 million, or 1.1% over budget, reflecting a \$4.2 million receipt from the settlement between various State Attorneys General and Barclays PLC for attempting to manipulate the LIBOR market. LIBOR is a standard financial index used to set the cost of various variable-rate loans. Revenues were also over budget by \$1,228,000 mostly for favorable returns on investment income (short term rates were higher than budgeted: 1.39% vs.1.05%), \$228,000 for the final payment of a class action lawsuit settlement for derivative agreements, \$225,000 for disposal of surplus material.

FY18 Capital Improvement Program

Capital expenditures in Fiscal Year 2018 through March total \$120.2 million, \$1.7 million, or 1.4%, over budget.

After accounting for programs which are not directly under MWRA's control, most notably the Inflow and Infiltration (I/I) grant/loan program, the Local Water Pipeline loan program, and the community managed Combined Sewer Overflow (CSOs) projects, capital spending totaled \$92.8 million, \$2.0 million, or 2.1%, under budget.



Overall CIP spending reflects the overspending of \$12.6 million in Waterworks Improvements, underspending of \$8.8 million in Wastewater Improvements and \$2.2 million in Business and Operations Support.

| \$ in Millions | Budget | Actuals | \$ Var. | % Var. |
|--------------------------------------|---------|---------|---------|--------|
| Wastewater System Improvements | | | | |
| Interception & Pumping | 34.1 | 28.1 | (6.0) | -17.7% |
| Treatment | 8.8 | 7.6 | (1.3) | -14.2% |
| Residuals | 0.9 | 0.3 | (0.6) | -69.8% |
| CSO | 1.6 | 1.6 | (0.0) | -2.4% |
| Other | 13.8 | 12.9 | (0.8) | -6.1% |
| Total Wastewater System Improvements | \$59.2 | \$50.4 | (\$8.8) | -14.8% |
| Waterworks System Improvements | | | | |
| Drinking Water Quality Improvements | 2.6 | 2.8 | 0.3 | 10.2% |
| Transmission | 18.2 | 21.8 | 3.7 | 20.2% |
| Distribution & Pumping | 25.5 | 29.8 | 4.3 | 16.8% |
| Other | 8.9 | 13.4 | 4.4 | 49.7% |
| Total Waterworks System Improvements | \$55.2 | \$67.8 | \$12.6 | 22.9% |
| Business & Operations Support | \$4.2 | \$2.0 | (\$2.2) | -52.6% |
| Total MWRA | \$118.5 | \$120.2 | \$1.7 | 1.4% |

Totals may not add due to rounding

FY18 Year-to-date Spending by Program:

The main reasons for the project spending variances in order of magnitude are:

Interception & Pumping: Net underspending of \$6.0 million

- \$3.0 million for Alewife Brook Pump Station Construction due to prior bypass pumping delays.
- \$2.4 million for Chelsea Creek Upgrades Construction due to delays with water main and fuel oil system installations.
- \$0.3 million for Wastewater Metering/Study/Design due to the contract award being less than budgeted, \$0.2 million for Pump Stations and CSO Condition Assessment due to delay in award, \$0.2 million for DeLauri Pump Stations Screens and Security due to later than budgeted notice-toproceed, and \$0.1 million for Cambridge Branch Sections 23, 24, 26, and 27 Study due to being completed under budget.
- This underspending was partially offset by overspending of \$0.2 million for Cambridge Study Sections 186, 4, 5, and 6; and \$0.1 million for Quincy and Hingham Pump Station Fuel Storage Upgrades due to contractor progress.

Other Waterworks: Net overspending of \$4.4 million

\$4.7 million for Local Water System Assistance Program due to greater than
anticipated community requests for loans. The overspending was partially
offset by \$0.2 million for Quabbin Power, Communication & Security –
Construction partially due to reimbursement from DCR Office of
Watershed Management for work at the boat cove and less than anticipated
engineering services during construction.

Water Distribution and Pumping: Net overspending of \$4.3 million

- \$4.6 million for Section 89/29 Redundancy Phase 1C Construction and \$2.3 million for SEH Redundancy Pipeline Section 111 Phase 1 Construction, \$0.5 million for NIH Section 89 & 29 Redundancy Phase 2 Construction, and \$0.3 million for NIH Section 89 & 29 Redundancy Phase 1B due to contractor progress.
- The overspending was partially offset by underspending \$0.9 million for SEH Redundancy Pipeline Section 111 Phase 3 due to delay in award as a result of permit issues, \$0.7 million for Section 14 Water Pipe Relocation (Malden) due to delay in commencing pipe installation, and \$0.4 million for Chestnut Hill Gatehouse #1 Repairs due to water infiltration issue and contract award being less than budgeted.

Waterworks Transmission: Net overspending of \$3.7 million

 \$2.8 million for Wachusett Aqueduct Pump Station Construction and Engineering Services due to contractor progress, \$1.1 million for Watershed Land due to timing of land purchases, and \$0.6 million for WASM 3 MEPA/Design/CA/RI for timing of boring work. This overspending was partially offset by underspending of \$0.2 million for CVA Motorized Screen Replacement due to work scheduled for FY18 performed in FY17, \$0.2 million for Shaft 12 Isolation Gate Design due to contract being terminated, and \$0.1 million for time extension for the Evaluation of Farm Pond Buildings and Waban Arches.

Other Wastewater: Net underspending of \$0.8 million

• \$0.8 million for Community Infiltration/Inflow (I/I) due to less than anticipated requests for grants and loans.

Wastewater Treatment: Net underspending of \$1.3 million

- Clinton: \$0.3 million for Phosphorus Reduction Construction due to less than anticipated progress including testing delays and \$0.1 million for Clinton Roofing Rehabilitation due to delay in contract award.
- Deer Island: \$0.4 million for Digester Sludge Pump Replacement Phase 2 and \$0.3 million for Fuel System Upgrades for work scheduled for FY18 performed in FY17, \$0.3 million for Chemical Bulk Storage Tanks Relining due to delay in award, and \$0.1 million for less than anticipated work for the Valve and Piping Replacement Engineering Services During Construction. The underspending was partially offset by overspending of \$0.3 million for Winthrop Terminal Facility VFD Replacement Construction due to progress and \$0.2 million for the Personnel Dock Rehabilitation due to additional work required.

Drinking Water Quality Improvements: Net overspending of \$0.3 million

• \$0.4 million for contractor progress for the Marlborough Maintenance Facility.

Combined Sewer Overflow: Net underspending of \$0.1 million

 Underspending of \$0.2 million for Cambridge Sewer Separation Project due to updated final cost of restoration work, partially offset by \$0.2 million for CSO Performance Assessment due to consultant progress.

Residuals: Net underspending of \$0.6 million

Underspending of \$0.2 million for Electrical Improvements and \$0.2 million for Mechanical Improvements due to delay in contract awards, and \$0.1 million for Sludge Tank & Silo Coating for work that was postponed for the winter and will resume in April.

Construction Fund Balance

The construction fund balance was \$51.1 million as of the end of March. Commercial Paper/Revolving Loan availability was \$121.0 million to fund construction projects.

ATTACHMENTS:

Attachment 1 – Variance Summary March 2018 Attachment 2 – Current Expense Variance Explanations Attachment 3 – Capital Improvement Program Variance Explanations Attachment 4 – FY18 Budget vs. FY18 Projections

ATTACHMENT 1 FY18 Actuals vs. FY18 Budget

| | | | | 1 | | | | | |
|----------------------------|-----|------------------------|----|------------------------|--|--------------------------|---------------|------|------------------|
| | I | Period 9 YTD Budget | F | Period 9 YTD Actual | | Period 9 YTD Variance | % | | FY18 Approved |
| EXPENSES | | | | | | | | | |
| WAGES AND SALARIES | \$ | 74,439,029 | \$ | 71,958,893 | \$ | (2,480,136) | -3.3% | \$ | 104,286,370 |
| OVERTIME | | 3,106,092 | | 3,564,537 | T. | 458,445 | 14.8% | 1000 | 4,110,637 |
| FRINGE BENEFITS | | 15,295,308 | | 14,659,003 | | (636,305) | -4.2% | | 20,997,975 |
| WORKERS' COMPENSATION | | 1,742,235 | | 1,428,823 | | (313,412) | -18.0% | | 2,322,980 |
| CHEMICALS | 1 | 7,262,253 | | 6,924,888 | | (337,365) | -4.6% | | 9,836,933 |
| ENERGY AND UTILITIES | 1 | 15,678,124 | | 15,815,947 | | 137,823 | 0.9% | | 21,735,222 |
| MAINTENANCE | 1 | 22,346,921 | | 20,462,864 | | (1,884,057) | -8.4% | | 32,200,785 |
| TRAINING AND MEETINGS | 1 | 306,499 | | 223,326 | | (83,173) | -27.1% | | 406,269 |
| PROFESSIONAL SERVICES | 1 | 5,053,301 | | 4,911,417 | | (141,884) | -2.8% | | 7,221,622 |
| OTHER MATERIALS | ı | 3,175,017 | | 2,931,869 | | (243,148) | -7.7% | | 6,692,660 |
| OTHER SERVICES | 1 | 16,689,484 | | 16,725,586 | | 36,102 | 0.2% | | 22,764,526 |
| TOTAL DIRECT EXPENSES | S | | \$ | 159,607,153 | \$ | (5,487,108) | -3.3% | \$ | 232,575,979 |
| TOTAL DIRECT LA LA SES | 1 | 100,0074,200 | 4 | 107,007,100 | Ψ | (5,107,100)] | 0.070 | Ψ | 202,010,017 |
| INSURANCE | \$ | 1,510,089 | \$ | 2,287,857 | 2 | 777,768 | 51.5% | \$ | 2,013,452 |
| WATERSHED/PILOT | 1 4 | 18,873,005 | | 18,497,235 | The state of the s | (375,770) | -2.0% | 4 | 25,164,006 |
| HEEC PAYMENT | 1 | 718,084 | | 589,153 | | (128,931) | -18.0% | | 957,445 |
| MITIGATION | 1 | 1,197,713 | | 1,181,168 | | (16,545) | -1.4% | | 1,596,950 |
| ADDITIONS TO RESERVES | 1 | 615,837 | | 615,837 | | (10,543) | 0.0% | | 821,116 |
| RETIREMENT FUND | 1 | 3,277,369 | | 3,277,369 | | | 0.0% | | 3,277,369 |
| POST EMPLOYEE BENEFITS | 1 | 5,211,509 | | 3,211,307 | | | 0.070 | | 5,035,422 |
| TOTAL INDIRECT EXPENSES | \$ | 26,192,097 | \$ | 26,448,619 | \$ | 256,521 | 1.0% | \$ | 38,865,760 |
| | 1 | | - | ,, | - | | | | ,, |
| STATE REVOLVING FUND | \$ | 61,488,764 | \$ | 60,478,403 | \$ | (1,010,361) | -1.6% | \$ | 84,931,906 |
| SENIOR DEBT | | 195,795,201 | | 195,795,201 | 1105 | - | 0.0% | | 264,560,267 |
| CORD FUND | 1 | - | | 1001207/12000 1 | | 2 | (<u>1444</u> | | (<u>=</u>) |
| DEBT SERVICE ASSISTANCE | 1 | (391,580) | | (391,580) | | | 0.0% | | (391,580) |
| CURRENT REVENUE/CAPITAL | 1 | 9,900,000 | | 9,900,000 | | | 0.0% | | 13,200,000 |
| SUBORDINATE MWRA DEBT | 1 | 63,569,637 | | 63,569,637 | | _ | 0.0% | | 85,443,447 |
| LOCAL WATER PIPELINE CP | 1 | 2,846,208 | | 2,846,208 | | u u | 0.0% | | 3,794,944 |
| CAPITAL LEASE | 1 | 2,412,795 | | 2,412,795 | | | 0.0% | | 3,217,060 |
| DEBT PREPAYMENT | 1 | -,, | | -,, | | _ | | | 10,900,000 |
| VARIABLE DEBT | 1 | - | | (6,000,566) | | (6,000,566) | | | - |
| HEEC CABLE CAPACITY RESERV | 1 | | | (0,000,000) | | (0,000,200) | | | 6,532,146 |
| DEFEASANCE ACCOUNT | 1 | - | | 7,010,927 | | 7,010,927 | - | | .,, |
| TOTAL DEBT SERVICE | \$ | 335,621,025 | \$ | 335,621,025 | \$ | - | 0.0% | \$ | 472,188,190 |
| TOTAL EVDENCES | 6 | E26 007 20E | • | 521 (7) 70(| 0 | (5 220 595) | 1.00/ | • | 743 620 020 |
| TOTAL EXPENSES | \$ | 526,907,385 | 3 | 521,676,796 | 3 | (5,230,585) | -1.0% | \$ | 743,629,929 |
| REVENUE & INCOME | | | | | | | | | |
| RATE REVENUE | \$ | 537,790,500 | \$ | 537,790,500 | \$ | ž. | 0.0% | \$ | 717,054,000 |
| OTHER USER CHARGES | | 6,640,935 | | 6,595,589 | | (45,346) | -0.7% | | 9,011,070 |
| OTHER REVENUE | 1 | 6,025,393 | | 10,839,195 | | 4,813,802 | 79.9% | | 7,359,078 |
| RATE STABILIZATION | | - | | - | | | 1222 | | 2 |
| INVESTMENT INCOME | | 7,155,416 | | 8,383,504 | | 1,228,088 | 17.2% | | 10,205,781 |
| TOTAL REVENUE & INCOME | \$ | 557,612,244 | \$ | 563,608,788 | 8 | 5,996,544 | 1.1% | \$ | 743,629,929 |

