

Meeting Date: 4/28/2015

Report Type: Consent

Report ID: 2015-00309

Title: Supplemental Agreement: California Multi-Agency Benchmarking Study (15001111)

Location: Citywide

Recommendation: Pass a Motion authorizing the City Manager to execute Supplemental Agreement No. 1 to the professional services agreement with MWH Americas Inc., (Agreement No. 2014-0487) in an amount not to exceed \$129,500 with a net cost to the City of \$18,500.

Contact: Nicholas Theocharides, Engineering Services Manager, (916) 808-5065, Department of Public Works

Presenter: None

Department: Public Works Department

Division: Engineering Services Admin

Dept ID: 15001111

Attachments:

1-Description/Analysis

2-Supplement #1 4-2-15 - Signed

City Attorney Review

Approved as to Form

Gerald Hicks

4/16/2015 11:18:07 AM

Approvals/Acknowledgements

Department Director or Designee: Jerry Way - 4/6/2015 1:32:09 PM

Description/Analysis

Issue: Since 2001, the City of Sacramento has participated in an ongoing study to benchmark capital project delivery performance by seven of the eight largest cities in California (Long Beach, Los Angeles, Oakland, Sacramento, San Diego, San Francisco, and San Jose). The purpose of the study is to determine the costs to deliver capital projects by comparing cost data from similar agencies and to compare/evaluate different delivery methods, establish industry best management practices, and develop a discussion and information exchange forum between the participating agencies.

As the current chair of the study, the City is responsible for organizing and leading the study effort and managing the study's consultant, MWH Americas Inc. The contract costs are shared equally by each of the seven cities resulting in a net cost to the City of Sacramento of \$18,500 for participation in the study.

The original contract with MWH America's was approved on May 27, 2014 for a one-year term with an option to extend it for two additional one-year terms. This supplemental agreement will extend the contract for one additional year and increase the contract amount by \$129,500.

Policy Considerations: None

Environmental Considerations:

California Environmental Quality Act (CEQA): Under CEQA general rule 15061-B-3, CEQA applies only to projects which have the potential for causing a significant effect on the environment. The recommended action will have no effect on the environment and is therefore not subject to CEQA.

Sustainability Considerations: Not applicable.

Other: None.

Commission/Committee Action: None.

Rationale for Recommendation: Approval of the supplemental agreement is necessary for the 2015 Multi-Agency Benchmarking Study to proceed.

Financial Considerations: The additional contract amount is for a not to exceed amount of \$129,500. The contract will be obligated against the Department of Public Works Engineering Services operating budget. After reimbursement from the participating agencies the additional net cost to the City will be \$18,500 which is to be equally shared between the Department of Public Works and the Department of Utilities Engineering Services operating budgets.

Local Business Enterprise (LBE): In accordance with the Administrative Procedures for the LBE Program, a waiver of the 5% LBE participation requirement was granted by the Economic Development Department. The services to be provided by the consultant are in support of a state-wide study funded by seven California cities, and there are no Sacramento based LBE activities.

**City of Sacramento
SUPPLEMENTAL AGREEMENT**

Contract #: **2014-0487-1**

Purchase Order #:

Supplemental Agreement #: **1**

Job#: **15001111**

Project Title: **2014 Ca Multi-Agency Benchmarking Study**

The City of Sacramento ("City") and MWH Americas, Inc., ("Contractor"), as parties to that certain Professional Services Agreement designated as Agreement Number 2014-0487 including any and all prior supplemental agreements modifying said agreement (said agreement and supplemental agreements are hereby collectively referred to as the "Agreement"), hereby supplement and modify the Agreement as follows:

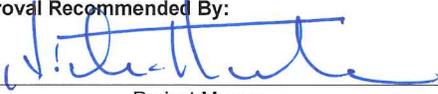
1. The Scope of Services specified in Exhibit A of the Agreement is amended as follows:

