PROFESSIONAL SERVICES

15. Approve Amendment #1 to PS-5168-04/TLR – Engineering Services for Reclaimed Discharge Main from the Yankee Lake Regional Water Reclamation Facility. (NTE \$219,905.92)

PS-5168-04/TLR provides for complete engineering services necessary to prepare preliminary and final engineering design, construction administration, and final construction plans and specification for the Reclaimed Discharge Main from the Yankee Lake Regional Water Reclamation Facility.

RFP-4168-02/BJC was awarded on November 1, 2004 for \$200,000.00. Amendment #1 adds \$19,905.92 for additional design work to accommodate projected wastewater flows and supplemental surface water supplies necessary to meet future reclaimed water needs.

The Environmental Services Department/Water & Waste Water Division and the Fiscal Services Department/Purchasing and Contracts Division recommend that the Board approve the amendment and authorize the acting County Manager to execute Amendment #1 as prepared by the County Attorney's Office.

FIRST AMENDMENT TO ENGINEERING SERVICES AGREEMENT (PS-5168-04/TLR) RECLAIMED DISCHARGE MAIN FROM YANKEE LAKE RWRF

THIS FIRST AMENDMENT is made and entered into this _____ day of ______, 20_____, 20_____ and is to that certain Agreement made and entered into on the 1st day of November, 2004 between CAMP DRESSER & MCKEE, whose address is 2301 Maitland Center Parkway, Suite 300, Maitland, Florida 32751, hereinafter referred to as "ENGINEER," and SEMINOLE COUNTY, a political subdivision of the State of Florida, whose address is Seminole County Services Building, 1101 East First Street, Sanford, Florida 32771, hereinafter referred to as "COUNTY".

WITNESSETH:

WHEREAS, the ENGINEER and COUNTY entered into the above-referenced Agreement on November 1, 2004 for engineering services regarding the reclaimed discharge main from the Yankee Lake RWRF; and

WHEREAS, the parties desire to amend the Agreement so as to enable both parties to continue to enjoy the mutual benefits it provides; and

WHEREAS, Section 20 of the Agreement provides that any amendments shall be valid only when expressed in writing and duly signed by the parties,

NOW, THEREFORE, in consideration of the mutual understandings and agreements contained herein, the parties agree to amend the Agreement as follows:

1. Section 3 of the Agreement is amended to read:

SECTION 3. TIME FOR COMPLETION. The services to be rendered by ENGINEER shall commence upon execution of this Agreement by the parties and shall be completed no later than the completion of construction on the reclaimed discharge main from Yankee Lake RWRF.

2. Section 4 of the Agreement is amended to read:

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SECTION 4. FIXED FEE COMPENSATION AND PAYMENT.

The COUNTY agrees to compensate ENGINEER for the professional (a) services called for under this Agreement a fixed fee in the amount of TWO HUNDRED NINETEEN THOUSAND NINE HUNDRED FIVE AND 92/100 DOLLARS (\$219,905.92). ENGINEER shall perform all work required by the Scope of Services but, in no event, shall ENGINEER be paid more than the negotiated Fixed Fee amount stated above.

Payments shall be made to the ENGINEER when requested as work (b) progresses for services furnished, but not more than once monthly. ENGINEER may invoice amount due based on the total required services actually performed and completed. Upon review and approval of ENGINEER's invoice, the COUNTY shall, within thirty (30) days of receipt of the invoice, pay ENGINEER the approved amount.

3. Exhibit "A" of the Agreement is amended by the addition of Exhibit "A," attached hereto.

4. Except as herein modified, all terms and conditions of the Agreement shall remain in full force and effect for the term of the Agreement, as originally set forth in said Agreement.

The County Manager or his designee is hereby authorized to 5. execute this Amendment on behalf of the COUNTY.

IN WITNESS WHEREOF, the parties hereto have executed this instrument for the purpose herein expressed.

