

**TANGIPAHOA PARISH GOVERNMENT**  
***Request for Qualification Statements:***  
***Engineering Services for***  
***Tangipahoa Parish Floodplain Restoration and Enhancement Project (061)***  
***ADDENDUM #1***

The Tangipahoa Parish Government is issuing Addendum #1 to clarify that the RFQ for engineering design and hydrologic and hydraulic (H&H) study services for the Parish's Louisiana Watershed Initiative (LWI) project does not include environmental services. A consultant has already been procured for all environmental services.

All questions regarding this RFQ should be directed to Misty Evans, Parish Engineer, at [mevans@tangipahoa.org](mailto:mevans@tangipahoa.org)

## TANGIPAHOA PARISH GOVERNMENT

### *Request for Qualification Statements:*

### *Engineering Services for*

### *Tangipahoa Parish Floodplain Restoration and Enhancement Project (061)*

The Tangipahoa Parish Government is interested in procuring the services of an engineering firm (or firms) to provide engineering design and hydrologic and hydraulic (H&H) study services for the Parish's Louisiana Watershed Initiative (LWI) project that aims to restore and enhance the floodplain in the Tangipahoa River watershed. This project has three components: stream restoration, barrier removal and infrastructure replacement (low-lying bridges and cross drains), and construction of a stormwater management retention/detention pond for flood mitigation. The firm will need to assess the beneficial and adverse impacts upstream and downstream as well as any flood risk improvements. Especially important in this selection is the firm's experience with designing flood mitigation and drainage projects and H&H studies in a manner approvable by the LWI program, administered by the Louisiana Office of Community Development (OCD).

#### **Project Scope of Services and Management**

The Parish is soliciting qualification statements for the following engineering services. All drainage calculations and H&H studies must include an assessment of the beneficial and adverse impacts upstream and downstream as well as any flood risk improvements.

1. H&H study for the Chappellepeela Road Bridges, Chappellepeela Creek Retention Pond, and Chappellepeela Creek between these two areas in compliance with LWI program requirements. The attached LWI checklist provides more detail about the H&H requirements.
2. Plans and specifications for replacing the Chappellepeela Road Bridges. (Large barrier removal components).
3. Plans and specifications for construction of Chappellepeela Creek Retention Pond including Chappellepeela Creek restoration. (Stormwater management pond components)
4. Drainage calculations, plans, and specifications for cross drains, a single-span bridge, and up to 32,000' of lateral cleaning for 5 locations. (Small barrier removal and stream restoration components)

The Parish may select up to four firms, one for each of the four components, or may combine some components together depending on the firm's qualifications. The agreement will be on a lump sum, fixed-price basis (or cost reimbursement "not to exceed" basis), with payment terms to be negotiated with the selected offeror and review for cost reasonableness.

The services to be provided will include, but not be limited to:

1. Provide surveying and analysis as needed to perform an H&H study or studies and floodplain modeling of the project-related area of Chappellepeela Creek, a sub-watershed of the Tangipahoa River. The attached LWI checklist provides more detail about the H&H requirements.
2. Provide draft project design plans and specifications to the Parish engineering office and any other agency reviewing the project, for consultation, and afterwards, preparation of final plans, specifications, and cost estimates.

3. Assist any Parish-procured administrative consultant with the construction bid package in conformance with applicable federal requirements, and supervise the bid advertising, tabulation, and award process, including preparation of bid solicitation advertisements, conducting the bid opening, and issuing the notice to proceed.
4. Assist in conducting a preconstruction conference(s).
5. Complete field staking, conduct on-site supervision of construction work, and prepare inspection reports.
6. Review and approve all contractor requests for payment and submit approved requests to the Parish.
7. Provide reproducible deliverables and as-built plans to the Parish upon project completion.
8. Prepare operating and maintenance manuals, if requested by the Parish, as an “additional service.”
9. Conduct final inspection(s) and testing.

**Request for Qualification Statements and Review:**

All RFQ submissions must be received in the Parish office by the deadline and at the location specified herein no later than 3pm on Monday, June 24th, 2024. All responses shall be sealed and the outside of the envelope marked: “**ENGINEERING SERVICES FOR LWI PROJECT 61.**” The RFQ submission must include three (3) printed copies of the RFQ submittal package and an electronic copy provided by postal mail or hand-delivered to:

Tangipahoa Parish Government  
ATTN: Donna Domiano, Purchasing Agent  
P.O. Box 215  
206 E. Mulberry Street

*An additional information package for this project is available upon request to the person and address above*

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The Parish may select up to four firms, one for each of the four components, or may combine some components together depending on the firm's qualifications. The agreement will be on a lump sum, fixed-price basis (or cost reimbursement "not to exceed" basis), with payment terms to be negotiated with the selected offeror and review for cost reasonableness. Reimbursement for services will be contingent on the Tangipahoa Parish Government receiving funding from the State OCD/DRU LWI Program. The maximum amount of engineering fees that can be paid with LWI funds will be determined by the OCD and may require adjustments in the proposed contract amount.

