

City of Lake City NFMIP 5A Water Main Project

TO: Paul Dyal
Executive Director of Utilities
692 SW Saint Margarets Street
Lake City, Florida 32025

DATE: August 30, 2021

SUBJECT: City of Lake City NFMIP 5A Water Main Project
Jones Edmunds Proposal/Opportunity No. 95110-205-21

PROJECT BACKGROUND

Columbia County is developing the North Florida Mega Industrial Park (NFMIP) in conjunction with the private landowner, Weyerhaeuser, on the lands east of the Lake City Gateway Airport along the south side of US 90. It is currently anticipated that new businesses will begin construction in late 2022 or early 2023. To support this development, the City contracted with Jones Edmunds to evaluate various alternative routes to supply the NFMIP with potable water for the near future demand (See Water Main Routing Study Technical Memorandum (TM), dated May 7, 2021). Based on the findings presented in the TM, the City has decided to proceed with Alternative 5A. Alternative 5A consists of roughly 5,800 linear feet of 24-inch water main to be constructed from the Price Creek Water Treatment Plant to the approximate property line of the proposed NFMIP (see attached Route Alternative 5 Map).

Jones Edmunds is pleased to provide the following scope for this project, which includes surveying, engineering, permitting, and limited construction phase services.

SCOPE OF SERVICES

TASK 1 – PROJECT MANAGEMENT AND KICKOFF MEETING

PROJECT INITIATION AND MANAGEMENT

Jones Edmunds will set up project financial files and prepare a Project Management Plan (PMP) that will be used throughout the project. The PMP will summarize the City’s goals and critical success factors, project schedule, project budgets, communication plan, accounting/invoicing procedures, and project contacts list. Jones Edmunds will monitor project progress (percent complete and schedule) and manage the project in conformance with the PMP to the extent possible throughout the contract.

KICKOFF MEETING WITH CITY PERSONNEL

Jones Edmunds will conduct a virtual kickoff meeting with the City. During the kickoff meeting, the following will be discussed:

- Key issues and confirmation of the City's objectives and expectations related to the project.
- Availability of information to be used in the preliminary engineering services.
- Refine overall project objectives and project schedule.

TASK 2 – PRELIMINARY DESIGN

Jones Edmunds will provide the following preliminary design and engineering services before obtaining the topographic survey and developing the detailed design drawings and specifications. The purpose of this task will be to evaluate the proposed water main route based on a site visit and walk-through of the route and to assess the available geographic information system (GIS) data.

This task will include the following:

- **Wetland Delineation and Listed Species Assessment.** Jones Edmunds will delineate jurisdictional wetlands and surface waters along the proposed route and locate key flags using a handheld global positioning system (GPS) unit prior to mobilization of the survey subcontractor. A preliminary wetland and surface water delineation map will be generated and provided to a registered surveyor to locate as part of the topographic survey. This effort will include a listed species assessment.
- **Existing Data Collection and Review.** Review available GIS data such as existing infrastructure geodatabases, County parcel data, recent high-resolution aerial imagery, National Wetland Inventory data, and LiDAR elevation data as available.
- **Site Visit.** Perform a walking site visit of the proposed route to identify potential utility conflicts, assess general site conditions such as traffic and special considerations, visualize potential constructability challenges, and develop recommendations for the side of the road for the pipe.
- **Develop Preliminary Layout.** Develop 10% preliminary design-level GIS figures of the proposed water main route, indicating the recommended side of the road for the pipeline and location of potential trenchless installations (either by horizontal directional drill (HDD) or jack and bore). Preliminary design figures will also note any potential easements the City may need to acquire.

Once the preliminary figures are developed, Jones Edmunds will host a design review workshop with the City to discuss the proposed route before providing the surveyor and geotechnical subconsultants their Notice to Proceed (NTP). Items discussed and agreed to during the design review workshop will be incorporated into the Final Design.

Deliverables: One electronic PDF copy of the preliminary design figures, a GIS shapefile of any delineated wetland boundaries, and the design review meeting minutes will be provided to the City.

