

CONSULTANT WORK ORDER

Date:	3/11/25
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1. PROJECT INFORMATION:

Project Title:	WRF Tank Cleaning Specification	
City Project Number:	24-0072-UT	
City Plan Set Number:	N/A	
Consultant Project Number:	B202085*34386	

2. SCOPE OF SERVICES:

The City of Clearwater (City) wishes to procure the services of one or more vendors to provide tank cleaning services at their three (3) water reclamation facilities. Kennedy Jenks Consultant's Inc. (KJ)(Engineer) has been engaged to develop a set of specifications to outline the specific scopes of work, procedures, and requirements for the cleaning of each of the WRF tanks and channels. These specifications will be used to solicit bids from prospective bidders to perform tank cleanings.

I. PROJECT MANAGEMENT:

Task 1.1: Meetings

KJ will participate in two (2) in-person or virtual project meetings during the project and each meeting will be attended by the Project Manager and the Project Engineer. Meetings included are as follows:

- Kickoff Meeting
- Draft Specifications Review Meeting

All meetings will be limited to two of the Engineer's staff unless previously approved by the project manager.

Task 1.2: QA/QC

KJ will schedule and provide an effective quality assurance and quality control program and perform a thorough review of all deliverables prior to submittal to

the City. QA/QC reviewers will be management-level KJ personnel not directly associated with the project.

Task 1.3: Management

KJ will implement management procedures to facilitate timely and cost-effective delivery of the project. This task includes the management responsibilities associated with schedule and budget control, monthly invoicing, progress status updates to be provided with invoices and coordination with the City.

II. DATA COLLECTION AND REVIEW

Task 2.1: Data Collection and Review

KJ will collect and review historical records and available reference material including record drawings, operations and maintenance manuals, aerial imagery, FDEP permits, previous contracts, and invitations to bid for similar services available online. KJ will submit a data request to the City for other available information that may be relevant to the project.

KJ will review record drawings for each of the WRF's to evaluate accuracy and determine which specific sheets should be included for each of the structures to be included in the specification. A summary of KJ's review of the record drawings will be provided in a memorandum, delivered in electronic format. The memorandum will outline the record drawings reviewed, and major discrepancies identified, if any.

Task 2.2: Site Visits

KJ will conduct site visits to each of the WRF's to meet with operations staff to discuss maintenance of plant operation concerns as well as identify potential work areas for tank cleaning vendors. KJ will also observe as-built conditions of the tanks to be included in the cleaning specification to determine what record drawings need to be updated. KJ will utilize 360 camera technology to capture existing conditions to support further record drawing review and update.

KJ has budgeted a total of three (3) one-day site visits during the project duration with two (2) KJ staff members attending each visit.

III. SPECIFICATION DEVELOPMENT

Task 3.1: Draft Specification Development

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KJ will develop a set of specifications that the City can use to advertise for wastewater tank assessment and cleaning services. The anticipated specification sections include:

- Summary of Work
- Submittal Procedures
- Price & Payment Procedures
- Staging Areas
- Existing Conditions Assessment
- Tank Cleaning

The specifications will include cleaning procedures, maintenance of plant operations requirements, figures depicting site access and staging areas, and appropriate bid line items to allow for the cleaning of the City's wastewater treatment plant tanks and associated channels (as appropriate), to include:

Northeast Water Reclamation Facility

- Flow Equalization Basin: 1
- Fermentation Basins: 2
- First-Stage Anoxic Reactors: 2
- Carrousel Oxidation Ditch Aeration Basins: 2
- Second Anoxic Basins: 10
- Reaeration Basins: 10
- Secondary Clarifiers: 8
- Chlorine Contact Chambers: 2
- Reclaimed Water Storage Tank: 1 (5 MG)
- Reject Water Storage Tank: 1 (3.5 MG)
- Mixing Basin: 1
- Blending/De-chlorination Basins: 1
- Dissolved Oxygen Boost Re-aeration Basin: 1
- North Sludge Blend Tank: 1
- South Sludge Blend Tank: 1
- Anaerobic Digesters: 2
- Aerobic Digesters: 4

East Water Reclamation Facility

- Fermentation Basins (operating as anoxic reactors): 4
- First-Stage Anoxic Reactors: 8
- Carrousel Oxidation Ditch Aeration Basin: 1
- Second-Stage Anoxic Basins: 7
- Re-aeration Basin: 1
- Secondary Clarifiers: 2
- Dosing Chamber/Clearwell: 1
- Chlorine Contact Chamber: 1

