PORT OF GALVESTON
REQUEST FOR DISCUSSION AND
TRUSTEES ACTION

BUSINESS ITEM

PREPARED BY: Jeffrey Thomas  Chief Engineer  December 17, 2019

SUBJECT: Consider and Approve Award of Professional Services Agreement for Engineering Services for the design of Utilities and Roadways for the Cruise Terminal 3 Development Between the Board of Trustees of the Galveston Wharves and Freese and Nichols, Inc. For an Amount Not to Exceed $800,320

BACKGROUND: Concurrent with the development of the Royal Caribbean Ground Lease, Port Staff have been working to qualify and negotiate a Scope of work and Fee with an Engineering firm to provide the Civil Engineering Support needed to design access roads, parking areas, and utility infrastructure for the Cruise Terminal 3 Project through an RFQ Process. Port staff were able to successfully negotiate a scope of work and fee with Freese and Nichols, Inc. for the design of the utilities and roadways required for Cruise Terminal 3 development. The Professional Services Agreement in the amount of $800,320.00, includes, Preliminary Engineering, Geotechnical Engineering, a Hydraulics and Hydrology Study, Detailed Design, and Bid Phase Services for the 15 AC project site, generally located north east of intersection of 14th Street and Harborside Dr. The detailed design of the parking areas, which were initially included in these negotiations, were removed from the Scope of Work for this agreement until Port Staff can develop a more comprehensive design criteria for the surface parking areas. Once Staff finishes developing the design criteria for the surface parking area and negotiates a successful scope of work and fee, they will bring a separate business item back to the Board of Trustees for approval.

RECOMMENDATIONS: The Board of Trustees is respectfully requested to listen to the briefing of the Port Director and approve the Port Director to enter into a Professional Service Agreement for Engineering Services for the design of utilities and roadways for the Cruise Terminal 3 Development with Freese and Nichols, Inc. for an amount not to Exceed $800,320.

Respectfully Submitted By:

Rodger Rees, Port Director/CEO

DATE ACTION TAKEN: ____________

Approved: ____________  Motion By: ____________
Disapproved: ____________  Seconded By: ____________
Deferred To: ____________  Unanimous: Yes ___ No ___
Incorporated into Minutes: ____________  By: ____________
PORT OF GALVESTON

CONSIDER AND APPROVE AWARD OF PROFESSIONAL SERVICES AGREEMENT FOR ENGINEERING SERVICES FOR THE DESIGN OF UTILITIES AND ROADWAYS FOR THE CRUISE TERMINAL 3 DEVELOPMENT BETWEEN THE BOARD OF TRUSTEES OF THE GALVESTON WHARVES AND FREESE AND NICHOLS, INC. FOR AN AMOUNT NOT TO EXCEED $800,320

Background

With the Royal Caribbean Ground Lease executed, there is an aggressive schedule laid out for the Port to transform 15 acres of the Port’s East end from a roll-on, roll-off terminal to a public access area which will contain access roads, surface parking lots, and utility routes to support the new Cruise Terminal at Pier 10. The agreement includes a deadline of December 31st, 2020 for the Wharves to provide an interconnection with the utilities at the demised premises reasonably necessary to operate the project (Exhibit - C 8.d.vi) and a deadline of September 21st, 2021 for the Wharves to provide street access to and from the demised premises and the parking facilities (Exhibit C - 8.c).

Current Situation

Concurrent with the development of the Royal Caribbean Ground Lease, Port Staff have been working to qualify and negotiate a Scope of work and Fee with an Engineering firm to provide the Civil Engineering Support needed to design access roads, parking areas, and utility infrastructure for the Cruise Terminal 3 Project through an RFQ Process. Additionally, Staff were seeking an engineering firm who had a strength in Hydraulics and Hydrology, given issues with the existing storm drains in the area and the City of Galveston’s more stringent Drainage Design Criteria. After some unsuccessful negotiations with other engineering firms, Port staff were able to successfully negotiate a scope of work and fee with Freese and Nichols, Inc. for the design of the utilities, roadways and site grading required for Cruise Terminal 3 development. The Professional Services Agreement in the amount of $800,320.00, includes, Preliminary Engineering, Geotechnical Engineering, a Hydraulics and Hydrology Study, Detailed Design, and Bid Phase Services for the 15 AC project site, generally located north east of intersection of 14th Street and Harborside Dr. The detailed design of the parking areas, which were initially included in these negotiations, were removed from the Scope of Work for this agreement until Port Staff can develop a more comprehensive design criteria for the surface parking areas. Once Staff develops the design criteria for the surface parking area and negotiates successful scope of work and fee, they will bring a separate business item back to the Board of Trustees for approval.

Fiscal Impact

The cost of designing the utilities and roadways within the 15 AC south of Cruise Terminal 3 is not expected to exceed $800,320 which will be funded out of the increased passenger charges the Port receives from the Royal Caribbean Ground Lease.
Staff Recommendation

The Board of Trustees is respectfully requested to listen to the briefing of the Port Director and approve the Port Director to enter into a Professional Service Agreement for Engineering Services for the design of utilities and roadways for the Cruise Terminal 3 Development with Freese and Nichols, Inc. for an amount not to exceed $800,320.
PROFESSIONAL SERVICES AGREEMENT

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is entered into as of December 18, 2019 (the "Effective Date"), by and between the BOARD OF TRUSTEES OF THE GALVESTON WHARVES ("Client"), a separate utility of the City of Galveston, Texas (the "City"), and FRESE AND NICHOLS, INC., a Texas corporation ("Consultant").

WHEREAS, Client is interested in retaining the services of an engineering firm to provide professional services for Client at the Port of Galveston (the "Port");

WHEREAS, Consultant is engineering firm authorized to do business in Texas and is qualified to perform the professional services Client may wish it to perform from time to time; and

WHEREAS, Client has determined that Consultant is the most highly qualified provider of the requested professional services based on demonstrated competence and qualifications, and that this Agreement represents a fair and reasonable price for the requested professional services.

NOW, THEREFORE, for and in consideration of the sum of $10 and other valuable consideration, Client and Consultant agree to the following Terms, covenants, and conditions:

1. Performance by Consultant

   a. Services. Consultant agrees to perform design services, construction bid documents and construction phase services for the construction of parking facilities and utility access at Pier 10 at the Port, in connection with redevelopment of Pier 10, including preliminary and final design of roadways, utilities and drainage improvements, and related items (the "Services"). A general description of the Services is attached as Exhibit A and incorporated by reference.

2. Payment for Services

   a. Fees, Price Protection. Unless otherwise agreed to in writing by both parties hereto, Client shall pay Consultant for the Services in accordance with the Fee Schedule included within Attachment CO to Exhibit A attached hereto. The fees specified in the Fee Schedule are the total fees, expenses, and other charges for the Services and will not be increased during the term of this Agreement without Client's prior written consent. Consultant represents that the price stated for the Services performed hereunder is at least as favorable as that charged to any other customer for the same or similar services.

   b. Invoices. Consultant shall invoice Client monthly for Services rendered, setting forth the hours worked and price of materials provided for which payment is sought. Consultant must include with each invoice copies of any receipts or other documentary evidence that Client may reasonably request to support the claims made in the invoice. Client will pay for those Services and expenses within 30 days of receipt of a properly completed invoice. Notwithstanding any provision of this Agreement to the contrary, the total of all consideration (fees, expenses, and other charges) to be paid to Consultant under this Agreement must not exceed the sum of $800,320.00 unless approved in advance by Client.
3. Obligations of Consultant

a. Work on Client's Premises. Consultant will ensure that its employees and agents will, whenever on Client's premises, obey all reasonable instructions and directions issued by Client, and observe Client's environmental, health, and safety policies, including any alcohol and substance abuse policies, as may be communicated to Consultant from time to time. Nothing in this paragraph 3, or otherwise in this Agreement, shall grant Client any control over the manner or means by which Consultant provides the Services.

