

**REQUEST FOR PROPOSALS FOR PROFESSIONAL SERVICES RELATED TO
STREAM GAUGE NETWORK SYSTEM**

Solicitation No: 2023-002

Advertisement Start Date: May 9, 2023
Proposal Submission Deadline: June 9, 2023
Bid Opening: June 9, 2023 at 12:00 PM

City of Central, Louisiana

The City of Central invites qualified firms to respond to its Request for Proposals (“RFP”) by providing their qualifications and experience for consideration to provide professional services for the development of a Stream Gauge Network System. Professional services shall include procurement of proposed specified equipment and installation and maintenance of the Stream Gauge Network System.

This RFP is issued by City of Central for the purpose of entering into a contract with a professional services firm who shall provide qualified personnel with Stream Gauge Network System development experience to provide a system that is appropriate for the long-term design life and is designed to properties of stream network dynamics.

Interested firms should submit two copies of their proposal by hand or certified mail. Delivery in this manner shall be accomplished by delivering the proposal to our physical location by 12:00 noon on June 8, 2023. The physical location is:

City of Central, Louisiana
City Hall
13421 Hooper Road, Suite 8
Central, Louisiana 70818

Proposer is solely responsible for the timely delivery of its Proposal. Failure to meet the Proposal opening date and time shall result in rejection of the Proposal.

Submittals **MUST BE RECEIVED** no later than **12:00 PM (noon), on June 9, 2023.**

1.0 DEFINITIONS

- 1.1 Shall, Must, or Will – Denotes mandatory language; a requirement that must be met without alteration
- 1.2 Should, Can, or May – Denotes desirable, non-mandatory language
- 1.3 Contractor – A firm or individual who is awarded a contract
- 1.4 Proposal – A response to an RFP
- 1.5 Proposer – A firm, consortium or individual who responds to an RFP
- 1.6 RFP – Request for Proposals

2.0 SCOPE OF SERVICES

Stream Gauge Network System Site Specific Development:

- Site Specific Equipment Proposal:
 - Minimum specification of equipment; Attachment C
 - Preliminary Stream Equipment Locations; Attachment D (Round 1 only)
 - Consultant shall field verify proposed equipment is conducive to the environmental and site-specific locations prior to submittal
 - Consultant shall provide plan drawings or shop drawing of equipment enclosures associated with on-site equipment
 - Consultant shall calibrate and validate systems equipment to assure system accuracy and efficiency prior to punch list project closure
 - Consultant shall provide field survey of measurement equipment locations. All survey data will be post-processed in State Plane Coordinate System Louisiana South, Horizontal Datum NAD 83, Vertical Datum NAVD 88, and Geoid 12B.
- Consultant shall provide specification for equipment within the proposal package
- Consultant shall submit specifications for all equipment for approval prior to construction of the stream gauge network system
- Consultant shall maintain equipment as needed to maintain operation and accuracy specified above thru the end of the awarded contract.
- All stream stage data shall be post processed to Vertical Datum NAVD 88, and Geoid 12B

3.0 ADDENDA TO THE RFP

The City of Central reserves the right to change the schedule of events or revise any part of the RFP by issuing an addendum to the RFP at any time.

4.0 WAIVER OF ADMINISTRATIVE INFORMALITIES

The City of Central reserves the right, at its sole discretion, to waive minor administrative informalities contained in any proposal.

5.0 PROPOSAL REJECTION/RFP CANCELLATION

Issuance of this RFP in no way constitutes a commitment by The City of Central to award a contract. The City of Central reserves the right to accept or reject, in whole or part, all proposals submitted and/or cancel this announcement if it is determined to be in the best interest of the City of Central.

6.0 WITHDRAWAL OF PROPOSAL

A proposer may withdraw a proposal that has been submitted at any time up to the date and time the proposal is due.

7.0 SUBCONTRACTING INFORMATION

The City of Central shall select a single Prime Contractor through this RFP process. The selected Contractor shall be responsible for all deliverables specified in the RFP and proposal. This requirement notwithstanding, Contractor may enter into subcontractor arrangements. Contractual arrangements between Contractor and subcontractors do not release Contractor from its responsibility for the entire contract.

