

**WORK AUTHORIZATION# CM2452-WA05
NASSAUCOUNTY
BOARD OF COUNTY COMMISSIONERS
RFQ/BID NO. NC16-033**

Consultant:	GAI Consultants, Inc.
Contract Number:	CM2452
Contact Name:	Jay Ameno, PE
Contact Number:	561-465-8001
Email:	j.ameno@gaiconsultants.com

CURRENT WORK AUTHORIZATION			
Project Short Title: WWTF Permit Renewal and PDR for Expansion			
		CONTRACT OVERVIEW	
Date Submitted	July 18, 2018	Total of Previous Authorizations	\$326,851.51
Amount	\$65,500.00	This Work Authorization	\$65,500.00
Scheduled Completion	120 days from NTP	Current Contract Total	\$392,351.51

This Work Authorization is to the AGREEMENT between Nassau County and the Consultant known as GAI Consultants for the Continuing Contract for Miscellaneous Engineering Services for Nassau Amelia Utilities (NAU), Nassau County, Florida, dated September 20, 2017. The services to be provided under this Work Authorization are as follows:

ARTICLE 1. Services Described as:

GAI is to renew the operating permit for the NAU Wastewater Treatment Facility (WWTF) (#FLA011688) and prepare a preliminary design report (PDR) for the WWTF expansion. The Submittal of the permit renewal application should be prior to December 5, 2018.

GAI will perform a series of professional services associated with projects listed above. Details are enclosed in Exhibit A.

ARTICLE 2. Time Schedule

Total expected time period for this work authorization four (4) months period starting upon the date of execution of this work authorization .

ARTICLE 3. Budget

Lump Sum \$65,500.

Article 4. Other Provisions See

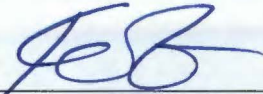
Exhibit A and Exhibit B

The Services covered by this Work Authorization will be performed in accordance with the provisions set forth in the AGREEMENT referenced above and any of its attachments or schedules. Additional terms or contract provisions whether submitted purposely or inadvertently, shall have no force or effect. This Work Authorization will become a part of the referenced AGREEMENT when executed by both parties.

In presenting this Work Authorization, Consultant agrees that:

Unless detailed herein, all drawings, data, electronic files and other information required for this Work Authorization has been accepted by Consultant. Specifically, all electronic files have been reviewed and accepted for the purposes of this Work assignment. Any additional information, including detailed scope of services are attached.

AGREED TO BY:

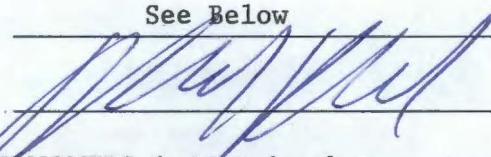
BY: 
Print Name: Kathleen Coo
Title: Vice President
Date: 8/16/18

RECOMMENDED AND APPROVED BY NASSAU COUNTY:

Director of Engineering Services: 

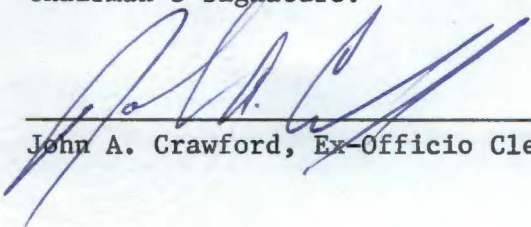
Board of County Commissioners, Chair: 

Ex-Officio Clerk: See Below

County Attorney: 

APPROVED by the BOARD OF COUNTY COMMISSIONERS, the 19th day of September, 2018.

