



MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey
Executive Director

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

WATER POLICY AND OVERSIGHT COMMITTEE MEETING

to be held on

Wednesday, July 18, 2018

Vice-Chair: B. Peña
Committee Members:
J. Carroll
J. Foti
A. Pappastergion
H. Vitale
J. Walsh
J. Wolowicz

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: 10:00 a.m.

REVISED

AGENDA

A. Information

1. Update on Lead and Copper
2. Accomplishments on Construction Contracts

B. Approvals

1. Emergency Water Supply Agreement with the Town of Burlington

C. Contract Awards

1. Bellevue 2 Tank and Turkey Hill Steel Water Storage Tanks Painting: Worldwide Industries, Corp., Contract 7634

D. Contract Amendments/Change Orders

1. Weston Aqueduct Supply Main 3: Design, Construction Administration and Resident Engineering Services: Stantec Consulting Services, Inc., Contract 6539, Amendment 1
2. Wachusett Aqueduct Pumping Station: BHD/BEC JV 2015, A Joint Venture, Contract 7157, Change Order 39
3. Northern Intermediate High Section 110-Stoneham: Albanese D&S, Inc., Contract 7067, Change Order 2

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the

Water Policy and Oversight Committee

June 20, 2018

A meeting of the Water Policy and Oversight Committee was held on June 20, 2018 at the Authority headquarters in Charlestown. Committee Chair Blackmon presided. Present from the Board were Messrs. Carroll, Foti, Pappastergion, Vitale, Walsh, Peña and Ms. Wolowicz. Messrs. Cotter and Flanagan were absent. Among those present from the Authority staff were Frederick Laskey, Steven Remsberg, David Coppes, John Vetere, Carolyn Fiore, Stephen Estes-Smargiassi, Cori Barrett, Nava Navanandan, Vincent Spada and Kristin MacDougall. The meeting was called to order at 10:54 a.m.

Change Orders

* Western Operations Marlborough Maintenance Facility: E. A. Colangeli Construction Co., Inc., Contract 6650B, Change Order 10

Staff made a presentation about the project and recommended the approval of Change Order 10 to MWRA Contract 6650B, as presented and filed with the records of the meeting. There was brief discussion and questions and answers.

The Committee recommended approval (ref. W.A.1.)

The meeting adjourned at 10:59 a.m.

* Committee recommendation approved by the Board on June 20, 2018

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 18, 2018
SUBJECT: Update on Lead and Copper



COMMITTEE: Water Policy & Oversight

INFORMATION
 VOTE

Joshua Das, Project Manager, Public Health
Carl Leone, Senior Program Manager
Stephen Estes-Smargiassi, Director, Planning and Sustainability
Preparer/Title


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

RECOMMENDATION:

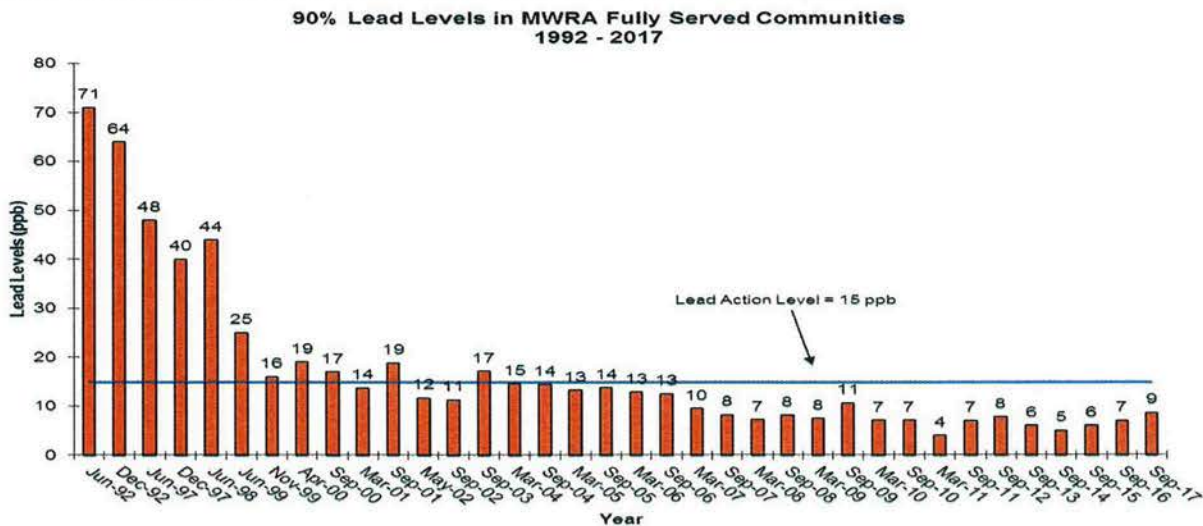
For information only.

DISCUSSION:

This staff summary highlights current activities related to lead in drinking water.

Sampling for those Communities over the Action Level in Fall 2017

Under EPA’s Lead and Copper Rule, each year MWRA and every fully-supplied community must collect and test tap water in a sample of homes that are likely to have high lead levels. These are usually homes with lead services or lead solder. EPA requires that nine out of ten of the sampled homes must have lead levels at or below the Action Level of 15 ppb.



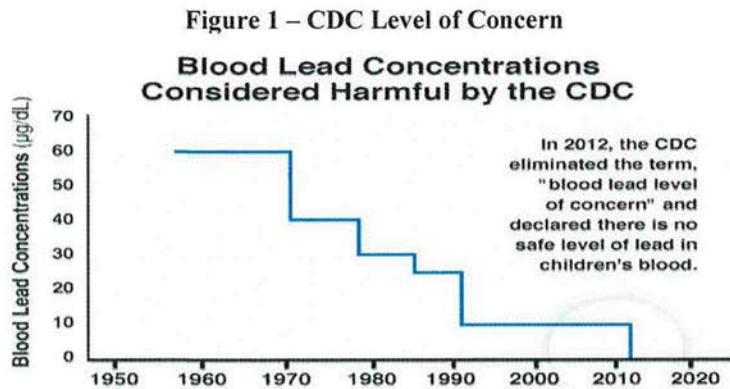
In Fall 2017, four communities, Medford, Melrose, Quincy, and Winthrop were above the Action Level. As required by the Massachusetts’s Department of Environmental Protection (DEP), all four

completed sampling in Spring 2018, and all four community's sampling results were back below the Action Level.

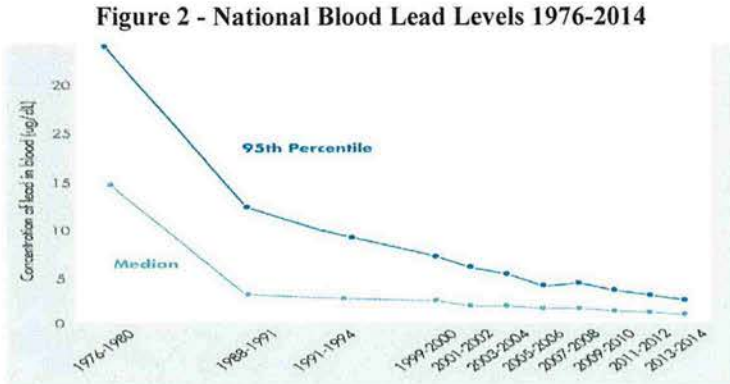
All four communities are required by DEP regulations to replace lead service lines. Quincy already had an active lead service line replacement program, with funding from MWRA's Lead Service Line Replacement zero-interest loan program, and is continuing to fully remove lead service lines and lead-lined steel service lines (A detailed update is in Attachment A). The other three communities are at various stages of initiating replacement programs under DEP's direction, with the requirement that each replace at least seven percent of their lead services during the current calendar year. MWRA staff have discussed the loan program with each of the communities.

Summary of Children's Blood Lead Levels

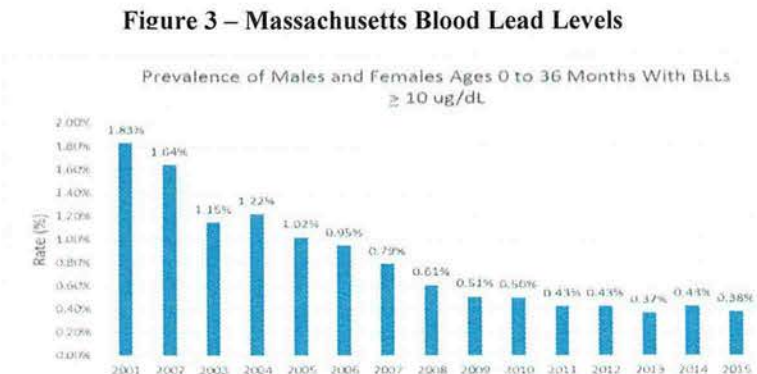
The federal Centers for Disease Control and Prevention (CDC) has continued to lower the blood lead level at which it believes there is a health impact of concern. Since 2012, CDC has stated that "no safe blood lead level in children has been identified," and have redefined lead poisoning in children as a concentration of lead in blood of 5 µg/dL or greater, lowered from 10 µg/dL.



Both nationally and state-wide, children's blood lead levels have dropped dramatically since public health interventions - including taking the lead out of gasoline and the ban on lead in paint - have reduced the amount of lead in the environment. Figure 2 shows the decrease across the nation since the 1970s in median and 95th percentile blood lead levels in children. National trends show a substantially slower rate of decline since 2010.



Massachusetts Department of Public Health (MDPH) has one of the nation's most aggressive children's blood lead level testing programs, with about 75% of children between 1 and 5 years of age tested. Figure 3 shows the decrease in number of children with blood lead levels above 10 µg/dL since 2001, and also shows a recent slower reduction similar to the national levels.



The main exposure for children to lead in the environment is through paint and dust. Though lead in paint was banned in 1978, Massachusetts has the fourth oldest housing stock in the country, and therefore chipped paint and lead dust from windows and exteriors in older houses is the most common exposure for children. Also, there are certain higher risk communities, including most of the larger cities in Massachusetts, where a majority of the lead poisoning cases are found.

Update on MWRA Coordination with Massachusetts Department of Public Health

MDPH has continued its partnership with MWRA to sample for lead in the tap water at homes where a child has an elevated lead blood level, and identify if there is a lead service line. Very few lead poisoning prevention programs around the country have collected information on lead in water. MWRA staff assisted in training MDPH field staff on how to perform the sampling. Sample bottles, chain of custody forms, and boxes with return postage are provided to MDPH staff. Residents are provided educational information about the potential for lead in water, as well as actions they can take to reduce levels.

Since the effort began in October 2016, 230 households with a child having elevated lead blood level have returned samples. About one quarter of the samples have had detectable lead, but only one has been above the Action Level. MWRA reports the results back to MDPH which then provides the results to the residents; preserving the required confidentiality under federal health privacy laws. Given the privacy restrictions, MWRA does not have information about the specific circumstances of any of the samples.

MWRA and MDPH staff continue to coordinate on the program, and anticipate an increased number of samples as MDPH will be expanding the definition of “elevated blood lead level.”

Update on School Testing Program

MWRA, in coordination with DEP, has continued to work with MWRA communities on testing school fixtures used for drinking or cooking. From April 2016 through the end of May 2018, the MWRA Laboratory performed 35,142 tests on samples from 328 schools in 37 different MWRA communities. Approximately 4.7 percent of all lead samples were above the Action Level. 125 of the 328 schools had one or more samples over the Action Level. All communities and schools with elevated levels have been contacted and technical assistance materials have been provided. Results from schools across the state have been posted by DEP on-line on its new easier-to-use data portal, and a link to the DEP site is on the MWRA website. Many communities also have had local outreach efforts to parents to let them know about the school results.

School systems have used the information to take remedial action at locations where sampling indicated elevated lead levels. These remedial actions included shutting off or removing fixtures (particularly where they were not needed or required, such as individual sinks in classrooms), replacing older fixtures which were contributing excessive lead with new lead-free ones, using bottled water until other actions could be taken, labeling bathroom sinks as for handwashing only, and developing flushing programs to clear stagnant water from plumbing within walls until extensive plumbing alterations can be undertaken.

While MWRA community school sample data did identify many locations which required remedial action, results from MWRA communities were somewhat better than statewide numbers from the

DEP program, likely indicating that MWRA corrosion control is providing substantial benefit at reducing lead corrosivity.

Staff continue to work with DEP at assuring that all data collected on lead levels is provided to the public, and jointly considering outreach and testing approaches for other locations where children might be exposed to elevated lead levels such as playgrounds and child care facilities. Staff have reached out to the Medford, Melrose, Quincy and Winthrop health departments regarding the potential for a pilot program of offering testing to licensed child care providers. MWRA staff have begun work with Medford, who indicated a willingness to participate. Staff will evaluate the approach before continuing the program in other communities.

Revisions to the Federal Lead and Copper Rule

This past spring, EPA announced that the draft revisions to the Lead and Copper Rule would be delayed and they are now expected to be released in February 2019. Recently, Michigan issued new state regulations, due to the situation in Flint, requiring full replacement of all lead service lines statewide by 2040, and lowering the Action Level to 12 ppb.

A particular issue that MWRA staff have been tracking is a concern that EPA and states may be heading towards a “one-size-fits-all” approach to corrosion control treatment requiring most systems to adopt a phosphate-based treatment option. This tendency has already been evident in state primacy agency interactions in several locations, most notably in Denver, where the state regulator mandated orthophosphate treatment even though Denver Water, river advocates, and wastewater treatment agencies all favored a pH approach similar to MWRA’s. Locally, MA DEP has required Ashland to add orthophosphate to MWRA water to match the town’s local treatment.

MWRA staff will continue to track EPA’s efforts, evaluating their potential impact, and will continue to be actively involved along with the water professional associations in commenting as appropriate.

Lead Data Transparency

MWRA has been posting all lead data collected under the Lead and Copper Rule on the MWRA website for over a decade, organized by community and sampling round, but with specific addresses redacted for customer privacy. More recently as part of MWRA’s efforts to be sure that our customers have access to all the information available on lead levels, MWRA has added additional information to the MWRA website. In addition to the link to the DEP website for school data, MWRA has posted all recent lead sample data analyzed by our laboratory, including data collected as part of the MDPH project, on www.MWRA.com. Links have also been provided to those local community websites which provide information about local lead programs or maps or databases of lead service line locations. The Annual Water Quality Report mailed to all consumers includes two pages of lead related information.

Update on Lead Service Line Replacement Loan Program

The presence of a lead service line connecting a home to the main in the street can lead to elevated lead levels in tap water, especially if water sits stagnant for an extended period. MWRA’s stable water quality and effective corrosion control treatment reduces the risk that a lead service line will

cause elevated lead levels. However, the risk of elevated levels remains as long as lead service lines are in use.

In March 2016, the Board approved an enhancement to the Local Water System Assistance Program to provide up to \$100 million in 10-year interest-free loans to communities for replacement of lead service lines. During the first two years of the program (through June 2018), MWRA has distributed a total of \$9 million to seven communities. These loans have helped initiate full removal of lead water services (whether on public or private property) with approximately 390 service line replacements reported as having been completed and with substantial construction ongoing.

The Lead Loan Program distributions to date include:

- Quincy \$1.5 million in FY17;
- Winchester \$500,000 in FY17;
- Newton \$4.0 million in FY17;
- Marlborough \$1.0 million in FY18;
- Revere \$195,000 in FY18;
- Winthrop \$284,000 in FY18;
- Needham \$1.0 million in FY18; and,
- Winchester (second phase) \$500,000 in FY18.



*Lead Service Line
Entering Basement*

Each community has developed its own local program, including its individual approach to how to manage the costs of removing the portion of lead service lines on private property. Details are included in Attachment A. The seven communities funded thus far under the Lead Line Program have taken the following approaches:

- Marlborough, Needham, Quincy, and Winthrop will pay full cost of private side lead service line removals. (Framingham also funded the full cost in their program using local funds.)
- Revere will pay full cost of private side lead service line removals via an SRF loan. MWRA funds were distributed for design only.
- Winchester will pay the first \$1200 of private side cost of private side lead service line removals and property owner will be billed for the remainder.
- Newton will offer a 10-year interest-free loan to property owners to cover the cost of private side lead service line removals.

Boston Water and Sewer Commission enhanced its long-standing locally funded lead service line program in 2016, to now pay for the first \$2,000 of the private side lead service line replacement and recover the remainder over 48 months at no interest.

Attachment B provides a summary of the number of lead services and lead goosenecks in each community. The current data indicates that about 18,000 lead service lines (some full and some partial) remain in local water systems, representing less than four percent of total service lines. If the 22,000 lead goosenecks are also included, about 40,000 services lines have some lead component remaining, representing about eight percent of total service lines.

The replacement of lead service lines has been eligible for MWRA community financial assistance since FY98. From FY98 through FY16, community projects that were funded by MWRA water loans included at least partial replacement of more than 6,000 lead service lines. Beginning in FY17, community participation in MWRA's Lead Service Line Replacement Loan Program requires local projects to fully replace public/private lead service lines.

BUDGET /FISCAL IMPACT:

FY19 CEB has \$3,732,720 for corrosion control chemicals (\$3.4 million in soda ash costs, and \$0.3 million in carbon dioxide costs) at the John J. Carroll Water Treatment Plant.

ATTACHMENTS:

- Attachment A - Details on individual community lead service line projects
- Attachment B - Community Estimates of Lead Service Lines and Lead Goosenecks

Attachment A - Details on individual community lead service line projects

- Quincy received a \$1.5 million loan in December 2016 to fund its program targeting the removal of 141 identified public/private lead services. Quincy is paying the full cost of both public/private lead service line replacements. Quincy removed a majority of the targeted services (both lead services and lead-lined steel services) during the 2017 construction season. During 2018, Quincy is continuing to follow-up with homeowners who have not yet participated and is also removing identified lead goosenecks and additional lead-lined steel service lines.



Sample photo of lead-lined service line as found in Quincy

- Winchester received a \$500,000 loan in March 2017 and an additional \$500,000 in June 2018 to fund the first and second phases of its program targeting the removal of 240 identified public/private lead services and 668 lead goosenecks. Winchester is paying all costs for replacement of lead pipe on the public portion of services and the first \$1,200 in costs on the private portion of services for homeowners who participate. The project began during the 2017 construction season with 160 water services having been worked on; some full replacements, some private side only replacements (where the public side had already been removed), and some that only needed a public side lead gooseneck removed. Few homeowners with a lead service line have refused to participate in Winchester's replacement program. Costs for both engineering and construction are averaging about \$7,500 per water service. Winchester is continuing construction work in 2018 and is moving into its second phase program.
- Newton received a \$4.0 million loan in May 2017 to fund the replacement of up to 584 public/private services that contain lead (lead service lines, lead gooseneck connections, lead fittings, etc.). The City has offered private homeowners the option of a 10-year interest-free loan to finance the cost of lead service line replacement on private property. The project began during the 2017 construction season with 272 water services and goosenecks having been worked on (approximately 63 service line replacements) at a cost of about \$5,200 per water service for both engineering and construction. The construction project is continuing in 2018.
- Marlborough received a \$1.0 million loan in September 2017 to fund the replacement of approximately 250-300 lead service lines. This is the first phase of a large project targeting all of the city's 1,350 lead service lines and expected to cost \$5 million. Marlborough is paying the full cost of both public/private lead service line replacements. The start of construction was delayed to spring 2018 due to an extended bidding process.
- Revere received a \$195,000 loan in November 2017 to fund the design portion of their lead service line replacement project. The design phase was recently completed and the construction phase is scheduled to follow. Revere has obtained State Revolving Loan Funds (SRF) funding for the construction project that will remove up to 282 lead service lines. Revere is paying the full cost of both public/private lead service line replacements.

- Winthrop received a \$284,000 loan in December 2017 to fund the replacement of 20 full and 17 private-side only lead service lines (where the public side had already been replaced). This work is Winthrop's first phase of lead service line removals associated with a specific water main construction project (local Contract 5 that received MWRA Local Water System Assistance Program funding). Winthrop is paying the full cost of both public/private lead service line replacements. This initial project is complete and Winthrop is planning a future expanded program to remove an estimated 780 public/private and 583 private-side only lead service lines.
- Needham received a \$1.0 million loan in June 2018 targeting removal of 157 identified public/private lead services and 1044 lead goosenecks. Needham is paying the full cost of both public/private lead service line replacements. Construction is scheduled to begin in the summer 2018.
- Medford is beginning a pilot public/private side lead service line replacement project using previously distributed MWRA Local Water System Assistance Program loan funds.
- Reading is developing a lead service line replacement program and a financial assistance application is likely during FY19.

Staff anticipate that applications under the Lead Loan Program are likely to be phased and ramp up as communities enhance existing lead service inventories, engage individual customers via outreach and education, and show success with initial phase construction. Community decision making to identify the most appropriate community contribution for private side lead service line replacement is a key aspect of local implementation. Future EPA requirements may stimulate lead service line removal work over the next few years.

Attachment B – MWRA Community Lead Service Line Estimates Updated June 2018

Information based on community responses to September 2016 MA DEP survey and updated with current information as available from communities.

Community	Number of Services	Estimated Lead Services	Estimated Lead Goosenecks
Arlington	12,585	100	300
Bedford	4,613	0	0
Belmont	7,745	1	15
Boston	87,638	5,013	
Brookline	10,527	25	
Canton	7,162		
Chelsea	5,100	96	
Dedham/Westwood	13,304		446
Everett	8,126	1,349	
Framingham	18,147	0	0
Lexington	14,145	0	
Lynnfield WD	1,427	0	36
Malden	11,815	2,917	
Marblehead	8,065	0	0
Marlborough	10,303	1,350	
Medford	14,706	2,231	
Melrose	8,200	574	
Milton	8,473	0	4,200
Nahant	1,634	0	0
Needham	10,192	157	1,044
Newton	25,071	372	
Northborough	4,234	0	0
Norwood	8,649	36	
Peabody	13,539	0	1,600
Quincy	23,750	11	696
Reading	7,992	300	1,580
Revere	12,000	282	
Saugus	9,331	0	0
Somerville	14,423	1,874	
Southborough	3,210	0	0
Stoneham	6,250	13	0
Stoughton	7,387	0	2,500
Swampscott	5,485	0	0
Wakefield	8,410	0	
Waltham	13,732	0	8,100
Watertown	9,165	0	1,100
Wellesley	8,324	1	
Weston	3,613	0	100
Wilmington	7,469	0	
Winchester	7,215	80	663
Winthrop	4,480	1,343	
Woburn	11,447	2	30
Chicopee	16,527	0	0
South Hadley FD 1	4,827	0	0
Wilbraham	3,347	0	0
TOTAL	503,784	18,127	22,410

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 18, 2018
SUBJECT: Accomplishments on Construction Contracts



COMMITTEE: Water Policy and Oversight

INFORMATION
 VOTE

A. Navanandan, P.E. Chief Engineer
Corinne M. Barrett, Director, Construction
Preparer/Title



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

RECOMMENDATION:

For information only.

DISCUSSION:

Several Important MWRA construction projects recently reached significant milestones.


For the water system, two of the on-going water redundancy projects had meaningful achievements. The Northern Intermediate High Pipeline projects are a series of new pipeline sections that will eliminate a single point of failure for MWRA supply to Reading, Stoneham, Wakefield, Wilmington, Winchester, and Woburn. The projects will create two interconnected loops, improving service and increasing reliability.

The Wachusett Aqueduct is the back-up to the Cosgrove Tunnel, bringing water from the Wachusett Reservoir to the John J Carroll Water Treatment Plant. Aqueduct water would enter the system by-passing the plant due to hydraulic limitations. It would only be treated with temporary chlorination and would not meet the minimum regulatory treatment requirements. The Wachusett Aqueduct Pump Station Project will allow the water to be lifted through the plant, thereby allowing full treatment while providing redundancy up to 240 MGD for the Cosgrove Tunnel and intake facilities.

On the wastewater side, the Clinton Wastewater Treatment Plant Phosphorous Reduction project will allow the facility to meet future, more stringent, National Pollution Discharge Elimination System permit limit for phosphorous.


Staff will provide a presentation on these recent construction projects and the milestones that were achieved.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: July 18, 2018
SUBJECT: Emergency Water Supply Agreement with the Town of Burlington

COMMITTEE: Water Policy & Oversight

Carolyn M. Fiore, Deputy Chief Operating Officer
Beth Card, Director, Environmental and Regulatory Affairs
Preparer/Title

 INFORMATION
 X VOTE

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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to execute an Emergency Water Supply Agreement with the Town of Burlington, which authorization is expressly conditioned upon MWRA Advisory Board approval for a period of emergency water supply beyond thirty days.

DISCUSSION:

On June 25, 2018, the Town of Burlington Department of Public Works submitted a request to MWRA for emergency withdrawal under MWRA's Operating Policy #:OP.05: Emergency Water Supply Withdrawals. This policy applies to communities outside MWRA's Water Service Area that are seeking MWRA water on an emergency basis. The MWRA may approve emergency withdrawals for no more than six months at a time, and typically, the emergency withdrawal period coincides with a DEP Declaration of Emergency for the Community.

The Town of Burlington has had on-going water supply issues and needs to do maintenance at its surface water treatment facility (Mill Pond). This work, including filter repair, is needed to maintain water quality and production capacity. Burlington can receive MWRA water on an emergency basis via its existing interconnections with Lexington. The ability of Lexington to supply Burlington, even during periods of high demand, has previously been established in flow tests. It is anticipated that the connection may need to stay open for up to four weeks. MWRA is seeking approval for a connection up to six months in the event that maintenance takes longer or in case dry summer conditions result in an on-going emergency need. If Burlington requests that the emergency approval be extended beyond the 30 days, approval from the MWRA Advisory Board will be required before the six-month Emergency Water Supply Agreement is implemented.

Emergency Water Supply Approval Criteria and Requirements

MWRA's emergency water use policy sets forth withdrawal criteria and requirements. The key components of the approval process are as follows:

- The Executive Director or the Chief Operating Officer is authorized to approve the emergency use of MWRA water through an existing or temporary connection to the MWRA or an MWRA water system community by a non-MWRA water system or facility for a period not to exceed thirty (30) calendar days.
- A DEP declaration of water supply emergency in the requesting community, or alternatively, submission by the community of documentation supporting the existence of conditions that could lead to a DEP declaration of water supply emergency per G.L.c21 G §15, is required for these emergency situations. Approval shall only be granted based on emergencies of non-chronic nature, such as supply and transmission disruptions.
- There must be no negative impact on MWRA's system and member communities.
- A long-term plan to remedy supply deficiencies must be developed.
- The applicant community does not use MWRA water supply as a chronic emergency back-up supply without equitable contribution for the fair asset value of the MWRA waterworks system.
- The Community must submit a detailed description of water conservation and water accountability programs undertaken.

Contents of Emergency Water Supply Agreement

The Agreement limits water withdrawals to a maximum rate of 0.7 mgd. If Burlington requests that the emergency approval be extended beyond the 30 days, the proposed emergency water supply agreement will be for a six month period that began on July 5, 2018. Pursuant to the Agreement, all withdrawals must be metered. The Agreement also requires Burlington to adhere to all conditions and requirements contained in the DEP Declaration of Water Supply Emergency. The Agreement reflects MWRA's charges for emergency withdrawals, including a 10% premium charge added to the prevailing rate as well as an asset value contribution payment.

