



**Town of Nags Head**

Post Office Box 99  
Nags Head, North Carolina 27959  
Telephone 252-441-5508  
Fax 252-441-0776  
www.townofnagshead.net

RW

NORTH CAROLINA  
DARE COUNTY

Task Order  
PURCHASE ORDER # 12-02476

**Contract Task Order No. 1**  
**Dated: 13 March 2012**

DMIZ

This Task Order, issued under the Annual Engineering Services Contract between the TOWN OF NAGS HEAD (hereinafter referred to as "THE TOWN"), and CREATIVE ENGINEERING SOLUTIONS, PLLC, 262 Mother Vineyard Rd., Manteo, NC 27954-9548 (hereinafter referred to as "CONTRACTOR"), dated February 1, 2012, covers the Memorial Avenue Waterline Extension, as described in the attached Proposal for Services, dated February 9, 2012, which becomes part of this Task Order.

The work under this Task Order involves design field surveys, engineered design, technical specifications, construction review and commissioning for the approximate 270-foot tie-in of the existing 6-inch waterline ending at the southern property line of 3306 S. Memorial Avenue with the stub-out located in the TOWN's right-of-way on the north side of Bainbridge Street. The design and permit application phase of this project will be completed no later than April 15, 2012. Total, not to exceed, cost for this project will be \$2,450.00 (Two thousand four hundred fifty dollars and no cents).

1) SIGNATURES

Both the TOWN and the CONTRACTOR agree to the above Task Order.

Witnessed or Attested By:

*[Handwritten signature]*



TOWN OF NAGS HEAD

By: *[Handwritten signature]*

Title: TOWN MANAGER

Date: 3/14/12

*[Handwritten signature]*

CONTRACTOR

By: *[Handwritten signature]*

Title: PRINCIPAL

Date: 3-13-12



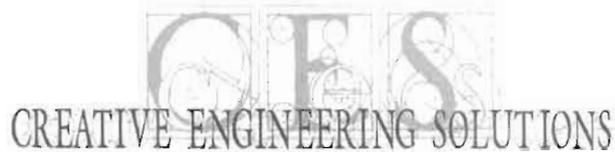
"This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act."

  
Finance Officer

APPROVED AS TO FORM AND LEGAL SUFFICIENCY.

  
TOWN ATTORNEY

Attachment: Proposal for Engineering Services for S. Memorial Ave. Waterline Extension,  
dated February 9, 2012



David M. Ryan, P.E., NC LID  
262 Mother Vineyard Rd.  
Manteo, NC 27954

February 9, 2012

Cliff Ogburn, Town Manager  
Town of Nags Head  
P.O. Box 99  
Nags Head, NC 27959

**Re: S. Memorial Ave. Waterline Extension  
Engineering / Surveying Services Proposal**

Dear Mr. Ogburn:

I am pleased to submit the following proposal for the provision of consulting engineering / surveying services to the Town of Nags Head of the subject project for your review and approval.

The work associated with this proposal involves surveying, engineering design, and construction related services to connect a proposed 6" dia. waterline approximately 270 l.f. southward, originating from the distal end of the S. Memorial Ave. right-of-way margin for connection to an existing 6" dia. waterline located within the northern right-of-way margin of Bainbridge St.. This extension will require the submission of engineered plans and specifications for review and approval by NCDENR Public Water Supply Section for the issuance of an Authorization to Construct. Upon completion of the installed improvements, engineered certifications and operating permits will be submitted for issuance of the Final Permit approval.

I have prepared a summary of the various engineering / surveying services proposed to accomplish this assignment and have attached that to this proposal letter as Exhibit "A". The proposed compensation and method of payment for these services is also included at the end of this Exhibit.

Execution of the proposal in the spaces provided on the next page of this letter and return of one copy of the proposal with Exhibit "A" will serve as my authorization to commence work on this assignment.

Should you have any questions regarding the scope of services or fee proposed, please do not hesitate to call. Thank for the opportunity to be of service to the Town on this project proposal. I look forward to working with you and the Town staff toward its successful completion.

