



Consultant Services Authorization

Firm	Wright-Pierce, Inc.
Master Agreement No.	2024-019
CSA No.	2024-019-05
Project Name	Lift Station 302 Replacement
Project Description	Consultant will provide project management, support, preliminary and final design, pricing, and construction administration services.
Projects Exhibits and Attachments	Exhibit "A"- Scope of Services Exhibit "B"-Fee Schedule (Master Agreement) Exhibit "C"-Reimbursable Cost Schedule (if applicable) Exhibit "D"-Insurance Documents
Duration (in days)	This authorization shall be in full force and effect until the Consultant completes all services as identified in Exhibit "A".
Compensation	\$ 593,097.00
Special Contract Conditions	NA
Insurance Requirements	Professional Liability
Liquidated Damages	\$ 0.00 Per Day
Budget Source/Availability	42011.680536034.5666000.6827000 (R&R CIP Wastewater Projects)

IN WITNESS WHEREOF, the parties hereto have executed this CSA on this ___ day of _____, 20__.

Attest:
STACY M. BUTTERFIELD

POLK COUNTY, a Political subdivision
of the State of Florida

By: _____
Deputy Clerk

By: _____
Chairman
Board of County Commissioners

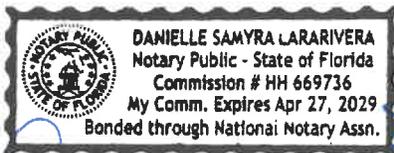
Date Approved by Board: _____

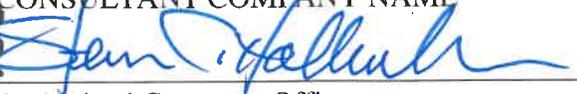
Review as to form and legal sufficiency

County Attorney's Office _____ Date

Attest:

Corporate Secretary



Wright-Pierce, Inc.
CONSULTANT COMPANY NAME

Authorized Corporate Officer

Steven C. Hallowell, Senior Vice President
[Printed Name and Title]

SEAL
Date: 12/08/2025



Date: 12/08/2025

Exhibit A
Consultant Services Authorization
24-019-05
Lift Station 302 Replacement

Wright-Pierce, Inc. (Consultant), entered into a Master Consulting Agreement (Agreement) with Polk County, Florida (County) on January 9, 2024. Pursuant to this Agreement, the County has requested that the Consultant provide certain professional services in support of the Lift Station (LS) 302 Replacement (Project) as further detailed in this Consultant Services Authorization.

A. Project Background and Description

In May 2025, the Consultant submitted a Technical Memorandum (TM) to the County which presented three conceptual layouts for improvements at LS 302. The layouts addressed fats, oils, and grease (FOG) / scum accumulation, improved access, wet well isolation, and improved maintenance and bypass pumping operations. In addition, PCU requested that the evaluation and layout include accommodation for a future emergency standby diesel pump and a bypass connection.

The recommended layout from the TM (Option 2) is shown in Figure 1, and includes the following items:

- Dual-compartment wet well with slide gates
- Master manhole (one to each compartment) and force main transition manhole
- Pumps, controls and electrical appurtenances
- Electrical building
- Emergency generator
- Backup diesel pump
- Odor control system
- Force main extension to new LS 302
- Decommissioning of the adjacent LS 321 and new gravity system to new LS 302
- Demolition of existing LS 302

Based on the recommended layout presented in the TM, the County has requested that the Consultant provide final design, permitting, construction documents, Contractor collaboration and construction phase services for the Project.

Rather than advertising the project for bid, the County will negotiate with one of its Contractors with a Master Agreement for Utilities Construction Services to construct the project under the Master Agreement for Utilities Construction Services (RFP 24-246). It is assumed the County will select a Contractor during the 30% design phase.

B. Scope of Services

Upon authorization to proceed from the County, the Consultant will provide the following identified services. The Consultant shall ensure that all design and construction documents produced by the Consultant or their subconsultants for the County will be consistent with the Polk County Utilities Standards and Specifications Manual, latest edition, and other County requirements. This authorization shall be in full force and effect until the Consultant completes all services as described in the Consultant Services Authorization and any subsequent modifications hereto.

Phase 100 – Project Management

Task 101 – Project Management

This task consists of overall management of the Project including contract administration, budget management, invoicing, monthly status reports, scheduling, and coordination with the County and Consultant's subconsultants.

Task 102 – Kick-off Meeting and Review Meetings

The Consultant will attend the meetings identified below with the County. The Consultant will also attend up to two collaborative meetings with the County and the Contractor to review constructability. The Consultant will prepare meeting agendas and meeting minutes. Meeting minutes shall be distributed within three working days of the date of the meeting.

- Design kickoff
- Operating Conditions and Control Strategy TM review
- 30% Basis of Design Memo review
- 60% design review
- 90% design review
- Design collaboration and constructability review with County and Contractor (2 meetings)

The two collaboration meetings with the County's Contractor are included for constructability review and project alignment. It is assumed the first meeting will occur prior to the start of the 60% design and the second meeting will be held during the 90% design phase.

Phase 200 – Support Services

Task 201 – Subsurface Utility Engineering

Subsurface Utility Engineers (SUE) services will be provided in accordance with the scope of services set forth in the October 6, 2025, proposal prepared by ECHO UES, Inc. (refer to Attachment A-3).

Task 202 – Land Surveying Services

Land surveying services will be provided in accordance with the scope of services set forth in the October 6, 2025 proposal prepared by ECHO UES, Inc. (refer to Attachment A-3).

Task 203 – Wetland Assessment / Delineation Services

Not included in this scope of services.

Task 204 – Threatened and Endangered Species

Not included in this scope of services.

Task 205 – Geotechnical Testing and Engineering

Geotechnical investigation services will be provided in accordance with the scope of services set forth in the October 8, 2025 proposal prepared by Nadic Engineering Services, Inc. (refer to Attachment A-4).

Phase 300 – Preliminary Design

Task 301 – Data Collection

The Consultant will review available background information provided by the County including:

- Existing and projected design flows and pressures for the LS
- PCU Geographic Information System (GIS) data including shapefiles of the wastewater system, parcels, right-of-way, and easements as available.
- Pump shop drawings, operations and maintenance (O&M) manuals, pump model numbers and pump curves for pumps at LS 302 and LS 321.
- Other LS equipment shop drawings and O&M manuals.

- LS 302 and 321 record drawings.
- Historical pump starts, run time, flow meter and discharge pressure data for LS 302.
- Property ownership documentation.
- Existing stormwater permits.
- Permanent standby diesel pump specifications.
- SCADA standards
- Odor control studies and standards
- Other reports, data, documents, etc that may be related and pertinent to the Project.

The Consultant will prepare a list of data and information to be provided by the County prior to the Kickoff Meeting for discussion.

Task 302 – Establish Proposed LS 302 Operating Conditions

As documented in the LS 302 Alternatives Evaluation TM, the peak current and future design capacities for LS 302 are 4,500 gpm and 5,000 gpm, respectively. The future capacity was projected by the 2022 Northeast Regional Utility Service Area (NERUSA) Wastewater Master Plan and provided by PCU during the LS 302 Evaluation. However, the total head conditions for the proposed pumps need to be determined.

Under this task, the Consultant will perform drawdown testing at the existing LS 302 and use the test results to validate the County's existing hydraulic model. The validation effort will include comparison of in-situ pump operating conditions to modeled results and minor adjustment of model parameters to achieve reasonable agreement. Once validated, the hydraulic model will be used to establish the proposed LS 302 operating conditions and to develop station and system head curves representing both current and future conditions.

The current and future design capacities associated with these operating conditions will remain 4,500 gpm and 5,000 gpm, respectively. This scope assumes the model validation effort will confirm that the model is suitable for determining the proposed LS 302 operating conditions. If the validation results indicate that additional calibration is required, the Consultant will notify the County and coordinate on how to proceed.

Site Visit and Drawdown Testing

The Consultant's Project Manager, Lead Project Engineer, Electrical Engineer and other staff as required will complete one site visit to LS 302 and LS 321 with PCU staff for the following purposes:

- Take photos, field measurements, and document equipment and material types and sizes of mechanical, electrical, and I&C components;
- Observe physical condition of structures and equipment for potential reuse, specifically the existing generator, electrical building and pumps.
- Perform drawdown testing at the existing LS 302 to confirm the in-situ operating conditions of the installed pumps as described in the paragraphs below.

PCU's project manager and lift station O&M staff member(s) will also attend and assist at the site visit and drawdown testing.

Pre-Drawdown Test Preparations

Prior to drawdown testing, the County will:

- Verify that a functioning valved 3/4-inch NPT pressure test port is installed within the LS 302 piping downstream of the check valves. If one is not available, the County will install the necessary test port prior to field testing.

Prior to drawdown testing, the Consultant will:

- Develop a drawdown testing spreadsheet and input applicable station geometry, pump curve data, and test parameters to support in-field performance calculations.
- Verify that the Consultant's calibrated pressure gauge is rated for the anticipated maximum discharge pressures.

General Drawdown Testing Procedures

Drawdown testing will be conducted jointly by the Consultant and County operations staff. In general, the County will provide site access and operate all equipment, while the Consultant will oversee the testing, record measurements, and evaluate in-situ pump performance.

LS 302 currently includes three pumps; however, it is possible that not all pumps will be in service during testing. Each in-service pump will be tested individually, and up to two additional tests may be performed with two pumps operating simultaneously. All pumps are expected to be tested at full speed unless otherwise directed by the County.

Each test will include the following steps:

1. With all pumps off, allow the wet well to fill for a duration determined by the Consultant.
2. Record the static discharge pressure immediately before starting the pump(s). If pressure oscillation occurs at LS 302, record both the range and average pressure.
3. Operate the pump(s) to draw down the wet well over a duration determined by the Consultant.
4. Observe discharge pressure continuously during pumping and manually record the discharge pressure once steady-state conditions are reached. If pressure oscillation occurs, record both the range and average steady-state pressure.
5. Record the rotational speed (rpm, VFD frequency, or percent full speed) displayed on the local HMI when the discharge pressure is recorded. While this step is primarily intended for reduced-speed testing, rotational speed should be recorded whenever available in case pumps do not achieve rated full speed.
6. Using wet-well geometry and the change in water depth, calculate:
 - Fill rate (average inflow rate to the wet well)
 - Drawdown rate (net outflow rate)
 - Pumping rate (sum of fill and drawdown rates)

Within one week of completing the testing, the County will provide the following SCADA data to the Consultant in one-minute intervals for the test day:

- LS 302 discharge flows recorded by the downstream force-main flow meter located approximately 350 feet west of LS 302 (dedicated to LS 302).
- NERUSA Wastewater Treatment Facility (WWTF) influent flows.
- Available pump run-status, run-time, and flow data for other lift stations discharging into the common force main.

The Consultant will perform a quality-control review of all field data and use the data to validate the model.

Wastewater Hydraulic Modeling

Hydraulic Model Validation

Using the SCADA data and drawdown test results, the Consultant will replicate the drawdown testing conditions in the model. For this effort, the Consultant will create steady-state scenarios derived from the 2025_with_CIPs EPS scenario. The steady-state scenarios will represent the drawdown test conditions and the operating status of lift stations discharging into the common force main during testing.

Minor adjustments to model parameters may be made to improve agreement between the modeled simulated results and field test results. It is anticipated that reasonable agreement will be achieved without the need for additional field investigations or detailed calibration. Should further effort appear warranted, the Consultant will immediately notify the County.

