

March 20, 2018

Mr. Steve Foster, Town Manager Town Hall 2008 Loggerhead Court North Topsail Beach, NC 28460

Phone: (910) 928-1349

Email: townmanager@ntbnc.org

Re:

Proposal for Professional Services

North Topsail Beach Sand Bag Project [17118]

North Topsail Beach, Onslow County, North Carolina

Dear Mr. Foster:

This letter provides our Proposal for Professional Engineering Services for design, permitting and construction administration of the sand bag revetment rehabilitation in North Topsail Beach, North Carolina. The existing sand bag revetment extends some 1,800 linear feet along the ocean shoreline from the Topsail Reefs Condominiums to New River Inlet providing protection to building foundations for some 22 residential structures and for public infrastructure in and along New River Inlet Road.

It is proposed that the Project Engineer be James W. (Bill) Forman, Jr., P.E. The project manager will be a single point of contact for the Owner(s) and be responsible for coordination of members of the project team throughout the project implementation.

We appreciate this opportunity to propose the services of our firm for installation of the sand bag project in North Topsail beach. We will do all we can to make the project a successful venture for the Town of North Topsail Beach, and the individual property owners along the extent of the project.

We look forward to meeting with the Town and the Revetment Committee and other stake holders of the project on Thursday March 22, 2018 at 11:30 AM to discuss our proposal and to compare their and our vision for success of the project.

Please contact me if you have any questions or need additional information.

Sincerely,

ARENDELL ENGINEERS

Vames W. (Bill) Forman, Jr., P.E.

President

Attachments



# TOWN OF NORTH TOPSAIL BEACH RESTORATION OF SANDBAG REVETMENT FOR THE TOWN OF NORTH TOPSAIL BEACH REVETMENT COMMITTEE EXHIBIT A PROPOSAL FOR PROFESSIONAL SERVICES

# March 20, 2018

# INTRODUCTION

In 2015 the Town of North Topsail Beach constructed a sand bag revetment along approximately 1,800 linear feet of ocean shoreline between the Reefs Condominiums and New River Inlet. The purpose of the revetment was to reduce the risk associated with inundation by ocean waters and associated losses to residential buildings and private and public utility infrastructure. Budget constraints and construction deficiencies resulted in the reduction in the size and effectiveness of the revetment. Additionally, the sand filled geotube structure installed along the length of the revetment was to provide protection of the bag lay down area during construction and served as toe protection for the revetment. The geotube was eventually removed as required by the CAMA Permit.

We observed deficiencies in construction of the revetment including the following:

- Bags were not continuous with gaps in the body of the structure permitting wave driven water to rush through and cause erosion behind the bags.
- There did not appear to be an adequate toe structure in place for when the geotube was removed.
- Generally, bags were over filled causing the shape of the bags to be more rounded and more likely to move because there is less contact with adjacent bags.
- The bag structure was not constructed to the top elevation indicated in the permit drawings.
- It did not seem that the level of protection hoped for was achieved.

# PROJECT TEAM

Arendell Engineers will be the Project Engineers responsible for coordination of the activities of the project team, and be the point of contact for the CLIENT. Land surveying and mapping services will be provided by Geodynamics LLC of Morehead City.

# SCOPE OF SERVICES

The scope of services proposed herein represents the **BASIC SERVICES** and is based on the experience of this firm on similar projects and project components, the scope of the project as defined by this proposal and the regulatory requirements of agencies of the State of North Carolina with jurisdiction over construction at the site.

# **BASIC SERVICES**

References to the "**ENGINEER**" in the scope of services are to the ENGINEER as the project manager responsible to the CLIENT for the execution of the services proposed. Execution of the services by the ENGINEER includes execution of work by members of the project team as required to execute all aspects of the scope of services. References to the "**CLIENT**" refer to the Town of North Topsail Beach.

The following services are proposed.