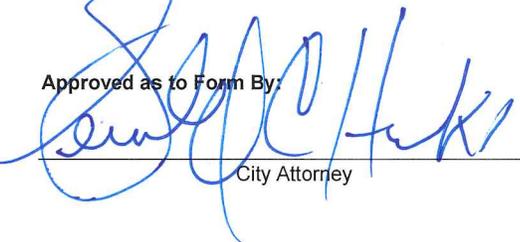
See Exhibit A

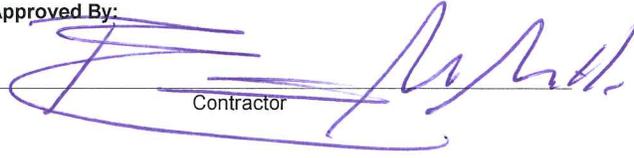
2. In consideration of the additional and/or revised services described in section 1, above, the maximum not-to-exceed amount that is specified in Exhibit B of the Agreement of Payment of Contractor's fees and expenses, is increased by \$129,500.00 and said maximum not-to-exceed amount is amended as follows:

| | |
|---|---------------------|
| The original not-to-exceed amount: | <u>\$129,500.00</u> |
| The net change by previous Supplemental Agreements: | <u>\$0.00</u> |
| The not-to-exceed amount prior to this Supplemental Agreements: | <u>\$129,500.00</u> |
| The contract sum will be increased by this Supplemental Agreement: | <u>\$129,500.00</u> |
| The new not-to-exceed amount including all Supplemental Agreements: | <u>\$259,000.00</u> |

3. Contractor agrees that the amount of increase or decrease in the not-to-exceed amount specified in section 2, above, shall constitute full compensation for additional and/or revised services specified in section 1, above, and shall fully compensate Contractor for any and all direct and indirect costs that may be incurred by Contractor in connection with such additional and/or revised services, including costs associated with any changes in work schedules or in the performance of other services or work by Contractor. The time for the performance of the agreement is increased by 0 Days by reason of the performance of the work required by this Supplemental Agreement.
4. Contractor warrants and represents that the person or persons executing this supplemental agreement on behalf of Contractor has or have been duly authorized by Contractor to sign this supplemental agreement and bind Contractor to the terms hereof.
5. Except as specifically revised herein, all terms and conditions of the Agreement shall remain in full force and effect, and Contractor shall perform all the services, duties, obligations and conditions required under the Agreement, as supplemented and modified by this supplemental agreement.

Approval Recommended By:

Project Manager

Approved as to Form By:

City Attorney

Approved By:

Contractor

Approved By:

City of Sacramento

4-28-15
Executed Date

Attested to By:

City Clerk

(Rev. 07/16/08)

Exhibit A

2014 Ca Multi-Agency Benchmarking Study 2014-0487

| <i>Description</i> | <i>Amount</i> | | | | | | | | | | | | | | | | |
|--|---|--------------------------------|--------------|--------------------------------|--------------|-------------------------|--|-------------------------------|--------|--|--|--------------------------|--------|--|--|--------------------------|--------------|
| Supplemental Agreement #1 | | | | | | | | | | | | | | | | | |
| PCO # 1.0 Client Initiated Changes | \$129,500.00 | | | | | | | | | | | | | | | | |
| 04/02/15 Additional scope of work being added. Please see attachment 1 to exhibit A. | | | | | | | | | | | | | | | | | |
| 1 Items | Total for Change Order # 1 \$129,500.00 | | | | | | | | | | | | | | | | |
| <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">1 Change Orders</td> <td style="width: 15%;">1 Items</td> <td style="width: 40%;">Total for Contract # 2014-0487</td> <td style="width: 15%; text-align: right;">\$129,500.00</td> </tr> <tr> <td colspan="2" style="text-align: center;"><i>Totals By Reason</i></td> <td>Changed/Unforeseen Conditions</td> <td style="text-align: right;">\$0.00</td> </tr> <tr> <td colspan="2"></td> <td>Changes to Bid Documents</td> <td style="text-align: right;">\$0.00</td> </tr> <tr> <td colspan="2"></td> <td>Client Initiated Changes</td> <td style="text-align: right;">\$129,500.00</td> </tr> </table> | | 1 Change Orders | 1 Items | Total for Contract # 2014-0487 | \$129,500.00 | <i>Totals By Reason</i> | | Changed/Unforeseen Conditions | \$0.00 | | | Changes to Bid Documents | \$0.00 | | | Client Initiated Changes | \$129,500.00 |
| 1 Change Orders | 1 Items | Total for Contract # 2014-0487 | \$129,500.00 | | | | | | | | | | | | | | |
| <i>Totals By Reason</i> | | Changed/Unforeseen Conditions | \$0.00 | | | | | | | | | | | | | | |
| | | Changes to Bid Documents | \$0.00 | | | | | | | | | | | | | | |
| | | Client Initiated Changes | \$129,500.00 | | | | | | | | | | | | | | |

