

SERVICE AGREEMENT NO. 2901
CONTRACT FOR PROFESSIONAL SERVICES

FOR PROJECT E12191 – ENGINEERING SERVICES FOR NORTH BEACH NAVIGABLE CANAL

The City of Corpus Christi, a Texas home rule municipal corporation, P.O. Box 9277, Corpus Christi, Nueces County, Texas 78469-9277 (City) acting through its duly authorized City Manager or Designee (Director) and Lockwood, Andrews & Newnam, Inc., 500 N. Shoreline Blvd, Suite 500, Corpus Christi, Nueces County, Texas 78401, (Consultant), hereby agree as follows:

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ARTICLE I – SCOPE OF SERVICES

1.1 City and Consultant agree that the services provided are properly described in the Scope of Services, which is incorporated herein and attached to this Agreement as **Exhibit A**. The Scope of Services shall include all associated services required for Consultant to provide such Services, pursuant to this Agreement, and any and all Services that would normally be required by law or common due diligence in accordance with the standard of care defined in Article XIII of this Agreement. The approved Scope of Services defines the services to be performed by Consultant under this Agreement. Consultant will perform the Services in accordance with **Exhibit A** and with Consultant's response to the Request for Qualifications related to this project, which response is incorporated by reference into this Agreement as if set out here in its entirety.

1.2 Consultant shall follow City Codes and Standards effective at the time of the execution of the contract. At review milestones, the Consultant and City will review the progress of the plans to ensure that City Codes and Standards are followed unless specifically and explicitly excluded from doing so in the approved Scope of Services attached as **Exhibit A**. A request made by either party to deviate from City standards after the contract is executed must be in writing.

1.3 Consultant shall provide labor, equipment and transportation necessary to complete all services agreed to hereunder in a timely manner throughout the term of the Agreement. Persons retained by Consultant to perform work pursuant to this Agreement shall be employees or subconsultants of Consultant. Upon request, Consultant must provide City with a list of all subconsultants that includes the services performed by subconsultant and the % of work performed by subconsultant (in dollars). Changes in Consultant's proposed team as specified in the SOQ or Scope of Services must be agreed to by the City in writing.

1.4 Consultant shall not begin work on any phase/task authorized under this Agreement until they are briefed on the scope of the Project and are notified in writing to proceed. If the scope of the Project changes, either Consultant or City may request a review of the changes with an appropriate adjustment in compensation.

1.5 Consultant will provide monthly status updates (project progress or delays) in the format requested by the City with each monthly invoice.

1.6 For design services, Consultant agrees to render the professional services necessary for the advancement of the Project through Final Completion of the Construction Contract. Consultant acknowledges and accepts its responsibilities, as defined and described in City's General Conditions for Construction Contracts, excerpt attached as **Exhibit D**.

1.6.1 The Consultant agrees to serve as the City's Designer as defined in the General Conditions and will consult and advise the City on matters related to the Consultant's Scope of Services during the performance of the Consultant's services.

1.6.2 The Consultant agrees to prepare plans, specification, bid and contract documents and to analyze bids and evaluate the documents submitted by bidders.

1.6.3 The Consultant agrees to assist the City in evaluating the qualifications of the prospective contractors, subcontractors and suppliers.

1.7 For projects that require subsurface utility investigation:

1.7.1 The Consultant agrees to prepare and submit to the City prior to the 60% submittal a signed and sealed report identifying all utilities within the project area at the Quality Level specified in **Exhibits A and A-1**. It is assumed that all utilities will be identified using Quality Level A exploratory excavation unless stated otherwise.

1.7.2 Utilities that should be identified include but are not limited to utilities owned by the City, local franchises, electric companies, communication companies, private pipeline companies and 3rd party owners/operators.

1.8 For project with potential utility conflicts:

1.8.1 The Consultant agrees to coordinate the verification and resolution of all potential utility conflicts.

1.8.2 The Consultant agrees to prepare and submit a monthly Utility Coordination Matrix to the City.

1.9 The Consultant agrees to complete the Scope of Services in accordance with the approved project schedule and budget as defined in **Exhibit A**, including completing the work in phases defined therein.

1.10 **Consultant is expressly prohibited from discussing or sharing information related to or resulting from the Scope of Services with any person or entity other than the City of Corpus Christi through its City Manager. Consultant shall immediately notify the City Manager of all inquiries related to the Scope of Services received by the Consultant.**

ARTICLE II – QUALITY CONTROL

2.1 The Consultant agrees to perform quality assurance-quality control/constructability reviews (QCP Review). The City reserves the right to retain a separate consultant to perform additional QCP services for the City.

2.2 The Consultant will perform QCP Reviews at intervals during the Project to ensure deliverables satisfy applicable industry quality standards and meet the requirements of the Project scope. Based on the findings of the QCP Review, the Consultant must reconcile the Project Scope and the Opinion of Probable Cost (OPC), as needed.

2.3 Final construction documents that do not meet City standards in effect at the time of the execution of this Agreement may be rejected. If final construction documents are found not to be in compliance with this Agreement, Consultant will not be compensated for having to resubmit documents.

ARTICLE III – COMPENSATION

3.1 The Compensation for all services (Basic and Additional) included in this Agreement and in the Scope of Services for this Agreement shall not exceed **\$508,988.**

3.2 The Consultant's fee will be on a lump sum or time and materials (T&M) basis as detailed in **Exhibit A** and will be full and total compensation for all services and for all expenses incurred in performing these services. Consultant shall submit a Rate Schedule with their proposal.

3.3 The Consultant agrees to complete the Scope of Services in accordance with the approved project schedule and budget as defined in **Exhibit A**, including completing the work in phases defined therein.

3.4 The Director of Engineering Services may request the Consultant to undertake additional services or tasks provided that no increase in fee is required. Services or tasks requiring an increase of fee will be mutually agreed and evidenced in writing as an amendment to this contract. Consultant shall notify the City within three (3) days of notice if tasks requested requires an additional fee.

3.5 Monthly invoices will be submitted in accordance with the Payment Request as shown in **Exhibit B**. Each invoice will include the Consultant's estimate of the proportion of the contracted services completed at the time of billing. For work performed on a T&M Basis, the invoice shall include documentation that shows who worked on

the Project, the number of hours that each individual worked, the applicable rates from the Rate Schedule and any reimbursable expenses associated with the work. City will make prompt monthly payments in response to Consultant's monthly invoices in compliance with the Texas Prompt Payment Act.

3.6 Principals may only bill at the agreed hourly rate for Principals (as defined in the Rate Schedule) when acting in that capacity. Principals acting in the capacity of staff must bill at applicable staff rates.

3.7 Consultant certifies that title to all services covered by a Payment Request shall pass to City no later than the time of payment. Consultant further certifies that, upon submittal of a Payment Request, all services for which Payment Requests have been previously issued and payments received from City shall, to the best of Consultant's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of Consultant or other persons or entities making a claim by reason of having provided labor or services relating to this Agreement. **Consultant shall indemnify and hold City harmless from any liens, claims, security interests or encumbrances filed by anyone claiming by, through or under the items covered by payments made by City to Consultant.**

3.8 The final payment due hereunder shall not be paid until all reports, data and documents have been submitted, received, accepted and approved by City. Final billing shall indicate "Final Bill – no additional compensation is due to Consultant."

3.9 City may withhold compensation to such extent as may be necessary, in City's opinion, to protect City from damage or loss for which Consultant is responsible, because of:

3.9.1 delays in the performance of Consultant's work;

3.9.2 failure of Consultant to make payments to subconsultants or vendors for labor, materials or equipment;

3.9.3 damage to City; or

3.9.4 persistent failure by Consultant to carry out the performance of its services in accordance with this Agreement.

3.10 When the above reasons for withholding are removed or remedied by Consultant, compensation of the amount withheld shall be made within 30 days. City shall not be deemed in default by reason of withholding compensation as provided under this Agreement.

3.11 In the event of any dispute(s) between the Parties regarding the amount properly compensable for any phase or as final compensation or regarding any amount that may be withheld by City, Consultant shall be required to make a claim pursuant to and in accordance with the terms of this Agreement and follow the procedures provided herein for the resolution of such dispute. In the event Consultant does not initiate and follow the claims procedures as required by the terms of this Agreement, any such claim shall be waived.

3.12 Request of final compensation by Consultant shall constitute a waiver of claims except those previously made in writing and identified by Consultant as unsettled at the time of final Payment Request.

3.13 All funding obligations of the City under this Agreement are subject to the appropriation of funds in its annual budget. The City may direct the Consultant to suspend work pending receipt and appropriation of funds. The right to suspend work under this provision does not relieve the City of its obligation to make payments in accordance with section 3.5 above for services provided up to the date of suspension.

ARTICLE IV – TIME AND PERIOD OF SERVICE

- 4.1 This Agreement shall be effective upon the signature of the City Manager or designee (Effective Date).
- 4.2 The term of this Agreement will be for a period of six years beginning on the effective date, unless extended by authority of the City Manager or designee.
- 4.3 The Consultant agrees to begin work on those authorized Services for this contract upon receipt of the Notice to Proceed from the Contracts and Procurement Department. Work will not begin on any phase or any Additional Services until requested in writing by the Consultant and written authorization is provided by the Director of Engineering Services.
- 4.4 Time is of the essence for this Agreement. Consultant shall perform and complete its obligations under this Agreement in a prompt and continuous manner so as to not delay the Work for the Project, in accordance with the schedules approved by City. The Consultant and City are aware that many factors may affect the Consultant's ability to complete the services to be provided under this agreement. The Consultant must notify the City within ten business days of becoming aware of a factor that may affect the Consultant's ability to complete the services hereunder.
- 4.5 City shall perform its obligations of review and approval in a prompt and continuous manner so as to not delay the project.
- 4.6 This Agreement shall remain in force for a period which may reasonably be required for completion of the Project, including any extra work and any required extensions thereto, unless terminated as provided for in this Agreement. For construction design services, "completion of the Project" refers to acceptance by the City of the construction phase of the Project, i.e., Final Completion.