| Total MWRA | FY18 Budget | FY18 Actuals | FY18 YTD Actu Budge | | Explanations |
|-----------------------|-------------|--------------|------------------------|--------|---|
| | YTD March | YTD March | S | % | |
| Direct Expenses | | | | | |
| Wages & Salaries | 74,439,029 | 71,958,893 | (2,480,136) | -3.3% | Wages and Salaries are under budget by \$2.5million. Year to date, there have been 10 fewer average FTEs (1,140 versus 1,150 budget), lower average new hire salaries versus retirees and the timing of backfilling vacant positions, which has contributed to Regular Pay being under budget. |
| Overtime | 3,106,092 | 3,564,537 | 458,445 | 14.8% | Higher spending mainly in Metro Maintenance of \$220,000, both for off-hours maintenance, wet weather events, and snow removal; Water Operations of \$154,000; and Wastewater Operations of \$96,000 for wet weather events. Some examples of off-hour maintenance work include off-hours work to alleviate a project backlog in western ops due to staff vacancies, replacement of manholes in a community prior to a major repaving job, and crane rigging to hoist replacement HVAC units into place at the Chelsea maintenance facility. The higher spending is offset by lower spending for Laboratory Services of \$33,000, and Administration of \$19,000. In March \$182,000 overspending relates to the significant nor'easters in March. |
| Fringe Benefits | 15,295,308 | 14,659,003 | (636,305) | -4.2% | Lower than budget mainly in Health Insurance of \$507,000, due to fewer than budgeted participants in health insurance plans, and the shift from family to individual plans which are less expensive; lower Unemployment Insurance of \$51,000; lower Medicare payments of \$46,000; and lower Tuition Reimbursement of \$25,000. |
| Worker's Compensation | 1,742,235 | 1,428,823 | (313,412) | -18.0% | Underspending due to lower Medical Payments of \$191,000, Compensation Payments of \$82,000, and Management Costs of \$40,000. Medical payments were lower due to adjustments to reserves for claims resolved through return to work. Compensation Payments were lower due to a reductions of reserves primarily due to settlements of five claims and lower reserves for claims resolved through returns to work. Expense Costs were adjusted as well to reflect resolution of outstanding cases. It is important to note that spending on this line item can change significantly depending on future claims and severity of cases. |

| Total MWRA | FY18 Budget | FY18 Actuals | FY18 YTD Actu Budge | | Explanations |
|-------------|--------------------|--------------|------------------------|-------|--|
| | YTD March YTD Marc | YTD March | S | % | |
| Chemicals | 7,262,253 | 6,924,888 | (337,365) | -4.6% | Underspending for Soda Ash of \$302,000 primarily at CWTP; Activated Carbon of \$96,000 at DITP; Sodium Hypochlorite of \$74,000 primarily at DITP, offset by over spending at CWTP; Carbon Dioxide of \$69,000 at CWTP; Hydrofluosilic Acid of \$69,000 at CWTP; and Sodium Bisulfite of \$63,000 primarily at DITP and CWTP. This is offset by over spending on Hydrogen Peroxide of \$296,000 at DITP and Ferric Chloride of \$111,000 also at DITP. The majority of underspending for Chemicals is the result of lower flows both at DITP and CWTP, 13% and 5% respectively through February and the quality of the influent both at DITP and CWTP. It is important to note that Chemicals variances are also based on deliveries which in general reflect the usage patterns. However, the timing of deliveries is an important factor. For instance, the underspending for Activated Carbon is due to the timing of the change out of carbon beds at DITP later in the year than budgeted. |
| Utilities | 15,678,124 | 15,815,947 | 137,823 | 0.9% | Overspending in Diesel Fuel of \$491,000. \$689,000 overspending in Diesel Fuel at DITP due to timing of delivery in December 2017 versus budgeted in May of 2018, offset by \$198,000 underspending in FOD due to favorable pricing YTD. Electricity is underbudget by \$310,000 primarily in FOD due to favorable pricing (approx. 2¢ under budget per kwh through December) resulting in \$379,000 under budget, offset by overspending at DITP of \$98,000. |
| Maintenance | 22,346,921 | 20,462,864 | (1,884,057) | -8.4% | Materials were underspent by \$1.4 million and Services were underspent by \$502,000. Underspending in Plant & Machinery Materials of \$809,000 in DITP for timing on various items like CTG spare parts, rolling stock (electric vehicles), and the W3 strainer on the non-potable water system; Specialized Equipment Services of \$759,000 in DITP for timing of PIC upgrade, FOD for instrumentation service contract, OEP & DLS; HVAC Materials of \$675,000 primarily in FOD for the timing of the B/W IPS and Chelsea HVAC upgrades and DITP for timing of condenser purchases; Building & Grounds Services of \$511,000 for timing of door replacement contract at DITP, and at the Chelsea Facility for carpet replacement and service contracts; Computer Licenses/Upgrades of \$316,000 in MIS for timing of software maintenance agreements; Electrical Materials of \$271,000 in DITP for timing of instrumentation upgrades and motor replacements; Electrical Services of \$165,000 in DITP for timing of lighting upgrade project; and Computer Materials of \$164,000 for an inventory issuance credit in MIS. Overspending in Plant & Machinery Services of \$1.2 million at Metro Maintenance for timing of cleaning of the Headwork air ducts; and DITP for timing of CTG maintenance, Cryo services, and refurbishing slide gates; and Pipeline Services of \$139,000 for timing of manhole replacement contract. |

| Total MWRA | FY18 Budget | FY18 Actuals | FY18 YTD Actua Budget | | Explanations |
|-----------------------|-------------|--------------|--------------------------|--------|---|
| | YTD March | YTD March | S | % | |
| Training & Meetings | 306,499 | 223,326 | (83,173) | -27.1% | Underspending in Operations, MIS and Procurement due to timing of training. |
| Professional Services | 5,053,301 | 4,911,417 | (141,884) | -2.8% | Other Professional Services was underspent by \$123,000 primarily in Admin and Treasury for timing of legal services, offset by over spending in MIS due to the transfer of spending from the CIP budget. Engineering Services was underspent by \$93,000 in Operations primarily at DITP. This is offset by higher spending for Lab & Testing of \$57,000 in Dept. Lab Services for unplanned algae testing for Chestnut Hill Reservoir and ENQUAL for unbudgeted red tide study. |
| Other Materials | 3,175,017 | 2,931,869 | (243,148) | -7.7% | Lower than budgeted spending for Health and Safety of \$113,000 primarily at DITP, Op Support and DLS; Vehicle Expenses of \$85,000 due to lower prices for fuel than budgeted; Equipment/Furniture of \$50,000 in Operations, offset by overspending in Office of Emergency Preparedness. |
| Other Services | 16,689,484 | 16,725,586 | 36,102 | 0.2% | Higher than budgeted spending for Sludge Pelletization of \$209,000 due to higher year to date quantities related to Struvite control; Space Lease/Rentals of \$122,000 primarily due to Internal Audit's completing their annual audit of CY16 operating expenses and FY17 property taxes which determined we owe the landlord \$41,000 and increased the common area maintenance and property taxes portions of the monthly bill for FY18; and Telephone of \$45,000 in MIS. This is offset by lower spending in Other Services of \$187,000 for a number of services, including timing of remediation projects managed by Real Property/Environmental Management and timing of Technical Assistance for Lead issues; and Police Details of \$59,000 primarily in Meter Maintenance, Wastewater Pipeline Maintenance, Water Valve Maintenance, and Pipeline Maintenance. |
| Total Direct Expenses | 165,094,263 | 159,607,153 | (5,487,111) | -3.3% | |

| Total MWRA | FY18 Budget | FY18 Actuals | FY18 YTD Actu Budge | | Explanations |
|-----------------------------------|-------------|--------------|------------------------|--------|--|
| | YTD March | YTD March | S | % | |
| Indirect Expenses | | | *** | | |
| Insurance | 1,510,089 | 2,287,857 | 777,768 | 51.5% | Higher claims than budgeted of \$818,000 due to recent adverse court case decision, offset by lower premiums of \$40,000. |
| Watershed/PILOT | 18,873,005 | 18,497,235 | (375,770) | -2.0% | Lower Watershed Reimbursement of \$286,000 due to over accrual at the end of FY17 as compared to the actual amount paid in the first quarter of FY18 and \$90,000 in lower PILOT payments. |
| HEEC Payment | 718,084 | 589,153 | (128,931) | -18.0% | Lower than budgeted charges for O&M charges for existing HEEC cable. |
| Mitigation | 1,197,713 | 1,181,168 | (16,545) | | Actual inflation rate was 2.08% vs. 2.5% used for the budget. |
| Addition to Reserves | 615,837 | 615,837 | (10,515) | 0.0% | rectal initiation rate was 2.50% to 2.5% asea for the staget. |
| Pension Expense | 3,277,369 | 3,277,369 | - | 0.0% | |
| Post Employee Benefits | - | - | | 0.070 | |
| Total Indirect Expenses | 26,192,097 | 26,448,619 | 256,522 | 1.0% | |
| Debt Service | | | | | |
| Debt Service | 336,012,605 | 336,012,604 | (0) | 0.0% | Through March staff have transferred \$7.0 million of a favorable YTD variance to the Defeasance Account. The short-term rates related variance is \$6.0 million lower YTD, and \$1.0 million related to the timing of SRF borrowing. |
| Debt Service Assistance | (391,580) | (391,580) | - | 0.0% | |
| Total Debt Service Expenses | 335,621,025 | 335,621,024 | (0) | 0.0% | |
| | | | | | |
| Total Expenses | 526,907,385 | 521,676,796 | (5,230,589) | -1.0% | |
| Revenue & Income | | | | | |
| Rate Revenue | 537,790,500 | 537,790,500 | | 0.0% | |
| Other User Charges | 6,640,935 | 6,595,589 | (45,346) | -0.7% | |
| Other Revenue | 6,025,393 | 10,839,195 | 4,813,802 | 79.9% | \$4.4 million for two settlements, \$4.2 million receipt for settlement between various State Attorneys General and Barclays PLC for attempting to manipulate the LIBOR market and \$228,000 for the final payment of a class action lawsuit settlement for derivative agreements; \$225,000 for disposal of surplus material. This is offset by \$29,000 less for revenue attributable to renewable energy credits and energy rebates due to timing on RPS credits. |
| Rate Stabilization | • | | - | | |
| Investment Income | 7,155,416 | 8,383,504 | 1,228,088 | 17.2% | Investment Income is over budget mostly due to short term rates higher than budget (1.39% vs.1.05% budget). Of this amount ~\$1 million is due to interest rates and ~\$200k is due to higher average daily balances as compared to budget. |
| Total Revenue | 557,612,244 | 563,608,788 | 5,996,544 | 1.1% | |
| Net Revenue in Excess of Expenses | 30,704,860 | 41,931,992 | 11,227,133 | | |

| | FY18 | FY18 | YTD Actuals | vs. Budget | |
|------------------------------|---------------------|----------------------|-------------|------------|---|
| | Budget YTD March | Actuals YTD March | s | % | Explanations |
| The same of | | | | Wastew | ater |
| Interception & Pumping (I&P) | \$34,120 | \$28,097 | (\$6,023) | -17.7% | Underspending Alewife Brook Pump Station Rehab - Construction: \$3.0M (testing of dry and wet weather bypass pumps had been delayed. Construction is now progressing on schedule) Chelsea Creek Headworks Upgrades - Construction: \$2.4M (delays of water main installation due to pile testing and the concrete channel lining due to service preparation. Also, exterior paneling work delayed due to timing of materials) Wastewater Meter System Planning/Study/Design: \$299k (less than budget award) Pump stations and CSO condition assessment: \$153k (contract not yet awarded) DeLauri Pump Station Screens and Security: \$150k (later than budgeted notice-to-proceed) Cambridge Branch Section 27, 26, and 24: \$144k (completed under budget) Offset Overspending Caruso Pump Station Improvements - Construction: \$165k (additional change order work) Sections 4, 5, 6, 186 - Study: \$152k (consultant progress) Quincy/Hingham Pump Station Fuel Storage Upgrades - Construction: \$99k (project progress) |
| Treatment | \$8,826 | \$7,571 | (\$1,255) | -14.2% | Underspending Digested Sludge Pump Replacement - Phase 2: \$396k and Power System Improvements - Construction: \$283k (for work scheduled for FY18 performed in FY17) Clinton Wastewater Treatment Plant Phosphorus Reduction - Construction: \$296k (up to a six-month time extension due to delays including preliminary testing) Chemical Bulk Storage Tanks Relining: \$294k (contract not yet awarded) Clinton Roofing: \$110k (contract not yet awarded) NMPS and WTF Valve & Piping Replacement - ESDC/REI: \$100k (less than anticipated engineering services) Offset Overspending WTF VFD Replacement - Construction: \$287k (contractor progress) Personnel Dock Rehab: \$156k (additional rehab work required) |
| Residuals | \$857 | \$259 | (\$598) | -69.8% | Delay in contract awards for mechanical improvements and electrical improvements. |
| CSO | \$1,606 | \$1,567 | (\$39) | -2.4% | Underspending Cambridge Sewer Separation: \$198k (pending final cost reconciliation) Offset Overspending CSO Performance Assessment: \$162k (consultant progress greater than planned) |