EXHIBIT A

SUPPLEMENTAL SCOPE OF SERVICES

Background

The “Project Team” consists of the City of Sacramento and the other participating agencies. The “Study Team” consists of the City of Sacramento, MWH, and MWH’s subconsultants. The “Consultant Team” consists of MWH, Tidal Basin, and Vanir.

The California Multi-Agency CIP Benchmarking Study (Study) was first published by the Project Team in 2002. Each year since then, an “Update” to the original Study has been produced. This scope of services pertains to the activities associated with producing the Update 2015 Study Report.

The Update consists of the following tasks: Study planning, four Project Team in-person meetings, information management, and annual report production. The Update 2015 Study will begin in February 2015 and end in January 2016.

The Project Team meetings are hosted by the participating agencies on a rotating basis. These are the planned dates and locations of the Update 2015 Project Team meetings:

- Meeting #1 March 6, 2015 Sacramento
- Meeting #2 June 5, 2015 MWH, Pasadena
- Meeting #3 August 7, 2015 Oakland
- Meeting #4 October 23, 2015 San Diego

This table summarizes the planned activities for the Update 2015 Study cycle.

| Meeting | Date | Tasks |
|-------------|------------------|---|
| Meeting # 1 | March 6, 2015 | <ul style="list-style-type: none"> ▪ Study Team to develop goals for Agency approval ▪ Re-Chartering Meeting ▪ Roundtable discussions on project delivery |
| Meeting # 2 | June 5, 2015 | <ul style="list-style-type: none"> ▪ Review preliminary data analyses ▪ Agencies report on implementation of BMPs ▪ Roundtable discussions on project delivery |
| Meeting # 3 | August 7, 2015 | <ul style="list-style-type: none"> ▪ Review Special Study results ▪ Roundtable discussions on project delivery |
| Meeting # 4 | October 23, 2015 | <ul style="list-style-type: none"> ▪ Review draft report ▪ Roundtable discussions on project delivery ▪ Update 2016 Planning |

Information to be managed over the course of the Study consists of:

- Project Team member contact information and email distribution lists
- project delivery cost data analyses
- documentation for electronic applications used in data collection and analyses
- changes to agency information in the annual Study report
- documentation of notes during the four in-person Project Team meetings

Customized electronic applications were created by another consultant for this Study and have been maintained and modified by MWH since Update 2005. These applications are: (1) a Performance Questionnaire (MS Excel 2003 with macros) for the agencies to provide project delivery cost data, (2) a

Performance Data spreadsheet (MS Excel 2003 with macros) used to transfer data from submitted Performance Questionnaires into a data table, and (3) a customized database (MS Access 2003) used to store and provide analytical tools for the project delivery cost data.

MWH has created technical documentation describing the function of the electronic applications, how to make basic changes to their designs, and how to address common technical problems. MWH also maintains a "readme" document for database users and reference library files required for database users to have on their computers in order to use the database.

The services required to complete Update 2015 are described below.

