



January 27, 2025

Christy Ferguson  
Town Manager  
110 Rothschild Street  
Holden Beach, NC 28462  
Christy.Ferguson@HBTownHall.com

**SUBJECT: Supplemental Information**

Dear Ms. Ferguson,

This letter is to both provide initial project ideas and concerns, and to solicit preferences and perspectives from the Town regarding the repair or replacement of the Holden Beach Pier.

At this point, a complete inspection and structural analysis have not been done but are planned. Until this analysis is completed, the state of the structure, the extent of deterioration, and the assumption that the pier design is structurally adequate cannot be properly assessed to determine the structural integrity of the pier. In particular, this structural uncertainty includes the currently in place and intact timber piles, wooden stringers, and other weight bearing structural members. Intact piles refer to the piles determined as not requiring (or being recommended for) immediate replacement. Once the level of structural integrity is established, determinations as to the estimated extent of repairs, what can be done from the pier deck (top down) versus what would be required to be done from ground-level, and whether any additional supporting structural components need to be added to mitigate any noted deficiencies in the current pier design will be made.

The design team will explore alternatives regarding construction sequencing to provide the best final outcome regarding pier quality, cost, and schedule time. Noting that in-water work can be more expensive along with other factors, a land-outward approach will be considered. Please note that the initial scope has been reorganized to now further separate out the repair and reconstruction alternatives such that the 250-foot extension option is more clearly defined.

When the construction project estimates are provided, it is assumed that the project will go out to bid with a line-item bid sheet, with the total bid being the sum of the various line items. All construction or installation work would be incidental to that line item. For example, if the deck is being replaced, the line item could show 8,000 square feet of deck, asking for the contractor price per square foot installed. The price for this would include the deck materials (wood, screws, etc.), as well as the labor and equipment needed for the work. Different contractors have different means and methods, as well as different personnel and equipment costs. This methodology can provide a more balanced approach and a better understanding of what part of the project is most costly in order to make the best decisions.

[hdrinc.com](http://hdrinc.com)

101 N 3rd Street, Suite 201, Wilmington, NC 28401-4034  
(910) 398-9020

Contained within the final report will be explanations regarding costs, benefits, obstacles, expectations, and final recommendations. As the scoping letter noted, it is impossible to accurately predict damage due to storms and they vary in intensity and duration. This is to be taken into consideration when making recommendations for maintenance and repair intervals and projected estimates as to the costs, including any potential reserve fund recommendations. Plan sheets can be delivered in scale and format suitable for Arch D size paper, or any other sizes as requested.

HDR would greatly appreciate any additional documentation, reports, permits, plans, surveys, etc. that the Town finds and believes may be relevant to the pier, even if the Town is not fully confident in whether the document would be useful for this project.

Sincerely,  
HDR Engineering, Inc. of the Carolinas

A handwritten signature in blue ink that reads "William Fuller". The signature is written in a cursive, flowing style.

William Fuller, EI  
*Project Manager*

**SHORT FORM AGREEMENT BETWEEN OWNER AND  
HDR ENGINEERING, INC. OF THE CAROLINAS FOR PROFESSIONAL  
SERVICES  
AGREEMENT NUMBER \_\_\_\_\_**

**THIS AGREEMENT** is made as of this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, between The Town of Holden Beach (“OWNER”) a municipal corporation, with principal offices at 110 Rothschild Street, Holden Beach, North Carolina 28462, and HDR ENGINEERING, INC. OF THE CAROLINAS, (“ENGINEER” or “CONSULTANT”) for services in connection with the project known as Holden Beach Pier Repair/Replacement (“Project”);

**WHEREAS**, OWNER desires to engage ENGINEER to provide professional engineering, consulting and related services (“Services”) in connection with the Project; and

**WHEREAS**, ENGINEER desires to render these Services as described in SECTION I, Scope of Services.

**NOW, THEREFORE**, OWNER and ENGINEER in consideration of the mutual covenants contained herein, agree as follows:

**SECTION I. SCOPE OF SERVICES**

ENGINEER will provide Services for the Project, which consist of the Scope of Services as outlined on the attached Exhibit A.

**SECTION II. TERMS AND CONDITIONS OF ENGINEERING SERVICES**

The HDR Engineering, Inc. of the Carolinas Terms and Conditions, which are attached hereto in Exhibit B, are incorporated into this Agreement by this reference as if fully set forth herein.

**SECTION III. RESPONSIBILITIES OF OWNER**

The OWNER shall provide the information set forth in paragraph 6 of the attached “HDR Engineering, Inc. of the Carolinas Terms and Conditions for Professional Services.”

**SECTION IV. COMPENSATION**

Compensation for ENGINEER’S services under this Agreement shall be on the basis of lump sum consisting of the Scope of Services Option 01 as outlined on the attached Exhibit A. The amount of the Option 01 lump sum is Two Hundred and Twenty-Nine Thousand Four Hundred and Thirty Dollars (\$ 229,430).