ARTICLE V – OPINIONS OF COST

- 5.1 The Opinion of Probable Cost (OPC) is computed by the Consultant and includes the total cost for construction of the Project.
- 5.2 The OPC does not include the cost of the land, rights-of-way or other costs which are the responsibility of the City.
- 5.3 Since Consultant has no control over a construction contractor's cost of labor, materials or equipment, or over the contractor's methods of determining prices, or over competitive bidding or market conditions, Consultant's opinions of probable Project Cost or Construction Cost provided herein are to be made on the basis of Consultant's experience and qualifications and represent Consultant's best judgment as a design professional familiar with the construction industry, but Consultant cannot and does not guarantee proposals, bids or the construction cost shall not vary from the OPC prepared by Consultant.

ARTICLE VI – INSURANCE REQUIREMENTS

- 6.1 Consultant must not commence work under this Agreement until all insurance required has been obtained and such insurance has been approved by the City. Consultant must not allow any subcontractor to commence work until all similar insurance required of any subcontractor has been obtained.
- 6.2 Insurance Requirements are shown in **EXHIBIT C**.

ARTICLE VII – INDEMNIFICATION

Consultant shall fully indemnify and hold harmless the City of Corpus Christi and its officials, officers, agents, employees, excluding the engineer or architect or that person's agent, employee or subconsultant, over which the City exercises control ("Indemnatee") from and against any and all claims, damages, liabilities or costs, including reasonable attorney fees and court costs, to the extent that the damage is caused by or results from an act of negligence, intentional tort, intellectual property infringement or failure to pay a subcontractor or supplier committed by Consultant or its agent, Consultant under contract or another entity over which Consultant exercises control while in the exercise of rights or performance of the duties under this agreement. This indemnification does not apply to any liability resulting from the negligent acts or omissions of the City or its employees, to the extent of such negligence.

Consultant shall defend Indemnatee, with counsel satisfactory to the City Attorney, from and against any and all claims, damages, liabilities or costs, including reasonable attorney fees and court costs, if the claim is not based wholly or partly on the negligence of, fault of or breach of contract by Indemnatee. If a claim is based wholly or partly on the negligence of, fault of or breach of contract by Indemnatee, the Consultant shall reimburse the City's reasonable attorney's fees in proportion to the Consultant's liability.

Consultant must advise City in writing within 24 hours of any claim or demand against City or Consultant known to Consultant related to or arising out of Consultant's activities under this Agreement.

ARTICLE VIII – TERMINATION OF AGREEMENT

8.1 By Consultant:

8.1.1 The City reserves the right to suspend this Agreement at the end of any phase for the convenience of the City by issuing a written and signed Notice of Suspension. The Consultant may terminate this Agreement for convenience in the event such suspension extends for a period beyond 120 calendar days by delivering a Notice of Termination to the City.

8.1.2 The Consultant must follow the Termination Procedure outlined in this Agreement.

8.2 By City:

8.2.1 The City may terminate this agreement for convenience upon seven days written notice to the Consultant at the address of record.

8.2.2 The City may terminate this agreement for cause upon ten days written notice to the Consultant. If Consultant begins, within three days of receipt of such notice, to correct its failure and proceeds to diligently cure such failure within the ten days, the agreement will not terminate. If the Consultant again fails to perform under this agreement, the City may terminate the agreement for cause upon seven days written notice to the Consultant with no additional cure period. If the City terminates for cause, the City may reject any and all proposals submitted by Consultant for up to two years.

8.3 Termination Procedure

8.3.1 Upon receipt of a Notice of Termination and prior to the effective date of termination, unless the notice otherwise directs or Consultant takes action to cure a failure to perform under the cure period,

Consultant shall immediately begin the phase-out and discontinuance of all services in connection with the performance of this Agreement. Within 30 calendar days after receipt of the Notice of Termination, unless Consultant has successfully cured a failure to perform, Consultant shall submit a statement showing in detail the services performed under this Agreement prior to the effective date of termination. City retains the option to grant an extension to the time period for submittal of such statement.

8.3.2 Consultant shall submit all completed and/or partially completed work under this Agreement, including but not limited to specifications, designs, plans and exhibits.

8.3.3 Upon receipt of documents described in the Termination Procedure and absent any reason why City may be compelled to withhold fees, Consultant will be compensated for its services based upon a Time & Materials calculation or Consultant and City's estimate of the proportion of the total services actually completed at the time of termination. There will be no compensation for anticipated profits on services not completed.

8.3.4 Consultant acknowledges that City is a public entity and has a duty to document the expenditure of public funds. The failure of Consultant to comply with the submittal of the statement and documents, as required above, shall constitute a waiver by Consultant of any and all rights or claims to payment for services performed under this Agreement.

ARTICLE IX – RIGHT OF REVIEW AND AUDIT

9.1 Consultant grants City, or its designees, the right to audit, examine or inspect, at City's election, all of Consultant's records relating to the performance of the Work under this Agreement, during the term of this Agreement and retention period herein. The audit, examination or inspection may be performed by a City designee, which may include its internal auditors or an outside representative engaged by City. Consultant agrees to retain its records for a minimum of four years following termination of the Agreement, unless there is an ongoing dispute under this Agreement, then such retention period shall extend until final resolution of the dispute.

9.2 Consultant's records include any and all information, materials and data of every kind and character generated as a result of and relevant to the Work under this Agreement (Consultant's Records). Examples include billings, books, general ledger, cost ledgers, invoices, production sheets, documents, correspondence, meeting notes, subscriptions, agreements, purchase orders, leases, contracts, commitments, arrangements, notes, daily diaries, reports, drawings, receipts, vouchers, memoranda, time sheets, payroll records, policies, procedures, and any and all other agreements, sources of information and matters that may, in City's and Consultant's reasonable judgment, have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any Agreement Documents.

9.3 City agrees that it shall exercise the right to audit, examine or inspect Consultant's Records only during Consultant's regular business hours. Consultant agrees to allow City's designee access to all of Consultant's Records, Consultant's facilities and Consultant's current employees, deemed necessary by City or its designee(s), to perform such audit, inspection or examination. Consultant also agrees to provide adequate and appropriate work space necessary to City or its designees to conduct such audits, inspections or examinations.

9.4 Consultant shall include this audit clause in any subcontractor, supplier or vendor contract.

ARTICLE X – OWNER REMEDIES

10.1 The City and Consultant agree that in the event the City suffers actual damages, the City may elect to pursue its actual damages and any other remedy allowed by law. This includes but is not limited to:

10.1.1 Failure of the Consultant to make adequate progress and endanger timely and successful

completion of the Project, which includes failure of subconsultants to meet contractual obligations;

10.1.2 Failure of the Consultant to design in compliance with the laws of the City, State and/or federal governments, such that subsequent compliance costs exceed expenditures that would have been involved had services been properly executed by the Consultant.

10.1.3 Losses are incurred because of errors and/or omissions in the design, working drawings, specifications or other documents prepared by the Consultant to the extent that the financial losses are greater than the City would have originally paid had there not been errors and/or omissions in the documents.

10.2 When the City incurs non-value added work costs for change orders due to design errors and/or omissions, the City will send the Consultant a letter that includes:

- (1) Summary of facts with supporting documentation;
- (2) Instructions for Consultant to revise design documents, if appropriate, at Consultant's expense;
- (3) Calculation of non-value added work costs incurred by the City; and
- (4) Deadline for Consultant's response.

10.3 The Consultant may be required to revise bid documents and re-advertise the Project at the Consultant's sole cost if, in the City's judgment, the Consultant generates excessive addenda, either in terms of the nature of the revision or the actual number of changes due to the Consultant's errors or omissions.

10.4 The City may withhold or nullify the whole or part of any payment as detailed in Article III.

ARTICLE XI – CONSULTANT REMEDIES

11.1 If Consultant is delayed due to uncontrollable circumstances, such as strikes, riots, acts of God, national emergency, acts of the public enemy, governmental restrictions, laws or regulations or any other causes beyond Consultant's and City's reasonable control, an extension of the Project schedule in an amount equal to the time lost due to such delay shall be Consultant's sole and exclusive remedy. The revised schedule should be approved in writing with a documented reason for granting the extension.

11.2 The City agrees that the Consultant is not responsible for damages arising from any cause beyond Consultant's reasonable control.

11.3 If Consultant requests a remedy for a condition not specified above, Consultant must file a Claim as provided in this Agreement.

ARTICLE XII – CLAIMS AND DISPUTE RESOLUTION

12.1 Filing of Claims

12.1.1 Claims arising from the circumstances identified in this Agreement or other occurrences or events, shall be made by Written Notice delivered by the party making the Claim to the other party within 21 calendar days after the start of the occurrence or event giving rise to the Claim and stating the general nature of the Claim.

12.1.2 Every Claim of Consultant, whether for additional compensation, additional time or other relief, shall be signed and sworn to by a person authorized to bind the Consultant by his/her signature, verifying the truth and accuracy of the Claim.

12.1.3 The responsibility to substantiate a claim rests with the party making the Claim.

12.1.4 Within 30 calendar days of receipt of notice and supporting documentation, City will meet to discuss the request, after which an offer of settlement or a notification of no settlement offer will be sent to Consultant. If Consultant is not satisfied with the proposal presented, Consultant will have 30 calendar days in which to (i) submit additional supporting data requested by the City, (ii) modify the initial request for remedy or (iii) request Mediation.

12.1.5 Pending final resolution of a claim, except as otherwise agreed in writing, Consultant shall proceed diligently with performance of the Agreement, and City shall continue to make payments in accordance with this Agreement.

12.2 Mediation

12.2.1 All negotiations pursuant to this clause are confidential and shall be treated as compromise and settlement negotiations for purposes of applicable rules of evidence.

12.2.2 Before invoking mediation, the Parties agree that they shall first try to resolve any dispute arising out of or related to this Agreement through discussions directly between those senior management representatives within their respective organizations who have overall managerial responsibility for similar projects. This step shall be a condition precedent to the use of mediation. If the parties' senior management representatives cannot resolve the dispute within 30 calendar days after a Party delivers a written notice of such dispute, then the Parties shall proceed with the mediation process contained herein.