Status of Admission Process

At Burlington's May 2018 Town meeting, members voted to approve Article 15 which provides \$5.3 million in funding to begin the process of joining the MWRA. In June 2018, MWRA staff met with Town representatives to discuss the next steps for the Town related to the MWRA approval process, environmental permitting, construction of additional water mains, and the creation of a water stabilization fund. Options associated with sharing some of the connection costs, particularly if Burlington were to construct a direct connection to MWRA as opposed to wheeling MWRA water through Lexington as they have done in emergencies, is being considered. A flow test has been conducted for calibration of a hydraulic model. This flow test and calibration involved opening a connection between Burlington and Lexington and tracking pressures and flow rates at key locations. On July 2, 2018, MWRA and Burlington staff met with regulatory agency staff in order to begin pursuit of approvals under MEPA and the Interbasin Transfer Act. Coordination with Burlington will be on-going in the year ahead.

BUDGET/FISCAL IMPACT:

Pursuant to OP.05, water taken for the third emergency withdrawal period is charged at the prevailing rate plus a 10% premium and an asset value contribution payment. MWRA will review actual use information to determine and assess the surcharge amounts. The volume of the emergency withdrawals and therefore the amount of revenue MWRA will receive cannot be projected at this time.

ATTACHMENTS:

Draft Burlington Emergency Water Supply Agreement
DEP Emergency Declaration

DRAFT
EMERGENCY WATER SUPPLY AGREEMENT – PERIOD THREE
BETWEEN
THE MASSACHUSETTS WATER RESOURCES AUTHORITY
AND
THE TOWN OF BURLINGTON

Parties.

This Emergency Water Supply Agreement (“Agreement”) is entered into by and between the Massachusetts Water Resources Authority (“MWRA”), and the Town of Burlington (“Burlington”) hereinafter jointly referred to as the “Parties.” This Agreement documents the agreement and understanding of the Parties regarding the arrangement whereby MWRA will supply water to Burlington through an interconnection that Burlington has with Lexington, an MWRA served water community and whereby Burlington will purchase a portion of its water supply from the MWRA through Lexington on an as-needed, emergency basis for a period not exceeding six months, as indicated in paragraph 11 hereof.

Recitals.

- R.1. The MWRA was created by the Massachusetts legislature in December, 1984 to operate, regulate, finance, and modernize the waterworks and sewerage systems servicing the greater metropolitan Boston area. Operating pursuant to the terms of Section 8(d) of its Enabling Act, chapter 372 of the Acts of 1984 (the “Act”), and pursuant to the Policies and Procedures for Emergency Water Supply Connections of its Board of Directors, the MWRA may enter into arrangements to provide emergency supplies of water to any local body of the Commonwealth, provided certain conditions are met.
- R.2. Burlington is a duly constituted municipal corporation of the Commonwealth of Massachusetts (“Commonwealth”).
- R.3. Lexington is supplied by the MWRA and Burlington has an emergency interconnection through Lexington to the MWRA water supply system.
- R.4. Burlington’s drinking water sources include both wells in the Vine Brook Aquifer as well as surface water pumped from the Shawsheen River to the Mill Pond Reservoir in Burlington. The ground and surface water sources are served by the Vine Brook Treatment Plant and the Mill Pond Treatment plant, respectively. Water quality factors have required the removal of some of Burlington’s wells from service and needed facility repairs have temporarily impacted Burlington’s ability to meet water demand with its local sources alone.
- R.5. On June 25, 2018, the Town of Burlington Department of Public Works, in an electronic mail communication to MWRA, notified MWRA that due to facility maintenance and

repairs, including a filter replacement, it had concerns about water levels and an emergency connection was desired.

- R.6 On July 5, 2018 the MA Department of Environmental Protection (MassDEP) issued a Declaration of Water Supply Emergency to Burlington, to remain in effect until January 4, 2019 or until such time as MassDEP determines that emergency conditions no longer exist, whichever is sooner. The Declaration of Water Supply Emergency is included as Attachment A to this Agreement.
- R.7 The MWRA's Policy for Emergency Water Supply Withdrawals, OP#.05 (the "Policy") includes criteria and a process for approving requests for emergency withdrawals.
- R.9. Burlington has applied to the MWRA to use emergency interconnections to the MWRA system through Lexington to supplement Burlington's local water supply sources on an as-needed basis.
- R.10. The MWRA has determined that it can supply Burlington with an emergency water supply for a period not exceeding six months under this Agreement without jeopardizing its ability to supply its member communities and without exceeding the safe yield of its water supply system.
- R.11. Burlington must comply with all applicable legal and regulatory requirements.
- R.12. Pursuant to the MWRA Policy, this Agreement is considered an Emergency Water Supply Agreement Period Three.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein and for other good and valuable consideration, the MWRA and Burlington agree as follows:

1. The proposed emergency water supply agreement will extend from July 5, 2018 to January 4, 2019 in accordance with the terms of this Agreement, subject to termination in accordance with numbered paragraph 11 below.
2. Burlington may take water from the emergency interconnection at a maximum rate of 700,000 gallons per day over the six month period.
3. The transfer of water from the MWRA through Lexington to Burlington shall not extend beyond a period of six months, unless Burlington submits an application for an additional emergency water supply withdrawal and the MWRA's Board of Directors approves the additional emergency water supply withdrawal. Any withdrawals beyond the DEP Emergency Declaration six-month period will also require an extension of DEP's Water Supply Emergency Declaration. In considering withdrawals beyond six months, the MWRA will consider Burlington's efforts to reduce consumption, to implement its long range plans and comply with DEP orders, and to implement a water conservation program.

4. During the six month term of this Agreement, Burlington shall institute and continue all practicable conservation measures including, but not limited to, a water conservation public education program; 100% metering; leak detection surveys and rehabilitation programs; conservation pricing for water services; and a local by-law governing outdoor water use with appropriate enforcement measures such as fines and water shut-off for non-compliance. Burlington shall actively administer and enforce such local by-law.
5. Burlington shall submit to MWRA a report on water use, and the status of the emergency.
6. Burlington shall comply with all the conditions of any DEP Declaration of Water Supply Emergency.
7. During the term of this Agreement, the MWRA shall bill Lexington for the total volume of water used by Burlington as metered by Lexington, and will bill Burlington directly for the 10% surcharge over the prevailing rate and an asset value contribution as mandated by the Policy. Lexington shall bill Burlington for water used in accordance with the terms of the agreement between Lexington and Burlington, which is incorporated by reference. Burlington shall remit its payments to Lexington for the total volume of water used. Burlington will remit its payments for the 10% surcharge and an asset value contribution to MWRA directly.
8. The parties agree that the emergency withdrawal authorized under this Agreement is not appropriate for or intended to provide a permanent water supply to Burlington. Any request by Burlington for a permanent partial water supply from MWRA shall require full consideration of all alternatives, including effective water conservation and leak detection, and shall be subject to all approvals required under Section 8 (d) of Chapter 372 of the Acts of 1984, MWRA policies, and under applicable state law and regulations.
9. The MWRA provides potable water in compliance with federal and state drinking water standards at the revenue meters of its waterworks communities. The parties agree that MWRA assumes no liability for the compliance of water delivered pursuant to this Agreement with those state and federal drinking water standards once the water has entered the water distribution system of the Town of Lexington.
10. Any dispute arising between the MWRA and Burlington under the terms of this Agreement shall be resolved in accordance with the dispute resolution process set forth at 360 C.M.R. 1.00.
11. The term of this Agreement shall extend from July 5, 2018, the day in which Burlington could begin to take water ("start date") through and including the six-month anniversary of the Start Date. During the term, MWRA reserves the right to terminate this Agreement at any time due to unforeseen circumstances such as inadequate supply, insufficient hydraulic capacity and other conditions related to the safe supply of existing users and operational requirements of the MWRA's waterworks system.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on this _____ day of _____, 2018 by their duly authorized representatives.

MASSACHUSETTS WATER
RESOURCES AUTHORITY

By:

Frederick A. Laskey
Executive Director

TOWN OF BURLINGTON

By:

John D. Petrin
Town Administrator



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

July 5, 2018

VIA Certified Mail No.: 7015 1520 0002 1412 9235

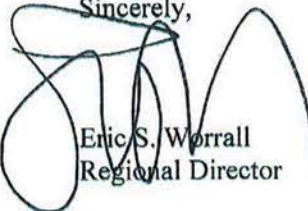
John D. Petrin, Town Administrator
Town of Burlington
Town Hall
29 Center Street
Burlington, MA 01803

City/Town: Burlington
PWS Name: Burlington Water and Sewer
PWSID: 3048000
WMA Registration No. 3-15-048.01
WMA Permit No. 9P3-15-048.01
Emergency Declaration No. 00004889

Dear Administrator Petrin:

The Massachusetts Department of Environmental Protection ("MassDEP") received a petition from the Town of Burlington (the "Town"), dated June 27, 2018, requesting an Emergency Declaration under the provisions of the Water Management Act, M.G.L. c. 21G, §15 (the "petition"). According to the petition, the capacity of the two water treatment facilities has been reduced due to repair and maintenance needs, and the activation of the interconnection to the Town of Lexington is needed to allow the work to be completed. Attached is the MassDEP's Declaration of State of Water Supply Emergency, No. 00004889. If you have any questions regarding this letter, please contact me at (978) 694-3225.

Sincerely,



Eric S. Worrall
Regional Director

cc: John G. Sanchez, P.E., Director, Town of Burlington-Department of Public Works, 25 Center Street, Burlington, MA 01803

Town of Burlington Board of Health, Human Services Building, 61 Center Street, Burlington, MA 01803

Bethany A. Card, Director, Environmental and Regulatory Affairs, Massachusetts Water Resources Authority, Charlestown Navy Yard, 100 First Avenue, Building 39, Boston, MA 02129

e-cc: Duane LeVangie, MassDEP-BWR-Boston
Heidi M. Zisch, MassDEP-OGC-NERO

Y:\DWP Archive\NERO\Burlington-3048000-Enforcement-2018-07-05

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.
TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

**COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**In the Matter of)
Town of Burlington)
_____)**

Enforcement Number 00004889

EMERGENCY DECLARATION

The Parties

1. The Massachusetts Department of Environmental Protection ("MassDEP") is a duly constituted agency of the Commonwealth of Massachusetts established pursuant to M.G.L. c. 21, § 7. MassDEP has its principal office located at One Winter Street, Boston, Massachusetts 02108, and its Northeast Regional Office located at 205B Lowell Street, Wilmington, Massachusetts 01887.
2. The Town of Burlington (the "Town") is a Municipality within the Commonwealth of Massachusetts having a principal place of business and a mailing address at 29 Center Street, Burlington, MA 01803.

Statement of Facts and Law

3. The Town operates a public water system with MassDEP Registration number 3-15-048.01 and Permit Number 9P-3-15-048.01. The Town, by and through its Water Department, operates and maintains two water treatment facilities, one is the Vine Brook Treatment Facility, which treats groundwater from seven groundwater wells in the Vine Brook aquifer, and the second is the Mill Pond Treatment Facility, which treats surface water that is pumped from the Shawsheen River in Billerica to the Mill Pond Reservoir in Burlington. To meet the new recommended maximum level for 1,4-dioxane, the Town took out of operation wells 3, 4, and 5 at the Vine Brook Treatment Facility in 2013, limiting the amount of water supplied from that location.
4. On Wednesday, June 27, 2018, MassDEP received a letter from Burlington petitioning MassDEP for a declaration of a state of water emergency pursuant to M.G.L. c. 21G, § 15 and seeking to open its emergency connection with the Town of Lexington as soon as possible. In the letter, the Town stated that it was seeking the Emergency Declaration "[d]ue to the limited production capacity at the Vine Brook Treatment Plant caused by the 1,4, dioxane contamination of drinking water wells," and that repairs of a filter unit have further limited the capacity of the Vine Brook facility. The Town also outlined that the Mill Pond Treatment Facility is required to be shut down for maintenance in order to obtain the full capacity of the facility. The Town stated that activation of the connection to Lexington "would allow for needed repairs at the Vine Brook Treatment Facility and for maintenance at the Mill Pond Treatment Facility."

5. On Wednesday, June 27, 2018, the Town imposed a full outdoor water ban, effective July 5, 2018.
6. The Water Management Act, M.G.L. c.21G, § 15, and the Water Management Regulations, specifically the section set out at 310 CMR 36.40(1), authorize any water system to petition MassDEP for a Declaration of a State of Water Supply Emergency if it finds that there exists or impends a water supply shortage of a dimension which endangers the public health, safety or welfare.
7. Pursuant to M.G.L. c.21G, § 15, and the Water Management Regulations set out at 310 CMR 36.40(2), MassDEP may declare a state of water emergency if it finds that there exists or impends a water supply shortage of a dimension which endangers the public health, safety or welfare. Further, in response to a petition for a Declaration of a State of Water Supply Emergency and pursuant to this statutory section, MassDEP may require the water supplier to submit for its review and approval a plan for restraining the use of water by whatever means it deems appropriate and feasible. The statute limits any Declaration of a State of Water Supply Emergency to no more than six months in the aggregate in any twelve month period, unless MassDEP determines that a longer state of emergency is required to protect the public health.
8. Furthermore, the Water Management Regulations at 310 CMR 36.40(2) provides:

Upon receiving a petition for a declaration of a state of water supply emergency, the Department may declare an emergency if it finds that there exists or impends a water supply shortage of a dimension which endangers the public health, safety or welfare, due to circumstances including, but not limited to:

(a) Demand for water exceeds the availability of water;

...

(d) Inadequate source of water, inadequate distribution system capacity, inadequate storage capacity or drought including seasonal water shortages which repeatedly affect the same public water system....

9. Pursuant to the Water Management Act, M.G.L. c.21G, § 17, MassDEP may issue orders during a state of water emergency declared under M.G.L. c.21G, § 15 to, among other things, establish priorities for the distribution of any water or quantity of water use, to permit any person engaged in the operation of a water supply system to cease the distribution of water, to distribute water to certain users as specified by MassDEP, and to require the implementation of specific water conservation measures.

Determination and Order

10. For the reasons set forth above and pursuant to the Water Management Act, M.G.L. c.21G, § 15, MassDEP hereby determines that a water supply emergency exists and that it endangers the public health, safety or welfare of the citizens of the Town. Unless

extended by MassDEP, this Emergency Declaration shall remain in effect until January 4, 2019 or until such time as MassDEP determines that emergency conditions no longer exist, whichever is sooner.

11. By issuing this Emergency Declaration, MassDEP hereby grants the Town authority to use its emergency connection to the Town of Lexington, subject to the following specific conditions:
 - a. The Town shall maintain records of any water pumped from these sources as required under the Regulations during the duration of this Declaration and provide those records to the Department on request.
 - b. The Town shall comply with the requirements of the Massachusetts Water Resources Authority (MWRA) governing emergency use of connections with an MWRA community.
 - c. Changes in the use of sources such as the activation of a new interconnection may result in disturbances in the distribution system due to changes in flow volumes, flow patterns, and mechanical disruption. Impacts to the distribution system may include colored water, changes in chlorine demand and residuals, and potential health risks, such as bacterial contamination. A new interconnection may also change hydraulic conditions in the system, impacting the operation of tanks. Additionally, EPA has concluded that distribution maintenance can lead to lead scale disruption, which could cause an increase in drinking water lead concentrations. Burlington should consider these impacts and develop a plan, as necessary, to prevent nuisance conditions and mitigate risks.
12. Effective immediately, the current town-wide ban on non-essential outside water use shall remain in place for the duration of this Emergency Declaration. For purposes of this Emergency Declaration, the term "nonessential outside water use" is defined to include those uses that do not have health or safety impacts, are not required by regulation, and are not needed to meet the core functions of a business or other organization.
13. Within seven (7) days of the date of issuance of this Emergency Declaration, the Town shall provide MassDEP with the written text of the Reverse-911 message sent by the Town to its users on July 5, 2018. The Town shall further notify customers by any additional means, including but not limited to sign boards, notices on its web site and social media, as deemed necessary. If the Town has published notice in a local newspaper and/or on the Town's website or by any other means, then the Town shall also submit a copy of the public notice to MassDEP within ten (10) days of publication of the notice.
14. On or before August 1, 2018, the Town shall submit to MassDEP a written report documenting all efforts taken by the Town to implement and enforce the ban on nonessential outside water use required herein, including all actions taken by the Town to inform the public of the ban and to enforce the ban, including the assessment of penalties or imposition of fines. The report shall describe water use trends over the period of the

emergency and describe progress and the status of all other conservation programs being implemented by the Town, including any efforts to limit the use of private wells. The Town shall submit copies of all materials and notices prepared to inform the public of the need to conserve water and comply with the ban on nonessential outside water use.

15. The Town shall comply with all the remaining terms and conditions of its MassDEP Registration number 3-15-048.01 and Permit Number 9P-3-15-048.01 that remain unchanged by this Emergency Declaration.
16. If the Town fails to comply with the provisions of this Emergency Declaration, MassDEP may assess a civil administrative penalty as provided in M.G.L. c.21A, § 16 and M.G.L. c.21G, § 14. MassDEP may also seek civil judicial penalties as provided in M.G.L. c.21G, § 14. Each day of continued violation shall constitute a separate offense. In addition, MassDEP may ask the Attorney General to bring an action in the superior court to compel compliance with this Declaration.


Issued by the Department of Environmental Protection this 5th day of July 2018.

By _____

Eric S. Worrall, Regional Director

A handwritten signature in black ink, appearing to be 'Eric S. Worrall', is written over a horizontal line. The signature is stylized and somewhat cursive.


STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: July 18, 2018
SUBJECT: Painting for Bellevue 2 and Turkey Hill Steel Water Storage Tanks
Worldwide Industries Corp.
Contract 7634

COMMITTEE: Water Policy & Oversight

A. Navanandan, P.E., Chief Engineer
Carmine De Maria, Project Manager
Preparer/Title

 INFORMATION
 X VOTE


Michele S. Gillen
Director of Administration


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

RECOMMENDATION:

To approve the award of Contract 7634, Painting for Bellevue 2 and Turkey Hill Steel Water Storage Tanks, to the lowest responsible and eligible bidder, Worldwide Industries Corp. and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of \$3,962,463, for a contract term of 180 calendar days from the Notice to Proceed.

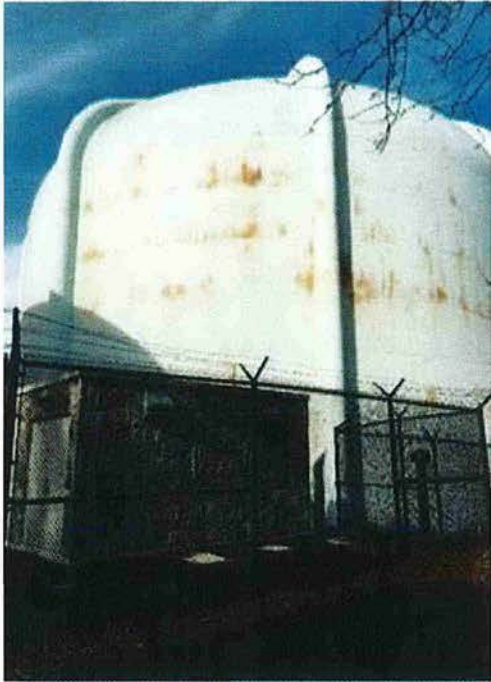
DISCUSSION:

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

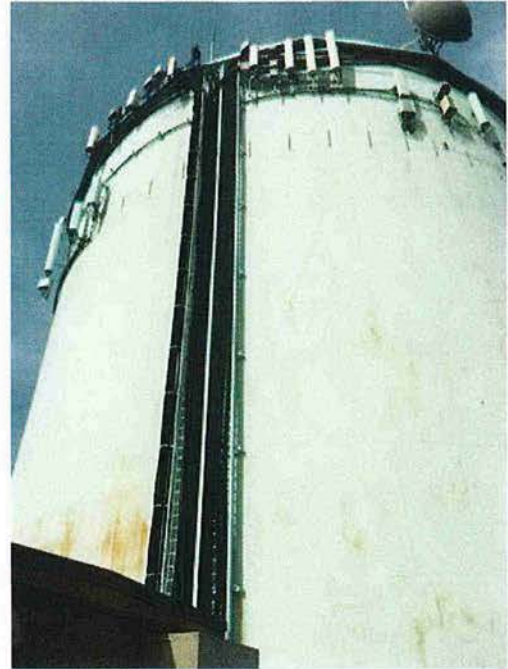
The Turkey Hill Tank, located in Arlington, is a 2.0 MG welded steel standpipe tank, operating in the Northern Extra High Pressure Zone. It is 75 feet in diameter and 65 feet high. The tank was built in 1945. The tank is equipped with an impressed current cathodic protection system, which needs to be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

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

designed and erected to hold the relocated cell equipment during the tank painting. Once the painting is completed the cell equipment will be placed back on the tank.



Bellevue 2 Standpipe



Turkey Hill Tank

Procurement Process

Contract 7634 was advertised and bid utilizing MWRA’s e-procurement system (Event Document 3465-4) in accordance with Massachusetts General Laws, Chapter 30. Bids were received and opened on June 27, 2018 from seven contractors as follows:

<u>Bidders</u>	<u>Bid Amount</u>
Worldwide Industries Corp.	\$ 3,962,463.00
Utility Service Co., Inc.	\$ 4,457,750.00
Amstar of WNY, Inc.	\$ 4,980,000.00
Atlas Painting and Sheeting Co	\$ 5,390,000.00
Allied Painting, Inc.	\$ 5,405,675.00
<i>Engineer’s Estimate</i>	<i>\$ 6,070,380.00</i>
Southern Road & Bridge, LLC	\$ 6,988,943.42
Abhe & Svoboda, Inc.	\$ 7,624,640.00

Worldwide Industries Corp.’s bid is \$3,962,463 or 35% below the Engineer’s Estimate. Staff reviewed Worldwide Industries Corp.’s bid and met with the Contractor and discussed the bid in detail to determine if he fully understood the scope of the contract requirements. Following those discussions, staff are of the opinion that the Contractor fully understands the scope of work and that the bid contains all elements of the work. The difference between the bid price and the Engineer’s Estimate was determined to be the result of several factors. Worldwide Industries’ plan

includes improved means and methods to conduct the work, including the use of robotics, and a large access opening being cut into the tank to allow access for lifting equipment. In addition, Worlwide owns all its equipment and therefore dosen't have associated rental cost.

References were checked and found to be favorable. Worldwide Industries Corp. has demonstrated its ability to successfully complete comparable projects.

After reviewing the bid and interviewing the Contractor, staff have concluded that Worldwide Industries Corp. possesses the skill, ability, and integrity necessary to perform the work under this contract and is qualified to do so. Staff have further determined that the bid price is reasonable, complete, and includes payment of prevailing wages, as required. Therefore, staff recommend that Contract 7634 be awarded to Worldwide Industries Corp. as the lowest responsible and eligible bidder.

BUDGET/FISCAL IMPACT:

The FY19 Capital Improvement Program includes a budget of \$5,692,959 for Contract 7634, Painting for Bellevue 2 and Turkey Hill Steel Water Storage Tanks. The contract award amount is \$3,962,463.

MBE/WBE PARTICIPATION:

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

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: July 18, 2018
SUBJECT: Weston Aqueduct Supply Main 3: Design, Construction Administration and Resident Engineering Services
Stantec Consulting Services, Inc.
Contract 6539, Amendment No. 1

COMMITTEE: Water Policy & Oversight

 INFORMATION
 X VOTE

A. Navanandan, P.E., Chief Engineer
Frederick O. Brandon, P.E., Assistant Director, Engineering
Michael G. Rivard, P.E., Program Manager
Preparer/Title


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

This staff summary provides an update on the Weston Aqueduct Supply Main 3 design contract and recommends an amendment to reflect the change from what was primarily a pipeline replacement project to what is now primarily a pipeline rehabilitation project. Approved by the Board of Directors in February 2017, the Metropolitan Tunnel Redundancy Program eliminated the need for a larger diameter WASM 3 pipe. However, rehabilitation of this critical pipeline that supplies 250,000 customers is still warranted and recommended as part of the tunnel program interim improvements. The proposed rehabilitation will restore the capacity of the pipe, improve water quality and extend its useful life.

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 1 to Contract 6539, Weston Aqueduct Supply Main 3: Design, Construction Administration and Resident Engineering Services with Stantec Consulting Services, Inc., to increase the contract amount by an amount not to exceed \$30,210 from \$15,482,625 to \$15,512,835, and increase the contract term by 243 calendar days from October 1, 2026 to June 1, 2027.

DISCUSSION:

The Weston Aqueduct Supply Main 3 (WASM 3) is a 10-mile long, 60-inch and 56-inch diameter steel pipeline that supplies the communities of Waltham, Watertown, Belmont, Arlington, Lexington, Bedford and Winchester. The pipe, which was built in the 1920s, requires frequent leak repairs and rehabilitation is critical. WASM 3 carries high service water from the 7-foot diameter branch of the Hultman Aqueduct to community connections and MWRA pumping stations serving

the Intermediate High, the Northern High and the Northern Extra High pressure zones. It extends from the Hultman Branch in Weston to the Shaft 9 connection pipe in Medford. There is currently no back-up for this pipeline. It serves as a primary means of supplying northern high communities in Metropolitan Tunnel System failure scenarios, and it has been identified as a key element for providing long-term redundancy to a large portion of the metropolitan area. WASM 3 is one of the most critical single points of failure in the water distribution system after the Metropolitan Tunnel System.

On June 26, 2013, the Board approved the award of Contract 6539, Weston Aqueduct Supply Main 3: Design, Construction Administration and Resident Engineering Services, to Fay Spofford and Thorndike, LLC in an amount not to exceed \$15,482,625 for a contract term of 4,840 days (13 years and 3 months). With approval from the Board, the contract was subsequently assigned from FST to Stantec as part of a merger between the two firms. The scope of the original contract includes engineering services for rehabilitation/replacement of the WASM 3 pipeline. The project was originally envisioned to require the replacement of 7.3 miles of existing pipe through Weston, Waltham and Belmont with a new 72-inch diameter pipeline and rehabilitation of the remaining 2.7 miles of existing pipe through Arlington, Somerville and Medford.

Stantec is the prime consultant with substantial participation by Green International Affiliates and CDM Smith as sub-consultants. The design and construction services were to span a total duration of 13 years 3 months. Figure 1 shows the initial alignment and sequencing of the three construction packages originally conceived under this engineering contract.

Preliminary design work began in July 2013 and continued for one year when it became apparent that surface construction of a 72-inch diameter pipeline through downtown congested areas would be extremely difficult to execute. At that point, staff began the process of evaluating various tunnel alternatives to provide redundancy for the metropolitan water transmission system. Stantec provided support to staff under the WASM 3 contract for the evaluation of tunnel redundancy alternatives. This support effort was paid for under an existing scope item for evaluation of alternatives and did not result in any budget impacts to the contract. While the evaluation of alternatives was proceeding, staff directed the consultant to put preliminary design work on hold.

Concurrent with the WASM 3 design contract, a separate professional services contract was underway for preliminary design and Massachusetts Environmental Policy Act review of the proposed pressurization of the Sudbury Aqueduct and connections (Contract 7352 with CDM Smith, awarded September 12, 2012). This project was to provide redundancy to communities in the southern metropolitan area. Since the evaluation of tunnel redundancy alternatives could also affect the proposed pressurization of the Sudbury Aqueduct, staff directed CDM Smith to put its work on hold while alternatives were being evaluated. This contract is in the process of being closed out.