- Compensation for ENGINEER'S services under this Agreement shall be on the basis of lump sum consisting of the Scope of Services Option 02 as outlined on the attached Exhibit A. The amount of the Option 02 lump sum is Two Hundred and Fifty Thousand Eight Hundred and Seventy Dollars (\$ 250,870).

The amount of any sales tax, excise tax, value added tax (VAT), or gross receipts tax that may be imposed on this Agreement shall be added to the ENGINEER'S compensation as Reimbursable Expenses.

Compensation terms are defined as follows:

Lump Sum shall mean a fixed amount which shall be the total compensation agreed upon in advance for Scope of Services.

#### **SECTION V. PERIOD OF SERVICE**

Upon receipt of written authorization to proceed, ENGINEER shall perform the services described in Exhibit A within a reasonable period of time.

within the time period(s) described in Exhibit A.

as follows:

Unless otherwise stated in this Agreement, the rates of compensation for ENGINEER'S services have been agreed to in anticipation of the orderly and continuous progress of the project through completion. If any specified dates for the completion of ENGINEER'S services are exceeded through no fault of the ENGINEER, the time for performance of those services shall be automatically extended for a period which may be reasonably required for their completion and all rates, measures and amounts of ENGINEER'S compensation shall be equitably adjusted.

**SECTION VI. SPECIAL PROVISIONS**

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

\_\_\_\_\_  
"OWNER"

BY: \_\_\_\_\_

NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

HDR ENGINEERING, INC. OF THE  
CAROLINAS  
"ENGINEER"

BY: \_\_\_\_\_



NAME: \_\_\_\_\_

Jonathan Henderson

TITLE: \_\_\_\_\_

Area Manager / Senior Vice  
President

ADDRESS: \_\_\_\_\_

555 Fayetteville Street, Suite  
900

Raleigh, NC 27601  
\_\_\_\_\_

**EXHIBIT A**  
**SCOPE OF SERVICES**



January 27, 2025

Christy Ferguson  
Town Manager  
110 Rothschild Street  
Holden Beach, NC 28462  
Christy.Ferguson@HBTownHall.com

**SUBJECT: REVISED Holden Beach Pier Repair or Replacement Engineering Contract Scope**

Dear Ms. Ferguson,

Thank you for the opportunity for HDR Engineering, Inc. of the Carolinas (HDR) to provide this scope and fee proposal to support the Town of Holden Beach (Town) with preliminary design and cost estimating services related to revitalizing the Town's historic fishing pier. HDR's scope of services for this preliminary design include project management and administration oversight, subconsultant management and oversight, a preliminary design and 30-year life cycle maintenance plan based on a repairs approach, a preliminary design and 30-year life cycle maintenance plan based on a full reconstruction approach, and comprehensive Class 3 cost estimations for both designs and life cycle maintenance plans.

**HDR PROPOSED SCOPE OF WORK**

Task 1: Project Management and Administration

HDR will perform the following project administrative functions for the project:

- a) Create a detailed project schedule that covers receiving HDR's Notice to Proceed (NTP) through HDR's completion of services and final scoped deliverables.
- b) Record summaries of coordination meetings between HDR and the Town for the Town's records. The Town will be provided with a draft summary and have the opportunity to review and provide comments before the summaries are finalized.
- c) Coordinate and participate in a kickoff meeting with Town staff following NTP.
- d) Attend and participate in monthly progress meetings with the Town while the project remains active.
- e) Hold bi-weekly HDR internal project staff meetings to monitor and coordinate progress while the project remains active.
- f) Prepare monthly project invoices.
- g) HDR will coordinate subcontractor activities to include:



- i. An underwater structural inspection by Collins Engineers, Inc.
- ii. Geotechnical borings by Catlin Engineers and Scientists
- iii. A beach profile survey by McKim & Creed

#### *Administrative Assumptions*

- 1) Local HDR staff will attend monthly in-person meetings with the Town. Additional HDR staff may attend virtual meetings on an as-needed basis. HDR anticipates seven (7) monthly meetings.
- 2) HDR internal meetings will only be attended by the project manager and the leads for each discipline who are actively involved in project design. Maximum of fourteen (14) meetings one-hour in duration.

#### *Administrative Deliverables*

- Complete project schedule following receipt of NTP.
- Summaries from meetings and coordination with the Town or Town staff.

#### Task 2: Geotechnical Services

HDR will provide the following geotechnical services to support both of the repair and reconstruction designs:

- a) HDR will provide the following discussions and/or design recommendations to the structural design team:
  - i. Stratigraphy and parameters for lateral analysis (one set of parameters for each terminal)
  - ii. Pile Drivability Analysis (one analysis for each terminal)
- b) HDR will summarize the geotechnical results and recommendations into a Geotechnical Recommendation Letter.