# 1.0 - SURVEYING AND DATA COLLECTION

Following receipt of written authorization to proceed with Site Evaluation and Data Collection, the ENGINEER shall:

- 1.1 Coordinate with CLIENT. Meet with CLIENT, Beach Revetment Committee and other stakeholders as necessary to discuss budget, and expectations and desires for improvements to the revetment, or that may be necessary to meet current and future needs and an acceptable level of protection within the constraints of costs and regulatory limitations.
- 1.2 Topographic and condition surveying. Conduct a location survey of the existing bag structure including cross sections through the structure and down the beach to mean low water in order to determine the general top elevation of the structure and its position relative to the beach profile. This task also includes a detailed visual survey and assessment of the existing bag line to determine the general condition and what, if any, of the bags can be salvaged or reused in the renovated structure.
- 1.3 Fill sand availability assessment. Evaluate the quantity and texture of sand on the beach seaward of the structure for filling bags as well as the working conditions on the beach. If sufficient sand is not available on the beach adjacent to or near the proposed structure, determine location and suitability of offsite sand sources and the costs of using offsite sources versus sand from adjacent beaches. Offsite sand sources might including local sand mines or sources identified by the CLIENT such as the pond identified by the CLIENT.
- 1.4 Develop Sand Bag Installation Objectives and Criteria. Based on our experience and knowledge of sand bag installation, we will develop a set of installation objectives and guidelines for the bag installation. Placing sand bags on the beach is more of an art than based on technical criteria. This is especially true with the North Topsail renovation because the installation contractor and ENGINEER will have to make judgements at each step if bags can be reused or moved or if new bags are required to achieve the installation objectives. The surveys and assessments will form the baseline for determining what improvements are necessary to the structure.
- 1.5 Preliminary assessment and opinion of probable costs. These surveys and assessments will form the baseline for determining what improvements are necessary to the structure including an estimate of the number of bags and an estimate of the cost associated with improving the bag line as well as a

determination of the level of protection that can be provided. Level of protection is defined in terms of the bag crest elevation, structure width and slope. Base flood elevations (100 year flood) in the area of the existing bag line range from 12 to 18 feet above NAVD 1988. It is not realistic to provide protection for the 100 year event. However protection for the 5, 10 or 25 year event might be feasible within the permitted envelop of a 45 foot base width and 12 feet top elevation.

# 2.0 - PROJECT DESIGN AND PERMITTING

Following receipt of written authorization to proceed with project design and permitting, the ENGINEER shall:

- 2.1 *Final design*. Based on the surveys, assessments and construction criteria and guidelines developed in Task 1.0, prepare a plan for improvement of the bag revetment. The plan will represent our best estimate of the number and layout of bags required to repair the structure and provide the level of protection desired.
- 2.2 *Permitting*. The existing revetment was permitted by N. C. Division of Coastal Management (DCM) under CAMA permit 92-14 and several subsequent modifications and variances granted by the Coastal Resources Commission to provide for a wider and higher sand bag revetment. A new permit or modification will not be required. Notification of DCM and the U. S. Army Corps of Engineers that maintenance is proposed on the permitted revetment is the only permitting proposed as long as any new work remains inside he envelop of the base width 45 feet wide and top elevation of +12.0 feet NAVD.

### 3.0 CONTRACTOR SELECTION AND NEGOTIATION

- 3.1 Assemble Project Construction Team. Engineer will work with the CLIENT to assemble a construction team acceptable to the CLIENT. The Team will include a sand bag contractor with a minimum of 10 years' experience installing sand filled bags and placed a minimum of 10,000 bags on the ocean beach for erosion control. Engineer will prepare Contract Documents for execution by CLIENT and Contractor including the Agreement, General Conditions, and Supplemental General Conditions using the EJCDC format. There is a limited number of Contractors with the knowledge and proven skills to install the sand bags. We will work with the CLIENT to identify and rank those contractors and seek to negotiate a price from the top ranked contractor that is acceptable the CLIENT. If an acceptable price and contract terms cannot be negotiated, we will assist the CLIENT to negotiate with the second Contractor on the list.
- 3.2 Final Construction Opinion of Probable Cost. (Contract Price). In conjunction with the construction team, prepare a final cost estimate construction of the project elements shown in the project plans and specifications. If required, work with the CLIENT and the construction team to revise the project scope, designs and cost opinion to finalize a project scope with costs that are within the CLIENT's budget.

3.3 Attend Town Council Meeting. Present the project design and construction cost estimates to the CLIENT in person for review. Attend one meeting of CLIENT's governing body and answer questions regarding the project design and costs or contract provisions.