In October 2016, staff presented a briefing to the Board of Directors on Redundancy for the Metropolitan Tunnel system and recommended a preferred long-term tunnel alternative for redundancy. After a separate public forum on Long-Term Water Redundancy hosted by the MWRA Advisory Board in December 2016 and subsequent Advisory Board vote to support the proposed tunnel alternative, the Board of Directors voted on February 15, 2017 to approve the

preferred tunnel redundancy alternative that includes both a northern and a southern tunnel route.

The proposed long-term tunnel alternative eliminated the need to replace the majority of the WASM 3 pipe with a larger diameter pipe. Therefore, staff recommend changing the scope of the WASM 3 design contract to include pipe condition assessment for the entire length of the 10-mile pipeline and preparation of construction contract documents for rehabilitation of the entire pipeline. As is typical of pipeline rehabilitation contracts, one third of the pipeline is assumed to require replacement, so approximately 3.3 miles is anticipated to be replaced in kind. Also, the sequence of construction of rehabilitation has been revised to begin work in the eastern communities (Medford, Somerville and Arlington) and progress to the west through Belmont and finally Waltham and Weston. This change was necessary for two reasons. First, it provides rehabilitation of the northeast end of the pipeline supplied from Shaft 9 earlier in the program to provide a more reliable supply during later pipe shutdowns in subsequent contracts. Secondly, it allows more time to complete future redundancy of supply to Lexington Street Pump Station, which is critical to sequencing the work in Waltham. Figure 2 shows the proposed construction packages and revised sequence of work.

To date, approximately \$2,000,000 (13 %) of the contract has been expended to investigate tunnel redundancy alternatives, conduct field surveys, prepare base maps and perform a geotechnical boring program.

Amendment No. 1

Proposed Amendment 1 includes revisions to the scope of services, schedule and budget, to reflect the design work for rehabilitation of the pipeline proceeding 3.5 years later than originally scheduled, and re-sequencing the construction schedule.

Staff directed Stantec to stop work on the preliminary design of the pipe replacement while tunnel alternatives were being developed and evaluated. In February 2017, after the Board approved the proposed tunnel redundancy program, staff directed Stantec to restart the preliminary design effort for rehabilitation of WASM 3. This resulted in the design work beginning 3.5 years later than the contract schedule. In order to mitigate this delay, the preliminary design phase is proposed to be compressed to a shorter duration and overlapped with final design. The net result is that construction will begin approximately eight months later than the original schedule. Therefore, the term of the professional services agreement needs to be extended by eight months.

The contract terms for the amendment for indirect cost rates, salary escalation rates and fee percentage remain unchanged from the original term of the contract (13 years and 3 months). However, for the 8-month extension period of the contract, the current provisional indirect cost rate for Stantec will be allowed (160.4 % current provisional rate versus 135.0 % current contract rate).

The cost savings for reducing the hours in the scope for designing a primarily pipeline rehabilitation instead of replacement contract is offset by cost escalation due to delaying the design effort 3.5 years later than originally scheduled and extending the end date of the contract by eight months. The net cost increase to the contract for the proposed amendment is \$30,210, or 0.2%.

The following is a summary of the factors contributing to the change in contract cost:

Cost reduction due to scope change	(\$674,632)
Cost escalation due to 3.5-year delay in beginning design	\$594,274
Labor, overhead, and profit for 8-month contract extension	<u>\$110,568</u>
Net increase in contract amount	\$30,210

CONTRACT SUMMARY:

	<u>Amount</u>	<u>Time</u>	<u>Dated</u>
Contract Award:	\$15,482,625	4,840 Days	06/26/2013
Proposed Amendment 1:	<u>\$30,210</u>	<u>243 Days</u>	Pending
Adjusted Contract:	\$15,512,835	5,083 Days	

Amendment 1 increases the contract amount by 0.2 percent.

BUDGET/FISCAL IMPACT:

The FY19 CIP includes a budget of \$15,482,625 for Contract 6539. Including this amendment for \$30,210 the adjusted contract total will be \$15,512,835 or \$30,210 over budget. This amount will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

The minimum MBE and WBE participation requirements for this contract are 23.5% and 7.57%, respectively and will be unchanged by Amendment 1.

ATTACHMENT(S):

Figure 1: WASM 3 Original Project and Sequence of Work.

Figure 2: WASM 3 Proposed Project and Sequence of Work (Amendment 1).

Figure 3: WASM 3 Original and Revised Project Schedule (Amendment 1).

Figure 1: WASM 3 Original Project and Sequence of Work

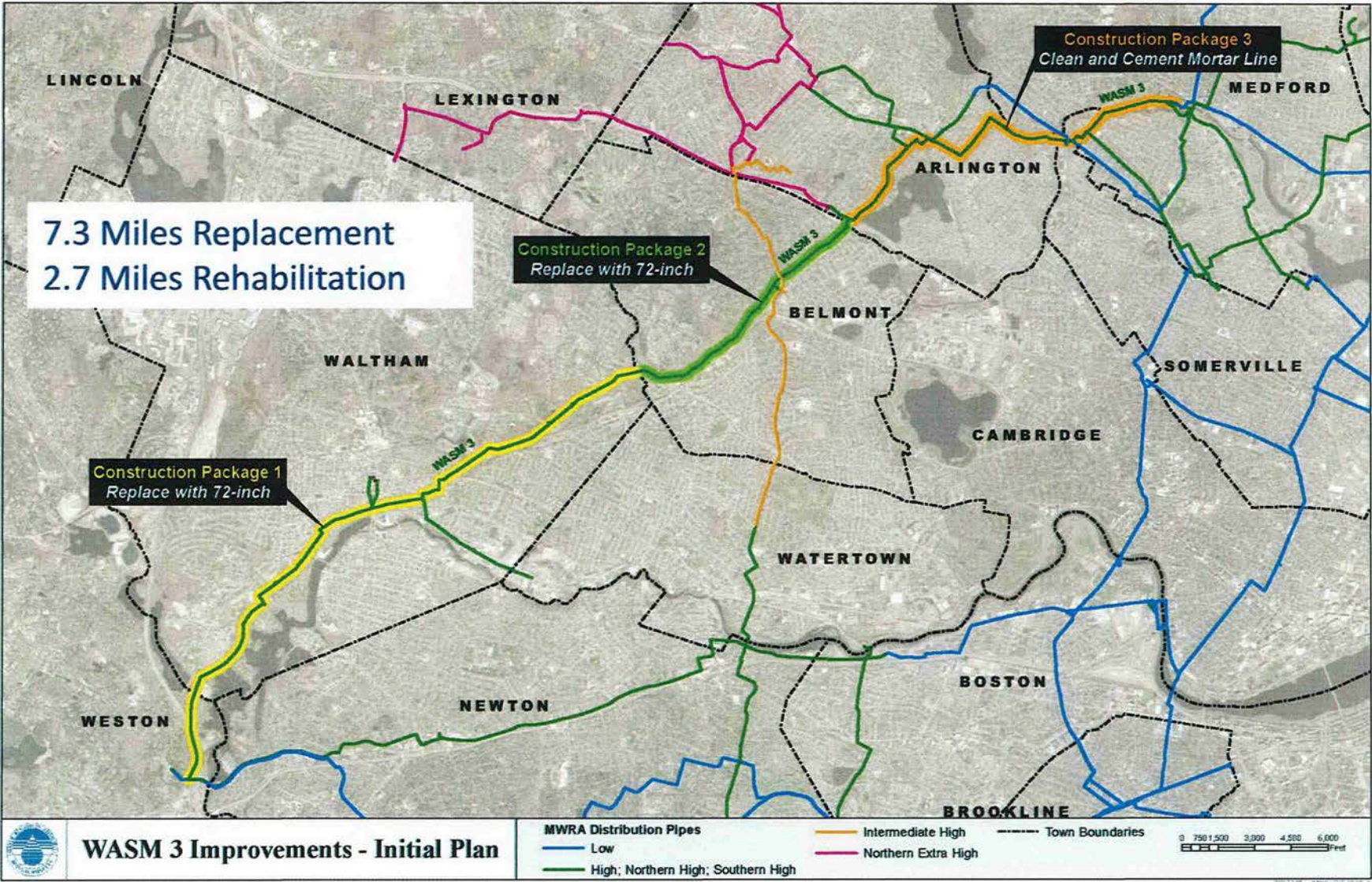
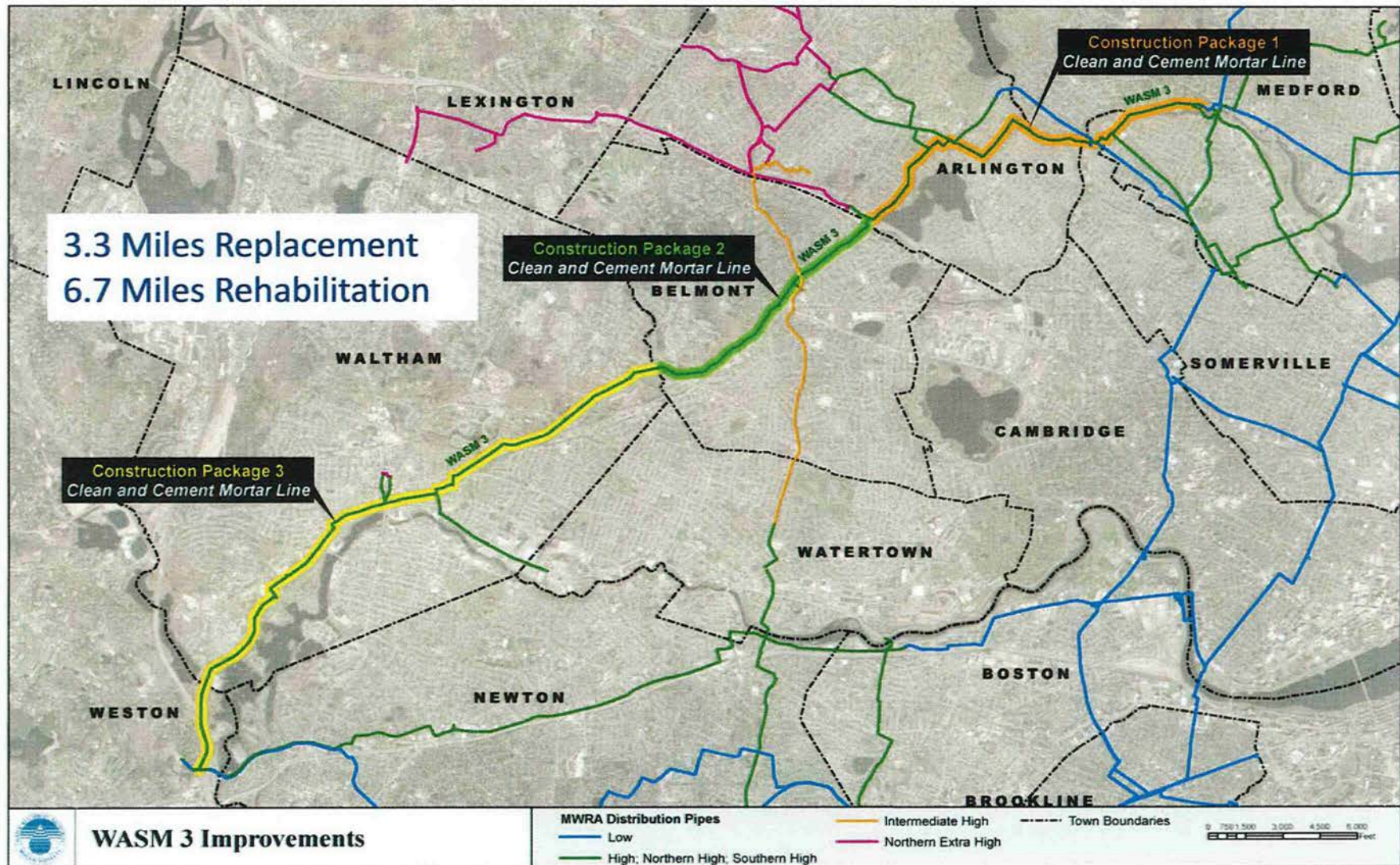
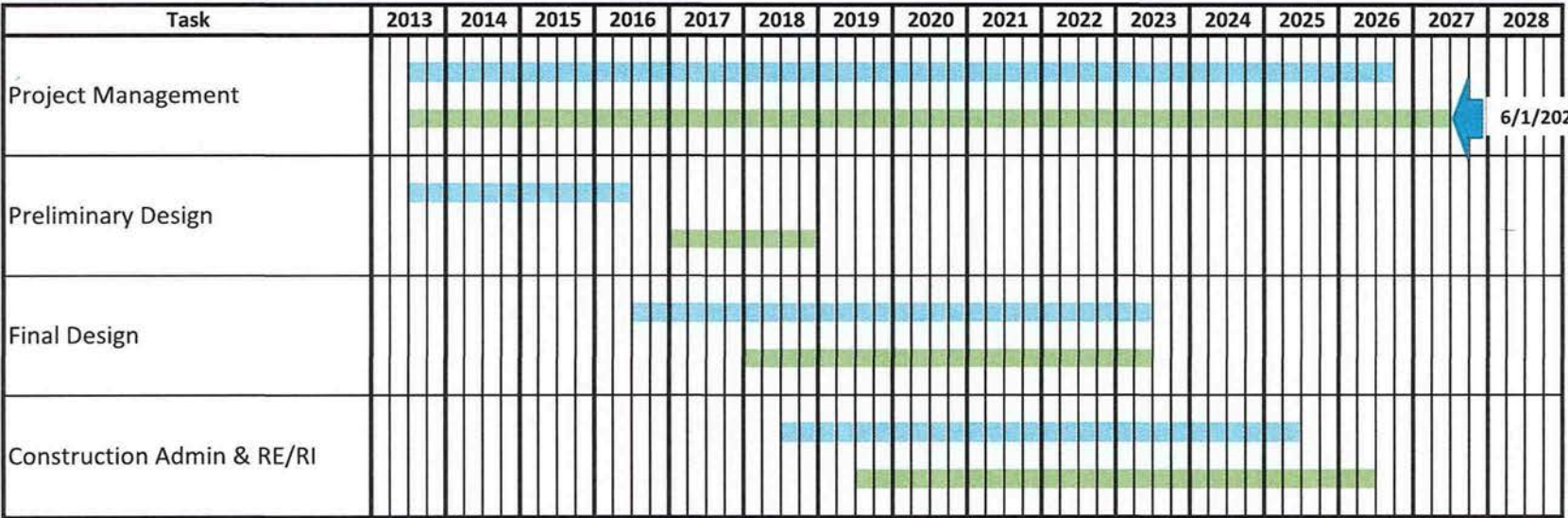


Figure 2: WASM 3 Proposed Project and Sequence of Work (Amendment 1).



**Figure 3. WASM 3 Original and Revised Project Schedule
Amendment No. 1**



Original Contract Schedule █
 Amendment 1 Schedule █

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 18, 2018
SUBJECT: Wachusett Aqueduct Pumping Station
BHD/BEC JV 2015, A Joint Venture
Contract 7157, Change Order 39



COMMITTEE: Water Policy and Oversight

 INFORMATION
 X VOTE

A. Navanandan, P.E. Chief Engineer
Corinne M. Barrett, Director, Construction
Vincent Spada. Construction Coordinator
Preparer/Title



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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 39 to Contract 7157, Wachusett Aqueduct Pumping Station, with BHD/BEC JV 2015, A Joint Venture, for a lump sum amount of \$508,549.00, increasing the contract amount from \$49,396,286.29 to \$49,904,835.29, with no increase in contract term.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 7157 in an amount not to exceed the aggregate of \$250,000, in accordance with the Management Policies and Procedures of the Board of Directors.

DISCUSSION:

The water transmission system between the Wachusett Reservoir and the John J. Carroll Water Treatment Plant consists of the Cosgrove Tunnel and the Wachusett Aqueduct. The Cosgrove Tunnel provides the primary raw water supply to the Carroll Plant and the Wachusett Aqueduct is an emergency back-up. Although rehabilitation of the Wachusett Aqueduct in 2003 allowed its use during a short winter duration so that the Cosgrove Tunnel could be connected to the Carroll Plant, it is limited in its flow capacity (approximately 240 MGD) and it cannot meet the grade line requirements of the Carroll Plant in the event of an emergency. Since the Wachusett Aqueduct operates at a lower hydraulic grade line than the Cosgrove Tunnel, water cannot flow from it into the Carroll Plant's ozone contactors without pumping. If the Wachusett Aqueduct were needed in an emergency, the Carroll Plant would have to be shut down and temporary chlorination facilities would have to be installed at the upstream-end of the aqueduct, at the base of the Wachusett dam, to provide disinfection. Demand management would be required during periods of summer high water use if demand exceeded the aqueduct's capacity.

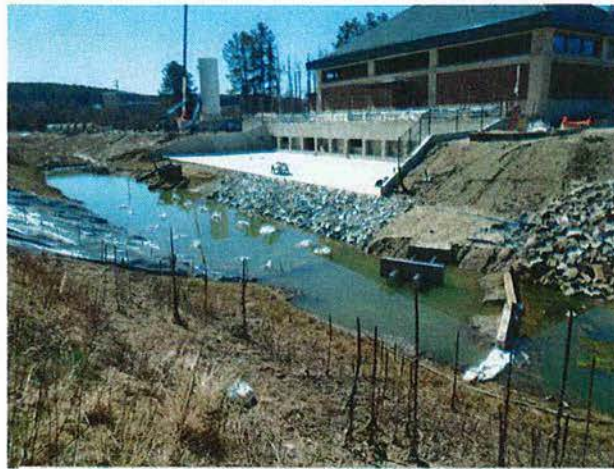
Once completed, this new pumping station will allow the Wachusett Aqueduct to provide up to 240 MGD of redundant capacity for the Cosgrove Tunnel. Completion of the Hultman Aqueduct rehabilitation and interconnections project provided redundancy for the MetroWest Water Supply Tunnel. Together, these projects will provide water transmission redundancy from Wachusett Reservoir to the metropolitan tunnel system.

This Change Order

Change Order 39 consists of the following two items:

Remove and Dispose of Soft Sediment Materials from the Bottom of the Forebay; Furnish, Install and Secure Geotextile Fabric; and Place Rip Rap along the Forebay Bottom \$360,299.00

The contract documents require the Contractor to furnish and install rip rap along the southern bank of the forebay at the end of the pump station concrete spillway. The rip rap provides erosion protection along the forebay channel and bank of the forebay. When the pump station is operating, water is flowing from the pump station inlet channel into the forebay. The water is discharged into the forebay in a perpendicular direction to the forebay from south to north and travels across the forebay to the north bank. The contract documents omitted rip rap along the northern bank of the forebay which is needed for scour protection of the channel bottom and erosion control protection. The Contractor must now furnish and install rip rap across the forebay to the top of the north bank which includes removing and disposing of the soft sediment materials from the bottom of the forebay, furnishing, installing and securing geotextile fabric and placing the rip rap along the forebay bottom.



Section of Forebay where Rip Rap is to be added

This item has been identified by MWRA staff as an omission. MWRA staff, the Consultant, and the Contractor have agreed to a lump sum amount of \$360,299.00 for this additional work with no increase in contract term. The Contractor proceeded with this work at its own risk in order to continue with the remainder of the contract work.

Perform Vacuum Excavation Test Pits and Furnish and Install
Modified Air/Vacuum Valve Vault

\$148,250.00



Air Release valve piping

The contract documents require the Contractor to furnish and install two 5-foot by 5-foot air/vacuum valve vaults. During construction, it was determined that the field locations of existing underground electrical duct banks and electrical manholes in the vicinity of the proposed air/vacuum valve vaults were not as shown on the facility drawings. To determine the actual location of the existing utilities, the Contractor performed vacuum excavation test pits. The Contractor discovered that the actual location of the existing electrical duct bank conflicted with the location for the proposed air/vacuum valve vaults. A new location for the air/vacuum valve vaults was investigated by the Consultant, but a suitable location was not available.

As a result, the design for the new vaults was modified such that the two vaults were combined into one vault with an 8-foot by 8-foot riser section, 3 foot by 3-foot access hatch and galvanized grating and framing. The two 5-foot by 5-foot vaults which the Contractor purchased will be removed and disposed of.

This item has been identified by MWRA staff as an unforeseen condition. MWRA staff, the Consultant, and the Contractor have agreed to a lump sum amount of \$148,250.00 for this additional work with no increase in contract term. The Contractor proceeded with this work at its own risk in order to continue with the remainder of the contract work.

CONTRACT SUMMARY:

	<u>Amount</u>	<u>Time</u>	<u>Dated</u>
Original Contract:	\$47,011,000.00	1,260 Days	03/01/16
Change Orders:			
Change Order 1*	(\$1,500,000.00)	(180) Days	07/25/16
Change Order 2*	\$14,766.00	0 Days	10/26/16
Change Order 3*	\$24,822.00	0 Days	11/16/16
Change Order 4*	\$199,629.92	0 Days	12/12/16
Change Order 5	\$328,039.00	0 Days	12/23/16
Change Order 6*	\$23,202.00	0 Days	01/18/17
Change Order 7*	\$24,533.12	0 Days	02/06/17
Change Order 8*	\$189,495.00	0 Days	03/06/17
Change Order 9	\$100,079.80	0 Days	03/23/17
Change Order 10*	\$24,521.45	0 Days	04/03/17
Change Order 11*	\$24,455.00	0 Days	04/12/17
Change Order 12*	\$24,659.00	0 Days	04/19/17
Change Order 13*	\$22,491.00	0 Days	05/03/17
Change Order 14*	\$19,515.00	0 Days	05/22/17
Change Order 15	\$306,664.00	0 Days	06/12/17
Change Order 16*	\$200,000.00	0 Days	07/24/17

Change Order 17*	\$23,350.00	0 Days	07/27/17
Change Order 18	\$608,007.00	0 Days	07/27/17
Change Order 19*	\$19,866.00	0 Days	08/14/17
Change Order 20*	\$222,828.00	0 Days	10/04/17
Change Order 21	\$285,385.00	0 Days	10/04/17
Change Order 22*	\$19,436.00	0 Days	10/24/17
Change Order 23*	\$24,888.00	0 Days	10/30/17
Change Order 24*	\$183,838.00	0 Days	11/28/17
Change Order 25	\$290,963.00	0 Days	11/29/17
Change Order 26*	\$22,404.00	0 Days	12/12/17
Change Order 27*	\$21,710.00	0 Days	01/03/18
Change Order 28*	\$23,825.00	0 Days	02/22/18
Change Order 29*	\$24,931.00	0 Days	02/22/18
Change Order 30*	\$15,297.00	0 Days	03/20/18
Change Order 31*	\$141,686.00	0 Days	05/14/18
Change Order 32	\$292,910.00	0 Days	06/06/18
Change Order 33*	\$23,068.00	0 Days	06/18/18
Change Order 34*	\$24,317.00	0 Days	06/18/18
Change Order 35*	\$24,773.00	0 Days	06/28/18
Change Order 36*	\$23,511.00	0 Days	07/09/18
Change Order 37*	\$18,563.00	0 Days	07/09/18
Change Order 38*	\$22,858.00	0 Days	07/11/18
Change Order 39	<u>\$508,549.00</u>	<u>0 Days</u>	<u>Pending</u>
Total of Change Orders:	\$2,893,835.29	(180) Days	
Adjusted Contract:	\$49,904,835.29	1,080 Days	

*Approved under delegated authority

If Change Order 39 is approved, the cumulative total value of all change orders to this contract will be \$2,893,835.29 or 6.2% of the original contract amount. Work on this contract is 92% complete.

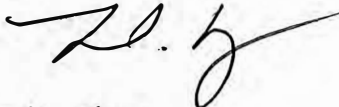
BUDGET/FISCAL IMPACT:

The FY19 CIP includes a budget of \$49,876,796 for Contract 7157. Including this change order for a lump sum amount of \$508,549, the adjusted sub phase total will be \$49,904,835.29 or \$28,039.29 over budget. This amount will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

The MBE/WBE participation requirements for this project were established at 3.4% and 3.8%, respectively.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: July 18, 2018
SUBJECT: Northern Intermediate High Section 110 – Stoneham
Albanese D&S Inc.
Contract 7067, Change Order 2

COMMITTEE: Water Policy and Oversight

INFORMATION
 VOTE

Corinne M. Barrett, Director, Construction
Jeremiah Sheehan, Construction Coordinator
Preparer/Title


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

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 2 to Contract 7067, Northern Intermediate High Section 110 Stoneham, with Albanese D&S Inc., for an amount not to exceed \$350,000.00 increasing the contract amount from \$22,757,300.00 to \$23,107,300, with no increase in contract term.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 7067 in an amount not to exceed the aggregate of \$250,000, in accordance with the Management Policies and Procedures of the Board of Directors.

DISCUSSION:

MWRA's Northern Intermediate High (NIH) service area provides water to the communities of Reading, Stoneham, Wakefield, Wilmington, Winchester, and Woburn through a single 48-inch pipeline, which is fed by the Gillis Pump Station, at Spot Pond in Stoneham. Although some of these communities are partially served by MWRA, the loss of this single transmission main would result in a rapid loss of service in Reading, Stoneham and Woburn, and potential water restrictions in Wakefield, Wilmington and Winchester.

The existing main pipeline that serves this area (Section 89) is a three-mile-long, four-foot diameter, pre-stressed concrete cylinder pipe (PCCP) transmission main with limited redundancy other than the low-capacity, century-old Section 29 that parallels its route for a short distance. Due to the lack of redundancy, Section 89 cannot be taken out of service for inspection or for repairs. The project goal is to design and construct a new pipeline that will provide redundancy to the community meters so that Section 89 can be removed from service for inspection and rehabilitation. Under Contract 7067, or Contract 4, the Contractor is excavating and installing 13,215 linear feet of 48-inch water transmission main connecting to previous MWRA construction contracts in the Town of Stoneham as shown on the attached map.

This Change Order

Change Order 2 consists of the following item:

Furnish EBAA Series 1100 Mechanical Joint Restraint Devices Not-to-Exceed \$350,000

The contract documents include specification requirements for mechanical joint restraint devices for use with ductile iron pipe installation. The Contractor included the cost of furnishing One-Lok Slide Wedge Restraint devices manufactured by Sigma in its bid and this product met the requirements of the contract specifications. Significant issues arose during the pressure testing on the previous NIH pipeline contract (7478) that also used the same restrained joint fittings. These issues included multiple leaks at the restrained joints, and significant time spent re-excavating to locate the leaks, repair, and re-test. This resulted in additional impacts to the host community. Staff have performed an investigation of alternative products that could produce a more desirable result. Staff are of the opinion that the Series 1100 ductile iron mechanical joint restraint manufactured by EBAA is a more appropriate product for the challenges associated with this project such as the multiple bends required in the pipe alignment due to utility locations. The installation requirements for the EBAA restraint are more stream-lined and therefore less restrictive which should result in a better installed product. Therefore, staff recommend furnishing 48-inch Series 1100 ductile iron mechanical joint restraint manufactured by EBAA in lieu of the One-Lok Slide Wedge Restraint.