b. Key Person. The parties agree that Ron Bavarian is essential to Consultant's performance of the Services offered pursuant to this Agreement. Should Ron Bavarian no longer be assigned by or available to Consultant to perform any of the Services for whatever reason, Consultant shall as soon as practicable provide the name and qualifications of a substitute key person or persons for Client's consideration and approval. If Client does not approve said substitute key person or persons, which approval will not be unreasonably withheld, Client will have the right to terminate this Agreement on 10 business days' written notice.

c. Consultations, Reports. Consultant agrees to make available Consultant's representative, who shall be mutually agreed upon by Consultant and Client, for periodic meetings to review the progress of all work under this Agreement. Consultant also shall prepare and submit to Client when requested a written report setting forth the status of such work in a format to be mutually agreed upon by Consultant and Client, as well as copies of all documents relating to the Services performed by Consultant.

d. Manner of Work. All Services shall be performed by Consultant without neglect, using the degree of skill, knowledge, care, and diligence normally applied by members of the architecture or engineering profession under like or similar circumstances, without material defects in the design of the work, and in strict compliance with the plans, specifications, and generally accepted professional standards applicable to the Services. Consultant shall observe and comply with all applicable laws, statutes, rules, regulations, ordinances, and codes in performing the Services, including without limitation obtaining all necessary licenses, certifications, and permits. Consultant shall, where and as applicable, provide all safety equipment and supplies necessary or desirable for Consultant's performance of the Services. Prior to commencement of the Services, and thereafter during performance of the Services, Consultant shall inspect the worksite to make certain that it is safe for Consultant and its employees and agents to work. Contractor hereby agrees to waive, and shall cause each of its permitted subcontractors and suppliers to waive, any and all mechanic and materialman's liens and privileges arising out of the Services to the extent any such liens may attach to Client's property as a matter of law, and shall indemnify, defend, and hold Client harmless from and against such liens and privileges.
4. Obligations of Client

Client agrees to make available to Consultant, upon reasonable notice, such information, data, and documentation regarding its facilities and infrastructure and other matters related to the Services as may reasonably be required by Consultant to complete the Services.

5. Recruitment

Consultant and Client agree not to recruit employees who are currently employed (or who were employed in the last 6 months) by the other party unless written permission is obtained from the other party. This provision shall remain in effect for a period of 6 months after termination of this Agreement. Notwithstanding the foregoing, no bar exists against any hiring action initiated through a public announcement.

6. Term of Agreement

a. Commencement and Renewal. This Agreement shall commence on the Effective Date and shall remain in effect until terminated as provided for in §6(b) below.

b. Termination by Either Party. Either party, upon giving written notice to the other party, may terminate this Agreement:

i. if the other party or its employees, consultants or other agents violate any material provision of this Agreement and the violation is not remedied within 5 business days of the party's receipt of written notice of the violation; or

ii. at any time in the event the other party terminates or suspends its business, becomes a debtor in any bankruptcy or insolvency proceeding under Federal or state statute, or becomes subject to direct control by a court appointed receiver or other similar authority.

In the event that any of the events described in iii. above occurs to a party, that party shall immediately notify the other party of its occurrence.

c. Termination by Client. Client, upon giving written notice to Consultant, may terminate this Agreement:

i. if at any time after the commencement of the Services, Client, in its reasonable judgment, determines that such services are inadequate, unsatisfactory, or substantially non-conforming to the specifications, descriptions, warranties, or representations contained herein and the problem is not remedied within 5 business days of the party's receipt of written notice describing the problem; or

ii. without cause, by giving Consultant 30 days written notice of termination.
d. **Obligations upon Expiration or Termination.** Upon expiration or termination of this Agreement, Consultant shall promptly return to Client all information, files, documentation, media, related material, and any other material that is owned by Client, as well as any work product in progress. Expiration or termination of this Agreement shall not relieve either party of its obligations regarding Confidential Information under Section 7 below. Upon termination Consultant shall immediately cease performing the Services and shall no longer be required to provide the Services. Consultant will be entitled to be paid for all Services performed, including payment for all expenses to which Contractor may be entitled, up to and including the effective date of the termination, subject to any claims for damages that Client has under the terms of this Agreement.

7. **Confidential Information**

   a. **Non-Disclosure.** Consultant and Client each agree not to use, disclose, sell, license, publish, reproduce or otherwise make available the Confidential Information (defined below) of the other party except and only to the extent necessary to perform under this Agreement. Consultant agrees to secure and protect the Client's Confidential Information in a manner consistent with the maintenance of Client's confidential and proprietary rights in the information and to take appropriate action by instruction or agreement with its employees, consultants or other agents who are permitted access to Client's Confidential Information to satisfy its obligations under this Section.

   b. **Definition.** "Confidential Information" means a party's information, not generally known by non-party personnel, used by the party and which is confidential or proprietary to the party or the disclosure of which would be detrimental to the party. Confidential Information includes, but is not limited to, the following types of information (whether or not reduced to writing or designated as confidential):

   i. work product resulting from or related to Services performed under this Agreement;

   ii. a party's computer software, including documentation;

   iii. a party's internal personnel, financial, marketing and other business information and manner and method of conducting business;

   iv. a party's security status, strategic operations, and other business plans and forecasts; and,

   v. confidential information provided by or regarding a party or a party's employees, customers, vendors and other contractors.

   c. **Confidentiality Agreement with Consultant's Employees.** All of Consultant's employees or agents who perform services for Client shall be provided a copy of this Agreement and agree to be bound by the terms and conditions.
8. Indemnification and Insurance

a. **Indemnification of City and Client.** Consultant INDEMNIFIES and HOLDS HARMLESS Client, its trustees, officers, authorized agents and employees, and the City, its officers, agents and employees, against all costs and expenses, including, without limitation, reasonable attorneys' fees and costs of investigation and defense, as well as legal liability, whether from suit, judgment, settlement or otherwise arising out of any or all claims for injury to persons or property, including but not limited to injuries resulting in death, to the extent arising from or caused by any wrongful or negligent act or omission of Consultant, its agents, invitees, servants and employees upon the property of Client, or arising or resulting from any defective or unsafe condition for which Consultant is responsible, or of any apparatus, equipment or other property of Consultant, or in any other manner arising out of any action or inaction of Consultant relating to the performance of Services under this Agreement. Any language to the contrary notwithstanding, the covenants and agreements contained in this paragraph survive the termination or expiration of this Agreement for whatever cause.

b. **Insurance Requirements.** Consultant must obtain and maintain throughout the term of this Agreement the insurance coverage described on Exhibit B, which is attached and incorporated by reference, and must strictly comply with all covenants relating to the insurance coverage described on Exhibit B.

c. **Indemnity for Noncompliance with Insurance Requirements.** Consultant INDEMNIFIES and HOLDS HARMLESS Client from any loss it may suffer due to Consultant's failure to comply with all the insurance requirements contained in this Agreement, including the requirement for obtaining waivers of subrogation, and due to any insurance coverage being invalidated because of Consultant's failure to comply with the terms, conditions and warranties of any policy of insurance required to be maintained by Consultant under the terms of this Agreement.

9. Injunctive Relief

It is hereby understood and agreed that damages shall be an inadequate remedy in the event of a breach by Consultant of Section 7 of this Agreement and that any such breach by Consultant will cause Client great and irreparable injury and damage. Accordingly, Consultant agrees that Client shall be entitled, without waiving any additional rights or remedies otherwise available to Client at law or in equity or by statute, to injunctive and other equitable relief without proof of actual damages in the event of a breach or intended or threatened breach by Consultant of Section 7 of this Agreement.

10. Assignment and Subcontracting

a. **Consent Required.** Consultant may not assign or subcontract the whole or any part of this Agreement without Client's prior written consent, which consent shall not be unreasonably withheld.
b. Subcontracting. Any subcontract made by Consultant with the consent of Client must incorporate by reference all the terms of this Agreement. Consultant agrees to guarantee the performance of any subcontractor used in performance of the Services.