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- Mixing Basin: 1
- Blending/De-chlorination Basins: 1
- Re-aeration Basin (with blowers and diffused air): 1
- Sludge Holding Tank: 1

Marshall Street Water Reclamation Facility

- Fermentation Basins (operated as first anoxic reactors): 3
- First Anoxic Reactors: 3
- Aeration Basins: 13
- Second Anoxic Basins: 4
- Re-aeration Basins: 4
- Secondary Clarifiers: 4
- Chlorine Contact Chamber: 1
- Reclaimed Water Storage Tank: 1 (5 MG)
- Dual Channel De-chlorination / Re-aeration Basin: 1
- Anaerobic Digester: 1
- Sludge Blending / Storage Tank: 1
- Sludge Holding Tank: 1
- Anaerobic Digester: 1

Skycrest Booster Pump Station

- 5.0 MG reclaimed water storage tank

Cleaning procedures will be outlined for tanks in service and out of service where appropriate. It is assumed that City staff will take responsibility for taking tanks out of service and returning them to service.

KJ will determine the most applicable record drawing for each structure from the available record drawings to be attached and referenced in the specification package.

Draft specifications will be delivered electronically via Word files to allow for track changes and commenting by the City. After the City has reviewed the draft specifications, a review meeting will be held to review and resolve the City's comments.

Task 5.2 Final Specification Development

Based on comments received from the City on the Draft Specifications, final specifications will be prepared and delivered to the City electronically as PDF files.

IV. BIDDING PHASE:

Task 4.1: Prepare Bid Documents

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KJ will address City comments from the final specification submittal and will submit two (2) signed & sealed sets of technical specifications to the City for advertisement, in PDF format.

Task 4.2: Pre-bid Meeting and Bidding Assistance

KJ will provide bidding services inclusive of the following items:

- Attend one Pre-Bid meeting that will be conducted by the City
- Provide responses to Contractors' questions during bidding and aid the City in the preparation of addenda. The City will issue all addenda.
- Review bids received by the City and develop a letter of recommendation of award for the City.

3. PROJECT GOALS:

KJ will provide a set of specifications for the City to advertise for bids from vendors to provide wastewater tank cleaning services. Deliverables to be provided are outlined below:

Task	Deliverable	Deliverable Format
Task I - Project Management		
Task 1.1 Meetings	<ul style="list-style-type: none">• Agendas• Meeting Notes	Meeting agendas and notes in electronic format
Task 1.2 QA/QC	-	-
Task 1.3 Management	<ul style="list-style-type: none">• Invoices	Electronic file to Public Utilities Division Controller
Task II - Data Collection and Review		
Task 2.1 Data Collection & Review	<ul style="list-style-type: none">• Data request	Electronic file
Task 2.2 Site Visits	<ul style="list-style-type: none">• Agendas• Site Visit Notes	Meeting agendas and notes in electronic format
Task III - Specification Development		
Task 3.1 Draft Specification Development	<ul style="list-style-type: none">• Draft Specifications• Review meeting agenda and notes	Electronic Files (
Task 3.3 Final Specifications Development	<ul style="list-style-type: none">• Final Specifications• Draft Specifications Comment Log	Electronic File
Task IV - Bidding Services		
Task 4.1 Prepare Bid Documents	<ul style="list-style-type: none">• TBD	
Task 4.2 Pre-Bid Meeting and Bidding Assistance	<ul style="list-style-type: none">•• Up to 2 addenda	Electronic files

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| | <ul style="list-style-type: none">• Recommendation of award | |
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4. FEES:

A detailed breakdown of hours by task, and the associated fee is provided in Attachment A.

This price includes all labor and expenses anticipated to be incurred by Kennedy Jenks Consultants, Inc. for the completion of these tasks in accordance with Professional Services Method "B" – Lump Sum – Percentage of Completion by Task, for a fee not to exceed one hundred nine thousand seven hundred twenty seven Dollars (\$109,727).

5. SCHEDULE:

The project is to be completed in **205** days from issuance of notice-to-proceed. The project deliverables are to be phased as follows:

Data Collection and Review:	20 calendar days
Draft Tank Cleaning Specifications:	45 calendar days
Draft Tank Cleaning Specifications Review:	15 calendar days
Final Tank Cleaning Specifications:	15 calendar days
Tank Cleaning Services Bidding:	30 calendar days
Tank Cleaning Services Field Services:	90 calendar days

6. STAFF ASSIGNMENT:

City:

Public Utilities Project Manager:	Jessie Ligenza
Public Utilities Engineering Manager:	Kaylynn Price
Public Utilities Assistant Director:	Michael Flanigan
Public Utilities Director:	Richard Gardner, PE
WET Division Manager	Christina Goodrich
WET Division Assistant Manager:	Travis Teuber