12.2.2.1 In the event that City or Consultant shall contend that the other has committed a material breach of this Agreement, the Party alleging such breach shall, as a condition precedent to filing any lawsuit, request mediation of the dispute.

12.2.2.2 Request for mediation shall be in writing, and shall request that the mediation commence no less than 30 or more than 90 calendar days following the date of the request, except upon agreement of both parties.

12.2.2.3 In the event City and Consultant are unable to agree to a date for the mediation or to the identity of the mediator or mediators within 30 calendar days of the request for mediation, all conditions precedent in this Article shall be deemed to have occurred.

12.2.2.4 The parties shall share the mediator's fee. Venue for mediation shall be Nueces County, Texas. Any agreement reached in mediation shall be enforceable as a settlement agreement in any court having jurisdiction thereof. No provision of this Agreement shall waive any immunity or defense. No provision of this Agreement is a consent to suit.

12.3 In calculating the amount of any Claim or any measure of damages for breach of contract, the following standards shall apply both to claims by Consultant and to claims by City:

12.3.1 In no event shall either Party be liable, whether in contract or tort or otherwise, to the other Party for loss of profits, delay damages or for any special incidental or consequential loss or damage of any nature arising at any time or from any cause whatsoever;

12.3.2 Damages are limited to extra costs specifically shown to have been directly caused by a proven wrong for which the other Party is claimed to be responsible.

12.4 In case of litigation between the parties, Consultant and City agree that neither party shall be responsible

for payment of attorney's fees pursuant to any law or other provision for payment of attorneys' fees. Both Parties expressly waive any claim to attorney's fees should litigation result from any dispute between the parties to this Agreement.

12.5 In case of litigation between the parties, Consultant and City agree that they have knowingly waived and do hereby waive the right to trial by jury and have instead agreed, in the event of any litigation arising out of or connected to this Agreement, to proceed with a trial before the court, unless both parties subsequently agree otherwise in writing.

12.6 No Waiver of Governmental Immunity. **This Agreement is to perform a governmental function solely for the public benefit. Nothing in this Agreement shall be construed to waive City's governmental immunity from lawsuit, which immunity is expressly retained to the extent it is not clearly and unambiguously waived by state law.**

ARTICLE XIII – MISCELLANEOUS PROVISIONS

13.1 Assignability. Neither party will assign, transfer or delegate any of its obligations or duties under this Agreement contract to any other person and/or party without the prior written consent of the other party, except for routine duties delegated to personnel of the Consultant staff. This includes subcontracts entered into for services under this Agreement. If the Consultant is a partnership or joint venture, then in the event of the termination of the partnership or joint venture, this contract will inure to the individual benefit of such partner or partners as the City may designate. No part of the Consultant fee may be assigned in advance of receipt by the Consultant without written consent of the City.

The City will not pay the fees of expert or technical assistance and consultants unless such employment, including the rate of compensation, has been approved in writing by the City.

13.2 Provisions Required by Law. Each applicable provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were physically included herein.

13.3 Public Information. The requirements of Subchapter J, Chapter 552, Government Code, may apply to this contract and the Consultant agrees that the contract can be terminated if the Consultant knowingly or intentionally fails to comply with a requirement of that subchapter.

13.4 Standard of Care. Services provided by Consultant under this Agreement shall be performed with the professional skill and care ordinarily provided by competent licensed professionals practicing under the same or similar circumstances and professional license; and performed as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect.

13.5 Licensing. Consultant shall be represented by personnel with appropriate licensure, registration and/or certification(s) at meetings of any official nature concerning the Project, including scope meetings, review meetings, pre-bid meetings and preconstruction meetings.

13.6 Independent Contractor. The relationship between the City and Consultant under this Agreement shall be that of independent contractor. City may explain to Consultant the City's goals and objectives in regard to the services to be performed by Consultant, but the City shall not direct Consultant on how or in what manner these goals and objectives are to be met.

13.7 Entire Agreement. This Agreement represents the entire and integrated Agreement between City and Consultant and supersedes all prior negotiations, representations or agreements, either oral or written. This Agreement may be amended only by written instrument signed by both the City and Consultant.

13.8 No Third Party Beneficiaries. Nothing in this Agreement can be construed to create rights in any entity other than the City and Consultant. Neither the City nor Consultant intends to create third party beneficiaries by entering into this Agreement.

13.9 Disclosure of Interest. Consultant agrees to comply with City of Corpus Christi Ordinance No. 17112 and complete the *Disclosure of Interests* form.

13.10 Certificate of Interested Parties. For contracts greater than \$50,000, Consultant agrees to comply with Texas Government Code section 2252.908 and complete Form 1295 Certificate of Interested Parties as part of this agreement. Form 1295 must be electronically filed with the Texas Ethics Commission at https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm. The form must then be printed, signed and filed with the City. For more information, please review the Texas Ethics Commission Rules at <https://www.ethics.state.tx.us/legal/ch46.html>.

13.11 Conflict of Interest. Consultant agrees, in compliance with Chapter 176 of the Texas Local Government Code, to complete and file Form CIQ with the City Secretary's Office. For more information and to determine if you need to file a Form CIQ, please review the information on the City Secretary's website at <http://www.cctexas.com/government/city-secretary/conflict-disclosure/index>.

13.11 Title VI Assurance. The Consultant shall prohibit discrimination in employment based upon race, color, religion, national origin, gender, disability or age.

13.12 Controlling Law. This Agreement is governed by the laws of the State of Texas without regard to its conflicts of laws. Venue for legal proceedings lies exclusively in Nueces County, Texas. Cases must be filed and tried in Nueces County and cannot be removed from Nueces County.

13.13 Severability. If, for any reason, any one or more Articles and/or paragraphs of this Agreement are held invalid or unenforceable, such invalidity or unenforceability shall not affect, impair or invalidate the remaining Articles and/or paragraphs of this Agreement but shall be confined in its effect to the specific Article, sentences, clauses or parts of this Agreement held invalid or unenforceable, and the invalidity or unenforceability of any Article, sentence, clause or parts of this Agreement, in any one or more instance, shall not affect or prejudice in any way the validity of this Agreement in any other instance.

13.14 Conflict Resolution Between Documents. Consultant hereby agrees and acknowledges if anything contained in the Consultant-prepared **Exhibit A**, Consultant's Scope of Services, the Consultant's response to the Request for Qualifications related to this project, or in any other document prepared by Consultant and included herein, is in conflict with Articles I-XIII of this Agreement (Articles), the Articles shall take precedence and control to resolve said conflict.

[Signature Page Follows]

CITY OF CORPUS CHRISTI

LOCKWOOD, ANDREWS & NEWNAM, INC.

Michael Rodriguez
Chief of Staff

Date

DocuSigned by:
 6/12/2020

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Steve Gilbreath, P.E.
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Date

APPROVED AS TO LEGAL FORM:

Assistant City Attorney

Date

ATTEST

City Secretary

Date

EXHIBIT A
SCOPE OF SERVICES

Exhibit A- Scope of Work

4.1. Background

On December 17, 2019, the City of Corpus Christi City Council passed an ordinance (# 031970) authorizing a navigable canal on North Beach in Corpus Christi, Texas. A copy of the Ordinance is attached. The attachment includes renderings of the navigable canal to include its location. Option #3 provides generally the intended navigable canal's scope.

4.2. Scope of Work

The Consultant will provide professional engineering services to design this canal. The work will be authorized in phases. Phase 1 will consist of the Consultant finalizing the navigable canal's scope and project limits as well as determining if the navigable canal will be functional for its intended use of being navigable and of being a major drainage facility for the North Beach peninsula land area. Based on positive results of Phase 1 findings, there will be subsequent phase(s) that will generally include project pre-design, final design, right of way determinations, land acquisition determinations, utility relocations, construction cost estimates, permitting with various agencies, bid phase services and construction administration services.

ORDINANCE AUTHORIZING A NAVIGABLE CANAL ON NORTH BEACH

WHEREAS, the term “Navigable Canal” in this proposed ordinance refers to the canal presented to the City Council on October 29, 2019 by Urban Engineering. Specifically, the term “Navigable Canal” refers to Option 3 presented to the City Council on such date, shown in the attached **Exhibit A**, as may be modified from time to time to provide the best engineering practices and changes necessary to secure required permits; subject to the limitations on any change that the canal must be (1) navigable and (2) substantially in the same footprint as proposed with the exception of the location of the channel connecting the Navigable Canal to Corpus Christi Bay; and

WHEREAS, the City of Corpus Christi (the “City”) understands that a Navigable Canal could positively impact economic development issues and drainage issues on North Beach to the benefit of all citizens and property owners on North Beach apart from future development;

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CORPUS CHRISTI, TEXAS, TO HEREBY PASS THIS ORDINANCE TO ACHIEVE THE FOLLOWING:

SECTION 1: Subject to funding appropriated by City Council, determination of suitable title, completion of a City-wide public input process, and completion of required permitting, the City will pre-design, design, and construct a Navigable Canal on the North Beach for an amount not to exceed \$41,200,000 and with construction to be complete on or before January 1, 2025.

SECTION 2: Funding for the Navigable Canal should come from various sources: debt by issuing revenue bonds (including such bonds from the revenue funds); HOT tax funds to the extent allowed by statute; TIRZ funds properly authorized by a Financing Plan approved by the TIRZ board; Seawall Fund to the extent allowed by the ballot language; Storm Water Capital Improvement Program; various grants; unassigned interest earned from operating budget and/or capital budget funds; Nueces County.

SECTION 3: The City Manager or designee is directed and authorized to accomplish – through appropriate interaction with City Council, staff, and others – the presentation of an engineering and design contract for the Navigable Canal to City Council for consideration of approval.

SECTION 4: The City Manager or designee is directed and authorized to take all steps necessary to identify funds and present items to City Council for consideration of approval to appropriate funds as described in SECTION 1 with certification made thereof.

