

**ADDITIONAL MATERIAL  
10:00 A.M. REGULAR MEETING**

**FEBRUARY 27, 2018**

**SUBMITTED AT THE REQUEST OF**

**PUBLIC WORKS DEPARTMENT**



Our Best.  
Nothing Less.

Public Works Department

**WATER AND WASTEWATER SERVICES**

2555 W. Copans Road • Pompano Beach, Florida 33069 • 954-831-0705 • FAX 954-831-0708

**MEMORANDUM**

**DATE:** February 20, 2018

**TO:** Board of County Commissioners

**THRU:** Bertha Henry, County Administrator

**FROM:** Alan Garcia, PE, Director, Water and Wastewater Services  
Public Works Department

A handwritten signature in black ink, appearing to be "AG", written over the name Alan Garcia in the "FROM" field.

**SUBJECT:** Lakdas Yohalem Engineering – Agenda Item No. 49, February 27, 2018

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Lakdas Yohalem Engineering (LYE) was hired to provide design plans and specifications for a demolition project at the County's Wastewater Treatment Plant. After several years and hundreds of staff hours of review, including three failed opportunities for LYE to provide plans and specifications sufficient for construction, staff was left with no other option but to recommend termination of this contract. Specifically, staff believes it is in the best interest of the County that this contract be "terminated for convenience" versus "terminated for cause;" and that LYE be paid \$4,000 of the \$4,500 being held, noting that the County incurred costs to validate that which it knew to be true.

Notwithstanding the above, it was inappropriate for the project manager to express his frustration in the manner that was done and this will not occur in the future. At no time was LYE asked to do anything illegal or unethical, as alleged. These accusations should not detract from the fact that all three plan and specification submittals had – and continue to have – material and substantive deficiencies.

The remaining outstanding issue is the evaluation rating. This rating cannot be deemed satisfactory as requested by LYE. When it became clear that the plans were insufficient for bidding after two submittals, upon advice of counsel, the County hired a third party engineering firm (Brown and Caldwell) to perform an independent blind review of LYE's first and second submittals. Brown and Caldwell concurred that the plans were deficient and stated that these deficiencies "could significantly impact the successful execution of the project." (Attachment B). Despite the results of this independent third review, staff gave one final opportunity to LYE to satisfactorily complete the plans and specifications. The third and final submittal continued to remain incomplete, and while some of the previous deficiencies were corrected, the plans still

Broward County Board of County Commissioners

Mark D. Bogen • Beam Furr • Steve Geller • Dale V.C. Holness • Chip LaMarca • Nan H. Rich • Tim Ryan • Barbara Sharief • Michael Udine  
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included significant errors and could not be utilized for bidding and construction. As to the overall performance evaluation rating of 1.43, it is recommended that LYE be allowed to place a rebuttal response in the County's Contract Central software database for any rating that there is a disagreement.

In closing, staff spent several hundred hours working with LYE in an attempt to have a successful project, paid \$7,324 to have an independent third party review of the first two submittals, and despite three submittals, still do not have a set of plans and specifications adequate enough to bid and perform this demolition.

If you should have any questions, please do not hesitate to contact me at (954) 831-0704.

Attachment

Cc: Tom Hutka, Public Works Department Director  
Mike Kerr, County Attorney's Office