The approved PCO for this item has been identified by staff as a design change after commencement of the contract. MWRA staff, the Consultant, and the Contractor have agreed to an amount not to exceed \$350,000.00 for this additional work with no increase in contract term. Staff and the Contractor are currently negotiating the final lump sum cost of this item.

CONTRACT SUMMARY:

	<u>Amount</u>	<u>Time</u>	<u>Dated</u>
Original Contract:	\$22,737,300.00	1,000 Days	07/31/17
Change Orders:			
Change Order 1*	\$20,000.00	0 Days	Pending
Change Order 2	<u>\$350,000.00</u>	<u>0 Days</u>	Pending
Total of Change Orders:	\$370,000.00	0 Days	
Adjusted Contract:	\$23,107,300.00	1,000 Days	

*Approved under delegated authority

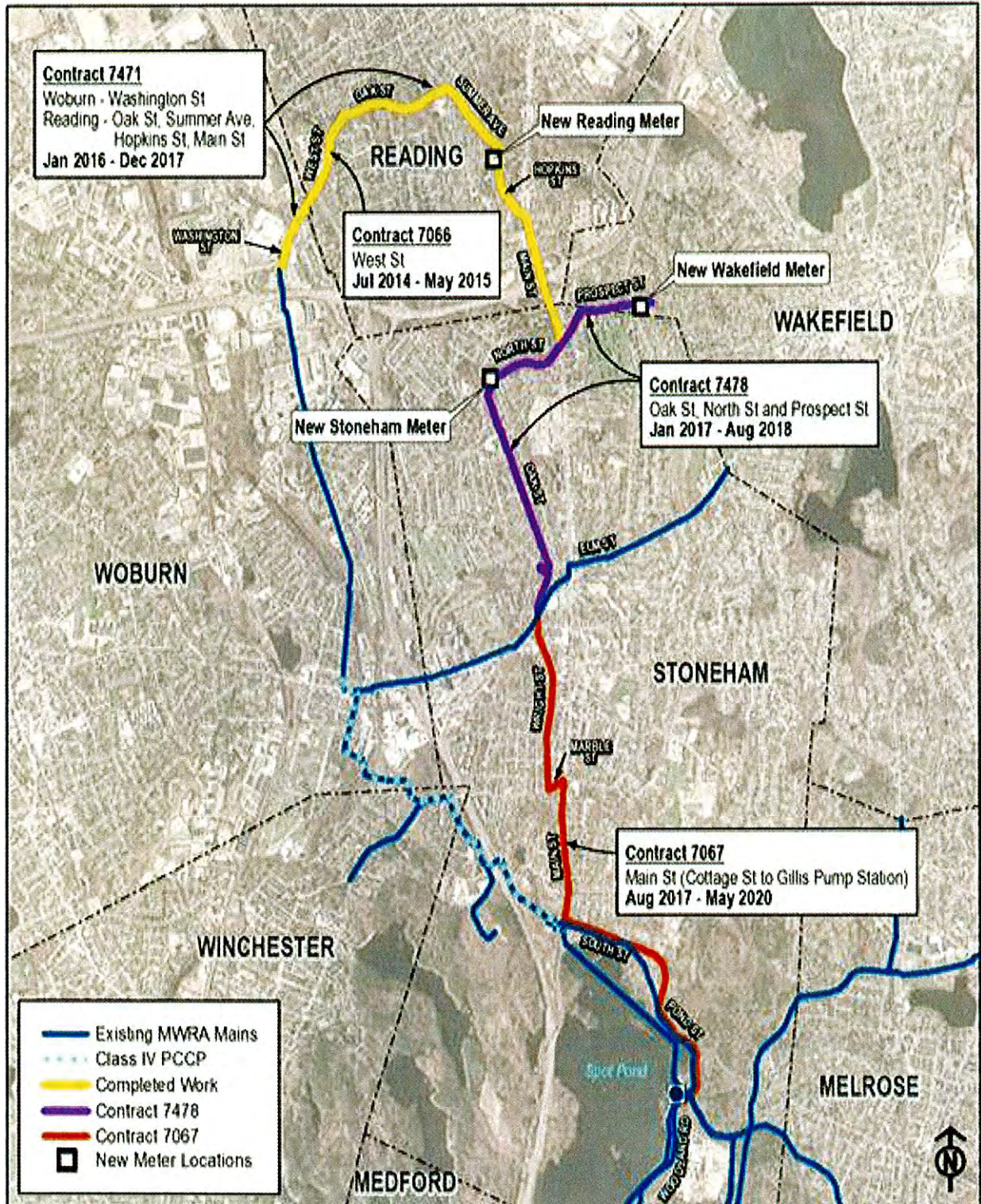
If Change Order 2 is approved, the cumulative value of all change orders to this contract will be \$370,000.00 or 1.63% of the original contract amount. Work on this contract is approximately 24% complete.

BUDGET/FISCAL IMPACT:

The FY19 Capital Improvement Program budget includes \$22,737,300 for Contract 7067. Including this change order for \$350,000, the adjusted subphase total is \$23,107,300 or \$370,000 over budget. This amount will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

The MBE/WBE participation requirements for this project were established at 7.24% and 3.6%, respectively. The Contractor has been notified that these requirements are still expected to be met.





MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey
Executive Director

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

PERSONNEL & COMPENSATION COMMITTEE MEETING

to be held on

Wednesday, July 18, 2018

Chair: J. Wolowicz
Vice-Chair: K. Cotter
Committee Members:
J. Carroll
P. Flanagan
J. Foti
A. Pappastergion
H. Vitale
J. Walsh

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: Immediately following Water Committee

AGENDA

A. Information

1. Tunnel Redundancy Department Staffing

B. Approvals

1. PCR Amendments – July 2018
2. Appointment of Deputy Contracts Manager
3. Appointment of General Counsel

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the

Personnel and Compensation Committee

June 20, 2018

A meeting of the Personnel and Compensation Committee was held on June 20, 2018 at the Authority headquarters in Charlestown. Committee Chair Wolowicz presided. Present from the Board were Messrs. Blackmon, Carroll, Foti, Pappastergion, Peña, Vitale and Walsh. Messrs. Cotter and Flanagan were absent. Among those present from the Authority staff were Frederick Laskey, Steven Remsberg, David Coppes, John Vetere, Carolyn Fiore, Patterson Riley, Karen Gay-Valente, Michele Gillen, Kathleen Chaloux, and Kristin MacDougall. The meeting was called to order at 10:59 a.m.

Information

Staff made a brief verbal presentation concerning the Massachusetts Equal Pay Act which goes into effect on July 1, 2018. There was general discussion and questions and answers. (Mr. Carroll temporarily left the meeting during discussion.)

Approvals

* PCR Amendments – April 2018

Staff described the need to change two positions in the Position Control Register to reflect organizational changes in the Operations Division and the Administration Division.

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

* Appointment of Director of Laboratory Services, Operations Division

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

* Appointment of Director of Waterworks, Operations Division

* Committee recommendation approved by the Board on June 20, 2018

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

* Appointment of Director of Wastewater, Operations Division

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

* Appointment of Director, Human Resources, Administration Division

There was brief discussion and questions and answers (Mr. Pappastergion left the meeting during discussion).

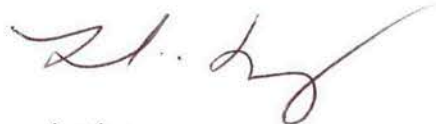
The Committee recommended approval (ref. P&C B.5)

The meeting adjourned at 11:32 a.m.

* Committee recommendation approved by the Board on June 20, 2018

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 18, 2018
SUBJECT: Proposed Tunnel Redundancy Program Organization



COMMITTEE: Personnel & Compensation

X INFORMATION
 VOTE

Andrea Murphy
Director, Human Resources


Kathleen Murtagh, P.E.
Director of Tunnel Redundancy

RECOMMENDATION:

For information only.

DISCUSSION:

On February 15, 2017, the Board of Directors voted to approve the MWRA staff-preferred 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). As recommended by the MWRA Advisory Board, a separate Tunnel Redundancy Program department within the MWRA, independent of existing engineering and construction departments, will oversee the planning, design and construction of the project.

On April 18, 2018 the Board of Directors approved the appointment of a Director for the Tunnel Redundancy Program (Kathleen Murtagh) to run the program. This staff summary lays out the basic organizational structure of the department and describes the creation of three key positions which are proposed in a separate staff summary.

The proposed Organization of the Tunnel Redundancy Program Department is shown on the attached chart along with areas of primary responsibility. The proposed organization currently includes the creation of three new positions; a new Director of Design and Construction (Non-union, Grade 16), a new Manager of Geotechnical and Tunneling (Non-union, Grade 14), and a new Manager of Design (Non-union, Grade 14). These positions will supplement Bethany Card, Director of Environmental and Regulatory Affairs, to oversee key aspects of the authorized early project work including Massachusetts Environmental Policy Act (MEPA) review, preparation for all environmental permits required from local, state, and federal authorities, geotechnical investigation, and preliminary design. Additional positions, including a Manager of Construction, will be added to the department organization as the project evolves.

BUDGET/FISCAL IMPACTS:

The FY2019 CEB includes \$410,000 for the Tunnel Redundancy Program wages and salaries. The final budgetary impact cannot be determined until after future decisions are made regarding backfills and subsequent promotions.

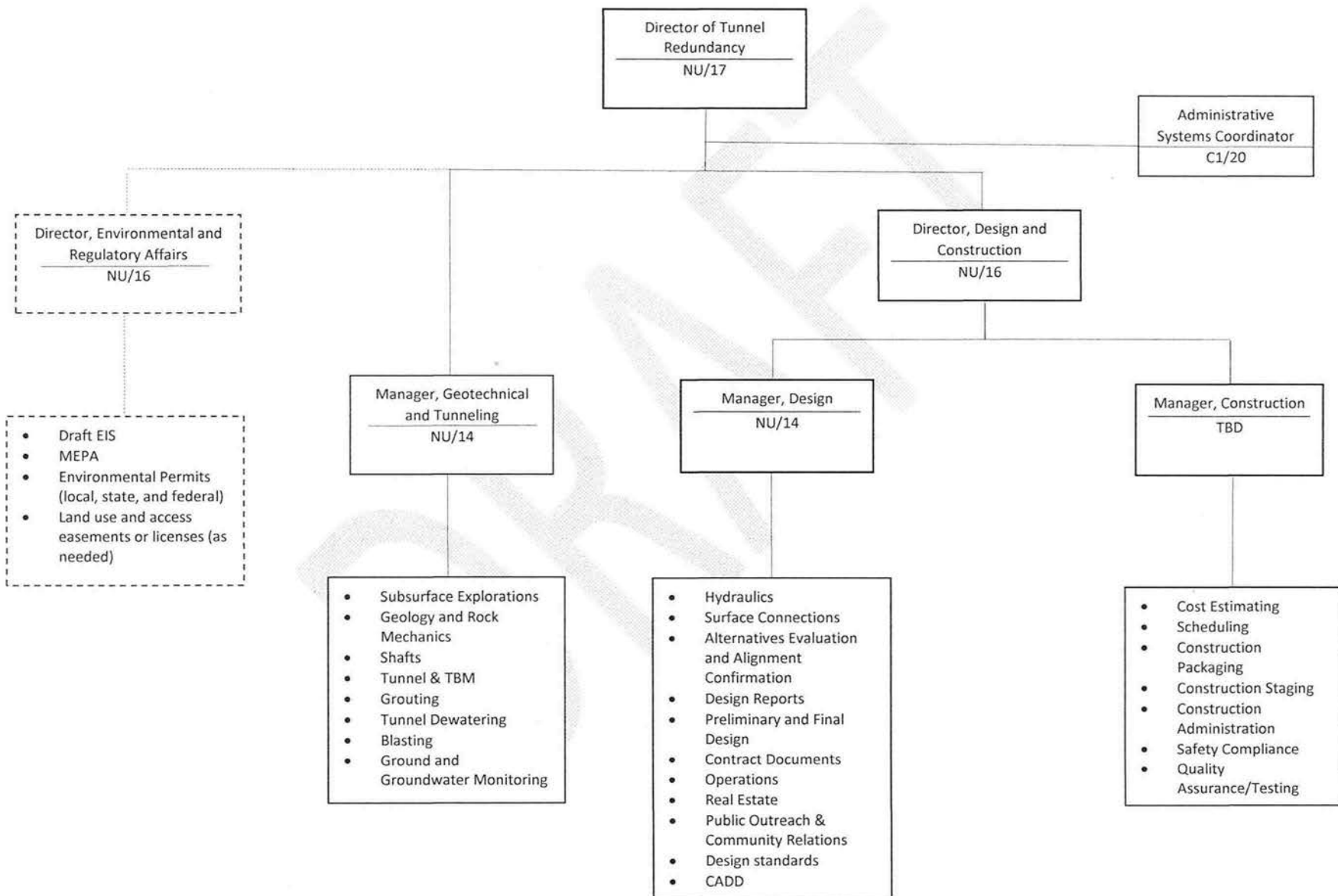
ATTACHMENT:

Tunnel Redundancy Program Department, Proposed Organizational Chart

Tunnel Redundancy Program Department

Proposed Organizational Chart

July 18, 2018

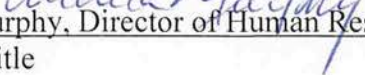



STAFF SUMMARY

TO: Board of Director
FROM: Frederick A Laskey, Executive Director
DATE: July 18, 2018
SUBJECT: July PCR Amendments



COMMITTEE: Personnel and Compensation


Andrea Murphy, Director of Human Resources
Preparer/Title

 INFORMATION
 X VOTE

Michele S. Gillen
Director, Administration

RECOMMENDATION:

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

DISCUSSION:

The Position Control Register lists all positions of the Authority, filled and vacant. It is updated as changes occur and it is published at the end of each month. Any changes to positions during the year are proposed as amendments to the PCR. All amendments to the PCR 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.

July PCR Amendments

The eight PCR changes include three new positions in the Tunnel Redundancy Program department, which are described in further detail in a separate staff summary; four in the Operations Division; and one in the Administration Division. The Operations Division amendments reflect changing three positions to address staffing needs and one union settlement. In the Administration Division, there is one PCR amendment to reflect a title change in the MIS Department.

The amendments are:

Tunnel Redundancy Program

1. To create a new position of Director, Design and Construction, Non-Union, Grade 16 position.
2. To create a new position of Manager, Geotechnical and Tunneling, Non-Union, Grade 14 position.
3. To create a new position of Manager, Design, Non-Union, Grade 14 position.

Operations Organizational Changes

1. Title and grade change to a vacant position in Deer Island Administration, Operations Division, Financial Planner, Unit 6, Grade 8, to Senior Financial Analyst, Unit 6 Grade 10, to address staffing needs.
2. Title change to a vacant position in the TRAC Department, Operations Division, 2. Industrial Coordinator, Unit 9, Grade 23, to Environmental Analyst, Unit 9 Grade 23 in 3. Environmental & Regulatory Affairs to address staffing needs.
3. Title and grade change to a filled position in ENQUAL, Operations Division, Environmental Informational Analyst, Unit 6, Grade 9, to Data Management Coordinator, Unit 6 Grade 10, as part of a union settlement.
4. Title change to a vacant position in the Deer Island Department, Operations Division, Area Manager, Unit 6, Grade 12, to Manager, Administration & Finance, Unit 6 Grade 12 to address staffing needs.

Administration Organizational Change

The amendment is:

1. Title change to a vacant position in the MIS Department, Administration Division, Database Analyst/Programmer, Unit 6, Grade 11, to Systems Analyst Programmer III to address staffing needs.

The four amendments require Board approval after review by the Personnel and Compensation Committee.

BUDGET/FISCAL IMPACT:

The annualized budget impact of this PCR amendment will range in cost of \$200,170 to a cost of \$482,641. 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 FY19 Wages and Salaries budget.

ATTACHMENTS:

Old Job Descriptions
New Job Descriptions

**MASSACHUSETTS WATER RESOURCES AUTHORITY
POSITION CONTROL REGISTER AMENDMENTS
FISCAL YEAR 2019**

PCR AMENDMENTS REQUIRING PERSONNEL & COMPENSATION COMMITTEE APPROVAL - July 18, 2018

Number	Current	V/F	Type	Current Title	UN	GR	Amended Title	UN	GR	Current/Budget	Estimated		Estimated Annual		Reason For Amendment
	PCR #									Salary	New Salary	\$ Impact			
P1	2210011	V	T	Industrial Coordinator	9	23	Environmental Analyst	9	23	\$98,292	\$71,532	\$98,292	-\$26,760	\$0	To address staffing needs related to environmental and regulatory affairs.
P2	2250009	F	T, G	Environmental Information Analyst	6	9	Data Management Coordinator	6	10	\$80,560	\$88,639	\$88,639	\$8,079	\$8,079	Per union settlement agreement.
P3	2988033	V	T	Area Manager	6	12	Manager, Finance & Admin	6	12	\$113,864	\$75,143	\$113,864	-\$38,721	\$0	To reflect the staffing needs for the department.
P4	8610043	V	T	Database Analyst/Programmer	6	11	Systems Analyst/Programmer III -	6	11	\$103,540	\$68,328	\$103,540	-\$35,212	\$0	To change title to match recommended organizational changes and job requirements to reflect Maximo responsibilities.
PERSONNEL & COMP COMMITTEE TOTAL=					4						SUBTOTAL:		-\$92,614	\$8,079	

PCR AMENDMENTS REQUIRING BOARD APPROVAL- July 18, 2018

Number	Current	V/F	Type	Current Title	UN	GR	Amended Title	UN	GR	Current/Budget	Estimated		Estimated Annual		Reason For Amendment
	PCR #									Salary	New Salary	\$ Impact			
B1	N/A	N/A	N/A	N/A	N/A	N/A	Director, Design and Construction	NU	16	\$0	\$118,093	\$173,157	\$118,093	\$173,157	To create a new position to support the multi-year Tunnel Redundancy Program.
B2	N/A	N/A	N/A	N/A	N/A	N/A	Manager, Geotechnical and Tunneling	NU	14	\$0	\$93,254	\$141,723	\$93,254	\$141,723	To create a new position to support the multi-year Tunnel Redundancy Program.
B3	N/A	N/A	N/A	N/A	N/A	N/A	Manager, Design	NU	14	\$0	\$93,254	\$141,723	\$93,254	\$141,723	To create a new position to support the multi-year Tunnel Redundancy Program.
B4	2945017	V	T, G	Financial Planner	6	8	Sr Financial Analyst	6	10	\$67,401	\$62,083	\$94,075	-\$5,318	\$26,674	To reflect staffing needs for the department
BOARD TOTAL =					4						SUBTOTAL:		\$299,283	\$483,277	
GRAND TOTAL =					8						TOTAL ESTIMATED COSTS:		\$206,669	\$491,356	

OLD

**MWRA
POSITION DESCRIPTION**

POSITION: Industrial Coordinator
DIVISION: Operations
DEPARTMENT: Toxic Reduction and Control (TRAC)

BASIC PURPOSE:

Conducts inspections and audits of commercial and industrial facilities and other sewer dischargers. Writes permits for issuance to sewer dischargers and others subject to MWRA regulations. Coordinates with and refers matters requiring escalated enforcement to enforcement staff.

SUPERVISION RECEIVED:

Works under the general supervision of a Regional Manager

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Conducts inspections of industry and other sewer dischargers and drafts resulting reports.
- Evaluates the adequacy of permit applications, notices of intent to discharge, and similar documents.
- Utilizes information gathered during inspections and relevant background information, writes permits (including sewer use, landfill, temporary construction site, group permits and others as assigned) for issuance to sewer dischargers and others subject to MWRA regulations. Integrates inspection, sampling and enforcement activities to develop information for permit revisions, new permit issuance, and one time only discharge authorizations.
- Uses TRAC's Pretreatment Information Management Systems (PIMS) to draft permit, and to gather current information relating to permits and inspections.
- Tracks permits through the required approvals to ensure the permit issuing cycle meets

established criteria.

- Assures that industrial surveys are complete and up-to-date in an assigned area of responsibility and that sewer dischargers have the requisite MWRA permits.
- Coordinates with and refers matters requiring escalated enforcement to enforcement staff.
- Reviews plans and specifications for industrial treatment facilities, including piping and instrumentation diagrams, to ensure conformance to accepted engineering practices, and explores opportunities for pollution prevention and source reduction actions by dischargers.
- Coordinates with other MWRA staff, within TRAC and from other MWRA sections, to provide support for specific sewer users.

SECONDARY DUTIES:

- Participates actively in TRAC multi-disciplinary work groups.
- Maintains accurate and current information relating to permits and inspections on TRAC databases.
- Drafts appropriate reports, meeting memoranda, file summaries, and other documents.
- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year undergraduate degree in chemistry, biology, environmental sciences or related engineering field or at least four (4) years of related experience is required; and
- (B) Three (3) to five (5) years experience in sanitary engineering and sampling practices; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge and understanding of industrial and municipal treatment systems, source reduction and pollution prevention principles (including the toxic use reduction planning and certification process), as well as applicable federal, state and MWRA regulations.
- (B) Strong written and oral communication skills.

- (C) Ability to work with computers, including word-processing, spreadsheet, and database programs.

SPECIAL REQUIREMENTS:

Valid Massachusetts Class D Motor Vehicle Operators License.

TOOLS AND EQUIPMENT USED:

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 regularly is required to sit or stand and talk or hear. The employee is occasionally required to walk; climb or balance; stoop, kneel, crouch, or crawl; and 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, distance vision, color vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT:

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

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

April 2018

NEW

**MWRA
POSITION DESCRIPTION**

POSITION: Environmental Analyst
DIVISION: Operations
DEPARTMENT: Environmental and Regulatory Affairs

BASIC PURPOSE:

Supports the Director of Environmental and Regulatory Affairs in evaluating local, state, and federal environmental regulations and permit requirements related to MWRA operations. This job also includes assisting in the oversight and implementation of operating procedures for water and wastewater expansion.

SUPERVISION RECEIVED:

Works under the general supervision of the Director of Environmental and Regulatory Affairs.

SUPERVISION EXERCISED:

May oversee contracts or supervise one or more interns as needed.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Assists with environmental permitting and operational decisions based on research of local, state and federal requirements. Specifically, the Massachusetts Environmental Policy Act, the Wetlands Protection Act, federal and state Clean Waters Act, federal and state Clean Air Act requirements, and storm water permit requirements.
- Prepares updates to MWRA operational materials to ensure work is conducted in a manner that is consistent with the Massachusetts Endangered Species Act and Natural Heritage & Endangered Species Program guidelines.
- Researches and summarizes information on whether MWRA project (construction) activities trigger MEPA thresholds and guides project managers and consultants on the required permitting associated with those thresholds.

- Review and oversee notices of intent prepared for local conservation commissions for MWRA projects.
- Assists senior managers in providing reporting recommendations under the Massachusetts Contingency Plan requirements.
- Assist in management of water and wastewater expansion efforts.
- Prepares reports, technical presentations, answers to inquiries, and letters for the Department Director.
- Tracks permits for MWRA projects, including reporting requirements, due dates, and responsible parties. Keeps MWRA staff abreast of impending deadlines.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college degree in environmental science, political science, public policy or administration, environmental engineering or equivalent degree in environmental science or related field. A master's degree preferred; and
- (B) Three (3) to five (5) years of experience in interpreting or applying environmental regulations; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of water and wastewater treatment systems, watershed management, and environmental regulations.
- (B) Excellent computer skills in Oracle, Access and Excel and working knowledge of MS Word and Power Point.
- (C) Demonstrated abilities to work as part of a team, to develop and maintain productive working relationships with external parties, and to function independently with minimal

supervision.

- (C) Excellent written and communication skills as well as good interpersonal and organizational skills.

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 is frequently 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 performance of this job, although the employee may have the opportunity to participate in field activities that involve lifting weight (e.g. water, sediment or other environmental samples) or exerting force. 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.

OLD

**MWRA
POSITION DESCRIPTION**

POSITION: Environmental Information Analyst

DIVISION: Operations

DEPARTMENT: Environmental Quality (ENQUAD)

BASIC PURPOSE:

Assists in developing computing resources in ENQUAD by loading and checking monitoring data and producing information from the LIMS and Oracle databases. Provides technical guidance and training to section staff. Coordinates ENQUAD/LIMS data management between ENQUAD clients and the Central Laboratory.

SUPERVISION RECEIVED:

Works under the general supervision of the Program Manager, Marine Data.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Assists in maintaining a consistent database structure and quality standards for influent, effluent, sludge and environmental data and coordination with MIS.
- Acts as client coordinator between ENQUAD staff and the Laboratory Information System, assisting in project set-up, project changes and the data transfer.
- Coordinates among ENQUAD, Department of Laboratory Services, TRAC, Residuals and Operations departments to ensure the transfer and entry of data into division databases.
- Assists in producing annual summary reports on NPDES compliance and industrial waste.
- Conducts ad hoc and routine analyses of wastewater and receiving water quality data to evaluate effects of MWRA discharges on the environment.

- Assists in the preparation of regular monthly informational reports on plant performance, effluent quality and environmental quality for Authority management and staff, the regulatory community and the general public.
- Trains staff to use Oracle and desktop tools to access Laboratory Information Management System (LIMS) and Operations Management System (OMS).
- Implements automated procedures for downloading and formatting data from Oracle databases for routine and ad hoc reports and graphics production, using Oracle, MicroCal Origin, S-Plus, Excel, and other commercial packages.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college degree in engineering, chemistry, biology, environmental science, or a related field is required. Appropriate graduate degree preferred; and
- (B) Four (4) to six (6) years of experience in using relational databases; or
- (C) Any equivalent combination of education or 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 ability to 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 occasionally works in an office environment. The noise level in the work environment is a moderately quiet office setting.

April 2007



**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.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- 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.

- Develops computer applications to automate loading, checking analysis and reporting of data from various sources.
- 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. Analyses environmental data to produce information for NPDES permit compliance.

- 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.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM REQUIREMENTS

EDUCATION 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 MATLAB, 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.

July, 2018

OLD

**MWRA
POSITION DESCRIPTION**

POSTION: Area Manager

DIVISION: Operations

DEPARTMENT:

BASIC PURPOSE:

Manages maintenance activities (labor, materials, and services) and monitors performance against operational needs and requests.

SUPERVISION RECEIVED:

Works under general supervision of the Maintenance Manager.

SUPERVISION EXCERCISED:

Exercises close supervision of assigned operations/maintenance staff.

ESSENTIAL DUTIES AND RESPONSIBILITES:

- Manages a group of maintenance personnel who perform tasks related to maintenance and construction.
- Coordinates with other managers, supervisors, work coordination staff and others for optimal functioning of assigned staff.
- Monitors "Work-In-Progress" by coordinating with Maintenance Supervisors, Operations Managers and Planner Schedulers, and monitors backlog with object of minimization.
- Prepares budget for assigned cost center and monitors performance against approved budget. Approves and tracks spending, justifies variances from budget, and provides support documentation as requested.
- Reviews, monitors, evaluates work performed, and recommends appropriate improvements on equipment, techniques, and procedures.
- Provides project management of outside contract services as assigned.

