

## **GENERAL ENGINEERING SERVICES CONSULTANT (GESC):**

5/14/24

This contract scope identifies the GESC requirements to support and review the development of fully-compliant Environmental Documents and fully-constructible plans for Letting of Highway/Transportation Projects. In particular, the GESC Firm shall provide professional consulting services to support NCDOT in the development and delivery of projects and, most notably, for the review of project plans, technical reports and other deliverables submitted by other private engineering firms and third parties. Where applicable, GESC Firms may also provide general program management support.

All GESC reviewers are required to have:

- Extensive knowledge of applicable federal and state regulations; FHWA and AASHTO Guidelines, the NEPA Merger Process, NCDOT construction practices, and the guidance, policies and procedures for the specific practices applicable to highway design, construction, and maintenance and the disciplines they will be reviewing.
- Extensive experience in all phases of the discipline's planning, design, and analysis for multiple NCDOT projects.
- Experience identifying project delivery risk and identifying adaptive solutions.
- Experience providing design reviews for the NCDOT discipline.
- Experience serving in a lead capacity for the development of the discipline design.
- Knowledge of the Project Development Network, NCDOT's Quality Management Program: Quality Control and Quality Assurance guidance and NCDOT discipline roles in project delivery.
- The person responsible for the review must have a minimum of 10 years' experience and hold the appropriate license or certification (PE, PLS, etc.) In the absence of a licensed or certified reviewer, a licensed or certified professional with responsible charge is to be identified.

Assignment of design review or plan review tasks is contingent upon the Firm or subconsultants being pre-qualified in the applicable discipline(s) per the approved contract. Reviewers named in each task order shall be used, and the Firm will notify the Department if there are any staff changes.

### DEFINITION OF GESC

This contract scope will entail a non-authoritative General Engineering Service Contract (GESC) relationship. With the exception of those subconsultants on their own GESC team, the GESC Firm shall not have the authority to dictate the scope of work to other professional services firms retained by the Department, or to manage or participate in the selection of other professional services firms, review workday estimate rates from (and negotiate with) other firms, review and approve invoices, or other such tasks that are the responsibility of the NCDOT.

The GESC Firm shall serve in a support and advisory role to the Department. The GESC Firm shall be responsible for working with the Department to deliver multiple projects. The GESC Firm shall review planning and engineering documents and other technical reports. The Firm may also provide general program management support.

## RESTRICTIONS

Consistent with the NCDOT Ethics Policy, the following restrictions will be in place for the GESC Firm (and its subconsultants, as applicable) as a means of avoiding potential conflicts of interest and perceived or real unfair competitive advantage:

- Confidentiality agreements will be executed by the Firm and all participating staff (inclusive of the Firm and all subconsultants).
- Prime firms and subconsultants may not review any of their own work products. In this regard, if a subconsultant performed work for the Department, nothing would preclude another firm on the team represented in the LOI from performing the review of that work product.
- The Firm does not have the authority to manage or participate in the selection of other professional services firms (except the subconsultants on their own GESC team) or perform other such tasks that are the responsibility of the Department.
- All review comments generated by this contract are to be provided directly to the Department. Under no circumstances will there be any consultant-to-consultant contact with regard to the review of work products generated by other consultants.
- In the event the Firm had a review role on a project that is converted to Design-Build, the Firm and participating subconsultant(s) are precluded from participating on the Contractor/Developer pursuit of that Design-Build contract, unless an exemption is granted in accordance with NCDOT's Design-Build Policy and Procedures.

Nothing in the above restrictions is intended to preclude the GESC Firm or its subconsultants from pursuing or engaging in other work directly contracted by and between the GESC Firm or its subconsultants, and the NCDOT (for example, performance of CEI for projects).

## SCOPE OF WORK

The services to be provided by the Firm(s) include engineering review support services whereby the Firm(s) serves as a technical extension of the NCDOT's staff for the purposes of reviewing project plans, technical reports and other deliverables submitted by other professional services firms or third parties for the purposes of supporting project delivery. The Firm may also provide general program management support.

The responsibilities of the Firm(s) include, but are not limited to:

- Serve as a resource and advisor to the NCDOT Project Manager and NCDOT Project Delivery staff for the development of projects.
  - review technical designs and engineering plans including but not limited to:
    - design criteria, design calculations, quantities for estimates or other supporting documents.
- Review environmental documents and ancillary studies in support of NEPA/SEPA and related permitting.
- Review and provide recommendations for required work, including but not limited to:
  - phasing and constructability of work
  - quality assurance and quality control
  - project schedules and risk.
- Support project functions.
  - drafting correspondence

- preparation of presentations
- management of meetings (preparation, logistics, meeting minutes, etc.)
- preparation of project briefs
- providing training support
- Project delivery tracking and reporting on milestones.
- While these contracts are primarily for the review of work performed by others, the Department may engage the Firm to perform minor design tasks and project support functions to ensure quality project delivery.

The NCDOT is placing a high level of importance on value engineering to reduce costs. Consideration should be given to the following items while providing project support and completing reviews:

- Consider high-level construction phasing.
- Consider constructability of each element in concert with the detailed review.
- Communicate opportunities that allow for a more efficient design from a cost and construction duration standpoint, if applicable.
- Communicate any opportunities on designated right of way and easements that could lead to reduced impacts, if applicable.

The NCDOT is placing a high level of importance on quality. Focus should be given to the following items while providing project support and completing reviews:

- Completion of the role of Quality Assurance Reviewer per the NCDOT's Quality Management Program: Quality Control and Quality Assurance guidance.
- Support at meetings to assist with resolution of issues on behalf of the Department with proper elevation of concerns.
- Evaluate risk and complexity of the project and involve a Quality Assurance Coordinator from the Technical Services Units if appropriate as outlined in NCDOT's Quality Management Program: Quality Control and Quality Assurance guidance.
- Review for potential conflicts between various discipline designs and/or adjacent projects.

The consultant/team must be capable of completing quality work assignments in an expeditious manner and within the timeframe directed by the Department and Project Team.

All services listed/mentioned in this document shall be done in accordance with the guidelines and standards for the North Carolina Department of Transportation.

All deliverables shall be produced in the format as directed by the Department. Markups should be made digitally within PDF format using a software package that allows comments to be typed in (Adobe, Bluebeam, etc.). Comments should also be provided in a spreadsheet format denoting the plan page, comment with space for a response and final resolution. All project documents including document markups will be transmitted via the project's PreConstruction SharePoint site, as directed by the Department.