| | FY18 | FY18 | YTD Actuals | vs. Budget | THE TAX BELLEVILLE INC. TO SERVICE STREET, STR |
|--|---------------------|----------------------|-------------|------------|--|
| | Budget YTD March | Actuals YTD March | S | % | Explanations |
| Other Wastewater | \$13,759 | \$12,917 | (\$841) | -6.1% | Underspending I/I Local Financial Assistance: \$841k (less than budgeted requests for grants and loans) |
| Total Wastewater | \$59,167 | \$50,412 | (\$8,755) | -14.8% | |
| | 1.4.124 | | Ball to the | Waterw | orks |
| Drinking Water Quality Improvements | \$2,559 | \$2,820 | \$261 | 10.2% | Overspending Marlborough Maintenance Facility: \$483k (contractor progress) |
| Transmission | \$18,166 | \$21,830 | \$3,664 | 20.2% | Overspending Wachusett Aqueduct Pump Station - Design/ESDC and Construction: \$2.8M (due to project progress) Watershed Land Acquisition: \$1.1M (timing of land purchases) WASM 3 - MEPA/Design/CA/RI: \$586k (field work scheduled for FY17 performed in FY18) Offset Underspending Shaft 12 Isolation Gates - Design/CA/RI: \$227k (preliminary design report indicates construction costs to be greater than anticipated and therefore project to be reevaluated) CVA Motorized Screens Replacement - Construction: \$208k (work scheduled for FY18 performed in FY17) Evaluation of Farm Pond Buildings & Waban Arches: \$132k (project is substantially complete and will be less than budgeted. Decision pending on demolition vs. rehabilitation as next phase.) |

| | FY18 | FY18 | YTD Actual | s vs. Budget | |
|------------------------|---------------------|----------------------|------------|--------------|--|
| | Budget YTD March | Actuals YTD March | S | % | Explanations |
| Distribution & Pumping | \$25,528 | \$29,808 | \$4,280 | 16.8% | Overspending NIH Section 89/29 Redundancy Phase 1B and 1C and Phase 2:\$5.2M, and SEH Redundancy Pipeline Section 111 Phase 1 - Construction: \$1.4M (all due to project progress) Offset Underspending Section 14 Water Pipe Relocation (Malden): \$657k (Delay in commencing pipe installation due to third party building construction. Work to commence next month.) Chestnut Hill Gatehouse No. 1 Repair - Construction: \$357k (due to delayed notice-to- proceed) SEH Redundancy Pipeline Section 111 Phase 3 - Construction: \$858k (contract not yet awarded) NIH Redundancy & Storage Easements: \$500k (timing of payment for the meter vault based on MOA with Town of Stoneham) Sections 50 & 57 Water & 19/20/21 Sewer Rehab - Design/ESDC: \$209k (delay in field testing due to weather) Sections 23, 24, 47 Rehab - Final Design/CA/RI: \$198k (Delay due to coordination of field work to determine pipe condition and establish test pits. |
| Other Waterworks | \$8,924 | \$13,358 | \$4,434 | 49.7% | Overspending Local Water System Assistance Program: \$4.7M (greater than budgeted community requests for loans) Offset Underspending Quabbin Power, Communication & Security - Construction: \$122k (partially due to reimbursement from DCR Office of Watershed Management for work at boat cove) |
| Total Waterworks | \$55,178 | \$67,816 | \$12,639 | 22.9% | The state of the s |

| | FY18 | FY18 | YTD Actuals vs. Budget | | |
|--|---------------------|----------------------|------------------------|-------------|---|
| | Budget YTD March | Actuals YTD March | S | % | Explanations |
| | | | Busin | ess & Opera | ations Support |
| Total Business & Operations Support | \$4,180 | \$1,981 | (\$2,200) | -52.6% | Underspending Security Equipment: \$1.5M (delay in implementing equipment initiatives) MIS Projects: \$639k (timing of IT Strategic Plan implementation) Fish Hatchery Pipeline Hydro: \$129k (timing of final work. Project is substantially complete) Offset Overspending Vehicle Purchases: \$263k (timing of vehicle purchases) |
| Total MWRA | \$118,525 | \$120,209 | \$1,684 | 1.4% | |

ATTACHMENT 4

FY18 Budget vs FY18 Projection

| TOTAL MWRA | F | Y18 Budget | | FY18 Projection | | Change FY18 Budget FY18 Projecti | |
|----------------------------------|----|-------------|----|--------------------|-----|--|-----------|
| | 1 | | | | | \$ | % |
| EXPENSES | 1 | | 10 | | 322 | | 250000000 |
| WAGES AND SALARIES | \$ | 104,286,370 | \$ | 101,055,329 | \$ | (3,231,041) | -3.1% |
| OVERTIME | | 4,110,637 | | 4,577,713 | | 467,076 | 11.4% |
| FRINGE BENEFITS | | 20,997,975 | | 20,149,975 | | (848,000) | -4.0% |
| WORKERS' COMPENSATION | | 2,322,980 | | 2,122,980 | | (200,000) | -8.6% |
| CHEMICALS | | 9,836,933 | | 9,637,130 | | (199,803) | -2.0% |
| ENERGY AND UTILITIES | | 21,735,222 | | 21,578,213 | | (157,009) | -0.7% |
| MAINTENANCE | | 32,200,786 | | 32,577,083 | | 376,297 | 1.2% |
| TRAINING AND MEETINGS | | 406,269 | | 422,531 | | 16,262 | 4.0% |
| PROFESSIONAL SERVICES | | 7,221,622 | | 6,974,322 | | (247,300) | -3.4% |
| OTHER MATERIALS | | 6,692,659 | | 6,550,018 | | (142,641) | -2.1% |
| OTHER SERVICES | | 22,764,526 | | 22,855,004 | | 90,478 | 0.4% |
| TOTAL DIRECT EXPENSES | \$ | 232,575,979 | \$ | 228,500,298 | \$ | (4,075,681) | -1.8% |
| INSURANCE | \$ | 2,013,452 | \$ | 2,805,581 | | 792,129 | 39.3% |
| WATERSHED/PILOT | | 25,164,006 | | 24,557,126 | | (606,880) | -2.4% |
| HEEC PAYMENT | | 957,445 | | 877,030 | | (80,415) | -8.4% |
| MITIGATION | | 1,596,950 | | 1,574,890 | | (22,060) | -1.4% |
| ADDITIONS TO RESERVES | | 821,116 | | 821,116 | | | 0.0% |
| RETIREMENT FUND | | 3,277,369 | | 3,277,369 | | | 0.0% |
| POSTEMPLOYMENT BENEFITS | | 5,035,422 | _ | 5,035,422 | | | 0.0% |
| TOTAL INDIRECT EXPENSES | \$ | 38,865,760 | \$ | 38,948,534 | \$ | 82,774 | 0.2% |
| STATE REVOLVING FUND | \$ | 84,931,906 | \$ | 80,637,871 | | (4,294,035) | -5.1% |
| SENIOR DEBT | | 264,560,267 | | 263,760,267 | | (800,000) | -0.3% |
| SUBORDINATE DEBT | | 85,443,447 | | 85,443,447 | | - | 0.0% |
| LOCAL WATER PIPELINE CP | | 3,794,944 | | 1,482,833 | -6. | (2,312,111) | -60.9% |
| CURRENT REVENUE/CAPITAL | | 13,200,000 | | 13,200,000 | 45 | - | 0.0% |
| CAPITAL LEASE | | 3,217,060 | | 3,217,060 | | - | 0.0% |
| DEBT PREPAYMENT | | 10,900,000 | | 10,900,000 | | - | |
| VARIABLE RATE SAVINGS | | - | | (7,727,273) | | (7,727,273) | |
| DEFEASANCE ACCOUNT | | * | | 15,133,419 | | 15,133,419 | |
| DEBT SERVICE ASSISTANCE | | (391,580) | | (1,336,306) | | (944,726) | 241.3% |
| HEEC CABLE CAPACITY RESERVE FUND | | 6,532,146 | | 6,532,146 | | | 0.0% |
| TOTAL DEBT SERVICE | \$ | 472,188,190 | \$ | 471,243,464 | \$ | (944,726) | -0.2% |
| TOTAL EXPENSES | \$ | 743,629,929 | \$ | 738,692,296 | \$ | (4,937,633) | -0.7% |
| REVENUE & INCOME |] | | | | | | |
| RATE REVENUE | \$ | 717,054,000 | S | 717,054,000 | | - [| 0.0% |
| OTHER USER CHARGES | Ψ | 9,011,070 | ф | 9,011,070 | | _ | 0.0% |
| OTHER REVENUE | | 7,359,078 | | 12,159,078 | | 4,800,000 | 65.2% |
| RATE STABILIZATION | | - | | ,, | | | |
| INVESTMENT INCOME | | 10,205,781 | | 12,183,869 | | 1,978,088 | 19.4% |
| TOTAL REVENUE & INCOME | \$ | 743,629,929 | S | 750,408,017 | 0 | 6,778,088 | 0.9% |

VARIANCE:

\$ (11,715,721) \$ (11,715,721)

STAFF SUMMARY

TO:

Board of Directors

FROM:

Fredrick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Technical Assistant Consultant Services, Hazardous Materials

Geosphere Environmental Management, Inc., Contract 605TA; and Green Seal

Environmental, Inc., Contract 606TA

COMMITTEE: Administration, Finance & Audit

INFORMATION

X VOTE

Michele S. Gillen

Director of Administration

Lori Ann Foley, Program Manager - Environmental John R. Nelson, Environmental Manager

Preparer/Title

David W. Coppes

Chief Operating Officer

RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to award two separate contracts to provide Technical Assistance Consulting Services for Hazardous Materials, and to authorize the Executive Director, on behalf of the Authority, to execute Contract 605TA with Geosphere Environmental Management, Inc. and Contract 606TA with Green Seal Environmental, Inc., each for an amount not to exceed \$450,000, with a contract term of three years from the Notice to Proceed.

DISCUSSION:

The purpose of these technical assistance contracts is to make available, on an as-needed basis, hazardous materials assessment services for small, unanticipated or emergency projects.

Over the years, because of the significant demand for task order work involving hazardous materials, MWRA has awarded separate contracts to two firms. This approach has been successful in ensuring the availability of qualified expertise in this important and environmentally sensitive discipline at all times.

Some typical examples of the task order work that is likely to be issued under this contract include:

- preparation and implementation of spill prevention plans at MWRA facilities required under the Clean Water Act;
- training of oil-handling staff in spill prevention and response procedures;
- annual update of the Deer Island Treatment Plant Integrated Contingency Plan by a

Professional Engineer;

- hazardous materials sampling and analysis support to MWRA staff as they plan, design, and construct new and rehabilitated infrastructure;
- hazardous materials spill response actions by a Licensed Site Professional (LSP) in accordance with the Massachusetts Contingency Plan (MCP); and
- ground water remediation and monitoring.

Procurement Process

Staff used a one-step, two-envelope Request for Qualifications/Proposals (RFQ/P) process seeking two consultants, to be selected on an all-qualified low-cost basis, with sealed cost proposal envelopes submitted separately from qualification submissions. Because these hazardous materials contracts often involve ensuring regulatory compliance and remediation of complex site conditions, proposers were required to meet minimum threshold qualifications requirements in specific areas of experience and expertise. In their proposals, respondents were required to demonstrate that the qualifying requirements have been met, and to show that the firm employs at least one LSP and one Massachusetts-Licensed Professional Engineer. Proposers meeting all qualification requirements were deemed qualified and were then ranked on the basis of cost, according to a pre-determined formula. The qualified proposers with the two lowest cost are recommended for contract award.

The RFQ/P did not include a detailed scope of work on which proposers could submit a cost proposal because tasks will vary depending on the nature and circumstances of the requested work. Instead, firms were required to provide Single Hourly Rates for each person, within each labor classification, for the three successive years of the contract, along with Unit Prices for laboratory and drilling costs. Each Single Hourly Rate is the billable rate of each specific employee for each hour spent on a task order and is inclusive of all direct labor costs, indirect costs and profit. Staff developed a sample cost exercise, which included a variety of representative expenses and level of effort that could be called for in task orders issued under these hazardous materials contracts.

On February 5, 2018, MWRA issued the RFQ/P which was publicly advertised in Goods and Services, the Boston Herald, Banner Publication and El Mundo. In addition, notice of the RFQ/P was sent directly to 18 firms. Eight proposals were received by the March 2, 2018 deadline: Aptim Massachusetts, Inc., Common Sense Environmental, Inc., ENSAFE Inc., EnviroTrac, Inc., Geosphere Environmental Management, Inc., Green Seal Environmental, Inc., Hydro Environmental Technologies, Inc., and Weston & Sampson Engineers, Inc.