SECTION 5: The City Manager or designee is directed and authorized to negotiate with Nueces County to secure the county’s full participation to procure all environmental studies (Phase 1, and Phase 2 (if necessary)) and permits as may be required to support construction of the Navigable Canal.

031970

SCANNED

That the foregoing ordinance was read for the first time and passed on to its second reading on this the 10th day of December 2019, by the following vote:

Joe McComb	<u>Aye</u>	Michael Hunter	<u>Aye</u>
Roland Barrera	<u>Aye</u>	Ben Molina	<u>Aye</u>
Rudy Garza	<u>Aye</u>	Everett Roy	<u>Aye</u>
Paulette M. Guajardo	<u>Aye</u>	Greg Smith	<u>Aye</u>
Gil Hernandez	<u>Aye</u>		

That the foregoing ordinance was read for the second time and passed finally on this the 17th day of December 2019, by the following vote:

Joe McComb	<u>Aye</u>	Michael Hunter	<u>Aye</u>
Roland Barrera	<u>Aye</u>	Ben Molina	<u>Aye</u>
Rudy Garza	<u>Aye</u>	Everett Roy	<u>Aye</u>
Paulette M. Guajardo	<u>Aye</u>	Greg Smith	<u>Aye</u>
Gil Hernandez	<u>Aye</u>		

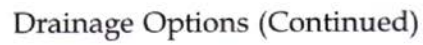
PASSED AND APPROVED on this the 17th day of December, 2019.

ATTEST:

Rebecca Huerta
Rebecca Huerta
City Secretary

Joe McComb
Joe McComb
Mayor

031970



- Cost more than ditch
- Easy to Maintain
- Best hydraulic improvement

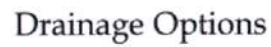


EXHIBIT A-1

Exhibit A-1



**Lockwood, Andrews
& Newnam, Inc.**
A LEO A DALY COMPANY

May 19, 2020

Ms. Kim Baker
Director of Contracts and Procurement
City of Corpus Christi
PO BOX 9277
Corpus Christi, Texas 78469-9277

Re: Proposal for North Beach Navigable Canal Project (Phase 1)

Dear Ms. Baker,

Based on our conversation on May 13th, 2020, this is our revised proposal for completing Phase I of the North Beach Navigable Canal project. Phase 1 will be an 6-month process consisting of LAN finalizing the navigable canal's scope and project limits. LAN will investigate the project for its intended use of being navigable and of being a major drainage facility for the North Beach peninsula land area and produce a report summarizing our findings.

Attachment A details the scope of services and fees required for this proposal and includes our personnel rates for this project. We propose to complete these services on a lump sum basis for total contract amount of **\$508,988.00**. Please feel free to contact me at 713-821-0420 or by email at SAGilbreath@lan-inc.com, if you have any additional questions.

Sincerely,

A handwritten signature in blue ink that reads 'Stephen A. Gilbreath'.

Steve Gilbreath, PE
Vice President

Attachments: A – Scope of Services and Fee Estimate

Cc: Jeffrey Edmonds, P.E. Director of Engineering Services

E12191- IDIQ Major Ditch Improvement

North Beach Navigable Canal

Phase I – Project Scoping

Overview

In December 2019, the City of Corpus Christi City Council passed an ordinance (# 031970) authorizing a \$41 Million dollar project on North Beach in Corpus Christi, Texas to design and construct a navigable canal.

It is LAN's understanding that the work will be authorized in phases:

Phase I – Project Definition - LAN will advance the concepts previously developed and finalize the navigable canal's scope and project limits. Phase I objective is to investigate the project for its intended use of being navigable and a major drainage facility for the North Beach peninsula land area. The Basic and Additional Services required for Phase I are detailed below.

NOTE: Phase II and III are not included in this proposal however below are the services we understand would be included in these future phases:

Phase II – Project Costs and Feasibility – LAN will evaluate the costs associated with the improvements and continue to determine if the project is technically feasible and able to be completed on schedule. In support of evaluating the project costs and feasibility, the following services will be included on Phase II:

- Advance the structural bulkhead concepts, including additional geotechnical engineering, preliminary sizing of the walls, anchoring, and stability analysis.
- Additional coastal modeling for sedimentation / siltation considerations.
- Develop a placement plan for dredged material
- Utility Conflict Identification – LAN will identify existing utilities that may conflict with the proposed improvements, coordinate with third-party utilities, and determine potential conflicts that may bear costs on the proposed project.
- Complete a Phase I Environmental Site Assessment (ESA) for the project.
- Determine Project Costs & Additional Funding Opportunities

Phase III – Preliminary Engineering – LAN will complete preliminary engineering services for the North Beach Navigable Canal improvement including but not limited to 30% design documents and utility conflict resolutions. Right-of-way and Real Estate support will be determined.

Basic Services (Phase I - Project Definition)

Phase I will consist of all efforts required to define the project limits:

- Task 100 – Project Management Services
- Task 101 – Perform Drainage Analysis & Advance Drainage Concepts
- Task 102 – Advance Concept of Canal Design
- Task 103 – Calculate Dredged Material
- Task 104 – Evaluate Traffic & Access Impacts
- Task 105 – Determine Regulatory Requirements
- Task 106 – Determine Real Estate Requirements
- Task 107 – Develop Phase I Report

Task 100 – Project Management Services

1. Client Meetings & Communications

- a. Project Reporting (Monthly) – LAN will prepare up to six (6) monthly project status reports describing work completed, work to be performed, schedule, changes, and deliverables.
- b. Periodic Site Visits – up to five (5) site visits will be budgeted during the course of Phase I. Site Visits will take 1-2 hours and be attended by 2-3 engineers or field personnel.
- c. Kickoff Meeting – LAN will conduct one (1) kick off meeting with the client to discuss the clients' vision for the project, scope of work, schedule, budget, change management plan, and deliverables.
- d. Progress Workshop – LAN will conduct one (1) progress workshop with the City to present results from the various analyses and modeling, conceptual designs/layouts and discuss opportunities and/or scope of project going forward.
- e. Phase I Presentation - LAN will conduct one (1) presentation to City Council to present results from the various analyses and modeling, conceptual designs/layouts and discuss opportunities and/or scope of project going forward.

2. Stakeholder Meetings

In addition to the meetings with the client, it will be necessary for LAN to meet with the following stakeholders of the project during the course of Phase I – Project Definition. LAN will coordinate these meetings, provide meeting notes and minutes, and discuss the outcomes of these meetings with the client. LAN assumes up to two (1) one-hour meetings with each the following two (2) stakeholders:

- US Army Corps of Engineers (USACE)
- Texas Department of Transportation (TXDOT)

Task 101 – Perform Drainage Analyses & Advance Drainage Concepts

1. Data Collection / Review

Gather and review readily-available existing drainage / stormwater information on the North Beach area, including tidal data for Corpus Christi Bay, rainfall data, sea level rise data, construction documents from previous and/or ongoing roadway and drainage projects, prior

drainage reports, and LiDAR topographic data. This task also includes a review City of Corpus Christi Drainage Design Criteria and Standards.

2. Existing Conditions Hydrology & Hydraulics Analysis

Analyze historical tidal records and storm surge levels and generally characterize tidal/surge influences in terms of tide/surge level versus likelihood of occurrence. Apply the LiDAR and topographic survey data to develop a preliminary 2D numerical model of stormwater flow in the North Beach area. Identify existing drainage systems and estimate peak runoff rates. Evaluate existing drainage systems in terms of capacity and level of service and identify capacity shortfalls.

3. Drainage Area Maps

LAN will take the Option 3 drainage area maps from Urban Engineers and develop more detailed drainage area maps for North Beach that graphically represent the results of the hydrology and hydraulics analyses and peak runoff rates. LAN will include additional drainage improvement concepts and features necessary for the canal to serve as a major drainage canal for North Beach.

4. Conceptual Grading Plans

LAN will utilize the drainage area maps to develop conceptual level grading plans focused on draining the right-of-way and areas surrounding the proposed navigable canal. Emphasis will be placed on determining those areas that will require to be raised to achieve positive drainage and prevent routine tidal influence and ponding.

5. Proposed Conditions Hydrology & Hydraulics Analysis

LAN will develop a preliminary 2D numerical model of the proposed canal and storm drainage systems in the North Beach area and model the proposed drainage systems based on estimated peak runoff rates.

Task 102 – Advance Concept of Canal Design

1. Data Collection / Review

Gather and review readily-available existing site improvement and land-use information on the North Beach area, including long and short-range plans, area development plans, capital improvement plans including streets and utility master plans. This task also includes a review City of Corpus Christi Unified Development Codes.

2. Layout & Cross Sections

LAN will take the Option 3 layout from the Urban Engineers report and advance that concept and develop a more detailed canal alignment. LAN will graphically show the alignment on a series of exhibits. LAN will also include up to three (3) cross sections of the proposed canal at key locations along the project.

3. Bulkhead Design

The design and construction of the bulkhead wall requires a conceptual engineering analysis to ascertain the demand forces developed from soil pressure on the wall. Once the demand forces

are determined, these forces will be used to determine the conceptual capacity requirements for the bulkhead wall.

LAN will use the geotechnical parameters developed by TWE within the bulkhead wall analysis and perform a conceptual-level bulkhead wall analysis to determine the requirements of the bulkhead wall. These requirements will include determining the conceptual sizing of the wall (wall thickness, location and sizing of the anchor wall (if required), size of the anchor and wale system and embedment depth.

LAN will develop (1) cross-section for the bulkhead wall and has assumed this analysis will be performed once. LAN will prepare bulkhead wall exhibits (limited to 3) and provide a description to summarize the bulkhead wall design based on the result of this analysis. These items noted will be incorporated within the overall draft and final deliverable to the City.

4. Inlet / Outlet Location Determination

As part of advancing the design of the proposed navigable canal, LAN will consider the most appropriate locations of the canal entrance and exit to Corpus Christi Bay. This task will be completed in conjunction with the water quality modeling and be iterative in nature with the intent to optimize the location for navigability and drainage.

