



## **Audit of Procuring Professional Engineering Services for Restoration Projects**

**Project #16-01**

**Prepared by**  
Office of the Inspector General

**J. Timothy Beirnes, CPA, Inspector General**  
**Daniel Sooker, CPA, Chief Investigator**



# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

November 10, 2016

Governing Board Members:

Re: Audit of Procuring Professional  
Engineering Services for  
Restoration Projects - *Project*  
*No. 16-01*

This audit was performed pursuant to the Inspector General's authority set forth in Chapter 20.055, F.S. Our objectives was to determine whether work orders are assigned to engineering firms under the Professional Engineering Services for Restoration Projects in an equitable manner, engineering firms are achieving established Small Business Enterprise Utilization goals, District project managers negotiated work order pricing with the Professional Engineering firm, and project managers prepared contractor evaluations upon project completion. Dan Sooker and I prepared this report.

Sincerely,

A handwritten signature in blue ink that reads "J. Timothy Beirnes".

J. Timothy Beirnes, CPA  
Inspector General

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## **BACKGROUND**

In accordance with our FY 2016 Audit Plan, the Office of Inspector General conducted an audit of Procuring Professional Engineering Services for Restoration Projects.

The District solicited firms through a Request for Proposal (RFP) dated November 6, 2013, to provide Professional Engineering Services for Restoration Projects in conformity with Section 287.055, Florida Statute, the Consultants' Competitive Negotiation Act (CCNA Statute). The CCNA Statute is a competitive process to solicit professional service contractors. The qualification based contractor selection process considers factors other than price, such as the skills of professional personnel; past performance; willingness to meet time and budget requirements; location; recent, current, and projected workloads of the firms; and the volume of work previously awarded to each firm by the agency. The CCNA Statute mandates a negotiated procurement for the acquisition of services for District projects that require certain licensed professionals. These include the professional services of architects, engineers, landscape architects, registered land surveyors, and mappers.

In accordance with the CCNA process, the District solicited full service engineering firms to submit qualifications and technical proposals to provide engineering services for the District's Restoration Projects through work order assignments. The District received 35 responses to the RFP for Professional Engineering Services for Restoration Projects, of which, 25 were shortlisted and made oral presentations to a panel of five District employees. After oral presentations were completed, the panel evaluated each firm's written proposals and oral presentations and ranked the 25 firms. In accordance with CCNA criteria, the panel considered qualitative factors such as professional staff's abilities, previous work for the District, current and projected workload with the objective of distributing the work equitably to the selected firms. The District selected 13 from the list of 25 firms to enter into contracts. Firms were ranked as follows:

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| Rank | Firm  |
|------|---|
| 1    | MWH Americas, Inc.  |
| 2    | CDM Smith, Inc.   |
| 3    | Brown and Caldwell (Corporation)                                |
| 4    | URS Corporation Southern  |
| 5    | Jacobs Engineering Group, Inc. and Tetra Tech Inc. D/B/A J-Tech |
| 6    | CH2M Hill, Inc.   |
| 7    | Northstar Contracting Group, Inc.                               |
| 8    | HDR Engineering, Inc.   |
| 9    | Carollo Engineers, Inc.   |
| 10   | Arcadis U.S., Inc.  |
| 11   | Parsons Brinckerhoff, Inc.                                      |
| 12   | Erdman Anthony of Florida Inc.                                  |
| 13   | Gannett Fleming, Inc.   |

The District negotiated contracts with these top 13 firms in accordance with the CCNA Statute. Multiple three-year work order contracts with two 1-year options were awarded, which has been the District's practice for many years. The authorized budget is not to exceed \$150 million over three-years but work order assignments are contingent on funding availability.

Our review of work order dollar volume assigned to these 13 firms in previous General Engineering and Professional Services (GEPS) contracts revealed that nine of these firms were the leading providers of engineering services. Our analysis also revealed that the remaining four firms issued work in the previous GEPS (Parsons Brinckerhoff, Inc., Erdman Anthony of Florida, Inc., Gannett Fleming, Inc. and MWH America, Inc.) were assigned substantially less work than the leading providers.

It should also be noted that the District also has engineering services contracts with other professional engineering firms including contracts with 15 firms approved for Operations, Maintenance, Repair, Replacement and Rehabilitation Projects (OMRR&R). Engineering firms, as prime contractors, are restricted to inclusion on either the Restoration Projects or the OMRR&R Projects approved contractor list, but not both.