#### *Task 2 Assumptions*

- 1) Geotechnical boring data will be referenced from the October 2023 "Project Manual" document the Town provided to HDR on January 17, 2025. By using this report, the collection of additional borings will not be required.

#### *Task 2 Deliverables*

- Geotechnical Recommendation Letter



### Task 3: Coastal Services

HDR will perform coastal engineering services to support both the pier repair and reconstruction designs. The subconsultant, McKim & Creed, will provide surveying support services. The following services will be performed as part of this task:

- a) Perform a meteorological and oceanographic analysis to obtain, collate, and compile readily available information on tides, wind, storm surge, and wave conditions.
- b) Assess relative sea level rise (RSLR) based on the NOAA 2022 Sea Level Rise and Coastal Flood Hazard Scenarios and Tools Interagency Task Force report.
- c) Perform cursory wave analysis utilizing readily available information from U.S. Army Corps of Engineers (USACE), NOAA, and other entities.
- d) Develop wave loadings based on the cursory wave analysis and proposed bent geometry. Loadings will be developed based on the AASHTO Guidelines for Bridges Vulnerable to Coastal Storms with 2010 errata.
- e) Perform a scour analysis for the piers using the cursory wave analysis and methodology from HEC-18. Methods may also consider the USACE Coastal Engineering Manual.
- f) Review historical shoreline change values published by the NC Department of Environmental Quality Division of Coastal Management.
- g) Six (6) beach profile transects are to be collected by the subconsultant McKim & Creed. The beach profiles will be collected such that:
  - i. Coverage in the cross-shore direction includes the start of the pier extending offshore to 500' beyond the ending location of the pier's full 1,000' length, at minimum
  - ii. Coverage in the alongshore direction includes three transects to each side of the pier, with the first occurring as close to the pier as possible, and the remaining transects separated by 100' spacings
  - iii. The hydrographic portion will be collected by a single-beam survey

### Task 3 Assumptions

- 1) This proposal does not include a beach morphology analysis. Beach morphology will be characterized at a conceptual level based on readily available historical information and previous studies by others.
- 2) Numerical modeling of waves, currents, and sediment transport are not included in this proposal. If a full pier replacement is pursued numerical modeling may be required to refine some of the design values.

### **Task 3 Deliverables**

- Coastal Meteorological and Oceanographic Report
- Beach profile survey raw data file(s)

### **Task 4: Preliminary Repair Design**

The subconsultant, Collins Engineers, Inc., will provide underwater inspection support services and HDR will perform the following services during the preliminary repair design:

- a) HDR will conduct a condition assessment of the pier structure according to *ASCE MOP 130 – Waterfront Facilities Inspection and Assessment* to identify the extent of required repairs above water. The assessment will be coordinated and overseen by the project's structural lead. A total of two (2) HDR staff will perform the assessment. The assessment will include:
  - i. Measuring sections for typical timber members
  - ii. Types of defects
  - iii. Size of defects
  - iv. Location of defects
- b) An underwater structural inspection, performed by the subconsultant Collins Engineers, Inc., from mudline to waterline for 30 submerged bents having 2 piles per bent. The inspection will involve Type 1 inspections on 100% of piles and Type 3 inspections (to include resistance testing) on 10% of piles. The inspection report is to include:
  - i. Method of inspection
  - ii. Existing Conditions and Summary of Inspection Findings
  - iii. Evaluation and Recommendations
  - iv. Above and below water photographs (as conditions permit)
  - v. Bent elevation drawings locating quantity and location of each deficiency
- c) Provide updated project completion schedule based on condition assessment and subcontractor inspection findings.
- d) Create a preliminary design covering a full repair of the pier structure, including estimated construction timeline.
- e) Create a Class 3 cost estimate covering all components of the preliminary repair design based off results from the newly performed underwater structural inspection, above water structural inspection, and geotechnical borings.
- f) Develop a draft maintenance and repair plan that shall include annual life cycle cost estimates for a 30-year period. The maintenance plan shall include periodic inspections.