The services to be provided will include, but not be limited to:

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**Request for Qualification Statements and Review:**

All RFQ submissions must be received in the Parish office by the deadline and at the location specified herein no later than 3pm on JUNE 24, 2024. All responses shall be sealed and the outside of the envelope marked: “**ENGINEERING SERVICES FOR LWI PROJECT 61.**” The RFQ submission must include three (3) printed copies of the RFQ submittal package and an electronic copy provided by postal mail or hand-delivered to:

Tangipahoa Parish Government  
ATTN: Donna Domiano, Purchasing Agent  
P.O. Box 215  
206 E. Mulberry Street  
Amite, LA 70422

*Emailed submissions will not be accepted.* The Parish reserves the right to reject any or all responses for late or incomplete submissions.

All submittals will be reviewed and ranked by a selection committee, with the highest-rated firm (or firms) being awarded a contract, pending fee negotiations and the number of separate watershed projects. The respondent’s submittal must include:

- Brief history of the firm. Identify if the firm is DBE-certified.
- Experience with drainage-flood mitigation projects, design services, and H&H studies.
- Resume of each person in the firm who will be assigned to the project.
- Proposed time schedule for tasks.
- Proposed fee schedules typically charged and description of additional costs not included in the typical fees. The Parish will review the fee tables for cost reasonableness, and a lump sum price will be negotiated after a firm (or firms) is selected.

- Information on any subconsultant(s) that may assist with the project, if such services are used. Identify if subconsultant(s) is DBE-certified.

### **Selection Criteria**

All qualification statements will be evaluated according to the following criteria, along with the Parish's verification of previous job references. Incomplete or misleading/incorrect information may result in disqualification of a submittal. After initial qualification, the highest scoring firm (or firms) will be interviewed for reasonable cost negotiation and project scheduling.

### **Evaluation Criteria (up to 50 points)**

1. Experience of the firm in successfully completing similar drainage and flood mitigation design services and/or H&H studies, for other projects, particularly those using federal funding and those completed in Tangipahoa Parish. Include reference contact information and project start/end dates. *(up to 20 points)*
2. Knowledge and background of assigned staff members or subconsultants that are involved with the project. Include resumes that list relevant information, credentials, familiarity with specific models/software, and similar projects. *(up to 20 points)*
3. Timeliness and methods used to quickly complete each phase of the project, based upon a written time schedule of key tasks, milestones, and deliverable. *(up to 10 points)*
4. Cost reasonableness analysis based upon typical fee tables and negotiated fees. Make sure to describe any additional costs not included in the typical fees. *(no points assigned)*

Note that Tangipahoa Parish is an Equal Opportunity Employer and encourages submission by DBE-certified firms and the use of DBE subconsultants. Please identify such if they are available and will be used in this project.

**Questions concerning this RFQ should be addressed to Donna Domiano at (985) 748-3211 and emailed to [ddomiano@tangipahoa.org](mailto:ddomiano@tangipahoa.org) for a written response. Questions and comments should be provided at least 48 hours in advance of the submittal deadline.**



## HYDROLOGIC AND HYDRAULIC REPORT CHECKLIST

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The Hydraulic Report shall provide an analysis of the proposed project compared to the existing conditions, on the floodplain and/or floodway for a range of discharges; 5-year, 10-year, 25-year, 50-year, 100-year, and an optional 500-year discharge. The report should contain the following information.

Disclaimer: The checklist guidance provided herein does not represent regulatory products or standards nor do they modify or supersede any official regulations, requirements, ordinances, policies, or flood hazard boundaries currently in force under the National Flood Insurance Program (NFIP) or state and local flood damage prevention ordinances in their respective jurisdictions.

### Introduction

- Preparers name, company name, telephone number, and email.
- Provide basic information such as the location and description of the watershed and study area.
- Name and type of project.
- Describe and define study limits.
- Locate and describe where flood discharges were estimated.
- Name all associated USGS gaging stations.
- Describe the climatic data, hydrologic features, and any other information that supports the hydrologic analyses.
- Describe the watercourse and location of investigation.
- Name for whom the report is being prepared.
- Date of report and topographic data used in model.
- Describe the scope of investigation including the alternatives analyzed and evaluated.
- Describe the scope of the analysis.
- Identify any existing studies or any history of work on the watercourse in the vicinity of the project including past flooding events.

### Method of Analysis

- A description of ALL modeling runs submitted must be included in the report.
- Explain why the modeling method was chosen and why it is appropriate for the project evaluation.
- Explain any assumptions made in the application of the chosen method.
- Include references and provide a description and source of any computer programs used.
- Explain all utilized discharges in the analysis.
- Explain any modeling iterations including the use of previous data (i.e., FEMA study), the addition of updated/corrected geometry, etc.