# 4.0 CONSTRUCTION ADMINISTRATION

- 4.1 General Administration of the Construction Contract. Consult with and advise the CLIENT and act as their representative as provided in the Standard General Conditions of the Construction Contract. The extent and limitations of the duties of the ENGINEER as assigned in the Standard General Conditions shall not be modified, except as the ENGINEER may agree to in writing. All of CLIENT instructions to the contractor shall be issued through the ENGINEER who will have the authority to act on behalf of the CLIENT to the extent provided in the Standard General Conditions except as otherwise provided in writing.
- 4.2 Visits to the Site and Observation of Construction. Make visits to the site at intervals appropriate to the various stages of Construction as ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress and quality of the various aspects of the contractor(s)' work. Based on information obtained during the site visits and on observations by other members of the project team, the ENGINEER shall endeavor to determine in general if such work is proceeding in accordance with the Contract Documents and the ENGINEER shall keep the CLIENT informed of the progress of the work.
- 4.3 Defective Work. During such site visits and on the basis of observations of the work, the ENGINEER may disapprove of or reject the contractor(s)' work while it is in progress if ENGINEER believes the work will not produce a completed project that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the project as reflected in the Contract Documents.
- 4.4 *Interpretations and Clarifications*. Issue necessary interpretations and clarifications of the Contract Documents and in connection herewith prepare work directive changes or change orders as required.
- 4.5 Shop Drawings. Review and approve (or take action to obtain review and approval by the appropriate member of the project team) Shop Drawings, samples and other data which contractor(s) is required to submit, but only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Such reviews and approvals or other action shall not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto.
- 4.6 Substitutes. Evaluate and determine the acceptability of substitute materials and equipment proposed by the contractor(s).
- 4.7 *Inspections and Tests*. Have authority, as representative of the CLIENT, to require special inspection or testing of the work, and shall receive and review all certificates of inspections, testing and approvals required by laws, rules, regulations, ordinances, codes, orders or the Contract Documents (but only to determine generally that their content complies with the requirements of, and the results certified indicate compliance with the Contract Documents).

- 4.8 Disputes between CLIENT and Contractor. Act as the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the work thereunder and make decisions on all claims of the CLIENT and Contractor relating to the acceptability of the work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the work. ENGINEER shall not be liable for the results of any such interpretations or decisions rendered in good faith.
- 4.9 Applications for Payment. Based on the ENGINEER's on-site observations as an experienced and qualified design professional and upon review of applications for payment and the accompanying data and schedules, the ENGINEER shall determine the amounts owed to the contractor(s) and recommend in writing payments to the contractor(s).
- 4.10 *Inspections*. Conduct an inspection of the work to determine if the work is Substantially Complete and a final inspection to determine if the work is acceptable so that recommendations can be made in writing to the CLIENT for final payment to the Contractor.
- 4.11 *Final Report*. Prepare a post-construction report that includes as-built plans of the sand bag revetment, final bag counts and construction costs, and recommendations for maintenance of the revetment. The intent of the report is to provide the client with a record of the improvements made and the associated costs. Submit the report to the CLIENT.

# ADDITIONAL SERVICES

The work described in the scope of services, paragraphs 1.1 through 4.11 does not include work in the following categories of work. Work in these categories or other services requested by the CLIENT shall be considered Additional Services.

If the CLIENT wishes the ENGINEER to perform any of the following Additional Services, the CLIENT shall so instruct the ENGINEER in writing and ENGINEER shall perform or obtain from others such services and will be paid therefore on an hourly basis in accordance with the rate schedule for professional services for this firm.

- Preparation of applications and supporting documents financial aid for the project.
- Provide Bidding & Negotiation services for the CLIENT.
- Services resulting from significant changes in the general scope, extent or character of the project, or major changes in the documentation previously accepted by the CLIENT where changes are due to causes beyond the ENGINEER's control.
- Providing renderings or models.
- Detailed consideration of operations, maintenance and overhead expenses; value engineering and the preparation of rate schedules, earnings and expense statements, cash flow and economic evaluations, feasibility studies, appraisals and valuations.
- Furnishing the services of environmental scientists, biologists, fisheries scientists, or other specialized scientific testing, evaluations or services not specifically included in the scope of services.
- Preparation of operations and maintenance manuals.

- Surveying services in connection with staking out work of contractor(s).
- Services for obtaining easements or rights-of-way and creating documents for construction or access easements.
- Preparing to serve or serving as ENGINEER or witness in any litigation, arbitration, or other legal or administrative proceeding except where required by the scope of services.
- The services of an independent cost estimator shall be Additional Services.