If the hydraulic model contains simplified representations of existing lift stations, omits some lift stations, or is otherwise configured such that the planned approach cannot be implemented without updating the model, the Consultant may use an alternate modeling approach it deems suitable. In such case, the Consultant may introduce nodal inflows at existing lift station locations or at connection points to the common force main to approximate the flows occurring during testing. The approach will be based on professional judgment and consideration of available SCADA data, model data, and drawdown results, with the intent of providing a practical and reliable analysis appropriate for this phase of work. If an alternate approach is needed, the Consultant will recommend one to the County for approval. Once approved via email, the Consultant will proceed with the modeling effort.

Necessary tables and/or figures comparing simulated results to observed data will be prepared. It is anticipated that reasonable agreement will be achieved, indicating the model is suitable for use in determining future LS 302 operating conditions. The Consultant will immediately notify the County if reasonable agreement is not achieved and will coordinate on next steps before performing any additional work. This scope assumes that reasonable agreement will be achieved.

Development of Station and System Curves

Following completion of the validation effort, the Consultant will perform modeling to develop station curves for the proposed LS 302. Station curves will define the relationship between energy-grade-line elevation and flow rate at the point where flows from the proposed pumps converge into the common force main at the proposed LS 302 site.

The following three station curves will be developed:

- Current Low-Head Station Curve: Only LS 302 discharging into the common force main (all other contributing lift stations set to OFF).
- Current High-Head Station Curve: Representative of peak-flow conditions in the 2025_with_CIPs EPS scenario.
- Future High-Head Station Curve: Representative of peak-flow conditions in the 2035_with_CIPs EPS scenario.

Based on the modeled station curves and the proposed LS 302 layout, the Consultant will then generate system curves for the individual pumps in Excel. The Excel tool will be structured to allow efficient updates as the design progresses and will maintain consistency with model results. The Consultant will use the developed curves to:

- Establish the design total head for the pumps at the future design capacity of 5,000 gpm. For this, the Future High-Head Station Curve will be used.
- Finalize the number and size of proposed variable-speed pumps and define the range of capacity and total-head conditions (i.e., the operating envelope) under which they may need to operate. Solicitate and validate pump selections from up to two County approved pump manufacturers for recommended design conditions. Recommendations for future impeller upsizing may be provided if appropriate.
- Develop a preliminary pump control strategy that defines proper sequencing and overlap of variable-speed operating ranges to ensure continuous hydraulic coverage without performance gaps, maintain all pumps within acceptable operating ranges (preferably within their best efficiency range), and include a periodic operating scheme to minimize surface stagnation.

The Consultant will use the future high-head scenario within the model with the proposed pump selection to evaluate impacts to the collection system downstream of LS 302. The Consultant

will identify and summarize with tables the original and revised operating conditions of downstream lift stations found to be negatively impacted. The scope of services can be modified should the County request the Consultant to develop improvements for those stations through additional modeling scenarios.

The Consultant will prepare and submit a Proposed LS 302 Operating Conditions and Control Strategy TM summarizing the drawdown testing, modeling methodology, system curves, and operating recommendations. The draft TM will be submitted to the County for review and comment. Following the draft TM Review Meeting, the Consultant will incorporate the County's comments and issue the final TM. The Draft and Final Proposed LS 302 Operating Conditions and Control Strategy TM will consist of three hard copies and one (1) electronic copy in Portable Document Format.

Task 303 – Basis of Design Memorandum

The Consultant will prepare and submit a basis of design consisting of the following:

- Draft and Final Basis of Design Memorandum (BODM) consisting of three (3) hard copies and one (1) electronic copy in Portable Document Format.

As part of this task, the Consultant will establish the LS 302 and LS 321 decommissioning and overall project sequencing requirements; confirm the design flow range for the new LS, LS 302 wet well size, size of pumps and motors, piping, and electrical service; size new pipelines; and develop the site layout for the new LS.

The BODM will confirm the following items for the new LS 302:

- Range of design flows, pressures, proposed pumps and operating conditions per the LS 302 Operating Conditions and Control Strategy TM
- Wet well size and depth
- Manhole and pipe sizes and depths
- Standby diesel pump size
- Size (KW) of emergency generator
- Electrical service requirements
- Permits required for the new LS
- Decommissioning of lift stations (321 and 302) and start up sequencing of new LS
- Construction sequencing

The BODM will also determine the following items:

- Potential reuse of the emergency generator, electrical building, and submersible pumps
- Other improvements required for the Project including appropriate odor control system technology
- Electrical service for the new LS.
- Site layout shown in the following figures (11"x17"):
 - One CAD figure presenting the overall new LS site plan.
 - One CAD figure electrical single line diagram.
- Preliminary construction sequencing requirements.
- Preliminary Engineer's Opinion of Probable Construction Cost (OPCC) (Class 3 cost estimate as established by the American Association of Cost Engineers).
- Preliminary drawing list.
- Preliminary list of supplemental technical specifications for items not covered in the Polk County Utilities Standards and Specifications Manual (USSM).

The Consultant will develop a draft and final version of the BODM. The draft BODM including figures will be submitted to the County for review and comment. Following the draft BODM Review Meeting, the Consultant will incorporate the County's comments and issue the final BODM.

Phase 400 – Final Design Documents

Task 401 – 60% Design Documents

The Consultant will prepare and submit 60% design documents consisting of the following:

- Design drawings consisting of three (3) half-size sets of drawings to scale and one (1) electronic copy in Portable Document Format;
- Technical specifications consisting of three (3) bound copies and one (1) electronic copy in Portable Document Format;
- One (1) copy of a preliminary Engineer's Opinion of Probable Construction Cost.

The 60% drawings will identify and quantify all permanent and temporary easements that will be required to support construction, operation, and maintenance of the improvements. Additionally, the Consultant shall clearly list any variations from the Utilities Standards and Specifications Manual and the rationale for each variation.

A preliminary list of drawings is provided in Attachment A-5.

Task 402 – 90% Design Documents

The Consultant will prepare and submit 90% design documents consisting of the following:

- One (1) copy of a tabular summary of the Consultant's responses to comments provided by the County for the 60% design submittal;
- Design drawings consisting of three (3) half-size sets of drawings to scale and one (1) electronic copy in Portable Document Format;
- Technical specifications consisting of three (3) bound copies and one (1) electronic copy in Portable Document Format. The technical specifications shall include Division 1.
- One (1) copy of an updated Engineer's Opinion of Probable Construction Cost. If there is more than 25% variance in the Engineer's Opinion of Probable Construction Cost from the 60% design, the Consultant shall provide the rationale for the difference in cost.

The Consultant shall clearly list any variations from the Utilities Standards and Specifications Manual and documentation that the variations have been accepted by the County.

Phase 500 – Permitting Services

This phase consists of the preparation and submittal of the forms and documents that are required for obtaining regulatory and construction permits / approvals for the Project. In each task below, response to agency questions and comments is limited to two (2) sets of review questions and comments from each agency for each permit. This limit does not include responses to agency questions / comments resulting from errors and / or omissions of the Consultant in preparing and submitting requisite application documents. Permit application fees will be paid by the County.

Task 501 – Florida Department of Environmental Protection (FDEP) Wastewater Collection / Transmission Permit Application

- Prepare and submit FDEP Application For Constructing A Domestic Wastewater Collection/Transmission System (including all required forms and supporting documentation). A pre-application meeting is not needed for this permit.

Task 502 – Environmental Resource Permit Application

- Environmental Resource Permit - stormwater, jurisdiction wetlands / waters of the State, sovereign submerged lands, etc. (FDEP or Southwest Florida Water Management District).

Task 503 – Right of Way Utilization Permit Application

- Right of Way Utilization Permit (Polk County Roads & Drainage)

The scope for each required permit shall include the following services:

- Attend one pre-application meeting for the Environmental Resource Permit Application (if required). A pre-application meeting is not needed for the Domestic Wastewater Collection / Transmission System Construction Permit or the Right of Way Utilization Permit.
- Prepare and submit permit application (including all required forms and supporting documentation).
- Prepare and submit responses to Requests for Additional Information. This effort is limited to two (2) sets of review questions / comments unless otherwise required to address errors and / or omissions of the Consultant in preparing and submitting requisite application documents.

Phase 600 – Pricing Phase Services

Rather than advertising the project for bid, the County will obtain a proposal from one of its existing Contractors under the Master Agreement for Utilities Construction Services (RFP 24-246). For the purpose of this Consultant Services Authorization, it is assumed that the County will enter into one contract for construction of the Project. The County shall be responsible for preparation of Procurement and Contracting Requirements, and distribution of the Construction documents, including all costs associated therewith.

Task 601 – Construction Documents

The Consultant shall prepare and submit the following documents to the County for Contractor pricing:

- One (1) signed and sealed full-size set of 100% drawings to scale and one (1) half-size set of construction plans to scale;

- One (1) signed and sealed copy of technical specifications;
- Schedule of Values and Pricing Sheet (electronic only) if required;
- Scope of Work if required;
- Supplementary and Special Conditions if required (electronic only);
- Engineer's Opinion of Probable Construction Cost;
- An electronic copy of the construction documents in Portable Document Format (electronically signed and sealed).

Task 602 – Pre-bid Meeting

Not included in this scope of services.

Task 603 – Bid Addenda

Not included in this scope of services.

Task 604 – Bid Recommendation

Not included in this scope of services.

Task 605 – Pre-Award Phase (BVP projects only)

Not included in this scope of services.

Phase 700 – Construction Administration Services

These services will be performed during construction of the Project. For the purpose of this Consultant Services Authorization it is assumed that the construction duration will not exceed 18 months.

Task 701 – Pre-Construction Meeting

The Consultant shall attend one pre-construction meeting and prepare a meeting agenda and meeting summary (unless meeting agenda / minutes are included in Contractor's scope).

Task 702 – Preliminary Matters and Contract Documents

The Consultant shall provide three (3) sets of 22" x 34" final construction drawings to scale and three (3) sets of technical specifications for distribution to the County and the Contractor. Additionally, the Consultant shall also submit one (1) electronically signed and sealed set of all final drawings and technical specifications. The final construction drawings and technical

specifications shall incorporate changes and clarifications to the documents during the Contractor's proposal phase.

The Consultant shall review and approve the preliminary schedule of shop drawings and submittals, the preliminary schedule of values, and the construction schedule for the Project. The Consultant shall provide written interpretations and clarifications of the Contract Documents as requested by the Contractor and determine the acceptability of work. The Consultant will render in writing their opinions concerning the Contractor's requests for formal decisions on claims and disputes. The Consultant will disapprove or reject work which is defective and / or require special inspection or testing as may be deemed necessary to assess conformance with the Contract Documents.

Task 703 – Shop Drawing Review

Review Contractor's shop drawings and other submittals for general conformance with the Contract Documents. It is assumed that up to 40 shop drawing submittals and resubmittals will be reviewed. As part of this task, the Consultant will maintain a Shop Drawing Review Log. The Consultant will also coordinate with the County to incorporate County review comments into the submittal review process and distribute the shop drawing review comments to the Contractor.

Task 704 – Construction Progress Meetings

Attend up to 16 construction progress meetings and prepare a meeting agenda and meeting summary (unless meeting agenda / minutes are included in Contractor's scope).

Task 705 – Construction Site Visits

The Consultant's Engineer of Record, or designated representative, will visit the site at intervals deemed appropriate by the Consultant to review the construction of the Project for general conformance with Contract Documents. The Engineer of Record or designated representative will conduct up to 32 visits (not including substantial and final completion) including start up testing of major equipment for an average of two visits per month during the construction of the Project. While some site visits will coincide with construction progress meetings, additional visits will be conducted independently to meet the required frequency.

Task 706 – Applications for Payment

The Consultant will review applications for payment submitted by the Contractor, including updated progress schedules, and will indicate in writing to the County a recommendation of

payment or return the application to the Contractor specifying in writing the reasons for not recommending payment. This task assumes up to 18 applications for payment with supporting documentation will be submitted by the Contractor for review.

