

NCDOT -- Hydraulics Unit

REQUEST for LETTERS of INTEREST (RFLOI)

2016 Hydraulics Services Limited Services Contract

TITLE: **2016 Hydraulics Services Limited Services Contract**

USING AGENCY: North Carolina Department of Transportation
Hydraulics Unit

ISSUE DATE: **MAY 16, 2016**

SUBMITTAL DEADLINE: **MAY 31, 2016**

ISSUING AGENCY: North Carolina Department of Transportation
Technical Services Division
Professional Services Management Unit

SYNOPSIS

SUBCONSULTANTS ARE (ONLY AS NOTED BELOW) PERMITTED UNDER THIS CONTRACT. READ THE REQUIREMENTS VERY CAREFULLY FOR RS-2 FORMS, ETC.**

The primary and/or subconsultant firm(s) (*if Subconsultants are allowed under this RFLOI*) shall be pre-qualified to perform ALL or ANY COMBINATION of the work codes listed below for the HYDRAULICS UNIT. Work Codes required are:

- 00433 (TIER I – BASIC HYDROLOGIC & HYDRAULIC DESIGN)
- 00434 (TIER II – COMPLETE HYDROLOGIC & HYDRAULIC DESIGN)
- 00479 (TIER III – COMPLEX HYDRAULIC DESIGN)
- 00480 (TIER IV – UNIQUE HYDRAULIC ENGINEERING – NATIONAL FLOODPLAIN INSURANCE PROGRAM (NFIP))
- 00481 (TIER IV – UNIQUE HYDRAULIC ENGINEERING – NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES))
- 00482 (TIER IV – UNIQUE HYDRAULIC ENGINEERING – COASTAL HYDRAULIC MODELING)

**** SUBCONSULTANTS ARE ONLY ALLOWED FOR THE FOLLOWING WORK CODE:**

- **00481 (TIER IV – UNIQUE HYDRAULIC ENGINEERING – NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)).** *Subconsultants are NOT to be included in the RFLOI. These are to be determined at a later date as program requirements dictate. Any subconsultants listed in the RFLOI will disqualify the firms RFLOI.*

WORK CODES for each primary ~~and/or-subconsultant~~ firm(s) (if Subconsultants are allowed under this RFLO) SHALL be listed on the respective RS-2 FORMS (see section 'SUBMISSION ORGANIZATION AND INFORMATION REQUIREMENTS').

This RFLOI is to solicit responses (LETTERS of INTEREST, or LOIs) from qualified firms to provide professional consulting services to:

Support Hydraulics Unit in Tier I - Tier IV activities as outlined below.

LOIs should be submitted in .pdf format using software such as Adobe, CutePDF PDF Writer, DocuDesk deskPDF, etc.

One copy of the LOI should be sent as a .pdf file, **through NCDOT's FTS System**, to: psmu-411@ncdot.gov . **The FTS system will send you an electronic receipt when your LOI is uploaded to NCDOT's FTS system.** Paper copies are not required. The subject line should contain the Firm's Name, and **"LOI for 2016 Hydraulics Services Limited Services Contract"**.

If an interested firm does not have an FTS account they should send a request through regular e-mail to psmu-411@ncdot.gov . A response will be sent via the FTS system that will provide a login username, password, and login procedures.

LOIs SHALL be received electronically no later than 12:00 P.M., MAY 31, 2016.

LOIs received after this deadline will not be considered.

Except as provided below any firm wishing to be considered must be properly registered with the Office of the Secretary of State and with the North Carolina Board of Examiners for Engineers and Surveyors. Any firm proposing to use corporate subsidiaries or subcontractors must include a statement that these companies are properly registered with the North Carolina Board of Examiners for Engineers and Surveyors and/or the NC Board for Licensing of Geologists. The Engineers performing the work and in responsible charge of the work must be registered Professional Engineers in the State of North Carolina and must have a good ethical and professional standing. It will be the responsibility of the selected private firm to verify the registration of any corporate subsidiary or subcontractor prior to submitting a Letter of Interest. Firms which are not providing engineering services need not be registered with the North Carolina Board of Examiners for Engineers and Surveyors. Some of the services being solicited may not require a license. It is the responsibility of each firm to adhere to all laws of the State of North Carolina.