11. Other Provisions

a. Status as Independent Contractor. Consultant and Client are contractors independent of one another and neither party's employees will be considered employees of the other party for any purpose. This Agreement does not create a joint venture, partnership, or other joint business enterprise, and neither party has the authority to bind the other to any third party. Notwithstanding any language in this Agreement to the contrary, Consultant is solely responsible for directing control over its employees and agents and the manner and means of performance of the Services.

b. Applicable Law and Forum. This Agreement will be governed and construed in accordance with the laws of the State of Texas without regard to the conflicts of laws principles thereof. Any action or suit related to this Agreement must be brought in the state or federal courts sitting in Galveston County, Texas.

c. Notices. All notices, demands, or requests from one party to another must be in writing and must be (i) personally delivered, (ii) sent by mail, certified or registered, postage prepaid, (iii) sent by facsimile transmission, or (iv) sent by overnight delivery, in any case to the address stated in this Section, or to such other address as the party may request in writing, and are deemed to have been given at the time of receipt or delivery:

If to Client: Board of Trustees of the Galveston Wharves
123 Rosenberg, 8th Floor
Galveston, Texas 77550
Fax: (409) 766-6171
Attn.: Port Director

If to Consultant: Freese and Nichols, Inc.
11200 Broadway, Suite 2320
Pearland, Texas 77584
Fax: (832) 456-4701
Attn.: Ron Bavarian

d. Waiver. No waiver by Client of any breach by Consultant of any of the provisions of this Agreement shall be deemed a waiver of any preceding or succeeding breach of the same or any other provisions hereof. No such waiver shall be effective unless in writing and then only to the extent expressly set forth in writing.

e. Entire Agreement. This Agreement, including Exhibits A and, constitutes the entire agreement between Consultant and Client with respect to the subject matter hereof.

f. Modifications. No modification of this Agreement shall be effective unless in writing and signed by both parties.
g. *Severability.* If any provision of this Agreement is invalid or unenforceable under any statute or rule of law, the provision is to that extent to be deemed omitted, and the remaining provisions shall not be affected in any way.

h. *Counterparts.* This Agreement may be executed in any number of counterparts, each of which will be deemed an original and all of which taken together will be deemed one and the same document. A photocopy or facsimile reproduction of an original signature of a party on this Agreement binds that party to the terms, covenants and conditions of this Agreement.

i. *No Personal Liability of Board.* The members of the BOARD OF TRUSTEES OF THE GALVESTON WHARVES, whether singularly or collectively, are not personally liable on this Agreement or for any breach thereof.

j. *Limitation of Liability of the City.* The City of Galveston is never liable to respond in damages or make indemnity, or contribution, or payment of any character from any source other than the property, and the income and revenues arising from the property, under the management and control of the BOARD OF TRUSTEES OF THE GALVESTON WHARVES by reason of, due to or caused by a breach of this Agreement.

k. *Time.* Time is of the essence in the performance of this Agreement.

l. *Attorneys' Fees.* In the event either party breaches any of the terms of this Agreement and the party not in default employs attorneys to protect or enforce its rights and prevails, then the defaulting party agrees to pay the non-defaulting party's reasonable attorney's fees and expenses.

IN WITNESS WHEREOF, and in acknowledgment that the parties hereto have read and understood each and every provision hereof, the parties have executed this Agreement on the date first set forth above.

[signatures follow on next page]
CLIENT:

BOARD OF TRUSTEES OF
THE GALVESTON WHARVES

By: _________________________
    Rodger Rees, Port Director / CEO

Approved as to form:

Counsel to the Board of Trustees
of the Galveston Wharves

CONSULTANT:

FREESE AND NICHOLS, INC.

By: _________________________
Name: _______________________
Title: _______________________

SCHEDULE OF EXHIBITS

Exhibit A - Description of Services and Overall Fee Schedule [Sections 1(a), 2(a)]
Exhibit B – Insurance Requirements [Section 8(b)]
Exhibit A
December 12, 2019

Mr. Jeffrey Thomas
Port of Galveston
123 Rosenberg Ave., 8th Floor
Galveston, TX 77550

Re: Rev Scope & Fee Proposal - Pier 10 Redevelopment

Dear Jeffrey:

Please find attached our revised proposal for the redevelopment of Pier 10. Our revised scope and fees are based on our recent email correspondence and calls in which project scope was reduced to preliminary design and final design of roadways, utilities and drainage improvements on Pier 10. Construction Phase services were taken out as well as the BMW Site Drainage Improvements Final Design. Project scope and fees are broken between Basic and Additional Services.

The Basic work includes development of overall Pier 10 preliminary parking lot and access road layout and then design of access road & related items as defined in our scope. As requested, we reduced bid phase assistance to limited tasks. Per your request, construction phase of the project and inspection services were removec. As shown in Attachment CO of our proposal, revised Basic Fee is now $619,760. Please refer to this Attachment for the fee breakdown.

The Additional Services include: 1) H&H Analysis for the Pier 10 and BMW Vehicle storage facility, 2) Geotechnical Study, and 3) Reimbursable Expenses. The total fee for the Additional Services as shown in Attachment CO of our proposal is $180,560. Please refer to this Attachment for the additional services fee breakdown.

So, the total revised fee is $800,320.

We appreciate the opportunity to submit this revised proposal. We certainly look forward to being of assistance to Port of Galveston on this major development.

Sincerely,

Mehran (Ron) Bavarian, P.E.
Associate

cc: Eric Potts (FNI)
SCOPE OF SERVICES AND RESPONSIBILITIES OF THE PORT

Project Understanding:

The Port of Galveston is seeking engineering services for the redevelopment of Pier 10 to accommodate a new cruise ship terminal. Pier 10 is currently used for heavy equipment and cargo storage. The northern 10 acres will be redeveloped for the terminal building by the new tenant. The Port will be responsible for redeveloping the southern portion of Pier 10, approx. 15.74 ac, to provide passenger parking spaces, a new passenger entry gate, utility connections, and access routes for passengers and delivery vehicles. Access to the facility will be at 14th Street. The existing truck entrance will remain for Del Monte freight traffic; however, this entryway will be expanded to include a separate roadway for cruise ship passenger traffic. A separate traffic study will be performed by others to determine the impact and required adjustments at the intersection with Harbor Drive/SH 275. Port will do Improvements within Port’s property approaching this intersection which could include roadway design, traffic signal, lighting, striping, signage, utility coordination, traffic control, and coordination with City and TxDOT. It is our understanding that the Port will provide any necessary security and communication improvements.

The southern portion of Pier 10 will be used to provide passenger parking and access for both passengers coach buses and delivery vehicles to the cruise terminal facility. Site improvements to these areas will include a grading, paving plan, and striping layout for interior roadways, and parking spaces to accommodate at least 2,000 vehicles, fencing, lighting improvements, and utility connections for water, sanitary sewer, and electric. FNI will provide utility coordination for the proposed connections and design new utilities up to tie-ins for the northern 10 acres. It is our understanding that the tenant will redevelop this area, including all paving and utility improvements. FNI will coordinate with the Port to determine possible impacts to their tenants throughout design.

In addition to engineering for the site development, FNI will perform a drainage analysis of the area to address concerns regarding drainage and flooding problems on the Port property. Details for the drainage analysis are outlined below. Recommendations will be provided for the Piers 10 and Wallenius Wilhelmsen Logistics (WWL) facility areas.

BASIC SERVICES: FNI shall provide the following professional services in connection with the development of the Project:

This Basic Services generally includes:

2. Final Design of Pier 10 access roads and related components.
3. Limited Bid Phase services for the redevelopment of Pier 10 access roads.
4. Special Services such as H&H Analysis for Pier 10 & BMW Vehicle storage site and Geotechnical Study.

A. PROJECT MANAGEMENT

1. Provide overall project management, scoping, contract administration, invoicing, quality control/quality assurance, and monthly one-page reports.
2. Conduct on-site pre-design meeting to validate understanding of the project scope, budget, and schedule.
3. Coordinate with the Port to ensure compatibility of proposed improvements with the cruise terminal development plans.
4. Provide limited Bid Phase assistance.