TASK 3 – PUBLIC OUTREACH

Jones Edmunds will assist the City with conducting one public meeting focused on the proposed project route. The purpose of the meeting will be to inform and engage the public regarding the new water main and to discuss projects at the airport and the college that may impact the final design. Jones Edmunds will coordinate with City staff and assist with public presentations and discussions. This task will include the following:

- Prepare exhibits and drawings to show the general layout of the work proposed.
- Furnish additional information about the project design required for public education.

Jones Edmunds will also prepare one presentation to give before Council when the 90% design submittal is complete.

Deliverables: Exhibits and drawings of general layout (submitted in PDF format to City, poster-size printouts provided for meetings); informational handouts and attendance sheets for meetings; PowerPoint presentation for Council meeting.

TASK 4 – SURVEYING

Jones Edmunds will authorize a professional land surveyor (PLS) subconsultant to perform a topographic/location survey within the limits of the proposed water main route in support of the design. The topographic survey will meet the Standards of Practice as prescribed by the Florida Board of Professional Land Surveyors in Chapter 5J-17 of the Florida Administrative Code (FAC), Section 472.027 of the Florida Statutes. The survey will include the following:

- Task I – See the attached Route Alternative 5A map. The PLS will survey a 50-foot-wide corridor along this route which will be developed into the base map for the construction plans/documents. This task will include:
 - Based on Task 2 Preliminary Design, provide design-level survey services for a 50-foot corridor along one side of the road and through a portion of Suwannee River Water Management District (SRWMD) property, from the Price Creek Water Treatment Plant to the approximate property boundary of the proposed NFMIP site.
 - Determine the right-of-way for the primary roadways and intersecting roadways to the return radius.
 - Locate aboveground improvements and utilities.
 - Locate underground drainage and sewer facilities with pipe size, material, and elevation.
 - Locate wetland delineation flags placed by Jones Edmunds staff.
 - Create a survey baseline for both primary roads.
 - Set control points with x, y, and z at 500-foot intervals.
 - Locate utility designations and test holes data performed as part of Task II.
- Task II – Provide Subsurface Utility Designation and Verification (Test Holes):
 - Horizontally locate and field mark (paint and/or flags) public subsurface utility mains found excluding service lines, gravity sewer lines, and irrigation along the selected project route.

- Coordinate obtaining Sunshine 811 and utility locates to include supplemental calls to each locator to expedite the field marking of each subsurface utility as required by law.
- Expose the subject utilities by using non-destructive vacuum excavation methods at up to six (6) specific locations.
- Confirm/determine the vertical and horizontal position of the subject utilities and record the information, using the locate marks provided by the utility owners and/or their representatives.
- Reference each test-hole location to a minimum of three visible physical features to enable these data to be added to the base map and enable future recovery.

Deliverables: One paper copy and one electronic PDF copy of the final survey signed and sealed by the PLS will be provided to the City.

TASK 5 – GEOTECHNICAL SERVICES

Jones Edmunds will authorize a professional geotechnical engineering subconsultant for this project. The geotechnical investigation is expected to include the following:

- Four, 10-foot-deep hand auger borings spaced at approximately 1,200-foot intervals along the proposed water main route.
- In addition, based upon the Preliminary Design route, one boring adjacent to wetlands may be performed utilizing Standard Penetration Test (SPT) methods to a depth of 25 feet to be used for horizontal directional drill layout and design.

The subsurface investigation will occur when the approved preliminary design is in place, and borings will be conducted at the selected locations along the proposed route.

A geotechnical report summarizing the following will be provided:

- Classifying representative soil samples including percent soil fines (sieve determinations), organic content, natural moisture determination, and Atterberg limit tests.
- Water-table levels found during exploration and the seasonal high-water level for each boring.
- Recommendations for suitability of soils for trenchless pipe installations.
- Recommended subgrade preparation for the proposed water main.

Deliverables: One paper copy and one electronic PDF copy of the final geotechnical report will be provided to the City.

TASK 6 – CONSTRUCTION DOCUMENTS

Task 6 will consist of two submittals – 90% Design and Final Design. Each design submittal will include design Drawings, Technical Specifications, and an Engineer’s Opinion of Probable Construction Cost (EOPCC).