The firm must have the financial ability to undertake the work and assume the liability. The selected firm(s) will be required to furnish proof of Professional Liability insurance coverage in the minimum amount of \$1,000,000.00. The firm(s) must have an adequate accounting system to identify costs chargeable to the project.

SCOPE OF WORK

The North Carolina Department of Transportation (NCDOT) is soliciting proposals for the services of a firm/team for the following contract scope of work:

STATEWIDE HYDROLOGIC/HYDRAULIC DESIGN STUDIES REQUIREMENTS:

• **00433 (TIER I – BASIC HYDROLOGIC & HYDRAULIC DESIGN)**

1. **ROADWAY DRAINAGE DESIGN, INCLUDING DITCHES, SMALL PIPE CULVERTS, STORM SEWER SYSTEMS, OUTFALL ANALYSIS, AND DRAINAGE INVESTIGATIONS, USING THE MOST RECENT NCDOT HYDRAULIC GUIDELINES FOR DRAINAGE STUDIES.**
2. **BRIDGE AND/OR CULVERT DESIGN OVER STREAMS USING FEDERAL HIGHWAY ADMINISTRATION(FHWA) DESIGN GUIDELINES, SUCH AS HDS 5,7,ETC. (NON-FEMA)**
3. **DRAINAGE DESIGN USING THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION “STORMWATER BEST MANAGEMENT PRACTICES TOOLBOX”.**

• **00434 (TIER II – COMPLETE HYDROLOGIC & HYDRAULIC DESIGN)**

1. **ALL OF TIER I REQUIREMENTS**
2. **DESIGN OF BRIDGES AND CULVERTS OVER FEMA REGULATED STREAMS THAT REQUIRE COORDINATION AND APPROVALS FROM FEMA OR THEIR DESIGNEES.**
3. **PREPARE DRAINAGE DESIGN PLANS USING MICROSTATION AND GEOPAK DRAINAGE SOFTWARE.**

• **00479 (TIER III – COMPLEX HYDRAULIC DESIGN)**

1. **ALL OF TIER I AND TIER II REQUIREMENTS**
2. **TWO-DIMENSIONAL (2D) HYDRAULIC MODELING DESIGN FOR BRIDGES AND CULVERTS WITH STREAMS THAT ARE UNDER THE INFLUENCE OF TURBULENT, UNSTEADY FLOW.**

• **00480 (TIER IV – UNIQUE HYDRAULIC ENGINEERING – NATIONAL FLOODPLAIN INSURANCE PROGRAM (NFIP))**

1. **EXTENSIVE KNOWLEDGE OF THE NFIP AND EXPERIENCE IN HYDRAULIC MODEL DESIGN, FEMA FLOOD MAP REVISION, REVIEW OF HYDRAULIC MODELING FOR BRIDGES AND/OR CULVERTS OVER FEMA REGULATED STREAMS AND UNDER CONTRACT OR HAVE BEEN UNDER CONTRACT WITH FEMA OR THEIR DESIGNEES.**
2. **PROFICIENT USE OF MICROSTATION SOFTWARE.**

• **00481 (TIER IV – UNIQUE HYDRAULIC ENGINEERING – NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES))**

1. ASSIST THE DEPARTMENT IN COMPLIANCE WITH THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S NPDES PROGRAM. EXTENSIVE KNOWLEDGE AND PROJECT EXPERIENCE REQUIRED.
2. DEVELOP WATERSHED POLLUTANT LOAD MODELING FOR IMPAIRED WATER BODIES. EXTENSIVE EXPERIENCE WITH TOTAL MAXIMUM DAILY LOAD (TMDL) DEVELOPMENT AND COMPLIANCE.

- 00482 (TIER IV – UNIQUE HYDRAULIC ENGINEERING – COASTAL HYDRAULIC MODELING)

EXTENSIVE KNOWLEDGE AND EXPERIENCE OF COASTAL HYDRODYNAMICS AND SIMULATION MODELS USING RMA2, ADCIRC (ADVANCED CIRCULATION MODEL FOR COASTAL OCEAN HYDRODYNAMICS), AND SWAN (SIMULATING WAVES NEAR SHORE) SOFTWARE. EXTENSIVE EXPERIENCE WITH MODELS AND APPLICATION IN COASTAL AREAS.

PROPOSED CONTRACT TIME: ONE (1) YEAR; with an option for a ONE (1) YEAR EXTENSION.

