



The City of San Diego

## Report to the City Council

DATE ISSUED: July 12, 2016 REPORT NO. 16-058

ATTENTION: Honorable Council President Sherri Lightner and Members of the City Council

SUBJECT: Amendment No. 1 to the As-Needed Engineering Technical Services Consultant agreement with Montgomery Watson Harza Americas, Inc., (MWH Americas, Inc.) for the Pure Water San Diego Program; H156303

REFERENCE: On December 9, 2014, City Council approved award of a 5-year \$30,000,000 Agreement with MWH Americas, Inc., for As-Needed Engineering Technical Services to support the Public Utilities Department in implementation of the Pure Water Program. This item was unanimously approved by City Council.

### REQUESTED ACTION:

1. That the Mayor or his designee is authorized to execute the First Amendment to the Agreement with MWH Americas, Inc., for As-Needed Engineering Technical Services for no more than \$16,400,000, increasing the total not-to-exceed amount of the Agreement to \$46,400,000, and the City Council waives the requirement to competitively bid consultant contracts as set forth by Council Policy 300-07; and
2. That the Chief Financial Officer is hereby authorized to expend an amount not to exceed \$46,400,000 in total over the term of this Agreement from Water Utility Operating Fund (700011), Water Utility CIP Fund (700010), Metro Sewer Operating Fund (700001), and Metro Sewer CIP Fund (700009) for the purpose of funding the As-Needed Engineering Technical Services Consultant agreement with MWH Americas, Inc., contingent upon adoption of the Annual Appropriation Ordinance for the applicable fiscal year and contingent upon the Chief Financial Officer furnishing one or more certificates certifying that funds necessary for expenditure are, or will be, on deposit with the City Treasurer.

### STAFF RECOMMENDATION:

Adopt the resolutions.

### EXECUTIVE SUMMARY OF ITEM BACKGROUND:

The Public Utilities Department (PUD) utilizes the As-Needed Engineering Technical Services Consultant agreement with MWH Americas, Inc., for specialized technical services to support the Pure Water Program implementation. The services generally relate to planning, design,

engineering, regulatory, and program management support. The original agreement was approved by City Council on December 9, 2014, via Resolution No. R-309350. The agreement was issued on January 8, 2015, for an amount not to exceed \$30 million and a term of five (5) years. To support activities described below, PUD requests to amend the total contract amount to \$46,400,000.

The existing contract scope and amount were based on meeting cumulative Pure Water production of 15, 30, and 83 million gallons per day (mgd), by 2023, 2027, and 2035, respectively. Conditions since the contract was awarded have changed. Through work accomplished via the MWH Americas, Inc., contract, PUD is now positioned to bring the first 30 mgd of Pure Water online in 2021 (versus 2023 and 2027), and is doing so through a more favorable program of facilities and projects.

The decision to accelerate came in response to the heightened urgency for new local water supplies to reduce reliance on imported water, and to respond to California's multi-year historic drought and climate change impacts. Bringing the first 30 mgd of Pure Water on line up to six (6) years early has required MWH Americas, Inc., to perform the activities below:

- Design the Advance Water Purification Facility (AWPF) to a 30% design level, compared to the 10% level in the contract scope. This was done to develop information for both California Environmental Quality Act-related biological and other analyses, and the potable reuse permit application. Both are on the critical path; and
- Perform technical reviews of final designers' submittals completely within the term of this contract; this is twice the effort than would have been required for the original implementation dates.

Approximately \$9.9 million is attributed to the above work to support acceleration.

Throughout the City's planning and design of the first 30 mgd of Pure Water, the State Water Resources Control Board's Division of Drinking Water (DDW) has been working to finalize regulations for potable reuse through surface water augmentation. They are legislatively mandated to finalize regulations on or before December 31, 2016. Initial drafts of the regulations required specific reservoir dilution. In mid-2015, DDW and their independent expert panel included other dilution requirements in the draft regulations, allowing a wider range of reservoirs in potable reuse projects. This allowed the City to proceed with a North City-to-Miramar project. No prior studies had been done to determine the Miramar Concept's feasibility; these have been undertaken through the MWH Americas, Inc., contract:

- Reservoir modeling;
- Preparation of the proposed Miramar concept for the regulators and City's Independent Advisory Panel (IAP);
- AWPF preliminary design; includes a 5-step purification process to ensure treatment reliability and redundancy;
- Conveyance system preliminary design;
- Evaluation of impacts to the Miramar Water Treatment Plant and downstream water distribution system; and
- Preliminary design of Miramar Water Treatment Plant modifications.