Grow Mack

Print Name

Witnes

ROBEN A SARVIS JOBE Print Name

Attest: Mario I Marcaccio

CAMP DRESSER & MCKEE

By: CHARLES J. VOSS, Vice-President

Date: 3-9-06

SEMINOLE COUNTY, FLORIDA

By:_

DONALD S. FISHER Acting County Manager

Print Name

Witness

Date:_____

Witness

Print Name

For the use and reliance of Seminole County only.

Approved as to form and legal sufficiency

County Attorney AC/1pk 3/7/06 ps-5168 1am

Attachment: Exhibit "A"- Scope of Services Within authority of Resolution No. 93-R-71 adopted February 23, 1993.

EXHIBIT "A"

SCOPE OF SERVICES FOR SEMINOLE COUNTY YANKEE LAKE WATER RECLAMATION FACILITY ADDITIONAL RECLAIMED WATER DISCHARGE MAIN

I. Introduction

The firm of CDM (ENGINEER) completed the Yankee Lake Reuse System Preliminary Design Report (December 2005) for Seminole County (the COUNTY), which included a recommendation for the construction of an additional reclaimed water discharge main from the Yankee Lake Water Reclamation Facility (WRF) to accommodate projected wastewater flows and supplemental surface water supplies to meet future reclaimed water demands. The project involves the design and construction of approximately 5,700 linear feet of 24-inch diameter reclaimed water main along Yankee Lake Road and crossing S.R. 46 from the Yankee Lake WRF and approximately 1,400 linear feet of 24-inch diameter reclaimed water main along S.R. 46 from Yankee Lake Road to Longwood Markham Road. The proposed 24-inch diameter reclaimed water main along Yankee Lake Road is to be constructed parallel to the existing 16inch reclaimed water main. The contract documents will also include the installation of approximately 160 linear feet of 12-inch diameter water main and 2,500 linear feet of 8-inch diameter water main from the south side of S.R. 46 to connect to an existing 8-inch diameter water main along Yankee Lake Road. The project also includes two (2) bore and jack installations beneath S.R. 46 (FDOT) for the 24-inch diameter reclaimed water main and the 12inch diameter potable water main. The attached figure shows the approximate location of the proposed reclaimed water main and potable water main within the existing system.

II. Scope of Services

Task 1 Project Kick-Off Meeting

The ENGINEER shall meet with the COUNTY at the project kick-off meeting to discuss and review the expectations for the project, the detailed project approach, schedule and budget, and critical factors for success. Additional issues that will be discussed include design criteria, pipe materials, impacts to the downstream system, and permitting strategies.

Task 2 Topographic Survey Services

The ENGINEER will be responsible for the coordination of the work to be completed by Southeastern Surveying & Mapping Corp. (SSMC) for the proposed pipeline route which includes the following services:

- Perform cross-sections at 100 foot intervals extending 25 feet each side of the proposed pipeline route to include locating utilities as marked by a utility representative and determining the horizontal and vertical location of existing pipelines at the proposed tie-in points of the system along the 7,100 linear feet route.
- Verify vertical and horizontal locations of underground utility conflicts (up to 20 potholes).

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CDM

 Provide plan sheets which depict the existing topography, above ground indicators of underground utilities, right-of-ways, and easements.

Task 3 Geotechnical Services

The ENGINEER will be responsible for the coordination of the work to be completed by GEC for the proposed pipeline route. Engineering analysis of all data obtained will be made by GEC to evaluate the general subsurface conditions and to develop engineering recommendations to guide site preparation and earthwork construction. General soil design parameters will be provided. A soil exploration report will state whether any unsuitable soil types such as organic muck, rock, or hardpan soils are present and will summarize the following:

- 15 Auger borings (15 feet deep) along the 7,100 linear feet route;
- Soil boring logs and classification;
- Existing groundwater levels and estimated seasonal high levels;
- Pipe trench preparation and backfill recommendations; and
- Any concerns related to the site preparation and earthwork construction.

