



*Summary of:*

# MWRA Board of Directors' Meeting

## March 3, 1999

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A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on March 3, 1999 at the Authority Headquarters in Charlestown. **Present:** Chairman Robert Durand, Gubernatorial Representative; John Carroll, Andrew Pappastergion, Norman Jacques, Advisory Board Representatives; Vincent Mannering, Andrea d'Amato, City of Boston Representatives; Joseph MacRitchie, City of Quincy Representative; Lucile Hicks, Donald Mitchell, Gubernatorial Representatives. **Absent:** Marie Turner, Town of Winthrop Representative; Robert Spinney, City of Boston Representative.

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## AGENDA

### *Report of the Chair*

No Report.

### *Report of the Executive Director*

Mr. MacDonald informed the Board that there would be a hearing regarding the filtration waiver the following day in the Federal Court House in Judge Stearn's Chamber. In addition, Mr. MacDonald referred to a letter from Massachusetts DEP in response to the Authority's report concerning coliform violations at Wachusett Reservoir. The letter states that DEP will not change its decision relative to the filtration waiver at this time, but requests comparison testing with final results due by September 30, 1999.

The Executive Director also reported on the status of Chestnut Hill. The new pump station is moving forward, with the award of the construction contract at the last Board meeting. He also said that a proposal has been made to mount a charrette (group meeting) to get on the table visions of what should happen with the buildings. Secretary Durand is

very interested in this project and would like to see something happen. Mr. MacDonald said that the Authority has been in touch with a company named HMI to organize the charrette. Although the MWRA would provide financial support in the order of \$25,000, HMI has proposed a much higher cost. Mr. Favaloro asked why the Authority feels compelled to pay for the charrette and suggested that there are other parties that should contribute, noting that the Authority contribution should be contingent upon equal matches from the City of Boston and Executive Office of Environmental Affairs.

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## **APPROVALS**

### **Approval of Capital Budget Amendment to the Other Capital Projects Contingency Fund**

The Board voted to approve an amendment to the FY99-01 Capital Improvement Program to increase the Other Capital Projects Contingency Fund by \$15,300,000, from \$36,513,000 to \$51,813,000; and to approve transmittal to the Advisory Board, for its review and comment, of a second proposed amendment to the FY99-01 Capital Improvement Program budget to increase the Other Capital Projects Contingency Fund by \$6,150,000, from \$51,813,000 to \$57,963,000.

The budget amendment originally proposed for approval at this meeting included an additional \$6.2 million which was not included in the original transmittal to the Advisory Board and, therefore, was subject to Advisory Board review. Mr. Pappastergion and other members of the Board objected to this lack of opportunity for review. The Board amended the motion to remove this portion of the contingency fund amendment and submit the \$6.2 million as a separate amendment to the Advisory Board for review and comment.

Staff noted that they did not concur with the Advisory Board's recommendation relative to the CSO program in Cambridge. The Cambridge Sewer Separation project was originally estimated to be a \$10 million project. Developments during the early stages of the project have revealed that the costs could grow to approximately \$70 million. MWRA has requested that Cambridge reevaluate and define the overall scope and cost of CSO control. In response to the Authority's request for an additional \$2.4 for the project, the Advisory Board recommended that the Authority hold further design spending until the Board has approved any new or expanded approach to the project. MWRA staff argued that the funds are for the first four contracts, which Cambridge has already awarded. Mr. Favaloro said that the Authority should not spend any more on the current approach until the reassessment is complete.

\$2.2 million of the Advisory Board's recommended reductions to the original request were accepted by the Authority, resulting in a contingency amendment in the amount of \$15.3 million.

### **Approval of Agreement between the MWRA and MDC Regarding Responsibility for Spot Pond and its Surrounding Land**

The Board approved an Agreement between the MWRA and the Metropolitan District Commission (MDC) for the MDC, through its Operations Division, to assume responsibility for operation, maintenance and management of Spot Pond Reservoir, in the form of Attachment 1 filed with the records of the meeting. The Agreement further assigns MDC responsibility for all of MWRA's obligations under the 1995 Memorandum of Understanding between MDC, MWRA and the Massachusetts Historical Commission, specifically including the care and control of the Tudor Barn.