B. PRELIMINARY DESIGN PHASE (Conceptual Designs for Pier 10)

1. Conduct one meeting with the Port, site developer and other Port-identified stakeholders to review the performance parameters and contributing factors for the project. Review the applicable requirements of the City of Galveston for development of the site.
2. Prepare one initial conceptual layout plan that programs the needed space for the building footprint, parking lot, access roadways, space for buffers, nearest secure port entry, cruise ship parking entries, cruise ship freight entries, and utilities corridors.
3. Conduct one review meetings with the Port, site developer and other Port-identified stakeholders to review the attributes of the conceptual layout and get feedback on needed refinements to the conceptual design.
4. Prepare one refined conceptual layout plan that incorporates the feedback received on review of the initial conceptual layout plan.
5. Conduct one review meeting with the Port, site developer and other Port-identified stakeholders to review the attributes of the refined conceptual layout and get feedback on needed refinements to the conceptual design.
6. Prepare one final refined conceptual layout plan that incorporates the feedback received on review of the refined conceptual layout plan.

It is assumed that the Port will provide the surveying and mapping files currently under way to FNI prior to start of this phase to be used as the base file/map for the development of the Project.

C. FINAL DESIGN PHASE: Upon approval of Conceptual Design Plans by the Port, FNI shall proceed with development of Final Design Documents for the Pier 10 (Area 2 on attached map) redevelopment access roadways and related drainage improvements. Professional services in this phase as follows:

1. Review field survey data and as-built data for the sites and existing utilities, to be provided by the Port. Review arrival and departure characteristics for similar cruise ships and available development plan information provided by the Port.
2. Conduct a field visit to verify existing site conditions.
3. Coordinate with subconsultant to conduct a Geotechnical Study to make recommendations for subgrade stabilization, utility and storm bedding and backfill, pavement design, foundations, structures, fill, and other design components. See attached proposal from subconsultant. Please note that upon completion of Conceptual Design, FNI and subconsultant will finalize the boring locations and depths, within the limits of their contract, to provide the required recommendations for the various designs.
4. Provide utility coordination for tie-ins and relocations of existing utilities.
5. Provide designs for the following: entryway and street traffic control improvements to meet the ingress/egress needs of the site, electrical power conduit corridor to tenant’s development limits, access roadways’ grading and pavement designs for the Pier 10, access roads lighting & conduit design, striping and signage plans, water lines, sanitary sewer lines, and SWPPP. On drainage design, FNI will provide drainage design of access roads and provide design of drainage trunk lines through the Parking lot to outfall point(s). All parking access roads designs to meet City of Galveston land development requirements.

Note, scope does not include a lift station design for sanitary system. It is assumed Pier 10 tenant will provide, if needed.
6. Provide engineering design for a traffic signal and other traffic control devices recommended for traffic control internal to the Port.
7. FNI will submit an electronic copy of the 60%-complete plans, and Engineer's Opinion of Probable Construction Cost (OPCC) to the Port for review and comments.
8. Upon receipt of 60%-complete comments, FNI will proceed with development of 90% construction documents.
9. FNI will prepare the required technical specifications and project manual for the Project.
10. FNI will submit an electronic copy of the 90%-complete plans, technical specification and project manual and Engineer's Opinion of Probable Construction Cost (OPCC) to the Port for review and comments.
11. Upon receipt of 90%-complete comments, FNI will proceed with development of 100% construction documents.
12. FNI will assist the Port in approval of plans by City, utility companies, and other agencies.
13. FNI will submit an electronic copy of the 100%-complete plans, and Engineer's Opinion of Probable Construction Cost (OPCC) to the Port.

D. BID PHASE. Upon completion of the design services and approval of "Final" drawings and specifications by the Port, FNI will proceed with the performance of services in this phase as follows:

1. Assist the Port by responding to questions and interpreting bid documents. Prepare and issue addenda to the Port to distribute to plan holders, if necessary.
2. Assist the Port in conducting a pre bid conference and coordinate responses with the Port. Prepare and issue addenda, if necessary, to the Port to distribute to plan holders, if necessary.

E. SPECIAL & ADDITIONAL SERVICES:

1. H & H Analysis: A detailed analysis of Pier 10 is necessary in order to identify the source of the drainage problems within Pier 10, BMW site, and Harborside Dr. Without the completion of a detailed H&H Analysis, the proposed drainage system will likely not perform as intended, and the existing drainage issues may not be resolved. In order to accomplish what is intended, FNI will perform the following:
   a. Data Collection:
      i. Conduct a field visit to assess current infrastructure conditions and document any unique conditions that may not be visible from 2018 aerial imagery or LiDAR topography.
      ii. Field survey will be required for all storm sewer infrastructure on site (Piers 10 including Harborside Dr), Client to provide detailed survey and condition of the storm sewer infrastructure.
   b. H&H Modeling:
      i. Develop an existing conditions hydrologic model of the study area (Piers 10 including Harborside Dr.) using Atlas 14 rainfall depths and derived intensities. Hydrologic model will be used to generate flows that will be applied to the hydraulic model. The general approach is to use rational method to define peak discharges, and then a unit hydrograph method such as Clark's to define a hydrograph with the same peak discharge. Discharges will be generated for the 2-, 5-, 10-, 25-, and 100-year storm events.
      ii. Develop a 1D/2D Infoworks ICM hydraulic model representing existing conditions to assess inundation depths and extents for the 2-, 5-, 10-, 25-, and 100-year storm
events. The 1D/2D model will include all existing storm sewer infrastructure from the field survey, and 2018 LiDAR for the topography within Pier 10 and the immediate vicinity.

iii. Develop a 2D Infoworks ICM hydraulic model for the area south of Pier 10 (City of Galveston) that drains towards Pier 10. This model will be based on 2018 LiDAR only. Direct rainfall for the 2-, 5-, 10-, 25-, and 100-year storm events will be applied to the topography, with the only purpose of quantifying flows and identifying locations where these off-site flows enter Pier 10. The resulting hydrographs from this analysis will be applied to the 1D/2D model described in item C.2.b

iv. Modify the existing conditions model(s) to assess up to three (3) proposed options for drainage infrastructure and grading that will limit the 25-year ponding to no greater than 6-inches on site. An extreme event pathway will also be incorporated into the design, to provide a pathway into the Galveston Bay for flows from storms that exceed the 25-year event, offsite flows will be considered when evaluating this scenario. One option will be selected by the Port and will be incorporated into the parking lot access roads Civil design.

v. It is assumed that no mitigation of flows will be necessary for the proposed improvements, as the site is currently fully paved.

c. Plan Development
   i. Coordinate with FNI transportation design group to guide plan development for grading and proposed storm sewer infrastructure.
   ii. Prepare a Technical Memorandum with the findings of the hydrologic and hydraulic evaluation.

d. PM/Coordination:
   i. Coordinate and attend a meeting with the Port and the City of Galveston to discuss current conditions of drainage infrastructure in the area, drainage criteria, and potential future plans for improvement.
   ii. Meet with the Port to present results of the existing conditions evaluation and to identify conceptual alternatives to be evaluated.
   iii. Up to 3 meetings with the Port to present all proposed drainage options as noted in Item 2d and select the final option to move forward with design.

2. Geotechnical Investigation
   Terracon Consulting, Inc. will perform the geotechnical investigation consisting of 33 borings for a total of 640 feet. See attached sub consultant proposal for more details.

3. Environmental Services
   If environmental and permitting services is requested, FNI will submit a separate scope and fee for such assistance.
ARTICLE II

ADDITIONAL SERVICES: Additional Services to be performed by FNI, if authorized by the Port, which are not included in the above described basic services, are described as follows:

A. GIS mapping services or assistance with these services.

B. Making property, boundary and right of way surveys, preparation of easement and deed descriptions, including title search and examination of deed records.

C. Providing services to investigate existing conditions or facilities, or to make measured drawings thereof, or to verify the accuracy of drawings or other information furnished by the Port.

D. Providing renderings, model and mock-ups requested by the Port.

E. Making revisions to drawings, specifications or other documents when such revisions are 1) consistent with approvals or instructions previously given by the Port or 2) due to other causes not solely within the control of FNI.