The cost associated with the above work is approximately \$3.2 million. The City, DDW, and the Regional Water Quality Control Board are collaborating on the permit application for a 30 mgd Miramar Pure Water Project which provides schedule and cost advantages over the previously programmed Project.

The proposed contract amendment also supports:

- Implementation of a cogeneration facility;
- Preparation and execution of an Operational Readiness Master Plan (ORMP); and
- Value engineering of Pure Water facility designs.

The proposed cogeneration facility aligns with the City's Climate Action Plan and will fulfill energy requirements of the expanded North City Water Reclamation Plant, the new AWPF, and pumping to Miramar. It will also serve a dual purpose of utilizing landfill gas and reducing emissions to below limits that will go into effect January 1, 2019. PUD and Environmental Services Department are partnering on this cogeneration project and its costs.

ORMP will define an organizational structure needed to support future Pure Water facilities. Lines of authority, roles, responsibilities, and qualification requirements will be established through this structure. An ORMP will also address recruitment and training needs that will be unique to the City's first AWPF.

Value engineering will be conducted as part of reviews of the 30% facility designs to identify cost-saving opportunities, while preserving the original intended function and scope of the facility under review.

The estimate for cogeneration support, preparation of an ORMP, and value engineering is \$3.3 million.

The table below summarizes contract scope changes that have prompted the proposed amendment.

<i>Scope Change Category</i>	<i>Contract Value Change</i>
Accelerated delivery of 30 mgd of Pure Water (2023 and 2027 to 2021)	\$9,900,000
Miramar Project feasibility & preliminary design	\$3,200,000
Cogeneration facility, ORMP, value engineering	\$3,300,000
<b>Subtotal</b>	<b>\$16,400,000</b>
<b>Proposed Amended Total Contract Value</b>	<b>\$46,400,000</b>

The total program management support level is within industry standards.

CITY STRATEGIC PLAN GOAL(S)/OBJECTIVE(S):

- Goal #3: Create and sustain a resilient and economically prosperous City  
Objective #2: Increase water independence

FISCAL CONSIDERATIONS:

The total not-to-exceed amount of this Amendment No. 1 is \$16,400,000. Funds are, or will be, available in the following two Sewer Funds: 700001 (Metro Sewer Operating), 700009 (Metro Sewer CIP); and the following two Water Funds: 700011 (Water Utility Operating) and 700010 (Water Utility CIP), contingent upon adoption of the Annual Appropriation Ordinance for the applicable fiscal year, and contingent upon the City Comptroller furnishing one or more certificates certifying that the funds necessary for expenditure are, or will be, on deposit with the City Treasurer. Funds will be allocated on a task order basis.

EQUAL OPPORTUNITY CONTRACTING INFORMATION (if applicable):

This Agreement is subject to the City's Equal Opportunity Contracting (San Diego Ordinance 18173, Section 22.2701 through 22.2708) and Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517).

PREVIOUS COUNCIL and/or COMMITTEE ACTIONS:

The City Council approved the As-Needed Engineering Technical Services Consultant agreement with MWH Americas, Inc., (H156303) on December 9, 2014, Resolution number R-309350 for a total not-to-exceed amount of \$30,000,000.

COMMUNITY PARTICIPATION AND OUTREACH EFFORTS:

In April 2014, the City formed the Pure Water Working Group to provide diverse viewpoints and input on the City's efforts to provide a safe, secure and local drinking water supply. The group includes representatives from community planning groups, businesses, City Council District Offices, environmental groups, and water coalitions. The group has been meeting since May 2014. We continue to provide them with regular program updates.

Overall Pure Water outreach activities initiated in 2010 continue; attendance at tours and speaking engagements have reached 9,779 and 13,013, respectively, with many pledging support for the program.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

The stakeholders in this Program include the San Diego Coastkeeper, San Diego Chapter of the Surfrider Foundation, Metro Wastewater Participating Agencies, Independent Rates Oversight Committee, Pure Water Working Group, and Water and Wastewater Ratepayers. The Stakeholders played an important role in development of the Pure Water Program.



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