

REQUEST FOR PROPOSAL
Project # 8017.8011, Bid # M-10-001
SYSTEM CONSULTANT FOR SCADA SYSTEM DESIGN

The Chesapeake Bay Bridge and Tunnel District (“District”) issues this request for proposals for a System Consultant to design, write specifications and develop a Request for Bid (RFB) for a new Supervisory Control and Data Acquisition (SCADA) System for the District. The Offeror shall work closely with staff in the development of the above said items. The District is inviting proposals from individual SCADA System Consulting Firms or Corporations having nationwide and favorable reputation with skill and experience to perform and carry out duties requested by the District.

1. The District is a Political Subdivision of the Commonwealth of Virginia and was created by the Acts of Assembly in 1954. The facility is a 20-mile long bridge and tunnel combination toll facility across the Chesapeake Bay connecting Northampton County with the City of Virginia Beach. Daily traffic counts range from a low in the winter of 8,300 to a high in the summer of 24,100 vehicles per day.
2. Sealed Proposals will be received until 2:00 pm Tuesday, **May 18, 2010**, at the District Administration Building, for furnishing the services described herein. Note: The common overnight delivery services, including priority mail do not guarantee delivery to the lower Eastern Shore (Cape Charles area) by 2:00 pm. Use of these services to deliver a proposal may result in delivery to the District after the submittal deadline.
3. A **mandatory** pre-proposal conference will be held at 10:00 am on Thursday, **April 08, 2010**, at the District Administration Building. A site visit will immediately follow the conference. Please bring a safety vest as this will be required at some locations of the site visit.
4. All inquiries for information should be directed to Robert E. Johnson, Director of Maintenance, Chesapeake Bay Bridge and Tunnel District, 32386 Lankford Highway, Cape Charles, VA 23310.
5. During the performance of this RFP, the firm agrees to the following:
 - a) The Offeror will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment. The Offeror agrees to post in a conspicuous place, available to employees and applicants for employment, notices setting forth provisions of this nondiscrimination clause.
 - b) The Offeror, in all solicitations or advertisements for employees placed by or on behalf of the firm, will state that such firm is an equal opportunity employer.

- c) Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
 - d) The Offeror will include the provisions of the foregoing paragraphs a., b., and c. in every purchase order over \$10,000, so that the provisions will be binding upon each firm.
6. During the performance of this RFP, the Offeror agrees to (i) provide a drug-free workplace for it's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession or use of a controlled substance is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract of purchase order over \$10,000, so that the provisions will be binding upon each firm.

For the purposes of this section, "*drug-free workplace*" means a site for the performance of work done in connection with a specific contract awarded to a firm in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance during the performance of the contract.

- 7. Toll-Free access across the Chesapeake Bay Bridge and Tunnel will be furnished by the District for work on this RFP. No toll free access is provided for either personal travel or personal business.
- 8. The District reserves the right to reject any and all Proposals, to require amendments of clarifications of Proposals, and to meet individually or collectively with firms that have responded. This request is being procured via competitive negotiation as referred to in Section 2.2-4301 – Definitions in the Virginia Public Procurement Act.
- 9. The award of this Request for Proposal, if it is awarded, will be made to the best value Offeror. In determining the best value Offeror, the following factors shall be considered:

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|----------------------------|
| 1. Proposer Qualifications |
| 2. Technical Proposal |
| 3. Project Execution |
| a. Project Plans |
| b. Project Schedule |
| 4. Price of Proposal |

One day prior to the proposal submission deadline, weightings for each factor will be publicly posted at the following locations:

- a. Administration Building
- b. North Toll Plaza
- c. South Toll Plaza
- d. Northampton County Courthouse
- e. City of Virginia Beach Courthouse
- f. District Website, www.cbbt.com

The District will review and evaluate all proposals received by the proposal deadline. Proposals must be complete and responsive to all sections of the RFP. Proposals that do not fulfill all requirements or omit any of the requested contents may receive a reduced evaluation and/or be deemed non-responsive per the scope of the request.

