



## GIS Utilities Network Implementation And Asset Collection

Proposals will be received until  
12:00 Noon, Friday, May 31, 2024  
Per Document Instructions

April 05, 2024

### ADVERTISEMENT FOR PROPOSALS

Sealed proposals titled **GIS Utilities Network Implementation and Asset Collection** for the City of Morganton (City) will be received per document instructions by the City Electric Department **until 12:00 Noon, Friday, May 31, 2024**. Instructions for submitting proposals and/or receiving the complete RFP document specifications may be obtained during regular office hours by contacting John Steel via email [jsteel@morgantonnc.gov](mailto:jsteel@morgantonnc.gov). The City reserves the right to reject any or all proposals.

John Steel  
Electric Engineering Services Manager

### **Proposer Questions and Inquiries**

Proposer Questions and Inquiries relative to this RFP must be submitted **in writing only by 12:00 Noon, Thursday, May 16, 2024**, to John Steel, Electric Engineering Services Manager, via e-mail: [jsteel@morgantonnc.gov](mailto:jsteel@morgantonnc.gov) . The City will provide written responses to all inquiries received by this date, and responses will be made available to all recipients of this RFP. Any oral responses made by any representative of the City may not be relied upon. Any supplements or amendments to this RFP will be in writing and furnished to potential bidders.

### **RFP Response Submission**

**Bidders must submit Proposals electronically.** To reduce printing costs and to facilitate recycling, we request that only electronic proposals in PDF format be submitted prior to the deadline. Electronic bids should be submitted by attaching the required bid forms to an email entitled, “**BID – GIS Utilities Network Implementation and Asset Collection – RFP053124**” and emailed to: [jsteel@morgantonnc.gov](mailto:jsteel@morgantonnc.gov) and received no later than **12:00 Noon, Friday, May 31, 2024**. Such submission will not be opened until the time for receiving Proposals has come. **Please do not wait until the last minute to send your Proposal to avoid any possible delay that may occur during the transmittal of files.** A screen print of the email receipt will be used by the City as verification of the time received. **Late proposals will not be considered.**

The proposer should submit their proposal with all information necessary to properly analyze the proposer's response in full. Proposer's notes, exceptions, comments, and proposed contract documents should be included in the email attachments

The City will not be obligated for the expenses of any provider arising out of preparation and/or submittal of responses to this RFP. Any and all proposals to this RFP are to be prepared at the cost and expense of the respondents, with the express understanding that there may be no claims whatsoever for the reimbursement of any costs, damages, or expenses relating to this procurement from the City or any other party for any reason (including the cancellation of this RFP).

Proposals must be made in the official name of the individual, firm, or corporation under which the business is conducted (showing official business address) and must be signed in ink by a person duly authorized to legally bind the business entity submitting the proposal.

All proposals should be complete and carefully worded and must convey all of the information requested by the City. If errors or exceptions are found in the proposal, or if the proposal fails to conform to the requirements of the RFP, the City will be the sole judge as to whether that variance is significant enough to reject the proposal.

Proposals should be prepared simply and economically. All data, materials, and documentation shall be available in a clear, concise form. The City reserves the right to reproduce proposals for internal use in the evaluation process.

Proposers are expressly forbidden from contacting any other city employee or city of Morganton elected official regarding this Request for Proposals. Any such outside contact may result in disqualification from the request for proposal process.

The City reserves the right to hold proposals open for a period of sixty days (60) days after due date before making awards.

Anticipated Schedule of Events (Subject to Changes)

RFP Release Date	April 05, 2024
<b>Proposers Questions and Inquiries Deadline</b>	<b>12:00 Noon – 5/16/2024</b>
City Response to Questions – (No later than)	5/21/2024
<b>RFP Response Submission Due</b>	<b>12:00 Noon – 5/31/2024</b>
Evaluation and Selection	6/05/2024
Duplicate Signed Contracts Due by	6/12/2024
Notice of Award	6/19/2024
Project Start Date	shortly after July 1, 2024

**REQUEST FOR PROPOSAL**

**Introduction:**

The City of Morganton is soliciting proposals from experienced and qualified contractors to provide labor, tools, transportation, equipment, and materials necessary for a comprehensive field data collection project aimed at inventorying all of the City's overhead and underground electrical utility assets. The program will focus on creation and implementation of ESRI Utility and Trace Networks for Medium and Low Voltage Electric Distribution. The finished product should be capable of leveraging the structure and electric domains to perform circuit tracing and analysis from the electric substation breakers to the customer meters.

The City will not provide data collection equipment or transportation for field data collection.

The project will be managed by the City's Electric and IT Departments, which are responsible for maintaining the City's Geographic Information System (GIS). The GIS is currently on ESRI's Enterprise **version 11.1. and ArcGIS Pro 3.2.2.** The current GIS data for the Electric Utility System lacks a functional geometric network.

The City's Electrical Utility System comprises approximately:

- 5 sub stations
- 24 Circuits
- 200 miles of overhead lines
- 20 to 25 miles of underground lines
- 6,000 Poles
- 2,500 Streetlights
- 1,900 Pole and Pad-mounted transformers
- 9,000 Meters
- 117 Junction Cabinets
- Our system voltage is 12.47 kV Grounded Wye/7,200
- The City owns the substations, but not the transmission feeding them
- The existing GIS data was converted to a GIS database in 2020 with minimal UNM framework.
- The spatial accuracy of the existing GIS data may need to be updated during the collection of that data, including missing structures.