## Attachment A

### Substantive material deficiencies in the plan submittals included:

- No schedule of bid items was submitted (1<sup>st</sup> and 2<sup>nd</sup> Submittals)
- No hazardous materials survey was submitted (1<sup>st</sup> Submittal)
- Specifications were not in the proper format; the County utilizes the Construction Specification Institute MasterFormat for section numbering. (1<sup>st</sup> and 2<sup>nd</sup> Submittals)
- Three separate, conflicting sections of specifications regarding clearing and grubbing were in the contract documents. (1<sup>st</sup> Submittal)
- The irrigation system was not designed and left up to the contractor to determine scope which could lead to bidding issues and change orders. (1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Submittals)
- Limits of the work were not identified on the plans (1<sup>st</sup> Submittal)
- Other erroneous specification sections included a section on seawall demolition (there is none), commemorative plaques to be saved (there were none) and an engineering survey of the existing building (not needed as building was being demolished). (1<sup>st</sup> Submittal)
- Specifications included provision for storage and bringing hazardous materials on site that would not be permitted by the Contractor. This section was requested to be removed. (2<sup>nd</sup> Submittal)
- Plans did not identify sodium hypochlorite tanks that were to remain and not be demolished. (2<sup>nd</sup> and 3<sup>rd</sup> Submittal)
- Staff advised LYE in writing that the canopy over the hypochlorite tanks were to remain; yet, the submittal still showed the canopy to be removed. (2<sup>nd</sup> and 3<sup>rd</sup> Submittal)
- Additive/deductive alternates to be determined by the bidder. The County does not allow a contractor to determine their own bid alternatives as part of the bid submittal. The specifications also allowed a line item for general conditions. The County requires that these costs be included into the unit and lump sum prices in the bid and would not be paid separately. (3<sup>rd</sup> Submittal)
- Specifications indicated that the owner would be required to provide an Independent Industrial Hygiene Consultant and provide air quality monitoring. The specifications should have shown that the Contractor would provide these subcontractor services, not the owner. (3<sup>rd</sup> Submittal)
- Tree species were not identified in the schedule of bid prices (3<sup>rd</sup> Submittal)

## Attachment B Results of Third Party Review by Brown and Caldwell

1560 Sawgrass Corporate Parkway, Suite 240  
Sunrise, FL 33323  
Certificate of Authorization No. 2602

Attachment C

Phone: 954-200-7611  
Fax: 954-200-7612



June 15, 2016

### Letter Report

Mr. Gregory Balicki, PE  
Broward County Water and Wastewater Services – Engineering Division  
2555 W Copans Road  
Pompano Beach, FL 33069

149385

Subject: Project 9197: Phase 1 Belt Press Filter Demolition Review

Dear Mr. Balicki:

At your request, Brown and Caldwell performed a blind review of two 100 percent submittals for Broward County Water and Wastewater Services (BCWWS) Project 9197: Phase 1 Belt Press Filter Demolition. This review was performed on documents that were redacted to remove the name of the company and engineer of record that developed the drawings. As recommended by the National Society of Professional Engineers Code of Ethics, BCWWS notified the Engineer(s) of Record for the project in writing that their work was to be reviewed by another consultant.

### Scope of Work and Limitations

The Scope of Work of this review is described in Work Authorization BC13-18. Brown and Caldwell conducted a general review of the documents for technical completeness and consistency, presentation and clarity, focusing on site/civil requirements and other aspects of the work that could introduce ambiguity in a potential Contractor's interpretation of the Contract Documents. The scope did not include hazardous materials (lead paint, asbestos, and others) mitigation, field investigations, quantity take-offs, construction sequencing reviews, maintenance of operations reviews, or cost estimating. The level of review provided was similar to what would be provided for a Subconsultant who was taking professional responsibility for their own portions of a design deliverable.

### Summary of Key Issues

The drawings and specifications for the first 100 percent submittal and the second 100 percent submittal were reviewed, and comments are compiled on the attached comment logs and marked-up drawing sets. Comments marked as "critical" are ones that, in the opinion of the reviewer, could significantly impact the successful execution of the project. In general, the second 100 percent submittal was more detailed than the first, and some of the issues identified in the first were at least partially corrected in the second.

Key issues identified in the drawing sets included the following:

- Horizontal control (northing and easting) is not provided on the Civil sheets. Horizontal control points should be established for each termination and to delineate pavement cuts.