Scope of Services

MWH will perform the following services relating to the Study Update 2015 under this AGREEMENT:

Task 1 Project Management

- **Procedures:** MWH will employ its global project management procedures, called the "Project Delivery System", to guide delivery of tasks in this Scope of Services. The purpose of the Project Delivery System is to facilitate consistent application of standards to all project inputs and outputs. This framework sets forth requirements during each phase of project delivery, from setup through closeout.
- **Regular Activities:** MWH will plan, monitor, and control project financial performance, scope performance, quality performance, schedule performance, resource allocation/utilization, and subconsultant activities.

Task 2 Meetings

- **Study Team Meetings:** MWH will participate in one Study Team meeting for conceptual planning and document review prior to each of the four in-person Project Team meetings. This consists of:
 - planning, coordinating, and conducting one Consultant Team meeting prior to each Study Team meeting (for a total of four Consultant Team meetings);
 - planning the purpose and theme of each of the four meetings as embodied in the meeting agenda and meeting documents ("Meeting Book");
 - preparing draft documents ("Meeting Book") for each Study Team meeting (for a total of four draft Meeting Books);
 - planning, coordinating, and attending each Study Team meeting (for a total of four Study Team meetings);
 - collecting comments from the Study Team on the Meeting Books; and
 - completing action items as directed by the lead agency following each Study Team meeting.It is assumed that MWH will spend a total of 2 hours following each Study Team meeting completing action items.
- **Project Team Meetings:** The agency (or Consultant Team) hosting a Project Team meeting is responsible for the following items:
 - preparing and distributing meeting invitations to participants;
 - collecting confirmations of attendance from participants;
 - coordinating food and facility needs;
 - reproducing and binding Meeting Books;
 - reproducing name badges and reproducing tent name cards for attendees; and
 - transporting shipped meeting supplies to the meeting location.

MWH and Vanir will host a total of two in-person Project Team Meetings.

MWH will finalize Meeting Books for and attend each of the four Project Team meetings. This consists of:

- compiling and emailing an electronic file of the Meeting Book (Adobe Portable Document Format [PDF]) to the hosting agency for reproduction;
- emailing the Project Team Contact List (MS Excel 2007) and example invitation to the hosting agency for sending meeting invitations;
- emailing a Workshop Checklist (PDF) to the host for determining facility and meeting needs;
- preparing and shipping meeting supplies;
- answering questions from and sending information to the hosting agency;
- attending the Project Team meeting;
- providing support to the meeting facilitator; and
- taking meeting notes.

- **Action Items:** MWH shall complete action items identified during each of the four Project Team meetings. These consist of:

- preparing draft meeting notes for Study Team review;
- collecting and incorporating comments from the Study Team;
- distributing final meeting notes to the Project Team; and
- completing action items agreed upon during the meeting.

It is assumed that MWH will spend a total of 4 hours per Project Team meeting completing action items.

Task 3 Information Management

- **Project Team Contact List:** Project Team and Study Team member contact information is summarized in a MS Excel 2007 spreadsheet. This spreadsheet is used to track requests and the status of receipt of requested information from the Project Team; to track the distribution of information to the Project Team; as a sign-in list at the Project Team meetings; and as a basis for preparing an email distribution list for relaying action items to the Project Team. MWH will maintain this document. This consists of:

- revising, distributing, collecting and incorporating corrections to the Project Team Contact List following each Project Team Meeting; and
- distributing updated lists to the Project Team via email in an Adobe PDF file as revisions are made.

- **Online Discussion Forum:** MWH will develop a summary of discussions agreed upon by the Project Team and incorporate them into the Update 2015 report (see Task 4 Report Preparation). The report will form the archive of the Discussion Forum exchanges. These discussions will also be summarized and presented at the Project Team Meetings.