5. Determine Constructability & Project Phasing

LAN will identify any construction related concerns and opportunities and determine the constructability of the navigable canal project. Included as part of this task will be recommendations for phasing the project based on cost, regulatory factors, and on-going and planned adjacent construction projects.

Task 103 – Calculate Dredged Material

LAN will utilize LIDAR and topographic data collected as part of this scope and calculate dredging quantities based on a navigable canal depth of 10-foot.

Task 104 – Evaluate Traffic & Access Impacts

1. Data Collection

Gather readily-available existing roadway and US181 / Harbor Bridge project information relevant to the North Beach area, including traffic studies, construction documents from previous and/or ongoing roadway projects, prior reports, and other traffic count data.

2. Coordinate with TXDOT / Develop Alternatives

After collecting data from TXDOT, LAN will coordinate with the agency and the Harbor Bridge developer to assess traffic and access impacts of the proposed North Beach Canal project and discuss alternatives (up to two (2) alternatives) that may improve access and trafficability between the two projects. This coordination is above and beyond the initial stakeholder meetings and includes additional collaboration between LAN and TXDOT, necessary to develop the alternatives.

3. Review of Existing Plans / Develop Impact Statements

Once data are collected and alternatives are discussed with TXDOT, LAN will review the existing plans and alternatives and develop impact statements for each alternative including feasibility, advantages/disadvantages, and impacts to North Beach businesses, residents, and visitors.

4. Conceptual Transportation Improvement Plans

In addition to the impact statements developed above, LAN will provide conceptual level transportation improvement exhibits for each alternative.

Task 105 – Determine Regulatory Requirements

LAN will coordinate with a third-party subconsultant (BioWest) to determine the regulatory requirements related to the project. LAN will assist Bio-West with the initial coordination with the permitting authorities and assist with any desktop assessments necessary and field verifications to determine potential impacts to wetlands located in or near the project area.

Results and findings from the subconsultants will be included in the Phase I Report.

Task 106 – Determine Real Estate Requirements

LAN will perform a desktop study of the property boundaries within the project area to determine ownership and assess the proposed canal alignment conflicts with those properties. Additionally, included in this assessment will be surrounding properties that will be affected by improvements to the surface transportation network necessary for the proposed canal improvements and preliminary determinations of any phasing that may be required with respect to property acquisition. LAN will document those properties in a table and provide preliminary parcel maps for each of those properties.

Assumptions / Clarifications

This scope does NOT include performing abstracting, certified appraisals, negotiating the price and terms of property transactions, or final parcel maps for property acquisition purposes.

Task 107 – Develop Phase I Report

1. Draft Report

LAN will complete a Draft Report that includes the results and determinations made in the tasks above. The report will document the findings of the analyses, the navigable canal's scope and project limits, and summarize the projects' utilization as a navigable canal and major drainage facility for the North Beach peninsula land area.

Prior to developing the report, LAN will facilitate a Project Review Workshop, to present results from the various analyses and modeling, conceptual designs/layouts and discuss opportunities and/or concerns going forward.

2. Final Report - LAN will receive review comments from the client and incorporate those into a final, signed, and sealed report.

Additional Services

The following additional services will be necessary to support the development and completion of the Basic Services performed during Phase I of this project. Additionally, the work completed will be utilized for future phases of this project, including pre-design, design, bid, and construction.

Task 201 – Geotechnical Engineering

Task 202 – Environmental Services

Task 203 – Survey Services

Task 204 – Coastal Modeling

Task 205 – Data Collection & Modeling Support (Harte Research Institute)

Task 201 – Geotechnical Engineering (Sub-Consultant)

Includes performing necessary field work and developing a geotechnical report documenting the basis for all geotechnical parameters, discussing boring log findings, and incorporating geotechnical findings into an engineering analysis report. See attached sub-consultant proposal (Tolunay-Wong Engineers, Inc. P20-C036).

Task 202 – Environmental Services (Sub-Consultant)

Includes initial coordination with agencies and desktop assessments with limited field verifications to determine the regulatory and environmental permitting requirements for the project. See attached sub-consultant proposal (Bio-West, dated May 14th, 2020).

Task 203 – Survey Services (Sub-Consultant)

Includes performing necessary field work and development of maps documenting the topography, location, and boundaries within the project area and incorporating these documents into the project design documents.

Task 204 – Coastal Modeling

LAN will conduct Water Quality (WQ) modeling to help understand the exchange between the proposed canal and the bay and to evaluate if any unfavorable WQ condition may occur in various design alternatives. We propose to use CE-QUAL-W2 (Corps of Engineers-Quality-Width Averaged 2D) for the WQ modeling.

1. Data Collection and Review - Data to be collected and reviewed will include the following:
 - Proposed design of the North Beach Canal including cross sections and layout.
 - Water level and temperature from NOAA tide station at USS Lexington.
 - Meteorological observations (air and dew point temperatures, wind speed and direction, cloud cover) at nearby airports from NOAA National Centers for Environmental Information (NCEI). Air temperature is also available at the NOAA tide station.

- Any expected inflows (flows and constituent loads) into the canal.
 - WQ data from the TCEQ Surface Water Quality Monitoring (SWQM) program.
 - Model parameters—Since this is a new canal, model parameters will be based on similar waterbodies
2. CE-QUAL-W2 Model Setup - The data collected will be processed to set up WQ model geometry and input files. This task will involve the following effort:
- Determination of model segmentation,
 - Preparation of geometry file,
 - Preparation of meteorological file,
 - Preparation of boundary condition files, and
 - Preparation of model control file.
3. CE-QUAL-W2 Model Application - The developed CE-QUAL-W2 model will be used to evaluate the following design alternatives and conditions that represent worse-case WQ scenarios with less tidal exchange and higher temperature:
- Canal depth of ten feet.
 - Opening at the north end of the canal (Rincon) and opening to the beach (Bay).
 - Average tide condition and neap tide conditions.
 - Summer air and water temperature.

Assumptions / Clarifications

The water level data at USS Lexington will be reviewed to select a typical period of average tide and a typical period of neap tide. LAN also proposes to work with the Harte Research Institute (HRI) to develop water level boundary conditions (time series) by using the HRI's AD-CIRC or DELFT 3D model for incorporation into the CE-QUAL-W2 models. LAN will also develop boundary and initial conditions of the WQ model using the water sampling results to be conducted by Bio-West as well as available historical data obtained from TCEQ/SWQM.

In both cases the WQ modeling period will be selected under hot summer and relatively calm weather. These conditions are more likely to produce unfavorable WQ conditions.

The following four scenarios will be simulated for different combinations of the above alternatives and tide conditions:

Scenario	Opening to the bay	Tide condition
1	Rincon	Average
2	Rincon	Neap
3	Bay	Average
4	Bay	Neap

The following WQ constituents will be simulated:

- Water temperature,

- Salinity,
- Dissolved oxygen,
- Total suspended solids,
- Carbonaceous biochemical oxygen demand,
- Nutrients (nitrogen and phosphorus), and
- Chlorophyll a.

Each scenario will involve simulating a spin up period to establish an equilibrium initial condition. Then, the CE-QUAL-W2 model will be executed for a set number of days using observed tide and meteorological data. The model output will then be processed and evaluated. The model results will be used to support the evaluation and selection of design alternatives.

4. Sensitivity Analysis - To evaluate the sensitivity of CE-QUAL-W2 model parameters on the results of simulating the proposed canal, up to five key model parameters will be changed (+/-20%) one at a time. Statistics of model results will be summarized and reviewed to evaluate the model's sensitivity to the parameters. This analysis will increase the confidence level and provide a better understanding of the modeling results. The sensitivity analysis will be performed for no more than two scenarios that are the most preferred designs.

Task 205 – Data Collection and Modeling Support (Harte Research Institute)

See attached sub-consultant proposal (Harte Research Institute, dated May 18th, 2020).

1. Hydrodynamic modeling support - This task will generate hydrodynamic boundary conditions and provide a 2D, xyz grid for use in a CMS-Flow model. HRI will calculate water level and current velocity boundary conditions for neap and average tide conditions occurring over a 1-month long time series using HRI's Delft3D model of Corpus Christi Bay. The Delft3D model runs on Texas A&M – Corpus Christi's High-Performance Computing system. HRI will also create a 2D xyz grid needed to build the CMS-Flow model. The grid will merge existing bathymetric data along North Beach with the xyz data in the Delft3D model.
2. Data collection support - HRI will assist in the effort to collect pertinent datasets and technical reports.

Summary of Fees:

LAN proposes to complete Phase I of this project on a lump sum basis for a total contract amount **\$508,988.00**.

The following table summarizes the fees associated with each task under this proposal:

Task	Proposed Fee
Task 100 – Project Management Services	\$ 52,035.00
Task 101 – Perform Drainage Analysis & Advance Drainage Concepts	\$ 105,156.00
Task 102 – Advance Concept of Canal Design	\$ 90,228.00
Task 103 – Calculate Dredge Material	\$ 9,331.00
Task 104 – Evaluate Traffic & Access Impacts	\$ 36,359.00
Task 105 – Determine Regulatory Requirements	\$ 3,912.00
Task 106 – Determine Real Estate Requirements	\$ 25,000.00
Task 107 – Develop Phase 1 Report	\$ 51,164.00
Total Basic Services	\$ 373,185.00
Task 201 – Geotechnical Services	\$ 16,180.00
Task 202 – Environmental Services	\$ 13,990.00
Task 203 – Survey Services	\$ 15,000.00
Task 204 – Coastal Modeling	\$ 63,150.00
Task 205 – Data Collection & Modeling Support (HRI)	\$ 27,483.00
Total Additional Services	\$ 135,803.00
Phase I Total	\$ 508,988.00

Project Schedule:

The following table summarizes the fees associated with each task under this proposal:

Task	Duration (weeks)	Begin (week)	End (week)
Notice to Proceed	-	0	0
Task 100 – Project Management	-	0	24
Task 202 – Environmental Services	-	1	
Task 105 – Determine Regulatory Requirements	-	1	
Task 203 – Survey Services	4	1	5
Task 104 – Evaluate Traffic & Access Impacts	4	2	6
Task 101 – Perform Drainage Analysis & Advance Drainage Concepts	10	5	15
Task 201 – Geotechnical Services	4	1	5
Task 204 – Coastal Modeling	8	5	13
Task 205 – Modeling Support	-	5	13
Task 102 – Advance Concept of Canal Design	8	12	20
Task 103 – Calculate Dredged Material	1	20	21
Task 106 – Determine Real Estate Requirements	2	19	21
Task 107 – Develop Phase I Report	4	21	24
Total Duration	24 weeks		

Labor Rates:

The following are LAN's labor rates for the personnel assigned to this project:

Personnel	Rate / Hr
Principal-in-Charge / Regulatory Support	\$ 267.00
Senior Project Manager	\$ 240.00
Quality Control Manager	\$ 210.00
Structural Task Leader	\$ 222.00
Senior Coastal Modeler	\$ 240.00
Coastal Modeler	\$ 195.00
Drainage Task Leader	\$ 196.00
Construction Engineer	\$ 202.00
Structural Engineer	\$ 178.00
Engineer V	\$ 178.00
Senior Designer	\$ 149.00
Engineer III	\$ 148.00
Drainage Engineer	\$ 148.00
Engineer I/II	\$ 115.00

Tolunay-Wong Engineers, Inc.