#### ***Task 4 Assumptions***

- 1) An underwater structural investigation is necessary due to the previous investigation occurring in April 2022 was a Class 1 inspection and did not include any Class 3 inspections.
- 2) The amount of man hours estimated by HDR to be necessary for the repair design is only based on the information that was provided to HDR prior to any Notice to Proceed (NTP). The results of the inspections outlined in this Task may require additional repair work. HDR assumes the repair scope of work:
  - i. Does not require additional cuts, braces, holes drilled, or additional supports below water level.
  - ii. Does not require the replacement of currently intact pilings.
  - iii. Does not require structural redesign and the current design is at minimum appropriate for any lateral loads due to non-extreme surf conditions (tides, waves, surges within standard design criteria, etc.).
- 3) All water/electrical utilities will need to be replaced.
- 4) The design plans will be at the preliminary level and will include relevant drawings, standard details, and general design notes. Drawings will include typical:
  - i. Plan views
  - ii. Section views
  - iii. Elevation views

#### ***Task 4 Deliverables***

- Underwater inspection report from subconsultant Collins Engineers, Inc.
- Above water condition assessment report performed by HDR
- Plans for a preliminary design level repair alternative
- 30-year draft lifecycle maintenance and repair plan
- Class 3 cost estimates for the preliminary repair design and draft maintenance plan
- Estimated construction timeline for the repair design alternative

#### **Task 5: Preliminary Reconstruction Design**

HDR will perform the following services during the preliminary reconstruction design:

- a) Create a preliminary design covering a full reconstruction of the pier structure, including estimated construction timeline.
- b) Create a Class 3 cost estimate covering all components of the preliminary reconstruction design.

- c) Develop a draft maintenance and repair plan that shall include annual life cycle cost estimates for a 30-year period. The maintenance plan shall include periodic inspections.

**Task 5 Assumptions**

- 1) The design plans will be at the preliminary level and will include relevant drawings, standard details, and general design notes. Drawings will include typical:
  - i. Plan views
  - ii. Section views
  - iii. Elevation views

**Task 5 Deliverables**

- Plans for a preliminary design level reconstruction alternative
- 30-year draft lifecycle maintenance and repair plan
- Class 3 cost estimates for the preliminary reconstruction design and draft maintenance plan
- Estimated construction timeline for the reconstruction design alternative

**Task 6: Preliminary 250-Foot Extension Design**

HDR will perform the following services in support of a preliminary design of a 250-foot pier extension:

- a) Create a preliminary design covering a 250-foot extension to the pier, including estimated construction timeline.
- b) Create a Class 3 cost estimate covering all components of the 250-foot extension preliminary design.

**Task 6 Assumptions**

- 1) The design plans will be at the preliminary level and will include relevant drawings, standard details, and general design notes. Drawings will include typical:
  - i. Plan views
  - ii. Section views
  - iii. Elevation views
- 2) The lifecycle and maintenance repair plans drafted for the repair and reconstruction alternatives will each include the 250-foot extension.

### *Task 6 Deliverables*

- Plans for a preliminary design level 250-foot pier extension for both repair and reconstruction alternatives
- Class 3 cost estimates for the preliminary 250-foot extension designs
- Estimated construction timeline for the pier extension design alternative

### *General Project Assumptions*

- 1) A CAMA permit or permit decision will be required by regulatory agencies and the Town is responsible for permit acquisition.
- 2) The maintenance plans for both design options will not include damage projections related to hurricane, storm, or other natural disaster events. Such events are unpredictable in both frequency and intensity so meaningful projections are not feasible.
- 3) Project recommendations and design criteria will take current sea level rise projects into consideration for both the repair and reconstruction design process.
- 4) The Town will issue a building permit for either the repair or reconstruction options.
- 5) The anchor building connected to the base of the pier is not included during considerations for either design plan.
- 6) Current applicable ADA standards and requirements will be implemented for both repair and reconstruction design plan options.
- 7) HDR Engineering staff will visit the site and perform or witness inspections as required.
- 8) If the necessary condition assessment and inspections are completed and a review determines that either:
  - i. The pier's current condition is substantially deteriorated such that structural integrity is seriously compromised;
  - ii. The current structural elevation of the pier is determined (by HDR) to not be sufficient for the projected lifetime of the structure following a projected sea level rise analysis,

in which case a recommendation will be made by HDR for the Town to cease further repair design efforts and only focus further efforts on the reconstruction design option. This recommendation would only be made in order to save the Town time and costs that would be unnecessarily incurred from pursuit of a repair scenario HDR has determined to be unfeasible. If the Town still requests completion of the preliminary repair design phase following HDR's recommendation, then HDR will still complete the preliminary repair design as otherwise outlined in this scope.

### *General Project Deliverables*

- Final report summarizing and discussing project results and any recommended actions

## FEE

HDR proposes to provide the **Task 1-5** services (Option 01) on a lump sum basis for a total amount of **Two Hundred and Twenty-Nine Thousand Four Hundred and Thirty Dollars (\$229,430)**. HDR proposes to provide the **Task 1-6** services (Option 02) on a lump sum basis for a total amount of **Two Hundred and Fifty Thousand Eight Hundred and Seventy Dollars (\$250,870)**. A summary for each major task is listed below. No other services are presently expected. However, if additional services do become necessary, we will acquire authorization in advance from the Town and bill for these in accordance with HDR's most current rate schedule or at an agreed to lump sum fee. This Proposal is valid for 30 days.