Sincerely,

David M. Ryan, P.E., NC LID  
Creative Engineering Solutions, PLLC

Attachment: Exhibit "A"

**EXECUTED** this \_\_\_\_\_ day of \_\_\_\_\_, 2012.

**Town of Nags Head, North Carolina**

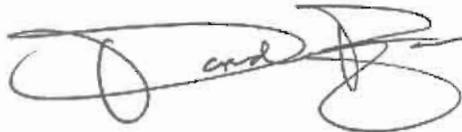
By:

Name: Cliff Ogburn

Title: Nags Head Town Manager

**EXECUTED** this 9th day of February, 2012.

**Professional**

A handwritten signature in black ink, appearing to read "David M. Ryan". The signature is stylized with large loops and a horizontal line across the middle.

By:

Name: David M. Ryan, P.E., NCLID

Title: Creative Engineering Solutions, PLLC, Principal

## **EXHIBIT "A"** **SCOPE OF SERVICES**

This Agreement is comprised of civil engineering and surveying services related to supporting planning, design, and construction related phase services for a proposed 6" dia. waterline extension, within the Nags Head Shores Subdivision & Atlantic Crest Townhome development, located within Nags Head Township, Dare County, North Carolina. The intent is to compile the necessary information for permitting by NCDENR Public Water Supply Section for the issuance of an Authorization to Construct of the proposed facilities.

The proposed engineering and surveying services are described as follows:

### **DESCRIPTION OF SERVICES:**

#### **Part 1- Surveys & Mapping**

##### **Purpose**

The purpose of Surveys and Mapping is to acquire the field data necessary to perform the planning and design information within the existing right-of-way margins for the project at hand. This typically includes record research, control surveys, right-of-way surveys, mapping, and preliminary engineering surveys.

##### **Research**

The designer shall:

- Obtain as-built plans, right-of-way plans, and deeds of acquisition from the Town of Nags Head and/or Dare County.
- Check other sources of information, including recorded plats and recorded surveys.

##### **Datum and Basis of Bearing**

Horizontal control shall be referenced to the North Carolina State Plane Coordinate System utilizing the latest published adjustments of the North American Datum, 1983 control network.

The basis of bearing shall be established on a well-defined line within the project limits and shall be referenced to NAD 83 grid north.

The vertical datum shall be NAVD88 utilizing the most recently published orthometric heights.

##### **Horizontal Control Network**

A horizontal control network shall be established encompassing the project.

Horizontal control points shall be recovered or established at each end of the project, and at the ends of intersecting streets where the proposed work. Section corners, quarter corners, sixteenth corners, and other monuments that define existing alignments and rights-of-way and/or lie within the project limits shall be incorporated into the horizontal control network.

The NAD 83 coordinates and the surface coordinates of each horizontal control network point shall be determined. A single mean combined grid-to-surface factor

**EXHIBIT "A"**  
**SCOPE OF SERVICES (Con't.)**

shall be computed and used to transform the horizontal control network to the surface. Surface values shall be used for all other survey and design work. Horizontal roadway centerline control points shall be referenced. Reference points shall be located at the edge of right-of-way or in other locations where they are unlikely to be disturbed during construction.

Survey data will be collected @ a minimum of 50' intervals along the proposed project path, within and along the existing right of way to a point offset 15' either side of the alignment.

**Vertical Control and Benchmarks**

Vertical control shall be tied to at least one known benchmark.

**Topographic Mapping and Construction Surveys**

Topographic surveys shall be performed to determine contours, spot elevations, existing surface & subsurface utility locations, (within the limits of the right-of-way), and other elevation-related information needed for preliminary project studies and design.

Construction stakeout services are to be provided with reference stakes placed at 50' intervals along the planned alignment.

**Part 2- Engineered Design Plans & Specifications (EDPS)**

The EDPS documents provide the necessary information required for permit submission for review and approval by NCDENR Public Water Supply Section for the issuance of an Authorization to Construct. The following outlines the information required for the permit application submission;

- Preparation of waterline route plan/profile sections.
- Preparation of Engineered design plans and specifications.
- Preparation of the Engineer's Report.
- Preparation of Opinion of Probable Construction Cost

In an effort to minimize costs, the Town will prepare the "Application for Approval of Engineering Plans and Specifications For Water Supply Systems." The distribution system plan review fees for the construction of waterline extensions less than 5,000 l.f. in length is anticipated to be \$150.

An opinion of probable construction cost will also be provided under this section.