- Provides technical input for major maintenance projects and reviews new construction proposals to insure maintainability.
- Reviews assigned employee performance according to MWRA procedures as established and maintained by the Human Resources Department.
- Recommends upgrades to plant equipment and facilities to ensure continued optimal operation. Includes tracking major projects and the coordination of outside contractors, as required.
- Promotes the MWRA Safety Policy and Program by participating in and supporting activities as detailed by the Authority Safety Group.
- Acts as liaison between and promotes harmonious relations with other Maintenance Managers, Operations Managers, vendors and MWRA departments.
- Performs supervisory responsibilities of roving field crews and operational personnel located within an operational control center (OCC) as needed.
- Coordinates shutdown and start-up of process equipment in support of maintenance activities.
- Ensures plant cleanliness and makes rounds to ensure staff maintain plant facility.
- Schedules and works overtime as required.
- Needs to be available during any emergency.
- Provides training to assigned staff.
- Directs remedial action in all emergencies.
- Assists employee with procurement of tools, parts and materials.
- Operates motor vehicles, such as vans and pick-up trucks, to transport materials to work sites, pick up equipment, etc.
- Generates inspection lists and maintenance reporting through the Computerized Maintenance Management System.
- Inspects and troubleshoots various systems and equipment

SECONDARY DUTIES:

- Assists employees with the preparation of injury and illness reports, safety work orders, and maintenance work order requests, reviews requests for completeness and accuracy.
- Assists in maintaining harmonious labor management relations through proper application of collective bargaining agreement provisions and established personnel policies.
- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year degree in maintenance management, or any related field; and
- (B) Seven (7) – nine (9) direct experience of principles, procedures, methods, equipment and materials used in the operation, repair and maintenance of a large municipal wastewater or water treatment facility; and
- (C) Two (2) must be in a supervisory capacity; ore
- (D) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) A working knowledge of the methods, techniques, operations, systems, equipment, principles and practices of wastewater or water treatment.
- (B) Ability to plan, organize, direct, train and assign duties to subordinates, as obtained through successful completion of supervisory training program or an approved substitution.
- (C) Extensive knowledge of safety practices and applications in wastewater treatment operations.
- (D) Ability to plan, organize, direct, train and assign duties to subordinates.

SPECIAL REQUIREMENTS:

- A valid Class D Massachusetts Motor Vehicle Operator License.

TOOLS AND EQUIPMENT USED:

Office equipment as normally associated with the use of telephone, mobile radio, beeper, 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 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 more than 50 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 regularly works in outside weather conditions. The employee occasionally works near moving mechanic 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.

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

August, 2001

NEW

**MWRA
POSITION DESCRIPTION**

POSITION: Manager, Finance & Administration

DIVISION: Operations

BASIC PURPOSE:

Manages all CEB and CIP budgeting, payroll, and accounting functions for assigned department(s) within the Operations Division.

SUPERVISION RECEIVED:

Works under the general supervision of the Manager, Finance, with a matrix reporting relationship to the Director, DIWWTP.

SUPERVISION EXERCISED:

Exercises close supervision of budget and administrative staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Manages budget development process. Develops budget process, supervises budget staff, coordinates with approximately 25 managers, and recommends allocation of resources to meet department objectives. Acts as liaison with division budget staff, Budget Department staff, Treasury Department staff, and Advisory Board staff.
- Manages and carries out assigned department's CIP budget process, and helps to facilitate communication on project planning between department staff, Engineering & Construction staff, and/or Capital Engineering staff.
- Manages the process of developing Rates Planning Estimates by determining the CEB Impact of capital projects.
- Manages payroll process for the department including timesheet and check distribution, collection, and review. Makes sure that timesheet policies and procedures are properly followed.
- Manages staff performing accounting and administrative coordination functions such as

accruals, Accounts Payable, travel requests, general ledger monitoring, etc.

- Manages the department's financial control mechanisms to ensure spending is within budget and that cost controls measures are implemented when possible. Manages CEB & CIP variance reporting.
- Manages tracking of OT, sick time, personnel, utilities, communication, vehicle, chemical and fuel use data.
- Works with Work Coordination staff to ensure that purchases are coded correctly in accordance with the department's budget and sub cost center structure.
- Reviews all major purchases to make sure they fit within the department budget constraints.
- Manages and prepares financial analyses.
- Develops improved financial systems and databases for cost tracking and analysis.
- Manages or contributes to special projects such as LCCAs, staffing analyses, facility moves, etc.
- Performs management functions such as performance evaluations, interviews, staff development, workload planning.
- Manages data tracking and recordkeeping systems for administration & finance functions within the department.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four- (4) year college program in public/business administration or a related field. Advanced degree preferred; and
- (B) Six (6) to eight (8) years of experience in planning, financial analysis and accounting preferably in the public sector; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of budgetary planning, financial analysis and accounting.
- (B) Demonstrated effectiveness at facilitating major processes that involve coordinating with people across all levels of an organization.
- (C) Ability to supervise staff.
- (D) Excellent analytical, facilitation, oral and written communication skills.
- (E) Good understanding of computer systems. Adeptness with Excel and Word, and knowledge of Access. Knowledge of MWRA's budget system preferred.

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 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.

July 2018

OLD

**MWRA
POSITION DESCRIPTION**

JOB TITLE: Database Analyst Programmer

DEPARTMENT: MIS

DIVISION: Administration & Finance

BASIC PURPOSE:

Primary technical lead in support of assigned applications including, senior level programming, systems project management, application maintenance and database integrity. Defines and develops new functionality, database structures, application interfaces and the critically shared data elements through a comprehensive understanding of the MWRA's business functions.

SUPERVISION RECEIVED:

Works under the general supervision of the Data Resources Manager.

SUPERVISION EXERCISED:

Exercises close supervision of assigned project staff and technical resources.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Assures the quality and integrity of the production version of assigned applications in compliance with SDM and Change Control Procedures.
- Manages new release and maintenance support activities provided by the assigned applications vendor.
- Identifies new business functions and defines information technology solutions to address the new functions.
- Defines the logical and physical organization of assigned application related data which support targeted business functions.
- Develops database definition and program code required to implement new modules, reports, and interfaces with other systems.
- Coordinates and executes quality assurance and system acceptance procedures.
- Validates the content of data structures for data security and data accuracy.

- Manages assigned technical staff resources and combined user and MIS implementation task forces.
- Analyzes and specifies the operational requirements of assigned applications.
- Participates in the identification and evaluation of the storage medium organization techniques and access methods.

SECONDARY DUTIES:

Performs related duties as required.

DESIRED MINIMUM QUALIFICATIONS:

- (A) A four (4) year college program in computer science or related field. Advance degree preferred.
- (B) Six (6) to eight (8) years of experience with assigned systems and/or environmental software, preferably with vendor supplied packages. Expertise in minicomputer/server application and database programming.
- (C) Any equivalent combination of education and/or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of information system design and programming.
- (B) Proficiency with the following required: 3rd and 4th generation languages, Oracle Discover, Crystal Reports, Oracle DBMS, and SQL.
- (C) Proficiency with several of the following preferred: Pretreatment Information Management Systems (IPS), Black and Veatch Legacy PIMS, Beckman Lab Manager, LabWare LIMS, SAMS, Crystal Enterprise XI and GIS. Experience in SQL Server, J2EE, ASP.NET, and Power Builder development methodology is preferred .
- (D) Demonstrated experience in project management techniques and the ability to establish effective relationships with users.

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

The employee must frequently lift and/or move up to 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 noise level in the work environment is a moderately quiet office setting.

June 2008

NEW

**MWRA
POSITION DESCRIPTION**

POSITION: Systems Analyst/Programmer III
DIVISION: Administration & Finance
DEPARTMENT: Management Information System (MIS)

BASIC PURPOSE:

This position is responsible for analyzing, designing, developing, testing, implementing and maintaining software applications. This position is also responsible for the post implementation support including incident, performance, capacity, continuity and problem management activities. The Systems Analyst/Programmer III is responsible for the preparation, and maintenance of system documentation to be used by the IT staff and user community.

The Systems Analyst/Programmer III also serves as a team lead for assigned projects, maintains and upgrades project plans and schedules and ensures IT testing is scheduled and documented

SUPERVISION RECEIVED:

Works under the general supervision of the group supervisor. On specific IT projects may be supervised by a team lead or project manager.

SUPERVISION EXERCISED:

Exercises supervision of assigned vendor resources and IT project team.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

Application Development

- Reviews application design prior to buy or build decision to ensure service levels can be met and recommend any performance enhancements prior to implementation
- Codes, configures, implements, maintains and supports, new and upgrades to software applications (in-house and third party software) and interfaces to ensure processes and functionality of the applications comply with the organization's requirements, processes and standards.

- Develops and maintains technical documentation for applications as follows:
 - Design Model - Description of the system design. Comprised of a variety of work products, potentially including a deployment model, an object model, a physical data model (PDM), a security threat model, a system overview document, and a user interface model.
 - Source Code – The program code for the system.
 - Regression Test Suite - Collection of test cases, and the code to run them in the appropriate order. The regression test suite will include a wide range of tests, including acceptance tests, unit tests, system tests, etc.
 - Installation Scripts - Code for installing the system into pre- and post-production environments.
 - Release Notes - Summarize the things to know pertaining to the current release of the system.
 - Operations Procedure - Procedures and supporting information to operate the system once it is in production including continuity and disaster recovery procedures.
 - Support Reference- Used by support staff, such as trouble shooting guides, contact information for the development team, which enables them to support end users
- Responsible for developing a release package for all systems changes when transitioning to the production environments.

Post Implementation Support

- Supports the resolution of incidents and problems with software application functionality.
- Researches and corrects problems with the system applications code during production processing in an efficient and timely manner ensuring system recovery and integrity.
- Is available to execute and carry out IT Continuity and Disaster Recovery Plans
- Is a Technical Member of the Change Advisory Board (CAB) as needed.
- Serves as team lead for assigned projects and updates/maintains project plans and schedules as required.

Mentoring & Professionalism

- Maintains professional interaction with the application development staff, user and extended IT community (i.e. project teams) to ensure adequate system functionality, promote team participation and encourage user confidence in the Application Development Staff's quality of service.
- Provides assistance to Systems Analysts/Programmer I and II personnel ensuring that all technical design work, coding and testing are done in a manner that meets or exceeds design and testing requirements and standards.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college program in management science, engineering management, computer science or related fields; and
- (B) Five (5) to seven (7) years experience supporting enterprise wide applications as well as tier two applications.
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Extensive knowledge of programming languages, troubleshooting techniques, database structures, triggers and procedures, application server platforms, middleware and operating systems.
- (B) Knowledge of the following is desirable: MS .Net, J2EE, Crystal Reporting, ORACLE 11g, SQL Server and PL/SQL.
- (C) Analytical and interpersonal skills
- (D) Written and oral communication skills.

SPECIAL REQUIREMENTS:

- Information Technology Infrastructure Library (ITIL) Foundation Certification is required or the ability to obtain within one year.
- Formal training or certification in programming methodologies and System Development Life Cycle methodologies is required or the ability to obtain within one year.
- Microsoft Certified Solutions Developer (MCSD) or equivalent is required or the ability to obtain within one year of scheduled training.

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

October 2013

NEW

**MWRA
POSITION DESCRIPTION**

POSITION: Director, Design and Construction

DIVISION: Tunnel Redundancy

DEPARTMENT: Tunnel Redundancy

BASIC PURPOSE:

Directs and manages professional multi-disciplinary engineering and design for large and complex projects such as the Tunnel Redundancy Program as and rehabilitation and capital improvement of other water and wastewater facilities and infrastructure Applies professional engineering principles and exercises independent engineering judgment. Manages professional staff in the Tunnel Redundancy Program. Under the direction of the Director of Tunnel Redundancy, develops, implements, manages, coordinates, controls, and performs quality assurance/quality control (QA/QC) on policies and procedures for shaft and tunnel projects from planning through construction to ensure projects comply with approved schedules and budgets.

SUPERVISION RECEIVED:

Works under the general supervision of the Director of Tunnel Redundancy.

SUPERVISION EXERCISED:

Directly manages Tunnel Redundancy Program Unit professional staff and consultants.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Serves as the chief engineer during the planning, design and construction of the tunnel systems related to the Tunnel Redundancy Program. Develops concept designs and/or reviews designs received from consultant engineering firms which involves overseeing and managing schedules and budgets. Develops and implements program design standards including CADD.
- Determines all design delivery methods, specification types and schedules for all projects that support the Tunnel Redundancy Program. Provides and controls construction input into bid documents and process. Participates in consultant selection procedures and contract negotiations for projects. Additionally, oversees applicable phases of consultant selection for assigned projects including development of scope of services, specifications, cost estimates, work schedules, negotiations, and preparations of contract award

recommendations.

- Directs review of construction cost estimates and schedules.
- Oversees the professional engineering consultants' efforts to identify and mitigate potential sources of project delays during the construction phase.
- Performs engineering analysis, prepares engineering documents and writes project reports.
- Directs, develops, and administers the program management plan and program to ensure timely and cost-effective delivery of the Tunnel Redundancy Program. Develops and implements control and tracking methods and procedures to ensure project compliance with approved budgets and schedules. Provides timely reporting to senior management of the status of all projects, associated issues that impact schedules and budgets. Drafts proposals to address budget/schedule non-compliance issues.
- Ensures all projects are implemented using comprehensive work plans and resources by selecting consultant services groups that deliver a technically sound, controlled project on budget and on time. Ensures compliance with contract budgets, schedules and terms.
- Manages the efficient and cost effective execution of capital investment programs and projects.
- Establishes design schedules and budgets to ensure fundamental management controls, techniques, and accountability for projects related to the Tunnel Redundancy Program.
- Oversees the monitoring, control, schedule and budget for all projects using scope controls, performance reports, change requests and cost management and controls using integrated time/cost management controls.
- Reviews project change orders and cost estimates. Identifies new project funding requirements.
- Develops annual and supplementary budget requests for the Tunnel Redundancy Program in the Capital Improvement Program. Oversees and reviews projects' budgets and schedules for compliance with established goals.
- Develops safety procedures working closely with MWRA Safety staff.
- Ensures compliance with MWRA procedures and policies, local, state, and federal environmental regulatory requirements, and applicable engineering and construction standards.
- Develops and implements a Quality Assurance/Quality Control (QA/QC) plan for the program ensure a project's fast tracking and the effect on contract document preparation that will result in technical, effective and constructible projects.

- Directs quality management during design and construction process. Ensures that fundamentals and recommended practices and procedures for QA/QC are followed and managed by staff.
- Directs development and implementation of risk management plans for tunneling projects.
- Provides project development and overall oversight of professional engineering consultants related to the Tunnel Redundancy Program.
- Manages professional staff including assigning projects, evaluating performance, and planning staff development. Oversees professional engineering consultants working on the Tunnel Redundancy Program.
- Provides technical and administrative assistance to staff in the development and management of projects which include design and engineering services during construction.
- Works effectively with and ensures coordinates with other departments such as Procurement, Law, Operations and Administration divisions. Oversees and facilitates cooperative project development with other departments to ensure complete and coordinated projects.
- Provides overall oversight and facilitates cooperative project development of work breakdown and construction packaging.
- Coordinates projects with communities and government agencies by providing technical information and assistance and addressing professional and community groups. Initiates community outreach projects as required.
- Implements MWRA goals and commitments outlined in the MWRA business plan such as customer service, diversity, affirmative action, economy, efficiency, health, safety, emergency response, security, integrity, and public trust.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A bachelor's degree in civil or geotechnical engineering or associated engineering field; and
- (B) At least twelve (12) years demonstrated success in progressively responsible management

positions in engineering design, engineering project management, and/or construction functions relating to deep shaft and rock tunnel systems or major water/wastewater facilities; and

- (C) At least five (5) years of experience must be in a managerial capacity; or
- (D) Any equivalent combination of education or experience.
- (E) Preferred qualifications: An advanced degree or other post-graduate study in civil engineering or construction management. Experience with water systems. Experience using alternative delivery methods on large complex underground projects. Design or construction experience on a megaproject(s) (i.e., projects over \$1B)

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of principles and practices of civil engineering, geotechnical, and tunneling engineering.
- (B) Advanced understanding of issues related to design, construction and operation of large and complex water and wastewater facilities and infrastructure.
- (C) Demonstrated ability to work effectively in a senior leadership position of a collaborative project team and to function independently with minimal supervision.
- (D) Demonstrated understanding of Massachusetts bidding laws, including M.G.L Chapter 30 and Chapter 149 construction bidding regulations.
- (E) Knowledge of environmental regulations and permitting requirements.
- (F) Demonstrated experience in construction project dispute resolution procedures such as partnering, dispute resolution boards and other equivalent dispute resolution procedures.
- (G) Proficiency with Microsoft Office Suite and CADD.
- (H) Exceptional leadership and project management skills.
- (I) Excellent interpersonal, written, and oral and communications skills.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operators License.
Massachusetts license as a Registered Professional Engineer. (P.E.)
Preferred qualifications: Project Management Institute certification as a Project Management Professional (PMP)

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, 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 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 or underground 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.

June 2018

NEW

**MWRA
POSITION DESCRIPTION**

POSITION: Manager, Geotechnical and Tunneling

DIVISION: Tunnel Redundancy

DEPARTMENT: Tunnel Redundancy

BASIC PURPOSE:

Manages activities relative to subsurface investigations, geotechnical, and tunnel engineering. Additionally, manages engineering and design projects related to the Tunnel Redundancy Program as well as rehabilitation and capital improvement of other water and wastewater facilities and infrastructure.

SUPERVISION RECEIVED:

Works under the general supervision of the Director, Design and Construction (Tunnel Redundancy.)

SUPERVISION EXERCISED:

Manages professional and technical employees and consultants.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Supervises professional multi-disciplinary engineering work of large and complex projects requiring application of professional engineering principles and the exercise of independent engineering judgment.
- Oversees projects, including the planning and design of the Tunnel Redundancy Program as well as rehabilitation and capital engineering projects for waterworks and wastewater facilities and pipelines. Manages the planning and design phases of the Tunnel Redundancy Program as well as assigned water and wastewater engineering and or maintenance projects including, feasibility and environmental impact reports, detailed plans and specifications, permitting, project schedules, technical assistance, progress review and evaluation.
- Serves as the chief geotechnical/tunneling engineer during the design and planning of the tunnel systems related to the Tunnel Redundancy Program. Develops concept designs and/or

reviews designs received from consultant engineering firms.

- Manages activities and interactions related to subsurface investigations and geotechnical engineering. Manages geotechnical engineering reviews and in-house geotechnical design activities for projects Authority-wide.
- Establishes and reviews policies, procedures, work plans, and schedules for conducting subsurface investigations and inspections, geotechnical engineering reviews and records management of subsurface/geologic data and materials.
- Participates in consultant selection procedures and contract negotiations for projects. Additionally, oversees applicable phases of consultant selection for assigned projects including developing scope of services, specifications, cost estimates, work schedules, negotiations, and preparing contract award recommendations. Ensures compliance with contract budgets, schedules, and terms.
- Coordinates project development and reviews work of professional engineering consultants related to geotechnical and tunnel engineering including subsurface exploration and testing methods, tunnel alignment, shaft location selection, shaft design, tunnel diameter and liner system, tunnel boring machine specification, shaft and tunnel groundwater control, probing and grouting, blasting, ground monitoring, and instrumentation.
- Oversees the work of professional engineering consultants for large tunneling projects, including all work products for quality of work, budget, schedule, and compliance with contractual terms and MWRA objectives and policies. Monitors the professional engineering consultants' efforts to identify and mitigate potential sources of project delays during the construction phase. Provides quality reviews of geotechnical data reports and geotechnical baseline reports as well as contract documents (plans and specifications) for shaft and tunnel projects.
- Coordinates with the Director of Environmental and Regulatory Affairs and Law Division as needed to conduct project activities in compliance with local, state, and federal requirements.
- Supports annual and supplementary budget requests for the Tunnel Redundancy Program in the Capital Improvement Program. Oversees and reviews projects' budgets and schedules for compliance with established department, division, and MWRA program goals.
- Prepares and reviews project schedules and budgets, and reviews and recommends payment of invoices.
- Reviews project change orders and cost estimates and identifies new project funding requirements.
- Manages subsurface data records, records access, and exchange of technical information.

- Assists with the development of risk management plans and quality plans for tunneling projects and participates in overseeing their implementation.
- Manages professional staff, including assigning projects, evaluating performance, and planning staff development. Provides technical and administrative assistance to staff in the development and management of projects which include design and engineering services during construction in the Tunnel Redundancy Program as well as new and rehabilitative water and wastewater projects. Develops safety procedures working closely with MWRA Safety staff.
- Works effectively and in conjunction with other MWRA divisions and departments to ensure complete and coordinated projects. Coordinates projects with communities, government agencies and other MWRA departments as required. Provides technical information and assistance. Addresses professional and community groups and initiates outreach projects as required.
- Assists with compliance with MWRA procedures and policies, regulatory requirements and applicable engineering standards. Ensures all project activities are coordinated with MWRA divisions and departments, outside regulatory and permitting agencies and communities, as appropriate.
- Assists in implementing the goals and commitments of MWRA in the areas of customer services, diversity and affirmative action, economy and efficiency, health and safety, emergency response and security, integrity, and public trust.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A bachelor's degree in geotechnical engineering, geology, civil engineering or related engineering field; and
- (B) A master's degree in geotechnical or tunnel engineering, or civil engineering with a geotechnical focus; and
- (C) At least ten (10) years of civil/geotechnical/tunnel engineering experience; and
- (D) At least five (5) years of progressive engineering experience in shaft and tunnel design

involving sewer or water system tunnel projects; and

- (E) At least three (3) years experience in a supervisory or project management capacity; or
- (F) Any equivalent combination of education and experience.
- (G) Preferred qualifications: Previous design or construction experience on a megaproject(s) (i.e., projects over \$1B).

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of principles and practices of civil engineering, geotechnical, and tunneling engineering.
- (B) Understanding of issues related to design, construction, and operation of large and complex water and wastewater facilities and infrastructure.
- (C) Demonstrated ability to work effectively as part of a collaborative project team and also to function independently with minimal supervision.
- (D) Knowledge of Massachusetts bidding laws, including M.G.L Chapter 30 and Chapter 149 construction bidding regulations.
- (E) Knowledge of environmental regulations and permitting requirements.
- (F) Proficiency with computer software such as Microsoft Office Suite.
- (G) Familiarity with engineering software such as CADD related to subsurface investigations, geotechnical engineer, shaft, and tunnel design.
- (H) Excellent interpersonal, managerial, written and oral communications skills.
- (I) Well-developed management skills including effective delegation of work and performance management.
- (J) Ability to provide program management leadership to engineering managers and staff engaged in engineering programs, projects and activities.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operators License.

Registration as a Massachusetts Professional Engineer.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated with the use of telephone, personal computer, including word processing and other software, copy fax machine, measuring equipment, light tools and mobile radio.

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 or underground 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 setting and moderately quiet in an office setting.

June 2018

NEW

**MWRA
POSITION DESCRIPTION**

POSITION: Manager, Design
DIVISION: Tunnel Redundancy
DEPARTMENT: Tunnel Redundancy

BASIC PURPOSE:

Manages engineering and design projects related to the Tunnel Redundancy Program as well as rehabilitation and capital improvement of other water and wastewater facilities and infrastructure. Under the direction of the Director, Design and Construction implements, manages, coordinates, controls and performs quality assurance/quality control on policies and procedures for shaft and tunnel projects from planning through construction award to ensure design and construction projects comply with approved schedules and budgets.

SUPERVISION RECEIVED:

Works under general supervision by the Director, Design and Construction (Tunnel Redundancy Program).

SUPERVISION EXERCISED:

Directly manages professional staff and consultants.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Supervises professional multi-disciplinary design work of large and complex projects applying professional engineering principles and exercising independent judgment.
- Serves as a design engineer during the planning and design of the tunnel systems related to the Tunnel Redundancy Program, including developing concept designs and/or reviewing designs received from consultant engineering firms which involves the oversight and management of schedules and budgets. Implements program design standards including CADD.
- Performs engineering analysis, prepares engineering documents, and writes project reports.
- Develops design schedules and design budgets ensuring fundamental management controls, techniques, accountability for projects related to the Tunnel Redundancy

Program.

- Ensures safe MWRA operations for MWRA employees, constituents, and the general public.
- Implements and administers the program management plan and program to ensure timely and cost-effective delivery of the Tunnel Redundancy Program. Implements control and tracking methods and procedures to ensure project compliance with approved budgets and schedules. Reports the status of projects to senior management including any issues that impact schedules and budgets. Develops and provides proposals to address budget or schedule non-compliance issues.
- Determines design delivery methods, specification types, and schedules for projects supporting the Tunnel Redundancy Program. Ensures projects are implemented using comprehensive work plans and resources by selecting consultant services groups that deliver a technically sound, controlled project on budget and on time.
- Participates in consultant selection procedures and contract negotiations for projects. Additionally, oversees applicable phases of consultant selection for assigned projects including developing scope of services, specifications, cost estimates, work schedules, negotiations, and preparing contract award recommendations. Ensures compliance with contract budgets, schedules, and terms.
- Oversees the work of professional engineering consultants for large tunneling projects, including all work products for quality of work, budget, schedule, and compliance with contractual terms and MWRA objectives and policies.
- Reviews work of professional engineering consultants related to alternative analysis, tunnel alignment and shaft location selection, hydraulic analysis, groundwater treatment and discharge, connections to existing MWRA systems, long term operations, design reports, and contract documents (plans and specifications).
- Monitors the professional engineering consultants' efforts to identify and mitigate potential sources of project delays during the design and construction phases.
- Administers the monitoring, control, schedule & budget for projects using scope control, performance reports, change requests and cost management/control using integrated time/cost management controls.
- Supports annual and supplementary budget requests for the Tunnel Redundancy Program in the Capital Improvement Program. Reviews projects' budgets and schedules for compliance with established department, division, and MWRA program goals.
- Prepares and reviews project schedules and budgets, and reviews and recommends payment of invoices.
- Reviews project change orders and cost estimates and identifies new project funding

requirements.

- Implements a Quality Assurance/Quality Control (QA/QC) plan for the program to ensure a project's fast tracking and the effect on contract document preparation that will result in a technical, effective and constructible projects. Administers quality management during design and construction process. Ensures that fundamentals and recommended practices and procedures for QA/QC are followed and managed by staff.
- Assists in the development of risk management plans and quality plans for tunneling projects and participates in overseeing their implementation.
- Manages professional staff, including assigning projects, evaluating performance, and planning staff development.
- Provides technical and administrative assistance to staff in the development and management of projects which include design and engineering services during construction of the Tunnel Redundancy Program as well as new and rehabilitation water and wastewater projects.
- Develop safety procedures by working closely with MWRA Safety staff.
- Works effectively and in conjunction with Procurement, Law, Operations and Administration divisions. Develops clear schedules and costs associated with all projects from both in-house and consultant teams.
- Assists with project development of work breakdown and construction packaging. Coordinates cooperative project development with other MWRA divisions and departments to ensure complete and coordinated projects. Coordinates projects with communities, government agencies and other MWRA departments. Provides technical information and assistance. Assists in addressing professional and community groups and initiates outreach projects as required.
- Assists with compliance with MWRA procedures and policies, local, state, and federal environmental regulatory requirements and applicable engineering standards.
- In coordination with MWRA senior staff, supports all project activities and coordinates with MWRA divisions and departments, outside regulatory and permitting agencies and communities, as appropriate.
- Works collegially with and coordinates with staff in other MWRA divisions and departments and advances the goals, objectives and strategies of the MWRA business plan.
- Assists in implementing the goals and commitments of MWRA in the areas of customer services, diversity and affirmative action, economy and efficiency, health and safety, emergency response and security, integrity, and public trust.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A bachelor's degree in civil or geotechnical engineering or associated engineering field; and
- (B) At least ten (10) years demonstrated success in progressively responsible management positions in engineering design, project management and/or construction functions; and
- (C) At least three (3) years experience in a supervisory capacity; or
- (D) Any equivalent combination of education or experience.
- (E) Preferred qualifications: An advanced degree or other post-graduate study in an engineering. Experience relating to shaft and tunnel systems. Knowledge of principles and practices of geotechnical, and tunneling engineering. Experience with alternative delivery methods on large complex underground projects. Design or construction experience on a megaproject(s) (i.e., projects over \$1B). Experience with major water/wastewater facilities or water systems.