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## **OBJECTIVE, SCOPE AND METHODOLOGY**

The primary objectives of our audit was to determine whether, 1) work orders are assigned to engineering firms under the Professional Engineering Services for Restoration Projects in an equitable manner, 2) engineering firms are achieving established Small Business Enterprise<sup>1</sup> (SBE) utilization goals, 3) District project managers negotiated work order pricing with the professional engineering firm, and 4) project managers prepared contractor evaluations upon project completion. To accomplish our objectives, we performed the following:

- Documented the work order assignment process
- Reviewed work order assignments for compliance with established procedures
- Documented the work order negotiation process
- Analyzed SBE utilization for compliance with SBE participation goals
- Reviewed District prepared contractor evaluations
- Interviewed District staff from the Procurement Bureau and the Engineering and Construction Bureau

The scope of our audit included work order assignments under the Professional Engineering Services for Restoration Projects for the period March 2014 through December 2015.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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<sup>1</sup> District Small Business Enterprise (SBE) is a business certified by the District, whose 3-year average gross receipts, including affiliates, shall not exceed \$13 million if the business provides construction, \$5 million if the business provides commodities, and \$6 million if the business provides services.

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## AUDIT RESULTS

### Executive Summary

During the period FY 2008 through FY 2014, the District expended over \$176 million for engineering services with 61 firms (See Appendix 1). Our focus was on work orders assigned to the 13 professional engineering firms currently contracted to provide services under restoration projects.

The goal is to distribute work orders as equally as possible among professional engineering firms while considering the District's best interest, which has been the method used to assign work orders in previous GEPS contracts. Our review of applicable Florida Statutes and Procurement policies and procedures revealed that neither prohibited the District from distributing work order assignments in this manner.

The District has complied with established work order assignment procedures and distributed work orders to the 13 professional engineering firms awarded contracts under restoration projects. Through December 31, 2015, the District has contracted or encumbered \$60.2 million<sup>2</sup> of the \$150 million authorized for restoration projects but engineering firms that were assigned the larger work orders related to the C-43, C-44 and STA-1W projects have received the most work, which is expected. Depending on future projects, this disparity may not even out over the life of the Restoration Projects' contracts.

The District has established internal control procedures over the work order distribution process, which requires multiple reviews and approvals to mitigate the risk associated with work order assignments. District internal controls over the work order distribution process requires both the Procurement Bureau Chief and the Engineering and Construction Bureau Chief to approve the engineering firm's work order assignment. Thus, no one employee has complete control over the work order assignment process. Our review of engineering firm work order assignments indicated that the District complied with its established process and internal control are working as prescribed.

Rather than assigning a work order to a specific engineering firm to prepare the Mecca Project Design Documentation Report, Procurement requested proposals from three firms on the restoration projects approved contractor list. We find this type of procurement provides a more

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<sup>2</sup> At September 30, 2016, the amount contracted and encumbered under restoration projects is \$67.2 million.

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competitive approach and is beneficial to the District. The District should continue using this procurement approach for larger projects.

Project managers are responsible for evaluating contractor performance on an on-going basis against performance indicators established for the contract. These evaluations are archived and used to appraise contractor competence for future RFP and RFB solicitations. Our review of the status of performance evaluations related to restoration projects indicated that for most of the completed work orders, project managers prepared evaluations in a timely manner but additional follow-up procedures to ensure timely completion could improve this process.



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## **Distribution of Work Order Assignments**

The District's goal is to distribute work orders as equally as possible among professional engineering firms awarded contracts under restoration projects, while also considering the best value for the District. This distribution process has been used in the past to assign work orders under previous GEPS contracts. Our review of relevant Florida Statutes and District policies revealed that neither prohibited the District from distributing work order assignments in this manner.

The primary factor for distributing work orders to engineering firms is the dollar amount of work assigned to each firm under the Professional Engineering Services for Restoration Projects. Procurement maintains a cumulative schedule of previous work order allocations that is used to determine the next firm for assignment. However, there are other factors that are sometimes considered, which may result in uneven work order distribution. Such factors include:

- Specific project qualifications of the engineering firm and subcontractors,
- Project experience and proximity to the project. Engineering firms that have previous project experience are almost always assigned additional design work and other engineering services. While this may lead to disparities in work order distribution, having contractor continuity on long term projects is generally cost beneficial to the District.