Attestation: Only to Authenticity as to
Chairman's Signature:



John A. Crawford, Ex-Officio Clerk



Jacksonville Office
1301 Riverplace Boulevard
Suite 900
Jacksonville, Florida 32207

T 904.363.1110
F 904.363.1115

July 18, 2018

GAI Project A170003.05

Ms. Becky Hiers-Bray, P.E.
Public Works Director
Nassau County
96161 Nassau Place
Yulee, Florida 32097

**Proposal for Professional Services
Contract No. CM2452, Work Authorization No. 5
WWTF Permit Renewal Application and Preliminary Design Report for Expansion
Amelia Island, FL**

Dear Ms. Hiers-Bray:

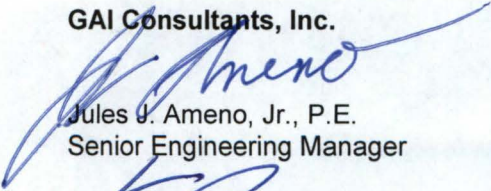
GAI Consultants, Inc. ("GAI" or "the Consultant") is pleased to submit this Scope of Services/Fee Proposal for Professional Services to the Nassau Amelia Utilities (NAU or "the Client") for the above-referenced project. This proposal reflects the anticipated Scope and related costs for services to be provided based on GAI's understanding of the project.

Transmitted herewith is an executed Work Authorization form, Exhibit A (Scope of Services) and Exhibit B (Labor Cost Table) for the renewal of the operating permit and preparation of a preliminary design report of expansion for the Nassau Amelia Utilities (NAU) Wastewater Treatment Facility (WWTF).

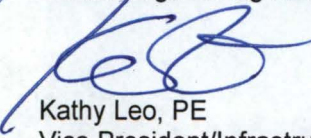
Please do not hesitate to contact me at 561.465.8001 if you have any questions or wish to discuss this Proposal.

Sincerely,

GAI Consultants, Inc.



Jules J. Ameno, Jr., P.E.
Senior Engineering Manager



Kathy Leo, PE
Vice President/Infrastructure/Southeast
Community Development

Attachments: Exhibit A – Scope of Services
Exhibit B – Labor Cost Table

Cc: Jill Grimaldi, BCES
MJ Chen, PhD, PE

EXHIBIT A

Scope of Services

Proposal for Professional Services – Contract No. CM2452

Work Authorization No. 5

WWTF Permit Renewal Application and Preliminary Design Report for Expansion

Project Understanding

GAI Consultants, Inc. (GAI) is to renew the operating permit for the Nassau Amelia Utilities (NAU) Wastewater Treatment Facility (WWTF) (Florida Department of Environmental Protection (FDEP) Permit No. FLA011688) and prepare a preliminary design report (PDR) for the WWTF expansion. The submittal of the permit renewal application is due to FDEP prior to December 5, 2018. The wastewater flow received by the WWTF has increased since the last permit renewal and the permitted treatment capacity of 0.95 million gallons per day (MGD) is expected to be exceeded in the next 2-years. According to Chapter 62-600.405, Florida Administrative Code (F.A.C.), a PDR is required to be included in a complete permit application for the necessary expansion.

Scope of Services

To accomplish the above, GAI proposes the following tasks:

Task 1 - Project Management

1. **Kick-off Meeting:** GAI will meet with NAU key personnel to introduce the project team, define the project communication protocol, review the scope of services, and identify the project expectations and design assumptions. GAI will prepare meeting minutes and distribute within one week of the kickoff meeting.
2. **Progress Meetings:** GAI will participate in up to three (3) review or progress meetings at NAU.
3. **Contracting and Invoicing:** Set up contracts with subconsultants if applicable and prepare invoices.

Task 2 - Data Collection

Upon receipt of the Notice to Proceed from the Nassau County (COUNTY), GAI will request information regarding:

1. Original design parameters including specifications, drawings, and Operation and Maintenance (O&M) manuals.
2. Discharge Monitoring Reports (DMRs) or permit report submittals.
3. Other unit process operating data.
4. Information regarding equipment maintenance.
5. Previous reports including Capacity Analysis Report (CAR), O&M Performance Report (OMPR), and other reports.