F. Providing consultation concerning the replacement of any Work damaged by fire or other cause during the construction, and providing services as may be required in connection with the replacement of such Work.

G. Investigations involving consideration of operation, maintenance and overhead expenses, and the preparation of rate schedules, earnings and expense statements, feasibility studies, appraisals, evaluations, assessment schedules, and material audits or inventories required for certification of force account construction performed by the Port.

H. Preparing applications and supporting documents for government grants, loans, or planning advances and providing data for detailed applications.

I. Providing shop, mill, field or laboratory inspection of materials and equipment. Observe factory tests of equipment at any site remote to the project or observing tests required as a result of equipment failing the initial test.

J. Preparing Operation and Maintenance Manuals or conducting operator training.

K. Preparing data and reports for assistance to the Port in preparation for hearings before regulatory agencies, courts, arbitration panels or any mediator, giving testimony, personally or by deposition, and preparations therefore before any regulatory agency, court, arbitration panel or mediator.

L. Furnishing Special Inspections required under chapter 17 of the International Building Code. These Special Inspections are often continuous, requiring an inspector dedicated to inspection of the individual work item, and they are in additional to General Representation and Resident Representation services noted elsewhere in the contract. These continuous inspection services can be provided by FNI as an Additional Service.

M. Assisting the Port in preparing for, or appearing at litigation, mediation, arbitration, dispute review boards, or other legal and/or administrative proceedings in the defense or prosecution of claims disputes with Contractor(s).

N. Performing investigations, studies and analyses of substitutions of equipment and/or materials or deviations from the drawings and specifications.
O. Assisting the Port in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this AGREEMENT. Such services, if any, shall be furnished by FNI on a fee basis negotiated by the respective parties outside of and in addition to this AGREEMENT.

P. Providing environmental support services including the design and implementation of ecological baseline studies, environmental monitoring, impact assessment and analyses, permitting assistance, and other assistance required to address environmental issues.

Q. Performing investigations, studies, and analysis of work proposed by construction contractors to correct defective work.

R. Design, contract modifications, studies or analysis required to comply with local, State, Federal or other regulatory agencies that become effective after the date of this Agreement.

S. Services required to resolve bid protests or to rebid the projects for any reason.

T. Visits to the site in excess of the number of trips included in Article I for periodic site visits, coordination meetings, or contract completion activities.

U. Any services required as a result of default of the contractor(s) or the failure, for any reason, of the contractor(s) to complete the work within the contract time.

V. Providing services after the completion of the construction phase not specifically listed in Article I.

W. Providing basic or additional services on an accelerated time schedule. The scope of this service include cost for overtime wages of employees and consultants, inefficiencies in work sequence and plotting or reproduction costs directly attributable to an accelerated time schedule directed by the Port.

X. Providing services made necessary because of unforeseen, concealed, or differing site conditions or due to the presence of hazardous substances in any form.

Y. Providing services to review or evaluate construction contractor(s) claim(s), provided said claims are supported by causes not within the control of FNI.

Z. Providing value engineering studies or reviews of cost savings proposed by construction contractors after bids have been submitted.

AA. Preparing statements for invoicing or other documentation for billing other than for the standard invoice for services attached to this professional services Agreement.

BB. Provide follow-up professional services during Contractor’s warranty period.
ARTICLE III

TIME OF COMPLETION: FNI agrees to complete the services in accordance with the schedule established in each Task Authorization.

- Preliminary Engineering: 120 Days (90 Days for Utilities) after NTP & receipt of topo & mapping document.
- Final Design: 150 Days (90 Days for Utilities) after the Final Design NTP for Pier 1 Redevelopment.
- Bid Phase Assistance: 30 Days after NTP.

If FNI’s services are delayed or suspended in whole or in part by the Port, or if FNI’s services are extended by the Contractor’s actions or inactions for more than 180 days through no fault of FNI, FNI shall be entitled to equitable adjustment of rates and amounts of compensation.

ARTICLE IV

RESPONSIBILITIES OF THE PORT: The Port shall perform the following in a timely manner so as not to delay the services of FNI:

A. Designate in writing a person to act as the Port’s representative with respect to the services to be rendered under this AGREEMENT. Such person shall have contract authority to transmit instructions, receive information, interpret and define the Port’s policies and decisions with respect to FNI’s services for the Project.

B. Provide all criteria and full information as to the Port’s requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which the Port will require to be included in the drawings and specifications.

C. Assist FNI by placing at FNI’s disposal all available information pertinent to the Project including previous reports and any other data relative to design or construction of the Project.

D. Arrange for access to and make all provisions for FNI to enter upon public and private property as required for FNI to perform services under this AGREEMENT.

E. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by FNI, obtain advice of an attorney, insurance counselor and other consultants as The Port deems appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of FNI.

F. Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project.

G. The Port shall make or arrange to have made all subsurface investigations, including but not limited to borings, test pits, soil resistivity surveys, and other subsurface explorations. The Port shall also make or arrange to have made the interpretations of data and reports resulting from such investigations. All costs associated with such investigations shall be paid by the Port.
H. Provide such accounting, independent cost estimating and insurance counseling services as may be required for the Project, such legal services as the Port may require or FNI may reasonably request with regard to legal issues pertaining to the Project including any that may be raised by Contractor(s), such auditing service as the Port may require to ascertain how or for what purpose any Contractor has used the moneys paid under the construction contract, and such inspection services as The Port may require to ascertain that Contractor(s) are complying with any law, rule, regulation, ordinance, code or order applicable to their furnishing and performing the work.

I. If the Port designates a person to serve in the capacity of Resident Project Representative who is not FNI or FNI’s agent or employee, the duties, responsibilities and limitations of authority of such Resident Project Representative(s) will be set forth in an Attachment attached to and made a part of this AGREEMENT before the Construction Phase of the Project begins. Said attachment shall also set forth appropriate modifications of the Construction Phase services as defined in Attachment SC, Article I, C, together with such adjustment of compensation as appropriate.

J. Attend the pre bid conference, bid opening, preconstruction conferences, construction progress and other job related meetings and substantial completion inspections and final payment inspections.

K. Give prompt written notice to FNI whenever the Port observes or otherwise becomes aware of any development that affects the scope or timing of FNI’s services, or any defect or nonconformance of the work of any Contractor.

L. Furnish, or direct FNI to provide, Additional Services as stipulated in Attachment SC, Article II of this AGREEMENT or other services as required.

M. Bear all costs incident to compliance with the requirements of this Article IV.

ARTICLE V

DESIGNATED REPRESENTATIVES: FNI and the Port designate the following representatives:

The Port’s Designated Representative: Jeffrey W. Thomas, Chief Engineer, 123 Rosenberg Ave. 8th Floor, Galveston, Texas 77550; Phone: (409) 502-7112; Email: jthomas@portofgalveston.com

FNI’s Project Manager: Ron Bavarian, P.E., 11200 Broadway, Suite 2320, Pearland, Texas 77584; Phone (832) 456-4722; Fax: (832) 456-4701; Email: mb@freese.com

FNI’s Accounting Representative: Kristina Isaac, 10497 Town and Country Way, Suite 500, Houston, Texas 77024; Phone: (713) 600-6800; Fax: (713) 600-6801; Email: kristina.isaac@freese.com
## COMPENSATION

<table>
<thead>
<tr>
<th>Basic Services (Lump Sum)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management (Total Contract)</td>
<td>$52,435</td>
</tr>
<tr>
<td>Preliminary Design Services (Entire Project Areas)</td>
<td>$94,335</td>
</tr>
<tr>
<td>Final Design Services for Pier 10 Access Roads</td>
<td>$462,790</td>
</tr>
<tr>
<td>Bid and Award Services</td>
<td>$10,200</td>
</tr>
<tr>
<td><strong>Total Basic Services:</strong></td>
<td><strong>$619,760</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional Services (As indicated)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>H &amp; H Analysis (FNI) (Lump Sum)(Pier 10, BMW Site)</td>
<td>$119,500</td>
</tr>
<tr>
<td>Geotechnical Study(Terracon)(Sub plus 10%)(Entire Project Areas)</td>
<td>$49,060</td>
</tr>
<tr>
<td>Reimbursable Expenses (Budget NTE)</td>
<td>$12,000</td>
</tr>
<tr>
<td><strong>Total Additional Services:</strong></td>
<td><strong>$180,560</strong></td>
</tr>
<tr>
<td><strong>Total Basic and Additional Services:</strong></td>
<td><strong>$800,320</strong></td>
</tr>
</tbody>
</table>
August 22, 2019

Freese and Nichols
11200 Broadway Street, Suite 2320
Pearland, Texas 77584

Attn: Mr. Mehran (Ron) Bavarian, P.E.
Associate

Re: Cost Estimate for Geotechnical Engineering Services
Port of Galveston Piers 10 and 14
Harborside Drive and 14th Street
Galveston, Texas
Terracon Document No. P91195069

Dear Mr. Bavarian:

Terracon Consultants, Inc. (Terracon) understands we have been selected based on qualifications to provide this cost estimate to Freese and Nichols to provide Geotechnical Engineering services for the above referenced project. The following are exhibits to the attached Master Services Agreement – Task Order.