Kennedy Jenks:

Project Manager:	Matthew Munz, PE
Project Engineer:	Grant Moore, PE

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Quality Control:	Corey Young, PE
Support Staff:	Kelsey Vought, PhD., EI
	Angela Cadena
	Katie Engberg

7. CORRESPONDENCE/REPORTING PROCEDURES:

Consultant's project correspondence shall be directed to:

Matthew Munz, PE, Project Manager – mattmunz@kennedyjenks.com

Angela Cadena, Project Engineer – angelacadena@kennedyjenks.com

All City project correspondence shall be directed to:

The Public Utilities Project Manager with C.C. to the Engineering Manager, PU (WET) Manager, PU (WET) Assistant Manager, Assistant Director, and Director.

8. INVOICING/FUNDING PROCEDURES:

City Invoicing Code: 3277327-530100-96664

For work performed, invoices shall be submitted monthly to:

**ATTN DIVISION CONTROLLER
CITY OF CLEARWATER, PUBLIC UTILITIES DEPARTMENT
PO BOX 4748
CLEARWATER, FLORIDA 33758-4748
ATTENTION: PU ENGINEERING
1650 N. ARCTURAS AVE
BUILDING C
CLEARWATER, FLORIDA 33765-1945**

Email Invoices: PUEngineering@myclearwater.com

Contingency services will be billed as incurred only after written authorization provided by the City to proceed with those services.

9. INVOICING PROCEDURES:

At a minimum, in addition to the invoice amount(s) the following information shall be provided on all invoices submitted on the Work Order:

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1. Purchase Order, Project and Invoice Numbers and Contract Amount.
2. The time period (begin and end date) covered by the invoice.
3. A short narrative summary of activities completed in the time period.
4. Contract billing method – Lump Sum or Hourly Rate.
5. If Lump Sum, the percent completion, amount due, previous amount earned and total earned to date for all tasks (direct costs, if any, shall be included in lump sum amount).
6. If Hourly Rate, hours, hourly rates, names of individuals being billed, amount due, previous amount earned, the percent completion, total earned to date for each task and other direct costs (receipts will be required for any single item with a cost of \$50 or greater or cumulative monthly expenses greater than \$100).
7. If the Work Order is funded by multiple funding codes, an itemization of tasks and invoice amounts by funding code.

10. CONSIDERATIONS:

Consultant acknowledges the following:

1. The Consultant named above is required to comply with Section 119.0701, Florida Statutes, where applicable.
2. All City directives shall be provided by the City Project Manager.
3. "Alternate equals" shall not be approved until City Project Manager agrees.
4. All submittals must be accompanied by evidence each has been internally checked for QA/QC before providing to City.
5. Consultants/Contractors are not permitted to use City-owned equipment (i.e. sampling equipment, etc.).
6. Documents posted on City website must ADA accessible.

11. ADDITIONAL CONSIDERATIONS:

All work orders should include considerations for the following:

1. Sea Level Rise and Flood Resilience, as applicable.
2. Submittal of a Critical Path Method (CPM) Schedule(s).
3. Submittal of a Project Catalog with the following items, as appropriate:
 - a. Data requests, assumptions, critical correspondence, meeting agenda, sign-in sheets, meeting minutes, document comment-response log(s), technical memorandum/reports, addenda, progress reports, regulatory correspondence, and other project-related documents.
 - b. If construction project, also include design plans, conformed plans, change orders, field orders, RFIs, work change directives, addenda, progress reports, shop drawing and progress submittals, as-builts, record drawings, and other project-related documents such as O&M manuals and warranty information.

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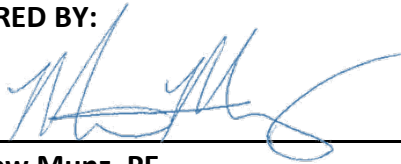
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- c. At the conclusion of the project, ENGINEER will combine this information into a Project Catalog and submit to the City for review and comment.
- 4. Arc Flash labeling requirements:
 - a. All electrical designs and construction shall adhere to NFPA 70 E "Standard for Electrical Safety in the Workplace".
 - b. Updated calculations of Fault and Arc Flash, and provisions for new or updated Arc Flash equipment labeling shall be included in the contract documents.

12. SIGNATURES:

PREPARED BY:



Matthew Munz, PE
Principal
Kennedy Jenks Consultants, Inc.

March 11, 2025

Date

APPROVED BY:

Richard Gardner, P.E.
City Engineer
City of Clearwater

Date