Task 3 - Permit Application Forms

1. GAI will complete the FDEP Wastewater Facility or Activity Permit Application – General Information – Form 1 (FDEP form 62-610.910(1)).
2. GAI will complete FDEP Wastewater Permit Application Form 2A for Domestic Wastewater Facilities (FDEP Form 62-610.910(2)).

Task 4 - O&M Performance Report

In accordance with the operating permit, the County is required to prepare an OMPR every 5 years in conjunction with the permit renewal. GAI will prepare the OMPR to include the following, required information:

- A. Title Page
- B. Certifications
- C. Table of Contents
- D. Chapter 1 - Introduction
- E. Chapter 2 - Physical Condition
- F. Chapter 3 - Treatment Efficiency
 1. Each Treatment Unit
 2. Overall
- G. Chapter 4 - Performance Trends
 1. Influent
 2. Effluent and Reclaimed Water
 3. Three-month Average Daily Flows
 4. Ground Water Quality
 5. Surface Water Quality
 6. General
- H. Chapter 5 - Operation and Maintenance Program
 1. Record Drawings
 2. Operation and Maintenance Manual
 3. Operation and Maintenance Log
 4. General
- I. Chapter 6 - Collection System Evaluation
 1. Excessive Infiltration or Inflow
 2. Septic Wastewater
 3. Industrial Contributions
- J. Chapter 7 - Problems, Deficiencies, and Corrective Actions

To prepare the report, GAI will review the prior year's operating and maintenance records, as well as all corrective actions (if applicable) from the previous 5-year period. GAI will also conduct a one (1) day site visit to review the condition of the facility. The condition assessment will be conducted in accordance with Attachment 2 of the OMPR, Field Evaluation form for OMPRs for Domestic Wastewater Facilities. This assessment will be limited to visible conditions and discussions with operators at the facility. For each operating unit, GAI will perform an operational review following the requirements of the OMPR Attachment 1, List of Components, Systems and Processes to be Evaluated. GAI will review each unit's operating performance in comparison to expected operating efficiencies. GAI will determine and identify any deficiencies in the facility unit processes and include as necessary recommendations to rectify each deficiency. GAI will provide one draft, electronic (PDF) copy of the OMPR to the County for review and comment prior to submittal to FDEP. GAI will incorporate all applicable comments from the County and finalize the OMPR for inclusion in the renewal/expansion application. A final PDF and two (2) hardcopies will be provided for the County's records.

Task 5 - Updated CAR

An updated CAR will be prepared to define the status of the facility and the requirements for planning and implementation expansion schedule of the facility. A full report meeting the FDEP CAR outline will be prepared including:

- A. Title Page
- B. Certifications
- C. Table of Contents
- D. Chapter 1 – Introduction
- E. Chapter 2 – Existing Conditions
 1. Permitted Capacities

2. Monthly Average Daily Flows, Three-month Average Daily Flows, and Annual Average Daily Flow
 3. Seasonal Variations in Flow
 4. Updated Flow and Loading Information
- F. Chapter 3 – Future Conditions
1. Population Projections
 2. Flow Projections
- G. Chapter 4 – Summary and Conclusions
1. Time Required for the Three-month Average Daily Flow to Reach the Permitted Capacity
 2. Recommendations for Expansion
 3. Expansion Schedules

DMRs for the past ten (10) years will be required.

GAI will prepare and provide an electronic (PDF) draft of the CAR for review and comment by the County. GAI will incorporate all applicable comments received from the County and finalize the CAR for submittal with the renewal/expansion application. A final PDF and two (2) hardcopies will be provided for the County's records.