If the Proposer intends to subcontract for portions of the work, the Proposer should identify the subcontractor in its response to this RFP and include specific designations of the tasks to be performed by the subcontractor(s). Proposer should provide detailed information on the experience, qualifications, and key personnel of the subcontractor. Contractor shall be the single point of contact for all subcontract work.

Unless stated otherwise in the contract, Contractor shall not contract with any subcontractors not listed in its proposal without the prior written approval of the City of Central.

8.0 OWNERSHIP OF PROPOSAL

All materials submitted in response to this request become the property of the City of Central. Selection or rejection of a proposal does not affect this right.

9.0 PROPRIETARY INFORMATION

Only information which is in the nature of legitimate trade secrets or non-published financial data may be deemed proprietary or confidential. Any material within a proposal identified as such must be clearly marked in the proposal and will be handled in accordance with the State of Louisiana's rules and regulations. Any proposal marked as confidential or proprietary in its entirety may be rejected without further consideration or recourse.

10.0 COST OF PREPARING PROPOSALS

Costs associated with developing the proposal, preparing for oral presentations, if any, and any other expenses incurred by the Proposer in responding to this RFP are entirely the responsibility of the Proposer, and shall not be reimbursed by the City of Central.

11.0 ERRORS AND OMISSIONS IN PROPOSAL

The City of Central will not be liable for any errors in proposals. The City of Central reserves the right to make corrections or amendments due to errors identified in proposals by the City of Central or Proposer. The City of Central, at its option, has the right to request clarification or additional information from the proposers.

12.0 CONTRACT AWARD AND EXECUTION

The City of Central reserves the right to enter into a contract without further discussion of the proposal submitted based on the initial offer received. The City of Central reserves the right to contract for all or a partial list of services offered in the proposal.

The RFP and proposal of the selected Proposer will become part of any contract initiated by the City of Central.

If the selected Proposer fails to sign the final contract within five (5) business days of delivery, the City of Central may elect to cancel the award and award the contract to the next-highest-ranked Proposer.

13.0 TERMS

The work shall begin on notice to proceed and continue for three (3) years. The parties may extend the contract upon mutual agreement of both parties.

14.0 EVALUATION AND SELECTION

The response to the RFP should address the following:

1. Executive Summary
2. Corporate Background and Relevant Experience
3. Approach and Methodology
4. Resumes, Proposed Staff Qualifications
5. Cost

Any material received that is not requested may be discarded. Proposals shall be graded on the information contained therein.

14.1 Executive Summary

This section should serve to introduce the purpose and scope of the proposal. It should include administrative information including, at a minimum, response date, proposer contact name and phone number, and the stipulation that the proposal is valid for a time period of at least ninety (90) days from the date of submission. This section should also include a summary of the Proposer's qualifications and ability to meet the overall requirements.

14.2 Corporate Background and Experience

Proposer should give a description of its organization to include a brief history, structure and organization, number of years in business, and latest financial statements.

This section should also provide a detailed discussion of Proposer's prior experience in working on projects similar in size, scope, client type and function to the proposed contract. References from previous clients to include contact information should be provided.

If subcontractors will be employed, Proposer should provide the same information regarding the subcontractor(s) as is requested for Proposer.

14.3 Approach and Methodology

Proposer should outline his understanding of the nature of the proposed scope of services and the statement of work that reflects its approach and methodology to the desired objectives and suggested tasks and services to be performed.

14.4 Resumes, Proposed Staff Qualifications

Proposer should submit resumes for the individuals to be assigned to project and identify the staff positions that the individual will be assigned. The individual should be further identified as either a company employee or a subcontractor. Proposer should provide detailed information addressing the experience and qualifications of assigned personnel. The information should include all education, training, and experience specific to the contract statement of work and the position held by the individual under the contract.

14.5 Cost

The proposal should include an lump sum fee for each proposed stream gauge network component to be listed in Attachment B. All costs proposed are to be inclusive of labor, materials, equipment, incidentals, and costs necessary to provide the Scope of Services outlined in this RFP.

14.6 Administrative and Mandatory Screening

All proposals will be reviewed to determine compliance with administrative and mandatory requirements as specified in this RFP. Proposals found not to be compliant with mandatory requirements (responsive) or proposals deemed to be not responsible will be rejected for further consideration.