# PROJECT SCHEDULE

ENGINEER is in a position to begin work on this project on or about April 2, 2018, with completion of surveying by April 20, 2018, preparation of preliminary design and cost estimates for review by the CLIENT on or about May 4, 2018, and final design documents ready for DCM review to CLIENT on or about May 16, 2018. This schedule is preliminary and can be adjusted to conform to specific needs of the CLIENT.

# FEE PROPOSAL

Fees are proposed on a lump sum basis. In lieu of tracking the costs of reproduction and telephone, reimbursable expenses are billed at five (5) percent of labor costs. Travel expenses (mileage only on this project) will be billed at the prevailing IRS allowable rate. Fees for permitting and legal advertisements shall be paid by the CLIENT.

The following fees are proposed:

Task	Description	Labor Total	5% Reimbr.	Task Total
1.0	Surveying and Data Collection			
1.1	Coordinate with Client	\$2,160.00	\$108.00	\$2,268.00
1.2	Topo & condition survey	\$11,950.00	\$597.50	\$12,547.50
1.3	Bag fill sand availability assessment	\$3,420.00	\$171.00	\$3,591.00
1.4	Develop sand bag installation objectives & criteria	\$1,290.00	\$64.50	\$1,354.50
1.5	Preliminary assessment and cost opinion	\$2,460.00	\$123.00	\$2,583.00
2.0	Project Design and Permitting			
2.1	Final Design	\$2,760.00	\$138.00	\$2,898.00
2.2	Permitting	\$3,000.00	\$150.00	\$3,150.00
3.0	Contractor Selection & Negotiation			
3.1	Assemble Project Construction Team	\$2,580.00	\$129.00	\$2,709.00
3.2	Final opinion of probable costs	\$1,380.00	\$69.00	\$1,449.00
3.3	Attend Town Council meeting	\$1,080.00	\$54.00	\$1,134.00
4.0	Construction Administration			
4.1-4.10	Construction admin services, tasks 4.1 thru 4.11	\$11,100.00	\$555.00	\$11,655.00
4.11	Final Report	\$3,240.00	\$162.00	\$3,402.00
	PROJECT SUBTOTALS	\$46,420.00	\$2,321.00	\$48,741.00
	Reimbursable Mileage			\$1,200.00
	Project Totals	\$46,420.00	\$2,321.00	\$49,941.00



# AGREEMENT BETWEEN CLIENT AND ENGINEER

# FOR PROFESSIONAL SERVICES

Project Name: Town of North Topsail Beach, Restoration of Sandbag Revetment for the Town of North Topsail				
Beach Revetment Committee				
ENGINEER's Project No17118				
THIS AGREEMENT is made <i>effective as of</i> the day of, 2018, by and between the <u>Town of North Topsail Beach</u> , a North Carolina Municipality, hereinafter called CLIENT, and ARENDELL ENGINEERS., hereinafter called ENGINEER.				
The CLIENT and ENGINEER for mutual consideration hereinafter set forth, agree as set forth below and as set for in the attached standard provisions:	th			
ENGINEER'S SERVICES: ENGINEER shall perform professional services in connection with the Project as set forth below and contained in this Agreement:				
Services provided shall be as described in the Proposal for Professional Services, Scope of Services attached as <u>Exhibit A, dated March 20, 2018</u> and made a part of this agreement herein.				
2.0 ENGINEER shall start performing services hereunder within 5 days after receipt of CLIENT'S authorization proceed in order to complete the work ready for construction on <a href="May 16">May 16</a> , 2018.	Ю			
3.0 ENGINEER COMPENSATION:				
In accordance with this Agreement, the ENGINEER shall provide professional services for which the CLIENT shall compensate ENGINEER as follows:				
Fees shall be in accordance with Exhibit A, Proposal for Professional Services, Fee Proposal dated <u>Exhibit A, dated March 20,, 2018.</u>				
OTHER:				
3.1 Payments will be made to the ENGINEER on a monthly basis upon presentation of an approved invoice.				
SPECIAL PROVISIONS:				
4.1 The Agreement shall be governed by the laws of the State of North Carolina.				

4.3 The ENGINEER agrees to acquire and maintain professional liability insurance with a limit of at least \$1,000,000 for each claim and an annual aggregate of at least \$2,000,000.

Topsail Beach as additional insured on comprehensive general liability insurance policy.