826 South Padre Island Drive • Corpus Christi, Texas 78416 • Phone: (361) 884-5050

May 18, 2020

Mr. Joseph Scarborough, P.E.
LAN
2925 Briarpark Drive, Suite 400
Houston, TX 77042

(713) 266-6900

email: JEScarborough@lan-inc.com

Ref: Revised Proposal for Geotechnical Engineering Services
Corpus Christi North Beach Project
Corpus Christi, Texas
TWE Proposal No.: P20-C036R1

Dear Mr. Scarborough,

Tolunay-Wong Engineers, Inc. (TWE) is pleased to submit this revised proposal to provide geotechnical engineering services for the referenced project. This proposal presents a general description of the project, our proposed scope of services to be provided, and the estimated cost for completion of our services associated with the project.

Project Overview

The project involves improvement of the North Beach development in Corpus Christi, Texas. The improvements include elevation of the development along with addition of a major drainage canal and drainage outfalls and construction of new streets/roadways. The general site location for the project is shown on the attached Option 3 Drainage Map provided by LAN.

Geotechnical Scope of Services

We will provide the personnel, equipment and materials necessary to complete the requirements of our scope of services. Our scope of services can be categorized into three major areas: field program, laboratory testing, and engineering analysis/report preparation. The purpose of our geotechnical services will be to provide the geotechnical information needed to assist the Client in the preliminary design of the new drainage canal and new streets/roadways.

Field Program

As requested for the revised scope of services, the subsurface conditions at the site will be explored by performing two (2) test borings, each extended to a depth of 50-ft below the natural ground surface. The test boring locations will be near the south and north segments of the proposed alignment for the new drainage canal and streets. The soil boring locations will be identified by TWE and surveyed using a hand-held global positioning system (GPS) device.

We anticipate underground utilities and pipelines could be of concern at the site location. Our field personnel will work with appropriate personnel to identify and avoid known underground utilities. We will also notify the Texas 811 One Call System prior to the commencement of our field program for clearance of subsurface utilities within the project site. Our field personnel will have the appropriate safety training and will be equipped with the required personal protective equipment.

Our services will be under the direction of a Professional Engineer experienced in geotechnical engineering. Our test borings will be logged by an experienced geotechnician. The borings will be advanced using auger methods or until borehole conditions require the use of wash-rotary drilling methods.

Geotechnical drilling and sampling will be performed in accordance with *ASTM International* standards. Samples will be obtained at 2.5-ft depth intervals to a depth of 10-ft, at the 13-ft to 15-ft depth interval, and at 5-ft depth intervals thereafter until the boring completion depths are reached.

Fine-grained, cohesive soils will be sampled using pushed, thin-walled Shelby tubes with an inside diameter of 2.87-in. Our geotechnician will conduct field strength measurements using a pocket penetrometer or hand torvane device on each cohesive soil sample recovered. The samples will be wrapped in foil, placed in moisture sealed plastic bags and handled to minimize disturbance prior to transport to our laboratory.

Where coarse-grained, cohesionless and semi-cohesionless soils are encountered, sampling will be performed using standard penetration test (SPT) methods. Our geotechnician will monitor the driving resistance and record blow counts while performing the SPTs. The disturbed samples from the SPT sampling will be placed in moisture sealed plastic bags and delivered to our laboratory.

The test borings will be backfilled with auger cuttings and bentonite chips. Any leftover cuttings will be scattered around the boring locations.

Laboratory Testing

Selected samples from the soil borings will be used for laboratory testing. Our laboratory testing program will include properties such as moisture content, unit weight, various shear strength tests (unconfined compression strength, unconsolidated-undrained triaxial compression strength, and consolidated-undrained triaxial compression strength with pore water pressure), crumb dispersion, one-dimensional, incremental loading consolidation, Atterberg Limits, and grain size distribution.

Engineering Analysis/Report Preparation

Engineering analysis will be conducted utilizing the information collected during our field program and laboratory testing services. Analyses will include preliminary global stability of canal bulkhead wall, analysis of anchor wall system, soil parameters for bulkhead wall analysis, pavement sections, and erosion considerations near the mudline. We will also provide earthwork discussions for the project. We will present the results and findings of our geotechnical services in a written report. Electronic and hard copies of our final report will be issued to the Client as requested.

Our final report will include the following:

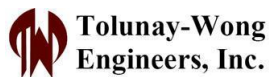
- a. Summary of field and laboratory tasks;
- b. Discussion and conclusions of our findings including:
 - i. Project site conditions;
 - ii. Subsurface soil and groundwater conditions;
 - iii. Boring logs presenting tabulated field and laboratory test results;
- c. Preliminary geotechnical recommendations including drivability of concrete sheet piling; global stability of canal bulkhead wall for determination of allowable safety factor, design of anchor wall system for canal bulkhead wall including passive resistance on the anchor wall and location of anchor wall behind main wall, design profile and soil parameters for bulkhead wall analysis;
- d. Guidance for erosion susceptibility/characteristics of soils near the mudline of the sheet piles based on cross section provided by LAN will be provided;
- e. Preliminary geotechnical design recommendations for flexible (asphalt) and rigid (concrete) pavement sections including subgrade preparation and required component thicknesses. The information as requested by LAN in their Geotechnical Scope of Work will be provided;
- f. Geotechnical guidance will be provided regarding erosion/scour susceptibility; and,
- g. Geotechnical recommendations including subgrade preparation, excavation considerations, fill and backfill placement, and overall quality control monitoring, inspection and testing services.

Schedule

Upon authorization, our field program can typically commence within five (5) working days depending on our current schedule, site access, weather contingencies and subsurface utility clearance. We anticipate the field program will take one (1) day to complete with laboratory testing beginning as soil samples are returned to the laboratory. We anticipate being able to complete all laboratory testing within one (1) to two (2) weeks after completion of the field work. Engineering analysis and preparation of our draft report will require two (2) to three (3) weeks after all laboratory testing is completed. A final report will be available within one (1) week of receiving comments on the draft report from LAN. We anticipate an overall project duration of five (5) to seven (7) weeks from notice to proceed to completion of our final report. During this time, we will communicate with the Client and provide preliminary information as needed to avoid delays in the overall project schedule.

Estimated Cost

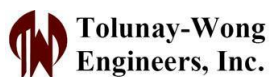
The estimated cost associated with our geotechnical services for this project is presented below. Every reasonable effort will be made to stay within this proposed budget. Should unforeseen conditions or situations occur that are beyond the control of TWE, we will not exceed this lump sum amount without prior approval from the Client.



**Tolunay-Wong
Engineers, Inc.**

May 18, 2020
TWE Proposal No. P20-C036R1

Description		Unit	Quantity	Rate	Extension
Field Program					
1	Project Setup/One Call/Coordination	lump sum	1	\$400.00	\$400.00
2	Mobilize and demobilize truck mounted drilling equipment	lump sum	1	\$1,600.00	\$1,600.00
3	Drilling, sampling, personnel, & equipment	day	1	\$2,300.00	\$2,300.00
4	Grouting materials	foot	100	\$3.00	\$300.00
5	Drill Crew Per Diem	day	1	\$275.00	\$275.00
6	Senior Field Geotechnician	day	1	\$750.00	\$750.00
7	Standby time for delays beyond our control	hour	as expended	\$230.00	as expended
Laboratory Testing					
8	Moisture Content/Visual Classification	ea	10	\$20.00	\$200.00
9	Atterberg Limits	ea	5	\$50.00	\$250.00
10	Percent Finer Than No. 200 Sieve	ea	10	\$50.00	\$500.00
11	Unconfined Compressive Strength	ea	2	\$50.00	\$100.00
12	Unconsolidated Undrained Triaxial Shear Strength	ea	3	\$60.00	\$180.00
14	Crumb Dispersion	ea	2	\$40.00	\$80.00
15	Consolidated-Undrained Triaxial Compression with Pore Water Pressure	ea	2	\$1,000.00	\$2,000.00
16	One-Dimensional Incremental Loading Consolidation with intermediate rebound and reload	ea	1	\$500.00	\$500.00
Engineering Analysis/Report Preparation					
17	Geotechnical Consultant	hour	4	\$180.00	\$720.00
18	Project Manager - Geotechnical	hour	10	\$160.00	\$1,600.00
19	Project Professional	hour	36	\$110.00	\$3,960.00
20	Computer-Aided Draftsman	hour	4	\$75.00	\$300.00
21	Administrative Support	hour	3	\$55.00	\$165.00
Total Cost Estimate					\$16,180.00

**Closing**

If this proposal is acceptable, please sign and date below and return it to us. Receipt of the executed proposal will serve as authorization to us to proceed with the services.