- 10. Any comments or questions concerning specifications or other provisions of this Request for Proposal should be directed in writing to Mr. Robert Johnson, Director of Maintenance, 32386 Lankford Highway, Cape Charles, Virginia 23310, and shall be received at least 15 days prior to receipt of proposal, May 03, 2010, with an answer to be given at least 10 days prior to proposal, May 08, 2010. The District is not responsible for any explanation, clarification or approval made or given in any manner except by addendum. A copy of each addendum will be mailed or delivered to each person that received an RFP. Any addenda so issued are to be considered part of this RFP.
- 11. In compliance with this Request for Proposal and to all the conditions imposed therein and hereby incorporated by reference, the undersigned offers and agrees to furnish the services in accordance with the attached signed proposal as mutually agreed upon by subsequent negotiations.

| | |
|---|------------------|
| _____ | By: _____ |
| (Name of Individual, Firm or Corporation) | (Signature) |
| _____ | _____ |
| Address | Title |
| _____ | _____ |
| City, State, Zip | Telephone Number |

GENERAL REQUIREMENTS

In order to be considered for selection, Offerors must submit a complete response to this RFP. One (1) original and five (5) copies of each proposal shall be submitted. The Offeror shall make no other distribution of the proposal. Any proposals received after the deadline will not be considered. It is the Offeror's responsibility to assure that proposal packages are received by the time and date indicated.

PROPOSAL PREPARATION

An authorized representative of the Offeror shall sign proposals. All required information must be submitted. Failure to submit all required information may result in the District rejecting the proposal or giving a lowered evaluation of the proposal. Mandatory requirements are those required by law or regulation or are such that they cannot be waived and are not subject to negotiation.

Proposals should be prepared simply and economically and should provide a straightforward, concise description of capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.

Each copy of the proposal should be bound or contained in a single volume where practical. All documentation submitted with the proposal should be contained in that single volume.

Other proposal format requirements include:

- The entire proposal shall be limited to 75 typed pages
- 8 ½ x 11 inch page size (larger pages are allowed for figures or tables, but they must be folded into the overall proposal and used sparingly)
- No font smaller than 12 point

PROPRIETARY INFORMATION

Ownership of all data, material, and documentation originated and prepared for the District pursuant to this RFP shall belong exclusively to the District and be subjected to public inspection in accordance with the Virginia Freedom of Information Act. Trade secrets or proprietary information submitted by a proposer shall not be subject to public disclosure under the Virginia Freedom of Information Act. However, the Offeror must invoke the protections of section 2.2-4342.F of the Code of Virginia, in writing, either before or at the time the data or other material is submitted. The written notice must specifically identify the materials requiring protection and enumerate the reasons why protection is necessary. The proprietary or trade secret material submitted must be identified by some distinct method (e.g. highlighting or underlining) and must indicate only the specific words, figures, or paragraphs that constitute trade secrets or proprietary information. The classification of an entire proposal document, and/or total proposal prices as proprietary or trade secrets is not acceptable and shall result in rejection of the proposal.

ORAL PRESENTATION

Offerors who submit proposals in response to this RFP may be required to give an oral presentation of their proposal to the Proposal Evaluation Team. An oral presentation may provide an opportunity for the Offeror to clarify or elaborate on the proposal. If held, the District will schedule the time and location of these presentations. Oral presentations are an option of the Proposal Evaluation Team and may or may not be conducted. Therefore, proposals must be complete.

COST OF PROPOSALS

The Offeror is responsible for all costs of proposal preparation. The District is not liable for any costs incurred in response to the RFP.

SPECIFIC PROPOSAL REQUIREMENTS

Proposals should be as thorough and detailed as possible so that the District may properly evaluate an Offeror's capabilities to provide the required services. Offerors are required to submit the following items, separated by tabs within the proposal:

TAB 1: Offerors shall include a signed copy of pages 1 through 3 of this RFP.
The Offeror shall include a signed copy of any future addenda to this RFP that may be issued.

TAB 2: General Qualifications

- a. Provide a description of the Offeror's organizational structure and history. Include legal name and address; legal form of company (partnership, corporation, joint venture, etc.); if joint venture, identify the members of the joint venture and provide all information within this section for each member; or if the company is a wholly owned subsidiary of a "parent company"; and address(es) of office(s) working on this engagement.
- b. Provide a detailed narrative describing the Offeror's qualifications to provide design, specifications and procurement assistance which encompasses the Scope of Work as listed below.

The Offeror shall have experience in projects of this nature and understand the general scope of this project, which includes but is not limited to the following:

1. This Contract shall be for the purpose of designing, writing specifications and developing a Request for Bid for a new SCADA System for the District. The selected Offeror shall work closely with staff in the development of the above said

items, which will retrofit and interact with existing District equipment as well as control new equipment to be installed as part of the implementation process. The selected Offeror shall participate as needed at District Commission meetings and other meetings as necessary.