- **Project Delivery Cost Data:**

- MWH will modify, test, and distribute the Performance Questionnaire to the Project Team prior to Meeting #1.
- MWH will respond to questions posed by Project Team members regarding the use of the Performance Questionnaire.
- MWH will collect completed Performance Questionnaires; transfer data into project data table; and vet data for completeness, entering 0 or dummy values for required fields that the submitting agency left blank.
- No changes will be made to data by the Project Team following submission.
- It is assumed that MWH will spend a total of 20 hours on this effort.

- **Electronic Applications:** Modifying one application will require modifications to all electronic applications.

- MWH will maintain existing customized applications used to support the Study data

analyses.

- **Documentation for Electronic Applications:** MWH will update technical documentation and user readme document to reflect changes made during the Study. In the technical document, MWH will describe detailed requirements and function of changes, describe how to implement other similar changes, and describe solutions to common technical problems when using the electronic applications. The user readme document will provide basic instructions for the database function.
- **Outlier Analysis:** MWH will:
 - evaluate the entire dataset for statistical outliers by the 16 Project Classifications;
 - calculate median (m) and standard deviation (d) of project delivery cost (y) for each set of projects by Project Classification;
 - identify projects that fall outside of the range of $y = s \pm 3*d$ as statistical outliers;
 - retain outliers in the database but exclude them from the Update 2015 analysis; and
 - mark statistical outliers with a “Yes” in the “Outliers” field of the projects data table in the database.
- **Project Delivery Cost Data Analysis:** Data analysis for the Study will be based on the following criteria: projects completed between 1/1/2010 and 12/31/2014, delivered by the traditional design-bid-build method, total construction cost greater than \$100,000, and projects assigned to one existing Project Classification. Changes to the Study criteria will result in an increased effort and fee to implement the activities described above. MWH will:
 - analyze performance benchmarking data from the Project Team for design cost versus total construction cost, construction management cost versus total construction cost, and project delivery cost versus total construction cost;
 - analyze performance benchmarking data for two ranges of total construction cost (TCC) data: a) full range of TCC and b) 80 percent range of TCC. For example, if a dataset contains 1,000 project data points having a TCC ranging from \$100,000 to \$10 Million, then as per (a) this range of TCC would reflect the full range of TCC for statistical evaluation. If 80 percent of the total projects (800 project data points) have a TCC ranging from \$100,000 to \$1 Million, then as per (b) this range of TCC would reflect the 80 percent range of TCC for statistical evaluation; create these three types of regression models for each of the 4 Project Types and 16 Project Classifications used in the Study;
 - display the R^2 (coefficient of determination) value, and N (count of projects) on the curve (display of other values on curves (e.g., p values) is specifically excluded from this effort);
 - create curves using a linear trendline;
 - conduct analysis and prepare a separate table for later report inclusion that lists: p-value, R^2 Value, and descriptive characteristics of the selected regression model (e.g., y-intercept (b) and slope of regression line (m) for linear trendlines);
 - present the results of such analyses in draft form to the Project Team for review and comment at Meeting # 1; and
 - revise analyses once for publication in the final Study Update report.
 - The consultant will also collect projects delivered by alternative delivery methods such as design-build, job-order-contracting, and CM@Risk. These projects will be added to the projects database but will not be analyzed.
 - The consultant will conduct the small projects analysis from Appendix D from the 2014 Update
- **Miscellaneous Corrections and Requests:** MWH will make minor corrections and requests throughout the Study year as requested by the Project Team. An example of a minor correction is to revise the agency design cost for a project in the project data table. An example of a minor request is to provide an agency with their project delivery cost

data in the database. It is assumed that MWH will spend a total of 16 hours on these corrections and requests.