PROPOSED CONTRACT PAYMENT TYPE: NEGOTIATED LUMP SUM FOR TIP PROJECTS; AND COST PLUS FOR OPERATION ACTIVITIES.

SUBMITTAL REQUIREMENTS

All LOIs are limited to **TWENTY (20)** pages (RS-2 forms are not included in the page count) inclusive of the cover sheet, and shall be typed on 8-1/2" x 11" sheets, single-spaced, one-sided.

ONLY ELECTRONIC LOIs WILL BE ACCEPTED.

LOIs containing more than **TWENTY (20)** pages will not be considered.

Firms submitting LOIs are encouraged to carefully check them for conformance to the requirements stated above. If LOIs do not meet ALL of these requirements, or if they are sent by any means other than NCDOT's FTS system, or to any address other than psmu-411@ncdot.gov they will be disqualified. No exception will be granted.

SELECTION PROCESS

Following is a general description of the selection process:

- The NCDOT Selection Committee will review all qualifying LOI submittals.
- For Limited Services Contracts (On-Call type contracts), the NCDOT Selection Committee MAY, at the Department's discretion, choose any number of firms to provide the services being solicited.

- For Project-Specific Contracts (non On-Call type contracts), the Selection Committee MAY, at the Department's discretion, shortlist a minimum of three (3) firms to be interviewed. IF APPLICABLE, dates of shortlisting and dates for interviews are shown in the section SUBMISSION SCHEDULE AND KEY DATES at the end of this RFLOI.
- In order to be considered for selection, consultants must submit a complete response to this RFLOI prior to the specified deadlines. Failure to submit all information in a timely manner will result in disqualification.

SMALL PROFESSIONAL SERVICE FIRM (SPSF) PARTICIPATION

The Department encourages the use of Small Professional Services Firms (SPSF). Small businesses determined to be eligible for participation in the SPSF program are those meeting size standards defined by Small Business Administration (SBA) regulations, 13 CFR Part 121 in Sector 54 under the North American Industrial Classification System (NAICS). The SPSF program is a race, ethnicity, and gender neutral program designed to increase the availability of contracting opportunities for small businesses on federal, state or locally funded contracts. SPSF participation is not contingent upon the funding source.

The Firm, at the time the Letter of Interest is submitted, shall submit a listing of all known SPSF firms that will participate in the performance of the identified work. The participation shall be submitted on the Department's Subconsultant Form RS-2. RS-2 forms may be accessed on the Department's website at [NCDOT Electronic Forms](#).

The SPSF must be qualified with the Department to perform the work for which they are listed.

Real-time information about firms doing business with the Department and firms that are SPSF certified through the Contractual Services Unit is available in the Directory of Transportation Firms. The Directory can be accessed on the Department's website at [Directory of Firms](#) -- Complete listing of certified and prequalified firms.

The listing of an individual firm in the Department's directory shall not be construed as an endorsement of the firm.

PREQUALIFICATION

The Department maintains on file the qualifications and key personnel for each approved discipline, as well as any required samples of work. Each year on the anniversary date of the company, the firm shall renew their prequalified disciplines. If your firm has not renewed its application as required by your anniversary date or if your firm is not currently prequalified, please submit an application to the Department **prior to submittal of your LOI**. An application may be accessed on the Department's website at [Prequalifying Private Consulting Firms](#) -- Learn how to become Prequalified as a Private Consulting Firm with NCDOT. Having this data on file with the Department eliminates the need to resubmit this data with each letter of interest.

Even though specific DBE/MBE/WBE goals are not required for this project, the Department of Transportation is committed to providing opportunity for small and disadvantaged businesses to perform on its contracts through established Department goals. The Firm, subconsultant and

subfirm shall not discriminate on the basis of race, religion, color, national origin, age, disability or sex in the performance of this contract.

SELECTION CRITERIA

All prequalified firms who submit responsive letters of interest will be considered.

In selecting a firm/team, the selection committee will take into consideration qualification information including such factors as:

1. **50%** = THE RELATIVE EXPERIENCE AND PAST PERFORMANCE ON ANY PREVIOUS CONTRACTS WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND/OR OTHER STATE DEPARTMENTS OF TRANSPORTATION.
2. **50%** = THE FIRM'S KNOWLEDGE, EXPERIENCE AND STAFF TO PERFORM THE TYPE OF WORK REQUIRED.
3. **N/A%** = N/A.
4. **N/A%** = N/A.
5. **N/A%** = N/A.