On March 28, 2018, the Selection Committee met and carefully examined the proposals. All eight firms were deemed qualified. The Selection Committee then opened the second envelope containing the sample cost exercise of the eight qualified firms and ranked them based upon cost. The results are presented below:

| <u>Firms</u> | Sample Cost Exercise* | Rank |
|--|-----------------------|------|
| Geosphere Environmental Management, Inc. | \$51,713.75 | 1 |
| Green Seal Environmental, Inc. | \$51,841.17 | 2 |
| Common Sense Environmental, Inc. | \$52,125.70 | 3 |
| ENSAFE | \$57,406.44 | 4 |

| Hydro Environmental Technologies, Inc. | \$58,708.00 | 5 |
|--|-------------|---|
| Aptim Massachusetts, Inc. | \$63,330.89 | 6 |
| Weston & Sampson Engineers, Inc. | \$74,458.00 | 7 |
| EnviroTrac, Inc. | \$76,237.00 | 8 |

^{*}Cost figures shown reflect mathematical corrections.

Geosphere Environmental Management, Inc. was first ranked with the lowest sample cost exercise. This firm is one of the current incumbent consultants for Hazardous Materials task order services. Staff report that Geosphere has provided outstanding past performance on MWRA work, and has successfully completed task orders on schedule and within budget. The firm proposed a highly qualified project team with excellent experience performing complex MCP work and outstanding management and staff training for the EPA-required Spill Prevention Control and Countermeasure Plans at fourteen applicable MWRA facilities. Geosphere has developed an excellent working relationship with MWRA staff and have demonstrated a thorough understanding of MWRA's regulatory needs.

Green Seal Environmental, Inc. was the second-ranked firm and is also one of the current incumbent consultants. This dual-certified MBE/WBE firm has excellent prior experience working for MWRA. In particular, it has demonstrated outstanding performance managing several task orders including the assessment of hazardous building materials at MWRA facilities undergoing design for rehabilitation. In addition, its well-qualified LSP and staff demonstrated excellent understanding of the MCP through their management of response actions involving releases of hazardous material at several MWRA facilities. Green Seal's proposal included a well-qualified project team with experience in environmental regulations applicable to MWRA operations. The firm's proposal demonstrated significant experience on previous related projects and a thoughtful technical and management approach to anticipated task order work.

The Selection Committee was in agreement that all of the remaining firms were well qualified and met the threshold requirements for consideration. However, these firms submitted proposals that were not as competitively priced as the two recommended firms.

Therefore, the Selection Committee recommends the award of Contract 605TA to Geosphere Environmental Management, Inc. and Contract 606TA to Green Seal Environmental, Inc., each for an amount not to exceed \$450,000.

BUDGET/FISCAL IMPACT:

The FY18 Capital Improvement Program contains \$900,000 for Hazardous Materials Services.

MBE/WBE PARTICIPATION:

There were no MBE or WBE participation requirements established for this contract due to limited opportunities for subcontracting. However, Green Seal Environmental, Inc. proposed 75% MBE as they are certified by the SDO as a Disadvantaged, Minority- and Women-owned business.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Renewable and Alternative Energy Portfolio Services

Next Grid Markets, LLC

Contract RPS-68

COMMITTEE: Administration, Finance & Audit

INFORMATION

X VOTE

Carolyn M. Fiore, Deputy Chief Operating Officer

Michael McDonald, Manager, Energy

Stephen Estes-Smargiassi, Director of Planning & Sustainability

Israel Alvarez, Project Engineer, Planning

Preparer/Title

Director of Administration

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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Contract RPS-68, Renewable and Alternative Energy Portfolio Services, with Next Grid Markets, LLC in accordance with the pricing established under Massachusetts State Contract FAC109, and to authorize the Executive Director, on behalf of the Authority, to execute said contract in an amount not to exceed \$77,600 and for a term of 713 days from April 18, 2018 through March 31, 2020.

BACKGROUND:

The Massachusetts Renewable Energy Portfolio Standards (RPS) and Alternative Energy Portfolio Standards (APS) are statutory obligations under the Green Communities Act of 2008. The Act requires Massachusetts retail electricity suppliers to provide a minimum percentage of kilowatthours (kWh) sales to end-use customers from eligible renewable resources. Qualified facilities generating renewable energy earn Renewable Energy Certificates (RECs), which may be sold to retail electricity suppliers to satisfy their RPS obligations.

Retail electricity suppliers must meet their annual RPS obligations by acquiring a sufficient quantity of RPS-qualified RECs and/or by making Alternative Compliance Payments to the Massachusetts Clean Energy Center. The Alternative Compliance Payments are established by the Massachusetts Division of Energy Resources (DOER). These rates are designed to be higher than the market price of RECs and are adjusted annually based on the Consumer Price Index of the previous year.

DOER established the qualification process for renewable generation facilities.¹ The following MWRA facilities are currently approved as qualified renewable generation units:

- Deer Island Steam and Back-Pressure Turbine Generators Class I
- Deer Island Residuals Odor Control Solar Solar Class I
- Deer Island Maintenance Building Solar Solar Class I
- Deer Island Wind, Both Turbines Class I
- Deer Island Hydro Class I
- Charlestown Wind Class I
- Loring Road Hydro Class I
- Carroll Water Treatment Plant Solar Class I
- Brutsch Hydro Class I
- Oakdale Hydro Class II
- Cosgrove Hydro Class II

Electricity produced by renewable energy generators qualified for the RPS program is broken into two products:

- 1) The electricity production that is used on-site or delivered to the grid; or
- 2) The positive environmental attributes associated with clean energy production.

RECs represent the second product. One REC is earned each time a qualified source generates one megawatt hour (MWh) of electricity. For suppliers to meet their compliance obligations as set by the RPS they must purchase a number of RECs equal to their percentage for that particular compliance year. For example, in 2017 all suppliers were required to purchase an amount of RECs equal to 12% of the total load they serve in Massachusetts in order to comply with their RPS Class I requirement. This contract will provide the mechanism for MWRA to sell the RECs created by MWRA green power generators.

DISCUSSION:

Under Contracts RPS-51, RPS-60 and RPS-65, MWRA sold its Class I RECs and Solar Renewable Energy Certificates (SRECs) utilizing the previous Massachusetts State Contract, FAC83DesignatedDCAMM, which expired on March 31, 2018. Under that previous State Contract, MWRA received revenue of \$1.8 million for FY16 and FY17 through sale of its Class I and SRECs. MWRA staff currently sell Class II RECs independently because the pricing received is consistently close to the Alternative Compliance Payment price. MWRA revenue from Class II REC sales was approximately \$700,000 for FY16 and FY17 combined. The new contract may offer an opportunity to utilize the REC vendor to obtain similar competitive market pricing.

¹ Each RPS Class has different supplier compliance percentages, as well as different qualifying generation units used to meet the compliance percentage. RPS Class I facilities generate electricity using eligible technologies (solar, wind, small hydroelectric, landfill methane, digester gas, marine or hydrokinetic, geothermal, biomass) and began commercial operation after 1997. RPS Class II renewable facilities generate electricity using technologies similar to Class I but have an operation date prior to January 1, 1998. APS facilities include Combined Heat and Power, flywheel storage, coal gasification, and efficient steam technologies.

In early 2018, the Division of Capital Asset Management and Maintenance (DCAMM) issued a Request for Responses (RFR) to procure the successor contract to FAC83DesignatedDCAMM which includes the marketing, certification and sales of qualified RECs generated by the Commonwealth's facilities. The services under the successor contract, FAC109, are separated into the following four program categories:

- Category 1: Sale of APS Alternative Energy Certificates which includes Combined Heat and Power, flywheel, Coal Gasification, Ground source and solar thermal and efficient steam technology.
- Category 2: Sale of RPS Class I and Class II RECs and SRECs; and the purchase of Green-e RECs. Category 2 includes all solar technologies, wind, hydro, and other applicable renewable energy classifications.
- Category 3: Services related to meter equipment repair and other data collection and testing services.
- Category 4: Support services in administration of the development of the Solar Massachusetts Renewable Target program or other alternatives.

Category 2 is the category that is applicable to this contract. Three firms responded to DCAMM's RFR and an MWRA staff member participated in the DCAMM selection committee as an agency representative. After evaluation of proposals, the DCAMM selection committee deemed Next Grid Markets, LLC the most advantageous firm and best value for the Commonwealth for the services prescribed under all four program categories based on the following criteria: Experience and Team, Strategy and Business Plan, and Financial Return.

Under State Contract FAC109, commencing April 1, 2018, MWRA will be eligible to utilize Next Grid Markets to provide marketing, certification, and sales services under Program Category 2 RECs/SRECs. Contract FAC109 is a two-year contract with two, 2-year renewal options. In accordance with the pricing established under FAC109, Next Grid Markets will be paid a fee of 3% of revenue received from sales of Class I and Class II RECs, and a fee of 1.5% of revenue received from sale of SRECs. Eligible state and public entities, including MWRA, may utilize FAC109 in accordance with the terms, pricing and conditions of that State Contract.

Staff recommend that MWRA utilize State Contract FAC109 for the sale of its Category 2 RECs and award RPS-68 to Next Grid Markets, LLC. There are several advantages to MWRA in utilizing the State Contract for the marketing, certification, and sales of its Category 2 RECs. Next Grid Markets may aggregate MWRA's RECs with RECS from other state-controlled agencies and public entities, potentially resulting in overall higher bid prices based upon current market trends. Moreover, Next Grid Markets is actively engaged in the renewables market pricing, which allows the firm to develop a strategy to optimize REC sales revenue. Next Grid Markets may engage in "forward" marketing (financial contracts for future supply of RECs), which can result in higher prices. Finally, Next Grid Markets will keep staff informed of any changes to the RPS market and/or regulations.

This contract will include the sale of MWRA Class I RECs and SRECs. With respect to the sale of MWRA's Class II RECs, MWRA will reserve the right to either continue to sell Class II RECs independently or utilize Next Grid Markets, LLC. Next Grid Markets' fee will be in accordance with FAC109 - 3% of revenue received from sales of any Class I and Class II RECs, and 1.5% of revenue received from sale of any SRECs. The estimated total payment to Next Grid Markets for marketing, certifying and selling MWRA's projected Category 2 RECs and SRECs through March 31, 2020 is \$77,600 (including 3rd party verifier fees² and meter repair/upgrade costs), or 3% of the RECs and 1.5% of the SRECS of the anticipated \$1.6 million total revenue based on current market prices and projections for REC generation.

For the reasons set forth above, staff recommend award of Contract RPS-68 to Next Grid Markets, LLC in accordance with the pricing established under Massachusetts State Contract FAC109, in an amount not to exceed \$77,600 and for a term of 713 days from April 18, 2018 through March 31, 2020.

BUDGET/FISCAL IMPACTS:

The estimated total payment to Next Grid Markets, LLC for selling MWRA's projected RECs through March 31, 2020 is \$77,600, or 3% of the Category 2 RECs and 1.5% of the Category 2 SRECS, of the anticipated \$1.6 million total revenue, based on current market prices and projections for REC generation.

MBE/WBE PARTICIPATION:

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

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² According to 225 CMR 14.00 RENEWABLE ENERGY PORTFOLIO STANDARD – CLASS I, the electrical energy output from a Generation Unit shall be verified by the ISO-NE or by an independent verification system or person participating in the NEPOOL GIS accounting system as an independent Third Party Meter Reader, as defined in Rule 2.5(j) of the NEPOOL GIS Operating Rules, or any successor rule, and approved by the Department.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT: Sole Source Purchase Order for One Year of Maintenance and Support of the

Integrated Financial, Procurement and Human Resources/Payroll Management

System

Infor Global Solutions

COMMITTEE: Administration, Finance, & Audit

INFORMATION

X_VOTE

Thomas Durkin Director, Finance

Russell J. Murray, MIS Director
Giri Narayanan, App & Sys Development Manager
Carolyn Francisco Murphy, Director, Procurement

Preparer/Title

Michele S. Gillen

Director, Administration

RECOMMENDATION:

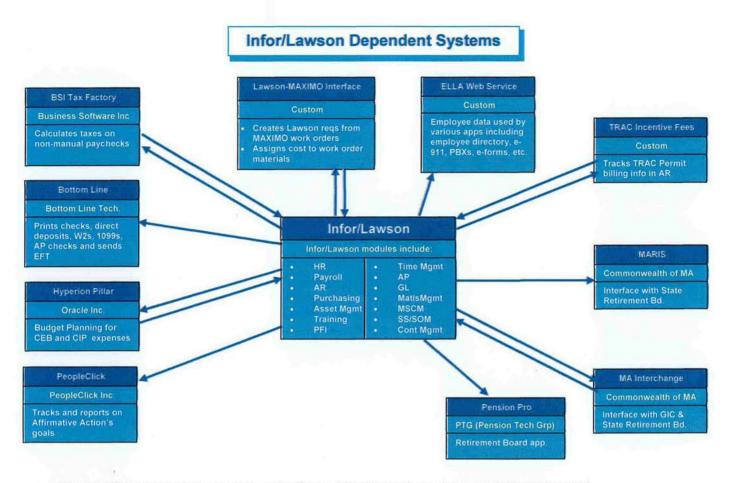
To approve the award of a sole source purchase order contract for the annual maintenance and support of the integrated financial, procurement and human resources/payroll management system to Infor Global Solutions (formerly Lawson Associates, Inc.), and to authorize the Executive Director to execute said purchase order contract in an amount not to exceed \$427,162.80 for a period of one year, from June 1, 2018 through May 31, 2019.