Exhibit A  Project Understanding
Exhibit B  Scope of Services
Exhibit C  Compensation and Project Schedule

Our fee to perform the scope of services described in this document is $44,600. See Exhibit C for consideration of additional services.
These services will be performed under the terms and conditions stated in "Master Subconsultant Agreement (MSA)" dated April 1, 2015 between Freese & Nichols, Inc. and Terracon. We understand Terracon will be authorized to proceed in accordance with this document by issuance of "Subconsultant Authorization" referencing the MSA, which will be reviewed by our legal department.

Sincerely,
Terracon Consultants, Inc.
(Texas Registration No. F-3272)

Rehan Khan, E.I.T.
Staff Geotechnical Engineer

Mohamed Amin Zomorrodian, P.E.
Geotechnical Department Manager (Freeport)

Patrick M. Beecher, P.E.
Geotechnical Services Manager (Houston)
EXHIBIT A - PROJECT UNDERSTANDING

Our scope of work is based on our understanding of the project after discussion with the client and the expected subsurface conditions as described below. We have not visited the site to confirm the information provided. Aspects of the project that are undefined or assumed are highlighted as shown below. We request the design team provide input to verify this information prior to our initiation of field exploration activities.

Site Location

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site location</td>
<td>The project site is within Port of Galveston Cruise Terminal 1 located north of the intersection of Harborside Drive and 14th Street in Galveston, Texas.</td>
</tr>
<tr>
<td>Existing improvements</td>
<td>Based on available aerial photographs, the site has warehouse buildings, trailers, electrical towers, construction equipment, railroad tracks, and overhead utilities. The site is fenced.</td>
</tr>
<tr>
<td>Current ground cover</td>
<td>Concrete and asphaltic concrete.</td>
</tr>
<tr>
<td>Site access</td>
<td>We expect the site and exploration locations are accessible with our truck-mounted drilling equipment during normal business hours.</td>
</tr>
</tbody>
</table>
## Planned Construction

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed improvements</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td><strong>Area 1:</strong></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Pavements (concrete and asphaltic concrete).</td>
</tr>
<tr>
<td>o</td>
<td>Storm sewer line with a diameter no more than 36 inches. We assume that the maximum depth of installation is 10 feet.</td>
</tr>
<tr>
<td>o</td>
<td>Bus canopy/passenger shelter.</td>
</tr>
<tr>
<td><strong>Area 2:</strong></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Concrete pavements.</td>
</tr>
<tr>
<td>o</td>
<td>One traffic signal near the intersection of 14th Street and future Portside Road.</td>
</tr>
<tr>
<td>o</td>
<td>Lightpoles in the parking lot.</td>
</tr>
<tr>
<td>o</td>
<td>Utilities assumed to be installed at a maximum depth of 10 feet.</td>
</tr>
<tr>
<td>o</td>
<td>Shuttle passenger pickup shelter/canopy.</td>
</tr>
<tr>
<td><strong>Area 3:</strong></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>The existing asphaltic concrete pavement will be demolished and removed to install drainage structures followed by the construction of new asphaltic concrete pavement. We assume that the maximum depth of installation for the new drainage structures is 10 feet.</td>
</tr>
<tr>
<td><strong>Area 4:</strong></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Concrete pavements.</td>
</tr>
<tr>
<td>o</td>
<td>Lightpoles in the parking lot.</td>
</tr>
<tr>
<td>o</td>
<td>Utilities assumed to be installed at a maximum depth of 10 feet.</td>
</tr>
<tr>
<td>o</td>
<td>Shuttle passenger pickup shelter/canopy.</td>
</tr>
<tr>
<td><strong>Final grade</strong></td>
<td>Within approximately one to two feet above existing grade.</td>
</tr>
<tr>
<td><strong>Utility installation method</strong></td>
<td>Open cut excavation.</td>
</tr>
<tr>
<td><strong>Anticipated foundation types</strong></td>
<td></td>
</tr>
<tr>
<td>Bus canopy/passenger shelter: Drilled straight shafts.</td>
<td></td>
</tr>
<tr>
<td>Lightpoles&lt;sup&gt;2&lt;/sup&gt;: Drilled straight shafts.</td>
<td></td>
</tr>
<tr>
<td>Traffic signal&lt;sup&gt;2&lt;/sup&gt;: Drilled straight shafts.</td>
<td></td>
</tr>
</tbody>
</table>

---

<sup>1</sup> We understand a site plan showing the locations of the proposed improvements will be provided at the time of authorization.

<sup>2</sup> Information provided by the client.
EXHIBIT B - SCOPE OF SERVICES

Our proposed scope of services consists of field exploration, laboratory testing, and engineering/project delivery. These services are described in the following sections.

Field Exploration

The field exploration program is planned to consist of the following:

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Borings</th>
<th>Planned Boring Depth (feet)</th>
<th>Planned Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>15</td>
<td>Proposed pavement and utilities</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>20</td>
<td>Bus canopy</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>20</td>
<td>Proposed pavement and utilities, lightpoles, and bus canopy</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>35</td>
<td>Traffic signal</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>15</td>
<td>Proposed pavement and utilities</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>20</td>
<td>Proposed pavement and utilities, bus canopy, lightpoles</td>
</tr>
</tbody>
</table>

1. Below existing grade.

The total drilling footage is planned to be 640 feet. Once a site plan showing the location and alignment of the proposed improvements is provided, the field exploration program proposed in the table above may change.

Boring Layout and Elevations: We will use handheld GPS equipment to locate borings with an estimated horizontal accuracy of +/- 25 feet. Field measurements from existing site features are also utilized.

Subsurface Exploration Procedures: We will advance soil borings with truck-mounted drilling equipment using continuous flight augers (solid stem). The existing concrete will be cored, wherever encountered, to access the underlying subgrade. Samples will be obtained continuously in the top 10 feet and at intervals of 5 feet thereafter. Soil sampling is typically performed using open tube and/or Standard Penetration Test. The samples will be placed in appropriate containers, taken to our soil laboratory for testing, and classified by a geotechnical engineer. In addition, we will observe and record groundwater levels during drilling and sampling.

Our exploration team will prepare field logs as part of standard drilling operations. The field logs will include sampling depths, penetration distances, and other relevant sampling information such as visual classifications of materials encountered during drilling, and our interpretation of
subsurface conditions between samples. The final boring logs, prepared from field logs, will represent the geotechnical engineer's interpretation, and include modifications based on observations and laboratory tests.

We understand that the only requirement of our field crew to access the site is possession of a TWIC card. In addition, we understand that no site specific training/safety classes are required for our field program.

Property Disturbance: We will backfill borings with auger cuttings and patch the surface with concrete/asphaltic concrete upon completion. Our services do not include repair of the site beyond backfilling our boreholes. Excess auger cuttings will be dispersed in the general vicinity of the boreholes. Because backfill material often settles below the surface after a period, we recommend boreholes to be periodically checked and backfilled, if necessary. We can provide this service or grout the boreholes for additional fees, at your request.

