



**March 8, 2017**

**To:** Finance and Administration Committee  
**From:** Darrell Johnson, Chief Executive Officer  
**Subject:** Agreement for Cyber Security Assessment

### **Overview**

Consultant services are needed to perform a cyber security assessment of the Orange County Transportation Authority's industrial control systems and related networks. Proposals were received and evaluated in accordance with the Orange County Transportation Authority's procurement procedures for professional and technical services. Approval is requested to execute a new agreement for these services.

### **Recommendations**

- A. Approve the selection of Ankura Consulting Group, LLC, as the firm to provide cyber security assessment services for the Orange County Transportation Authority's industrial control systems and related networks.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-6-1489 between the Orange County Transportation Authority and Ankura Consulting Group, LLC, in the amount of \$300,000, to provide cyber security assessment services for the Orange County Transportation Authority's industrial control systems and related networks for a one-year term.

### **Discussion**

As part of ongoing security assessments and improvements, the Orange County Transportation Authority's (OCTA) Information Systems Department is seeking a consultant to perform a cyber security assessment of OCTA's industrial control systems (ICS). An ICS is integrated hardware and software designed to monitor and control the operation of machinery and associated devices. Examples of ICS at OCTA include fluid management at the bases, safety systems such as methane detectors, as well as heating, ventilation, and air conditioning systems.

The assessment will include a review of cyber security for technology where a failure could endanger life, property, or physically impact transit service, including communication, fluid management, vehicle management, safety and monitoring, environmental, and on-board transportation systems. This assessment will allow OCTA to identify unknown vulnerabilities and identify ways to mitigate those vulnerabilities. The result of the assessment will include a summary of findings, a prioritized ranking of the vulnerabilities, and suggested mitigation steps.

In order to adequately prioritize future risk remediation, OCTA needs a clear understanding of the risks faced. This assessment will provide a detailed view of the vulnerabilities in OCTA's current transit technical infrastructure. The assessment will also include probability, impact, and suggested remediation steps for each vulnerability, and will be used to prioritize vulnerability remediation. Upon completion, the assessment will include a table-top exercise simulating a cyber-attack on OCTA's ICS, which will identify possible gaps in OCTA's cyber defenses.

### ***Procurement Approach***

This procurement was handled in accordance with OCTA's Board of Directors (Board)-approved procedures for professional and technical services. In addition to cost, many other factors are considered in an award for professional and technical services. Award is recommended to the firm offering the most comprehensive overall proposal considering such factors as staffing and project organization, prior experience with similar projects, work plan, as well as cost and price.

On December 8, 2016, Request for Proposals (RFP) 6-1489 was issued electronically on CAMM NET. The project was advertised in a newspaper of general circulation on December 8 and 15, 2016. One addendum was issued to provide responses to questions received.

On January 10, 2017, 11 proposals were received; however, six were deemed non-responsive as they were unable to meet the federally required Disadvantaged Business Enterprise requirements established for this project.

An evaluation committee consisting of OCTA staff from Contracts Administration and Materials Management, Information Systems, Bus Operations, as well as Security and Emergency Preparedness departments, met to review the five responsive proposals received. The proposals were evaluated based on the following evaluation criteria and weights:

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|---|-----------------------------------|------------|
| • | Qualifications of the Firm        | 30 percent |
| • | Staffing and Project Organization | 30 percent |
| • | Work Plan                         | 20 percent |
| • | Cost and Price                    | 20 percent |

Several factors were considered in developing the criteria weights. Qualifications of the firm, as well as staffing and project organization, were both weighted highest at 30 percent due to the importance of the consultant's experience and staff expertise in completing the work on time and within budget. Work plan and cost were both weighted 20 percent to ensure the consultant can demonstrate their understanding of the scope of work, and OCTA receives competitive pricing.

On January 19, 2017, the evaluation committee reviewed the five responsive proposals based on the evaluation criteria and short-listed the two most qualified firms listed below in alphabetical order:

Firm and Location

Ankura Consulting Group, LLC (Ankura)  
New York, New York

Michael Baker International, Inc. (Michael Baker)  
Irvine, California

On January 26, 2017, the evaluation committee interviewed the two short-listed firms. The interviews consisted of a presentation to demonstrate the firms' understanding of OCTA's requirements for this project. The firms' project managers and key team members had an opportunity to present qualifications and respond to the evaluation committee's questions. Questions were asked relative to the firms' experience performing similar services, understanding of the scope of work, and approach to mitigating the challenges of this project. Finally, each team was asked specific clarification questions related to their proposal. After considering the responses to the questions asked during the interviews, the evaluation committee adjusted the preliminary scores for both firms; however, the overall ranking of the firms did not change as a result of the interviews.