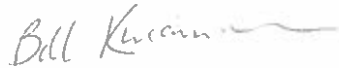
Task	Amount Per Task
Task 1: Project Management and Administration	\$38,227.54
Task 2: Geotechnical Services	\$17,444.10
Task 3: Coastal Services	\$29,520.66
Task 4: Preliminary Repair Design	\$92,543.81
Task 5: Preliminary Reconstruction Design	\$51,691.35
Task 6: Preliminary 250-Foot Pier Extension	\$21,442.11
<b>Total Proposed Budget (Tasks 1-5):</b>	<b>\$229,430.00</b>
<b>Total Proposed Budget (Tasks 1-6):</b>	<b>\$250,870.00</b>

## PERFORMANCE SCHEDULE

The following tasks are planned to be completed within the timeline indicated below, counted forward from the date the Town issues the Notice to Proceed.

Task	Start (Months)	End (Months)
<b>Data Gathering &amp; Review</b>	NTP	0.5
<b>Structural Conditions Investigation &amp; Assessment</b>	0.5	2
<b>Geotechnical Investigations &amp; Reporting</b>	0.5	2
<b>Draft Preliminary Reconstruction Design &amp; Cost Estimate</b>	1	5
<b>Draft Preliminary Repair Design &amp; Cost Estimate</b>	1.5	5
<b>Draft Preliminary Design Maintenance &amp; Repair Plans</b>	2.5	5
<b>Town Review &amp; Comment</b>	5	6
<b>Finalize Draft Plans</b>	6	7

Sincerely,  
**HDR Engineering, Inc. of the Carolinas**

Handwritten signature of Bill Kincannon in black ink.

**Bill Kincannon, PE**  
*Senior Project Manager*

Handwritten signature of Jonathan Henderson in blue ink.

**Jonathan Henderson, PE, SVP**  
*Area Manager*

**EXHIBIT B**

**TERMS AND CONDITIONS**



# HDR Engineering, Inc. of the Carolinas Terms and Conditions for Professional Services

## 1. STANDARD OF PERFORMANCE

The standard of care for all professional engineering, consulting and related services performed or furnished by ENGINEER and its employees under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under the same or similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.

## 2. INSURANCE/INDEMNITY

ENGINEER agrees to procure and maintain, at its expense, Workers' Compensation insurance as required by statute; Employer's Liability of \$250,000; Automobile Liability insurance of \$1,000,000 combined single limit for bodily injury and property damage covering all vehicles, including hired vehicles, owned and non-owned vehicles; Commercial General Liability insurance of \$1,000,000 combined single limit for personal injury and property damage; and Professional Liability insurance of \$1,000,000 per claim for protection against claims arising out of the performance of services under this Agreement caused by negligent acts, errors, or omissions for which ENGINEER is legally liable. If flying an Unmanned Aerial System (UAS or drone), ENGINEER will procure and maintain aircraft unmanned aerial systems insurance of \$1,000,000 per occurrence.

OWNER shall be made an additional insured on Commercial General and Automobile Liability insurance policies and certificates of insurance will be furnished to the OWNER. ENGINEER agrees to indemnify OWNER for third party personal injury and property damage claims to the extent caused by ENGINEER's negligent acts, errors or omissions. However, neither Party to this Agreement shall be liable to the other Party for any special, incidental, indirect, or consequential damages (including but not limited to loss of use or opportunity; loss of good will; cost of substitute facilities, goods, or services; cost of capital; and/or fines or penalties), loss of profits or revenue arising out of, resulting from, or in any way related to the Project or the Agreement from any cause or causes, including but not limited to any such damages caused by the negligence, errors or omissions, strict liability or breach of contract. The employees of both parties are intended third party beneficiaries of this waiver of consequential damages.

## 3. OPINIONS OF PROBABLE COST

Any opinions of probable project cost or probable construction cost provided by ENGINEER are made on the basis of information available to ENGINEER and on the basis of ENGINEER's experience and qualifications, and represents its judgment as an experienced and qualified professional engineer. However, since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s)' methods of determining prices, or over competitive bidding or market conditions, ENGINEER does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost ENGINEER prepares.

## 4. CONSTRUCTION PROCEDURES

ENGINEER's observation or monitoring portions of the work performed under construction contracts shall not relieve the contractor from its responsibility for performing work in accordance with applicable contract documents. ENGINEER shall not control or have charge of, and shall not be responsible for, construction means, methods, techniques, sequences, procedures of construction, health or safety programs or precautions connected with the work and shall not manage, supervise, control or have charge of construction. ENGINEER shall not be responsible for the acts or omissions of the contractor or other parties on the project. ENGINEER shall be

entitled to review all construction contract documents and to require that no provisions extend the duties or liabilities of ENGINEER beyond those set forth in this Agreement. OWNER agrees to include ENGINEER as an indemnified party in OWNER's construction contracts for the work, which shall protect ENGINEER to the same degree as OWNER. Further, OWNER agrees that ENGINEER shall be listed as an additional insured under the construction contractor's liability insurance policies.