The Drawings will use Jones Edmunds’ presentation standards. The City-provided standard details will be used to the extent practical. A preliminary list of Drawings is outlined below as a basis of design for our fee estimate.

The Water Main Plan and Profile sheets will be prepared at the following scales:

- Horizontal: 1 inch = 20 feet (full-size sheets, 22-x-34-inch); and 1 inch = 40 feet (half-size sheets, 11-x-17-inch).
- Vertical: 1 inch = 4 feet (full-size sheets, 22-x-34-inch);

Drawing No.	Title
G-1	Cover Sheet
G-2	Drawing Index and Key Map
G-3	General Notes
G-4	Legends and Pipe Schedule
C-1 to C-11	Water Main Plan and Profile
C-12 to C-15	Civil and Utility Details
C-16 to C-20	Erosion and Sedimentation Control Plan, Notes, and Details

The Specifications will be prepared using Jones Edmunds' standard Construction Standards Institute 16-division format using 2018 EJCDC Front-End Documents and Technical Specifications. Jones Edmunds will customize the Technical Specifications based on comments from the City.

90% DESIGN SUBMITTAL

Jones Edmunds will prepare a 90% Design Submittal to the City for review and comment. The 90% Design Submittal will present the proposed complete design pending the City's comments and will include Drawings, Front-End Documents, Technical Specifications, an EOPCC, and permit application packages.

The EOPCC accuracy range will be Class 1 according to the Association for the Advancement of Cost Engineering (AACE) International's Cost Estimate Classification System (Recommended Practice No. 18R-97). The classifications depend on the level of project definition, with Class 1 being the highest level of definition and Class 5 being the lowest level of definition.

We assume that the City will need 2 weeks to review the submittal package. Jones Edmunds will participate in a review meeting with the City to discuss and obtain the City's comments. Changes agreed to at the meeting will be incorporated into the Final Design Submittal documents.

90% Deliverables: Jones Edmunds will provide electronic PDF copies of the 90% Drawings, Technical Specifications, and EOPCC to the City. Jones Edmunds will also provide hardcopies of the permit application packages for signature by the City, after which Jones Edmunds will coordinate submittal to the appropriate permitting agency. Jones Edmunds will distribute electronic copies of the design review meeting minutes to meeting attendees by email. The meeting minutes will include key decisions made and action items discussed during the meeting.

FINAL DESIGN SUBMITTAL

After the 90% design review meeting, Jones Edmunds will incorporate the City's review comments into the Final Design Submittal and issue the Final Design Submittal. The Final

Design will be completed after obtaining all approved permits described in Task 6. The Final Design Submittal will include the Drawings, Front-End Documents, Technical Specifications, a final EOPCC, and approved permit application package(s).

Final-Deliverables: Jones Edmunds will provide two paper copies and one electronic copy (PDF and/or CAD format) of the Final Design Submittal to the City. Jones Edmunds will also provide final copies of raw ArcGIS and AutoCAD data collected and developed.

TASK 7 – PERMITTING ASSISTANCE

Jones Edmunds will provide the permitting services described below. All permit applications will be submitted based on the 90% Design Submittal.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs

Jones Edmunds will prepare and submit FDEP Form 62-555.900(7) Alternate, Notice of Intent to use the General Permit for Construction of Water Main Extension for PWSs and respond to up to one Request for Additional Information (RAI). We assume that the City will not have to pay the permit application fee of \$650.00 per City's Reduction or waiver of permit processing fee agreement with the State.

As part of this FDEP permit application, we assume that the City will provide flow data to Jones Edmunds for our review as necessary to complete the permit application. Hydraulic modeling of the water system is not included in this Scope of Services.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) GENERAL ENVIRONMENTAL RESOURCE PERMIT

Jones Edmunds will prepare and submit FDEP Form 62-330.060(1), F.A.C. (June 1, 2018) for a General Environmental Resource Permit and, if necessary, a Section 404 General Permit. We assume that the City will pay the permit application fee of \$100.00 per City's Reduction or waiver of permit processing fee agreement with the State. Jones Edmunds will coordinate and attend on on-site field meeting with FDEP to review the flagged wetland lines, if required, and will respond up to one RAI per application.