If you have any questions regarding this proposal, please contact us at **(361) 884-5050**. We appreciate your consideration for this project and we look forward to working with you on this project.

Sincerely,

TOLUNAY-WONG ENGINEERS, INC.

Texas Board of Professional Engineers Firm Registration Number F-000124

A handwritten signature in blue ink that reads 'D. R. Rokohl'.

Don R. Rokohl, P.E.
Branch Manager

DRR/drr

Signature: _____

Name: _____

Company: _____

Date: _____

Attached: Scope of Work dated May 14, 2020
Project Site Exhibit
BIO-WEST 2020 Standard Terms and Conditions



May 14, 2020

Mr. Joseph E. Scarborough, PE
Market Segment Leader, Port and Coastal Services
Lockwood, Andrews, & Newnam, Inc.
2925 Briarpark Drive, Suite 400
Houston, TX 77042-3720

**Re: Request for Environmental Support Services
Proposed City of Corpus Christi North Beach Navigable Canal Project
Corpus Christi, Nueces County, Texas**

Dear Mr. Scarborough:

BIO-WEST, Inc. (BIO-WEST) is pleased to provide the following scope of work and cost estimate for environmental support for the proposed City of Corpus Christi's (the City's) proposed North Beach Navigable Canal Project ("the project") in Corpus Christi, Nueces County, Texas. For this project, BIO-WEST understands that the City intends to construct a navigable canal between Timmons Boulevard (Blvd) and Surfside Blvd in the North Beach area of Corpus Christi with a tidal entrance channel near Bushick Place and Steward Place. BIO-WEST also understands that although the primary purpose of this project is to alleviate drainage and floodplain issues in this neighborhood, the project as proposed also has the potential positively impact economic development in the area.

To support this effort, BIO-WEST proposes to assist the project team with the identification of potential environmental concerns (wetlands/waters, protected species, marine resources, cultural resources, etc.), that may result from the project. BIO-WEST understands that on Lockwood, Andrews, & Newnam, Inc. (LAN) is the Engineer of Record for this project, and will be representing the City, the permit applicant and end client. Project site figures depicting the project area and footprint are attached for reference.

Based on communication with LAN, BIO-WEST proposes to use a phased approach to this project. This scope of work includes services related to Phase I: Initial Coordination and Desktop Assessments with Limited Field Verifications. BIO-WEST anticipates providing a separate proposal at a later date for services related to Phase II: Formal Surveys and Permitting. For ease of understanding, this proposal is organized according to Technical Approach, Schedule, Cost Estimate and Conditions of Engagement, Assumptions, and Summary.

TECHNICAL SCOPE – PHASE I

Task 1: Initial Coordination with Agencies and Stakeholders

To kick-off the project and assist with future permitting efforts, BIO-WEST will coordinate one in-person meetings with LAN, the City, and the United States Army Corps of Engineers (USACE) Corpus Christi Field Office as a pre-application in Corpus Christi, Texas or with Joint Evaluation Meeting (JEM) with the entire Interagency Review Team (IRT) in Galveston, Texas to facilitate project progress and navigate potential permitting approvals.

For this meeting, BIO-WEST will provide all necessary paperwork (agenda, meeting minutes, etc.), maps, and exhibits to assist both agencies and stakeholders in understanding the project's goals and objectives. BIO-WEST will also coordinate up to three teleconference meetings internally for this project between BIO-WEST, LAN, and the City to ask questions, solicit feedback, and receive project information and updates for the necessary permit approvals. BIO-WEST assumes up to three rounds of comments and

summary memos may be needed for this effort, for inclusion into LAN's Preliminary Engineering Report (PER) on the project.

During and following each meeting or teleconference, BIO-WEST will assist LAN and the City team with design, organization, and permitting strategies for all aspects of the project, including dredge and fill scenarios, dewatering and entrapment issues, and potential hazardous materials sampling plans, analysis, handling, and disposal. BIO-WEST will assist LAN and the City in proactively addressing issues and agency requirements as well as preparing conceptual plans and outlines, meeting minutes, and agendas to address agency and stakeholder comments and answer any pertinent questions prior to any formal permitting effort.

Throughout this phase, BIO-WEST will provide the necessary experienced personnel to manage the project and meet all of LAN's needs. To facilitate project completion, BIO-WEST will provide a single point of contact to LAN for the purposes of project interface, budget tracking and forecasts, project updates, and scheduling. BIO-WEST's Project Manager will provide project updates, field data, and progress reports on a regular schedule through both telephone and email correspondence. BIO-WEST's Project Manager will assume the role of QA/QC and will participate in iterative review and revision of project data, documentation, permits, and agency submittals at the direction of LAN.

Task 2: Desktop Assessment and Limited Field Verification

BIO-WEST will conduct a desktop review and evaluation of the proposed project site for potential waters of the United States, including wetlands and other special aquatic sites (WOTUS), threatened and endangered species, and cultural resources. BIO-WEST will perform a background and literature review of the project area, evaluating the following items:

- Potential jurisdictional wetland/water bodies regulated by the USACE
- Section 10 Navigable Waters
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs)
- United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) imagery
- National Hydrography Dataset (NHD) imagery
- Current and Historical Aerial Imagery
- LIDAR and current United States Geological Society (USGS) Topographic Quadrangle Maps
- State-specific resource maps (sensitive watersheds, protected habitat, etc.)
- USFWS Information for Planning and Conservation (IPaC) tool
- USFWS Environmental Conservation Online System (ECOS) mapper
- Texas Parks and Wildlife Department (TPWD) Natural Diversity Database (NDD)
- Texas State Historic Preservation Office (SPHO) and Texas Historical Atlas (THA) records

Following the desktop evaluation, BIO-WEST will conduct one, two-day limited field verification of the project site to provide a cost savings for the project. This field visit will include photo-documenting the project site and evaluating the potential for impacts to WOTUS, protected species, and aboveground cultural or historical resources from any proposed development. While this task is not intended to act as a formal field survey for any of these resources, BIO-WEST will verify the results of the desktop assessment versus existing field conditions.

Additionally, at the request of LAN, BIO-WEST will collect up to two water quality samples from the water column within wading or small craft distance of the mean high tide (but outside of the surf zone) to test for turbidity and suspended solids. BIO-WEST will coordinate with LAN and an accredited laboratory on the sample kits and collect both samples during the field work. BIO-WEST will deliver the

samples back to the lack and have them tested for Total Suspended Solids (TSS) and supply the results to LAN.

Once complete, BIO-WEST will produce one environmental review letter report focusing on the project site referenced in this scope. The cultural resource portion of this review report will be overseen by a qualified cultural resource firm. The letter report will include maps, figures, and other pertinent information to assist LAN and the City in understanding development constraints on the project site related to WOTUS, protected species, and cultural resources. After one round of comments are incorporated in the initial draft report, BIO-WEST will provide a final copy to LAN and the City to use for planning and permitting purposes.

SCHEDULE

BIO-WEST will start coordinating schedules and meetings within two weeks of receiving notice to proceed. Following each meeting, BIO-WEST will provide input on LAN's meeting minutes for participant review within one week. The remainder of the project schedule will be set as coordination with agencies and stakeholders progresses.

ASSUMPTIONS

BIO-WEST made the following assumptions in the development of this scope of work:

- This proposal is inclusive of all effort, manpower, equipment, and cost required to complete the referenced scope of work.
- BIO-WEST assumes up to three rounds of comments may be needed prior to the final production of materials for Task 1 meetings and teleconferences.
- BIO-WEST assumes one in-person meeting will be required for this scope of work.
- BIO-WEST assumes up to three teleconferences internally between BIO-WEST, LAN, and the City will be required for this scope of work.
- BIO-WEST assumes that each in-person meeting or teleconference will have a preparation component and that each in-person meeting will require up to one day for travel and meeting time.
- BIO-WEST will be provided with site access to all properties within the subject property during normal business hours.
- If the results and findings indicate the need for further study beyond the scope of work specifically referenced herein, BIO-WEST will notify LAN of the conditions of concern and recommendations for revised services, and additional costs and request a change order.
- Only one, two-day limited field verification is included in this proposal for Task 2. No formal surveys or permitting are proposed as part of this proposal.
- BIO-WEST will collect two water quality samples during field efforts to test for TSS in the water column. If additional sampling is required, BIO-WEST can perform this under a separate scope of work and cost estimate.

COST ESTIMATE AND CONDITIONS OF ENGAGEMENT

BIO-WEST proposes to provide the aforementioned services for the following fixed fee, lump sum prices below based on a breakdown by task in Table 1.

Table 1: Cost Estimate by Task

Task	Fee
Task 1: Initial Coordination with Agencies and Stakeholders	\$6,040.00
Task 2: Desktop Assessments and Limited Field Verifications	\$7,950.00
Total	\$13,990.00

This cost is an estimate based upon project knowledge and our current 2020 standard billing rates. The information presented is intended to assist with environmental permitting needs (i.e. Section 404/10 of CWA/RHA, Section 106 of NHPA, etc.) and provide additional support for project planning.

SUMMARY AND CONDITIONS OF ENGAGEMENT

To accept this cost estimate, please sign and date the attached BIO-WEST Agreement for Consulting Services, and return an electronic copy to BIO-WEST. Acceptance of this proposal, in whole or part, entails acceptance of BIO-WEST's attached Standard Terms and Conditions. This proposal is valid for 60 days from the date above.

BIO-WEST greatly appreciates the opportunity to provide this scope of services and cost estimate. If you have any questions or would like any additional information, please feel free to contact me at (832) 595-9064 or mchastain@bio-west.com.

Sincerely,



Matthew Chastain, PWS
Project Manager/Ecologist

cc: Lars Zetterstrom, Lockwood, Andrews, and Newnam, Inc.