The Consultant's recommendation of payment will constitute a representation by the Consultant to the County that:

- The work has progressed to the point indicated;
- The quality of the work is generally in accordance with the Contract Documents; and
- The conditions precedent to the Contractor's being entitled to such payment appear to have been fulfilled based on the Consultant's site observations.

In the event that the work has not progressed in accordance with the approved construction schedule, the Consultant will request that the Contractor submit a schedule recovery plan indicating corrective actions necessary to put the work back on schedule. The Consultant shall submit the Contractor's application for payment to the County within five working days of receipt of the same.

Task 707 – Requests for Information

Review Requests for Information submitted by the Contractor and provide written responses to the Contractor. The Consultant shall maintain a Requests for Information log for the Project. As part of this task, the Consultant will coordinate with the County to incorporate County reviews and review comments into the RFI review process for distribution to the Contractor. It has been assumed that responses will be provided for up to ten (10) RFIs.

Task 708 – Change Orders

The Consultant will review requests from the Contractor for changes in contract price or contract time and provide written comments to the Contractor and the County. If acceptable, the Consultant will prepare a written change order request consistent with the Contractor's Master Construction Services Agreement to be submitted to the County for approval. This task potentially includes the review of applicable Allowance Authorization Releases and Contingency Releases. It has been assumed that for this task that up to three (3) Change Order requests may be submitted. The Consultant shall maintain a Change Order Review Log.

Task 709 – Substantial Completion

Upon written notification and receipt of a list of items to be completed / corrected from the Contractor, the Consultant will visit the site to determine if the work or a designated portion thereof is substantially complete. For the purpose of this task, the Consultant assumes that two (2) substantial completion site visits will be required. When the work (or a portion thereof) is deemed to be substantially complete, the Consultant will prepare a Certificate of Substantial Completion that establishes the date of Substantial Completion. The Certificate of Substantial Completion shall be accompanied by a punch list of items to be completed / corrected.

Task 710 – Project Close-Out

Upon written notification from the Contractor that the entire work is complete, the Consultant will visit the site to determine if the work is complete as required by the Contract Documents. For this task, the Consultant assumes that one final completion site visit will be required. When the work is deemed to be complete by the Consultant and the County, the Consultant will review the Contractor's final application for payment and accompanying documentation and provide a written recommendation of payment to the County. The Consultant will also give written notice to the County and the Contractor that the work is acceptable subject to the appropriate provisions referenced herein and within the Contractor's approval documents and contract.

The Consultant will review the Contractor's as-built drawings for completeness and compliance with County requirements. This effort shall include the preparation of written comments for submission to the Contractor based on the Consultant's review of the as-built drawings. The Consultant will prepare record drawings based on the Contractor's as-built data in accordance with the Utilities Standards and Specifications Manual. One (1) complete 24" x 36" set of draft record drawings shall be submitted for review by the County. The Consultant will incorporate all comments from the draft review, then submit signed and sealed electronic sets (Portable Document Format and AutoCAD) and one (1) signed and sealed 24" x 36" hard copy set of the record drawings to the County within 30 days of the receipt of the Contractor's final as-built drawings.

The Consultant shall prepare and submit a "Request for Approval to Place a Domestic Wastewater Collection / Transmission System into Operation" (Form 62-604.300(8)(b)) to the Florida Department of Environmental Protection.

Phase 800 – Resident Project Representative Services

Not included in the scope of services.

C. Deliverables

The Consultant shall prepare and submit to the County, including electronic format when applicable, the following deliverables:

Task	Activity	Deliverable
102	Meetings	Meeting agenda and minutes
201-204	Support Services	Three (3) hard copies of reports / drawings (signed / sealed for survey documents); one (1) electronic copy (Portable Document Format and / or AutoCAD)
302	Proposed Operating Conditions and Control Strategy TM	Three (3) hard copies and one (1) electronic copy
303	Basis of Design Memo	Three (3) hard copies and one (1) electronic copy
401-402	Final Design Documents	Three (3) 11" x 17" design drawings; three (3) copies of technical specifications; one (1) electronic copy of each; and one (1) hard copy of the Engineers Opinion of Probable Construction Cost
501	Permitting	Permit applications and supporting documentation
601	Construction Documents	One (1) 24" x 36" signed / sealed and one (1) 11" x 17" construction plans; one (1) set of technical specifications (signed / sealed); Schedule of Values; Scope of Work; Supplementary and Special Conditions; Engineers Opinion of Probable Construction Cost; one (1) electronic copy of all docs in Portable Document Format

Task	Activity	Deliverable
701	Pre-Construction Meeting	Meeting agenda and minutes
702	Contract Documents	Three (3) sets of 22" x 34" final construction drawings and technical specifications; written interpretations, clarifications, opinions
704	Progress Meetings	Meeting agenda and minutes
706	Pay Applications	Written comments on payment applications, as applicable
707	Requests for Information	Written responses to Contractor's Requests For Information
708	Change Orders	Written comments on (as applicable) Change Orders, Allowance Authorization Releases, and Contingency Releases consistent with Contractor's approval documents and contract.
709	Substantial Completion	Certificate of Substantial Completion (with punch list)
710	Project Close-Out	Certificate of Final Completion; one (1) signed / sealed set (22" x 34") record drawings and two (2) electronic sets (Portable Document Format and AutoCAD); construction completion certifications (as required)

D. Schedule

Consultant will proceed with the services identified herein immediately upon receipt of an executed copy of this Consultant Services Authorization and a formal Notice-to-Proceed from the County. The projected schedule for the performance of services described herein, in Gantt Chart format, is included as Attachment A-1. An updated electronic version of the Project schedule in Microsoft Project will be provided to the County within 10 working days from the issuance of the Notice-to-Proceed. Delivery of the schedule may be in other electronic formats so long as they accurately portray the approved scope of services with sufficient detail subject to staff approval. Should additional time be required beyond the schedule depicted in Attachment A-1, The Consultant will provide an updated Attachment A-1 (schedule) to the Utilities and Procurement Divisions. Following staff approval, the updated Attachment A-1 will

be forwarded by Utilities staff to Procurement staff for inclusion in the contract file with no further administration action required for extension.

E. Compensation

This Consultant Services Authorization establishes a not-to-exceed cost of \$593,097.00. Compensation for the services performed under this Consultant Services Authorization shall be on an hourly, not-to-exceed basis using the current hourly rate schedule as set forth in Master Consulting Agreement 2024-019. Other direct costs or expenses incurred in connection with this Consultant Services Authorization will not be invoiced as these expenses have been accounted for in the rate multiplier associated with the Master Consulting Agreement referenced above. A summary of the estimated labor costs is provided in Attachment A-2 for reference only. Each invoice submittal shall include a tabular summary of the originally estimated labor costs by phase in accordance with Attachment A-2, fees invoiced to date, and the balance remaining per phase. The transfer of funds between defined phases is not permitted unless approved in advance in writing by the County Utilities Director. To request consideration for such a transfer, the Consultant must submit satisfactory written justification to transfer unused funds from phases with completed tasks or tasks clearly tracking under budget to phases with tasks requiring additional funding. In addition, the transfer of funds shall not exceed the total authorized fee for the Project.

The not-to-exceed cost for this Consultant Services Authorization includes contingency funds in the amount of \$25,000. The contingency funds authorized for use on this Consultant Services Authorization may only be expended upon written approval from the County's Utilities Director. Adequate justification must be provided by the Consultant for the release of contingency funds. Any out-of-scope services performed requiring the release of contingency funds will be considered at-risk and may not be compensated until, or if, written approval is granted by the County's Utilities Director.

The Consultant will minimally provide a consultant invoice summary with each invoice, based on a mutually agreed-upon breakdown of phases and tasks in Attachment A-2 that reflect the effort and deliverables submitted to the County. The summary will depict the overall phases, associated budgets, amounts invoiced to date, and balance remaining. Invoices for compensation submitted by the Consultant will include the reviewed and approved consultant invoice summary, an updated Project schedule, notarized affidavits (as applicable), and the monthly status report.

Invoices for not-to-exceed projects shall be accompanied by time and task records for all billable hours appearing on the invoice. Additional documentation may be requested by the County and, if so requested, shall be furnished by the Consultant to the County Auditor's satisfaction. In addition, all invoices shall be submitted with the Consultant Services Authorization number, purchase order number, and the Polk County Utilities Project and Records Room numbers on the invoice.

The Consultant agrees that, in the event that design errors and / or omissions are discovered during construction, all services rendered by the Consultant to correct said design errors and / or omissions will be considered out-of-scope services and shall not be invoiced to the County.

F. County's Responsibilities

The County will provide the following information to the Consultant and / or perform the following services related to the Project:

1. Provide design data (shop drawings, serial numbers, or other) for the existing lift stations and connected piping.
2. Provide site access to LS 302 and LS 321.
3. Install pressure gauge test ports and provide operations staff during LS 321 drawdown testing.
4. Provide use of existing flow meter for drawdown testing.
5. Provide the requested SCADA data within one week of completing the drawdown testing.
6. Provide the design criteria for the lift station, specifically, the average daily and peak hourly flow and pressure the County desires for Consultant to design the new lift station.
7. Provide record drawings and GIS shapefiles of utilities (water, wastewater, reclaimed water and stormwater) installed along Ronald Reagan Parkway and Affirmed Way in the vicinity of LS 302 and LS 321.
8. Review submittals and meet to discuss comments with the Consultant within two weeks of submission.
9. Payment of permitting fees.
10. Select a Contractor to construct the project.
11. Provide a construction site representative

G. Services Not Included

The following services are not included in the Scope of Services for the Project:

1. SRF funding activities
2. Wetlands delineation and threatened and endangered species identification
3. Maintenance of Traffic (MOT) plans (Consultant will require the Contractor to submit an MOT plan for review prior to construction)
4. Bypass pumping plans
5. Building permit (the Contractor will be required to obtain any applicable building permits)
6. Permitting services are limited specifically to those listed in this Scope of Services.
7. Permitting fees
8. Full time construction inspection services
9. Preparation of O&M manuals
10. Operator training