The District has established internal control procedures over the process, which requires multiple reviews and approvals to mitigate the risks associated with work order assignments. District internal controls over the work order distribution process requires both the Procurement Bureau Chief and the Engineering and Construction Bureau Chief to approve the engineering firm's work order assignment. Thus, no one employee has complete control over the work order assignment process. Key assignment responsibilities are segregated between the Procurement Bureau and the Engineering and Construction Bureau as follows:

- The Project Manager determines the need for professional engineering services and develops the scope of work.
- Procurement's Contract Specialist reviews the cumulative schedule of previous work orders to determine the next firm for assignment and informs the Engineering and Construction Bureau Chief.

- The Bureau Chiefs of the Procurement and the Engineering and Construction Bureaus approve the final decision on assignment of the work order to a firm.

Our review of engineering firm work order assignments indicated that the District complied with its established processes and internal controls are working as prescribed. Further, all 13 professional engineering firms awarded contracts to provide services under restoration projects have been assigned work orders through December 31, 2015 as follows:

| Firm Name   | Execution Date | Expiration Date | Assigned and Executed Work Orders* | SBE and Non-SBE Participation | Work Order Amount (Net of SBE and Non-SBE Participation) |
|---|----------------|-----------------|------------------------------------|-------------------------------|--|
| MWH Americas, Inc.  | 4/18/2014      | 4/17/2017       | \$9,456,225                        | \$3,005,700                   | \$6,450,525  |
| CDM Smith, Inc.   | 7/14/2014      | 7/13/2017       | 3,509,290                          | 2,923,069                     | 586,221  |
| Brown And Caldwell  | 7/17/2014      | 7/16/2019       | 4,434,954                          | 1,185,785                     | 3,249,169  |
| URS Corporation Southern  | 6/10/2014      | 6/9/2017        | 2,326,219                          | 628,635                       | 1,697,584  |
| HDR Engineering, Inc.   | 6/10/2014      | 6/9/2017        | 5,352,098                          | 1,473,854                     | 3,878,244  |
| Arcadis U.S., Inc.  | 6/24/2014      | 6/23/2017       | 1,851,443                          | 499,922                       | 1,351,521  |
| Northstar Contracting Group                                     | 6/24/2014      | 6/23/2017       | 1,357,982                          | 452,839                       | 905,143  |
| Parsons Brinckerhoff, Inc.                                      | 4/21/2014      | 4/20/2017       | 7,247,917                          | 3,082,763                     | 4,165,154  |
| CH2M Hill, Inc.   | 8/12/2014      | 8/11/2017       | 6,259,944                          | 1,357,497                     | 4,902,447  |
| Jacobs Engineering Group, Inc. and Tetra Tech Inc. D/B/A J-Tech | 7/14/2014      | 7/13/2017       | 2,740,447                          | 522,747                       | 2,217,700  |
| Carollo Engineers, Inc.   | 5/23/2014      | 5/22/2017       | 11,765,391                         | 10,721,902                    | 1,043,489  |
| Erdman Anthony of FL, Inc.                                      | 5/22/2014      | 5/21/2017       | 2,380,511                          | 1,017,167                     | 1,363,344  |
| Gannett Fleming, Inc.   | 5/14/2014      | 5/13/2017       | 1,531,250                          | 290,581                       | 1,240,669  |
| <b>TOTAL</b>  |                |                 | <b>\$60,213,671</b>                | <b>\$27,162,461</b>           | <b>\$33,051,210</b>                                      |

\* Executed work orders plus work order in negotiation or preliminary stage of work order execution.

Through December 2015, the District has executed or assigned work orders totaling \$60.2 million, which represents approximately 40% of the total authorized expenditures of \$150 million. Of the \$60.2 million, firms have committed to \$27.1 million to SBE and Non-SBE firms.

Engineering firms that were assigned work orders related to the District largest projects, C-43, C-44 and STA-1W have received the most work under Professional Engineering Services for Restoration Projects as follows:

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- Carollo Engineering (Carollo) has been assigned approximately \$11.8 million in work orders related to the C-43 project but a substantial portion of the work will likely be subcontracted to Stanley Consultants Inc. (Stanley), the Engineer of Record for C-43 project. Stanley is a subcontractor on Carollo's team. Stanley was not awarded a contract under the Restoration Project's RFP but is included as an approved contractor for the OMRR&R Projects. The District restricts inclusion as an approved prime contractor to either the Restoration Projects or the OMRR&R projects list but not both. There is no restriction for subcontractors.
  - Erdman Anthony of FL, Inc. has been assigned \$1.1 million in work orders for construction management services on the C-43 project.
  - HRD Engineering, Inc. work order assignments of \$5.4 million are related to C-44 design work.
  - Parsons Brinckerhoff, Inc. (\$7.2 million), and Brown and Caldwell (\$4.1 million) work orders are for C-44 construction management services.
  - MWH America, Inc. was assigned work orders totaling \$9.5 million for STA-1W design services.
  - CH2M Hill, Inc. was assigned STA-1W construction management services work orders totaling \$5.4 million.