## 5. CONTROLLING LAW

This Agreement is to be governed by the law of the state where ENGINEER's services are performed.

## 6. SERVICES AND INFORMATION

OWNER will provide all criteria and information pertaining to OWNER's requirements for the project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations. OWNER will also provide copies of any OWNER-furnished Standard Details, Standard Specifications, or Standard Bidding Documents which are to be incorporated into the project.

OWNER will furnish the services of soils/geotechnical engineers or other consultants that include reports and appropriate professional recommendations when such services are deemed necessary by ENGINEER. The OWNER agrees to bear full responsibility for the technical accuracy and content of OWNER-furnished documents and services.

In performing professional engineering and related services hereunder, it is understood by OWNER that ENGINEER is not engaged in rendering any type of legal, insurance or accounting services, opinions or advice. Further, it is the OWNER's sole responsibility to obtain the advice of an attorney, insurance counselor or accountant to protect the OWNER's legal and financial interests. To that end, the OWNER agrees that OWNER or the OWNER's representative will examine all studies, reports, sketches, drawings, specifications, proposals and other documents, opinions or advice prepared or provided by ENGINEER, and will obtain the advice of an attorney, insurance counselor or other consultant as the OWNER deems necessary to protect the OWNER's interests before OWNER takes action or forebears to take action based upon or relying upon the services provided by ENGINEER.

## 7. SUCCESSORS, ASSIGNS AND BENEFICIARIES

OWNER and ENGINEER, respectively, bind themselves, their partners, successors, assigns, and legal representatives to the covenants of this Agreement. Neither OWNER nor ENGINEER will assign, sublet, or transfer any interest in this Agreement or claims arising therefrom without the written consent of the other. No third party beneficiaries are intended under this Agreement.

## 8. RE-USE OF DOCUMENTS

All documents, including all reports, drawings, specifications, computer software or other items prepared or furnished by ENGINEER pursuant to this Agreement, are instruments of service with respect to the project. ENGINEER retains ownership of all such documents. OWNER may retain copies of the documents for its information and reference in connection with the project; however, none of the documents are intended or represented to be suitable for reuse by OWNER or others on extensions of the project or on any other project. Any reuse without written verification or adaptation by ENGINEER for the specific purpose intended will be at OWNER's sole risk and without liability or legal exposure to ENGINEER, and OWNER will defend, indemnify and hold harmless ENGINEER from all claims, damages, losses and expenses, including attorney's fees,

arising or resulting therefrom. Any such verification or adaptation will entitle ENGINEER to further compensation at rates to be agreed upon by OWNER and ENGINEER.

#### 9. TERMINATION OF AGREEMENT

OWNER or ENGINEER may terminate the Agreement, in whole or in part, by giving seven (7) days written notice to the other party. Where the method of payment is "lump sum," or cost reimbursement, the final invoice will include all services and expenses associated with the project up to the effective date of termination. An equitable adjustment shall also be made to provide for termination settlement costs ENGINEER incurs as a result of commitments that had become firm before termination, and for a reasonable profit for services performed.

#### 10. SEVERABILITY

If any provision of this agreement is held invalid or unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any provision, term or condition shall not be construed by the other party as a waiver of any subsequent breach of the same provision, term or condition.

#### 11. INVOICES

ENGINEER will submit monthly invoices for services rendered and OWNER will make payments to ENGINEER within thirty (30) days of OWNER's receipt of ENGINEER's invoice.

ENGINEER will retain receipts for reimbursable expenses in general accordance with Internal Revenue Service rules pertaining to the support of expenditures for income tax purposes. Receipts will be available for inspection by OWNER's auditors upon request.

If OWNER disputes any items in ENGINEER's invoice for any reason, including the lack of supporting documentation, OWNER may temporarily delete the disputed item and pay the remaining amount of the invoice. OWNER will promptly notify ENGINEER of the dispute and request clarification and/or correction. After any dispute has been settled, ENGINEER will include the disputed item on a subsequent, regularly scheduled invoice, or on a special invoice for the disputed item only.

OWNER recognizes that late payment of invoices results in extra expenses for ENGINEER. ENGINEER retains the right to assess OWNER interest at the rate of one percent (1%) per month, but not to exceed the maximum rate allowed by law, on invoices which are not paid within thirty (30) days from the date OWNER receives ENGINEER's invoice. In the event undisputed portions of ENGINEER's invoices are not paid when due, ENGINEER also reserves the right, after seven (7) days prior written notice, to suspend the performance of its services under this Agreement until all past due amounts have been paid in full.