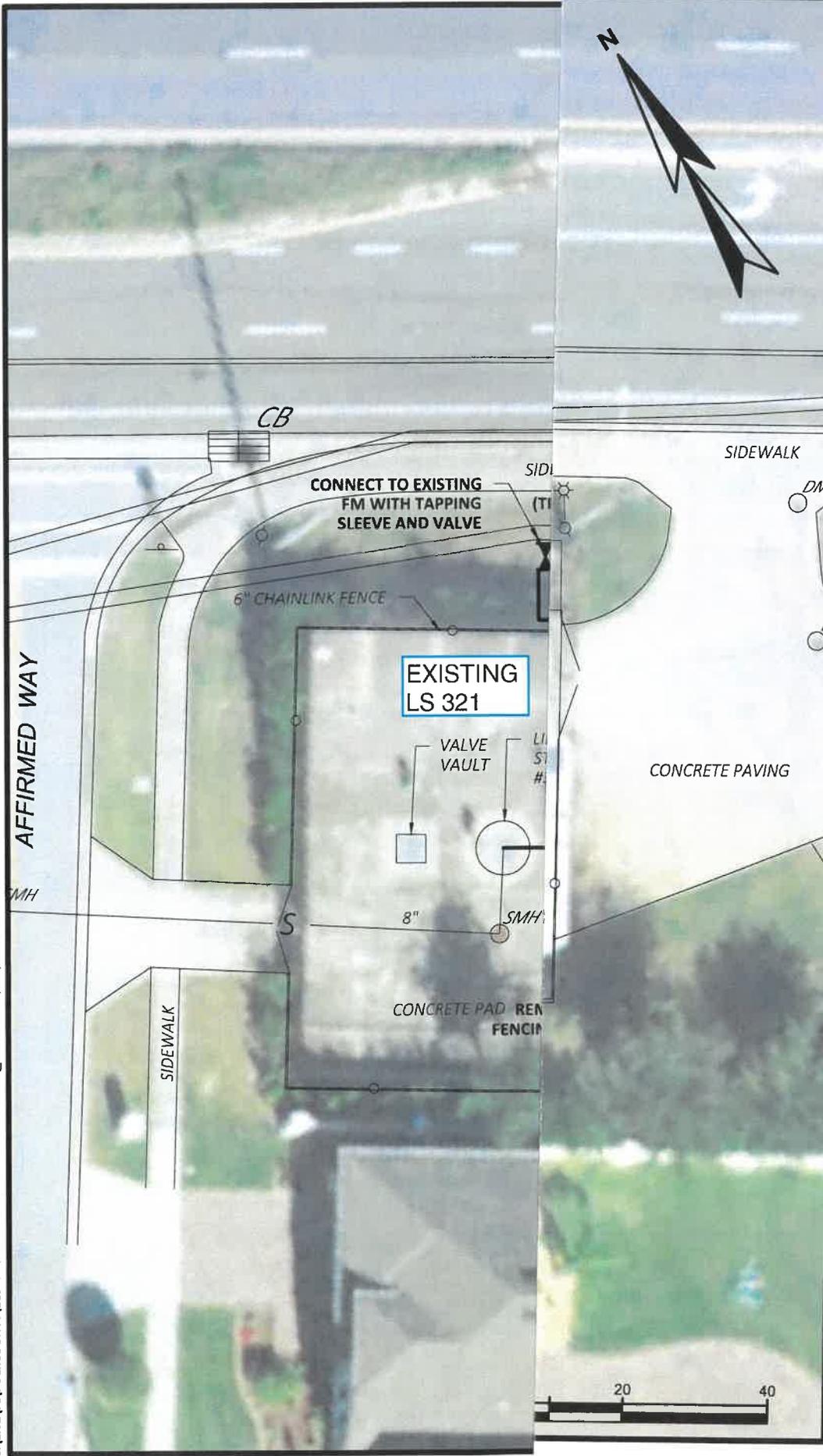
H. Assumptions

The Scope of Services and compensation arrangement outlined in this Consultant Services Authorization are based on the following assumptions:

1. The technical specifications developed by the Consultant will include applicable portions of the County's USSM, Supplementary Conditions, Special Provisions, and supplemental technical specifications for components not addressed in the USSM.
2. The Consultant will provide calibrated pressure gauge and Excel software tool for analysis.
3. The Consultant will use the County's existing wastewater model; no calibration or significant model updates are included. If such updates appear necessary, the Consultant will immediately notify the County and coordinate whether a modified scope is required to expand services.
4. The project will not be advertised to bid. Instead, the County will use one of its existing Contractors with a Master Agreement for Utilities Construction Services to provide a price proposal for construction.
5. The County will bring the Contractor on board during the 30% design phase.
6. The 90% design documents will present the complete design pending incorporation of the County's and Contractor's comments.
7. The County will provide the Consultant USSM Standard Drawings in AutoCAD format.

8. The Consultant will not develop maintenance of traffic (MOT) drawings. Instead, the Consultant will require the Contractor to develop and adhere to a MOT plan that complies with Florida Department of Transportation requirements.
9. The Contractor will be required to obtain any applicable building permits.
10. Design and construction services include a new generator and electrical building.
11. Construction duration of 18 months.
12. Permitting services are limited specifically to those listed in this Scope of Services.

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POLK COUNTY UTILITIES UPGRADE LIFT STATION No. 302		REVISIONS		DRAWN BY	APP'D
PROJ NO: 21905	DATE: APRIL 2025	NO. 1	NO. 2	NO. 3	FIGURE: 1
WRIGHT-PIERCE			PROPOSED LS No. 302 SITE PLAN OPTION 2		

Attachment A-1
Gantt Chart Schedule



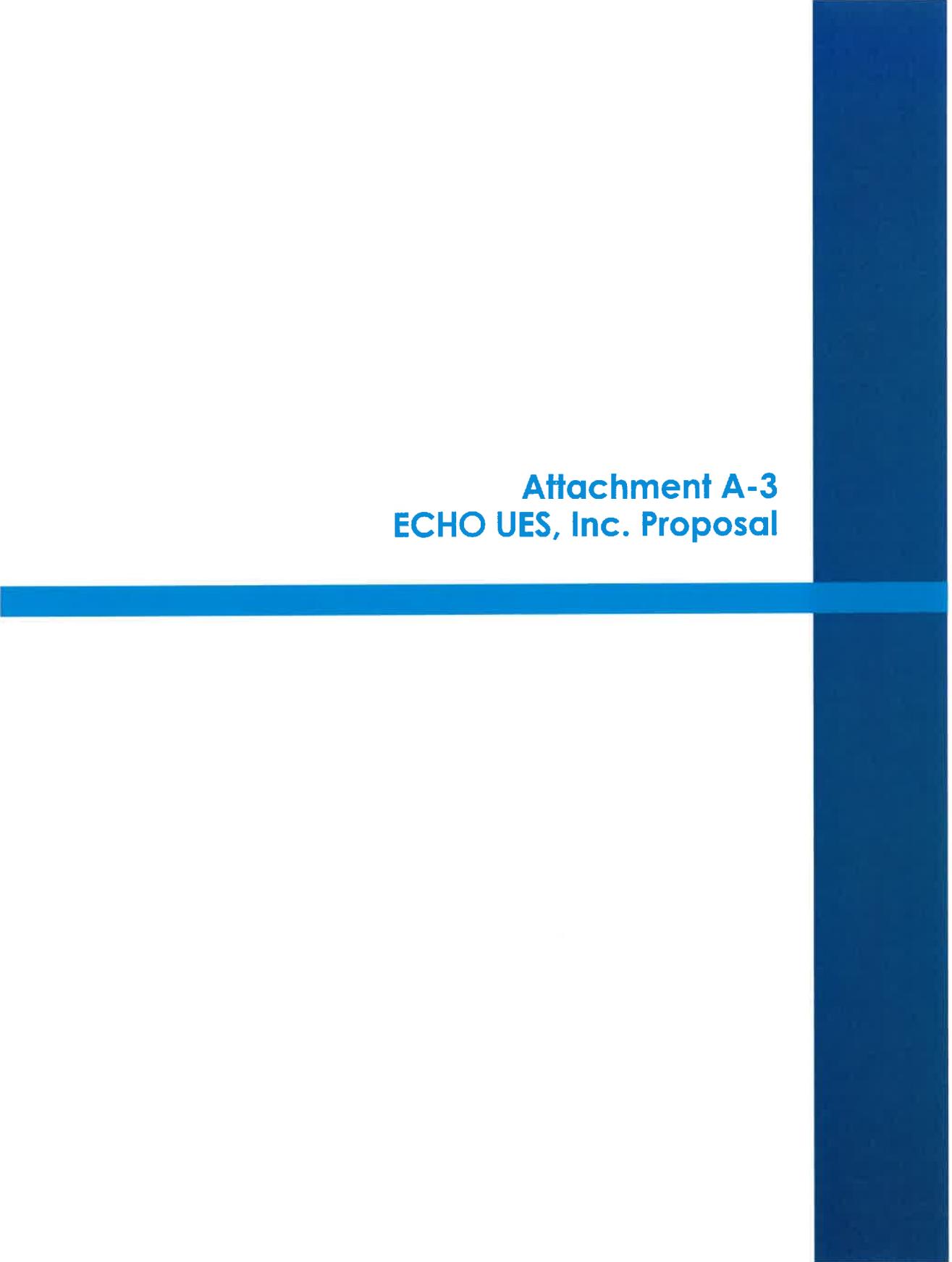


**Attachment A-2
Fee Estimate**

**Polk County Utilities
Lift Station 302 Replacement
Consulting Fee Estimate**

Phase and Task Descriptions	Subtotal Labor Cost	Subconsultant(s)		Total Subconsultant Costs	Subtotal Fee
		ECHO	Nadic		
PHASE 100 PROJECT MANAGEMENT					
Task 101 - Project Management	\$25,475			\$0.00	\$25,475.00
Task 102 - Kick Off, Review Meetings (4), Contractor Collaboration (up to 2)	\$23,732			\$0.00	\$23,732.00
PHASE 100 - TOTAL	\$49,207.00	\$0.00	\$0.00	\$0.00	\$49,207.00
PHASE 200 SUPPORT SERVICES					
Task 201 - Subsurface Utility Engineering	\$2,793	\$9,990.00		\$9,990.00	\$12,783.00
Task 202 - Land Surveying Services	\$2,928	\$7,220.00		\$7,220.00	\$10,148.00
Task 203 - Wetland Assessment / Delineation Services - NOT USED	\$0			\$0.00	\$0.00
Task 204 - Threatened and Endangered Species - NOT USED	\$0			\$0.00	\$0.00
Task 205 - Geotechnical Testing and Engineering	\$3,700		\$15,891.00	\$15,891.00	\$19,591.00
PHASE 200 - TOTAL	\$9,421	\$17,210.00	\$15,891.00	\$33,101.00	\$42,522.00
PHASE 300 - PRELIMINARY DESIGN					
Task 301 - Data Collection	\$3,856			\$0.00	\$3,856.00
Task 302 - Drawdown Test, Modeling, LS Operating Conditions Tech Memo	\$24,560			\$0.00	\$24,560.00
Task 303 - Basis of Design Memorandum	\$30,765			\$0.00	\$30,765.00
PHASE 300 - TOTAL	\$59,181	\$0.00	\$0.00	\$0.00	\$59,181.00
PHASE 400 - FINAL DESIGN DOCUMENTS					
Task 401 - 60% Design Documents	\$88,386			\$0.00	\$88,386.00
Task 402 - 90% Design Documents	\$70,504			\$0.00	\$70,504.00
Task 403 - 100% Design Documents - NOT USED	\$0			\$0.00	\$0.00
PHASE 400 - TOTAL	\$158,890	\$0.00	\$0.00	\$0.00	\$158,890.00
PHASE 500 - PERMITTING SERVICES					
Task 501 - FDEP Domestic Wastewater Permit	\$4,643			\$0.00	\$4,643.00
Task 502 - Environmental Resource Permitting	\$5,107			\$0.00	\$5,107.00
Task 503 - Right of Way Permit	\$3,649			\$0.00	\$3,649.00
PHASE 500 - TOTAL	\$13,399	\$0.00	\$0.00	\$0.00	\$13,399.00
PHASE 600 - PRICING PHASE SERVICES					
Task 601 - Final Construction Documents	\$28,092			\$0.00	\$28,092.00
Task 602 - Pre-Bid Meeting - NOT USED	\$0			\$0.00	\$0.00
Task 603 - Bid Addenda - NOT USED	\$0			\$0.00	\$0.00
Task 604 - Bid Recommendation - NOT USED	\$0			\$0.00	\$0.00
PHASE 600 - TOTAL	\$28,092	\$0.00	\$0.00	\$0.00	\$28,092.00
PHASE 700 - CONSTRUCTION ADMINISTRATION SERVICES					
Task 701 - Pre-Construction Meeting	\$3,236			\$0.00	\$3,236.00
Task 702 - Preliminary Matters and Contract Documents	\$3,457			\$0.00	\$3,457.00
Task 703 - Shop Drawing Review (40)	\$67,253			\$0.00	\$67,253.00
Task 704 - Construction Progress Meetings (16)	\$29,058			\$0.00	\$29,058.00
Task 705 - Construction Site Visits (32)	\$64,084			\$0.00	\$64,084.00
Task 706 - Application for Payment (18)	\$6,674			\$0.00	\$6,674.00
Task 707 - Requests for Information (10)	\$14,332			\$0.00	\$14,332.00
Task 708 - Change Orders (3)	\$2,802			\$0.00	\$2,802.00
Task 709 - Substantial Completion	\$13,380			\$0.00	\$13,380.00
Task 710 - Project Closeout	\$12,530			\$0.00	\$12,530.00
PHASE 700 - TOTAL	\$216,806	\$0.00	\$0.00	\$0.00	\$216,806.00
Subtotal	\$534,996.00	\$17,210.00	\$15,891.00	\$33,101.00	\$568,097.00
Contingency Funds					\$25,000.00
TOTAL					\$593,097.00

Attachment A-3
ECHO UES, Inc. Proposal



October 6, 2025

Kelly Wehner, PE, ENV SP
Wright-Pierce
Project Manager

PROPOSAL FOR SURVEY AND SUBSURFACE UTILITY ENGINEERING SERVICES

Project: Polk County Utilities, Lift Stations 302, Pinellas County

Dear Ms. Wehner:

At ECHO UES, Inc. (ECHO), we value your consideration and appreciate the opportunity to provide this technical proposal for the requested professional services in support of this project. This technical proposal details the approach we consider to be the most suitable for this project.