DISCUSSION:

On March 24, 1999, the Board of Directors approved Contract 6362 with Lawson Associates (now Infor Global Solutions) to implement an integrated financial and procurement management system. In May 2000, the implementation of a Human Resources/Payroll module was included as part of the Lawson System. Today, this set of application modules represents the core administrative and financial management functionality for the MWRA (Human Resources, Payroll, Finance, Procurement, and Materials Management).

In October 2012, as part of an effort to reduce the use of customized applications, use more off-the-shelf products, and respond to the MIS 5-Year Strategic Plan recommendations (including enhancing e-Procurement functionality and reducing paper), the Board of Directors approved the implementation of the Strategic Sourcing, Supplier Order Management, and Contracts Management modules.

The illustration on the next page shows the significant Infor/Lawson modules in use and interfaces with other applications.



*The new Massachusetts Retirement Information System (MARIS) interface went into production in Q3 FY17.

This maintenance and support agreement is an essential tool to protect the MWRA's Lawson software investment. The Lawson support agreement ensures that the MWRA receives vendor support including:

- Access to product patches, version releases, software upgrades and documentation; "How To" assistance, remote diagnosis, priority case queuing, e-mail notifications, Lawson Global Support, hot topics web discussion groups and electronic self-service case logging, tracking and management.
- Access to support engineers twelve hours a day, five days a week and twenty-four hour, seven day a week support for critical issues.

Staff have thoroughly reviewed the sole source nature of this procurement. Infor Global Solutions is the manufacturer of this software and while there are third party vendors who provide support for various applications, they do not have the ability to change standard code or provide upgrades or fixes to the application. This ability is important to the MWRA to ensure that it is able to maximize its use of Lawson.

Non-renewal of the maintenance and support agreement would place the MWRA at risk since no further support will be provided on the existing applications. Therefore, staff recommend that the MWRA renew the annual maintenance agreement to provide ongoing support for the Lawson System.

BUDGET/FISCAL IMPACT:

This year's request of \$427,162.80 represents a 6% increase over last year's not-to-exceed amount of \$402,983.77. There are sufficient funds available in the FY18 CEB for this renewal.

MBE/WBE PARTICIPATION:

Infor Global Solutions is not a certified Minority or Woman Owned business.



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

WASTEWATER POLICY & OVERSIGHT COMMITTEE MEETING

to be held on

Chair: P. Flanagan Vice-Chair: J. Walsh

Committee Members:

J. Carroll J. Foti

A. Pappastergion

B. Peña H. Vitale

A. Blackmon

Wednesday, April 18, 2018

Location:

100 First Avenue, 2nd Floor Charlestown Navy Yard

Boston, MA 02129

Time:

Immediately following AF&A Comm.

AGENDA

A. Approvals

1. Approval of Amendment 1 to Memorandum of Understanding with Mass. Game for Public Access Fishing Pier at Deer Island

B. **Contract Awards**

- Agency-Wide Technical Assistance Consulting Services, Hazen and Sawyer, PC, Contract 7498, and Kleinfelder Northeast, Inc., Contract 7604
- 2. Repair of Three Digester Mixer Assemblies at the Deer Island Treatment Plant: Flowserve Corporation
- 3. Gravity Thickener Rehabilitation, Deer Island Treatment Plant, Contractor TBD. Contract 7428 - MATERIALS TO FOLLOW

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Wastewater Policy and Oversight Committee

March 21, 2018

A meeting of the Wastewater Policy and Oversight Committee was held on March 21, 2018 at the Authority headquarters in Charlestown. Chairman Flanagan presided. Present from the Board were Messrs. Blackmon, Carroll, Cotter, Foti, Pappastergion, Peña, Vitale and Walsh. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Dave Coppes, John Vetere, Carl Leone, and Bonnie Hale. The meeting was called to order at 12:05 p.m.

Information

Update on Deer Island Storm Impacts/March 14, 2018 Power Outage (Presentation)

Staff gave a presentation on recent storm impacts, including a power outage, and MWRA's speedy response (the materials are on file with the records of the meeting.)

Infiltration/Inflow Local Financial Assistance Program Annual Update

Staff gave a presentation summarizing the annual program update.

The meeting adjourned at 12:30 p.m.

^{*} Approved as recommended at March 21, 2018 Board of Directors meeting.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Approval of Amendment 1 to Memorandum of Understanding with Mass.

Department of Fish and Game for Public Access Fishing Pier at Deer Island

COMMITTEE: Wastewater Policy & Oversight

INFORMATION

VOTE

David W. Coppes, P.E.

Chief Operating Officer

John Vetere, Deputy Chief Operating Officer

David F. Duest, Director, DITP

Preparer/Title

Steven A. Remsberg

General Counsel

RECOMMENDATION:

That the Board authorize the Executive Director, on behalf of the Authority, to execute Amendment 1 to an existing Memorandum of Understanding with the Massachusetts Department of Fish and Game, and other fisheries offices, substantially in the form attached to this staff summary authorizing the Department to undertake and fund the permitting, design and construction of a fishing pier and associated lighting, security improvements, and 20 pier parking spaces within the public access portion of Deer Island and to further authorize the Authority to fund lighting and security improvements, and to authorize MWRA to provide general oversight and monitoring of the use of the fishing pier and parking areas.

BACKGROUND:

In 1986, the Massachusetts Legislature set aside lands around the perimeter of Deer Island, which were not otherwise needed for new wastewater treatment plant improvements, to be dedicated to open space uses for public access as mitigation for the expansion of the treatment facilities that were to be built on the island. The island perimeter walking trail has served as a unique opportunity for the public to enjoy the aesthetic and recreational activities which were intended by the Legislature.

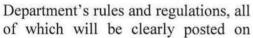
The Legislature has additionally charged the Department of Fish & Game ("Department") under a variety of statutory provisions to promote and improve programs and opportunities for saltwater fishing with the intent that those programs will increase public access to marine recreational facilities. In particular, the Department is authorized to utilize public lands, with the consent of the public agency having care, custody and control of such lands, and to build docks, piers and parking areas that will accommodate the public's use and access to saltwater fishing venues. The Department is likewise authorized to transfer operation of such facilities to the public body already in control of the public lands.

DISCUSSION:

A Memorandum of Understanding (MOU), was approved by the Board of Directors on April 15, 2015 to allow the Department to permit, design and construct a pier and 20-spot parking lot at Deer Island to be paid for by the Department. At that time, MWRA saw an opportunity to improve upon the limited parking available to public access users at the entrance to the island by incorporating an additional 20 parking spaces to be used for fishing and/or general access to the perimeter pathway. Under the MOU, the Department agreed to include the additional spaces and MWRA agreed to pay the associated costs. At that time, the preliminary estimate for MWRA's portion of the project for the additional parking spaces was \$75,000.

Provisions of Original MOU:

MWRA's obligations under original MOU, as operator of the pier, are minimal and do not involve the addition of or funding for personnel, equipment or supplies. MWRA's principal responsibilities monitor and periodically report to the Department the condition of the pier and the need for repairs maintenance. In addition, MWRA is responsible for on-site monitoring of uses of the pier to allow MWRA to advise the Department of uses or users who are not complying with the





Similar Pier Installed In Oak Bluffs

signage to be provided by the Department. It is MWRA's expectation that its current practice of policing the existing public access parking lot will include trash removal from the pier and new parking area. MWRA maintains a similar fishing pier as part of the public access area at the Nut Island Headworks in Quincy and has found it to be well used and appreciated by the community.

The MOU also provides that neither MWRA nor the Department shall charge any fees to the public. Payment of a fee by a member of the public for access would allow lawsuits for injuries to be maintained against the Authority. Likewise, MWRA would not be involved in any way with monitoring whether users of the pier have obtained the appropriate fishing licenses or are complying with Department's rules regulations. The MOU requires no active or daily monitoring of persons



Nut Island Fishing Pier

using the pier or associated parking as the pier is designed and intended to be "self-operating."

MWRA retains the right to temporarily close the pier should weather conditions or other factors cause MWRA to believe that public safety may be jeopardized.

Provisions of the First Amended MOU:

During permitting and design of the new facility, as a result of concerns raised at several public meetings, MWRA found it prudent to eliminate the 20 additional spaces but to add lighting and security improvements to both the parking lot and pier. These additions are similar to and consistent with those provided at the public access lot at the entrance to the island and at the Nut Island fishing pier in Quincy. Under the revised MOU, the Department would still pay the costs associated with the pier and original 20-spot parking lot and MWRA would pay the costs associated with the lighting and security improvements. MWRA's cost would be approximately \$260,000 for the lighting and security improvements and design costs. The actual costs will be determined once the project is bid and constructed. The Department's share of the estimated cost of the project is approximately \$1.1 million. In addition, MWRA will be responsible for maintenance and utility costs associated with the electrical and security improvements. The draft amendment to the MOU has been forwarded to the Department for review. In order to not hold up bidding of this project, staff request approval to amend the MOU as outlined and presented.

BUDGET/FISCAL IMPACT:

The final FY19 CIP will include \$260,000 for design costs and to construct the lighting, and security improvements.

ATTACHMENTS

Proposed Amendment 1 to MOU with Department of Fish & Game Plan View of Pier Location

First Amended Memorandum of Understanding (MOU)

| THIS FIRST AMENDE | D MOU is entered | l into pursuant to the authority of G.L. c. $10 \$ |
|-------------------------------------|-------------------------|--|
| 35NN, c. 130 § 17C and c. 21A, | §§2(8) and 11B, ar | nd G.L. c. 10 § 35NN, c. 130 § 17C and c. |
| 21A, §§2(8) and 11B on this | day of | , 2018, by and among the Division |
| of Marine Fisheries ("Division") | and Office of Fish | ing and Boating ("OFBA") within the |
| Massachusetts Department of Fis | sh and Game ("Dep | partment") collectively referred to herein as |
| "MA Fisheries", and by the Mass | sachusetts Water R | esources Authority ("MWRA") pursuant to |
| all applicable provisions of its en | abling act, all parti | es collectively referred to as the "Parties"). |

WHEREAS, the Parties desire to memorialize the obligations of each relative to the siting, funding, permitting, design, construction, maintenance, monitoring and operation of a proposed public access salt water fishing pier and associated parking facilities upon lands situated on Deer Island in the City of Boston currently owned by the Commonwealth of Massachusetts, and presently under the care, custody and control of MWRA; and

WHEREAS, MA Fisheries has proposed that a portion of the Deer Island site, as identified on the attached plan and which MWRA dedicates to open space and public access uses pursuant to the provisions of Chapter 658 of the Acts of 1986, be dedicated for public access and use as a fishing pier facility and for parking associated with the pier (the "Premises"); and

WHEREAS, MWRA believes that the proposed uses of the Premises are consistent with and are a continuation of its existing open space and public access uses of the Deer Island site, do not represent any disposition of said open space/public access uses by MWRA, do not represent a change in use of the open space/public access portions of the Deer Island site, and therefore that no action or approval of the Massachusetts Legislature under Article 97 is required.

NOW THEREFORE, in consideration of the allocation of responsibilities, as provided herein, among the Parties for the costs of design, permitting, construction, improvement, repair, maintenance, monitoring and operation of a fishing pier and associated area of twenty (20) parking spaces to be located at the Premises and in consideration of the mutual covenants contained herein, and for other good and valuable consideration the receipt and sufficiency of which are acknowledged by the Parties, each of the Department, OFBA, Division, and MWRA covenant and agree as follows:

- 1. Consent to Use of Public Access Property. Pursuant to the provisions of G.L. c. 21A, section 11B, MWRA hereby consents to the use of the Premises by MA Fisheries for a fishing pier and associated parking and both MWRA and MA Fisheries agree to the transfer to MWRA, the public entity having care, custody and control of the public access portions of Deer Island, of the limited monitoring and operational functions described in paragraph 5 hereof. It is understood and agreed that title to and ownership of the fishing pier structure shall be and remain in the Department and that MA Fisheries entities shall undertake the obligations allocated to them hereunder.
- 2. Project Funding/MWRA Payment. The Division shall, subject to available funding, provide funds from the Marine Recreational Fisheries Development Fund to OFBA to pay all costs, except as hereinafter provided, necessary for the permitting, design, and construction of the fishing pier and shall pay 100% of the costs to permit, design and construct a total of twenty (20) parking spaces, all spaces intended by the Parties to be associated with and to be dedicated to the public's use of the fishing pier. MWRA shall be responsible for the costs of design, specification development, component costs and installation of such lighting and security facilities at both the pier and parking area consistent with the completed specifications for lighting and security items. MWRA further agrees to be responsible for the on-going costs of maintenance and necessary future replacement of said lighting and security facilities and for all utility costs to operate same.

The Division shall from time to time, subject to available funding, pay for and undertake any repairs, replacement or reconstruction of the fishing pier reasonably necessary to maintain those facilities in a constant condition of good repair, free of all known and obvious defects and conditions which would present an unreasonable risk of injury, loss or death to members of the visiting public. The Division, subject to available funding, and MWRA shall share equally in the

costs of undertaking any repairs, replacement or reconstruction of the parking area reasonably necessary to maintain the parking facilities in a constant condition of good repair, free of all known and obvious defects and conditions which would present an unreasonable risk of injury, loss or death to members of the visiting public.