The City of Central reserves the right to seek clarification of any proposal to identify or eliminate minor irregularities or informalities.

14.7 Evaluation and Review

Responsive proposals will be evaluated based on information provided in the proposal. Entity Name reserves the right to validate the claims made in the proposals through outside third parties. The evaluation will be conducted according to the following:

| Criteria | Maximum Score |
|---|----------------------|
| 1. Background and Experience of Proposer | 30 |
| 2. Approach and Methodology | 20 |
| 3. Resumes, Proposed Staff Qualifications | 30 |
| 4. Cost | 20 |
| Total Possible Points | 100 |

14.8 Announcement of Contractor

The City of Central will notify the successful proposer. Unsuccessful proposers will be notified in writing accordingly.

**ATTACHMENT A:
Insurance Requirements**

Solicitation No: 2023-002

CONTRACTOR’S AND SUB-CONTRACTOR’S INSURANCE: Prime Contractor and any sub-Contractors shall carry and maintain at least the minimum insurance as specified below until completion and acceptance of the work covered by this contract. Prime Contractor shall not commence work under this contract until certificates of insurance have been approved by the City. Insurance companies listed on certificates must have industry rating of A-, Class VI or higher, according to Best's Key Rating Guide. Prime Contractor is responsible for assuring that its sub- Contractors meet these insurance requirements.

A. Commercial General Liability on an occurrence basis:

| | |
|-------------------|-------------|
| General Aggregate | \$2,000,000 |
| Each Occurrence | \$1,000,000 |

B. Business Auto Policy

Any Auto; or Owned, Non-Owned & Hired:

| | |
|-----------------------|-------------|
| Combined Single Limit | \$1,000,000 |
|-----------------------|-------------|

C. Standard Workers Compensation – Full statutory liability for State of Mississippi with Employer's Liability Coverage.

D. The City of Central must be named as additional insured on all general liability policies described above.

E. Professional Liability coverage for errors and omissions is not required, but the City of Central shall have the benefit of any such insurance carried by Contractor.

F. Certificates must provide for thirty (30) days written notice to Certificate Holder prior to cancellation or change.

G. The Certificate Holder should be shown as: entity name and address.

NOTE TO PROPOSERS:

Submit evidence of compliance with the Insurance Requirements.

**ATTACHMENT B:
Cost Proposal Form**

PROFESSIONAL SERVICES RELATED TO STREAM GAUGE NETWORK SYSTEM

Note to Proposers: All costs proposed are to be inclusive of construction, labor, materials, equipment, incidents, etc. necessary to provide the outlined in this RFP for the below listed lump sum fee.

| Stream Gauge Network Component Description | Lump Sum Fee |
|---|---------------------|
| Water Level Sensors | |
| Flow Instruments | |
| Tipping Bucket Rain Gauges | |
| Data Loggers | |
| Enclosures | |
| Solar Panels | |
| Batteries | |
| Web Hosting Service Systems | |
| Cellular/Satellite Data Transmission Service Systems | |
| Site Specific Mounting Systems | |
| Site Specific Ancillary Equipment Proposed | |
| Maintenance Fee thru 2026 | |

ATTACHMENT C: Specifications of Equipment

To effectively monitor water level, rainfall, and stream flow sites in shallow low flowing water bodies require evaluation to determine the proper equipment for accurate and sustainable data. Data collected must be available at near real-time for planning, emergency notifications, and engineering and design of flood mitigation projects.

Sensor Specifications

Radar water level sensors must meet or exceed these specifications.

- Range – 3 feet to 66 feet
- Accuracy - +/- 0.08 inches from 3.5 feet to 66 feet
- Target Accuracy - +/-0.2 inches form 0-3.5 feet
- Temperature error - +/- 0.08 inches per 10 degree C change.
- Data Output - SDI-12, RS232
- Input voltage - 10-16 VDC
- Supply Current - <13.5 mA
- Range – 3-66 feet
- Frequency – approximately 26 GHz
- Display mounted on the unit
- Cable length TBD based on site characteristics

Flow Instruments

Side Looking Horizontal Acoustic Doppler Current Profiler (HADCP)