Brown and Caldwell Project 9197 review FINAL 6 15-16.docx

## Attachment B (cont'd) Results of Third Party Review by Brown and Caldwell

Greg Balicki, PE  
Broward County Water and Wastewater Services – Engineering Division Attachment C  
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- Demolition of the pumps, pad, and Maintenance Access Structure adjacent to the storage tank do not appear to be fully addressed.
- There are several pipe terminations that do not appear to be adequately addressed in the Civil sheets.
- Pipeline nomenclature and linetypes do not appear to be consistent throughout the Civil sheets. Multiple line types are used, and there is not a key that defines what they represent. There are lines labeled as "DRAINAGE" that appear to be gravity sewer lines. Also, force mains and gravity sewers do not appear to be clearly differentiated.
- Some pipeline termination notes for "sewer lines" call for restrained plugs, which imply that they may be force mains. Gravity sewers and pressure sewers need to be clearly delineated.
- Line size, contents, and material do not appear to be labeled in the termination callouts.
- The extent of new fill is not clearly delineated in the drawing set.
- The plans call for a large area to be graded at 11.50', which is about 6-inches below the surrounding area. There is some potential for ponding in the re-graded area. Also, catch basins and Maintenance Access Structure rims are still showing at their pre-demolition elevations and appear to be 4 to 6-inches above the proposed new grade.
- Mechanical demolition call-outs were significantly more detailed in the second submittal, but additional detail may be needed. It is suggested that piping diameter/material (particularly for piping 4-inches in diameter and larger), chemical tank material and approximate volume, and HVAC units/ductwork be specifically called out, and the level of detail in the mechanical call-outs be similar to the structural demolition sheets.
- Additional electrical demolition detail appears to be needed. A one-line demolition diagram showing all MCCs, switchboards, and panelboards with cable schedules should be included.
- Electrical sheets E-5, 6, 7, 8, 18, and 19 from the original as-built sets show disconnect locations and are referenced in the drawing sets, but are not provided in either submittal. It is suggested that the load centers/breakers referenced in this drawing set be shown.
- Landscaping sheets show proposed locations for new trees that are close to, and potentially conflict with, existing vaults, piping, and other buried infrastructure.

Key issues with the Specifications included the following:

- There are references to specification sections that are not included in the specification set provided.

In addition to the issues identified above, the comment logs identify other opportunities to streamline the drawing set and clarify and correct spelling and nomenclature issues throughout the Contract Documents. Of particular note are the need to conform to the County's gender neutral language requirements and the need to confirm with the County that using the 50-division specification format is acceptable.

Brown and Caldwell Project 9197 review FINAL 6-15-16.docx

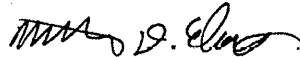
Attachment B (cont'd)  
Results of Third Party Review by Brown and Caldwell

Greg Balicki, PE  
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Brown and Caldwell appreciates that BCWWS has requested our services in assisting with this project. Should you have any questions, please do not hesitate to call me at 954-200-7616.

Very truly yours,

**Brown and Caldwell**



Matthew Charles, PE, Project Manager

MDC:mc

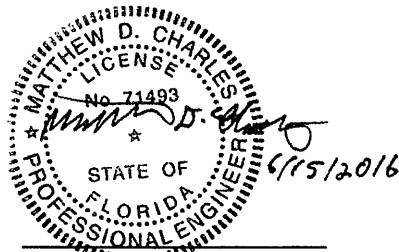
cc: John Morra, PE, Broward County Water and Wastewater Services  
Celia Earle, Ph.D., Brown and Caldwell

Attachments (4)

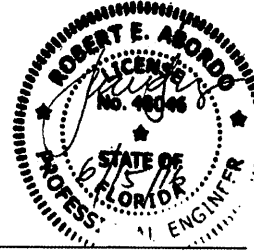
- Attachment A: First 100% submittal drawing and specification comment logs
- Attachment B: Second 100% submittal drawing and specification comment logs
- Attachment C: First 100% submittal marked-up drawing set
- Attachment D: Second 100% submittal marked-up drawing set

**Limitations:**

*This document was prepared solely for Broward County in accordance with professional standards at the time the services were performed and in accordance with the contract between Broward County and Brown and Caldwell dated August 13, 2013. This document is governed by the specific scope of work authorized by Broward County; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by Broward County and other parties and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.*



Matthew Charles, PE  
License No. 71493  
Disciplines: General, Civil, Mechanical



Robert Abordo, PE  
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Discipline: Electrical

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