MWRA shall pay for its entire share of the project costs in a single lump sum uponcompletion of all work per a written itemized statement of account for same from MA Fisheries. As of the date of this First Amended MOU, the agreed upon charges for all aspects of design and/or construction of all elements for which MWRA is to be responsible total approximately \$260,000, subject always to the actual bid amount allocable to MWRA based upon an award by MA Fisheries to the low, responsible bidder/contractor.

- 3. <u>Signage</u>. MA Fisheries shall provide the MWRA with a sign or signs which contain the provisions of MA Fisheries regulations (hereafter "Regulations") governing the use of public access facilities (320 CMR 2.00), and a statement that the facilities were constructed by OFBA using funds provided by the Marine Recreational Fisheries Development Fund. The MWRA shall install and maintain any sign or signs provided by MA Fisheries in a prominent and visible location at the facilities. MWRA reserves the right to coordinate the placement of said signage with other signage presently in use at or around the public access entrance areas of Deer Island in a manner that will best direct the public's attention to the Regulations associated with the fishing pier and associated parking spaces.
- 4. Periodic Maintenance, Repair and Inspection of Parking Facilities. MA Fisheries shall devote sufficient funds from its annual legislative appropriations and budgets, to provide for the costs of annual maintenance, repairs and inspections which will be necessary to keep the entirety of the parking area in a constant condition of good repair, free of all known and obvious defects and conditions which would present an unreasonable risk of injury, loss or death to members of the visiting public.
- 5. Operation and Monitoring of the Parking and Fish Pier Facilities. The MWRA shall be responsible for funding and staffing which, in its sole discretion, it believes to be necessary for the operation and monitoring of the facilities which will be substantially self-operating in nature and will require no day-to-day active assistance from MWRA. As used herein, the term "operation and monitoring" shall include: (i) general oversight of the facilities and monitoring whether uses by the general public are in accordance with the Regulations, (ii) periodic trash and litter removal, (iii) snow and ice removal if the facilities, in the sole discretion of MWRA, will be open during winter months, and (iv) reasonable efforts to detect unsafe conditions, damage to, and/or the need for maintenance or repairs to the fishing pier structure or parking area. MWRA agrees that it shall notify MA Fisheries in

the event that such conditions are observed in order to enable MA Fisheries to effect repairs pursuant to paragraphs 2 and 7 hereof. While MWRA shall have no obligation to enforce compliance with any provision of the Regulations, MWRA shall use reasonable efforts to bring repeated or chronic violations of the Regulations to the attention of MA Fisheries and/or appropriate law or code enforcement officials and to cooperate with said officials.

As used herein, the term "operation and monitoring" shall not require MWRA to: (i) charge or collect any license or admission fees from any user of the fishing pier, (ii) to issue or check for valid licenses for fishing from the pier, (iii) to provide any assistance to members of the public in their use of the facilities, nor (iv) to provide any public safety/security services to users. Neither shall that term require MWRA to post any employee or assign any personnel at the facilities during any specific period(s) of time when the facilities are open to the public. MWRA reserves the right to temporarily close access to the fishing pier and associated parking area in the event that any condition, activity or needed repair at the pier or parking area presents a risk of injury or harm to the public.

- 6. Design, Construction and Installation of the Fishing Pier and Parking Area. MA
 Fisheries shall advance the funding of all expenses for and, subject to reimbursement by MWRA for its
 share of the costs as described in paragraph "2" hereof, shall be responsible for the permitting, design,
 installation, and construction on the Premises of the fishing pier and the parking as herein defined. MA
 Fisheries shall provide MWRA, at least 30 days in advance of the start of any construction of the
 parking facility or of the fish pier facility, with a full set of all plans, specifications, drawings and
 contract documents, which will be used in connection with the construction of those facilities. The
 design and construction of the facilities shall be in compliance with all applicable federal, state and local
 building codes and regulatory requirements. MA Fisheries shall provide MWRA, following the
 completion of any construction of the parking facility or of the fish pier facility, with a full set of as built
 plans and drawings for those finished facilities.
- 7. Maintenance, Repair and Inspection of the Fishing Pier. MA Fisheries shall devote sufficient funds from its annual legislative appropriations to provide for the costs of non-recurring maintenance, repairs and inspections which will be necessary to keep the fishing pier in a constant condition of good repair, free of all known and obvious defects and conditions which would present an unreasonable risk of injury, loss or death to members of the visiting public.
- 8. <u>No Fees to be Charged.</u> Neither any of the MA Fisheries agencies nor MWRA, either directly or through their agents or contractors, shall assess or collect from members of the public any fees, charges, assessments or other payment of any consideration in exchange for or as a condition

of entry upon, admission to or use of any part or portions of the parking facility or fish pier facility. Each of the MA Fisheries agencies and MWRA desire to avoid exposure, responsibility and/or liability for claims of injuries or damage to or loss of property or any other damages, inclusive of claims for wrongful death, and wish to be protected from such claims by the provisions of G.L. c. 21, § 17C. It is the express intent of MWRA and of the MA Fisheries agencies that no signage or other written or verbal statements shall be made by any of the MA Fisheries agencies or by their respective employees, agents or contractors that any fee, charge, assessment or other payment or consideration will be charged for admission to or use of the facilities by the public.

- 9. <u>Management Measures</u>. Subject to written approval of OFBA and the Division, MWRA may adopt reasonable management measures governing the use of the facilities that are not inconsistent with either the provisions of the Regulations or with other applicable management measures as adopted by MA Fisheries.
- 10. Third Party Claims and Lawsuits. It is the express intention of MA Fisheries, as the owner of the facilities, and MWRA, as the entity having care, custody and control of the public access property owned by the Commonwealth, that each reserves all rights, claims and defenses, including any claims against one another, which each may have in connection with any claims or lawsuits that may be brought against any of the Parties arising out of the public's use of the fishing pier and associated parking facilities, including the applicability of the provisions of G.L. c. 21, §17C.
- 11. <u>Compliance With All Laws and Authorities; No Interference.</u> MA Fisheries shall not interfere with any MWRA activities, operations, shipments or deliveries to or from Deer Island, nor will it, by any of its activities, cause MWRA to be unable to comply with those laws or the provisions of any of its permits with which it is required to remain in compliance. The MA Fisheries agencies shall observe and obey all reasonable MWRA safety and security directives applicable to any of MWRA's operations and activities at Deer Island.
- 12. <u>Insurance</u>. Prior to the entry upon the Premises by any contractor chosen to perform any work including design, construction, installation, repairs, maintenance, inspections and/or operation of the parking and fish pier facilities, said contractor shall provide MA Fisheries and MWRA with certificates of insurance coverage in such amounts and types as will protect both MWRA and the MA Fisheries agencies from the types of claims and risks of loss which could arise out of or result from said contractors operations, activities and facilities at Deer Island.

| | | DIALL |
|---|-------------------------|---|
| 13. | Term; Termination. | This MOU shall be in effect for the useful life of the fishing pier |
| acility or ur | ntil mutually dissolved | or modified in writing by the Department, Division, OFBA, and the |
| MWRA. | | |
| ATA (A A A A A A A A A A A A A A A A A | | |
| N WITNE | SCES WHEDEOE the | wanting housts have accounted this Assessment on this |
| of | , 2018. | e parties hereto have executed this Agreement on this day |
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| | | |
| | | Ronald S. Amidon, Commissioner |
| | | Department of Fish and Game |
| | | |
| | | |
| | | David E. Pierce |
| | | Director of the Division of Marine Fisheries |
| | | |
| | | |
| | | John P. Sheppard |
| | | Director of the Office of Fishing and Boating |
| | | |
| | | |
| | | Frederick A. Laskey |
| | | Executive Director, Massachusetts Water Resources Authority |
| | | radionly |
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STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Agency-Wide Technical Assistance Consulting Services

Hazen and Sawyer, P.C., Contract 7498 Kleinfelder Northeast, Inc., Contract 7604

COMMITTEE: Wastewater Policy & Oversight

John P. Vetere, Deputy Chief Operating Officer A. Navanandan, P.E., Chief Engineer Meredith R. Norton, Program Manager Preparer/Title

INFORMATION

X_VOTE

Michele S. Gillen
Director of Administration

David W. Coppes, P.E.

Chief Operating Officer

RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to award two separate contracts to provide agency-wide technical consulting services, and to authorize the Executive Director, on behalf of the Authority, to execute Contract 7498 with Hazen and Sawyer, P.C., and Contract 7604 with Kleinfelder Northeast, Inc., each in an amount not to exceed \$2,500,000 and for a contract term of twenty-four months from the Notice to Proceed.

DISCUSSION:

The purpose of technical assistance contracts is to make available, on a continuing, as-needed basis, the services of qualified, professional engineering firms to assist MWRA staff on engineering study and/or design initiatives. These contracts include several engineering disciplines such as civil, structural, environmental and sanitary, mechanical and process engineering, and related disciplines including architecture, geotechnical, surveying, fire protection, electrical, control systems, chemical, corrosion and odor control, permitting, and security. These agencywide technical assistance contracts are used to supplement in-house staff on high-priority/unanticipated projects, or projects which are not large enough to warrant engineering consultants' efforts to develop qualifications and cost proposals. These technical assistance contracts also provide expertise on short-term assignments requiring specialized disciplines that are not cost effective for MWRA to maintain in-house staff resources. 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.

Staff require sign-off from the Chief Engineer for all task orders up to and including \$25,000; from the Deputy Chief Operating Officer for task orders greater than \$25,000 and up to and including \$50,000; and from the Chief Operating Officer on 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 February 7, 2018, 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. In addition, notice of the RFQ/P was sent directly to twelve firms. On March 9, 2018, the Authority received proposals from the following firms: Arcadis U.S., Inc., CDM Smith Inc., Hazen and Sawyer, P.C., Kleinfelder Northeast, Inc., and Stantec Consulting Services Inc. 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 - 18 points; Technical Approach - 5 points; and MBE/WBE Participation - 2 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 | |
|----------------------------------|-------------------------------|--|
| Engineer's Estimate | \$1,708,970.00 | |
| Hazen and Sawyer, P.C. | \$1,726,188.14 | |
| Stantec Consulting Services Inc. | \$1,762,403.96* | |
| Kleinfelder Northeast, Inc. | \$1,888,519.50* | |
| CDM Smith Inc. | \$1,907,398.68* | |
| Arcadis U.S., Inc. | \$1,970,327.04 | |

^{*}Reflects corrections made due to mathematical errors/rounding.

The sample cost exercise estimates above are within 1% to 15% of the Engineer's Estimate. The five voting members on the Selection Committee reviewed, scored and ranked the proposals as follows:

| PROPOSER | TOTAL POINTS | ORDER OF PREFERENCE* TOTAL SCORE | FINAL RANKING |
|-----------------------------|-----------------|--|------------------|
| Hazen and Sawyer, P.C. | 429.9 | 5 | 1 |
| Kleinfelder Northeast, Inc. | 371 | 11 | 2 |
| CDM Smith Inc. | 344.4 | 18 | 3 |
| Stantec Consulting Services | 351.8 | 19 | 4 |
| Arcadis U.S., Inc. | 332.8 | 22 | 5 |

^{*}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 all 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. It included the lowest price in the cost exercise with capped direct labor rates and appropriate average comprehensive hourly rates, as well as key personnel with excellent qualifications and experience, and 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 the Consultant for one of the current Agency-Wide Technical Assistance Consulting Services contracts (Contract 7497) and has proposed many of the same key personnel for Contract 7498. 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.

Kleinfelder Northeast proposed the third lowest cost and was ranked second overall. All but one Selection Committee member ranked Kleinfelder second, with the final member ranking them third. Kleinfelder's cost exercise was approximately 10% higher than the Engineer's Estimate. The firm provided excellent depth of the key personnel. With over 1800 professionals (255 of which are in New England) in more than 70 offices nationwide, Kleinfelder's proposal identified numerous multidisciplinary personnel that would be available to work on task order projects. Nine specialty subconsultants were identified as part of the team, including a highly rated process instrumentation and controls subconsultant. Key personnel appear to be well qualified and cover the experience requirements. The internal reference for the MWRA's Southern Extra High Redundancy Study (Contract 6452) reported that Kleinfelder was technically proficient and well organized. The external Kleinfelder references for both water and wastewater projects were excellent. Several of the proposed key personnel were given an excellent evaluation for a wastewater facility upgrade project in the New England area. Kleinfelder has previously worked on technical assistance contracts for other agencies and presented a good understanding of the process with its Technical Approach.

CDM Smith, Stantec, and Arcadis were ranked third, fourth and fifth, respectively, by the Selection Committee. CDM had the second highest total for the cost exercise. CDM received good internal and external references, but did not present pertinent information for the Capacity/Organization and Management Approach criteria. Stantec proposed the second lowest cost exercise and capped the Principal and Project Manager hourly direct labor rates for the duration of the contract. Stantec received good external references and below average to good references on recent internal technical assistance contracts. It was also noted that there have been delays in critical schedule and deliverable milestones on recent MWRA projects. Arcadis had the highest cost overall for the cost exercise. The majority of Arcadis' internal and external references were fair to good; however, a recent reference noted incomplete submittals and schedule delays. In addition, the Selection Committee was concerned about the Project Manager's actual availability for this contract based on his current commitment to other MWRA projects. Arcadis also did not present a detailed Technical Approach.