Staff explained that Spot Pond Reservoir was taken off-line as a distribution reservoir in September of 1997 and is now used as an emergency back-up water supply. In developing the Agreement with the MDC, the Authority and the Advisory Board worked to ensure that MWRA interests in Spot Pond are protected and that ratepayers do not pay for any costs associated with public access or water quality impacts associated with public access. The Agreement places responsibility for operation, maintenance, and management of Spot Pond Reservoir for public recreation purposes with the MDC. MWRA retains rights to all pipelines, connections, facilities and appurtenances constituting part of the MWRA Waterworks system and responsibility for use, operation, maintenance and management of the reservoir as an emergency back-up water supply. In addition, the Agreement specifically assigns to MDC responsibility for the care

and control of the Tudor Barn.

**Walnut Hill Water Treatment Plant Design and ESDC; Camp Dresser & McKee - Authorization to Proceed with Final Design of Ozonation Facilities**

The Board voted to authorize Camp Dresser & McKee, Inc., the Walnut Hill Water Treatment Plant design engineer, to proceed with the final design of the ozonation alternative in order to meet the August 1999 design completion date required in the Administrative Consent Order with the DEP. The authorized amount will increase by \$409,601 as provided for in the original contract for this work, from \$21,545,653 to \$21,955,254. The increased amount is within the approved contract amount of \$29,261,171.

This authorization will allow CDM to proceed to 90% design on the ozonation facilities at Walnut Hill Water Treatment Plant. The Board approved the construction contract award for the common facilities for filtration and ozonation on February 10, 1999. MWRA is required to complete final design for ozonation/chloramination facilities by August 1999.

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## **CONTRACT AWARDS**

**Expansion Joint Repair Evaluation and Design at the Deer Island Treatment Plant, Simpson, Gumpertz, and Heger, Inc.**

The Board voted (with Mr. Mannering opposed) to approve the selection of Simpson, Gumpertz, and Heger, Inc. to provide engineering services for an Expansion Joint Repair Evaluation study at the Deer Island Treatment Plant, and to authorize the Executive Director, on behalf of the Authority, to execute a contract with Simpson, Gumpertz, and Heger, Inc., for an amount not to exceed \$99,874, and for a term of two years from the Notice to Proceed.

Staff explained that in September 1997, about twenty-one months after the Primary Clarifier Batteries A&B were placed into service at Deer Island, failures in the expansion joints on the decks were detected in the bond between the caulking compound and the adjacent concrete. Evidence of such failure now extends to about 25% of the total linear dimension of 9,600 feet of the expansion joints in the Primary Clarifiers A, B, C & D. The life for high performance expansion joint sealing systems should be between ten and twenty years.

This consultant contract will include evaluation of the cause of the premature sealing system failures, preparation of documentation and other support for warranty and design claims, preparation of specifications and drawings for recommended repairs, engineering services during construction for the repair program, and development of an expansion joint inspection, maintenance and repair program.

**Technical Assistance Consultant Services Contract - Surveying, Bryant Associates, Inc.**

The Board voted to approve the award of a Technical Assistance Consultant Contract for an initial one-year phase to Bryant Associates, Inc. and to authorize the Executive Director, on behalf of the Authority, to execute said contract for surveying for an amount not to exceed \$50,000. Further, the Board authorized the Executive Director to renew said contract, if recommended by staff, for up to two additional one-year phases, for similar terms and conditions, and for the same yearly not-to-exceed amount.

The purpose of this technical assistance contract is to make available to the MWRA, on a continuing as-needed basis, the services of a consultant with expertise in surveying to perform small, unanticipated or emergency projects. The consultant will be on call to provide task order based services under a one-year contract, renewable for two additional one-year phases.

**Effluent Outfall Tunnel Startup, Modern Continental Construction Company, Inc.**

The Board approved the award of Contract 6029, Effluent Outfall Tunnel Startup, to the lowest responsible and eligible bidder, Modern Continental Construction Company, Inc., conditional upon approval by the Massachusetts Department of Environmental Protection, Bureau of Municipal Facilities, and to execute said Contract in the bid price of \$3,287,000 for a period of 607 days from the date of Notice to Proceed.