- Sampling range will depend on the width of the channel
 - Up to 17 feet; up to 66 feet; up to 400 feet
- Vertical acoustic beam to measure water surface above the instrument
- Velocity range - +/- 21 ft/s
- Resolution – 0.003 feet
- Accuracy – 0.15 ft/s
- Pressure Range – 30 meters
- Pressure sensor accuracy 0.10% Full Scale
- 4Gb internal memory
- RS 232, Modbus, RS 422, SDI-12
- Power input – 9 VDC -18 VDC
- Power Consumption – 0.1W to 0.8W
- Operating Temperature 0 degrees C to 60 degrees C
- Pitch and roll sensors
- Temperature sensor
- Cable length TBD based on site characteristics

Upward looking Acoustic doppler Current Profiler (ADCP)

- Velocity sampling range – 0.16-16.0 feet
- Cells/bins – up to 100
- Cell/bin size – 0.8-4.0 inches
- Velocity range- +/- 16 ft/sec
- Resolution – 0.0003 feet/sec
- Accuracy - +/- 1% of measured velocity. 0.2 in/sec

- Pressure sensor range – 98 ft, 42PSI
- Accuracy (pressure) – 0.1% full scale
- Operating temperature - -5 C to 60 C
- Temperature and tilt sensors
- Internal memory capacity – 4 Gb
- Cable length TBD based on site characteristics
- Bird deterrent spikes
- Debris filter

Tipping Bucket Rain Gauge

- Accuracy – 0-2 in/hr., +/- 1%
- Collector diameter – 8 inches
- Bounce setting time – 0.75 millisecond
- Operating temperature – 0 C – 70 C
- Humidity limits – 0-100%
- Range – 27 inches per hour
- Resolution – 0.01 inch
- Switch – momentary potted reed switch
- Switch rating – 30 VDC
- Pivot – ground bronze pivots on hardened steel shaft
- Cable length TBD based on site characteristics

Datalogger

- Communication options – USB, Wi-Fi, Cellular, Satellite
- Connectors – SDI-12, RS-232(male), RS485- 4 position screw terminal
- Operating temperature - -40 C to 60C
- Power – 10.0 VDC to 16.0 VDC
- Must be able to transmit to web-based database for real time data access and visualization

Enclosure

- NEMA 4x

Solar Panels

- 20 watts, with solar regulator

Battery

- 12-volt, 18-amp hour

Web Hosting service

- Platform must make the data available for 24-hour access and post the data as it collected.
- Ability to download the collected and stored data for analysis and modeling