Long term restoration projects are designed and constructed in phases and take years to complete. As such, professional engineering services are required over extended periods of time and may require multiple RFPs. We found that engineering firms that are initially involved with a project's design are most often, assigned additional design and engineering services work orders for the projects duration. HDR Engineering, Inc., Carollo Engineers, Inc. and CDM Smith, Inc. have been assigned work orders for the continuation of work related to the C-43, C-44 and Lakeside Ranch projects. These firms and their subcontractors have been performing design and other engineering services since the project's inception. Thus, the firms are usually considered the best value to the District and the most cost beneficial to continue with the project; however, the District always negotiates work orders to ensure best value. Work orders assigned to these firms

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totaled \$18.7 million. The engineering firms, project experience and the work order assignment amounts are as follows:

| Engineering Firm        | Project Experience    | Work Orders Amount<br>(in millions) |
|-------------------------|-----------------------|-------------------------------------|
| HDR Engineering, Inc.   | C-44 STA Pump Station | \$ 5.4                              |
| Carollo Engineers, Inc. | C-43 Design           | 11.8                                |
| CDM Smith, Inc.         | Lakeside Ranch        | 1.5                                 |
| <b>Total</b>            |                       | <b>\$ 18.7</b>                      |

HDR Engineering, Inc. is the Engineer of Record for the C-44 Project. Stanley completed design work on the C-43 project in FY 2008 and additional design work for project phases is planned (Stanley is a subcontractor on Carollo's team). CDM Smith, Inc. was also assigned work orders because of their previous project experience. The remaining work orders totaling approximately \$42 million were assigned based on:

- The dollar amount of previous District work order assigned under the GEPS contract for the first work orders issued under the Professional Engineering Services for Restoration Projects.
- Balancing the dollar value of work order assignments under the Professional Engineering Services for Restoration Projects.
- Engineering firm expertise.
- Multi-contractor solicitation.

The first work orders assigned to engineering firms under the Professional Engineering Services for Restoration Projects were based on the dollar volume of assignments under the previous GEPS contract. Parsons Brinckerhoff, Inc. received the first work order for \$6.96 million because the firm was not assigned work under the previous GEPS contract. The District also assigned work orders to MWH Americas, Inc., Erdman Anthony of FL, Inc. and Gannett Fleming, Inc. because of the smaller amount of previous GEPS work assigned when compared to other firms.

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In January 2015, the assignment criteria was changed and previous GEPS dollar volume was discontinued as a criteria for determining work order assignments. Assignments are now based on balancing the dollar volume of work order assignments under the Professional Engineering Services for Restoration Projects, except when the work order is a continuation of a project or the need for particular engineering firm's expertise.

We also found that Procurement requested proposals from three approved firms under Restoration Projects for the Mecca Project Design Documentation Report. The District provided the scope of work to these firms and they responded with their team and project approach. The project manager evaluated the proposals and recommended a firm to Procurement. We find this type of procurement provides a more competitive approach and is beneficial to the District. We recommend that the District consider using this procurement approach for larger projects.

### **Recommendation**

- 1. Compete larger projects with several engineering firms that are approved under the Professional Engineering Services for Restoration Projects.**

**Management Response:** Agree. This is and continues to be process that has always been used for larger projects.

**Responsible Division:** Engineering & Construction

**Estimated Completion:** Complete

### **SBE Utilization**

The 13 professional engineering services firms that were awarded contracts to provide services under the Professional Engineering Services for Restoration Projects committed to SBE participation. SBE participation goals are established on a work order basis and can vary depending on the nature of the work assigned and the availability of SBE contractors but the overall participation goal is approximately 25%.