After reviewing qualifications, if firms are equal on the evaluation review, then those qualified firms with proposed SPSF participation will be given priority consideration.

SUBMISSION ORGANIZATION AND INFORMATION REQUIREMENTS

The LOI should be addressed to **Robert J. Stroup, PE -- State Professional Services Engineer** and must include the name, address, telephone number, and e-mail address of the prime consultant's contact person for this RFLOI.

The LOI must also include the information outlined below:

Chapter 1 - Introduction

The Introduction should demonstrate the consultant's overall qualifications to fulfill the requirements of the scope of work and should contain the following elements of information:

- Expression of firm's interest in the work;
- Statement of whether firm is on register;
- Date of most recent private engineering firm qualification;
- Statement regarding firm's(') possible conflict of interest for the work; and

- Summation of information contained in the letter of interest.

Chapter 2 - Team Qualifications

This chapter should elaborate on the general information presented in the introduction, to establish the credentials and experience of the consultant to undertake this type of effort. The following must be included:

1. Identify recent, similar projects the firm, acting as the prime contractor, has conducted which demonstrates its ability to conduct and manage the project. Provide a synopsis of each project and include the date completed, and contact person.
2. If subconsultants are involved, provide corresponding information describing their qualifications as requested in bullet number 1 above.

Chapter 3 - Team Experience

This chapter must provide the names, classifications, and location of the firm's North Carolina employees and resources to be assigned to the advertised work; and the professional credentials and experience of the persons assigned to the project, along with any unique qualifications of key personnel. Although standard personnel resumes may be included, identify pertinent team experience to be applied to this project. Specifically, the Department is interested in the experience, expertise, and total quality of the consultant's proposed team. If principals of the firm will not be actively involved in the study/contract/project, do not list them. The submittal shall clearly indicate the Consultant's Project Manager, other key Team Members and his/her qualifications for the proposed work. Also, include the team's organization chart for the Project / Plan. A Capacity Chart / Graph (available work force) should also be included. Any other pertinent information should also be listed in this section.

Note: If a project team or subconsultant encounters personnel changes, or any other changes of significance dealing with the company, NCDOT should be notified immediately.

Chapter 4 - Technical Approach

The consultant shall provide information on its understanding of, and approach to accomplish, this project, including their envisioned scope for the work and any innovative ideas/approaches, and a schedule to achieve the dates outlined in this RFLOI (if any project-specific dates are outlined below).

APPENDICES-

CONSULTANT CERTIFICATION Form RS-2

Completed Form RS-2 forms SHALL be submitted with the firm's letter of interest. This section is limited to the number of pages required to provide the requested information.

Submit Form RS-2 forms for the following:

- **Prime Consultant firm**

- Prime Consultant Form RS-2 Rev 1/14/08; and

~~• ANY/ALL Subconsultant firms (If Subconsultants are allowed under this RFLOI) to be, or anticipated to be, utilized by your firm.~~

- ~~Subconsultant Form RS 2 Rev 1/15/08.~~
- In the event the firm has no subconsultant, it is required that this be indicated on the Subconsultant Form RS-2 by entering the word “None” or the number “ZERO” and signing the form.

Complete and sign each Form RS-2 (instructions are listed on the form).

The required forms are available on the Department’s website at:
<https://apps.dot.state.nc.us/quickfind/forms/Default.aspx> .

[Prime Consultant Form RS-2](#)

[Subconsultant Form RS-2](#)

All submissions, correspondence, and questions concerning this RFLOI should be directed to **Robert J. Stroup, PE** at rstroup@ncdot.gov.



NOTE: To adhere to the Timeframe, a Notice to Proceed is expected to be issued shortly after (a) firm(s)/team(s) is/are selected. All firm(s)/team(s) submitting a LETTER OF INTEREST should make sure that their rates and overheads are current and have been audited by NCDOT.

SUBMISSION SCHEDULE AND KEY DATES

RFLOI Release – **MAY 16, 2016**

Deadline for Questions -

Issue Final Addendum -

Deadline for LOI Submission – **MAY 31, 2016**

Shortlist Announced * -

Interviews - the week of

Firm Selection and Notification ** - **TBD.**

Anticipated Notice to Proceed – **TBD**.

* Notification will **ONLY** be sent to shortlisted firms.

** Notification will **ONLY** be sent to selected firms.