REQUEST FOR PROPOSALS

TOWN OF CHAPLIN BEDLAM ROAD BRIDGE

CONSULTING ENGINEER For BRIDGE REPLACEMENT DESIGN

The Town of Chaplin invites the submission of proposals from engineering design firms for the purpose of preparing a complete design package for the design of the replacement of the Bedlam Road Bridge.

A description of project, general scope of work, and submission requirements are available from the First Selectman's Office.

Interested firms are requested to submit three copies of their proposal to the Office of the First Selectman, during normal office hours and by no later than 2:00 p.m. on Thursday, March 2, 2023. The bids will be opened at 2:30 PM Thursday, March 2, 2023 in the Chaplin Town Hall located at 495 Phoenixville Road, Chaplin, CT.

Envelopes should be marked: "Proposal – Engineering Services for the Bedlam Road Bridge."

Services include all work necessary to prepare plans, specifications, bid documents and obtain all necessary permits for the construction of the above noted bridge replacement. The Bedlam Road Bridge has been rated as in poor condition and in need of replacement.

The engineering work includes the design, permitting and bid document preparation.

This project is funded, in part, by the Connecticut DOT's Local Bridge Program and therefore all design and permitting shall meet the requirements of the Local Bridge Program. Since the project is funded in part with dollars from the State of Connecticut, the bid documents and construction must comply with the State Commission on Human Rights and Opportunities regulations, particularly regarding set-aside goals.

The following information relative to the project services is offered:

1. The consulting engineer is to prepare all applications to the State of Connecticut DEEP, Town Commissions, Army Corps of Engineers, and any other agency from which an approval or permit must be acquired. The consulting engineer is to make any presentations to these agencies which may be required.

Note that the project site may be within a DEEP identified area of concern on their Natural Diversity Data Base Area map and the consultant is required to contact the DEEP to confirm whether the project could affect rare and endangered species or species of special concern. Should the DEEP require any special investigations or studies for identified species, this work shall be considered an additional service with a fee to be negotiated.

2. The consulting engineer is to provide all services related to surveying, wetlands delineation, hydrologic/hydraulic/scour studies and analyses, replacement alternatives evaluation, design of the repairs and scour countermeasures and appurtenant work, etc. A preliminary scope of services to be provided is attached.

- 3. The consulting engineer is to assist the Town during the bidding process including the provision of bid documents, issuance of any addenda, evaluation of submitted bids, etc.
- 4. The consulting engineer is to provide the Town with construction easement maps (up to two) which may be required for the project. The Town will acquire any rights needed.
- 5. Prospective consultants must submit a scope of services and fee proposal for the above noted work with their proposal.
- 6. Proposals shall also contain references for at least five similar projects designed over the last five years, resumes of your project team that would be assigned to this project along with assurance that the team proposed will be available for this project and a time schedule for design completion.

<u>A pre-bid conference to review the project will be held on Tuesday February 14, 2023 at 2:30 PM in the Chaplin Town Hall, 495 Phoenixville Road, Chaplin, CT,. All prospective bidders are urged to attend.</u>

Any questions are to be addressed to First Selectman Juan Roman, III via email at firstselectman@chaplinct.org

Preliminary Scope of Services

All design work associated with this project will be performed in accordance with the desires of the Town of Chaplin and the requirements of the Connecticut DOT Local Bridge Program. The following is the minimum scope of the anticipated elements of design for the proposed project. If the consultant feels that there are additional tasks that should be undertaken as part of the design process, these tasks should be included in the consultant's proposed scope of services and fee proposal.

<u>1. SURVEY and RIGHTS-OF-WAY</u>

Perform right-of-way, topographic, and stream channel surveys in the field in the vicinity of the bridge improvements as required to prepare base mapping for project design and preparation of construction drawings. Field work will generally consist of the following:

- control survey and establishment of vertical benches and horizontal control points. All work will be based upon CCGS datum for horizontal control and USGS datum for vertical control, if existing horizontal and/or vertical control can be found within 0.5 miles of the bridge, otherwise assumed datum shall be used.
- perform limited research at Town offices and field survey at the site to establish the existing roadway right-of-way within the required standards of Class D survey and identify property owners abutting the project area. Research will consist of a reasonable effort to identify property owners within the project area from assessor's mapping and then locate available mapping for those owners through a search of local map reference books and recent deed references in order to locate existing mapping. Field work will consist of spotting and locating existing pins that are readily evident from existing mapping and/or observed in the field.
- topographic survey, approximately 50 feet upstream and downstream of the existing bridge locating any topographic features deemed pertinent for design.
- stream channel sections suitable for hydraulic modeling, in accordance with ConnDEEP guidelines, if required.
- location and mapping of all Federal & State wetland boundaries as determined by a certified soil scientist within the project area.
- schedule of property owners and preparation of property maps (up to four) as may be required for easements.

Prepare a topographic base map of the bridge area at a scale suitable for design, including stream channel, wetlands and spot elevations as required for preparation of design. In addition, prepare detailed topographic map of the proposed improvements.

2. PRELIMINARY ENGINEERING

a) Hydrologic, Hydraulic, Scour Evaluation

Hydraulic and scour analyses shall be performed to quantify existing, natural and proposed hydraulic conditions and to outline scour countermeasure alternatives.

b) Wetlands Identification: Identification, flagging, and evaluation of wetlands by a certified soil scientist for use in structure design. Wetland limits will be identified for both the Connecticut and

Federal definitions and shall be flagged in conjunction with field survey such that wetland limits can be field located and shown on the base mapping.

c) **Replacement Study:** This phase, based upon the previously outlined preliminary engineering studies, will culminate in a compilation of data outlining existing hydraulic and topographic conditions. Based upon the information and data collected, investigate replacement options and prepare a brief report containing findings of existing conditions and recommendations for the proposed structure improvements. Additionally, recommendations for handling of water should be investigated and proposed.

3. DESIGN

- Based upon the selected replacement type, prepare design drawings and a cost opinion for the bridge for submittal to the Town for review and approval. Design will initiate with a project team meeting including the Town. This phase will ultimately culminate in the submittal of design drawings outlining the proposed replacement design.
- final design and preparation of structure construction drawings including, as appropriate, structure plan & elevation, structural details and miscellaneous structural details.
- water handling plan
- maintenance and protection of traffic, assuming bridge closure during construction
- detailed opinion of construction quantities and costs
- prepare 90% and 100% plan submission to Town of Chaplin for review.
- provide bid documents and assemble the bid packages. Connecticut DOT Form 818 will be utilized as the base technical specifications and the consultant will prepare supplemental technical specifications, special provisions and quantity estimate, as necessary for public bidding and award of the construction contract. Submit one set of final plans, an original copy of all special provisions and mylars of contract drawings for public bidding by the Town, assist the Town in bidding the project electronically.
- attend review meetings with the Town.
- prepare for and attend a public information meeting.
- review bids received by the Town for accuracy and check references. Report to the Town on a recommendation for selecting a contractor.

4. REGULATORY APPROVALS

Based upon the approved preliminary design concept, documentation will be prepared and submitted to appropriate Federal, State and Local agencies for permitting and/or review. As may be appropriate, permits are expected to include:

- DEEP Flood Management, Fisheries coordination, etc.
- Town of Chaplin Inland/Wetland
- U. S. Army Corps of Engineers (PCN)

5. BIDDING SERVICES

Assist the Town in the electronic distribution of construction contract documents to be distributed to interested parties for bidding.

Answer contractor questions and issue addenda, if necessary.

Attend bid opening and analyzing bids received in order to recommend award.