#### 12. CHANGES

The parties agree that no change or modification to this Agreement, or any attachments hereto, shall have any force or effect unless the change is reduced to writing, dated, and made part of this Agreement. The execution of the change shall be authorized and signed in the same manner as this Agreement. Adjustments in the period of services and in compensation shall be in accordance with applicable paragraphs and sections of this Agreement. Any proposed fees by ENGINEER are estimates to perform the services required to complete the project as ENGINEER understands it to be defined. For those projects involving conceptual or process development services, activities often are not fully definable in the initial planning. In any event, as the project progresses, the facts developed may dictate a change in the services to be performed, which may alter the scope. ENGINEER will inform OWNER of such situations so that changes in scope and adjustments to the time of performance and compensation can be made as required. If such change, additional services, or suspension of services results in an increase or decrease in the cost of or time required for performance

of the services, an equitable adjustment shall be made, and the Agreement modified accordingly.

#### 13. CONTROLLING AGREEMENT

These Terms and Conditions shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice-to-proceed, or like document.

#### 14. EQUAL EMPLOYMENT AND NONDISCRIMINATION

In connection with the services under this Agreement, ENGINEER agrees to comply with the applicable provisions of federal and state Equal Employment Opportunity for individuals based on color, religion, sex, or national origin, or disabled veteran, recently separated veteran, other protected veteran and armed forces service medal veteran status, disabilities under provisions of executive order 11246, and other employment, statutes and regulations, as stated in Title 41 Part 60 of the Code of Federal Regulations § 60-1.4 (a-f), § 60-300.5 (a-e), § 60-741 (a-e).

#### 15. HAZARDOUS MATERIALS

OWNER represents to ENGINEER that, to the best of its knowledge, no hazardous materials are present at the project site. However, in the event hazardous materials are known to be present, OWNER represents that to the best of its knowledge it has disclosed to ENGINEER the existence of all such hazardous materials, including but not limited to asbestos, PCB's, petroleum, hazardous waste, or radioactive material located at or near the project site, including type, quantity and location of such hazardous materials. It is acknowledged by both parties that ENGINEER's scope of services do not include services related in any way to hazardous materials. In the event ENGINEER or any other party encounters undisclosed hazardous materials, ENGINEER shall have the obligation to notify OWNER and, to the extent required by law or regulation, the appropriate governmental officials, and ENGINEER may, at its option and without liability for delay, consequential or any other damages to OWNER, suspend performance of services on that portion of the project affected by hazardous materials until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the hazardous materials; and (ii) warrants that the project site is in full compliance with all applicable laws and regulations. OWNER acknowledges that ENGINEER is performing professional services for OWNER and that ENGINEER is not and shall not be required to become an "arranger," "operator," "generator," or "transporter" of hazardous materials, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA), which are or may be encountered at or near the project site in connection with ENGINEER's services under this Agreement. If ENGINEER's services hereunder cannot be performed because of the existence of hazardous materials, ENGINEER shall be entitled to terminate this Agreement for cause on 30 days written notice. To the fullest extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER, its officers, directors, partners, employees, and subconsultants from and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused by, arising out of or resulting from hazardous materials, provided that (i) any such cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or injury to or destruction of tangible property (other than completed Work), including the loss of use resulting therefrom, and (ii) nothing in this paragraph shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's sole negligence or willful misconduct.

#### 16. EXECUTION

This Agreement, including the exhibits and schedules made part hereof, constitute the entire Agreement between ENGINEER and

OWNER, supersedes and controls over all prior written or oral understandings. This Agreement may be amended, supplemented or modified only by a written instrument duly executed by the parties.

**17. ALLOCATION OF RISK**

**OWNER AND ENGINEER HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING ENGINEER'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE RISKS, SO, TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF ENGINEER (AND ITS RELATED CORPORATIONS, SUBCONSULTANTS AND EMPLOYEES) TO OWNER AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE LESSER OF \$1,000,000 OR ITS FEE, FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF ENGINEER'S SERVICES OR THIS AGREEMENT REGARDLESS OF CAUSE(S) OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY. ENGINEER'S AND SUBCONSULTANTS' EMPLOYEES ARE INTENDED THIRD PARTY BENEFICIARIES OF THIS ALLOCATION OF RISK.**

**18. LITIGATION SUPPORT**

In the event ENGINEER is required to respond to a subpoena, government inquiry or other legal process related to the services in connection with a legal or dispute resolution proceeding to which ENGINEER is not a party, OWNER shall reimburse ENGINEER for reasonable costs in responding and compensate ENGINEER at its then standard rates for reasonable time incurred in gathering information and documents and attending depositions, hearings, and trial.

**19. NO THIRD PARTY BENEFICIARIES**

Except as otherwise provided in this Agreement, no third party beneficiaries are intended under this Agreement. In the event a reliance letter or certification is required under the scope of services, the parties agree to use a form that is mutually acceptable to both parties.