COLUMBIA COUNTY PUBLIC WORKS RIGHT-OF-WAY PERMIT

Jones Edmunds will apply to Columbia County Public Works Department for a Right-of-Way Utilization permit and respond to up to one RAI. The City will pay any review/application fee. Comments from Columbia County will be incorporated by Jones Edmunds into the Final Submittal.

Deliverables: Jones Edmunds will provide one hard copy and one electronic PDF copy of each draft permit application to the City for review. The final permit applications will require City signatures. Jones Edmunds will collect the signed permit applications from the City and submit to the regulatory agencies. Electronic and hardcopies of all fully executed permits will be provided to the City.

TASK 8 – BIDDING AND LIMITED PROFESSIONAL SERVICES DURING CONSTRUCTION

BIDDING SERVICES

Jones Edmunds will assist the City during a proposed 45-day bidding and award process for the project as follows:

- Provide electronic Bid Documents in PDF format to the City. The City will advertise the project through ProcureNow; the City will distribute and maintain distribution records of Bid Documents to the prospective bidders and correspond with prospective bidders.
- Assist the City with one addendum to the Contract Documents. Verbal and written questions from prospective bidders will be first directed to the City. The City and Jones Edmunds will decide if issuing an addendum is required. Jones Edmunds will prepare responses to the bidders' questions to the City, prepare the addenda, and provide the addenda to the City for distribution. Contractor questions received less than 7 calendar days prior to bid opening will not be received by Jones Edmunds.
- Conduct one non-mandatory pre-bid meeting with prospective bidders, direct the meeting, and develop/issue any subsequent minutes or addenda associated with the pre-bid meeting.
- Review the bidders' cost proposals, prepare proposal tabulation, conduct reference and bond checks of the apparent low bidder, and develop a contract award recommendation letter.

CONSTRUCTION-ADMINISTRATION ASSISTANCE AND LIMITED OBSERVATION SERVICES

A 10-month construction schedule is proposed for this project, consisting of a 2-month submittal and material acquisition period and 8 months on site. Jones Edmund's Limited Professional Services During Construction services are based on this 10-month construction schedule. The limited construction-phase services provided will consist of the following:

Submittal Review

Jones Edmunds will receive, log, review, and issue comments on project submittals, including administrative submittals (i.e., construction schedules and work plans), shop drawings, and product data for the materials to be incorporated into the project, warranties, samples, and O&M manuals. Jones Edmunds estimates approximately 20 submittals for this project. This Scope of Work includes an initial review and one resubmittal review for each submittal. Submittals will be returned to the Contractor within 14 calendar days if all deviations are not listed as requested on the project forms.

Site Visits

During construction, Jones Edmunds will visit the site to observe construction progress and review that the project work is progressing in general conformance with the Contract Documents. It is assumed that one of the site visits each month will be a progress meeting led by the Contractor. For this Task, we have planned up to 36 site visits to perform these services. If additional site visits are required, they can be performed on an as-needed, time/materials basis. It is assumed that the City will provide daily construction inspection services including completing daily logs and photographs of work completed.

Construction Project Closeout and FDEP Certification

Jones Edmunds will conduct one substantial completion site review with the City and the Contractor when the Contractor submits their request for substantial completion. We will prepare a punch list of items that need correction and completion. Final completion will be certified once the punch list items are completed.

Jones Edmunds will prepare the Certification of Completion (COC) documentation and submit to FDEP for clearance of the new water main. For the preparation of the COCs, we have assumed that the Contractor shall provide surveyor signed/sealed as-built drawings of the completed water main along with passing pressure testing and bacteriological testing results.