Project Synopsis: Based on the information made available to ECHO, we understand the project consists of demolishing existing Lift Stations 302 and 321, and rebuilding Lift Station 302 in their place. ECHO's professional services were requested to provide a topographic survey and subsurface utility engineering services as further described below.

Project Limits: ECHO's proposed services will be performed within well-defined limits as shown on the attached graphic representations provided by Wright-Pierce.

I. Topographic Survey: ECHO shall provide a topographic survey locating existing conditions, and existing aboveground and visible improvements within the area delineated in red on the attached exhibit. Additional project-specific items to be performed include:

- Set horizontal control referenced to the Florida State Plane Coordinate System, West Zone, North American Datum of 1983, 2011 Adjustment (NAD 83/2011)
- Set vertical control referenced to the North American Vertical Datum of 1988 (NAVD 88)
- Collect all aboveground and visible features, including surface evidence of utilities.
- Collect all accessible gravity utilities, including pipe size, material, and inverts within the project limits, and include the next upstream and downstream sanitary manhole and/or storm manhole/inlet. A note will be included on the survey for any structures that cannot be detailed, noting the cause.
- Collect sufficient elevation data to create a digital terrain model (DTM) of the site.
- Elevations will be shown to the nearest tenth of a foot (0.1') on natural ground or soft shots and the nearest one-hundredth (0.01') of a foot on paved or hard surfaces.

- The horizontal and vertical survey control will be provided in the final survey in tabular format for use by the contractor during construction activities.
- Recover and tie down sufficient monumentation in the field to calculate the existing apparent right-of-way/parcel lines within the project limits. Right-of-way and property lines will be shown as calculated based on field monumentation, but will not result in a Boundary or Right-of-Way Survey.
- Items as noted on Survey Scope Summary document provided by Wright-Pierce (see attached).
- All survey efforts will be conducted in accordance with the Standards of Practice outlined in Rule Chapter 5J-17, F.A.C., pursuant to Section 472.027, F.S.

II. Subsurface Utility Engineering Services: Using a combination of field investigative techniques and technology, including surface geophysical instruments, including ground penetrating radar (GPR), ECHO will perform the following services.

1. **Identification and marking of existing utilities.** Utilities within the project limits will be investigated in an attempt to identify their position. The results will be marked on the ground surface using the most appropriate method (i.e., pin flags, paint, etc.) and showing the approximate position of the identified utilities.
2. **Verification of utility location and characteristics.** At specific locations, ECHO will attempt to expose utilities using minimally intrusive methods (e.g., vacuum excavation) to confirm their characteristics (e.g., type, size, material, direction, configuration) and provide an accurate location. At completion of each excavation (test hole), ECHO will record all verifiable utility information, mark the utility location with the most appropriate method (e.g., wooden lathes, "X" mark on concrete, nail, and disk on asphalt), and restore the field to as close to its original conditions as possible.

This proposal includes up to ten (10) test holes to be used to confirm the horizontal alignment and depth of existing target utilities within the project limits.

Deliverables will consist of:

- Test hole data sheets containing all the information obtained via test holes and visual verification.
- Survey digital CADD file (AutoCAD) inclusive of sheeting on appropriate format and scale, and a signed and sealed surveyor's report.
- Deliverables will be prepared in accordance with Wright Pierce's Survey Checklist.

Proposed Schedule: To be discussed and agreed to upon receipt of the executed agreement.

Notes and Limitations:

1. The client shall facilitate access to the site and provide any relevant project information.
2. The site must be clear of obstacles impeding access to any portion of the project limits.

3. Standard work hours are from 7:00 am to 4:00 pm, Monday through Friday; additional charges may occur (following discussion with the Client) in case of weekend or nighttime work.
4. ECHO will not work on any site that is known to be contaminated with any hazardous or harmful substance.
5. FDOT Design Standards (Index 600 Series) will be utilized for the Maintenance of Traffic (MOT). Should the site require modification to the Index 600 for non-standard MOT arrangements, ECHO will seek the Client's concurrence to obtain signed and sealed project's specific MOT plans (to be provided by others).
6. Unless otherwise stated within this proposal, test holes have a standard depth of up to eight (8) feet from the ground surface, and a diameter of up to one (1) foot. Should there be a need for deeper or wider excavations, additional charges may apply.
7. The original ground surface at each test hole location will be restored as close as possible to its original conditions, using concrete mix or asphalt cold patch as applicable. Any deviation from this standard (e.g., use of hot asphalt, flowable fill, etc.) may require additional charges and the use of specialty subcontractors.
8. Regardless of the type of estimate proposed (e.g., lump sum, time, and materials, etc.), such an estimate should be considered indicative and based on preliminary information. Should any situation out of ECHO's control heavily impact ECHO's field work performance (e.g., adverse site conditions), ECHO reserves the right to seek additional funds to complete the work.
9. The exact location of any underground utility is not guaranteed unless clearly exposed and visually verified at a specific location. Utility characteristics, methods of installation, soil conditions, and the surrounding environment can all adversely impact the results of any utility investigation using surface geophysical instruments and technology. No guarantee is made that all utilities will be found and identified.
10. Subsurface Utility Engineering, Designating and Locating terms all refer to the American Society of Civil Engineers / Construction Institute Standard for the Collection and Depiction of Subsurface Utility Data (ASCE/CI 38-02). Should ECHO adopt this standard for the performance of the scope of work and preparation of deliverables, a clear mention of the Standard shall be made throughout the deliverables.

Fee: ECHO's competitive offer, which is inclusive of all field, office, materials, supplies, and equipment costs, is:

Survey & Mapping: **\$7,220.00.**

Subsurface Utility Engineering: **\$9,990.00**

Acceptance: We will honor this proposal for a period of 60 days. If accepted, please return this to our attention, along with a professional services agreement/task work order authorization, and official Notice to Proceed.

At ECHO UES, Inc., we believe in collaboration and open communication with our clients, and we are committed to understanding their needs and delivering efficient, cost-effective solutions. Thank you for considering ECHO for this important project. Please do not hesitate to contact me directly if you have any questions or concerns.

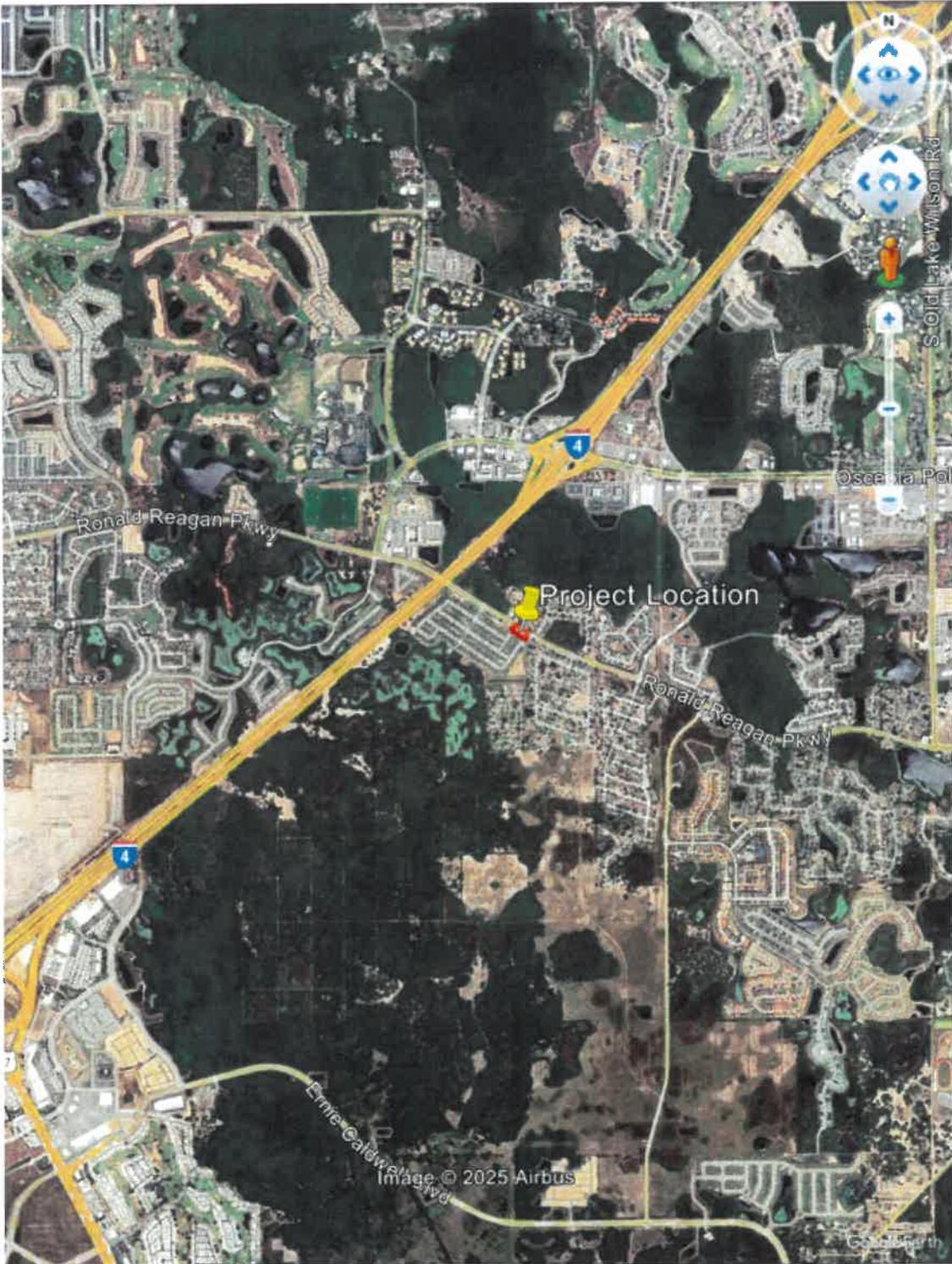
Sincerely,

ECHO UES, Inc.



