

LAKEWOOD TOWNSHIP MUNICIPAL UTILITIES AUTHORITY

Proposed Scope of Work for

DESIGN BIDDING AND CONSTRUCTION SERVICES
FOR A WATERMAIN EXTENSION ON COUNTY ROUTE 526
RIDGE AVENUE – ALAMITOS DRIVE

January 2010

The Lakewood Township Municipal Utilities Authority (Authority) is soliciting proposals for engineering services associated with the installation of a water main extension on Lanes Mill Road. The main installation will be located between the intersections of Ridge Avenue and Alamitos Drive. This work will include preparation of bid documents, applications for permits, assistance with bidding, construction services and preparation of as-built plans.

Scope of Services

The Scope of Services shall include:

1. Preparation of Bid Documents
2. Lakewood Township/NJDEP Meetings
3. Preparing all necessary permit applications
4. Bidding Services
5. Construction Services
6. Preparation of As-Built Drawings

Assumptions

- It is anticipated that no meetings will be necessary with the NJDEP, Lakewood Township Planning or Zoning Boards. Any meetings that are required with these entities will be paid at the firm's hourly rate that must be attached to the proposal.
- The sizes and approximate lengths of the pipe to be installed will be provided by the Authority.
- Only fifteen (15) sets of drawings and specifications will be required during the bidding phase. Two (2) copies of the final specifications and three (3) copies of the final plans will be provided to the Authority and one (1) additional copy of the final specifications and two (2) copies of the final construction plans will be provided to the successful bidder at no additional cost to the Authority.
- The New Jersey Department of Environmental Protection's (NJDEP) Bureau of Safe Drinking Water (BSDW) requires a GIS map of the Authority's distribution system with the application. The Authority will provide the copy of that document.
- Construction Observation services will be provided by the Authority under separate contract. The design engineer will be responsible to maintain contact with the construction observer, review the observer's daily inspection reports and make whatever field inspections necessary to be able to administer the contract, recommend payment and to gather sufficient information to prepare detailed and accurate as-built drawings.

Description of Tasks

Preparation of Bid Documents

This task shall be reimbursed on a lump sum basis. This task shall include the following:

- Preparation of budgeting figures for all construction, engineering, permitting and any other conceivable costs.
- Preparation of construction plans and specifications including the contract for signature by successful bidder. Please note that it will be the design engineer's responsibility to have the contract submitted and reviewed by the Authority's Attorney before submission of the contract to the contractor for signature. These documents must comply with all LTMUA, County and State regulations. These documents must take into account the LTMUA Master Plan, proposed Ocean County roadway improvements and be sufficient for a public bidding of the project. At a minimum, these documents will include the following:
 - ◆ Notice to Bidders announcing the bid and setting the due date,
 - ◆ Information to Bidders, providing specific details of the bid process, insurance requirements, bid bonds, and all other related material,
 - ◆ Construction Plans, General and Detailed Specifications for use in bidding and for submission to, and review by, the governing agencies,
 - ◆ Proposal and Contract Documents for submission by potential bidders, and,
 - ◆ Technical Specifications regarding the project including site work to be performed.
- The design phase shall include a review of the Authority's files associated with the project. The Authority is having the distribution system analyzed and will provide the designer with the recommended pipe sizes and lengths that are to be installed. The Authority anticipates approximately 2,650 LF of water main being recommended to be installed. The design must include extremely detailed information as to how the proposed piping will be connected to the existing system. The plans must also explain how water service will be maintained and what, if any, provisions must be made for either temporary service or boil water notices that may be required.
- This phase will include the identification of any potential conflicts with existing utilities, determining where test pits are required and hiring a contractor to dig the test pits. The designer should assume that a minimum of 10 test pits will be required to determine the exact location of connections and conflict locations. The proposal should include the cost of the contractor that will perform the test pitting at those locations. A unit price for the test pits must be included and additional test pits may be required by the Authority based on the Authority's review of the drawings.
- The designer will be responsible to gather the locations of all of the utilities marked out as part of the test pitting described above and adding that information to the contract drawings.
- The design phase must also include sufficient time for progress meetings with the Authority.
- Upon completion of the plans and specifications, the engineer will submit two (2) copies to the Authority for review and comment. The engineer will incorporate the Authority's comments into the bid documents. The design phase should anticipate that there could be significant modifications to the plans due to recommendations by the Authority's staff.