2. A new SCADA system will be installed throughout the facility which is comprised of parallel North and South bound elevated structures, two tunnels, four ventilation buildings and two Toll Plazas, spanning approximately 20 miles. (See Appendix A for overall facility layout.)
3. The SCADA system shall be capable of providing control and or monitoring of over 1000 devices including but not limited to: internal telephones, traffic control lights, variable message signs, cameras, fog horns, and medium and high voltage electrical devices.
4. Possible re-use of some existing equipment shall be considered in this project. There are 28 existing Communications Node Cabinets (CNC) with back-up power generators located at various locations across the facility. The existing stainless steel NEMA 4X CNC Cabinets shall be re-used. Where feasible, the existing fiber-optic cable shall be repaired and recertified for reuse with upgraded communications and control equipment. A proportioned amount of a newly installed 72 count fiber optic cable is also available for this said integration.
5. Replacement of existing blank out and changeable message signs with full matrix variable message signs shall be considered in this design.
6. The system design shall include replacement of the current control and monitoring system. The new system shall be capable of providing full monitoring and control of all traffic control and emergency communications devices from the North Toll Plaza, South Toll Plaza, and the Electronics and Communications Shop.

The power control system shall have full control and monitoring at #1 Island control room and #3 Island control room with remote monitoring and control in the Electrical/Mechanical Superintendent's office and in the Electronics/Communications shop.

The video surveillance system shall have control and monitoring at #1 Island control room and #3 Island control room with remote monitoring and control in the Electrical/Mechanical Superintendent's office, the Electronics/Communications shop and the Administration Offices.

Island Gate control system integration will be considered in the design process.

7. The new system shall integrate equipment and software technologies that are current for the anticipated time of implementation and shall have an anticipated lifespan that is a minimum of ten years from the completion of the project.
8. The scope of work shall also consist of providing, at a minimum, the following items and tasks at specific review times. While these formal meetings will be significant to the overall project, the District envisions a hands on team involvement between the selected Offeror and District Staff, with meetings as necessary, throughout the entirety of the project. The selected Offeror, if awarded, shall assume a project commencement date not later than September 01, 2010.
 - a. The following items are to be completed and submitted at the 30% design review:
 - Review manufacturers' alternatives.
 - Develop scoping documents for the replacement of the SCADA, including architectural block diagram, description of functions, software, etc.
 - Updated revision of Project Schedule
 - b. The following items are to be included and submitted at the 60% design review:
 - All previously submitted items with requested changes.
 - Develop initial index of drawings for entire project.
 - Develop sequences of operations, control schematics and layout.
 - Updated revision of project schedule
 - c. The following items are to be completed and submitted at the 90% design review:
 - All previously submitted items with requested changes.
 - Develop control panel layouts and point to point wiring diagrams.
 - Develop written specifications and bill of materials.
 - Develop construction schedule and budget estimates.

- Develop testing methodology of newly installed system.
 - Updated revision of project schedule
- d. All previously submitted items with the requested changes are to be completed and submitted at the 100% design review.
9. The District may request the selected Offeror(s) to provide other than the aforementioned services; however, any other request(s) will be within the scope of this agreement. Compensation for such additional services shall be in accordance with the terms of the selected Offeror's proposal and subsequent amendments that will constitute the contract between the District and the Offeror(s). An authorized representative of the District will initiate all services and shall approve the engagement on the basis of receiving an approved task order.
10. Selected Offeror(s) will be prohibited from participating as part of a team proposing to develop any project pursuant to the SCADA RFP for which the selected Offeror(s) has conducted any preliminary studies for the District under this awarded Contract.
- c. Describe your firm's experience, focusing on the last 5 years, in review/development of the detail design document in relation to installation and /or upgrade of a SCADA or related system. In addition, this documented experience should focus on the principal management team for these past successful projects and their availability to be involved on this RFP.
- d. Describe your experience, focusing in the past 5 years, in providing similar consulting services. For the primary and any proposed sub consultant, list three similar engagements, the name of the entity and project manager, telephone numbers and value of the consulting contract. In addition, this documented experience should focus on the principal management team for these past successful projects and their availability to be involved on this RFP.

TAB 3: Plans for Providing Services:

Identify, by name, title and location the individuals who will be responsible for this relationship. Describe the role of each individual, provide summary resumes (no more than one page) for all individuals listed and identify the individual who will be the