Necessary Knowledge, Skills and Abilities:

Knowledge of principles and practices of civil engineering engineering. Understanding of issues related to design, construction and operation of large and complex water and wastewater facilities and infrastructure. Demonstrated ability to work effectively as part of a collaborative project team and also to function independently with minimal supervision.

Knowledge of Massachusetts bidding laws, including M.G.L Chapter 30 and Chapter 149 construction bidding regulations.

Knowledge of environmental regulations and permitting requirements.

Proficiency with computer software such as Microsoft Office Suite and CADD.

Ability to provide program management leadership to engineering managers and staff engaged in engineering programs, projects and activities.

Excellent interpersonal, written, and oral communication skills.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operators License.

Massachusetts license as a Registered Professional Engineer. (P.E.)

Preferred qualifications: Certification by the Project Management Institute as a Project Management Professional (PMP).

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, 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 regularly works in an office environment. 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 or underground 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.

June 2018

OLD

**MWRA
POSITION DESCRIPTION**

POSITION: Financial Planner
DIVISION: Administration, Finance, Operations
DEPARTMENT: All

BASIC PURPOSE:

Assists with financial and contract administration functions related to the daily management of financial activities. Assist with special financial projects as assigned.

SUPERVISION RECEIVED:

Works under the general supervision of a Finance Manager.

SUPERVISION EXERCISED:

None

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Coordinates all day-to-day operations of assigned project work.
- Monitors activities of assigned projects to ensure project completion, compliance with applicable terms and conditions, to include accurate payment of applicable fees and invoices.
- Assists with the administration of finance projects from project initiation through design, construction and project completion; procures engineering design and construction services.
- Receives, reviews and recommends approval of all project invoices.
- Assists with the development of grant applications.
- Assists with activities with federal, state and local entities to ensure compliance with applicable laws and regulations, mitigate project impact, and addresses concerns.
- Prepares agenda and all supporting material for internal and external formal meetings.
- Assists in the development of schedules, applications, forms, spreadsheets, notices.

- Assists with the collection and collation needed for Finance Division transactions.
- Works on special analytical projects.
- Assist with the development of the annual budget.
- Assist with the development of procurement documents.
- Assist with maintaining financial applications and databases.

SECONDARY DUTIES:

Performs related duties as required.

DESIRED MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Completion of a four (4) year college program in business administration, engineering or a related field; and
- (B) One (1) to three (3) years experience in contract administration and financial analysis; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Excellent spreadsheet and database skills
- (B) Excellent written, organization, interpersonal, planning and communications skills and demonstrated ability to work effectively with managers at all levels of the organization

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D Motor Vehicle Operator's License

TOOLS AND EQUIPMENT USED:

Office machines as normally associated with the use of multiple-line 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 and talk or hear, to use hands to feel, finger, handle or operate objects, including office equipment or controls and reach with hands and arms. The employee is frequently required to stand and walk; and occasionally climb or balance; stoop, kneel, crouch, crawl, or smell.

The employee must frequently lift and/or move up to 10 pounds, occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, peripheral 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 employee routinely makes visits to operating facilities and construction sites. In these situations the employee is occasionally exposed to outdoor weather conditions, extreme heat or cold and wet, humid conditions (non-weather) and vibration. The employee occasionally works near moving mechanical parts, and in high precarious places. The employee is occasionally exposed to fumes, toxic or caustic chemicals and airborne particles. The employee occasionally exposed to risk of electrical shock and radiation.

The noise level in the normal work environment is a moderately quiet office setting. Visits made to facilities and construction sites include noise levels at the site that could range from loud to very loud.

May 2008

NEW

**MWRA
POSITION DESCRIPTION**

POSITION: Senior Financial Analyst
DIVISION: Operations
DEPARTMENT: Operations Administration, Policy and Administration

BASIC PURPOSE:

Coordinates the budget process and prepares current expense budget (CEB) work products for assigned projects and units within the Operations Division. Reviews and analyzes budget requests, variances, and financial analyses for assigned projects. Responsible for division /department-level consolidation, analysis, review, and reporting of the Operations Division's CEB.

SUPERVISION RECEIVED:

Works under the general supervision of the assigned Manager.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Coordinates CEB development and monitoring processes for assigned departments. Prepares work products including budget submissions with backup documentation, variance explanations, expense tracking systems, projected spending estimates, and narratives. Reviews information with department management.
- Assists with the coordination of processes for developing, monitoring, and analyzing the Current Expense budgets for the Operations Division. Establishes approaches and methods to support assigned stages of the budget process.
- Assists with review of budget requests and performance measurements (budget estimates, justifications, schedules, and expenditure flow projections) for the Operations Division at the division and departmental level. Develops recommendations for managers regarding budget issues.

- Prepares monthly department-level CEB variance report summary for management.
- Writes reports and reviews documents related to the CEB.
- Ensures the integrity of CEB accruals for assigned departments and resolves other accounting issues as required.
- Prepares and/or reviews Life Cycle Cost Analyses and other financial analyses for assigned projects.
- Performs special projects on as-needed basis.
- Assists with review and analysis of Yellow Notebook and other performance reports.
- Performs other related duties as required.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Analytical and writing skills as normally attained through a four (4) year college program in business administration, engineering or a related field, or knowledge acquired through professional experience. Advanced degree in business or public administration preferred; and
- (B) Understanding of budgeting, financial analysis, accounting, and forecasting concepts and practices as acquired by two (2) to five (5) years of experience; or
- (C) Any equivalent of combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Excellent spreadsheet and database skills. Working knowledge of standard MWRA office automation products (Microsoft Word and Excel), Hyperion, and Lawson software is preferred.
- (B) Excellent written, organizational, interpersonal, planning, communication, and negotiation skills and demonstrated ability to work effectively with managers at all levels of the organization.

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

Office machines including: multiple-line telephone, personal computer, including word processing and other software, photocopier, 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 duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, office equipment, or controls and to 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.


The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. The employee regularly works in an office environment. The noise level in the work environment is moderately quiet.

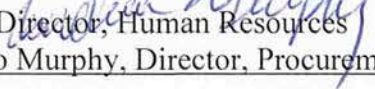
July 2016

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: July 18, 2018
SUBJECT: Appointment of Deputy Contracts Manager, Administration Division

COMMITTEE: Personnel & Compensation

X VOTE
____ INFORMATION

Andrea Murphy, Director, Human Resources 
Carolyn Francisco Murphy, Director, Procurement
Preparer/Title


Michele S. Gillen
Director of Administration

RECOMMENDATION:

That the Board approve the appointment of Ms. Rita C. Mercado to the position of Deputy Contracts Manager, Administration Division (Unit 6, Grade 13) at an annual salary of \$120,130.72 commencing on a date to be determined by the Executive Director.

DISCUSSION:

The position of Deputy Contract Manager will be vacant in October, 2018 with the retirement of the incumbent. Organizationally, this position reports to the Director of Procurement.

The Deputy Contracts Manager works closely with all staff to facilitate the procurement of construction and professional and non-professional service contracts. The Deputy Contracts Manager implements Authority-wide policies and procedures, and applicable laws, for all elements of contracting, including the creation, review and/or evaluation of contract documents, RFQs, RFPs, proposals and bids, and the review and analysis of amendments, change orders and contract close-out documents. The Deputy Contracts Manager assists the Director of Procurement in the defense of contract claims and the dispute resolution process, advises the Law Division and Authority senior staff on contract matters as required, and represents the Authority before the Commonwealth's Attorney General's Office. The Deputy Contracts Manager reviews, drafts and/or negotiates contract terms and conditions, oversees the preparation and updating of standard forms and other contract provisions and participates in the close-out and final payment stages of contracts. The Deputy Contracts Manager directs Assistant Contract Managers in the performance of similar duties and functions.

Selection Process

This position was posted internally and externally. Three internal and fifty-nine external candidates applied. Four qualified candidates, including one internal candidate, were interviewed by the Director of Procurement, Special Assistant for Affirmative Action and Deputy Chief Engineer.

Two candidates were interviewed a second time by the Director of Procurement and Director of Administration. Ms. Mercado was selected as the most qualified candidate based on her experience, abilities, knowledge and education.

Ms. Mercado is a Deputy General Counsel at the Division of Capital Asset Management and Maintenance (DCAMM) where her work is focused on construction related matters. Among other duties, Ms. Mercado advises staff on procurement issues related to construction projects, provides pre-claim advice to project managers regarding construction defect issues, represents DCAMM in change order appeals before the Division of Administrative Law Appeals, prepares and negotiates energy service agreements and design contracts, conducts mediation and settlement negotiations related to construction contract disputes and manages and coordinates litigation with the Attorney General's Office. In addition, Ms. Mercado handles emergency waiver and direct payment requests, assists with bid protests and advises on funding and roles and responsibilities for capital projects.

Prior to her position at DCAMM, Ms. Mercado served as Senior Claims Consultant/Litigation Specialists at Liberty Mutual Insurance where she was responsible for insurance claims, including analysis of coverage issues, claims resolution and management of litigation. Ms. Mercado was also an attorney in private practice for several years where she worked on many aspects of construction law including complex professional liability claims, risk management, surety bond and lien claims, construction defect claims and contract performance issues.

Ms. Mercado holds a BA in International Relations/Peace and Justice Studies from Tufts University and a JD from Suffolk University Law School.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the FY19 CEB for this position.

ATTACHMENTS:

Rita C. Mercado Resume
Position Description
Procurement Department Organization Chart

RITA C. MERCADO

BAR INFORMATION:

Admitted to Practice in Massachusetts and the United States District Court for the District of Massachusetts.

COMMUNITY INVOLVEMENT:

Chairman of Board of Appeals for the City of Melrose
Member of Board of Appeals for the City of Melrose

Fall 2010 - Present
Fall 2007 – Fall 2010

LEGAL EXPERIENCE:

COMMONWEALTH OF MASSACHUSETTS –

DIVISION OF CAPITAL ASSET MANAGEMENT AND MAINTENANCE

February 2013 - Present

Deputy General Counsel

- Provides advice related to procurement issues involving construction manager at risk, and design-bid-build projects.
- Handles emergency waiver requests, and direct payment claims. Assists with bid protests.
- Provides pre-claim advice to project managers related to onsite conflicts and construction defect issues.
- Represents DCAMM in Change Order Appeals before the Division of Administrative Law Appeals.
- Manages and coordinates litigation with the Attorney Generals' Office.
- Prepares and negotiates energy service agreements procured under M.G.L. 25A, and design contracts.
- Conducts mediations and settlement negotiations related to construction contract disputes.
- Drafts intra-state agency memoranda outlining funding, and roles and responsibilities for capital projects.

LIBERTY MUTUAL INSURANCE, Weston, MA

July 2012 – January 2013

Senior Claims Consultant / Litigation Specialist

- Handled commercial general liability and automobile claims in litigation in the Northeast region.
- Analyzed and afforded coverage based on relevant insurance policy and identified any potential coverage issues.
- Managed all aspects of litigation and coordinate strategy with local counsel.
- Conducted direct settlement negotiations with Plaintiff/Claimant.
- Analyzed relevant documents including but not limited to lease agreements, and service contracts to establish the insured's potential exposure and indemnity and defense obligations.
- Established initial reserves and monitor adequacy of reserves.

DONOVAN HATEM LLP, Boston, MA

July 2009- June 2012

Associate - Claims Management Department

- Evaluate and monitor complex professional liability claims nationally and engage in risk management of potential claims on behalf of architects, engineers and other design professionals.
- Analyze design professionals' potential exposure through the detailed analysis of all relevant project documents including but not limited to the identification of relevant contract provisions (indemnity, dispute resolution, waiver of subrogation, waiver of consequential damages, choice of law and limitation of liability provisions).
- Manage all aspects of litigation including attendance of mediation with settlement authority provided by insurer, and coordination of strategy with local counsel.

HOGAN & MERCADO, P.C., Boston, MA

October 2008- July 2009

Partner

- Handled construction law and litigation cases involving contract performance issues, surety bonds, and mechanic liens.
- Advised clients regarding contract issues.
- Drafted pleadings and discovery.
- Researched and prepared dispositive motions.
- Attended hearings, and mediations.

CURTIN, MURPHY, & O'REILLY, P.C., Boston, MA

October 2006- September 2008

Associate

- Handled the defense of premises liability cases.
- Drafted pleadings and discovery.
- Researched and wrote dispositive motions.
- Attended hearings for motions.
- Drafted pre-trial memoranda and trial motions.
- Conducted and defended depositions.
- Negotiated settlements with opposing counsel. Participated in civil trials.

BOYLE, MORRISSEY, & CAMPO, Boston, MA

September 2005- October 2006

Associate

- Handled the defense of construction defect and accident cases.
- Drafted and answered complaints and discovery.
- Researched and wrote dispositive motions.
- Analyzed and applied case law and statutes regarding contract indemnification and additional insured issues.
- Conducted depositions.
- Assisted in trial preparation.
- Communicated with client and insurance claims representative regarding case strategy.

HOGAN & ASSOCIATES, Boston, MA

Spring 2005

Law Clerk

Assisted in all areas of construction litigation involving both public and private contracts including drafting and answering complaints, discovery documents, motions and filing mechanic's liens. Researched bid protests decisions in preparation for hearing.

SUFFOLK UNIVERSITY LAW SCHOOL, Boston, MA

Fall 2003- Spring 2004

Research Assistant.

Researched recent cases contributing to the development of international law. Assisted in updating and editing textbook *International law* by Valerie Epps.

OFFICE OF THE ATTORNEY GENERAL, TRIAL DIVISION, Boston, MA

Summer 2003

Legal Intern

Drafted and answered discovery documents. Answered complaints. Analyzed statutes. Researched and wrote motions, briefs and legal memoranda on legal issues such as judicial immunity, qualified immunity, Massachusetts Tort Claims Act, Civil Rights and employment Law. Facilitated communication between clients and opposing attorneys. Observed courtroom procedures. Assisted in preparing depositions. Participated in case strategy for civil litigation.

EDUCATION:

SUFFOLK UNIVERSITY LAW SCHOOL, Juris Doctor, *cum laude*, May 2005

Boston, MA

Class Rank: Top 25%

Honors: Dean's List, 2003-2005

Honorable Mention, Best Brief Section Competition, 2003

Distinguished Oral Advocate, Best Oral Advocate Section Competition, 2003

Jessup International Law Moot Court Competition, 3rd Place Regional Memorial Ranking, 2005

Activities: International Law Student Association (ILSA), co-vice president

Rehnquist Inn, Phi Delta Phi International Legal Fraternity, member

TUFTS UNIVERSITY, Bachelor of Arts, May 2002

Medford, MA

Double Major: International Relations / Peace and Justice Studies

Honors: Dean's List (3/8 semesters)

Awards: Recipient of the *Anne E. Borghesani Memorial Prize* to research the role of non-governmental organizations in conflict resolution in the Philippines.

Community Service: Leonard Carmichael Society, service organization

**MWRA
POSITION DESCRIPTION**

POSITION: Deputy Contracts Manager

DIVISION: Administration

DEPARTMENT: Procurement

BASIC PURPOSE:

Manages all aspects of construction and professional and non-professional service contracts from initial submission of contract documents through contract closeout.

SUPERVISION RECEIVED:

Works under the general supervision of the Director, Procurement.

SUPERVISION EXERCISED:

Exercises close supervision of assigned Assistant Contracts Manager(s).

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Under the direction of the Director, Procurement, develops and implements Authority-wide policies and procedures for all elements of the contract function, including creation, review and/or evaluation of RFQs, RFPs, proposals, bids and contracts as well as the negotiation of contracts and terms and the review of contract amendments, change orders, contract close-out and final payment.
- Reviews bids, contract processes and documents for format and substance as well as compliance with Authority standards and applicable law, especially MGL Chapters 149 and 30; directs assigned Assistant Contracts Manager(s) in performance of these same functions.
- Oversees and administers advertising programs and systems to open bids and award and execute contracts in compliance with Authority standards and Commonwealth law; works with administrative staff on these issues.
- Assists the Director, Procurement in the defense of contract claims and the dispute resolution process; participates in and directs Assistant Contract Manager(s) in similar activities as appropriate.
- Advises Law Division and Senior Authority staff on contract matters as required; represents Authority before Commonwealth Attorney General's Office; directs Assistant Contracts Manager(s) in performance of these functions.

- Directs Assistant Contracts Manager(s) in the review and evaluation of consultant proposals, emphasizing compensation analysis and cost control.
 - Participates with administrative staff in the establishment and maintenance of a contract database that tracks progress through the advertising, bidding and award stages as well as through the life of the contract.
 - Reviews, drafts and helps negotiate contract terms and conditions; oversees the preparation and updating of standard forms and other contract provisions; supervises Assistant Contracts Manager(s) and directs and assists Authority staff in performance of these functions.
 - Reviews contract amendments and change orders; participates in contract close-out and final payment stages; directs Assistant Contracts Managers in performance of these same functions.
 - Participates in Consultant/Contractor Selection Committees as required.
 - Participates with technical personnel in presentations to the Board.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college program in business administration or a related field; and
- (B) A masters degree in a related field or a degree in law is strongly preferred; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Understanding of contract administration as acquired through six (6) to eight (8) years contract management experience, of which at least two (2) years should be in a supervisory capacity.
- (B) Knowledge of and experience with MGL Chapters 149 and 30 and with design and other professional and nonprofessional service contracts required; governmental contract experience preferred.
- (C) Excellent written and oral communication skills are required.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D 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 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.

April 2016

ADMINISTRATION - PROCURMENT

Director
8810021
NU/16

Deputy Contracts
Manager
8810046
U6/G14

Materials
Manager
8820001
U6/G13

Deputy Contracts
Manager
8810050
U6/G13

Deputy Contracts
Manager
8810040
U6/G13

Deputy Contracts
Manager
8810031
U6/G14

Deputy Contracts
Manager
8810025
U6/G13

Manager,
Purchasing
8810003
NU/G14

Deputy Contracts
Manager
8810044
U6/G13

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 18, 2018
SUBJECT: Appointment of General Counsel, Law Division



COMMITTEE: Personnel & Compensation

X VOTE
 INFORMATION

RECOMMENDATION:

To approve the appointment of Ms. Carolyn Francisco Murphy to the position of General Counsel, Law Division (Non-Union, Grade 17) at an annual salary of \$164,569.00, commencing on a date to be determined by the Executive Director.

DISCUSSION:

Steven Remsberg has been MWRA's General Counsel since June 2004 and has announced that he will be retiring in September 2018. Carolyn Francisco Murphy is being recommended to fill this position.

The General Counsel is responsible for providing critical legal services to MWRA's Board of Directors and Executive Director, as well as other MWRA staff. The Law Division includes three units: Labor and Employment, Capital and Operations and Litigation that provide legal guidance on employment and labor, contracts, regulatory, legislative and other matters. In addition, the Law Division represents MWRA in litigation.

Ms. Francisco Murphy has served as the Director of Procurement since January 2016. She has over 20 years of contract law and litigation experience. In her current role, she oversees three units (Contracts, Purchasing and Materials Management) with a total staff of 44 and directs all MWRA procurement and materials management matters, including advising staff on and representing MWRA, as necessary, in bid protest matters before the Massachusetts Office of the Attorney General. Ms. Francisco Murphy also provides legal guidance to staff, including the Executive Director, on contract and procurement related issues. She has negotiated contractual terms on behalf of MWRA and advised on construction, cost recovery and professional liability claims. Staff have also sought her input and relied on her good judgment on non-Procurement related issues as well, including labor and employment.

Prior to joining the MWRA, Ms. Francisco Murphy was a partner at the law firm of Corwin and Corwin, a firm specializing in private and public construction law where she represented owners, contractors, subcontractors, sureties and suppliers in all aspects of construction law including litigation, mediation, arbitrations and appellate and administrative proceedings. In addition to litigation related matters Ms. Francisco Murphy drafted and negotiated complex construction contracts, analyzed and advised clients on documents governing real estate transactions, and advised clients on MBE/WBE, prevailing wage, licensing and labor issues.

For six years Ms. Francisco Murphy served as General Counsel to the Associated Subcontractors Association of Massachusetts. In this capacity, she provided legal guidance to the Board and Chief Executive Officer. She has authored legislation that was enacted into law related to the governance of retainage on private construction projects. Ms. Francisco Murphy has also authored and lectured on construction law matters, is a member of the state and federal Massachusetts and Rhode Island bars, and has served as the Co-Chair of the Boston Bar Association Construction Law Committee.

Ms. Francisco Murphy is highly regarded by staff, including the Division Directors, who believe that her legal skills, strong work ethic, preparedness and commitment make her an excellent choice as the General Counsel. She is also highly regarded by outside counsel and entities.

Ms. Francisco Murphy has a B.A. in Political Science from Emmanuel College and a J.D. from Suffolk University Law School.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the FY19 CEB for this position.

ATTACHMENTS:

Carolyn Francisco Murphy Resume

Position Description

Organization Chart

CAROLYN M. FRANCISCO MURPHY

EXPERIENCE

Massachusetts Water Resources Authority, Charlestown, MA
Director of Procurement

January 2016 – Present

- Exercise close supervision of the Contracts Department, Purchasing Manager and Materials Management Manager and oversee staff of approximately forty-four employees.
- Direct and manage centralized system of procurement and surplus property disposal, consultant selection, contract awards and administration and inventory management in accordance with applicable laws and regulations and MWRA Policies and Procedures.
- Oversee procurement of construction, maintenance, operations, engineering, MIS, financial, professional and non-professional services and other MWRA contracts and the purchase of all goods and materials.
- Manage inventory and disposition of surplus personal property in accordance with MWRA Policies and Procedures.
- Develop policies and procedures for all elements of purchasing and the procurement of construction, professional and non-professional services.
- Assure compliance with public bid laws and other applicable statutes and regulations and MWRA Policies and Procedures.
- Coordinate procurement and contract administration Policies and Procedures with Special Assistant for Affirmative Action and Compliance.
- Direct and implement the advertising, bidding and award procedures for all contracts, including electronic bidding.
- Oversee the development and maintenance of a variety of vendor sources for purchased materials and services including MBE and WBE sources; evaluate vendor quality, delivery and pricing considerations.
- Oversee the negotiation and placement of contracts with vendors for required materials and services; coordinate with end users to ensure that vendor commitments are fulfilled.
- Develop, implement and manage a centralized system to administer all MWRA contracts and direct the development and maintenance of a master contract log.
- Approve contract amendments and change orders and assist in the defense of contract claims and the dispute resolution process.
- Direct MWRA's response to bid protests.
- Review and approve staff summaries prior to submission to Board of Directors; appear before Board of Directors on procurement matters.
- Review and approve sole source and proprietary requests.
- Direct the consultant selection process, including negotiating and drafting professional services contracts; review and approve all phases of contract preparation and implementation.
- Approve contracts prior to execution by the Executive Director.

Corwin & Corwin LLP, Woburn, MA

September 1995 – December 2015

Partner (1/2001 – 12/2015); Associate (9/1995 -1/2001)

- Represented contractors, subcontractors, owners, suppliers and sureties in all aspects of public and private construction projects including litigation, mediations, arbitrations and appellate and administrative proceedings.
- Drafted and negotiated complex construction contracts, supply and service agreements and purchase orders.
- Prosecuted and defended against bid protests and payment, delay, statutory, surety bond and construction defect claims. Analyzed contract documents to advise and represent clients on change orders, extra work and claims. Represented clients on demand for direct payment and other statutory claims.
- Prepared, filed, prosecuted and defended against mechanic's lien claims.
- Analyzed and advised clients on documents concerning real estate transactions including title and mortgage documents and leases.
- Advised clients on M/WBE, REO, labor agreement, prevailing wage, apprentice and licensing issues.
- Supervised and mentored associate attorneys and support staff.
- Managed firm business including financial, employment, and information technology matters.
- Responsible for selection and procurement of all legal research materials and resources.
- Commencing in 2010, served as General Counsel and Executive Secretary of major trade Association. Represented Association in all legal matters. Advised Board of Directors and CEO on Association business, bylaw compliance and governance issues. Drafted legislation and represented Association at legislative hearings. Met with legislators and political officials to advocate for sponsored legislation. Co-authored legislation enacted in 2014 governing retainage on private construction projects. Counseled Board of Directors, CEO and Association members on legislation, statutes, regulations and case law concerning public and private construction.

Newbury College, Brookline, MA

2000 - 2008

Adjunct Faculty

- Instructor in Business Law, Environmental Law, Legal Research and Writing, Law Office Management and Constitutional Law.

Superior Court of Massachusetts, Boston, MA

September 1994 - August 1995

Law Clerk to the Justices

- Assisted Justices in all aspects of civil and criminal litigation.
- Prepared draft decisions, legal memoranda and proposed jury instructions.
- Worked extensively with Justices on trials, hearings and motion sessions.