Based on final rankings, and for the reasons set forth above, the Selection Committee recommends the award of Contract 7498 to Hazen and Sawyer, P.C. and Contract 7604 to Kleinfelder Northeast, Inc., each in an amount not to exceed \$2,500,000 and for a contract term of twenty-four months from the Notice to Proceed. To ensure adequate resources and responsiveness, MWRA awards similar technical assistance contracts for the Deer Island Treatment Plant and the John J. Carroll Water Treatment Plant. Staff expect to present a recommendation to award for the Carroll Water Treatment Plant at the May 30, 2018 Board meeting.

BUDGET/FISCAL IMPACT:

The FY19 Proposed Capital Improvement Program budget includes \$2,000,000 each for two two-year Agency-Wide Technical Assistance Consulting Services contracts (Contract 7498 and Contract 7604). These budgets will be updated during the FY19 Final CIP process to account for the award amounts.

MBE/WBE PARTICIPATION:

Due to the specialized and uncertain nature of this work, no minimum MBE or WBE participation requirements were established for these contracts. However, Hazen and Sawyer, P.C.'s proposal identified its commitment to a total of 3% WBE participation.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Repair of Three Digester Mixer Assemblies at the Deer Island Treatment Plant

Flowserve Corporation

COMMITTEE: Wastewater Policy & Oversight

INFORMATION

X VOTE

Michele S. Gillen

Director of Administration

David F. Duest, Director, Deer Island WWTP

<u>Carolyn Francisco Murphy, Director, Procurement</u>

Preparer/Title

David W. Coppes, P.E.

Chief Operating Officer

RECOMMENDATION:

To approve the award of a three-year sole-source contract for the repair of three digester mixer assemblies at the Deer Island Treatment Plant, with Flowserve Corporation, and authorize the Executive Director, on behalf of the Authority, to execute said contract in the amount of \$293,358 for a contract term of three years, from April 18, 2018 through April 17, 2021.

DISCUSSION:

There are twelve egg-shaped, anaerobic sludge digesters on Deer Island which have been in operation for more than 20 years. Deer Island operates eight mixers concurrently and they operate continuously. A key component common to all of the digesters is the central mixer assembly. When first constructed under the Boston Harbor Project, the central mixers were specified as proprietary equipment originally provided by Sterling-Halberg and manufactured in Ludwigshafen, Germany. All associated parts are still manufactured in Germany. Repairs to these mixers can only be performed by the original equipment manufacturer or their authorized representative.

The mixer is critical to the proper operation of the digester. It provides the driving force for mixing the digester's contents and assists in maintaining a uniform temperature within the sludge mass. A thoroughly mixed digester results in proper operation, i.e., no "dead" spots. Proper operation results in higher gas production and higher solids destruction, thus reducing energy costs and sludge sent to the Pellet Plant for conversion to fertilizer.

Routine maintenance is performed on mixer assemblies by Deer Island staff. Staff perform vibration and acoustic monitoring monthly on each operating mixer to identify early signs of wear before it impacts mixer performance. Once a test indicates degradation in performance, staff begin to prepare for replacement. Over time, in spite of preventive maintenance, rotating assemblies develop problems that affect their performance, including worn impellers, erosion, scoring, fatigue, and flaking. The pictures below show one of MWRA's mixers after sandblasting; substantial impeller wear is clearly evident. The mixer assemblies weigh between eight and nine thousand pounds each and operate within a tube length approximately 30 inches in diameter and approximately 100 feet high. Each spiral-designed impeller is two feet long, two feet wide and rotates at a speed of 590 revolutions per minute and is capable of moving 15,000 gallons of digested sludge per minute. Two spare mixers are kept on hand so that when a mixer begins to show signs of wear, staff can remove it immediately and replace it with another one reducing digester down time. When the mixer assemblies are removed, the digester is emptied and cleaned so that when it is placed back on line after the mixer assembly rebuild, it is operating at maximum efficiency.



Mixer assembly after sandblasting, showing substantial impeller wear and pitting.

Staff remove the mixer assembly for shipment back to Flowserve for refurbishment. Each refurbishment returns the mixer assembly to a "like new" condition covered under a warranty as a new unit. Mixer refurbishment includes sandblasting, disassembly, and critical components, including but not limited to, the impeller, splash disc, shaft sleeve, lower thrust bearing, and upper guide bearing which will be replaced. All components will be inspected and returned to "like-new" condition. After re-assembly, the mixer will be balanced back to original specifications and a short-duration run test will be performed before the mixer assembly is returned to MWRA. Three mixers will be refurbished under this contract, approximately one per year. Historically, DITP has averaged approximately one mixer refurbishment per year over the past ten years.

SIHI Pumps Inc., the original local distributer for Halberg Mixers, was purchased by Flowserve in 2015. The Halberg Mixers are now distributed exclusively by Flowserve for the North American market and, as such, the mixers can only be procured from and repaired by Flowserve. Although MWRA is not purchasing new mixer assemblies, Flowserve will complete the refurbishment of mixer assemblies to "like-new" condition with full warranty.

Procurement Process:

A sole source request was made by the Chief Operating Officer to the Director of Procurement



Refurbished mixer as shipped back to Deer Island.

stating the need for Flowserve to service these units and the financial advantage of refurbishing versus replacement.

The digester mixers and their associated parts are proprietary, highly specialized, and only available from Flowserve Corporation. There are no generic or "after market" parts available for these mixers. They were designed and specially made to operate in Deer Island's egg-shaped digesters. Staff have received updated confirmation that the Halberg Mixers and parts are still distributed directly by Flowserve Corporation exclusively for the North American market, and as such, can only be procured and repaired from Flowserve Corporation.

The per-unit cost to refurbish each mixer assembly is \$97,786.00 for a total contract amount of \$293,358.00 for three full mixer refurbishments. This purchase order provides for

the transportation to and from Flowserve's repair facility in Connecticut including the full refurbishment as mentioned above. Staff plan to have three mixers refurbished over the three-year period of the contract. The expected useful life of a refurbished mixer is 10-12 years. The cost to purchase a brand new mixer assembly would be approximately \$250,000. The primary reason for the cost differential is the fact that the mixer assembly shaft is expected to be reusable in the refurbishment.

BUDGET/FISCAL IMPACT:

Sufficient funds for this contract have been included in the Proposed FY18 Current Expense Budget. Appropriate funding will be included in subsequent Proposed CEB requests for the remaining two years of the contract.

MBE/WBE PARTICIPATION:

Flowserve Corporation is not a certified Minority- or Women-owned business.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Gravity Thickener Rehabilitation

Deer Island Treatment Plant

Walsh Construction Company II, LLC.

Contract 7428

COMMITTEE: Wastewater Policy & Oversight

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 award of Contract 7428, Gravity Thickener Rehabilitation, 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 bid amount of \$19,633,050, with a contract term of 1,000 calendar days from the Notice to Proceed.

DISCUSSION:

The Deer Island Treatment Plant utilizes six gravity thickeners to concentrate sludge that is generated from the primary treatment process, and scum that is generated from all treatment processes (refer to Figure 1 below for the location of the Gravity Thickeners). Each gravity thickener is a conical-bottomed tank, seventy feet in diameter and has a 12-foot side water depth and a 20-foot center depth. Each tank consists of a cast-in-place reinforced concrete pile-supported substructure with a Fiberglass-Reinforced Plastic (FRP) domed cover to contain odors. Sludge and scum from wastewater treatment are pumped to the gravity thickeners through an interior center column. Thickening is accomplished using a rotating center cage and rake arms which are used for directing sludge to a central hopper at the base of the tank. A rotating skimmer directs floating scum to a trough for removal. The sludge and scum concentrating equipment is rotated by a bull gear drive connected to the center cage (refer to Figure 2 below for a typical Gravity Thickener cross section).

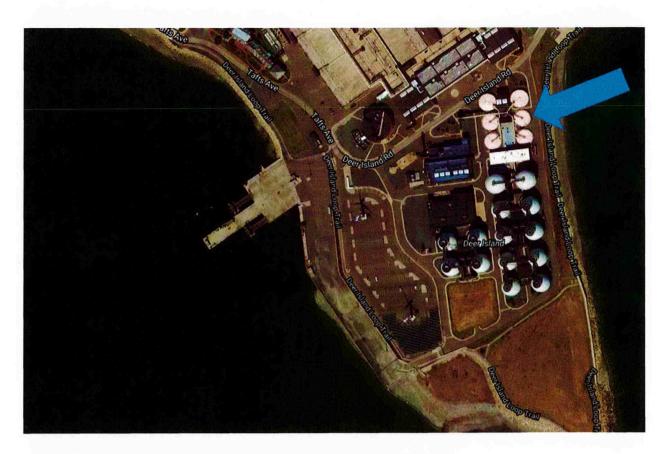


Figure 1: Gravity Thickener Location

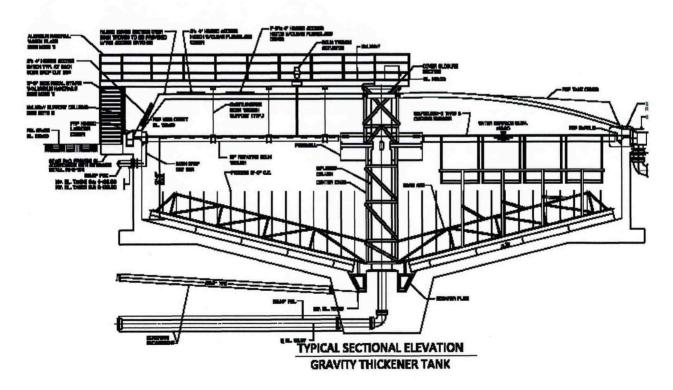


Figure 2: Gravity Thickener Cross Section

Repairs have been made over the years to replace corroded center columns and center cages in multiple gravity thickeners as well as the FRP domed cover on Gravity Thickener No. 2. Two recent emergency repair contracts (Contract Nos. S576 and S577) are currently underway to replace the center cages for Gravity Thickeners 5 and 6. The Board was apprised of these emergency repairs at the February 21, 2018 meeting. However, the sludge and scum thickening equipment (including the rake arms, scum skimmers, drive units, control panels and appurtenances, etc.) and five of the six FRP domed covers have reached the end of their useful lives and are in need of replacement. Under this contract, the contractor will perform a comprehensive upgrade of all six gravity thickeners that includes complete replacement of each tank's sludge and scum thickening equipment as well as replacement of five of the six FRP dome covers (the FRP domed cover for Gravity Thickener 2 has already been replaced). Critical components which were previously fabricated from carbon steel, including the center columns and center cages, will now be fabricated from type 316 stainless steel in order to provide superior protection against hydrogen sulfide gas which is present in high concentrations in this highly corrosive environment.

Procurement Process

Contract 7428 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 March 28, 2018 from three contractors as follows:

| <u>Bidders</u> | Bid Amount |
|------------------------------------|---------------|
| Engineer's Estimate | \$18,715,222 |
| Methuen Construction Co., Inc. | \$19,256,800* |
| Walsh Construction Company II, LLC | \$19,633,050 |
| Barletta Heavy Division, Inc. | \$35,000,000 |

^{*}Reflects correction of mathematical error. Methuen Construction withdrew its bid due to a clerical error.

MWRA staff interviewed Walsh and reviewed its bid in detail, which is approximately 4.6% higher than the Engineer's Estimate. Staff have determined that the bid is complete, reasonable, and includes the payment of prevailing wages as required. References for Walsh were checked and found to be favorable. Walsh is the contractor on the two emergency repair contracts described above. Staff report that Walsh's performance on Contract S576 has been very good and the project is on time. Contract S577 has just completed the submittal phase and is also on schedule. Based upon the information received during the interview, staff are of the opinion that Walsh understands the nature and complexity of the project, has the skill, ability and integrity necessary to complete the work, and is qualified to do so.

Therefore, MWRA staff recommend that Contract 7428 be awarded to Walsh Construction Company II, LLC as the lowest responsible and eligible bidder.

BUDGET/FISCAL IMPACT:

The FY18 CIP includes \$16,900,000 for Contract 7428. The FY19 CIP will be updated with the bid amount of \$19,633,050 after Board approval in June. The Authority is eligible for a reimbursement from the Massachusetts Emergency Management Agency in the amount of \$635,440 for the new FRP domed cover for Gravity Thickener 1 which was damaged during a 2015 winter storm.

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. The Contractor has proposed 7.2% MBE participation and 3.62% WBE participation and has committed to continuing making good faith efforts to satisfy the .04% MBE participation deficit. This is acceptable to the Affirmative Action and Compliance Unit.



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 AND OVERSIGHT COMMITTEE MEETING

Chair: A. Blackmon Vice-Chair: B. Peña Committee Members:

J. Carroll J. Foti

A. Pappastergion

H. Vitale

J. Walsh J. Wolowicz to be held on

Wednesday, April 18, 2018

Location:

100 First Avenue, 2nd Floor Charlestown Navy Yard

Boston, MA 02129

Time:

Immediately following Wastewater Comm.