4.2 The ENGINEER shall acquire and maintain statutory workmen's compensation insurance coverage where

applicable and comprehensive general liability insurance coverage. ENGINEER shall name the Town of North

4.4 In consideration of the substantial risks to the ENGINEER in rendering professional services in connection with this Project, the CLIENT agrees to make no claim and hereby waives, to the fullest extent permitted by

law, any claim or cause of action of any nature against the ENGINEER, its officers, directors, employees, agents or subconsultants, which may arise out of or in connection with this Project or the performance by any of the parties above-named of the services under this Agreement.

- 4.5 In addition, and notwithstanding any other provisions of this Agreement, the CLIENT agrees, to the fullest extent permitted by law, to indemnify and hold harmless the ENGINEER, its officers, directors, employees and subconsultants (collectively, ENGINEER) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising out of or in any way connected with this Project or the performance by any of the parties above-named of the services under this Agreement, excepting only those damages, liabilities or costs attributable to the negligent acts, errors or omissions, or willful misconduct by the ENGINEER.
- 4.6 In recognition of the relative risks and benefits of the Project to both the CLIENT and the ENGINEER, the risks have been allocated such that the CLIENT agrees, to the fullest extent permitted by law, to limit the liability of the ENGINEER and ENGINEER's officers, directors, partners, employees, shareholders, owners and subconsultants for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from causes, including attorneys' fees and costs and expert-witness fees and costs, so that the total aggregate liability of the ENGINEER and ENGINEER's officers, directors, partners, employees, shareholders, owners and subconsultants shall not exceed \$200,000 or the ENGINEER's total fee for services rendered on this Project, whichever is greater. It is intended that this limitation apply only those damages, liabilities or costs attributable to the negligent acts, errors or omissions, or willful misconduct by the ENGINEER.
- 4.7 ENGINEER is not responsible for the identifying, discovering, removal and/or treatment (remediation) of any hazardous waste, known or unknown at the site, nor for the consequences of any hazardous waste materials of any kind at the site, including, but not limited to asbestos and PCB's, as well as materials not yet known as hazardous.
- 4.8 Any notices required to be given under this Agreement may be given by enclosing the same in a sealed envelope, postage prepaid, addressed to the CLIENT at Town Hall, 2008 Loggerhead Court, North Topsail Beach, NC 28460 and to the ENGINEER at 1004 Arendell Street, Morehead City, N.C. 28557 and by depositing same with the U. S. Postal Service. When so given, such notice shall be given from the time of mailing the same.

IN WITNESS THEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

ENGINEER:	CLIENT:
Arendell Engineers	Town of North Topsail Beach
1004 Arendell Street	2008 Loggerhead Court
Morehead City, North Carolina 28557	North Topsail Beach, North Carolina 28460
By: Alle M In	Ву:
Title: TES, DENT	Title:
Date: 3/20/2018	Date:
Witness:	Witness:

# AGREEMENT BETWEEN CLIENT AND ENGINEER

# STANDARD PROVISIONS

#### 1.0 CLIENT 'S RESPONSIBILITY:

The CLIENT shall, unless otherwise provided for in this agreement, at no cost to the ENGINEER:

- 1.1 Furnish all reasonable geotechnical data necessary for the Project including all appropriate professional interpretations. The ENGINEER makes no representations concerning soil conditions and is not responsible for any liability that may arise out of the performance or failure to perform soils investigations and testing.
- 1.2 Guarantee full and free access for the ENGINEER to enter upon all property for the performance of the ENGINEER's services.
- 1.3 Furnish to the ENGINEER all existing studies, reports and other available data and services of others pertinent to the Scope of Services, and obtain additional reports and data as required; and ENGINEER shall be entitled to rely on such information and services in performance of services hereunder.
- 1.4 Give prompt written notice to the ENGINEER whenever the CLIENT observes or otherwise becomes aware of any defect in the Project or other event which may substantially affect the ENGINEER's performance of services under this Agreement.

# 2.0 PAYMENTS TO THE ENGINEER:

- 2.1 Progress payments shall be made in proportion to the services rendered and as indicated within this Agreement and shall be due and owing upon the ENGINEER's submittal of any invoice. Past due amounts owed shall include a late payment charge which will be computed at the interest rate of 0.67 percent per month, which is an Annual Percentage Rate of 8 percent, and will be applied to the balance unpaid 30 days after the date of the original invoice.
- 2.2 The ENGINEER may, upon seven days written notice, suspend services if CLIENT fails to make payments as required in this Agreement.
- 2.3 No deductions shall be made from the ENGINEER's compensation on account of penalty or other sums withheld from payment to Contractors.
- 2.4 Hourly rates and reimbursable expenses shall be subject to periodic revision as stated on the Rate Schedule. In the event revisions are made during the lifetime of this Agreement, the increased or decreased hourly rates and Reimbursable Expenses shall apply to all remaining compensation for services performed by the ENGINEER where such rates provide the basis for the ENGINEER's compensation.
- 2.5 Reimbursable expenses are in addition to ENGINEER's compensation for services performed on an hourly basis and include expenditures made by the ENGINEER, his employees or his consultant(s) in the interest of the project.