Task 6 - PDR

GAI will prepare a PDR in support of the expansion, in accordance with Chapter 62-620, F.A.C. and FDEP's Guidelines for Domestic Wastewater Permitting, to include the following (from FDEP):

1. Population - current and design year projections for the population to be served;
2. Description and map of service area and land use projections for the current and design years;
3. Forecasts of flow and wastewater characteristics for current and design years of:
 - a. Physical, chemical, and biological characteristics and concentrations,
 - b. Wastewater flow patterns described in terms of maximum monthly average daily flow, three-month average daily flow, annual average daily flow, maximum daily flow, minimum 24-hour flow and peak hourly flow during current and design years, and
 - c. Domestic, industrial, and infiltration/inflow contributions;
4. Site plan showing operations and unit processes; 100-year and 25-year flood elevations; approximate finish elevations for all major treatment units, pumping stations, and sanitary manholes; and a stormwater management plan;
5. An assessment of environmental effects of the project, including odor and noise control, public accessibility, proximity to existing and proposed residential areas, flood protection, lighting, and aerosol drift;
6. Disposal methods or reuse options selected, required levels of treatment, and selected treatment processes;
7. Technical information and design criteria for treatment facilities, including:
 - a. Hydraulic and organic loadings - minimum, average, and maximum quantities for the liquid and solids treatment processes,
 - b. Flow metering and sampling provision,
 - c. Recycle flows within the treatment plant,
 - d. Chemical addition facilities, including disinfection,
 - e. Removals, reclaimed water or effluent concentrations with separate tabulation for each unit handling solid and liquid fractions with supporting data including design calculations,
 - f. Documentation supporting chlorine doses and residuals and contact times used as the basis of design, if chlorine is used for disinfection, and
 - g. Residuals treatment, management, and disposal including on-site storage needs or alternate disposal methods;

8. Process diagrams, including:
 - a. Expected dimensions of unit operations and processes, capacities and volumes,
 - b. Process configuration,
 - c. Hydraulic profile,
 - d. Organic loading profile,
 - e. Solids profile,
 - f. Solids control system, and
 - g. Flow diagram with capacities;
9. Operation and control strategies included for prevention of upsets, alternate disposal methods, and reliability classification and features;
10. Additional requirements for the preliminary design report if applicable are:
 - a. For reuse of reclaimed water and land application systems, Chapter 62-610, F.A.C.,
 - b. For new Class I and V underground injection facilities or modification of such facilities, Chapter 62-528, F.A.C.,
 - c. For residuals management and land application, Chapter 62-640, F.A.C., and
 - d. For wetlands treatment and discharge systems, Chapter 62-611, F.A.C.

Task 7 - Response to Request for Additional information (RAI)

GAI will provide responses to RAIs from the FDEP to complete the permit renewal process. For purposes of this Scope of Services, responses for up to two (2) RAIs are included. Additional responses may be included as an additional service, if required.

Deliverables

- FDEP Wastewater Permit Application Form 1
- FDEP Wastewater Permit Application Form 2A
- O&M Performance Report
- Update CAR
- PDR

Project Schedule

We will provide a final permitting package and a PDR within four (4) months of authorization.

Additional Services

Additional services may be added to this contract during the course of work based on negotiated fees. These respective fees shall be determined jointly by the COUNTY staff and the Consultant. No work shall be undertaken on any additional service tasks without the written authorization of the COUNTY.

Fee

The lump sum for this work is \$65,500. Fees do not include permitting or related fees.

Payment

Payment terms will be in accordance with the 2017 Professional Services Agreement Contract No. CM2452.

Assumptions and Understandings

GAI's Scope of Services, Schedule and Compensation as set forth above, have been prepared on the basis of the following assumptions and understandings:

1. Access to the project site(s) or other land upon which GAI is to conduct any field work will be available to GAI personnel in a timely manner.
2. At the time of each work request, the client will provide all its requirements for GAI's scope of services and all criteria and/or specifications that GAI should utilize. This includes any requirement for any statement of professional opinion or certification.
3. At the time of each work request, the client will provide all available information pertinent to GAI's scope of services, including previous reports/drawings; utility information, etc. Unless otherwise noted, GAI may rely upon such information.
4. Client will give GAI prompt notice whenever it observes or otherwise becomes aware of any development that affects the scope or timing of GAI's performance. Client will examine and provide comments and/or decisions with respect to any GAI interim or final deliverables within a period mutually agreed upon.