BAR MEMBERSHIP

MA - December 1994

RI - May 1995

U.S. District Court, MA - January 1996

U.S. District Court, RI - May 1996

U.S. Court of Appeals, First Circuit - May 1996

EDUCATION

Suffolk University Law School, Boston, MA
J.D., *Cum Laude* Class Rank: Top 21%

Emmanuel College, Boston, MA
B.A., Political Science, *Summa Cum Laude* Class Rank: 1

PROFESSIONAL AFFILIATIONS

Boston Bar Association, Co-Chair of Construction Law Committee (2014-2016)
Rhode Island Bar Association, Member (1995-Present)

SPEAKING ENGAGEMENTS

- *The New Massachusetts Retainage Law*, October 28, 2014, Boston Bar Association; October 7, 2014, Associated General Contractors of Massachusetts; and September 15, 2014, Associated Subcontractors of Massachusetts
- *Understanding Your Insurance: The Nuts and Bolts of Indemnity & Insurance Liability Protection*, May 1, 2014, Associated Subcontractors of Massachusetts
- *Public Bidding Beyond the Basics*, April 3, 2014, Associated Subcontractors of Massachusetts
- *Prompt Pay Law Revisited*, March 21, 2013, Associated Subcontractors of Massachusetts
- *Don't Get Caught Holding the Bag: Tips and Tools to Lessen Contract and Insurance Risks*, June 13, 2012, Associated Subcontractors of Massachusetts
- *It's the Law: Hot Legal Issues in Construction*, April 3, 2012, Construction Financial Management Association
- *Payment Security for Subcontractors of Massachusetts Public and Private Projects*, May 18, 2011, Associated Subcontractors of Massachusetts
- *The New Massachusetts "Prompt Pay" Law*, February 24, 2011, New England Mechanical Contractors Association; February 15, 2011, National Association of Women in Construction; November 2, 2010, New England Mechanical Contractors Association, National Electrical Contractors Association, Plumbing, Heating & Cooling Contractors Association and Structural Steel Fabricators of New England; and September 22 and 27, 2010, Associated Subcontractors of Massachusetts
- *Constructive Change? Massachusetts New Prompt Pay Law*, September 23, 2010, Massachusetts Building Congress
- *Navigating C. 149A CM at Risk: A Guide for Subcontractors*, May 13, 2010, Associated Subcontractors of Massachusetts
- *Basics of Massachusetts Construction Law*, June 16, 2010 and September 20, 2007 Massachusetts Bar Association
- *Negotiating Construction Subcontracts, Part III*, May 13, 2009 and October 21, 2009; *Part II*, May 17, 2007 and May 15, 2008; and *Part I*, October 20, 2005 and February 9, 2006, Associated Subcontractors of Massachusetts
- *How to Get Paid for Your Work*, March 2, 2005, Associated Subcontractors of

Massachusetts

- *Essential Tools in Construction Contracts*, February 16, 2005, Plumbing, Heating & Cooling Contractors Association
- *The Essentials of Construction Contracts in Massachusetts*, September 23, 2004, Thomas Gregory Associates, Inc.
- *The Fundamentals of Construction Contracts in Massachusetts: Understanding the Issues*, May 5, 2004, Lorman Education Services
- *Public Bidding 101: A Guide to Bidding and Performing Public Work*, June 26, 2001, National Electrical Contractors Association

PUBLICATIONS

- Chapter: "Construction Law in the Public Sector" - MCLE *Massachusetts Construction Law and Litigation* (2013, 2016 and 2018)
- "The New Massachusetts Retainage Law" – *The Professional Contractor* (Fall, 2014)
- Chapter: Massachusetts – Foundation of the American Subcontractors Association, Inc. *Lien and Bond Claims in the Fifty States* (2015)
- "Will Massachusetts Courts Enforce an Agreement Requiring Indemnification for a Party's Own Gross Negligence?" –*The Standard* (July 24, 2015) and *The Professional Contractor* (Winter, 2014)
- "Know Your 'Little Miller Act' Rights Before Crossing the Border" - *The Professional Contractor* (Fall, 2013)
- "Be Aware Once You Cross the Border: Lien Laws Vary" - *The Professional Contractor* (Spring, 2012) (co-author)
- "Massachusetts' Revised Homestead Act – Greater Protection for the Massachusetts Homeowner" - *The Professional Contractor* (Fall, 2011) (co-author)

OTHER

Certified Mediator. Boston's Top-Rated Lawyers, 2015. Massachusetts Super Lawyer, 2010. Martindale Hubbell National Law Directory AV Preeminent Rating.

**MWRA
POSITION DESCRIPTION**

POSITION: General Counsel

DIVISION: Law

DEPARTMENT: Law

BASIC PURPOSE:

Manages the legal affairs of the Authority, ensuring that legal advice and representation is provided to the Board of Directors, the Executive Director, and the management and operational staff in a timely manner.

SUPERVISION RECEIVED:

Works under the general supervision of the Executive Director.

SUPERVISION EXERCISED:

Exercises general supervision of a 3 Associate General Counsels, and close supervision of a Legal Assistant and Executive Secretary.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Provides timely and competent legal advice to the Board of Directors and staff on the powers, responsibilities, duties and activities of the Authority.
- Manages the Law Division including personnel hiring, supervision and evaluation, budgeting, resource acquisition, program and systems development.
- Represents or supervises the representation of the Authority in litigation and administrative proceedings conducted on behalf of or against the Authority.
- Advises the Executive Director on use of outside counsel. Supervises and coordinates outside counsel in their activities on behalf of the Authority.
- Provides for legal representation of the Authority in interagency and intergovernmental matters including legislative matters.
- Assists the Executive Director in long-term and project planning from a legal and regulatory perspective.

- Develops and assists in the enforcement of regulatory programs for the Authority.

SECONDARY DUTIES:

- Performs related duties as required.

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) Understanding of relevant areas of law such as: environmental protection law, including in particular, federal and state clean water law, public contracting procurement and construction, intergovernmental relations, public employment and personnel law (including governmental affirmative action programs), governmental and environmental litigation, public finance and legislative drafting and practice as acquired by ten (10) to twelve (12) years of experience, of which at least five (5) years should be in a managerial or supervisory capacity; or
- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated ability to assist in management of legal services to substantial private or public corporate clients.
- (B) Excellent interpersonal, oral and written communication skills required.

SPECIAL REQUIREMENTS:

Admittance to practice law in Massachusetts or eligibility to practice under rules of reciprocity.

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.

LAW DIVISION

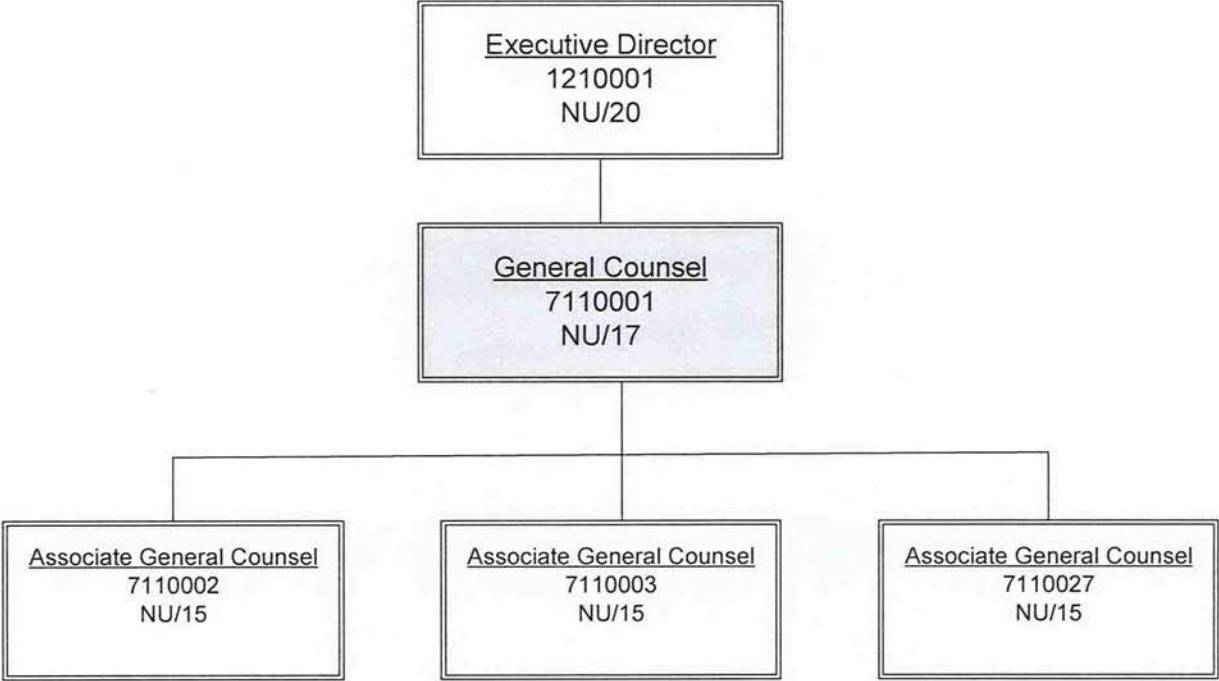
Executive Director
1210001
NU/20

General Counsel
7110001
NU/17

Associate General Counsel
7110002
NU/15

Associate General Counsel
7110003
NU/15

Associate General Counsel
7110027
NU/15





MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey
Executive Director

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

ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING

to be held on

Wednesday, July 18, 2018

Chair: H. Vitale
Vice-Chair: J. Foti
Committee Members:
J. Carroll
K. Cotter
A. Pappastergion
B. Peña
J. Walsh

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: Immediately following P&C Committee

AGENDA

A. Information

1. Delegated Authority Report — June 2018

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the

Administration, Finance and Audit Committee

June 20, 2018

A meeting of the Administration, Finance and Audit Committee was held on June 20, 2018 at the Authority headquarters in Charlestown. Committee Chair Vitale presided. Present from the Board were Messrs. Blackmon, Carroll, Foti, Pappastergion, Peña, Walsh and Ms. Wolowicz. Messrs. Cotter and Flanagan were absent. Among those present from the Authority staff were Frederick Laskey, Steven Remsberg, David Coppes, Carolyn Fiore, John Vetere, Bethany Card, Thomas Durkin, Matthew Horan, Louise Miller, Kathy Soni, and Kristin MacDougall. The meeting was called to order at 11:32 a.m.

Information

There was general discussion and brief questions and answers on the following informational items:

- Annual Update on New Connections to the MWRA System (Mr. Pappastergion returned to the meeting and Ms. Wolowicz temporarily left the meeting and returned during discussion)
- Delegated Authority Report – May 2018
- Employee Reimbursements and Payouts
- FY18 Financial Update and Summary as of May 2018.

Approvals

*** Final FY 2019 Capital Improvement Program**

The Committee recommended approval (ref. AF&F B.1.)

*** Final FY 2019 Current Expense Budget**

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

* Committee recommendation approved by the Board on June 20, 2018

* Final FY 2019 Water and Sewer Assessments

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

* Surplus Sewer Easement of the Abandoned Upper Neponset Valley Sewer

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

The meeting adjourned at 11:51 a.m.

* Committee recommendation approved by the Board on June 20, 2018

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 18, 2018
SUBJECT: Delegated Authority Report – June 2018



COMMITTEE: Administration, Finance & Audit

INFORMATION
 VOTE

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


Michele S. Gillen

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 June 1 – 30, 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 February 21, 2018, delegate authority to the Executive Director to approve the following:

Construction Contract Awards:

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

Change Orders:

Up to 25% of the original contract amount or \$250,000, whichever is less, where the change increases the contract amount, and for a term not exceeding an aggregate of six months; and for any amount and for any term, where the change decreases the contract amount. The delegations for cost increases and time can be restored by Board vote.

Professional Service Contract Awards:

Up to \$100,000 and one year with a firm; or up to \$50,000 and one year with an individual.

Non-Professional Service Contract Awards:

Up to \$250,000 if a competitive procurement process has been conducted, or up to \$100,000 if a procurement process other than a competitive process has been conducted.

Purchase or Lease of Equipment, Materials or Supplies:

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

Amendments:

Up to 25% of the original contract amount or \$250,000, whichever is less, and for a term not exceeding an aggregate of six months.

Amendments to the Position Control Register:

Amendments which result only in a change in cost center.

BUDGET/FISCAL IMPACT:

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

CONSTRUCTION/PROFESSIONAL SERVICES DELEGATED AUTHORITY ITEMS JUNE 1 - 30, 2018

NO.	DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT	AMEND/CO	COMPANY	FINANCIAL IMPACT
C-1.	06/05/18	EMERGENCY REPAIR OF GRAVITY THICKENER NO. 5 - DEER ISLAND TREATMENT PLANT DEMOLISH, FURNISH AND INSTALL SCRAPER ASSEMBLY AND ROTATING SCUM PIPE; EXTEND CONTRACT TERM BY 20 CALENDAR DAYS FROM APRIL 27, 2018 TO MAY 17, 2018.	S576	1	WALSH CONSTRUCTION COMPANY II, LLC	\$63,839.00
C-2.	06/11/18	CHELSEA CREEK HEADWORKS UPGRADE RELOCATE FIRE DEPARTMENT CONNECTION AND ELECTRIC BELL; FURNISH AND INSTALL A NEW LIGHTING, FIRE ALARM AND PAGE PARTY INTERCOM SYSTEM IN TUNNEL SHAFT CORRIDOR; FURNISH AND INSTALL THREE AIR RECEIVER TANKS AND ADDITIONAL PIPING, FITTINGS AND SUPPORTS AND ENLARGE CONCRETE FOUNDATIONS; FURNISH AND INSTALL CONDUIT WIRING FOR TOXIC GAS MONITORING ALARM HORNS AND BEACONS.	7161	13	BHD/BEC 2015, A JOINT VENTURE	\$129,783.00
C-3.	06/19/18	OVERHEAD DOOR MAINTENANCE SERVICES - VARIOUS FACILITIES FINAL BALANCING CHANGE ORDER TO DELETE THE FOLLOWING BID ITEMS TO REFLECT ACTUAL QUANTITIES USED: NON-EMERGENCY AND EMERGENCY MAINTENANCE SERVICES, REPLACEMENT PARTS AND MARK-UP, PRICE ADJUSTMENTS.	OP-277	1	COLLINS OVERHEAD DOOR	(\$38,560.61)
C-4.	06/19/18	EMERGENCY REPAIR OF GRAVITY THICKENER NO. 6 - DEER ISLAND TREATMENT PLANT DEMOLISH, FURNISH AND INSTALL SCRAPER ASSEMBLY ROTATING SCUM PIPE AND TWO DUCKING SKIMMER SUPPORTS; EXTEND CONTRACT TERM BY 11 CALENDAR DAYS FROM JUNE 1, 2018 TO JUNE 12, 2018.	S577	1	WALSH CONSTRUCTION COMPANY II, LLC	\$81,653.01
C-5.	06/25/18	EQUAL PAY ACT CONSULTING SERVICES AWARD OF A PROFESSIONAL SERVICES CONTRACT FOR MASSACHUSETTS EQUAL PAY ACT CONSULTING SERVICES FOR A TERM OF 365 CALENDAR DAYS.	A616	AWARD	HIRSCH ROBERTS WEINSTEIN, LLP	\$27,575.00
C-6.	06/15/18	DIESEL GENERATOR MAINTENANCE - CARROLL WATER TREATMENT PLANT FINAL BALANCING CHANGE ORDER TO DECREASE THE FOLLOWING BID ITEMS TO REFLECT ACTUAL QUANTITIES USED: MAINTENANCE/REPAIR SERVICES, REPLACEMENT PARTS AND MARK-UP AND EMISSIONS TEST.	OP-312	4	KNM HOLDINGS, LLC	(\$102,771.33)

PURCHASING DELEGATED AUTHORITY ITEMS JUNE 1 - 30, 2018

NO.	DATE OF AWARD	TITLE AND EXPLANATION	CONTRACT	AMENDMENT	COMPANY	FINANCIAL IMPACT
P-1.	06/04/18	PURCHASE OF TWO HUNDRED AND FORTY TELOG 4G LTE MODEMS AWARD OF A SOLE SOURCE PURCHASE ORDER FOR 240 TELOG 4G LTE MODEMS.			TELOG INSTRUMENTS, INC.	\$96,000.00
P-2	06/05/18	PURCHASE OF THREE ODOR CONTROL FANS AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THREE ODOR CONTROL FANS FOR THE DEER ISLAND TREATMENT PLANT.	WRA-4484		MASSFLOW AIR PRODUCTS CORP.	\$168,233.00
P-3	06/08/18	FUME HOOD MAINTENANCE AWARD OF A SOLE SOURCE PURCHASE ORDER FOR FUME HOOD MAINTENANCE FOR THE CENTRAL LABORATORY AT THE DEER ISLAND TREATMENT PLANT.			SIEMENS INDUSTRY, INC.	\$25,455.00
P-4	06/08/18	PURCHASE OF ONE RAYOX UV REACTOR BENCH UNIT AWARD OF A SOLE SOURCE PURCHASE ORDER FOR A RAYOX UV REACTOR, 1KW/40 WATT UNIT TO REPLICATE CARROLL PLANT TREATMENT PROCESS FOR BENCHTOP EXPERIMENTS.			CALGON CARBON CORPORATION	\$32,614.00
P-5	06/08/18	CLEAN AND REMOVE HYDRAULIC OIL RESIDUE AWARD OF A CRITICAL NEED PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER TO CLEAN AND REMOVE HYDRAULIC OIL RESIDUE FROM A WIND TURBINE AT THE DEER ISLAND TREATMENT PLANT.			CLEAN HARBOR ENVIRONMENTAL SERVICES, INC.	\$57,255.00
P-6	06/11/18	UPGRADE PORTIA INVESTMENT AND CASH MANAGEMENT SOFTWARE AWARD OF A SOLE SOURCE PURCHASE ORDER TO UPGRADE PORTIA INVESTMENT AND CASH MANAGEMENT SOFTWARE TO VERSION 12.4.3.			SS&C TECHNOLOGIES, INC.	\$30,160.00
P-7	06/11/18	PURCHASE OF ONE PUMP ROTATING ASSEMBLY AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR ONE PUMP ROTATING ASSEMBLY FOR THE QUINCY PUMP STATION.	WRA-4466		GRUNDFOS WATER UTILITY, INC.	\$58,052.50
P-8	06/11/18	MAINTENANCE AND SUPPORT FOR VMWARE VSPHERE LICENSES AWARD OF A PURCHASE ORDER UNDER STATE CONTRACT ITS58 TO THE LOWEST RESPONSIVE BIDDER TO PROVIDE ONE YEAR OF MAINTENANCE AND SUPPORT FOR VMWARE VSPHERE LICENSES.	WRA-4592Q		PCMG, INC.	\$62,068.96
P-9	06/11/18	MAINTENANCE AND SUPPORT OF WEB SECURITY SOFTWARE AND HARDWARE APPLIANCES AWARD OF A PURCHASE ORDER UNDER STATE CONTRACT ITS58 TO THE LOWEST RESPONSIVE BIDDER TO PROVIDE THREE YEARS OF MAINTENANCE AND SUPPORT OF FORCEPOINT'S WEB SECURITY SOFTWARE, ONE YEAR OF MAINTENANCE FOR FORCEPOINTS SERVER HARDWARE APPLIANCES, AND SERVICES TO UPGRADE TO VERSION 8.5.	WRA-4524Q		PCMG, INC.	\$83,011.00
P-10	06/11/18	REMOVAL OF HAZARDOUS WASTE AND OIL/WATER SEPARATOR MAINTENANCE AWARD OF A TWO-YEAR PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR REMOVAL AND DISPOSAL SERVICES FOR HAZARDOUS WASTE AND OIL/WATER SEPARATOR MAINTENANCE AT THE DEER ISLAND TREATMENT PLANT.	WRA-4520		TRADEBE ENVIRONMENTAL SERVICES, LLC	\$92,804.00
P-11	06/11/18	GARTNER IT EXECUTIVE + DELEGATE SUBSCRIPTION AWARD OF A ONE-YEAR PURCHASE ORDER UNDER STATE CONTRACT ITS59 FOR THE RENEWAL OF THE GARTNER IT EXECUTIVE + DELEGATE SUBSCRIPTION.			GARTNER, INC.	\$100,809.00
P-12	06/14/18	SUPPLY AND DELIVERY OF SODIUM BISULFITE AWARD OF ONE-YEAR PURCHASE ORDERS TO THE LOWEST RESPONSIVE BIDDERS FOR SUPPLY AND DELIVERY OF SODIUM BISULFITE TO THE CARROLL WATER TREATMENT PLANT AND THE CLINTON WASTEWATER TREATMENT PLANT.	WRA-4531		PVS CHEMICAL SOLUTIONS, INC. SOUTHERN IONICS, INC.	\$84,320.00 \$37,380.00
P-13	06/14/18	SUPPLY AND DELIVERY OF SODIUM BISULFITE AWARD OF A ONE-YEAR PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR SUPPLY AND DELIVERY OF SODIUM BISULFITE TO VARIOUS WASTEWATER LOCATIONS.	WRA-4533Q		UNIVAR USA, INC.	\$50,664.70
P-14	06/14/18	SUPPLY AND DELIVERY OF SODIUM HYPOCHLORITE AWARD OF A ONE-YEAR PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR SUPPLY AND DELIVERY OF SODIUM HYPOCHLORITE TO VARIOUS WASTEWATER LOCATIONS.	WRA-4532		UNIVAR USA, INC.	\$214,958.49
P-15	06/14/18	MAINTENANCE AND SUPPORT OF HEWLETT PACKARD ENTERPRISE EQUIPMENT AWARD OF A ONE-YEAR PURCHASE ORDER UNDER STATE CONTRACT ITC47 TO THE LOWEST RESPONSIVE BIDDER FOR MAINTENANCE AND SUPPORT OF HEWLETT PACKARD ENTERPRISE EQUIPMENT.	WRA-4538Q		HEW LET PACKARD ENTERPRISE COMPANY	\$248,450.14
P-16	06/19/18	PURCHASE OF THREE DIESEL TRUCKS WITH SWEEPER BODIES AWARD OF A PURCHASE ORDER TO THE LOWEST RESPONSIVE BIDDER FOR THREE DIESEL TRUCKS WITH SWEEPER BODIES FOR BUILDING AND GROUNDS MAINTENANCE AT WESTERN OPERATIONS, CHELSEA FOD AND DEER ISLAND TREATMENT PLANT.	WRA-4488		DONOVAN EQUIPMENT COMPANY, INC.	\$352,500.00
P-17	06/20/18	PURCHASE OF TEN MULTI-FUNCTION DEVICES AWARD OF A PURCHASE ORDER UNDER STATE CONTRACT ITC66 TO THE LOWEST RESPONSIVE BIDDER FOR TEN MULTI-FUNCTION DEVICES FOR THE CHELSEA, CHARLESTOWN NAVY YARD, DEER ISLAND TREATMENT, SOUTHBOROUGH AND CLINTON FACILITIES.	WRA-4536Q		KONICA MINOLTA BUSINESS SOLUTIONS USA., INC.	\$73,146.20

P-18	06/27/18	INVASIVE PLANT CONTROL RESCISSION OF AWARD OF A PURCHASE ORDER FOR INVASIVE PLANT CONTROL AT THE WARE/SHAFT 8 INTAKE POOL FOR FAILURE TO SUBMIT PROOF OF INSURANCE AND AWARD OF A PURCHASE ORDER TO THE NEXT LOWEST RESPONSIVE BIDDER FOR SUCH INVASIVE PLANT CONTROL SERVICES.	WRA-4470Q	DAVEY RESOURCE GROUP, INC.	\$43,429.45
P-19	06/27/18	PRETREATMENT INFORMATION MANAGEMENT SYSTEM (PIMS) CROSS-MEDIA ELECTRONIC REPORTING RULE (CROMERR) TECHNICAL CONSULTANT SERVICES AWARD OF A PURCHASE ORDER UNDER STATE CONTRACT ITS63 TO THE LOWEST RESPONSIVE BIDDER FOR PIMS CROMERR TECHNICAL CONSULTANT SERVICES.	WRA-4537Q	MOTION RECRUITMENT PARTNERS, LLC	\$82,720.00
P-20	06/28/18	DATABASE CHANGES TO THE PRETREATMENT INFORMATION MANAGEMENT SYSTEM (PIMS) CROSS-MEDIA ELECTRONIC REPORTING RULE (CROMERR) COMPLIANCE UPGRADE AWARD OF A SOLE SOURCE PURCHASE ORDER FOR DATABASE CHANGES TO THE PIMS CROMERR COMPLIANCE UPGRADE.		INFLECTION POINT SOLUTIONS, LLC	\$53,837.00



MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey
Executive Director

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

WASTEWATER POLICY & OVERSIGHT COMMITTEE MEETING

to be held on

Wednesday, July 18, 2018

Chair: P. Flanagan
Vice-Chair: J. Walsh
Committee Members:
J. Carroll
J. Foti
A. Pappastergion
B. Peña
H. Vitale

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: Immediately following AF&F Committee

AGENDA

A. Information

1. Update on Deer Island Cable Progress (Presentation)

B. Approvals

1. Extension of the Sunset Date for Malden's Phase 6 Infiltration/Inflow Local Financial Assistance Program Funding

C. Contract Awards

1. As-Needed Resident Engineering/Resident Inspection Services: Kleinfelder Northeast, Inc., Contract 7269 and MWH Constructors, Inc., Contract 7630
2. Sole Source Purchase Order Software/Hardware Upgrade of the PICS Ovation HMI System and One Year Software Support: Emerson Process Management Power & Water Solutions Inc.

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the

Wastewater Policy and Oversight Committee

June 20, 2018

A meeting of the Wastewater Policy and Oversight Committee was held June 20 2018 at the Authority headquarters in Charlestown. Committee Vice Chair Walsh presided. Present from the Board were Messrs. Carroll, Blackmon, Foti, Pappastergion, Peña, Vitale and Ms. Wolowicz. Messrs. Cotter and Flanagan were absent. Among those present from the Authority staff were Frederick Laskey, Steven Remsberg, David Coppes, John Vetere, Thomas Durkin, Andrea Adams, Cori Barrett, Stephen Estes-Smargiassi, Carolyn Francisco-Murphy, Nava Navanandan, Martin McGowan and Kristin MacDougall. The meeting was called to order at 10:08 a.m.

Contract Awards

* Mechanical Improvements, Biosolids Processing Facility: Daniel O'Connell's Sons, Inc., Contract 7153

Following discussion among staff and Board members, the item was held without action pending review re: procurement "appearance" issue. (ref. WW.A.1)

** Remote Headworks and Deer Island Shafts Study: Mott MacDonald, LLC, Contract 7237

Staff made a presentation that provided an overview of this project and recommended the approval of MWRA Contract 7237 as presented and filed with the records of the meeting. There was brief discussion and questions and answers.

The Committee recommended approval (with Mr. Foti opposed.) (ref. WW.A.2)

Change Orders

** Chelsea Creek Headworks Upgrade: BHD/BEC 2015, A Joint Venture, Contract 7161, Change Order 14

* Postponed.

** Committee recommendation approved by the Board on June 20, 2018


Staff made a presentation that provided an overview of the project and recommended approval of Change Order 14 to MWRA Contract 7161 as presented and filed with the records of the meeting. There was brief discussion and questions and answers.

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

The meeting adjourned at 10:53 a.m.

DRAFT

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: July 18, 2018
SUBJECT: Extension of the Sunset Date for Malden's Phase 6 Infiltration/Inflow Local Financial Assistance Program Funding

COMMITTEE: Wastewater Policy & Oversight

 INFORMATION
 X VOTE

Carolyn M. Fiore, Deputy Chief Operating Officer
Stephen Estes-Smargiassi, Director of Planning and Sustainability
Carl H. Leone, Senior Program Manager
Preparer/Title


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

MWRA received a request from the City of Malden to extend the sunset provisions of the Phase 6 Infiltration/Inflow (I/I) Local Financial Assistance Program. This extension will allow the City access to their funding allocation for a project it is in the process of authorizing. The MWRA Advisory Board is in support of this extension.

RECOMMENDATION:

To approve a one-time modification to the Infiltration/Inflow (I/I) Local Financial Assistance Program Guidelines to extend the sunset date for Malden's Phase 6 grant allocation of \$471,600 (45% of the total grant/loan allocation of \$1,048,000) for a six-month period from June 30, 2018 to December 30, 2018, contingent on a Malden City Council sewer bond authorization vote.

DISCUSSION:

MWRA's I/I Local Financial Assistance Program was initiated in May 1993 to provide funding to member sewer communities to perform I/I reduction and sewer system rehabilitation projects within their locally-owned collection systems. The program's goal is to assist member communities in improving local sewer system conditions to reduce I/I and ensure ongoing repair/replacement of the collection system.