SCHEDULE

Jones Edmunds will begin work on this project upon receipt of a signed contract and NTP from the City. The schedule for this project will be based on the negotiated agreement between the City and Jones Edmunds. Preliminarily, the project tasks are estimated to be completed as follows:

Task	Calendar Days	Calendar Days from NTP
Task 1 – Project Management and Kickoff Meeting	14	14
Task 2 – Preliminary Design	45	60
Task 3 – Public Outreach	30	-
Task 4 – Survey	60	120
Task 5 – Geotechnical Services	30	120
Task 6-1 – Construction Documents – 90%	60	180
Task 6-2 – Construction Documents – Final	45	225
Task 7 – Permitting Assistance & Wetland Delineation	60	240
Task 8 – Limited Professional Services during Construction	10 months	-

Note: The above schedule assumes 14-day client review times and that the permits will be received within 60 days from submittal of the permit applications.

PROPOSAL CLARIFICATIONS

The following clarifications are assumptions, exclusions, or conditions to this Scope of Services. Excluded items may be provided by Jones Edmunds with written authorization via a contract amendment.

- The water main pipe size will be based on the noted Technical Memorandum dated May 7, 2021.
- No residential and/or commercial service connections will be added to the new water main.
- This project will not require design or permitting of stormwater systems.

- The project will not require modifications to existing roads other than minor replacement in kind for limited roadway sections impacted by the pipeline installation.
- The project will not require modifications to the water treatment plant other than the water main connection point.
- Delineated wetland boundaries, if available, will be provided by the City or adjacent landowner(s).
- The proposed scope assumes that wetland impacts will be avoided by following existing trail/timber roads, and therefore an Individual ERP will not be required. If the design requires alternate construction methods which will result in wetlands impacts, Jones Edmunds can provide additional design services under separate scope and fee.
- Wetland mitigation and associated permitting is excluded from this Scope of Services.
- Environmental site assessments and threatened or endangered species, archaeological, or historical investigations are not expected to be necessary and are excluded from this Scope of Services.
- The project includes no known areas that are contaminated by low-molecular-weight petroleum products or organic solvents.
- Permitting services other than those described herein are excluded from this Scope of Services.
- RAIs from permitting agencies will not result in changes to the pipeline route/alignment or construction methods.
- All permit application fees will be paid by the City.
- If Section 404 permitting is required permit issuance may take longer than 60 days; construction will not be allowed to begin until all appropriate permits are received.
- The City will coordinate with the County and other necessary parties on any activities related to zoning, comprehensive planning, fire-department approvals, building-permitting approvals, and easement acquisition.
- Gopher tortoise survey and Temporary Exclusion Permits are excluded from this Scope of Services. Jones Edmunds can provide these services under separate scope and fee if necessary.
- The City will acquire all required easements/properties, legal descriptions, and official boundary surveys. Professional services related to these activities are excluded from this Scope of Services.
- The City will provide full-time resident observation for the project and will review and approve all pay requests. These services are not included in this Scope of Services.

COMPENSATION

In accordance with our Contract for Consulting Engineering Services, Jones Edmunds proposes to perform the Scope of Services as described herein on a lump-sum fee, percent-complete basis as follows:

Task	Cost
Task 1 – Project Management and Kickoff Meeting	\$17,500
Task 2 – Preliminary Design	\$21,800
Task 3 – Public Outreach	\$7,200
Task 4 - Surveying	\$38,700
Task 5 – Geotechnical Services	\$9,900
Task 6 – Construction Documents (90% and Final Design)	\$65,800
Task 7 – Permitting Assistance	\$13,300
Task 8 – Bidding and Limited Professional Services During Construction	\$93,800
Total	\$268,000

Jones Edmunds appreciates this opportunity to offer our continuing professional engineering services to the City of Lake City and looks forward to working with the City on this important project. If you have any questions or wish to discuss any aspect of the proposed Scope of Services, please contact me at 352-377-5821 or jsbell@jonesedmunds.com.

Sincerely,



Jamie Sortevik Bell, PE, CFM
Engineer

Y:\08504 Lake City\Opportunities\2021_Proposals\95110-205-21-NFMIP-24-inch Water Main\ScopeFee-design_jsb.docx

Figure 1 **Route Alternative 5A and 5B**



For Informational Purposes Only Document Path: Q:\08504_Lake_City\037_01\mxd\WaterSupplyAlternative_Individuals.mxd