Task 4 Report Preparation

- **Outline:** MWH will prepare Study Update report outline for Project Team review and comment prior to Meeting # 4. MWH will collect and incorporate comments from the Project Team.
- **Draft Report:** MWH will distribute, collect, and incorporate updates from Project Team on the Benefits of Participation, Agencies' Overall Information Table, and Agencies' Indirect Rates table into the draft report. MWH will divide assignments for writing among the members of the Consultant Team. The Study Update 2015 Report is assumed to be similar in length and content to Update 2014 report. MWH will draft the annual report for Update 2015, which will consist of the following sections:
 - Executive Summary
 - Table of Contents
 - Introduction
 - Performance Benchmarking
 - Online Discussion Forum
 - Appendix A Performance Questionnaire
 - Appendix B Performance Curves
 - Appendix C Indirect Rates
 - Appendix D Small Projects Analysis

MWH will provide a complete Draft Report to Consultant Team for review, and collect and incorporate comments from the Consultant Team members. MWH will provide complete Draft Report to Study Team for review, and collect and incorporate comments from Study Team members. MWH will provide a complete Draft Report to Project Team for review and comment during Meeting #4.

- **Final Report:** MWH will incorporate comments from the Project Team into the Final Report. MWH will provide the Final Report to the Study Team for review, and collect and incorporate comments. MWH will prepare layout of Final Report in electronic (InDesign) format for posting on the internet. MWH will make the layout using InDesign project files for Update 2015 report. MWH will provide layout of Final Report to Study Team for review, and collect and incorporate comments. MWH will deliver the Final Report in Adobe PDF format suitable for posting on the internet and a high-resolution Adobe PDF suitable for printing. It is assumed that the electronic and printed reports will be similar in look and length to the Update 2014 report.
- **Report Distribution:** MWH will provide a low-resolution Adobe PDF suitable for posting on the internet. Study reports are currently posted on the City of Los Angeles' website at <http://eng.lacity.org/techdocs/cabm/>. MWH will email the Project Team to notify them when the report is posted on internet. MWH will provide each participating agency with 3 hard copies of the report. MWH will make the high-resolution PDF suitable for printing available to Project Team members who request it in order to print their own copies of the report.
- **Database Distribution:** MWH will upload the Update 2015 database on the Study website currently maintained by MWH. The database will contain the necessary reference library files required for correct function of the database, and a user readme file to explain database functions.

Task 5: Online Discussion Forum

- **Background:** The Study uses a web-based collaboration (SharePoint_ tool that allows the Study Team and the Project Team to manage, share, collect, and search information related to the Study.

- **Maintenance:** MWH will perform routine maintenance on the site. This subtask is budgeted assuming 2 hours per month of maintenance activities. No improvements or changes to the structure of the site are budgeted. Maintenance consists of:
 - addressing user questions and issues,
 - monitoring and controlling site activity,
 - posting documents,
 - reclassifying Online Discussion Forum topics or other documents posted by the Project Team,
 - periodically archiving the site and files, and
 - managing user accounts.

| Task | Update 2014 |
|---|--------------------|
| Task 1 Project Management | \$12,400 |
| Setup | |
| Monitoring and Control | |
| Closeout | |
| Task 2 Project Team Meetings | \$38,000 |
| Planning Update 2015 | |
| Consultant Team Meeting, Meeting Book, Study Team Meeting (x4) | |
| Task 3 Information Management | \$46,000 |
| Project Team Contact List | |
| Email Distribution List | |
| Online Discussion Forum | |
| Collect Project Delivery Cost Data | |
| Electronic Applications | |
| Documentation for Electronic Applications | |
| Outlier Analysis | |
| Analyze Project Delivery Cost Data | |
| Special Studies | |
| Misc Corrections | |
| Misc Requests | |
| Task 4 Report | \$29,300 |
| Report Outline | |
| Executive Summary | |
| Table of Contents | |
| Introduction | |
| Performance Benchmarking | |
| Online Discussion Forum | |
| Appendix A Performance Questionnaire | |
| Appendix B Performance Curves | |
| Appendix C Indirect Rates | |
| Appendix D Small Projects Analysis | |
| Collect comments and revise report | |
| Final Report Production | |
| Report Distribution | |
| Database Distribution | |
| Task 5 Website | \$3,500 |
| Maintenance | |
| Total | \$129,500 |

Fee: Payable on a lump sum basis in equal monthly instalments over the schedule of the project.