Safety

Terracon is currently not aware of any environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our scope considers standard OSHA Level D Personal Protection Equipment (PPE) and life vests appropriate. Our scope of services does not include any level of environmental site assessment services, but identification of unusual or unnatural materials encountered while drilling will be noted on our logs and discussed in our report.

Exploration efforts require boring into the subsurface, therefore Terracon complies with local regulations to request a utility location service through Texas 811. We consult with the owner/client regarding potential utilities, or other unmarked underground hazards. Based upon the results of this consultation, we consider the need for alternative subsurface exploration methods, as the safety of our field crew is a priority.

All private utilities should be marked by the owner/client prior to commencement of field exploration. In addition, we plan on retaining a utility locator to locate utilities in the areas of the proposed borings. The detection of underground utilities is dependent upon the composition and construction of the utility line; some utilities are comprised of non-electrically conductive materials and may not be readily detected. The use of a private utility locate service would not relieve the owner of their responsibilities in identifying private underground utilities.

Site Access: Terracon must be granted access to the site by the property owner. By acceptance of this document, without information to the contrary, we consider this as authorization to access the property for conducting field exploration in accordance with the scope of services.
Laboratory Testing

The project engineer will review field data and assign laboratory tests to better understand the engineering properties of the soil strata. Based on our understanding of the project, the assigned tests may include the following:

- Moisture content
- Dry unit weight of cohesive soil
- Atterberg limits
- Amount of materials in the soil finer than no. 200 sieve
- Unconfined compressive strength of cohesive soil

Our laboratory testing program includes examination of soil samples by an engineer. Based on the results of our field and laboratory program, we describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

Engineering and Project Delivery

Results of our field and laboratory programs will be evaluated by a professional engineer. The engineer will develop a geotechnical site characterization, perform the engineering calculations necessary to evaluate foundation alternatives, and develop appropriate geotechnical engineering design criteria for earth-related phases of the project.

Your project will be delivered using our GeoReport® system. Upon initiation, we provide you and your design team the necessary link and password to access the website (if not previously registered). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. The typical delivery process includes the following:

- Project Planning – Proposal information, schedule and anticipated exploration plan will be posted for review and verification
- Site Characterization – Findings of the site exploration
- Geotechnical Engineering – Recommendations and geotechnical engineering report

When utilized, our collaboration portal documents communication, eliminating the need for long email threads. This collaborative effort allows prompt evaluation and discussion of options related to the design and associated benefits and risks of each option. With the ability to inform all parties as the work progresses, decisions and consensus can be reached faster. In some cases, only minimal uploads and collaboration will be required, because options for design and construction are limited or unnecessary. This is typically the case for uncomplicated projects with no anomalies found at the site.
When services are complete, we will upload a printable version of our completed geotechnical engineering report, including the professional engineer's seal and signature, which documents our services. Previous submittals, collaboration and the report are maintained in our system. This allows future reference and integration into subsequent aspects of our services as the project goes through final design and construction.

The geotechnical engineering report will include recommendations for:

- Site and subgrade preparation
- Foundation design and construction for the proposed lightpoles, traffic signal, and bus canopy
- Utility construction considerations using open excavations
- Pavement design
EXHIBIT C - COMPENSATION AND PROJECT SCHEDULE

Compensation

Based upon our understanding of the site, the project as summarized in Exhibit A and our planned scope of services outlined in Exhibit B, our base fee is $44,600.

Our scope of services does not include services associated with surveying of boring locations, special equipment for wet ground conditions, or repair of damage to existing landscape. If such services are desired by the owner/client, we should be notified so we can adjust our scope of services.

Additional consultation (such as attendance on a project conference call, engineering analysis, review of project documents, etc.) requested will be performed on a time-and-materials basis. The fee to provide additional consultation services will be in excess of the above provided fee to complete the geotechnical services and will not be incurred without prior approval of the client.

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this document. If conditions are encountered that require scope of work revisions and/or result in higher fees, we will contact you for approval, prior to initiating these services. A supplemental document stating the modified scope of services as well as its effect on our fee will be prepared. We will not proceed without your authorization, as evidenced by your signature on the Supplemental Agreement for Services form.

Project Schedule

We developed a schedule to complete the scope of services, based upon our existing availability and understanding of your project schedule. However, this does not account for any delays in field exploration beyond our control, such as weather conditions, permit delays, or lack of permission to access the boring locations. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

<table>
<thead>
<tr>
<th>GeoReport Stage</th>
<th>Posting Date from Notice to Proceed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Planning</td>
<td>4 working days</td>
</tr>
<tr>
<td>Completion of field program</td>
<td>15 working days</td>
</tr>
<tr>
<td>Site Characterization</td>
<td>28 working days</td>
</tr>
<tr>
<td>Geotechnical Engineering</td>
<td>40 working days</td>
</tr>
<tr>
<td>GeoReport Stage</td>
<td>Posting Date from Notice to Proceed 1,2</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>1. Upon receipt of your notice to proceed we will activate the schedule component of our GeoReport website with specific, anticipated working dates for the three delivery points noted above as well as other pertinent events such as field exploration crews on-site, etc.</td>
<td></td>
</tr>
<tr>
<td>2. We will maintain a current calendar of activities within our GeoReport website. In the event of a need to modify the schedule, the schedule will be updated to maintain a current awareness of our plans for delivery.</td>
<td></td>
</tr>
</tbody>
</table>
### Exhibit B

**Insurance Requirements**

**Professional Services Agreement**

1. **Specific Insurance Requirements**

The following insurance shall be maintained in effect with limits not less than those set forth below at all times during the term of this Agreement and thereafter as required:

<table>
<thead>
<tr>
<th>Insurance</th>
<th>Coverage/Limits</th>
<th>Other Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial General Liability</td>
<td>• $1,000,000 Per Occurrence</td>
<td>• Current ISO edition of CG 00 01</td>
</tr>
<tr>
<td>(Occurrence Basis)</td>
<td>• $2,000,000 General Aggregate</td>
<td>• The personal injury contractual liability exclusion shall be deleted.</td>
</tr>
<tr>
<td></td>
<td>• $1,000,000 Personal And Advertising Injury</td>
<td>• This coverage shall be endorsed to provide primary and non-contributing liability coverage. It is the intent of the parties to this Agreement that all insurance coverage required herein shall be primary to and shall seek no contribution from all insurance available to Owner Parties, with Owner Parties’ insurance being excess. secondary and non-contributing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The following exclusions/limitations (or their equivalent(s), are prohibited:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contractual Liability Limitation CG 21 39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Any type of Punitive, Exemplary or Multiplied Damages exclusion</td>
</tr>
<tr>
<td>Business Auto Liability</td>
<td>$1,000,000 Per Accident</td>
<td>• Current ISO edition of CA 00 01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Arising out of any auto (Symbol 1), including owned, hired and nonowned</td>
</tr>
<tr>
<td>Workers’ Compensation and Employer’s Liability</td>
<td>• Statutory Limits</td>
<td>• Such insurance shall cover liability arising out of the Consultant’s employment of workers and anyone for whom the Consultant may be liable for workers’ compensation claims. Workers’ compensation insurance is required, and no “alternative” forms of insurance shall be permitted.</td>
</tr>
<tr>
<td></td>
<td>• $1,000,000 Each Accident and Disease</td>
<td>• Where a Professional Employee Organization (PEO) or “leased employees” are utilized, Consultant shall require its leasing company to provide Workers’ Compensation insurance for said workers and such policy shall be endorsed to provide an Alternate Employee endorsement in favor of Consultant. Where Consultant uses leased employees with Workers’ Compensation insurance provided by a PEO or employee leasing company, Consultant is strictly prohibited from subletting any of its work without the express written agreement of Owner.</td>
</tr>
<tr>
<td></td>
<td>• USL&amp;H must be provided where such exposure exists.</td>
<td></td>
</tr>
</tbody>
</table>
| Excess Liability (Occurrence Basis) | • $2,000,000 Each Occurrence  
   • $2,000,000 Aggregate | • Such insurance shall be excess over and be no less broad than all coverages described above and shall include a drop-down provision for exhaustion of underlying limits. |
|------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------|
| Professional Liability            | • $5,000,000 Each Claim  
   • $5,000,000 Aggregate  
   • Such insurance shall cover all services rendered by the Consultant and its consultants under the Agreement, including but not limited to engineering and construction management services.  
   • Policies written on a Claims-Made basis shall have an extended reporting period of at least two years beyond termination of the Agreement. | |

2. **General Insurance Requirements**

A. **Definitions.** For purposes of this Agreement:

i. "ISO" means Insurance Services Office.

ii. "Consultant" shall include subcontractors of any tier.

iii. "Owner Parties" means (a) the Client, as identified in the Master Services Agreement, (b) the City, as identified in the Master Services Agreement, (c) the Project, (d) any lender whose loan is secured by a lien against the Work, (e) their respective members, partners, joint venturers, affiliates, subsidiaries, and (f) any directors, officers, employees, or authorized agents of such persons or entities.