Lakewood Township/NJDEP Meetings

At this time it is anticipated meetings with Lakewood Township and the NJDEP will not be required. However, if required this task shall be reimbursed on an hourly basis. This task shall include the following:

- Make preliminary inquiries, as soon as it is deemed reasonable, to the Lakewood Township Planning and/or Zoning Board to determine their requirements for submission.
- Attend any meetings with the NJDEP or Township zoning board and/or planning board meetings/hearings that are required for the project.

Preparing The Necessary Permit Applications

This task shall be reimbursed on a lump sum basis. This task shall include the following:

- Research to determine what permits are necessary for the project.
- Notifying the Authority the amounts of the fees required and who the payments need to be made to.
- Obtaining, completing and submitting the permit applications to the appropriate agencies with the Authority's payment.
- Answering any questions from the reviewing agencies and modifying the bid documents as required by their review.

Bidding Services

This task shall be reimbursed on a lump sum basis. This task shall include the following:

- Preparing **fifteen (15)** copies of the contract document to be provided for distribution to potential bidders
- Preparing all documents that need to be advertised and assisting the Authority in advertising this project in newspapers and trade publications.
- Responding to questions during the bid period and issuing addenda as required.
- Attending the bid opening, review of bidder qualifications, reviewing all bid submissions and preparation of a bid report for the Authority and the Authority's Attorney's consideration regarding award of the contract. Report should include a recommendation of award.
- Obtaining signed contracts from bidders.
- Upon award of contract by the Authority, establishing contact with the successful bidders and obtaining bonds, insurance certificates, etc.

Construction Phase Services

This task shall be reimbursed on a lump sum basis. This task will include the following:

- Scheduling, attending, and preparation of type written notes of a pre-construction meeting to discuss the project in detail and discuss the estimated construction schedule.
- Reviewing all shop drawings.
- The Authority will provide a construction observer to observe and document all construction activities.
- Maintaining contact with the construction observer, review the observer's daily inspection reports and make whatever field inspections necessary to be able to administer the contract, recommend payment and to gather sufficient information to prepare detailed and accurate as-built drawings. If the designer feels that insufficient information has been gathered for any phase of the project it will be the designer's responsibility to inform the Authority of that fact within one week of the problem. If the Authority is not made aware of the problem within a week it will be the engineer's responsibility to get the contractor to expose the work that needs to be documented.
- Serving as liaison between the contractor and the Authority to resolve any questions and/or issues that arise during construction.
- Review the contractor's requests for payment and submission of same with a recommendation as to the total amount of work to date, amount previously paid and amount remaining in the contract.

As-Built Drawings

At the completion of the project, as-built drawings are to be prepared and submitted to the Authority for review and comment. This task shall be reimbursed on a lump sum basis. The as-built drawings are to be prepared in accordance with the requirements of the Authority. At a minimum, the as-built drawings are to include:

- Swing ties to all gate valves, curb stops, and fire hydrants.
- Location of water and sewer lines from the center line of the roadway.
- Depth of the water line in any location that is not at the depth of five feet.
- Pavement detail and limits where applicable.
- Pavement detail defining cross section of pavement (width and thickness, distance to sidewalk)
- Two sets of shop drawings.
- Benchmark that was used to establish elevations and how datum was determined. Note, the Authority requires '83 horizontal datum and '88 vertical datum.
- Location of marker posts for valves not in pavement.
- Location of reducers and/or fittings or couplings with orientation from the valves.

Cost of Services

The cost of the services is to be shown for each phase of the work as outlined in the scope of services. This cost should include any revisions made by the Authority when reviewing the permit applications, plans and specifications prepared. This cost should also include all copies, telephone calls and travel expenses. There will be no extras. This is a lump sum contract. All costs must be anticipated and incorporated into the proposed cost. Only items specifically listed above will be paid on an hourly basis. Additional test pits that are requested by the Authority will be paid as a unit price. The cost of the test pit will include the contractor's price as well as the costs associated with the preparation of test pit reports by the engineer detailing the information gathered by the test pit.

Proposal Due Date

The proposals are to be submitted to the Lakewood Township Municipal Utilities Authority, 1 America Avenue, Lakewood, NJ 08701 by **11 AM February 23, 2010**.

If awarded the contract, your company/firm will be required to comply with the requirements of N.J.S.A. 10:5-31 et seq and N.J.A.C. 17:27.