Mike Patterson, PSM
Senior Vice President

Vicinity Map

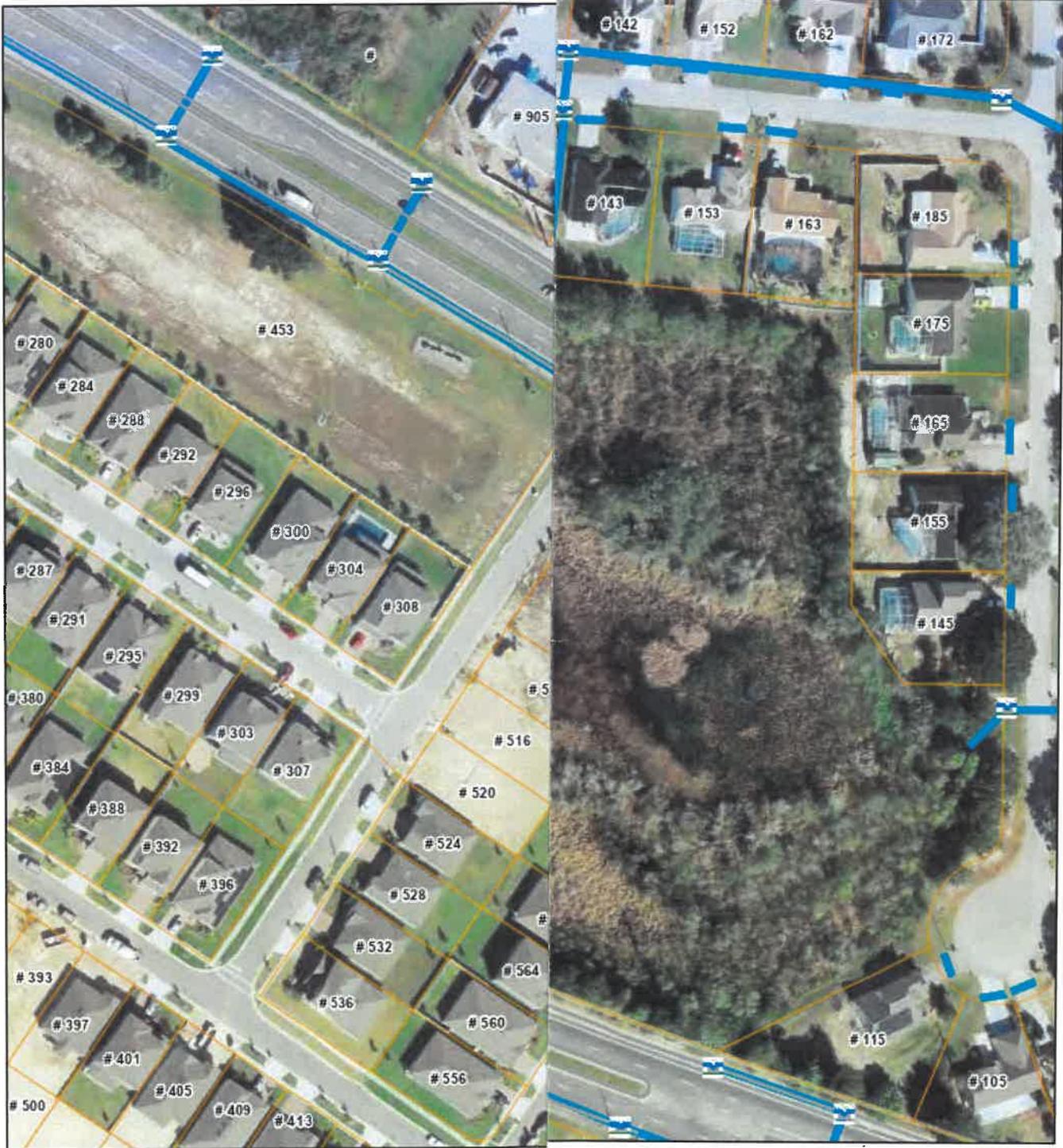




Map Disclaimer

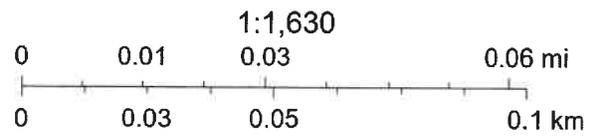
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- STORM_PIPES
- CURBING
- CON
- ▭ STORM_INLETS



Polk County Emergency Management

EXTERNAL SURVEY SCOPE SUMMARY

Survey Subconsultant: ECHO UES Date: 09-30-25
 Contract: Polk County Utilities Phone: (813) 344-3313
 Project: LS 302 Replacement Project Manager: Kelly Wehner
 Project No.: T18909 Client/Owner: Polk County
 Lead Project Engineer: Eben Spalding W-P CADD Coordinator: TBD

TYPE OF SERVICES: *(brief description)*

Topographic survey of existing lift station (LS) 302 and 321 areas and adjacent undeveloped area for construction of new LS 302 and removal of LS 321. See attached Exhibit A.

Locate and obtain rim and invert information of sewer manholes and stormwater inlets/manholes located within the Affirmed Way and Ronald Reagan Parkway rights-of-way.

Up to ten test holes, locations to be determined during design.

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> Boundary | <input type="checkbox"/> Easement | <input checked="" type="checkbox"/> Topography | <input type="checkbox"/> Aerial Mapping |
| <input checked="" type="checkbox"/> Subsurface Utilities Exploration | <input type="checkbox"/> Construction Layout | <input type="checkbox"/> Record | |

ATTACHED CHECKLIST: *(one of these detailed checklists should be completed and attached)*

- Roadway W-WWTP/Sites Aerial Other

EXISTING INFORMATION: *(brief description of what area is needed; attached map if possible)*

- Deed(s) Right-of-Way Plans
 Easements Benchmark CAD/ GIS data

SURVEY LOCATION: *(need description of what area is needed; attached map if possible)*

See attached Exhibit A.

DEADLINES:

HAZARDS/ SAFETY:

Survey services may present the Surveyor's personnel with certain hazardous conditions that require special procedures and equipment, (traffic, confined spaces, etc.). The Surveyor is solely responsible for assuring the safety of its employees and their operations in accordance with OSHA Regulations.

DELIVERABLES:

1. Surveyors Report *(control description, accuracies, problems, datum information, data file organization)*
2. Signed and Sealed Survey drawing set.



3. Data deliverables need to be in conformance to Wright-Pierce CAD Standards. WP currently uses Civil3D 2023 and prefers survey files provided in this format. If that is not possible, specify the software version/date and data format that can be provided:

If this is the case, all files will be required (i.e., survey points/descriptions, tin lines, contours, break lines, etc. are required.

4. Data deliverables for Subsurface Utilities Exploration, as noted herein.

DATA EXCHANGE METHOD:

It is recommended that the Surveyor's CAD person has a conversation with a Wright-Pierce's CAD person to work out the best possible data exchange plan. Wright-Pierce's preferred method for data exchange is via the Internet using the Wright-Pierce FTP site.

MEDIA/ MEANS:

- USB Thumb/Flash Drive FTP Transfer Other Email (if file size permits)

Survey Coordinator
(Chris Hinkley) _____



- Top
- Fence or Wall (dimensions and material)
- Tree line
- Trees/shrubs (*e.g. ornamental, all sizes – this is important for planning service connections*)
- All roadside trees OR Trees greater than 12-inch diameter
- Traffic signage
- Pavement markings
- Guard Rail
- Mailboxes
- Light poles or posts
- Electric boxes
- Telephone boxes
- Topography: Contour Intervals (*e.g. 1-foot, 2-foot*) 1-ft
- Wetlands
 - Field-located by others (flagged)
- Set/ Identify permanent control points and temporary benchmarks outside of development area to serve future construction layout
- See Subsurface Utility Exploration checklist
- Horizontal Control: NAD83 Assumed
- Vertical Control: NGVD29 NAVD88 Assumed Set TBM's
- Precision/Accuracy: In accordance with State of FL standards.
- Other: _____

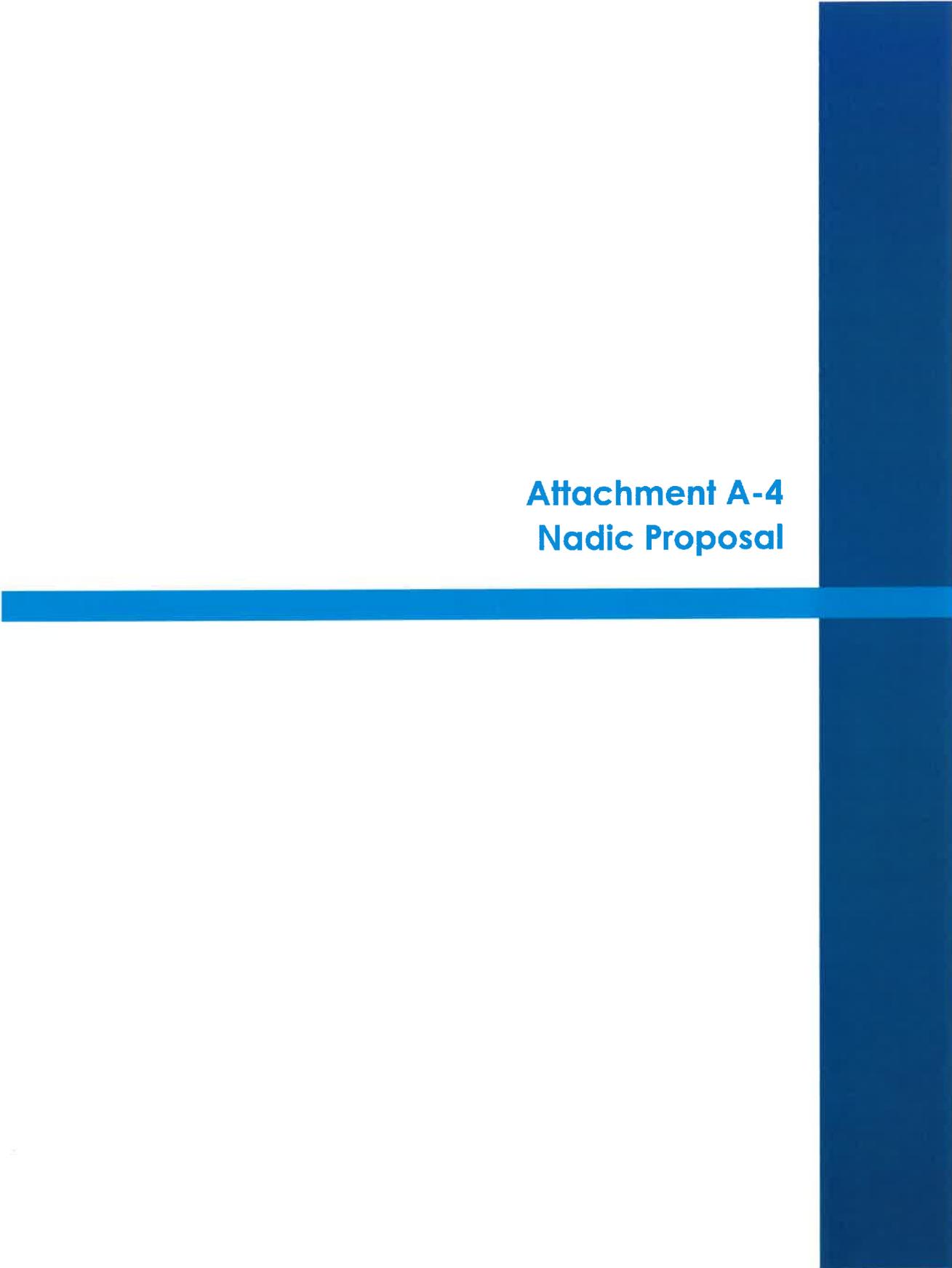


SUBSURFACE UTILITY EXPLORATION CHECKLIST FOR
ALL PROJECTS

Subsurface Utilities Exploration (SUE)

Utility Quality Level (QL) attributes are described in “Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, CI/ASCE 38-02” by American Society of Civil Engineers (ASCE), Latest Edition. Identify/Research Size/Material/Depth/Ownership based on the SUE Quality Levels (QL) identified below:

- Quality Level D – Derived from records drawings, oral recollections. **Preliminary project planning only.**
- Quality Level C - Information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to Quality Level D. **Minimum level conducted for design services.**
- Quality Level B – Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. This work should be performed to obtain horizontal location of subsurface utilities in areas with congested utilities (i.e. central business district), areas where utility information is sparse or where a specific utility of high importance is being crossed (i.e. gas line). Identify any specific areas on-site where Level B is required:
- Quality Level A - Precise horizontal and vertical location of utilities obtained by the actual exposure and subsequent measurement of subsurface utilities, usually at a specific point. This work should be performed to obtain precise horizontal and vertical locations of subsurface utilities in areas with congested utilities (i.e. central business district), areas where utility information is sparse or where a specific utility of high importance is being crossed (i.e. gas line). Identify any specific areas on-site where Level B is required:
 - Test Holes (Up to 10 test holes) – locations to be provided during design and after receipt of topographic survey
 - Data in tabular form
 - Data located on survey map



Attachment A-4
Nadic Proposal

October 8, 2025

Wright-Pierce

601 South Lake Destiny Road, Suite 290
Maitland, Florida 32751

Attention: Ms. Kelly Wehner, P.E.
Project Manager

RE: Geotechnical Engineering Fee Proposal for
Polk County Lift Station 302 Replacement
Polk County, Florida
NADIC Project No. PQ.GEO-CV25084

Dear Ms. Wehner:

As per your email dated September 30, 2025, **Nadic Engineering Services, Inc. (NADIC)** is pleased to provide this Fee Proposal for the replacement of Lift Station (LS) 302, located east of the intersection of Affirmed Way and Ronald Reagan Parkway in Davenport, Polk County, Florida. We understand the new lift station will be constructed adjacent to the existing LS 302 with a layout that will allow for the decommissioning of LS 321 located just west of the proposed improvements. We also understand that the new lift station will consist of a new Wet Well at a depth of up to 27 feet below existing grade, 5-foot diameter precast manholes, 30-inch influent sanitary sewer of an approximate depth of 20-feet below existing grade, 24-inch force main extension and a 5-foot diameter transition manhole with approximate depth of up to 10 feet below existing grade.

The purpose of this investigation will be to explore the soil and groundwater conditions at the site and to use the information obtained to provide geotechnical engineering recommendation for engineering design and construction effort for the proposed lift station improvements. Our recommended scope of services includes the following:

- 1) Coordinate boring location, including field reconnaissance, mark boring location at the sites.
- 2) Coordinate clearance and meetings with utility locators.
- 3) Mobilize truck mounted drill rig and personnel.
- 4) As requested, perform a total of three (3) Standard Penetration Test (SPT) borings:
 - a) One (1) boring to a depth of 50 feet below existing grade for the Wet Well.
 - b) Two (2) borings to a depth of 25 feet below existing grade for other construction.
- 5) Collect groundwater level measurement and estimate normal wet seasonal high groundwater table.
- 6) Visually examine all recovered soil samples in accordance to ASTM D2487 and perform laboratory tests on selected representative soil samples. The laboratory testing shall include Sieve analysis, Atterberg limits, organic content and natural moisture content, as appropriate.
- 7) Develop a Geotechnical Data Report (GDR) to be included in the Bidding Documents. The GDR shall include the following at a minimum:
 - a) Description of existing site conditions and proposed improvements
 - b) Description of regional and site geology and topography
 - c) Historical use of the project site, if appropriate

- d) Site plan with existing and proposed structures and with soil exploration locations
 - e) Description of lab test results and findings relative to soil and groundwater, including notification of presence of hazardous substances, including visible contaminated soils and groundwater
 - f) Soil borings profiles and
 - g) Laboratory test reports for soil properties and for corrosion
- 8) Develop a Geotechnical Design Report (GDM). The GDM shall include the following at a minimum:
- a) Reference to information in the Geotechnical Data Report
 - b) Site Plan with existing and proposed structures and with soil exploration locations
 - c) Description of findings of borings including soil classifications over boring depths, any refusal, groundwater observations, any indications of visible potential contamination
 - d) Description of laboratory test results including soil gradations
 - e) Description of geotechnical engineer's understanding of proposed construction including locations, dimensions, bearing elevations and loading conditions, to the extent known
 - f) Geotechnical design parameters: unit weight of soil, angle of internal friction, lateral design earth pressures above and below groundwater for active and at rest conditions, lateral passive earth pressure, if necessary, design seasonal high groundwater table
 - g) Recommendations for:
 - x Site preparation including excavation techniques, expectations, depth of removal and over-excavation, safe slopes for any permanent cuts or fills, and improvements of in-situ soils, if applicable
 - x Support of excavations including protection of existing adjacent utilities/structures during construction, lateral pressures for design of excavation support systems and any displacement monitoring recommendations
 - x Constructability considerations including temporary excavation slopes, sheeting and shoring/cofferdams, traffic control/maintenance, excavatability, possibility of heave of excavation bottoms, and applicable dewatering issues and methods
 - x Influence of expansive soils, if encountered, on foundation design and recommendations to mitigate harmful effects
 - x Backfill materials including onsite availability, recommended index properties, aggregate gradations, classifications in accordance with ASTM D2487 and moisture and density compaction criteria
 - x Compaction characteristics and suitability of onsite soils for use as engineered and other fills and other pertinent earthwork recommendations, including shrinkage factors
 - x Soil and/or groundwater contamination issues/management (if known or suspected), including recommended methods to address soil and/or groundwater contamination
 - x Corrosion protection for construction materials (metals and concrete) if corrosive soils are encountered.

- x Possible effects of pipeline or tunnel construction on the surface and subsurface facilities in the alignment and recommended measures to control detrimental effects or ground subsidence.
 - x Any other geological or geotechnical recommendations considered by the geotechnical engineer to be pertinent to the project.
- 9) Revise reports to address Engineer comments and submit final GDR and GDM. Submit signed and sealed memos and Reports.

In accordance with the proposed scope of services and unit prices, we estimate the total (Not-To-Exceed) cost for our geotechnical services to be **\$15,890.46**. Our schedule to complete the described work will be five (5) working weeks from your written notice to proceed.

The fee presented above does not include environmental investigation and evaluation. However, if visible contamination is noticed, it shall be reported to Wright-Pierce. In case, potential contamination is observed, **NADIC** will present a proposal for the additional cost.

NADIC appreciates the opportunity of working with you, Wright-Pierce and Polk County on this project. If you have any questions regarding this proposal, or if we may be of further assistance, please do not hesitate to contact the undersigned.

Sincerely,

NADIC ENGINEERING SERVICES, INC.



Oliver D. Rosen, E.I.
Staff Engineer



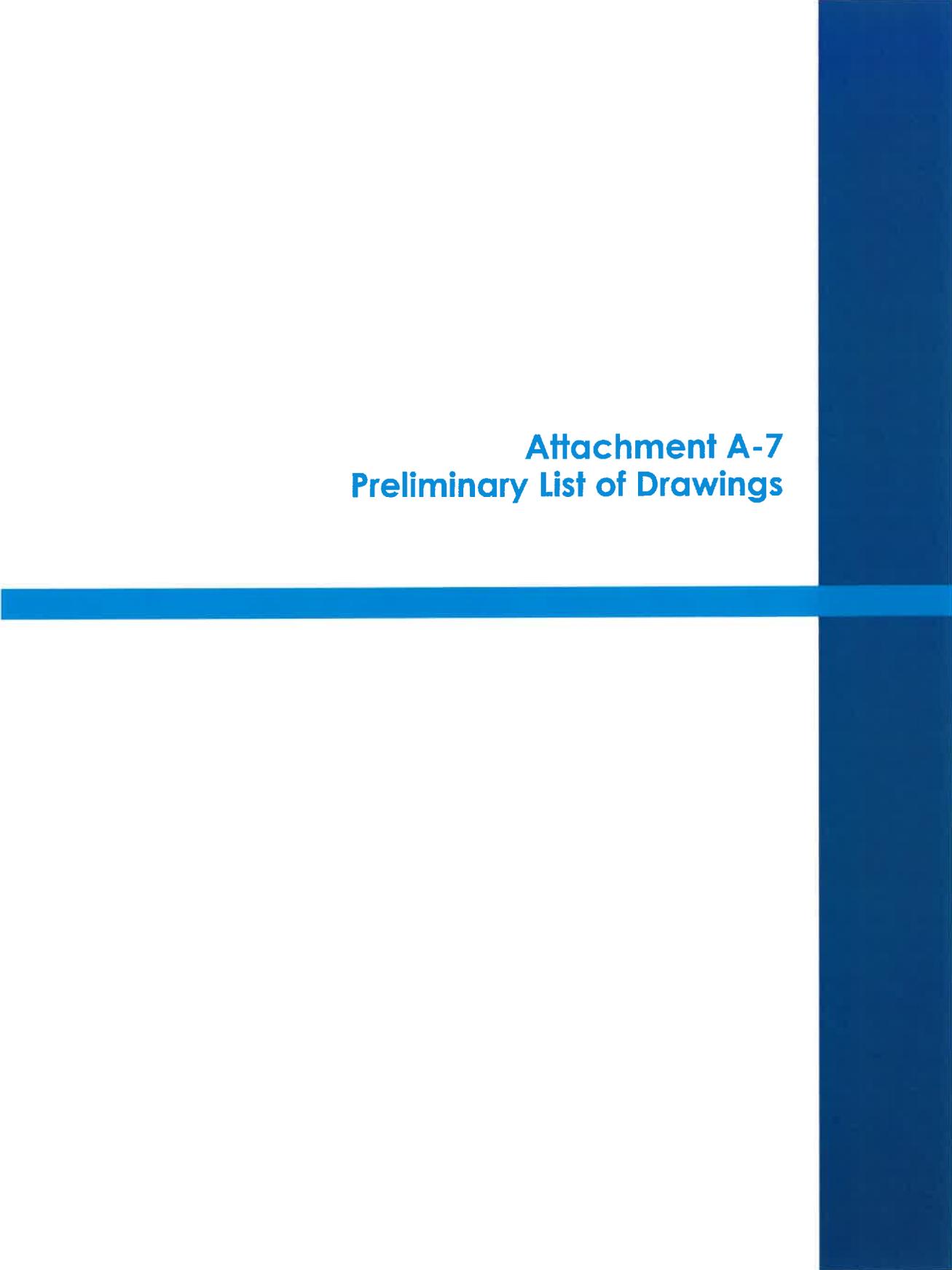
Godwin N. Nnadi, Ph.D., P.E.
Principal Engineer

Attachment: Attachment A – Computation of Geotechnical Cost

Component/Unit Description	UNIT	QTY	RATE	TOTAL COST
I. FIELD EXPLORATION:				
1. Crew & Equipment Mobilization:				
612-Mobilization Drill Rig Truck Mount	Ea.	1	\$644.80	\$644.80
610-Mobilization Drill Rig Truck Mount	Ea.	0	\$3,952.00	\$0.00
712-Support Vehicle	Hr	12	\$129.60	\$1,555.20
2. Standard Penetration Test Borings(ASTM D-1586):				
478-Geo SPT Truck 0-50 Ft	LF	100	\$20.96	\$2,096.00
479-Geo SPT Truck 50-100 Ft	LF	0	\$26.39	\$0.00
3. Auger Borings (ASTM D-1452):				
401-Hand/Truck	LF	0	\$17.09	\$0.00
479-Track	LF		\$18.40	\$0.00
4. Grout Boreholes: Truck/Mud Bug:				
440-Geo Grout Boreholes- Truck 0-50 Ft	LF	50	\$7.76	\$388.00
441-Geo Grout Boreholes- Truck 50-100 Ft	LF	0	\$9.33	\$0.00
5. Temp Casing 4": Truck/Mud Bug:				
488-Geo Temp Casing 4"- Truck 0-50 Ft	LF		\$15.52	\$0.00
489-Geo Temp Casing 4"- Truck 50-100 Ft	LF	0	\$19.41	\$0.00
9. Truck and Crew:				
531-Geo Drilling Crew 2-Person	Hr	1	\$342.21	\$342.21
15. Undist Samples(ASTM D-1587): Truc/MB				
519-Geo Undisturbed Samples Truck 0-50 Ft	Ea.		\$281.78	\$0.00
10. Site Reconnaissance/Utility Coordination:				
a. - Engineer Intern	Hr	1	\$87.40	\$87.40
b. -Sr. Engineering Tech	Hr	8	\$89.39	\$715.12
11. GPS Rental:	Days	0.5	\$104.00	\$52.00
Totals for Field Exploration				\$5,880.73
II. LABORATORY TESTING:				
1. Visual Exam./Stratify(ASTM D-2488):				
- Engineer Intern	hrs.	1	\$87.40	\$87.40