### Upstream and Downstream Modeling Limits

- Show the location of the modeling limits on the site development plan. The certifying engineer shall describe the methodology for depicting upstream and downstream limits.
- The model needs to start sufficiently downstream of the project in accordance with normal depth boundary conditions.



- The analysis must extend upstream to the point where any increase caused by the proposed project is dissipated, for all flood profiles.
- The location of all cross-sections should be shown on the plans. Cross-sections should all be labeled.
- Explain why the location was selected and the method used to determine the starting water surface elevation. Include an analysis of calibration of the model(s) to existing FEMA FIS profiles if they exist or other methods used to develop stable boundary downstream water surface conditions if no FIS is available.
- Describe all modeling boundary conditions.

#### **Variables, Coefficients, and Modeling Strategies**

- Discuss all modeling variables and coefficients. Indicate references and explain all assumptions for the variables used in the model.
- Ineffective Flow Areas – should be included when appropriate – up and downstream of crossings, encroachments, and ponding areas.
- Culvert modeling approaches should not show flow below the stream bottom.
- Provide descriptions for existing and future value selections of expansion and contraction, orifice, weir discharge, friction, and time of concentration variables.
- Use graphical maps for describing watershed boundaries by linework and shading and time of concentration by directional arrows. Include existing and proposed conditions.
- Provide photographs of present conditions and any other supporting information to justify modeling variable values selected for existing and/or proposed conditions.
- The routing methods used, including the values of input parameters, the derivation of those parameters, and methods of measurements and sources of data. The approach used for channel infiltration and the basis for any diversions from the watershed. The effect of encroachment on the computation of channel losses and storage, and the relation between storage and the extent of the floodplain.
- The source and derivation of any inflow hydrographs that are estimated independent of the modeling process.
- The methods or data used for estimating diversions from the watershed.

#### **Discussion**

- Discuss and evaluate the computations and analysis.
- Provide a description of the present channel and floodway, the nature and distribution of flow, and the proposed alterations and their resultant effect.
- Explain any unusual conditions that occur, and all assumptions not previously addressed that were part of the analysis.
- The differences between the proposed flood discharges, obtained from the rainfall-runoff model and regression equations, and effective base flood discharges and an explanation as to why they are different.
- Address all model error reports.

#### **Conclusion**

- The conclusion must include the definition of “harmful interference.” Harmful interference is defined as “causing an increase stage or change in the direction of flow that causes or is likely to cause: damage to property; a threat to life; pollution, impairment, or destruction of water or other natural resources.”





- The conclusion must include the engineer's opinion as to whether or not the project will cause harmful interference, based on the model results.
- Evaluate the effects of the proposed conditions on the watercourse, floodplain, floodway and potentially affected properties (including upstream and, where appropriate, downstream effects) for the range of discharges up to and including the 100-year discharge. The 500-year discharge is optional.

#### **SUPPORTING DOCUMENTS TO INCLUDE WITH REPORT**

- A site plan for existing and proposed conditions.
- Scaled plan view drawing(s) at sufficient scale and detail to show proposed work and elevations.
- Location of all cross-sections used in the analysis. Cross-sections and stations should be labeled to match cross-sections in the digital model.
- Flood Insurance Rate Map and flood profile (if available).
- Existing and proposed topography.
- Property boundaries.
- Floodway delineation.
- Floodway alterations.
- Proposed floodway obstruction.
- River channel.
- Fill, excavation and grading.
- Existing and proposed bridges and culverts. Include the profiles of the road grade along its highest points. (The information provided should be sufficient to analyze the crossings.)
- Utilize the North American Vertical Datum 1988 (NAVD 88) GEOID12B and State Plane Coordinates (horizontal) for all elevation deliverables.
- The elevation datum used. Plans and the model should be in the same datum.
- Cross-sections showing existing conditions and the proposed alterations. Cross-sections should include the following information.
  - Channel limits (the channel limits can be defined by the ordinary high-water mark of the watercourse).
  - Floodway limits, if mapped or modeled.
  - Floodplain boundary limits.
  - Roughness coefficients.
- Shapefiles for existing and proposed conditions for each design storm shall be included with the report.
- Statement to certify that the increase does not interfere harmfully with the discharge or stage characteristics of the stream. The certifying Louisiana Professional Engineer shall prepare a written certification stating "This is to certify that I am a duly qualified Professional Engineer licensed to practice in the State of Louisiana. I further certify this Hydrology and Hydraulic Report supports the fact that the proposed improvements would not result in any increase in flood levels within the community during the occurrence of a base flood event."
- A harmful interference is defined as an increased stage or change in the discharge or direction of flow that causes or is likely to cause any of the following: damage to property; a threat to life; a threat to personal injury; pollution, impairment, or destruction of water or other natural resources.