This can be addressed after a site visit

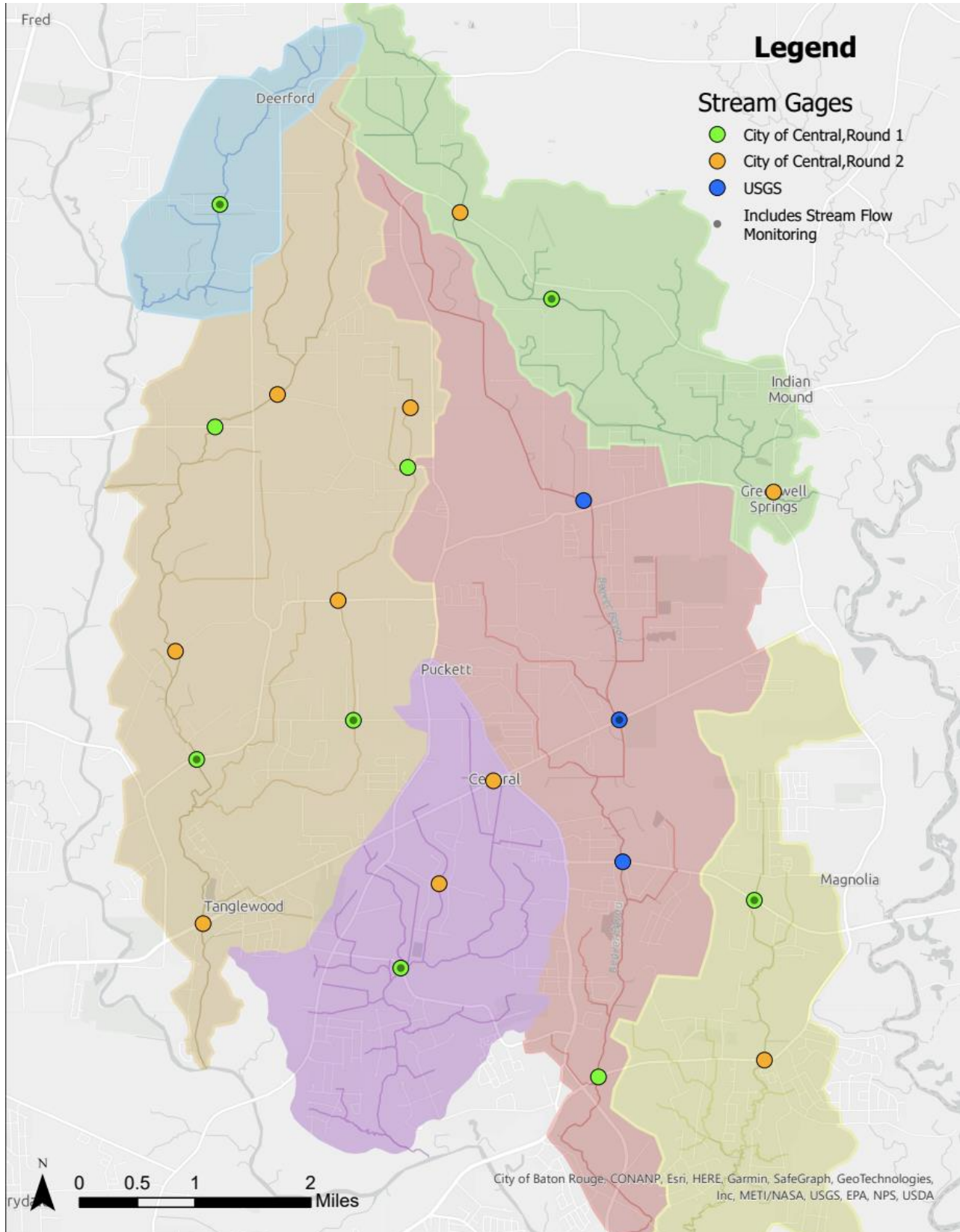
Cellular/Satellite data transmission

- Site specific and will depend on carrier availability at each site

Site Specific Mounting systems

- TBD

**ATTACHMENT D:
Preliminary Stream Gauge Locations Map and Type**



| | Stream | Roadway Crossing | Owner | Precipitation | Stream Elevation | Stream Flow |
|---------|----------------------------|----------------------------------|-----------------|---------------|------------------|-------------|
| Round 1 | Beaver Bayou | Greenwell Springs Rd | City of Central | YES | YES | -- |
| | Blackwater Bayou | Blackwater Rd | City of Central | YES | YES | YES |
| | Blackwater Bayou | Dyer Rd | City of Central | YES | YES | -- |
| | Blackwater Bayou Tributary | Gurney Rd | City of Central | YES | YES | YES |
| | Blackwater Bayou Tributary | McCullough Rd | City of Central | YES | YES | -- |
| | Draughan Creek | Magnolia Bridge Rd | City of Central | YES | YES | YES |
| | Hub Bayou | Hubbs Rd | City of Central | YES | YES | YES |
| | Saunders Bayou | Arleen Ave | City of Central | YES | YES | YES |
| | Shoe Creek | Lovett Rd | City of Central | YES | YES | YES |
| Round 2 | Blackwater Bayou | Hooper Rd | City of Central | YES | YES | -- |
| | Blackwater Bayou | Carey Rd | City of Central | YES | YES | -- |
| | Blackwater Bayou | McCullough Rd | City of Central | YES | YES | -- |
| | Blackwater Bayou Tributary | Core Ln | City of Central | YES | YES | -- |
| | Blackwater Bayou Tributary | Solitude Ln | City of Central | YES | YES | -- |
| | Draughan Creek | Greenwell Springs Rd | City of Central | YES | YES | -- |
| | Hub Bayou | Greenwell Springs Port Hudson Rd | City of Central | YES | YES | -- |
| | Hub Bayou | Greenwell Springs Rd | City of Central | YES | YES | -- |
| | Shoe Creek | Hooper Rd | City of Central | YES | YES | -- |
| | Shoe Creek Tributary | Morgan Meadow Ave | City of Central | YES | YES | -- |