AGENDA

A. Information

1. Update on Fire at DCR-Quabbin Watershed Facility

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Water Policy and Oversight Committee

March 21, 2018

A meeting of the Water Policy and Oversight Committee was held on March 21, 2018 at the Authority headquarters in Charlestown. Chairman Blackmon presided. Present from the Board were Messrs. Cotter, Flanagan, Foti, Pappastergion, Peña, Vitale and Walsh; Mr. Carroll joined the meeting in progress. Among those present from the Authority staff were Fred Laskey, Steve Remsberg, Carl Leone, Steve Estes-Smargiassi, Dave Coppes, Nava Navandan, Paul Rullo, Pat Barrett, and Bonnie Hale. The meeting was called to order at 10:10 a.m.

<u>Information</u>

Local Water System Assistance Program Annual Update

Staff provided an overview of the annual update. Mr. Foti attested to the great job MWRA staff does in administering this program.

<u>Update on Lead and Copper – Local and National Activities</u>

Staff gave a presentation highlighting current activities related to lead in drinking water. Mr. Laskey pointed out that Board member Carroll should be given credit for coming up with the idea of having MWRA work with Dept. of Public Health regarding sampling and testing water in homes with children.

Approvals

*Memorandum of Agreement between MWRA and the Dedham/Westwood Water District - Contract 7505, Southern Extra High Pipeline Section 111

Staff gave a presentation outlining the various components of the Pipeline Section 111 project and the development of a related MOA with the Dedham/Westwood Water District. The Committee recommended approval of the MOA (ref. agenda item B.1).

(Mr. Carroll joined the meeting.)

^{*} Approved as recommended at March 21, 2018 Board of Directors meeting.

Contract Awards

*Northern Intermediate High Section 89 Replacement Pipeline Preliminary/Final Design & ESDC: Stantec Consulting Services Inc., Contract 7116

Staff gave a presentation outlining the project, and there was general discussion and question and answer, particularly on the selection process and the length of time allotted for design and ESDC. The Committee recommended approval of the contract award.

The meeting adjourned at 11:00 a.m.

^{*} Approved as recommended at March 21, 2018 Board of Directors meeting.

STAFF SUMMARY

TO:

Board of Directors

FROM:

Frederick A. Laskey, Executive Director

DATE:

April 18, 2018

SUBJECT:

Update on Fire at DCR-Quabbin Watershed Facility

COMMITTEE: Water Policy & Oversight

X INFORMATION

VOTE

John Gregoire, Program Manager, Reservoir Operations

Preparer/Title

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

RECOMMENDATION:

For information only. This staff summary provides the Board with an update on the fire that occurred at the Department of Conservation and Recreation - Division of Water Supply Protection Quabbin watershed facility in New Salem on April 5, 2018.

DISCUSSION:

In the aerial photo below, the facility with the lower inverted "T" portion housed a vehicle garage and maintenance shops, and the upper building was office space. The rear building at the tree line is another equipment garage. The building and grounds served the DCR-DWSP functions of Natural Resources, Watershed Maintenance, and Forestry sections.





Facility location (L) and aerial view (R)

On April 5, 2018 at 9:15 p.m. a fire at this location was reported to the New Salem Fire Department. This turned out to be a two-alarm fire with 14 area fire departments and 54 firefighters responding. As it is a rural area, there are no fire hydrants. The Fire Departments teamed up to pump water from a local pond using approximately 40,000 gallons of water. The main building was completely destroyed. Fortunately, no fatalities or injuries were reported.

DCR notified Massachusetts Department of Environmental Protection who dispatched a team to assess any hazardous materials release. After a detailed site inspection, DEP determined there were no releases in the fire-fighting runoff from the diesel, gas, or heating oil tanks. It was all evidently consumed in the fire, adding to the fire's intensity.

As the photos below and next page show, the facility and its contents were completely destroyed and five vehicles were lost. The State Fire Marshall's report is not yet available to determine the cause of the fire. The building lost power earlier in the day and employees used a woodstove to provide heat to the building. The power was restored later in the day and no issues were noticed.









Ten DCR personnel were assigned to this facility and they have been temporarily re-assigned to the Quabbin Administration Building in Belchertown. DCR is presently assessing the impact of the loss. MWRA responded with assistance to DCR by erecting temporary fencing to secure the site.



MWRA temporary fencing to secure the site

As a precaution against rainfall runoff from the site, DCR deployed petroleum-absorbent "sausage booms" along the inside perimeter of the fence at the facility driveway, which is pitched toward the road drain and a nearby stream.

BUDGET/FISCAL IMPACT:

DCR-DWSP is funded by MWRA through the Water Supply Protection Trust. DCR is presently assessing the Capital and Operational financial impacts from this fire. Given that the Commonwealth does not purchase property insurance for state owned property, the Water Supply Trust will provide the funding for the losses as a result of this fire incident.



MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey **Executive Director**

Chair: M. Beaton Vice-Chair: J. Carroll Secretary: A. Pappastergion Board Members:

A. Blackmon

K. Cotter

P. Flanagan

J. Foti

B. Peña

H. Vitale

J. Walsh

J. Wolowicz

BOARD OF DIRECTORS' MEETING

to be held on

Wednesday, April 18, 2018

Location:

100 First Avenue, 2nd Floor

Charlestown Navy Yard

Boston, MA 02129

Time:

1:00 p.m.

REVISED

AGENDA

- APPROVAL OF MINUTES 1.
- REPORT OF THE CHAIR 11.
- III. REPORT OF THE EXECUTIVE DIRECTOR
- IV. **BOARD ACTIONS**
 - A. **Approvals**
 - 1. PCR Amendments (ref. P&C A.1)
 - Appointment of Senior Staff Counsel (ref. P&C A.2) 2.
 - Appointment of Program Manager SCADA Engineering (ref. P&C A.3) 3.
 - Appointment, Director of Tunnel Redundancy Program (ref. P&C A.4) 4.
 - Appointment of Warehouse Manager (ref. P&C A.5) 5.
 - Appointment, Deputy Director of MIS (ref. P&C A.6) 6.
 - Appointment of Manager Compensation (ref. P&C A.7) 7.
 - Approval of Amendment 1 to Memorandum of Understanding with Mass. 8. Game for Public Access Fishing Pier at Deer Island (ref. WW A.1)

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

TTY: (617) 788-4971

B. Contract Awards

- Occupational and Medical Services: AllOne Health Resources, Inc., Contract A615 (ref. P&C B.1)
- 2. Technical Assistance Consulting Services Hazardous Materials, Geosphere Environmental Management, Inc., Contract 605TA; and Green Seal Environmental, Inc., Contract 606TA (ref. AF&A B.1)
- 3. Renewable and Alternative Energy Portfolio Services, Next Grid Markets, LLC, Contract RPS-68 (ref. AF&A B.2)
- 4. Maintenance and Support of the Integrated Financial, Procurement and Human Resources/Payroll Management System: Infor Global Solutions (ref. AF&A B.3)
- 5. Agency-Wide Technical Assistance Consulting Services, Hazen and Sawyer, PC, Contract 7498, and Kleinfelder Northeast, Inc., Contract 7604 (ref. WW B.1)
- 6. Repair of Three Digester Mixer Assemblies at the Deer Island Treatment Plant: Flowserve Corporation (ref. WW B.2)
- 7. Gravity Thickener Rehabilitation, Deer Island Treatment Plant, Contractor TBD, Contract 7428 (ref. WW B.3) MATERIALS TO FOLLOW

V. CORRESPONDENCE TO THE BOARD

VI. OTHER BUSINESS

VII. <u>EXECUTIVE SESSION</u>

A. <u>Litigation</u>

- DaPrato v. MWRA Status of Post-Trial Proceedings
- 2. Potential HR Settlement

VIII. ADJOURNMENT

Meeting of the Board of Directors

March 21, 2018

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on March 21, 2018 at the Authority headquarters in Charlestown. Chairman Beaton presided. Present from the Board were Messrs. Blackmon, Carroll, Cotter, Flanagan, Foti, Pappastergion, Peña, Vitale and Walsh. Ms. Wolowicz was absent. Among those present from the Authority staff were Frederick Laskey, Executive Director, Steven Remsberg, General Counsel, David Coppes, Chief Operating Officer, Thomas Durkin, Director of Finance, Michele Gillen, Director of Administration, and Bonnie Hale, Assistant Secretary. The meeting was called to order at 1:10 p.m.

APPROVAL OF MINUTES

Upon a motion duly made and seconded, it was

<u>Voted</u> to approve the minutes of the Board of Directors' meeting of February 21, 2018, as presented and filed with the records of the meeting.

REPORT OF THE EXECUTIVE DIRECTOR

Mr. Laskey and the Board members recognized Bonnie Hale for her 32 years of service working as the Assistant to the Board of Directors, wished her well in her upcoming retirement, and presented her with a gift from her friends at MWRA and a citation from Governor Charles Baker.

Mr. Laskey and staff then gave a presentation on storm damage from the recent Nor'easters.

BOARD ACTIONS

APPROVALS

Memorandum of Agreement between MWRA and the Dedham/Westwood Water District - Contract 7505, Southern Extra High Pipeline Section 111

Upon a motion duly made and seconded, it was

Voted to authorize the Executive Director, on behalf of the Authority, to execute a Memorandum of Agreement with the Dedham/Westwood Water District, substantially in the form presented and filed with the records of the meeting, related to reimbursement to the Authority for construction costs associated with the installation of a Dedham/Westwood Water District 12-inch diameter water main.

PCR Amendments - March 2018

Upon a motion duly made and seconded, it was

<u>Voted</u> to approve amendments to the Position Control Register, as presented and filed with the records of the meeting.

Appointment of Proxy for the Fore River Railroad Corporation

Upon a motion duly made and seconded, it was

That the MWRA Board of Directors, as holder of all voting rights of all the issued and outstanding shares of stock of the Fore River Railroad Corporation, voted to appoint Kathy Soni, with the power of substitution, to vote as proxy at the next annual meeting and any special meeting of the stockholders for the Fore River Railroad Corporation in accordance with the form of proxy presented and and filed with the records of this meeting. In addition, the MWRA Board of Directors directs the proxy to elect the following board members: David W. Coppes, Thomas J. Durkin, Godfrey O. Ezeigwe, Michele S. Gillen, Lisa R. Grollman, Frederick A. Laskey, Brian Peña, Steven A. Remsberg, John P. Vetere, and John J. Walsh.

Adoption of the Seventy-Eighth Supplemental Resolution

Upon a motion duly made and seconded, it was

<u>Voted</u> to adopt the Seventy-Eighth Supplemental Resolution authorizing the issuance of up to \$150,000,000 of Massachusetts Water Resources Authority General Revenue Bonds and Massachusetts Water Resources Authority General Revenue Refunding Bonds and the supporting Issuance Resolution.

Amendments to Capital Finance Management Policy

Upon a motion duly made and seconded, it was

<u>Voted</u> to adopt amendments to the Capital Finance Management Policy, substantially in the form presented and filed with the records of the meeting, in compliance with the State Finance and Governance Board's regulations (976 CMR 2.04).

Electronic Document Management System

Upon a motion duly made and seconded, it was

<u>Voted</u> to authorize staff to proceed with the procurement of an electronic document management system.

CONTRACT AWARDS

Northern Intermediate High Section 89 Replacement Pipeline Preliminary/Final Design & ESDC: Stantec Consulting Services Inc., Contract 7116

Upon a motion duly made and seconded, it was

<u>Voted</u> to approve the recommendation of the Consultant Selection Committee to select Stantec Consulting Services Inc. to provide Section 89 Replacement Project, Design and Engineering Services During Construction, and to authorize the Executive Director, on behalf of the Authority, to execute and deliver Contract 7116 with Stantec Consulting Services Inc. in an amount not to exceed \$3,948,625, for a term of fifty-seven months from the Notice to Proceed.

Metropolitan Operations Paving: Sunshine Paving Corporation, Contract OP-354

Upon a motion duly made and seconded, it was

<u>Voted</u> to approve the award of Contract OP-354, Metropolitan Operations

Paving, to the lowest responsible and eligible bidder, Sunshine Paving Corporation,
and to authorize the Executive Director, on behalf of the Authority, to execute and
deliver Contract OP-354 in the bid amount of \$1,277,568.50 for a term of 970 days
from the Notice to Proceed.

CONTRACT AMENDMENTS/CHANGE ORDERS

Assignment and Assumption of Contract OP-337, Purchase and Supply of Electric Power for MWRA Profile Accounts, from TransCanada Power Marketing Ltd. to EDF Energy Services, LLC. and Amendment 1

Upon a motion duly made and seconded, it was

<u>Voted</u> to approve the assignment and assumption of Contract OP-337 from

TransCanada Power Marketing Ltd. to EDF Energy Services, LLC and, further, to
authorize the Executive Director, on behalf of the Authority, to approve Amendment 1
to Contract OP-337, incorporating a financial guarantee from its parent company, EDF

Trading Limited, as part of the terms and conditions of the contract, with no increase in contract price or term.

EXECUTIVE SESSION

Pappastergion

It was moved to enter executive session to discuss litigation.

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

Yes No Abstain

Blackmon
Carroll
Cotter
Flanagan
Foti

Yes

No

Abstain

Peña Vitale

Walsh Beaton

<u>Voted</u> to enter executive session to discuss strategy with respect to litigation, in that such discussion in open session may have a detrimental effect on the litigating

position of the Authority.

It was stated that the meeting would return to open session solely for the consideration of adjournment.

EXECUTIVE SESSION

* * * *

The meeting returned to open session at 1:45 p.m. and adjourned.