Procurement's SBE Unit is responsible for monitoring SBE utilization. The Unit has several processes and procedures to track engineering firm compliance, which includes review of SBE reports generated by the District's financial system on a regular basis. Compliance processes and procedures also includes random confirmation with subcontractors of the reported amounts paid to SBE subcontractors to ensure that the payments have been reported accurately. To track progress towards reaching the prime contractor's SBE participation goals, the SBE reporting process requires the prime contractors to remit SBE utilization with its invoicing to the District, which is reviewed by the SBE Unit.

The SBE Unit intervenes with the prime contractors, if it is reported that the SBE subcontractors have not been paid for the work completed on a District project in accordance with its work order contract with the prime contractor. However, according to the SBE Unit, this follow-up compliance has not been necessary. For the Professional Engineering under the Restoration Projects, the SBE Unit has not received any notices concerning delinquent prime contractor payments from SBE subcontractors. The following table summarizes SBE Utilization reported by professional engineering firms contracted for restoration projects through December 31, 2015.

| <b>Firm Name</b>            | <b>Executed Work Order Assignments</b> | <b>SBE Participation Goal</b> | <b>Projected SBE Utilization</b> | <b>District Payments to Prime</b> | <b>Prime Payments to SBE</b> | <b>% SBE Utilization</b> |
|-----------------------------|--|-------------------------------|----------------------------------|-----------------------------------|------------------------------|--------------------------|
| MWH Americas, Inc.          | \$ 9,456,225                           | \$ 1,576,175                  | 17%                              | \$ 6,400,466                      | \$ 1,303,993                 | 20%                      |
| CDM Smith, Inc.             | 2,509,290                              | 295,804                       | 12%                              | 553,859                           | 48,899                       | 9%                       |
| Brown and Caldwell          | 4,127,754                              | 833,585                       | 20%                              | 650,959                           | 70,666                       | 11%                      |
| URS                         | 2,286,945                              | 589,361                       | 26%                              | 159,975                           | -                            | -                        |
| HDR Engineering, Inc.       | 5,352,098                              | 1,473,854                     | 28%                              | 1,601,670                         | 184,192                      | 11%                      |
| Arcadis U.S., Inc.          | 1,851,443                              | 434,389                       | 23%                              | 979,695                           | 78,750                       | 8%                       |
| Northstar Contracting Group | 1,057,982                              | 152,839                       | 14%                              | 73,073                            | -                            | -                        |
| Parsons Brinckerhoff, Inc.  | 7,247,917                              | 2,492,851                     | 34%                              | 2,272,291                         | 261,983                      | 12%                      |
| CH2M Hill, Inc.             | 5,978,398                              | 1,053,050                     | 18%                              | 281,805                           | 113,207                      | 40%                      |
| J-Tech                      | 2,740,447                              | 522,747                       | 19%                              | 1,127,798                         | 137,839                      | 12%                      |
| Carollo Engineers, Inc.     | 3,023,686                              | 831,567                       | 24%                              | 1,936,994                         | 340,871                      | 18%                      |
| Erdman Anthony, Inc.        | 2,355,511                              | 789,572                       | 34%                              | 694,089                           | 238,816                      | 34%                      |
| Gannett Fleming, Inc.       | 1,531,250                              | 290,581                       | 19%                              | 845,395                           | 172,017                      | 20%                      |
| <b>Total</b>                | <b>\$ 49,518,946</b>                   | <b>\$ 11,336,376</b>          | <b>23%</b>                       | <b>\$ 17,578,070</b>              | <b>\$ 2,951,234</b>          | <b>17%</b>               |

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Overall, we found that engineering firms have established SBE participation goals that meet or exceed SBE goals established by Procurement's SBE Unit. The engineering firm's actual SBE participation goals was approximately \$756,000 greater than the work order goals established by the SBE Unit. However, the percentage of completion of the work order assignments is approximately 36% but only 26% of the SBE utilization has been paid through December 30, 2015. Although some of this deficit is due to the timing of SBE subcontractor utilization, the SBE Unit should continue to closely monitor future work order SBE participation to ensure that engineering firms are progressing toward meeting their overall SBE goals.

### **Work Order Negotiations**

The District's project managers are responsible for negotiating the cost for each work order with the assigned engineering firm. The negotiation process primarily consists of reaching agreement on staffing levels and the management oversight required, hours necessary to complete the work order project tasks and the reasonableness of projected expenses. The engineering firm's staffing rates have been previously negotiated and included in an exhibit to the executed contract.

We selected a sample of 10 work order assignments to determine whether work order negotiations are adequately documented. Our review of e-mails, detailed spreadsheets and other documentation revealed that District project managers were diligent in negotiating on the District's behalf and their effort resulted in significant reductions in proposed work order pricing.