This Outfall Tunnel start-up contract will support full activation and initial operation of the tunnel. The work under this contract includes all labor, material, equipment, vessels, tools, supplies and supervision necessary to support the MWRA during the start-up and initial operation of the Effluent Outfall Tunnel and the diffuser system. This includes installation of identification plates on each diffuser, surveying/documenting existing conditions of the diffusers, diffuser port adjustments, and sampling.

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## **CONTRACT AMENDMENTS/CHANGE ORDERS**

### **Telecommunications Support, RCC Consultants Inc.**

The Board authorized the Executive Director, on behalf of the Authority, to execute Amendment No. 2 to Contract 6177, Telecommunication Support, with RCC Consultants Inc., extending the term by 18 months, from August 1, 1998 to February 1, 2000 at no additional cost.

This contract was amended in April 1998 by adding tasks to support Year 2000 assessment activities; the upset limit was increased to \$52,364. At that time, additional time was not added to the contract but should have been since RCC has provided assessment and testing assistance since April 1998. Under this amendment, RCC will supplement staff's efforts to meet the deadlines for telecommunications upgrades and replacements.

### **Contingency Site Back-up Services, Sunguard, Inc.**

The Board voted to authorize the Executive Director, on behalf of the Authority, to execute Amendment No. 2 to WRA 763, Contingency Site Back-up Services, with Sunguard, Inc., increasing the cost by \$48,110, from \$349,008 to \$397,118, and extending the term by 17 months, from February 18, 1999 to July 18, 2000. The original contract price was \$332,028. Amendments now total \$65,090.

Staff explained that Sunguard provides MWRA with computer back-up disaster recovery services for its critical information systems. These services provide for network and computer center capability should a disaster occur in the MWRA Data Center or at a regional level, such as major equipment failure, fire, flood, hurricane or loss of power.

### **TRAC Information System Upgrade Contract**

The Board authorized the Executive Director, on behalf of the Authority, to execute Amendment No. 1 to Contract 344A, TRAC Information System Upgrade, with Black & Veatch Inc., decreasing the contract by \$75,000 from \$450,000 to \$375,000, and extending the term by 12 months, from August 1, 1999 to August 1, 2000.

In August 1997, the Board approved a two-year contract for \$450,000 with Black & Veatch to rewrite and upgrade the current TRAC Information System (TRAC I/S). After a delay in the delivery of the work product and staff requiring that Black & Veatch redo the deliverable, the contractor requested approval of a time extension and additional funds. Staff did not concur and entered into discussions with Black & Veatch to resolve a scope dispute. Agreement has been reached to streamline the system development and focus primarily on the hardwired linkages and to deliver a Y2K compliant system and to produce enhancements to TRAC Charges module which assists with revenue generation.

### **Concrete Coating/Repair and Upgrade - Phase II, Carlin Contracting Co., Inc.**

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order 6 to Contract 6403, Concrete Coating/Repair and Upgrade - Phase II, with Carlin Contracting Co., Inc. increasing the

contract amount by \$227,940 from \$17,600,312 to \$17,828,252. Further, the Board authorized the Executive Director to approve additional change orders as may be needed to Contract 6403 in amounts not to exceed \$250,000. The original contract price was \$17,359,370. Change orders now total \$468,882. A contingency transfer in the amount of \$227,940 is required.

Staff explained that the contract documents require the contractor to install Linabond and epoxy coatings in the effluent channels of Primary Batteries A, C, and D to address the issue of high levels of hydrogen sulfide gas at Deer Island. This change order will provide for an isolation plan requiring the installation of stop log frames and stop logs at the north end of each battery effluent channel, where it intersects with the Primary Effluent Cross Channel. This will permit the required isolation of the contractor's work area with no interference to the plant's safe operation.

#### **Secondary Treatment Facilities, Phase 4, Metcalf & Eddy, Inc.**

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 6 to Contract No. 5686, Engineering Services for Secondary Treatment Facilities, Phase 4, with Metcalf & Eddy, Inc., increasing the contract by \$586,000 from \$16,196,085 to \$16,782,085. Further, the Board authorized the Executive Director to approve additional change orders as may be needed to Contract 6180 in the amount not to exceed the aggregate of \$250,000. The original contract price was \$11,954,822. Amendments now total \$4,827,263.