**ATTACHMENT A - COMPUTATION OF GEOTECHNICAL COST
POLK COUNTY LIFT STATION 302 REPLACEMENT
POLK COUNTY, FLORIDA**

Component/Unit Description	UNIT	QTY	RATE	TOTAL COST
2. Grain Size Analysis:				
822- Soils Particle Anlyns AASHTO T99 No Hydrome	Ea.	0	\$120.13	\$0.00
812 -Soils Material Finer then 200 sieve FM 1-T011	Ea.	5	\$75.28	\$376.40
819-Soil Organic Content Ignition FM 1-T 267:	Ea.	1	\$57.67	\$57.67
826-Soil Plastic Limit & Plasticity Index AASHTO T9	Ea.	1	\$57.67	\$57.67
811-Soil Liquid Limit AASHTO T89:	Ea.	1	\$57.67	\$57.67
817-Soil Moisture Content AASHTO-T265):	Ea.	5	\$25.00	\$125.00
806-Unit Weight Determination:	Test		\$75.28	\$0.00
831-Soils Specific Gravity AASHTO T100	Test		\$117.86	\$0.00
803-Soils Consolidation - Constant Strain ASTM D41	Test		\$986.21	\$0.00
801-Soils Consol-Addtl Incrmnts AASHTO T216 (13 to 24 Loads)	Ea		\$100.00	\$0.00
805-Soils Corrosion Series FM 5-550 to 5-553: (pH, Sulfate, Chloride, Resistivity)	Ea.	1	\$258.44	\$258.44
Totals for Laboratory Testing				\$1,020.25
<u>ENGINEERING AND TECHNICAL SERVICES:</u>				
1. Chief Engineer:	hrs.	2	\$257.65	\$515.30
2. Senior Geotech Engineer:	hrs.	4	\$217.75	\$871.00
3. Project Engineer:	hrs.	28	\$188.28	\$5,271.84
4. Engineer Intern	hrs	11	\$87.40	\$961.40
5. Cadd/Computer Technician:	hrs.	8	\$104.20	\$833.60
6. Senior Geotech Technician:	hrs.	6	\$89.39	\$536.34
7. Secretarial/Clerical:	hrs.		\$66.28	\$0.00
		59		
Totals for Engineering and Technical Services				\$8,989.48
Total - Lump Sum				<u>\$15,890.46</u>



Attachment A-7
Preliminary List of Drawings

Polk County Utilities

LS 302 Replacement - Final Design, Permitting, Bidding and Construction Phase Services

Drawing List

No.	Drawing No.	Description
General		
1	G-1	Cover Sheet
Civil		
2	C-1	General Notes, Legend and Abbreviations
3	C-2	Survey Control & Benchmark Plan
4	C-2	Existing Conditions and Site Demolition Plan
5	C-3	Layout and Grading Plan
6	C-4	Site Piping Plan
7	C-7	Details I
8	C-8	Details II
9	C-9	Details III
10	C-10	Erosion Control Notes
11	C-11	Erosion Control Details
Architectural		
12	A-1	ELECTRICAL BUILDING - ARCHITECTURAL NOTES, LEGENDS, ABBREVIATIONS, PLANS, SECTIONS AND EXTERIOR ELEVATIONS
Structural		
13	S-1	Structural Notes, Legend & Abbreviations
14	S-2	Lift Station - Plans
15	S-3	Lift Station - Sections
16	S-4	Structural Details I
Process		
17	PR-1	Process General Notes
18	PR-2	Existing LS 302 Demolition Plan
19	PR-3	Existing LS 321 Demolition and Modification Plan
20	PR-4	Existing LS 321 Modification Plan
21	PR-5	Lift Station - Sections
22	PR-6	Details I
23	PR-7	Details II
Mechanical		
24	M-1	MECHANICAL GENERAL NOTES, LEGEND, ABBREVIATIONS, SCHEDULES, AND MODIFICATIONS PLAN
Instrument.		
25	I-1	Instrumentation Legend, Notes & Abbreviations
26	I-2	Instrumentation Loop Diagrams
27	I-3	Instrumentation Details I
Electrical		
28	E-1	ELECTRICAL LEGEND, NEMA AND CONDUIT INSTALLATION SCHEDULES
29	E-2	ELECTRICAL ABBREVIATIONS AND NOTES
29	E-3	ELECTRICAL SITE PLAN - DEMOLITION
30	E-4	SINGLE LINE DIAGRAM - DEMOLITION
30	E-5	ELECTRICAL SITE PLAN - MODIFICATIONS
31	E-6	ELECTRICAL SCHEMATICS
31	E-7	ELECTRICAL SCHEDULES
32	E-8	ELECTRICAL DETAILS I
32	E-9	ELECTRICAL DETAILS II
33	E-10	ELECTRICAL DETAILS III



122 East Main Street #238
Lakeland, FL 33801
Phone: 407.906.1776 | Fax: 407.667.4799
www.wright-pierce.com

Exhibit B

November 1, 2023

Wright-Pierce has developed the following rate multiplier based on Polk County guidance. The multiplier incorporates direct costs, reimbursables and in-County travel expenses. The calculation below provides the basis of our multiplier rate.

	<u>Wright-Pierce Standard</u>
Base Rate	1.00
Overhead/Admin.	0.38
<u>Labor/Fringe Benefits</u>	<u>1.40</u>
Subtotal	2.78

Profit	0.22 (@7.91%)

Subtotal	3.00
Direct Costs/Reimbursables	0.05

Overall Total Multiplier	3.05

Raw and burdened (raw labor rate x 3.05 multiplier) hourly rates listed by labor classification are shown in Table 1. Table 2 provides descriptions of experience requirements and general duties by labor classification.



TABLE 1 – Labor Classification and Rate Development

Labor Classification	Raw Hourly Rate (\$)	Raw Hourly Rate (\$)	Burdened Hourly Rate (\$)	Burdened Hourly Rate (\$)
	Low	High	Low	High
Principal	63.93	113.77	195	347
Technical Manager	61.64	111.15	188	339
Quality Control Officer	53.11	110.82	162	338
Client Service Manager	60.33	110.49	184	337
Sr. Project Manager	57.70	106.89	176	326
Lead Project Engineer	51.80	102.30	158	312
Senior Engineer	44.92	110.16	137	336
Project Manager	49.84	85.25	152	260
Project Engineer III	37.05	67.21	113	205
Project Engineer II	33.44	62.95	102	192
Project Engineer I	28.85	56.07	88	171
Senior Architect	41.97	74.75	128	228
Architect	36.72	62.95	112	192
Landscape Architect	36.72	62.95	112	192
Sr. RPR	38.03	70.49	116	215
Resident Project Representative	25.25	49.51	77	151
GIS Analyst	36.72	62.95	112	192
Senior Designer	38.03	70.49	116	215
Technician	27.21	49.51	83	151
GIS Technician	27.21	49.51	83	151
Intern	17.70	31.48	54	96
Sr. Administration	26.23	46.89	80	143
Administrative Assistant	19.67	35.74	60	109



TABLE 2 – Labor Classification – Experience and General Duties

Labor Classification	Experience and General Duties
Principal-in-Charge	BS Engineering or related; 20+ years of experience; Licensed Professional Engineer or Geologist. Ensures proper company resource are available; provides technical guidance; manages overall performance.
Technical Manager	BS Engineering or related; 20+ years of experience; Licensed Professional Engineer or Geologist. Manages staff; oversees projects and Project Manager performance.
Quality Control Officer	BS Engineering or related; 20+ years of experience; Licensed Professional Engineer or Geologist. Oversees technical accuracy of projects and adherence to QA/QC procedures.
Client Service Manager	BS Engineering or related; 15+ years of experience; Licensed Professional Engineer or Geologist. Ensures client expectations are met.
Senior Project Manager	BS Engineering or related; 12+ years of experience; Licensed Professional Engineer or Geologist. Manages project quality, support and technical and financial performance of projects.
Lead Project Engineer	BS Engineering or related; 6+ years of experience; Licensed Professional Engineer or Geologist. Provide expert project support and provide technical guidance of staff. Develops, oversees and coordinates the technical aspects of the project.
Senior Engineer	BS Engineering or related; 10+ years of experience; Licensed Professional Engineer or Geologist. Provide expert project support and provide technical guidance of staff in respective discipline. Develops, oversees and coordinates the technical aspects of the project in respective discipline.
Project Manager	BS Engineering or related; 6+ years of experience; Licensed Professional Engineer or Geologist. Manages project quality, support and technical and financial performance of projects.
Project Engineer III	BS Engineering or related; 4+ years of experience; Licensed Professional Engineer or Geologist. Provide technical project support and guidance of staff. Develops technical aspects of the project in the respective discipline.
Project Engineer II	BS Engineering or related; 2+ years of experience; Licensed Engineer-in-Training. Provide technical project support and guidance of staff. Develops technical aspects of the project in the respective discipline.
Project Engineer I	BS Engineering or related. Provides technical project support. Develops technical aspects of the project in the respective discipline.
Senior Architect	BS Architecture or related; 10+ years of experience; Licensed Professional Architect or Engineer. Provide expert project support and provide technical guidance of staff. Develops, oversees and coordinates the architectural aspects of the project.
Architect	BS Architecture or related. Provide technical project support. Develops technical architectural aspects of the project.



Labor Classification	Experience and General Duties
Landscape Architect	BS Landscape Architecture or related. Provide technical project support. Develops technical aspects of the project in the respective discipline.
Senior Resident Project Representative	BS in Engineering or related or HS diploma plus 10+ years with construction, construction observation, or related training. Observe and document on-site construction activities; provide technical support on construction administration issues.
Resident Project Representative	BS in Engineering or related or HS diploma with construction, construction observation, or related training. Observe and document on-site construction activities; provide technical support on construction administration issues.
GIS Analyst	BS/BA in Geography, Computer Science, or related field; 5+ years' experience using ESRI software. Prepare maps and other special data in digital or graphic forms using GIS applications.
Senior Designer	HS diploma plus 6+ years drawing or specialized technical experience; extensive knowledge and experience with CADD, engineering design or construction or specialized trade. Supports staff to identify, research, and solve technical issues.
Technician	HS diploma plus drawing or related experience; knowledge and experience with AutoCAD or MicroStation. Drafts detailed construction drawings, plans and figures for projects.
GIS Technician	HS diploma plus drawing or related experience; knowledge and experience with GIS. Performs data migration; data digitizing; prepares and alters terrain maps, charts, tables, drawings, and models; observes and records field data.
Intern	HS diploma and pursuing career in engineering or other related field. Support staff to identify, research, and solve technical issues.
Senior Administration Assistant	BA/BS or HS diploma plus 4+ years of administrative or 4+ years of accounting-related experience. Perform advanced administrative, construction clerk, or project-related tasks that support project.
Administrative Assistant	HS diploma plus administrative, construction, or accounting-related experience. Perform administrative, construction clerk, or project-related tasks that support project.