### **Contractor Performance Evaluations**

Project managers are required to prepare interim and final contractor performance evaluations in a timely manner for work orders issued under restoration projects and other major District-wide program initiatives. According to Procurement policy, project managers are responsible for evaluating contractor performance on an on-going basis against performance indicators established for the contract. These evaluations are archived and used to appraise contractor competence for future RFP and RFB solicitations.

Our review of the status of performance evaluations related to restoration projects indicated that for most of the completed work orders project managers prepared evaluations in a timely manner but a number of them are late. Procurement has sent reminders to the project managers

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that the evaluations are past due but should consider developing additional follow-up procedures to ensure timely completion of performance evaluations.

**Recommendation**

- 2. Consider developing additional follow-up procedures to ensure timely completion of interim and final performance evaluations.**

**Management Response:** Agree. A tracking system to prompt the Project Managers for interim and final evaluations has been implemented,

**Responsible Division:** Procurement Bureau

**Estimated Completion:** Complete



**District Engineering Expenditures  
FY 2008-FY 2014**

|    | <b>Contractors</b>                               | <b>Amount</b>         |
|----|--|-----------------------|
| 1  | CDM Smith Inc.                                   | \$ 11,398,630         |
| 2  | WRS Infrastructure & Environ Inc.                | 11,304,756            |
| 3  | Arcadis US Inc.                                  | 11,170,499            |
| 4  | URS Corp   | 8,994,255             |
| 5  | Carollo Engineers Inc.                           | 8,254,539             |
| 6  | CH2M Hill Inc.                                   | 5,870,076             |
| 7  | HDR Engineering Inc.                             | 5,755,542             |
| 8  | Stanley Consultants Inc.                         | 5,482,490             |
| 9  | Ty Lin International                             | 5,392,055             |
| 10 | Brown & Caldwell Corp                            | 5,382,634             |
| 11 | AECOM Technical Services Inc.                    | 5,302,437             |
| 12 | Tetra Tech EC Inc.                               | 5,126,726             |
| 13 | CSA Group Florida Inc.                           | 4,766,725             |
| 14 | Atkins North America Inc.                        | 4,594,551             |
| 15 | Corradino Group Inc.                             | 4,440,339             |
| 16 | AMEC Environmental & Infrastructure Inc.         | 4,340,435             |
| 17 | AECOM USA Inc.                                   | 4,300,679             |
| 18 | Parsons Water & Infrastructure                   | 4,284,721             |
| 19 | Jordan Jones & Goulding Inc.                     | 4,111,278             |
| 20 | HDR Construction Control Corp.                   | 4,052,380             |
| 21 | Gannett Fleming Inc.                             | 3,804,154             |
| 22 | RJ Behar & Co Inc.                               | 3,793,794             |
| 23 | Erdman Anthony of Florida Inc.                   | 3,781,306             |
| 24 | Taylor Engineering Inc.                          | 3,384,344             |
| 25 | CB&I Environmental & Infrastructure Inc.         | 3,281,346             |
| 26 | AMEC Foster Wheeler Environment & Infrastructure | 2,525,289             |
| 27 | Burns & McDonnell Engineering Inc.               | 2,218,646             |
| 28 | Wantman Group Inc.                               | 2,191,564             |
| 29 | TKW Consulting Engineers Inc.                    | 1,951,344             |
| 30 | A.D.A. Engineering Inc.                          | 1,844,133             |
| 31 | Pickett & Associates Inc.                        | 1,677,260             |
| 32 | Woolpert Inc.                                    | 1,446,306             |
| 33 | MWH Americas Inc.                                | 1,440,587             |
| 34 | Cooner & Associates Inc.                         | 1,405,492             |
| 35 | Morgan & Eklund Inc.                             | 1,273,187             |
| 36 | Southeastern Surveying & Mapping                 | 1,207,407             |
| 37 | Calvin Giordano & Associates Inc.                | 1,144,703             |
| 38 | Leidos Engineering LLC                           | 1,136,222             |
| 39 | Powell Kugler Inc.                               | 1,132,524             |
| 40 | Jones Edmunds & Associates Inc.                  | 1,130,270             |
| 41 | Creech Engineers Inc.                            | 1,119,263             |
| 61 | 20 Engineering Firms under \$1 million           | 9,263,505             |
|    | <b>Total</b>                                     | <b>\$ 176,478,396</b> |