On March 12, 2014, the Board approved an amendment to the I/I Local Financial Assistance Program Guidelines to add a sunset date of June 30, 2018 for the grant portion of each community's Phase 6 financial assistance grant/loan allocation. Malden submitted a Financial Assistance Application to MWRA on June 20, 2018 for an I/I project totaling \$1,048,000. The City is in the process of obtaining local borrowing authorization to execute a Financial Assistance Agreement with MWRA and authorize a sewer bond for loan repayment. The MWRA Advisory Board recommended approval of a six-month extension to the sunset date (see Advisory Board letter - Attachment 1). An extension of the Phase 6 sunset date is required to assure that Malden does not relinquish the \$471,600 grant portion of its funding allocation.

Through the first 10 Phases of the I/I Local Financial Assistance Program, a total of \$460.75 million in grant and loan funds have been allocated to MWRA's 43 sewer communities based on their respective share of sewer charges. Through June 2018, a total of \$354 million has been distributed to fund 545 local sewer rehabilitation projects. Attachment 2 provides a summary of funds allocated, distributed, and remaining for each member community through Phase 10. Under the first five I/I Program Phases (total \$180.75 million), all 43 sewer communities received all funds allocated; therefore, no grant funds were forfeited due to prior sunset provisions. Under Phase 6 of the I/I Program (total \$40 million), only Malden had not been distributed its remaining grant/loan allocation by the sunset date of June 30, 2018. Under Phase 7 of the I/I Program (total \$40 million), only three communities (Holbrook, Malden, and Needham) have not had all allocated grant/loan funds distributed (total \$1,636,038 for all three communities). The I/I Phase 7 grant portion (45% of the total - \$736,217) will sunset at the end of FY21.

The addition of I/I Local Financial Assistance Program Phases 11, 12, and 13 in the FY19 CIP, has increased the total program budget by \$300 million (to a total of \$760.75 million) and extended the distribution schedule through FY30. Phase 11 funds will be allocated to each community in the fiscal year that the community's Phase 10 funds are allocated. Phase 12 funds will be allocated to each community in the fiscal year following distribution of 50% or more of that community's Phase 11 funds. The Phase 13 funds are a separate loan-only allocation to each community intended to provide additional financial assistance for communities that are most aggressively utilizing MWRA's I/I financial assistance funding.

BUDGET/FISCAL IMPACT:

The FY19 CIP includes an overall budget of \$392.6 million for the grant portion of the I/I Local Financial Assistance Program. An additional \$368.1 million is budgeted for the loan portion of the program. However, the loan portion is offset by an equal amount of loan repayments over time. Depending on the timing and level of community loan requests, annual loan distributions can fluctuate, sometimes causing over-spending or under-spending (versus the Program's budget) for any particular fiscal quarter or year.

For the total program, the budget target is \$760.75 million for grant and loan distributions. To date, \$354 million in grants and loans have been distributed. All scheduled community loan repayments have been made, a total of \$164 million. As community loans are repaid, the funds are deposited into MWRA's construction fund. Community grants and loans are financed through MWRA 30-year bonds.

MBE/WBE PARTICIPATION:

MBE/WBE participation goals are included in the Financial Assistance Program agreements.

ATTACHMENTS:

Attachment 1 – Advisory Board Letter

Attachment 2 – Community Funding Summary Through Phase 10 of the I/I Program

ATTACHMENT 1



Advocacy & Accountability

Representing Over 2.2 Million People in Massachusetts Communities Since 1985

MWRA
100 First Ave
Building 39
Boston Mass. 02129

Dear Mr. Laskey,

Collectively our efforts to help communities to reduce I/I from entering the wastewater system is a success. Many of our communities utilize their funds almost immediately when they are available. Others need more time to draw down their funds. Malden is one of those communities that need more time.

Changes in personnel have delayed Malden's ability to participate in utilizing this program. In fact they are in jeopardy (through the sunset provision) of forfeiting the grant portion of their phase VI grant/loan funds. Currently they are working with DEP on submitting their analysis plan.

Malden has requested from and received approval from the MWRA Advisory Board Executive Committee by a vote of said Committee on June, 8th, 2018 to formally support a request of a six month extension of the sunset provision from June, 30th, 2018 to December, 30th, 2018

I hope that both you and the MWRA Board of Directors look favorably on this six month extension

Sincerely,

Louis M. Taverna, P.E.

Chairman, MWRA Advisory Board

Cc: Carl Leone

Charlestown Navy Yard
100 First Avenue, Building 39 – 4th Floor
Boston, MA 02129

Joseph E. Favaloro
Executive Director

www.mwraadvisoryboard.com

Telephone: (617) 788-2050
Fax: (617) 788-2059
Email: mwra.ab@mwraadvisoryboard.com

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: July 18, 2018
SUBJECT: As-Needed Resident Engineering and Resident Inspection Services
Kleinfelder Northeast, Inc., Contract 7629
MWH Constructors, Inc., Contract 7630




COMMITTEE: Wastewater Policy & Oversight

 INFORMATION
 X VOTE


Michele S. Gillen
Director of Administration

A. Navanandan, P.E., Chief Engineer
Corinne Barrett, Director, Construction
Eleanor Duffy, P.E., Assistant Director, Construction
Thomas Renaud, Senior Engineer
Preparer/Title


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

The purpose of these task order services is to bridge any unexpected gaps in RE/RI coverage for ongoing construction projects, including the unanticipated need for specialized RE/RI services. Because this is a new program, the Chief Operating Officer shall be required to sign off on all task orders up to \$100,000, and provided that the Executive Director, upon the recommendation of the Chief Operating Officer, shall sign off on task orders up to \$250,000.

RECOMMENDATION:

To approve the recommendation of the Consultant Selection Committee to award two separate contracts to provide as-needed Resident Engineering and Resident Inspection Services, and to authorize the Executive Director, on behalf of the Authority, to execute Contract 7629 with Kleinfelder Northeast, Inc., and Contract 7630 with MWH Constructors, Inc., each in an amount not to exceed \$1,500,000 and for a contract term of thirty-six months from the Notice to Proceed.

DISCUSSION:

The purpose of these technical assistance contracts is to make available, on an as-needed basis, civil, mechanical, electrical, and instrumentation and control specialists for resident engineering and inspection services to assist MWRA staff. These technical assistance contracts may also provide expertise on short-term assignments requiring specialized disciplines (e.g. Licensed Site Professionals, fire-stopping, corrosion protection) for which it is 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.

The Chief Operating Officer will approve all task orders up to \$100,000. The Executive Director will approve task orders between \$100,000 and \$250,000 upon the recommendation of the Chief Operating Officer.

Procurement Process

On May 10, 2018, MWRA issued a one-step Request for Qualifications Statements/Proposals that was publicly advertised in the Central Register, Boston Herald, Banner Publication and El Mundo. Twenty-one firms subsequently requested the RFQ/P. The RFQ/P included the following evaluation criteria and points: Cost - 25 points; Qualifications/Key Personnel - 25 points; Experience/Past Performance - 25 points; Capacity, Organization, Management and Technical Approach - 22 points; and MBE/WBE Participation - 3 points. On June 13, 2018, the Authority received proposals from two firms: Kleinfelder Northeast, Inc., and MWH Constructors, Inc. Both proposers were evaluated by the Selection Committee to confirm whether they were qualified to perform the job and should be recommended.

Of the 21 firms on the Planholders list, seven were considered likely to submit as prime consultants. Staff polled these firms to learn why they did not submit proposals. Representatives of several firms indicated that they lacked the kind of ‘bench depth’ of RE/RIs that would be needed for this kind of stand-by, as-needed availability; and other firms cited a very good construction economy, which required the firms to hold all of their RE/RI staff for their own Design and RE/RI Services projects.

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. In the cost exercise, both firms slightly exceeded the Engineer’s Estimate, likely reflecting higher market rates than the Authority’s estimate had anticipated: Kleinfelder price was about 15%, and MWH’s price about 10% higher than the Engineer’s Estimate.

PROPOSER	SAMPLE COST EXERCISE ESTIMATE
Kleinfelder Northeast, Inc.	\$1,723,428.98
MWH Constructors, Inc.	\$1,649,442.00
<i>Engineer’s Estimate</i>	<i>\$1,496,983.46</i>

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
Kleinfelder Northeast, Inc.	389.25	7	1
MWH Constructors, Inc.	392.85	8	2

*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.

Kleinfelder was ranked first, as shown by its lower Order of Preference total score. The Selection Committee noted that while Kleinfelder’s prices were slightly higher than MWH’s, the personnel listed for Kleinfelder are highly qualified for this type of work. Kleinfelder also provided several experienced and qualified personnel with strong experience on external projects of similar scope

and complexity to those anticipated under this scope. The firm demonstrated a strong technical approach, capacity, and organization and management approach, and received a number of very good references on some recent internal and relevant external contracts.

MWH was ranked second. The Selection Committee was in agreement that MWH's personnel are also well qualified for this type of work. The firm's proposal demonstrated a strong technical approach, good capacity and a sound organization and management approach. MWH has worked on Authority projects in the past and their key staff are highly regarded by the Authority's Construction Department.

The Selection Committee noted that both firms listed the same subconsultants for a number of the key personnel included in their proposals. This is a result of both firms proposing to use some of the same MBE/WBE firms (Aztec Technologies, City Point Partners and Keville Enterprises) to support the specialty services of this contract.

Based on the qualifications of the firms and the sample cost exercises submitted, the Selection Committee recommends the award of Contract 7629 to Kleinfelder Northeast, Inc. and Contract 7630 to MWH Constructors, Inc., each for a not-to-exceed amount of \$1,500,000 and a contract term of three years from the Notice to Proceed.

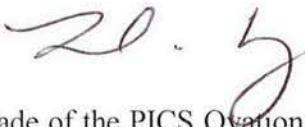
BUDGET/FISCAL IMPACT:

The FY19 Capital Improvement Program includes \$1,500,000 each for two three-year As-Needed Resident Engineering and Resident Inspection Services contracts (Contract 7629 and Contract 7630).

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; firms willing to commit to specific MBE and/or WBE participation percentages were eligible to receive up to three evaluation criteria points. Neither firm committed to specific MBE/WBE percentages thus neither was eligible to receive MBE/WBE participation credit.

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director 
DATE: July 18, 2018
SUBJECT: Sole Source Purchase Order for the Upgrade of the PICS Ovation HMI System and One Year of Software Support for the Deer Island Treatment Plant
Emerson Process Management Power & Water Solutions, Inc.

COMMITTEE: Wastewater Policy & Oversight

 INFORMATION

 X VOTE



Michele S. Gillen

Director of Administration

David Duest, Director, Deer Island WWTP
Patrick Phillips, Program Manager, Process Engineering
Carolyn Francisco Murphy, Director, Procurement
Preparer/Title



David W. Coppes, P.E.

Chief Operating Officer

RECOMMENDATION:

To approve the award of a sole source purchase order contract for the upgrade of the PICS Ovation™ Human Machine Interface system and one year of software support for the Deer Island Treatment Plant to Emerson Process Management Power & Water Solutions, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute said purchase order contract in an amount not to exceed \$648,340.

DISCUSSION:

MWRA's Process Information and Control System (PICS) on Deer Island is among the most sophisticated control systems of any wastewater treatment plant in the United States. Thousands of field instrumentation devices are used to gather process information such as: temperature, pressure, flow, and on/off states of remote equipment. These devices are wired back to a Distributed Control System (DCS), which consists of 64 control cabinets at various locations around the 150-acre site. There are more than one thousand control modules used in the control cabinets to gather input from process sensors and to send control signals back to the process, resulting in more than 30,000 input/output points in the PICS system.

The Human Machine Interface (HMI) for the PICS system consists of computers and monitors which run Emerson's proprietary Ovation™ HMI software. The HMI gathers process information and presents that information to staff through control graphics. The HMI allows operations staff to send control output commands to the DCS system to adjust or change operating parameters in the plant. Reliable operation of the PICS system, including the HMI system, is critical to ensure

proper operation of the Deer Island Treatment Plant and to ensure compliance with its NPDES permit.

The HMI system was competitively procured in 2011, and included Emerson's Ovation software installed on computers running Microsoft Windows Server 2008 and Windows 7 operating systems. The original contract price to furnish and install the HMI system was \$1,302,198. Since 2011, the Ovation software has undergone two major revisions that, according to Emerson, fixed software bugs present in previous releases and improved overall system performance. The HMI's computer hardware has also reached the end of its useful life of seven years. In order to keep the PICS system updated and fully supported, staff recommend upgrading the PICS HMI system hardware and Ovation software.

Due to cost of this upgrade, staff considered competitively bidding the entire HMI system again. However, staff determined that replacement of the HMI system with a different vendor would cost three to four times as much as the upgrade, and would require two to three years to implement. This would require a disruption of the PICS system, which could put plant operations at risk. Switching to a different vendor would require the conversion of over 3,000 control graphics, which would be a substantial quality control challenge for MWRA staff, as staff experienced in the 2011 HMI procurement. This upgrade will require less than six months to implement, and will be able to be phased-in with minimal operational disruption.

The HMI system runs specialized proprietary software developed and maintained by Emerson. Emerson does not sell the Ovation software to third party vendors or installers, nor does it use or authorize outside vendors to work on its systems. Emerson performs all upgrade work directly for the end-user. Moreover, Emerson will not guarantee or support the HMI system if a third party were to install any hardware or software onto its system.

Emerson uses Dell computers for the system hardware, which consists primarily of 46 computers. Some of these are used for operator work stations and some are used for hosting the software that coordinates the operation of the Ovation network. Two of the computers are specialized servers that allow PICS to be viewed securely from the MIS network. One of the computers is used to host a system backup and recovery module, which will ensure that the system can be quickly recovered in the event of a failure in part of the system. These computers must be configured according to Emerson's exact specifications. Hardware represents approximately 30% of the cost of the system upgrade, so staff explored the possibility of procuring the hardware separately. A cost analysis based on a state contract quote, showed that Emerson's proposed hardware pricing is less than what MWRA would pay through the state blanket. Following the hardware analysis staff requested that several servers be adjusted in their capabilities to more accurately meet system requirements, which resulted in a further reduction in the hardware cost (a \$7,000 reduction).

Device	# of units	Emerson proposed total cost	State contract quote
Workstation	17	\$47,211.00	\$53,749.24
Server	27	\$140,311.00	\$195,693.03
Specialized Server	2	\$19,000.00	Unable to obtain quote*
Total hardware cost	46	\$206,522.00	\$249,442.27

**Two of the proposed servers are specialized, customized machines which require additional engineering to set up. These were not included in the state contract quote because of the complexity of the machines, and an inability to get a reasonable price comparison.*

If MWRA were to purchase the hardware separately, it would also raise concerns that there would not be one party clearly responsible in the event of a problem. Due to the importance of the PICS system and its critical role in the operation of the Deer Island Treatment Plant, staff recommend contracting directly with the original supplier of the HMI system, Emerson, for this upgrade. This purchase order would include hardware, software, and a system backup and recovery module. It will ensure an uninterrupted Deer Island control system and maintain a high level of availability.

The total cost of the contract has been quoted as \$648,340. This price includes hardware, software, system configuration, and rollout. This price also includes one year of software support.

BUDGET/FISCAL IMPACT:

The FY18 Current Expense Budget included \$400,000 for this project. The project was not completed as anticipated in FY18. This project will be absorbed in the Operations FY19 CEB.

MBE/WBE PARTICIPATION:

Emerson Process Management Power & Water Solutions, Inc. is not a certified Minority- or Women-owned business.



MASSACHUSETTS WATER RESOURCES AUTHORITY

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

Frederick A. Laskey
Executive Director

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

BOARD OF DIRECTORS' MEETING

to be held on

Chair: M. Beaton
Vice-Chair: J. Carroll
Secretary: A. Pappastergion
Board Members:
K. Cotter
P. Flanagan
J. Foti
B. Peña
H. Vitale
J. Walsh
J. Wolowicz

Wednesday, July 18, 2018

Location: 100 First Avenue, 2nd Floor
Charlestown Navy Yard
Boston, MA 02129

Time: 1:00 p.m.

REVISED

AGENDA

- I. **APPROVAL OF MINUTES**
- II. **REPORT OF THE CHAIR**
- III. **REPORT OF THE EXECUTIVE DIRECTOR**
- IV. **OTHER BUSINESS**
- V. **BOARD ACTIONS**

A. Approvals

1. Emergency Water Supply Agreement with the Town of Burlington (ref. W B.1)
2. PCR Amendments, July 2018 (ref. P&C B.1)
3. Appointment of Deputy Contracts Manager (ref. P&C B.2)
4. Appointment of General Counsel (ref. P&C B.3)
5. Extension of the Sunset Date for Malden's Phase 6 Infiltration/Inflow Local Financial Assistance Program Funding (ref. WW B.1)

B. Contract Awards

1. Bellevue 2 Tank and Turkey Hill Steel Water Storage Tanks Painting: Worldwide Industries, Corp., Contract 7634 (ref. W C.1)
2. As-Needed Resident Engineering/Resident Inspection Services: Kleinfelder Northeast, Inc., Contract 7269 and MWH Constructors, Inc., Contract 7630 (ref. WW C.1)
3. Sole Source Purchase Order Software/Hardware Upgrade of the PICS Ovation HMI System and One Year Software Support: Emerson Process Management Power & Water Solutions Inc. (ref. WW. C.2)

C. Contract Amendments/Change Orders

1. Weston Aqueduct Supply Main 3: Design, Construction Administration and Resident Engineering Services: Stantec Consulting Services, Inc., Contract 6539, Amendment 1 (ref. W D.1)
2. Wachusett Aqueduct Pumping Station, BHD/BEC JV 2015, A Joint Venture: Contract 7157, Change Order 39 (ref. W D.2)
3. Northern Intermediate High Section 110-Stoneham: Albanese D&S, Inc., Contract 7067, Change Order 2 (ref. W.D.3)

VI. CORRESPONDENCE TO THE BOARD

VII. EXECUTIVE SESSION

A. Real Estate:

1. Cross-Harbor Cable – Approval of Revocable License Agreement with Harbor Electric Energy Company

B. Litigation:

1. Settlement Authority for Workers' Compensation Claim

VIII. ADJOURNMENT

MASSACHUSETTS WATER RESOURCES AUTHORITY
Meeting of the Board of Directors
June 20, 2018

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on Wednesday, June 20 at the Authority headquarters in Charlestown. Chair Beaton presided. Present from the Board were Messrs. Carroll, Blackmon, Foti, Pappastergion, Peña, Vitale, Walsh and Ms. Wolowicz. Messrs. Cotter and Flanagan were absent. Among those present from the Authority staff were Frederick Laskey, Executive Director, Steven Remsberg, General Counsel, David Coppes, Chief Operating Officer, Carolyn Fiore and John Vetere, Deputy Chief Operating Officers, Thomas Durkin, Director of Finance, Michele Gillen, Director of Administration, Karen Gay-Valente, Director of Human Resources, Ria Convery, Assistant Secretary, and Kristin MacDougall, Assistant to the Board of Directors. The meeting was called to order at 12:18 p.m.

REPORT OF THE CHAIR

Chair Beaton reported that this has been a busy legislative session regarding issues such as climate change and the mitigation of related municipal vulnerabilities. He noted the selection of Vineyard Wind in the Commonwealth's offshore wind project procurement process. He added that this will be the largest offshore wind development in the United States and is a great opportunity for Massachusetts as we transition toward a more renewable future.

Chair Beaton announced that the June 20, 2018 meeting would be Mr. Blackmon's last meeting as an MWRA Board member as he is pursuing a professional opportunity out of state. The Chair recognized Mr. Blackmon for his excellent work on the Board.

Mr. Blackmon thanked MWRA staff for their work to provide high quality drinking water and wastewater services. Mr. Laskey, on behalf of MWRA staff, thanked Mr. Blackmon for his contributions to the Board.

REPORT OF THE EXECUTIVE DIRECTOR

Mr. Laskey recognized Karen Gay-Valente, who will retire in June 2018, for her professionalism and many contributions to the MWRA. He also recognized John Vetere, also retiring, for his many years of dedicated service to the MWRA.

Mr. Laskey noted that MWRA will meet with the Winthrop CAC and will address residents' concerns about the Fish Pier project. He also suggested that the July and August Board of Directors meetings be consolidated into one meeting, to be held in July.

APPROVAL OF 05-30-2018 MINUTES

Upon a motion duly made and seconded, it was

Voted: to approve the minutes of the Board of Directors' meeting of May 30, 2018, as presented and filed with the records of the meeting.

APPROVALS

PCR Amendments – June 2018

Upon a motion duly made and seconded, it was

Voted: to approve amendments to the Position Control Register for June 2018, as presented and filed with the records of the meeting.

Appointment of Director, Laboratory Services

Upon a motion duly made and seconded, it was

Voted: to approve the appointment of Mr. Steven Rhode to the position of Director of Laboratory Services, (Non-Union, Grade 15) in the Operations Division, at the recommended annual salary of \$138,500, commencing on a date to be determined by the Executive Director.

Appointment of Director, Waterworks

Upon a motion duly made and seconded, it was

Voted: to approve the appointment of Mr. Mark H. Johnson to the position of Director of Waterworks (Non-Union, Grade 16) in the Operations Division, at the recommended annual salary of \$156,650, commencing on a date to be determined by the Executive Director.

Appointment of Director, Wastewater

Upon a motion duly made and seconded, it was

Voted: to approve the appointment of Mr. Stephen D. Cullen to the Position of Director of Wastewater (Non-Union, Grade 16) in the Operations Division, at the recommended annual salary of \$156,650, commencing on a date to be determined by the Executive Director.

Appointment of Director, Human Resources

Upon a motion duly made and seconded, it was first

Voted: to amend the proposed beginning salary for the position by increasing same from \$136,600 to \$141,000.

Upon a further motion duly made and seconded, it was then

Voted: to approve the appointment of Ms. Andrea Murphy to the position of Director, Human Resources, (Non-Union, Grade 16) in the Administration Division, at the recommended annual salary of \$141,000 commencing on a date to be determined by the Executive Director.

Final FY 2019 Capital Improvement Program

Upon a motion duly made and seconded, it was

Voted: 1) to approve the Final FY19 Capital Improvement Program with a total budget of \$179.2 million for FY19 including \$151.7 million in project spending and \$27.5 million in community assistance; 2) to approve a five-year budget cap for capital spending ("Cap") for the period of FY19 through FY23 of \$984.8 million with the FY19-FY23 annual cash flows as presented and filed with the records of the meeting; (Cap spending includes total budget spending, contingency, and inflation, and is offset by community assistance and Chicopee Valley Aqueduct adjustments. In the event that the five-year spending projection exceeds the five-year base-line Cap in any of the Proposed or Final Capital Improvement Program budget cycles, the Executive Director may request approval from the Board of Directors for higher spending); and 3) to approve the responses to the Advisory Board's Combined Recommendations and Comments upon the MWRA's FY19 Capital Improvement and Current Expense Budgets.

Final FY 2019 Current Expense Budget

Upon a motion duly made and seconded, it was

Voted: 1) to adopt the Final FY19 Current Expense Budget (CEB) set forth in Attachments A, B and C with current revenue and expense of \$767,943,713 and 2) to adopt the Final FY19 Operating Budget (Trustee's Budget) set forth in Attachment D, all as presented and filed with the records of the meeting.

Final FY 2019 Water and Sewer Assessments

Upon a motion duly made and seconded, it was

Voted: to adopt the following effective July 1, 2018: 1) Water system assessments of \$249,855,191 and sewer system assessments of \$489,187,009 for Fiscal Year 2019; 2) FY19 sewer assessments of \$500,000 for the Town of Clinton and \$450,278 for the Lancaster Sewer District; 3) FY19 charge to the City of Worcester of \$188,387 representing approximately 7.9% of the direct operating expenses for the Clinton Wastewater Treatment Plant; 4) FY19 water assessments of \$3,542,075 for the City of Chicopee, \$710,359 for South Hadley Fire District #1, and \$757,295 for the Town of Wilbraham; 5) A wholesale water rate of \$3,963.00 per million gallons; and 6) A retail sewer rate of \$7,824.67 per million gallons.

Surplus Easement of the Abandoned Upper Neponset Valley Sewer

Upon a motion duly made and seconded, it was

Voted: to declare as surplus to the Authority's sewer system construction, maintenance, or operation needs and purposes a certain portion of an existing Commonwealth of Massachusetts sewer easement under the care, custody, and control of the Authority and located on a parcel of land with an address of 151 VFW Parkway in the City of Boston, as shown on Attachment A as presented and filed with the records of the meeting, and to return it to the control of the Massachusetts Division of Capital Asset Management and Maintenance ("DCAMM") in accordance with Section 9(c) of Chapter 372 of the Acts of 1984, as amended ("Enabling Act").

CONTRACT AWARDS

Mechanical Improvements, Biosolids Processing Facility: Daniel O'Connell's Sons, Inc., Contract 7153

No action taken.

Remote Headworks and Deer Island Shafts Study: Mott MacDonald, LLC, Contract 7237

Upon a motion duly made and seconded, it was

Voted: to approve the recommendation of the Consultant Selection Committee to award Contract 7237, Remote Headworks and Deer Island Shafts Study, to Mott MacDonald, LLC and to authorize the Executive Director, on behalf of the Authority, to execute said contract in an amount not-to-exceed \$1,371,788.67 for a contract term of ten months from the Notice to Proceed.

CONTRACT AMENDMENTS/CHANGE ORDERS

Chelsea Creek Headworks Upgrade: BHD/BEC 2015, A Joint Venture, Contract 7161, Change Order 14

Upon a motion duly made and seconded, it was

Voted: to authorize the Executive Director, on behalf of the Authority, to approve Change Order 14 to Contract 7161, Chelsea Creek Headworks Upgrade, with BHD/BEC 2015, A Joint Venture, for an amount not to exceed \$500,000.00, increasing the contract amount from \$78,782,848.46 to \$79,282,848.46, with no increase in contract term. Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 7161 in an amount not to exceed the aggregate of \$250,000, in accordance with the Management Policies and Procedures of the Board of Directors.

Western Operations Marlborough Maintenance Facility: E. A. Colangeli Construction Co., Inc., Contract 6650B, Change Order 10 (ref. W A.1)

Upon a motion duly made and seconded, it was

Voted: to authorize the Executive Director, on behalf of the Authority, to approve Change Order 10 to Contract 6650B, Western Operations Marlborough Maintenance Facility, with E. A. Colangeli Construction Co., Inc., for a lump sum amount of \$29,346.00, increasing the contract amount from \$3,559,661.40 to \$3,589,007.40, with no increase in contract term. Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 6650B in an amount not to exceed the aggregate of \$75,000, in accordance with the Management Policies and Procedures of the Board of Directors.

EXECUTIVE SESSION

It was moved to enter executive session to discuss real estate and litigation and thereafter to return to open session solely for the purpose of adjournment.

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

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Blackmon		
Carroll		
Foti		
Pappastergion		
Peña		
Vitale		
Walsh		
Wolowicz		
Beaton		

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

EXECUTIVE SESSION

The meeting returned to open session at 12:49 p.m. and adjourned at 12:50 p.m.

Approved: (July 18, 2018)

Attest:

Andrew M. Pappastergion, Secretary