B. **Policies.**

i. Consultant shall maintain such General Liability, Excess Liability, and Professional Liability insurance in identical coverage, form and amount, including required endorsements, for at least two (2) years following final performance of services to be performed under this Agreement.

ii. All policies must:

a. Be written through insurance companies authorized to do business in the State in which the work is to be performed and rated no less than A-: VII in the most current edition of A. M. Best's Key Rating Guide.

b. Provide a waiver of subrogation in favor of Owner Parties on all insurance coverage carried by Consultant, whether required herein or not.

c. Include Owner Parties as additional insureds on all policies except Workers' Compensation/Employer's Liability and Professional Liability. Additional insured status on the Commercial General Liability policy shall be provided in favor of Owner Parties on ISO form CG 20 10 10 01.

d. Contain an endorsement providing for thirty (30) days prior written notice to Owner of cancellation or material change of coverage.

e. Be provided to the Owner Parties in compliance with the requirements herein and shall contain no endorsements that restrict, limit, or exclude coverage required herein in any manner without the prior express written approval of the Owner.
iii. Failure of any Owner Party to demand such certificate or other evidence of full compliance with these insurance requirements or failure of any Owner Party to identify a deficiency from evidence that is provided shall not be construed as a waiver of the Consultant’s obligation to maintain such insurance.

iv. Renewal policies, if necessary, shall be delivered to the Owner prior to the expiration of the previous policy.

v. Commencement of services without provision of the required certificate of insurance, evidence of insurance and/or required endorsements, or without compliance with any other provision of this Agreement, shall not constitute a waiver by any Owner Party of any rights. The Owner shall have the right, but not the obligation, of prohibiting the Consultant or any subcontractor from performing any Work until such certificate of insurance, evidence of insurance and/or required endorsements are received and approved by the Owner.

C. Limits, Deductibles and Retentions

i. The limits of liability may be provided by a single policy of insurance or by a combination of primary and excess policies, but in no event shall the total limits of liability available for any one occurrence or accident be less than the amount required herein.

ii. No deductible or self-insured retention shall exceed $25,000 without prior written approval of the Owner, except as otherwise specified herein. All deductibles and/or retentions shall be paid by, assumed by, for the account of, and at the Consultant’s sole risk. The Consultant shall not be reimbursed for same.

D. Forms

i. If the forms of policies, endorsements, certificates or evidence of insurance required by this Exhibit are superseded or discontinued, Owner will have the right to require other equivalent forms.

ii. Any policy or endorsement form other than a form specified in this Exhibit must be approved in advance by Owner.

E. Evidence of Insurance. Insurance must be evidenced as follows:

i. ACORD Form 25 Certificate of Liability Insurance for liability coverages.

ii. Evidence shall be provided to Owner prior to commencing Work and prior to the expiration of any required coverage.

iii. ACORD Forms specify:
   a. Owner as certificate holder at Owner's mailing address;
   b. Insured's name, which must match that on this Agreement;
   c. Insurance companies producing each coverage and the policy number and policy date of each coverage;
   d. Producer of the certificate with correct address and phone number and have the signature of the authorized representative of the producer;
   e. Additional Insured status in favor of Owner Parties;
   f. Amount of any deductible or self-insured retention in excess of $25,000;
   g. Personal Injury Contractual Liability;
   h. Primary and non-contributory status;
   i. Waivers of subrogation; and
   j. All exclusions and limitations added by endorsement to the General Liability coverage.

iv. Copies of the additional insured endorsement(s) applicable to the General Liability policy and of the 30 Day Notice of Cancellation or Material Change endorsement applicable to all required policies shall also be provided.

F. Consultant Insurance Representations to Owner Parties

i. It is expressly understood and agreed that the insurance coverages required herein (a) represent Owner Parties’ minimum requirements and are not to be construed to void or limit the Consultant’s
indemnity obligations as contained in this Agreement nor represent in any manner a determination of the insurance coverages the Consultant should or should not maintain for its own protection; and (d) are being, or have been, obtained by the Consultant in support of the Consultant’s liability and indemnity obligations under this Agreement. Irrespective of the requirements as to insurance to be carried as provided for herein, the insolvency, bankruptcy or failure of any insurance company carrying insurance of the Consultant, or the failure of any insurance company to pay claims accruing, shall not be held to affect, negate or waive any of the provisions of this Agreement.

ii. Failure to obtain and maintain the required insurance shall constitute a material breach of, and default under, this Agreement. If the Consultant shall fail to remedy such breach within five (5) business days after notice by the Owner, the Consultant will be liable for any and all costs, liabilities, damages and penalties resulting to the Owner Parties from such breach, unless a written waiver of the specific insurance requirement(s) is provided to the Consultant by the Owner. In the event of any failure by the Consultant to comply with the provisions of this Agreement, the Owner may, without in any way compromising or waiving any right or remedy at law or in equity, on notice to the Consultant, purchase such insurance, at the Consultant’s expense, provided that the Owner shall have no obligation to do so and if the Owner shall do so, the Consultant shall not be relieved of or excused from the obligation to obtain and maintain such insurance amounts and coverages.

iii. This Exhibit is an independent contract provision and shall survive the termination or expiration of the Construction Agreement.

G. **Insurance Requirements of Consultant’s Subcontractors**

i. Insurance similar to that required of the Consultant shall be provided by all subcontractors (or provided by the Consultant on behalf of subcontractors) to cover operations performed under any subcontract agreement. The Consultant shall be held responsible for any modification in these insurance requirements as they apply to subcontractors. The Consultant shall maintain certificates of insurance from all subcontractors containing provisions similar to those listed herein (modified to recognize that the certificate is from subcontractor) enumerating, among other things, the waivers of subrogation, additional insured status, and primary liability as required herein, and make them available to the Owner upon request.

ii. The Consultant is fully responsible for loss and damage to its property on the site, including tools and equipment, and shall take necessary precautions to prevent damage to or vandalism, theft, burglary, pilferage and unexplained disappearance of property. Any insurance covering the Consultant’s or its subcontractor’s property shall be the Consultant’s and its subcontractor’s sole and complete means or recovery for any such loss. To the extent any loss is not covered by said insurance or subject to any deductible or co-insurance, the Consultant shall not be reimbursed for same. Should the Consultant or its subcontractors choose to self insure this risk, it is expressly agreed that the Consultant hereby waives, and shall cause its subcontractors to waive, any claim for damage or loss to said property in favor of the Owner Parties.

H. **Use of the Owners Equipment**

The Consultant, its agents, employees, subcontractors or suppliers shall use the Owners equipment only with express written permission of the Owners designated representative and in accordance with the Owners terms and condition for such use.

I. **Release and Waiver**

The Consultant hereby releases, and shall cause its subcontractors to release, the Owner Parties from any and all claims or causes of action whatsoever which the Consultant and/or its subcontractors might otherwise now or hereafter possess resulting in or from or in any way connected with any loss covered by insurance, whether required herein or not, or which should have been covered by insurance required herein, including the deductible and/or uninsured portion thereof, maintained and/or required to be maintained by the Consultant and/or its subcontractors pursuant to this Agreement.