**Part 3- Construction Review & Commissioning**

In order to complete the state permit requirements, construction administration services are included for your review. The following outlines the anticipated services associated with construction administration services are as follows;

- On-site Construction Review of installation -(1) site visit allowance
- On-site Witness of Waterline Pressure/Leakage test & Chlorination testing & flushing-(1) site visit allowance.
- Final on-site inspection with Water Department representative- (1) site visit allowance, (conducted at time of testing)

## **EXHIBIT "A"** **SCOPE OF SERVICES (Con't.)**

- Construction Record Document preparation.
- Applicant's Certification preparation & submission.
- Engineer's Certification preparation & submission

### **Design Standards and Criteria**

The following is a list of potential reference sources utilized for the development of the engineered plans and specifications;

- Rules Governing Public Water Systems, North Carolina Administrative Code Title 15A Department of Environment and Natural Resources Subchapter 18C Water Supplies.
- Town of Nags Head Water System Management Plan.

### **Additional Services**

Other potential items of engineering service that may be required, but that are outside the scope of this proposal, include, but are not limited to, the following:

1. Any additional on-site or off-site topographic or utility survey, ALTA surveys, platting, easement or right-of-way descriptions.
2. Phase I and Phase II environmental studies and reports or wetland or "waters of the U.S." determination, delineation, or mitigation.
3. Design and detailing of any off-site infrastructure other than explicitly specified in the scope of services.
4. Variance submittals and presentations for public hearings, colored renderings, and exhibits for public hearings.
5. Geotechnical Subsurface Investigations.

Additional services that may be required for the final design, permitting, and construction of this project, in addition to what has been described hereon, will be billed to the Town at an hourly reimbursable rate of **\$100.00/hour**. An allowance has been provided for additional non-labor reimbursable costs such as mileage, printing and reproduction which has been calculated based upon 5% of the overall project costs for the generation of the required mileage and material.

### **CONTRACT AMOUNT:**

All described consulting services associated with this Agreement shall be billed to the Town at the beginning of each month for all included design, CAD work, construction, and surveying services. The following tabular outline provides for a proposed cost breakdown of the above referenced anticipated surveying and engineering services;

**EXHIBIT "A"**  
**SCOPE OF SERVICES (Con't.)**

Type of Service	Fee Amount
<b>Site Element Services</b>	
Part 1- Surveys, Mapping, & Construction Stakeout	\$1,085
Part 2- Engineered Design Plans & Specifications	\$950
Part 3- Construction Review & Commissioning	\$350
<b>Subtotal</b>	<b>\$2,385</b>
<b>Reimbursable Cost Allowance:</b>	<b>\$65</b>
<b>NCDENR Permit Application Fee*</b>	<b>\$150</b>
<b>Total Estimated Fees</b>	<b>\$2,450.00</b>

\*State Permit Fees have been excluded from the Subtotal & Total Estimated Fees shown above and shall be provided separately by the client for permit application processing

Design field surveying services shall be performed by a third-party surveying firm. Surveying and Engineering services will be billed directly to the Town in a single invoice format after review and approval of monthly invoices by the Engineer. The maximum billing for all services described herein above, (including surveying), shall not exceed **\$2,450.00** without written authorization from the Town for an amendment to this Agreement.

DAVE CLARK  
 TOWN OF NAGS HEAD PUBLIC WORKS  
 2200 LARK AVE  
 NAGS HEAD, NC 27959

12-02476

ORDER DATE: 03/13/12  
 REQUISITION NO: R1200673  
 DELIVERY DATE:  
 STATE CONTRACT:  
 F.O.B. TERMS: Destination

VENDOR #: CREAT010

CREATIVE ENGINEERING SOLUTIONS  
 262 MOTHER VINEYARD RD  
 MANTEO, NC 27954

Phone: (252)473-5566 Fax: (252)473-5566

QTY/UNIT	DESCRIPTION	ACCOUNT NO.	UNIT PRICE	TOTAL COST
1.00	Engineering not to exceed	2-61-818-6-5773-00	2,450.0000	2,450.00
		CAPITAL OUTLAY OTHER		
			TOTAL	2,450.00

Please contact the Town of Nags Head if the prices indicated are not correct. The Town of Nags Head will not be responsible for incorrect pricing after the Purchase Order is received by vendor for processing.