**20. UTILITY LOCATION**

If underground sampling/testing is to be performed, a local utility locating service shall be contacted to make arrangements for all utilities to determine the location of underground utilities. In addition, OWNER shall notify ENGINEER of the presence and location of any underground utilities located on the OWNER's property which are not the responsibility of private/public utilities. ENGINEER shall take reasonable precautions to avoid damaging underground utilities that are properly marked. The OWNER agrees to waive any claim against ENGINEER and will indemnify and hold ENGINEER harmless from any claim of liability, injury or loss caused by or allegedly caused by ENGINEER's damaging of underground utilities that are not properly marked or are not called to ENGINEER's attention prior to beginning the underground sampling/testing.

**21. UNMANNED AERIAL SYSTEMS**

If operating UAS, ENGINEER will obtain all permits or exemptions required by law to operate any UAS included in the services. ENGINEER's operators have completed the training, certifications and licensure as required by the applicable jurisdiction in which the UAS will be operated. OWNER will obtain any necessary permissions for ENGINEER to operate over private property, and assist, as necessary, with all other necessary permissions for operations.

**22. OPERATIONAL TECHNOLOGY SYSTEMS**

OWNER agrees that the effectiveness of operational technology systems and features designed, recommended or assessed by ENGINEER (collectively "OT Systems") are dependent upon OWNER's continued operation and maintenance of the OT Systems

in accordance with all standards, best practices, laws, and regulations that govern the operation and maintenance of the OT Systems. OWNER shall be solely responsible for operating and maintaining the OT Systems in accordance with applicable laws, regulations, and industry standards (e.g. ISA, NIST, etc.) and best practices, which generally include but are not limited to, cyber security policies and procedures, documentation and training requirements, continuous monitoring of assets for tampering and intrusion, periodic evaluation for asset vulnerabilities, implementation and update of appropriate technical, physical, and operational standards, and offline testing of all software/firmware patches/updates prior to placing updates into production. Additionally, OWNER recognizes and agrees that OT Systems are subject to internal and external breach, compromise, and similar incidents. Security features designed, recommended or assessed by ENGINEER are intended to reduce the likelihood that OT Systems will be compromised by such incidents. However, ENGINEER does not guarantee that OWNER's OT Systems are impenetrable and OWNER agrees to waive any claims against ENGINEER resulting from any such incidents that relate to or affect OWNER's OT Systems.

**23. FORCE MAJEURE**

ENGINEER shall not be responsible for delays caused by factors beyond ENGINEER's reasonable control, including but not limited to delays because of strikes, lockouts, work slowdowns or stoppages, government ordered industry shutdowns, power or server outages, acts of nature, widespread infectious disease outbreaks (including, but not limited to epidemics and pandemics), failure of any governmental or other regulatory authority to act in a timely manner, failure of the OWNER to furnish timely information or approve or disapprove of ENGINEER's services or work product, or delays caused by faulty performance by the OWNER's or by contractors of any level or any other events or circumstances not within the reasonable control of the party affected, whether similar or dissimilar to any of the foregoing. When such delays beyond ENGINEER's reasonable control occur, the OWNER agrees that ENGINEER shall not be responsible for damages, nor shall ENGINEER be deemed in default of this Agreement, and the parties will negotiate an equitable adjustment to ENGINEER's schedule and/or compensation if impacted by the force majeure event or condition.

**24. EMPLOYEE IMMUNITY**

The parties to this Agreement acknowledge that an individual employee or agent may not be held individually liable for negligence with regard to services provided under this Agreement. To the maximum extent permitted by law, the parties intend i) that this limitation on the liability of employees and agents shall include directors, officers, employees, agents and representatives of each party and of any entity for whom a party is legally responsible, and ii) that any such employee or agent identified by name in this Agreement shall not be deemed a party. Specifically, in the event that all or a portion of the services is performed in the State of Florida, the following provision shall be applicable:

**THE PARTIES ACKNOWLEDGE THAT PURSUANT TO APPLICABLE FLORIDA STATUTES AN INDIVIDUAL EMPLOYEE OR AGENT MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE WITH REGARD TO SERVICES PROVIDED UNDER THIS AGREEMENT. To the maximum extent permitted by law, the Parties intend i) that this limitation on the liability of employees**

and agents shall include directors, officers, employees, agents and representatives of each Party and of any entity for whom a Party is legally responsible, and ii) that any such employee or agent identified by name in this Agreement shall not be deemed a Party. The Parties further acknowledge that the Florida statutes referred to above include but are not limited to: §558.0035(1)(a)-(e); §471.023(3) (an engineer is personally liable for negligence except as provided in § 558.0035); §472.021(3) (surveyor and mapper); §481.219(11) (architect and interior designer); §481.319(6) (landscape architect); and §492.111(4) (geologist).