- 2.6 If the Project is delayed or if the ENGINEER's services on the project are delayed or suspended for more than three months for reasons beyond the ENGINEER's control, the ENGINEER may, after giving seven days written notice to the CLIENT, terminate this Agreement and the CLIENT shall compensate the ENGINEER in accordance with the termination provision contained hereinafter in this Agreement.
- 2.7 Should collection of overdue fees be necessary, CLIENT shall be responsible for all costs associated with collection, including legal fees.

# 3.0 GENERAL PROVISIONS:

- 3.1 All drawings, Specifications, computer data, and other work data of the ENGINEER for this Project are instruments of service for this Project only. The CLIENT shall not reuse any of the ENGINEER's instruments of service on extensions of this Project or on any other project without the written permission of the ENGINEER. Any unauthorized reuse shall be at the CLIENT'S risk and the CLIENT agrees to hold harmless the ENGINEER from all claims, damages, and expenses including attorney's fees arising out of such unauthorized reuse of the ENGINEER's instruments of service by the CLIENT or by others acting through the CLIENT.
- 3.2 Neither party to this Agreement shall transfer, sublet or assign any rights under or interest in this Agreement (including but not limited to monies that are due or monies that may be due) without prior written consent of the other party. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent ENGINEER from employing such independent associates and consultants as ENGINEER may deem appropriate to assist in the performance of the services hereunder.
- 3.3 This Agreement may be terminated by either party by seven days written notice in the event of substantial failure to perform in accordance with the terms of this Agreement by the other party through no fault of the terminating party. If this Agreement is terminated, the ENGINEER shall be paid for services performed and accepted by the CLIENT through the termination notice date including Reimbursable Expense.
- 3.4 This Agreement represents the entire and integrated agreement between the ENGINEER and CLIENT and supersedes all prior negotiations, representations or agreements, either written or oral. The Agreement may be amended only by written instrument signed by both the CLIENT and the ENGINEER.
- 3.5 In the event the parties to this Agreement are unable to reach a settlement of any fee dispute arising out of the services under this agreement, then such disputes shall be settled by mediation by a mediator to be mutually agreed upon by both parties, and shall proceed in accordance with the Rules of Mediation of the American Arbitration Association then pertaining. If the parties cannot agree on a single mediator, then the mediator(s) shall be selected in accordance with the above-referenced rules.
- 3.6 Should litigation occur between the two parties relating to the provisions of this Agreement, all reasonable litigation expenses, collection expenses, witness fees, court costs and attorney's fees

incurred by the prevailing party shall be paid by the non-prevailing party to the prevailing party.

- 3.7 Neither party shall hold the other responsible for damages caused by acts of God, strikes, lockouts, accidents, or other events beyond the control of the other or the other's employees and agents.
- 3.8 In the event any provisions of this Agreement are held to be invalid or unenforceable, the remaining provisions shall be valid and binding on the parties. One or more waivers by either party of any provision, term, condition or covenant shall not be construed by the other party as a waiver of a subsequent breach of the same by the other party.
- 3.9 The ENGINEER is not responsible for design and construction review services relating to the Contractor's safety precautions or to means, methods, techniques, sequences or procedures required for the Contractor to perform his work. Omitted services include but are not limited to shoring, scaffolding, underpinning, temporary detainment of excavations, and any erection methods and temporary bracing.
- 4.0 The ENGINEER intends to render his services under this agreement in accordance with generally accepted professional practices for the intended use of the Project and makes no warranty either expressed or implied.
- 4.1 Any estimate of construction costs prepared by the ENGINEER represents his judgment as a design professional and is supplied for the general guidance of the CLIENT. Since the ENGINEER has no control over the cost of labor and materials, or over competitive bidding or market conditions, the ENGINEER does not guarantee the accuracy of such estimates as compared to Contractors bids or actual cost to the CLIENT.