Recommendations made by GEC, including additional exploration required, together with all data developed during the exploration, will be submitted in a written report upon conclusion of the study. The extent of the proposed geotechnical exploration for the final design phase will be identified at a later time.

Task 4 Design Services

The ENGINEER shall provide all design services to produce the plans and specifications required to bid and construct the project. The design services to be provided by the ENGINEER are as follows:

Subtask 4.1 Roadway and Utilities Data Collection, Review, and Coordination

The ENGINEER will collect and review available data from the COUNTY on existing and proposed utilities, sizes, elevations, materials, operational data, easements, and right-of-ways. The ENGINEER will review available information on the development of plans to widen S.R. 46 as part of the Wekiva Parkway Project and assess the relevant impacts on the construction of the proposed pipelines. The COUNTY shall assist by providing copies of available drawings, records, specifications, or reports and current survey data that the ENGINEER has not yet obtained.

Seminole County Yankee Lake Water Reclamation Facility Additional Reclaimed Water Discharge Main Draft Scope of Services

Per discussion with the COUNTY, the potable water line, which was originally designed as part of the maintenance building at the Yankee Lake WRF, will be included with the bid package for the proposed reclaimed water line. The design of the water line will be reviewed by the ENGINEER for adequacy of design and feasibility of the design to be incorporated with the design of the proposed reclaimed water main. The ENGINEER will implement any changes to the design of the potable water main with the approval of the COUNTY. The potable water line will then be included in the plans and specifications with the reclaimed water line improvements.

The ENGINEER will evaluate in the field the existing conditions and potential effects of the proposed pipe installation route on roads, drainage systems, and existing utilities and appurtenances. Two site visits are anticipated during the design phase.

Subtask 4.2 Construction Documents

The ENGINEER provided the Conceptual Design to the COUNTY in the Yankee Lake Reuse System Preliminary Design Report (December 2005). The ENGINEER will prepare final design plans and specifications with sufficient detail for construction. The design effort will include submittal milestones corresponding to 60 percent, 90 percent, and 100 percent complete.

The ENGINEER will submit a PDF of 11"x 17" (half sizes) FDOT format at each scheduled design milestone for COUNTY review. The COUNTY review comments will be incorporated into the final construction documents (plans and specifications) as mutually agreed upon. The ENGINEER will furnish one reproducible (22" x 34") set of final construction documents to the COUNTY.

The ENGINEER will submit 60 and 90 percent plans to the COUNTY for review. This task includes two (2) review meetings with COUNTY staff at the 60 and 90 percent design milestones. Each design milestone will include an opinion of the probable construction cost of the proposed improvements.

Seminole County Environmental Services Water and Sewer Standards will be used for this project as modified by the ENGINEER with COUNTY approval. Roadway reconstruction will be per FDOT Design Standards (2006) and Standards Specifications (2004). Upfront documents required for the bid will be provided by the COUNTY and inserted into the specification package. Table 1 describes an approximate sheet count for the construction plans:

Sheet Description	Number of Sheets
Cover	1
Index/Key	1
General Notes	1
Typical Sections	1
Horizontal Control	1
Plan and Profile ¹	9
Cross Sections ¹	1
Potable Water/Reclaimed Water Main Details	3
Erosion Control	5
Total	23

Table 1

These sheets include approximately 7,100 feet of reclaimed water main.

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Subtask 4.3 Probable Construction Cost Estimate

The ENGINEER will provide an engineer's opinion of the probable cost of construction for the project at the Preliminary Design milestone, and at 60 and 90 percent completion milestones and prepare a final opinion of the probable construction cost estimate at the completion of the design.

Task 5 Permit Assistance

Subtask 5.1 FDOT Permit Application

The ENGINEER will prepare and submit the permit application and supporting documentation to obtain a FDOT Utility Permit (Bore and Jack) required for the crossings at S.R. 46. The ENGINEER will monitor the application throughout the approval process and will respond to one (1) Request for Additional Information (RAI) to clarify information in the permit application package. The FDOT permit application fee will be paid by CDM.