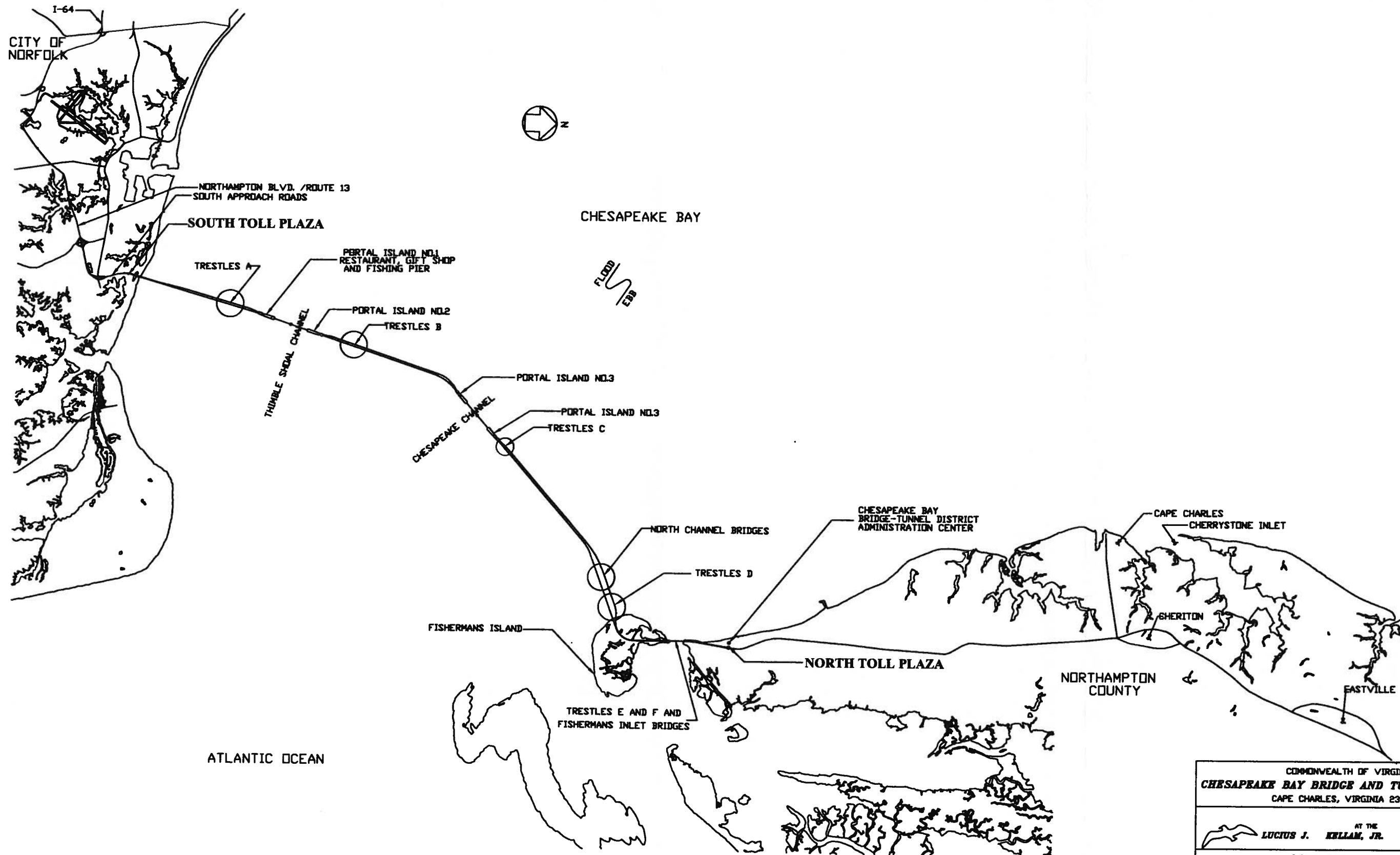
primary day-to-day contact. Indicate the roles and responsibilities of any sub-consultants.

Provide a projected project schedule that shall assume a project commencement date no later than September 01, 2010.

TAB 4: Method of Payment

Provide the progress payment schedule you will use to charge for services as outlined in the Scope of Work. Completely describe all fixed and variable expenses and the hourly rates of professional and administrative personnel involved in the engagement including fringe and overhead costs, as well as estimated out-of-pocket expenses.

Appendix A



ATLANTIC OCEAN

CHESAPEAKE BAY



FLOOD
EBB

CHESAPEAKE BAY BRIDGE AND TUNNEL
LOCATION MAP

COMMONWEALTH OF VIRGINIA
CHESAPEAKE BAY BRIDGE AND TUNNEL DISTRICT
CAPE CHARLES, VIRGINIA 23310-0111

AT THE
LUCIUS J. KELLAM, JR. BRIDGE-TUNNEL

PREPARED BY C.B.B.T.

LOCATION MAP

| | | | |
|-------------|-----|-------|----------------|
| DRAWN BY | EEB | SCALE | NONE |
| CHECKED BY | | DATE | March 16, 1988 |
| DWG. NO. | | | |
| SECTION NO. | | | |