This amendment addresses a series of design changes and increases that occurred in 1998. The amendment includes increased costs for design revisions to the final civil/site contract and design contract, offset by a reduction for design phase start-up assistance.

#### **Ancillary Design Modifications - Phase III, R. Zoppo Corp./Interstate Engineering Corp., J.V.**

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order 25 to Contract 6180, Ancillary Design Modification - Phase III, with R. Zoppo Corp./Interstate Engineering Corp., Joint Venture, in an amount not to exceed \$1,300,000, increasing the contract amount from \$28,890,580 to \$30,190,580, and extend Milestone "L" by 181 calendar days from March 7, 1999 to September 3, 1999, without any extension to the contract completion date. Further, the Board authorized the Executive Director to approve additional change orders as may be needed to Contract 6180 in amounts not to exceed the aggregate of \$250,000. The original contract amount was \$28,191,605. Change orders now total \$1,998,975. A contingency transfer in the amount of \$1,300,000 is required to fund this change order.

The Ancillary Design Modifications contract includes a wide array of modifications which are necessary for safe and efficient long-term operation of the Deer Island Treatment Plant. Staff explained that after completion of the Lydia Goodhue Pump Station design, MWRA decided to make the pump station an unmanned facility. This required certain modifications to the variable frequency drives to provide additional monitoring and alarm functions to prompt remote operator response. This change order relates to several new issues which were identified during the start-up of the pump station which are related to signals received at the variable frequency drives that are required to provide the operator with information for effective and timely problem resolution.

#### **Walnut Hill Water Treatment Plant Design and Engineering Services During Construction, Camp Dresser & McKee, Inc.**

The Board authorized the Executive Director, on behalf of the Authority, to execute Amendment 6 to Contract 5017, Walnut Hill Water Treatment Plant Design/Engineering Services During Construction with Camp Dresser & McKee, Inc., increasing the contract amount by \$4,597,161 from \$29,261,171 to \$33,858,332; and authorizing a Notice to Proceed on work covered by this amendment. The original contract price was \$23,459,620. Amendments now total \$10,398,712. A contingency transfer in the amount of \$4,159,332 is required to fund this change order.

This amendment authorizes additional engineer services related to the Walnut Hill Water Treatment Plant including additional work to support filtration avoidance determination; design of the ozonation alternative to reflect reservoir specific *Cryptosporidium* inactivation criteria; new design work necessary to upgrade the redundant connection to the Wachusett Reservoir for use during connection of new facilities to the Cosgrove Tunnel; additional support for

planning, training and facilitation of start-up and assumption of plant operations responsibility by MWRA staff; design improvements to increase safety and to reduce construction and operating costs; additional permit work resulting from value engineering and design review recommendations; and improvements to the bid documents, schedule changes and additional design effort.

Mr. Mannering asked what accounted for the \$1 million in new design work. Mr. Carroll agreed that the cost seemed high. Staff said initial testing and inspections have determined that additional testing and design services are needed at the Wachusett lower gate house and for repairs to the Wachusett Aqueduct. Mr. MacDonald added that the Authority does not have the in-house staff resources to do this work and that this is a very sensitive area to be working in due to proximity of the work site to the dam.

**MetroWest Water Supply Tunnel Project, Loring Road Storage Tanks, O'Connell-Barletta, J.V.**

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order 10 to Contract 6203, MetroWest Water Supply Tunnel Project, Loring Road Storage Tanks with O'Connell- Barletta, J.V., increasing the contract in an amount not to exceed \$40,000 from \$39,965,907 to \$40,005,907, with no change in the contract expiration date. Further, the Board authorized the Executive Director to approve additional change orders, as may be needed to Contract 6203, in amounts not to exceed the aggregate of \$250,000. A contingency transfer in the amount of \$40,000 is required.

This change order will allow for an incentive payment of \$40,000 to be made to the contractor based on its safety performance to date. Staff explained that the contractor is eligible for this payment under the MetroWest Safety Incentive Program approved by the Board in January 1997. The Loring Road Storage Tanks achieved its 40% complete mark in January.

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