Based on the evaluation of the written proposals, the firms' qualifications, the proposed project budget, and the information obtained from the interviews, the evaluation committee recommends Ankura as the firm to provide cyber security

assessment services for OCTA's ICS and related networks. The following is a brief summary of the proposal evaluation results.

#### Qualifications of the Firm

Both firms demonstrated a comprehensive understanding and experience in providing cyber security assessment services of ICS and related networks.

Ankura's proposal and interview demonstrated relevant project experience in providing cyber security assessment services for several public agencies, including the Los Angeles Metropolitan Transportation Authority, Atlanta Gas & Light, and Los Angeles World Airports. Ankura's references reported that they were satisfied with Ankura's performance, and the proposal highlights the firm's proven ability and capacity to provide cyber security assessment services of ICS and related networks. During the interview, Ankura highlighted its experience with the Federal Emergency Management Agency's National Preparedness Goals.

Michael Baker's proposal and interview demonstrated relevant project experience in providing cyber security assessment services for several public agencies, including the General Services Administration and United States Department of Transportation. Michael Baker's references reported that they were satisfied with Michael Baker's performance, and the proposal highlights the firm's proven ability and capacity to provide cyber security assessment services of ICS and related networks.

#### Staffing and Project Organization

Both firms proposed qualified staff to adequately handle the work described in the scope of work and meet the RFP requirements.

Ankura proposed a well-rounded project team with extensive experience performing similar projects. The proposed project manager has over 13 years of experience with a focus on cyber security. The project team provided excellent responses to interview questions that demonstrated a high level of competency and a commitment to completing the project on schedule. In addition, the firm's staff demonstrated its knowledge of the Homeland Security Exercise and Evaluation Program for the development of the table-top exercise.

Michael Baker proposed staff with extensive experience in similar projects. During the interview, the firm's representatives elaborated on their proposed staffing's experience; however, not all key personnel were present during the

interview. Therefore, the evaluation committee was unable to obtain responses from staff that were proposed to perform the work.

#### Work Plan

Both firms met the requirements of the RFP by describing their individualized approach to providing a cyber security assessment and meeting the requirements of OCTA.

Ankura's work plan demonstrated an excellent understanding of the project requirements. The project approach was thorough and methodical in its level of detail and process for planning and implementing the cyber security assessment. During the interview, Ankura's responses demonstrated greater depth of understanding of the project requirements and deliverables.

Michael Baker's work plan demonstrated a good understanding of the project. The project approach was satisfactory in its level of detail and process for planning and implementing the cyber security assessment.

#### Cost and Price

Pricing scores were based on a formula which assigns the highest score to the lowest total firm-fixed price for the tasks to be completed, and scores the other proposals' total firm-fixed prices based on their relation to the lowest total firm-fixed price. Ankura's proposed price was slightly lower than that of Michael Baker.

#### Procurement Summary

Based on the evaluation of the written proposals, the firms' qualifications, and the information obtained from the interviews, the evaluation committee recommends the selection of Ankura as the top-ranked firm to provide cyber security assessment services of OCTA's ICS and related networks. Ankura delivered a comprehensive proposal and an interview that was responsive to all requirements of the RFP.

**Fiscal Impact**

The project was approved in OCTA's Fiscal Year 2016-17 Budget, CEO/Security and Emergency Preparedness Account 1316-7519-D4825-0KT, and is funded through Grant No. EMW-2015-RA00012.

**Summary**

Based on the information provided, staff recommends the Board authorize the Chief Executive Officer to negotiate and execute Agreement No. C-6-1489 between the OCTA and Ankura Consulting Group, LLC, in the amount of \$300,000, to provide cyber security assessment services for the OCTA's ICS and related networks for a one-year term.

**Attachments**

- A. Review of Proposals - RFP 6-1489, Cyber Security Assessment
- B. Proposal Evaluation Criteria Matrix (Short-Listed Firms) - RFP 6-1489, Cyber Security Assessment
- C. Contract History for the Past Two Years - RFP 6-1489, Cyber Security Assessment

**Prepared by:**

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Mike Bosche  
Senior IS Security Analyst,  
Information Systems  
714-560-5335

**Approved by:**

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Andrew Oftelie  
Executive Director,  
Finance and Administration  
714-560-5649



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Virginia Abadessa  
Director, Contracts Administration and  
Materials Management  
714-560-5623