**Goals and Objectives:**

- Migrate the existing GIS data schema into the new ESRI Electrical Network Model
- Verify Electric and Structure Domains, Rules, Fields, and Contingent values for City of Morganton Electric Network Model
- Update new data model to capture data specific to the City that is not currently in the new Network Model
- Establish electric and structural connectivity and attachment associations.
- Load the new data into the City's existing federated GIS portal
- Configure ESRI Field Maps to perform data collection on City's portal site

**Scope of Work:**

The project scope encompasses:

- The collection, and/or update to current GIS Utility Network Schema, of all overhead and underground electric assets including, but not limited to:

- Update/Migrate Poles to UN Structure Network
  1. Pole Height
  2. Verify coordinates
  3. Pole condition
  4. # of communications attachments
- Update/Migrate OH and UG Transformers to UN Electric Network with associations
  1. kVA rating
  2. Secondary Voltage
  3. High side voltage, 12,470 or 7,200
  4. Structural attachments
  5. OH or Pad Mount
- Update/Migrate Street Lights
  1. Wattage
  2. LED, or other
- Update/Migrate OH and UG Primary lines
  1. Wire Size and Material for OH lines
  2. Wire size for UG lines
  3. Phase Connections
- Map OH and UG Secondary lines
  1. Wire Size and configuration (Duplex, Triplex, Quad)
  2. Voltage
- Map OH and UG service lines
  1. Wire Size and configuration
  2. Voltage
  3. Connection point, (pole, transformer, vault, pedestal)
- Primary and Secondary Service meters
  1. Accurate Location
- Capacitors (We only have four or five installations)
- Fuses and Switches
  1. Type
  2. Current State
  3. Operator
  - 4.

- Reclosers
- Switchgears
- Junction boxes

The Proposer should already have a program proven in this industry and have the applicable experience to implement the proposed program in alignment with the requirements described in this RFP. In addition, the Proposer must have the capacity to deploy the program in a time and cost-effective manner, following all pertinent information reliability and security standards.

- An ArcGIS Map Package file of City's current GIS data will be provided for the Proposer's use.
- A geodatabase containing a copy of the City's old GIS data will be provided.
- All data submitted will be required to be compatible with the latest ESRI GIS architecture.
- All digital deliverables should be in ESRI geodatabase format.
- All digital deliverables must include FGDC (Federal Geographic Data Committee) standard metadata.
- The map projection should be in North Carolina State Plane Coordinate System 1983 North America Datum FIPS 3200 US Feet.

**Deliverable Requirements:**

The final deliverable should be a comprehensive and functional model of all overhead and underground assets in ESRI's Utility Network, with full connectivity and all associated assets. The City's Electric Department and GIS Division will review the submitted data for each circuit and provide comments, corrections, and feedback to the contractor to correct or update as necessary. This review process is expected to take approximately one week per circuit.

In order to save time, periodic deliverables of completed circuits can be made during the project.

**Training:**

The proposal should include training associated with the Utility Network model as it relates to Morganton's Electric network. Training should include, but not limited to, how to edit existing equipment attributes, how to create and attach/connect new equipment, and how to remove/delete existing equipment.

**Additional Tasks:**

The City also desires the completion of additional tasks while collecting the data, and their results should be included in the data deliverable. If these tasks increase the project cost, they should be listed as "Option 1" and "Option 2" in the pricing document (fee schedule).

- Identification of communications attachments to City poles, with owner information (Option 1)
- Pole Hammer Testing for all poles owned by the City of Morganton (Option 2)

**References:**

The bidder must provide three references for similar projects including at least one completed in the ESRI Electric Utility Network.

**Experience:**

The bidder must demonstrate their firms and key staff's experience in electrical systems, electrical system field collection, and experience with ESRI's Utility Network.

**Methodology and Process:**

The bidder must outline their proposed methodology and process for the data collection and creation of the data deliverable, including a detailed timeline and meetings for project kickoff, schema definition, and other meetings. It is imperative that all attributes for every asset be reviewed and confirmed by the city before any collection is done. This should include the techniques and tools to be used for data collection, as well as the quality control measures to ensure the accuracy and completeness of the collected data. This should help expedite data collection by eliminating unnecessary data collection.

**Submission Requirements:**

The proposal should include a detailed explanation of the bidder's qualifications, experience, and capabilities. The proposal should clearly demonstrate the bidder's understanding of the City's requirements and the scope of work outlined in this RFP. The proposal should also provide information about the bidder's methodology and process for collecting the data, as well as their approach for creating the final deliverable in ESRI's Utility Network.

The proposal should include a quote for the collection/verification of field data (Either on a unit basis, or lump sum), a quote for the implementation and testing of the utility network. The proposal should also include a quote for the two options listed above, if the proposer is interested in providing those services.

The City of Morganton reserves the right to reject all proposals and to negotiate with the selected bidder. The City may also request an optional interview with the selected bidders to further evaluate their qualifications and experience.

**Contact Information:**

All questions regarding this RFP should be directed to the City of Morganton's Electric Department.

1. John Steel, Electrical Engineer  
[jsteel@morgantonnc.gov](mailto:jsteel@morgantonnc.gov)  
828-438 – 5281
2. Brooks Kirby, Director Electrical Service  
[bkirby@morgantonnc.gov](mailto:bkirby@morgantonnc.gov)  
(828) 438 - 5284
3. Steven Fox, GIS  
[sfox@morgantonnc.gov](mailto:sfox@morgantonnc.gov)  
828-443-3933

Any clarifications, modifications, or additional information related to this RFP will be posted as an addendum to this RFP on the City's website. The City of Morganton will ensure that all potential bidders are made aware of any addenda prior to the due date for submitting proposals.

By submitting a proposal, the bidder acknowledges receipt of all addenda and agrees to abide by the terms and conditions of the RFP and any addenda.

BIDDER COMPANY NAME:

\_\_\_\_\_

By \_\_\_\_\_  
(SIGNATURE)

\_\_\_\_\_  
(TITLE)