Subtask 5.2 Seminole County Right-of-Way Use Permit Application

The ENGINEER will prepare and submit the required permit application and supporting documentation to obtain a Seminole County Right-of-Way Use Permit for the project. The ENGINEER will coordinate with the COUNTY if additional information is necessary to complete the permitting process. The ENGINEER will respond to one (1) Request for Additional Information (RAI).

Based on information provided by the COUNTY, no new permitting services are needed to obtain the following permits from the FDEP and therefore are not included in this Scope of Services:

- Reuse Permit The construction of the reclaimed water main will be included under the existing FDEP reuse permit for the Yankee Lake WRF.
- Permit for Construction of Water Main Extensions The required permit for the construction of the potable water main extension has previously been issued by the FDEP.

Task 6 Meetings and Coordination

The ENGINEER will maintain routine coordination with designated COUNTY personnel and meet with the COUNTY regularly or as needed during the design phase to keep the COUNTY informed of project progress and all significant issues. The ENGINEER will coordinate technical and quality reviews of the project internally and with the COUNTY. A total of up to five (5) meetings is estimated for budgeting purposes.

Task 7 Limited Bidding Services

The ENGINEER will provide the following services during bidding of the reclaimed water main and potable water main construction project:

- Answer questions posed by prospective bidders according to the guidelines established in the bidding documents.
- Attend the pre-bidding meeting and pre-bid site visit.

 Prepare and submit addenda to construction drawings, specifications, and contract documents to the COUNTY for distribution prior to receipt of bids. Major changes associated with deletions, additions and/or significant modifications to the design concept shall be considered outside the Scope of Services and negotiated separately as Special Services.

Services associated with assisting the COUNTY in the review and evaluation of bid protests received are not included in this bid services task. Bid protest services will be negotiated separately with the COUNTY, if required.

The COUNTY will advertise or otherwise solicit bids and provide plans and specifications to potential bidders.

Task 8 Limited Construction Services

The ENGINEER will assist with the following tasks during construction:

- Attend one (1) pre-construction conference.
- Review up to ten (10) shop drawings, including resubmittals.
- Provide information to the Contractor in the form of requests for information (RFIs).
- Prepare for the COUNTY a set of reproducible record drawings showing changes made during the construction process, based on mark-up prints, drawings, and other data furnished by the Contractor to the ENGINEER and which the ENGINEER considers significant and has reviewed for accuracy and completeness.
- Conduct four (4) site visits for testing and substantial completion.
- Conduct one final inspection to determine if the Project is complete and the work is acceptable so that the ENGINEER may recommend, in writing, final payment to the Contractor and may give written notice to the COUNTY and Contractor that the work is acceptable.

III. DELIVERABLES

This Scope shall result in the following deliverable:

- 1. One copy of the Geotechnical Report;
- 2. One electronic copy of the construction documents in PDF file format (11" x 17") at each of the 60 percent, 90 percent, and 100 percent complete milestones;
- 3. One copy of reproducible (22" x 34") final construction documents and specifications; and,
- 4. One compact disc containing CAD files of the survey and construction documents.

IV. SCHEDULES AND TIME CONSTRAINTS

Within ten (10) days after the Notice to Proceed, the ENGINEER shall provide a project schedule. The total time allowed for completing the ENGINEER's design services required under this Task Assignment shall be a maximum of twelve (12) months from the date of the Notice to Proceed.

Seminole County Yankee Lake Water Reclamation Facility Additional Reclaimed Water Discharge Main Draft Scope of Services

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V. COMPENSATION

Total Compensation for all services, materials, supplies, and any other items or requirements necessary to complete the work defined by Task 1 through Task 8 will be based upon a Lump Sum amount of \$166,989. The justification for the Lump Sum amount is presented in Table 2.

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