BIO-WEST, INC.
STANDARD TERMS AND CONDITIONS 2020
AGREEMENT FOR SERVICES

ARTICLE 1. SERVICES

BIO-WEST will:

- 1.1 Act for the CLIENT in a professional manner, using the degree of care and skill ordinarily exercised by and consistent with the standards of competent consultants practicing in the same fields and a similar locality of LOCATION.
- 1.2 Provide only those services that, in the opinion of BIO-WEST, lie within the technical or professional areas of expertise of BIO-WEST and which BIO-WEST is adequately staffed and equipped to perform.
- 1.3 Perform all technical services under the general direction of a corporate principal and in substantial accordance with the basic requirements of the appropriate standards designated by the CLIENT.
- 1.4 Consider all reports to be the confidential property of CLIENT and distribute reports only to those persons, organizations, or agencies specifically designated in writing by the CLIENT or authorized representative, or as required by law.
- 1.5 Retain all pertinent records relating to the services performed for a period of 3 years following submission of the report. During this period, the records will be made available to the CLIENT at all reasonable times.
- 1.6 Submit copies of a complete preliminary draft of the report for review and comment by the CLIENT prior to the preparation and submittal of the final draft of the report.
- 1.7 Submit the report at the conclusion of the study and cover in reasonable detail each area outlined in the Exhibits.

ARTICLE 2. CLIENT'S RESPONSIBILITIES

The CLIENT (or authorized representative) will:

- 2.1 Provide BIO-WEST full information regarding the characteristics, history, and operations on LOCATION, including structure(s), existing underground utilities and facilities, legal and regulatory background, and other information necessary for the proper performance of BIO-WEST. BIO-WEST will not be liable for damages or injury arising from damage to existing underground utilities, structures, hazardous wastes, or other materials that are not called to BIO-WEST's attention and correctly shown on the plans furnished. The CLIENT agrees to defend, indemnify, and save BIO-WEST harmless from all claims, suits, losses, costs, and expenses, including reasonable attorney's fees, as a result of personal injury, death, or property damage occurring with respect to BIO-WEST's performance of its work and resulting to or caused by contact with subsurface or latent objects, structures, lines, or conduits where the actual or potential presence and location thereof were not revealed to BIO-WEST by the CLIENT.
- 2.2 Furnish right of entry onto LOCATION for BIO-WEST to make necessary field studies. BIO-WEST will endeavor to minimize damage to the land but makes no guarantee to restore the site to its original condition unless a separate agreement is made for such restoration, in which case BIO-WEST shall add the cost of restoration to the fee for LOCATION.
- 2.3 Designate in writing those persons, organizations, or agencies to be contacted in the event conditions are revealed during the execution of BIO-WEST's study that would require possible alteration of the study.
- 2.4 The CLIENT shall pay all costs incurred by BIO-WEST in defending itself against the claim, including but not limited to personnel-related costs, attorney's fees, court costs, and other claim-related expenses, in the event that the CLIENT makes a claim against BIO-WEST, at law or otherwise, for any alleged error, omission, or other act arising out of the performance of BIO-WEST's services, and the CLIENT fails to prove such claim upon final adjudication.

ARTICLE 3. GENERAL CONDITIONS

- 3.1 BIO-WEST, by the performance of services covered hereunder, does not in any way assume, abridge, or

abrogate any of those duties, responsibilities, or authorities with regard to LOCATION customarily vested in any other agencies or authorities.

- 3.2 BIO-WEST shall not be responsible for acts or omissions of any party or parties involved on LOCATION or the failure of any contractor or subcontractor to operate in accordance with recommendations contained in any correspondence or verbal recommendation issued by BIO-WEST.
- 3.3 This agreement may be terminated by either party by sending 30 day written notice. If this agreement is terminated by CLIENT, BIO-WEST shall be paid in full for all services performed through the termination date, plus five percent (5%) of all sums for work not yet performed as liquidated damages, and the client shall be provided with a complete report of the results of tests and analysis conducted prior to termination following receipt of payment.
- 3.4 Neither the CLIENT nor BIO-WEST may delegate, assign, or transfer their duties or interest in this agreement without the written consent of the other party.

ARTICLE 4. INSURANCE

- 4.1 A. BIO-WEST shall maintain the following insurances during the term of this Contract:

<u>TYPE OF COVERAGE</u>	<u>POLICY LIMITS</u>
Workers' Compensation:	
* Workers' Compensation	Statutory
* Employers' Liability	\$1,000,000
Commercial General Liability	\$1,000,000 per each occurrence. \$3,000,000 general aggregate.
Business Automobile Liability	\$1,000,000 combined single limit, per occurrence.
Professional Liability	\$1,000,000 per occurrence on a claims-made basis.

If the CLIENT desires additional coverage, any additional premium is to be paid by the CLIENT.

- 4.2 Upon reasonable request, BIO-WEST shall furnish the CLIENT with satisfactory evidence that all insurance required to be carried by it hereunder is in full force and effect and such insurance will not be canceled or materially altered prior to the expiration of 30 days following delivery to the CLIENT of notice of any such cancellation or alteration.

ARTICLE 5. WARRANTY AND LIMITATION OF PROFESSIONAL LIABILITY

- 5.1 THE ONLY WARRANTY OR GUARANTEE MADE BY BIO-WEST IN CONNECTION WITH SERVICES PERFORMED UNDER THIS AGREEMENT IS THAT SUCH SERVICES ARE PERFORMED WITH THE CARE AND SKILL ORDINARILY EXERCISED BY MEMBERS OF THE PROFESSION PRACTICING UNDER SIMILAR CONDITIONS AT THE SAME TIME AND IN THE SAME OR SIMILAR LOCALITY. NO OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE OR INTENDED BY RENDITION OF CONSULTING SERVICES OR BY FURNISHING ORAL OR WRITTEN REPORTS OF THE FINDINGS MADE.
- 5.2 Tests and inspections: The CLIENT shall cause all tests and inspections of the site, materials, and work performed by BIO-WEST or others to be timely and properly performed in accordance with the plans, specifications, and contract documents and BIO-WEST's recommendations. No claims for loss, damage, or injury shall be brought against BIO-WEST by the CLIENT or any third party unless all tests and inspections have been so performed and unless BIO-WEST's recommendations have been followed. The CLIENT agrees to indemnify, defend, and hold BIO-WEST, its officers, employees, and agents harmless from any and all claims, suits, losses, costs, and expenses, including, but not limited to, court costs and reasonable attorney's fees, in the event that all such tests and inspections are not so performed or BIO-WEST's recommendations are not so followed, except to the extent that such failure is the result of the negligence, willful or wanton act, or omission of BIO-WEST, its officers, agents, or employees, subject to the limitation contained in paragraph 5.1.

- 5.3 Responsibility: BIO-WEST's work shall not include determining, supervising, or implementing the means, methods, techniques, sequences, or procedures of construction. BIO-WEST shall not be responsible for evaluating, reporting, or affecting job conditions concerning health, safety, or welfare. BIO-WEST's work or failure to perform same shall not in any way excuse any contractor, subcontractor, or supplier from performance of its work in accordance with the contract documents. BIO-WEST has neither right nor duty to stop the contractor's work.
- 5.4 Sample disposal: Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed of 60 days after submission of BIO-WEST report.
- 5.5 Employee's/witness fees: BIO-WEST's employees shall not be retained as expert witnesses except by separate, written agreement. The CLIENT agrees to pay BIO-WEST's legal expenses, administrative costs, and fees pursuant to BIO-WEST's then current fee schedule for BIO-WEST to respond to any subpoena. The CLIENT agrees not to hire BIO-WEST's employees except through BIO-WEST. In the event the CLIENT hires a BIO-WEST employee, the CLIENT shall pay BIO-WEST an amount equal to one-half of the employee's annualized salary, without BIO-WEST waiving other remedies it may have.
- 5.6 Any exploration, testing, surveys, and analyses associated with the work will be performed by BIO-WEST for the CLIENT's sole use to fulfill the purpose of this service agreement, and BIO-WEST is not responsible for interpretation by other of the information developed. The CLIENT recognizes that subsurface conditions beneath the LOCATION may vary from those encountered in boring, surveys, or explorations, and that information and recommendations developed by BIO-WEST are based solely on the information available to them.
- 5.7 The CLIENT recognizes that failure of state or local governmental entity to approve part or all of a plan may require additional analysis and/or revisions.
- 5.8 BIO-WEST's liability for damages due to professional negligence will be limited to a sum not to exceed the fee paid to BIO-WEST for this project.
- 5.9 The CLIENT further agrees to notify any contractor and subcontractor who may perform work in connection with any design, report, or study prepared by BIO-WEST of such limitation of professional liability for design defects, errors, omissions, or professional negligence, and to require, as a condition precedent of their performing their work, a like indemnity and limitation of liability on their part as against BIO-WEST.
- 5.10 Nothing contained within this agreement shall be construed or interpreted as requiring BIO-WEST to assume the status of an owner, operator, generator, storer, transporter, treater, or disposal facility as those terms appear within Resource Conservation and Recovery Act (RCRA) or within any Federal or State statute or regulation governing the generation, transportation, treatment, storage, and disposal of pollutants. The CLIENT assumes full responsibility for compliance with the provision of RCRA and any other Federal or State statute or regulation governing the handling, treatment, storage, and disposal of pollutants.

ARTICLE 6. PAYMENT

- 6.1 The CLIENT will pay BIO-WEST for services and expenses in accordance with the attached fee schedule. At BIO-WEST's option, invoices will be presented at the completion of its work or monthly and will be paid within 30 days of receipt by the CLIENT or authorized representative. The CLIENT agrees to pay a finance charge of 1.5 percent per month on past-due accounts. Should either party hereto bring suit in court to enforce any term of this agreement, it is agreed that the prevailing party shall be entitled to recover costs, expenses, and reasonable attorney's fees. Payments more than 30 days past due shall, unless remedied within 10 days of notice to the CLIENT, excuse BIO-WEST from further performance thereunder and shall obligate the CLIENT to immediately pay all sums (including accrued interest), plus 5 percent of all sums of work not yet performed as liquidated damages.
- 6.2 BIO-WEST shall be paid in full for all services under this agreement, including any unforeseen need for BIO-WEST's services exceeding original contract requirements. Payment for such services shall be made irrespective of any claim by the CLIENT for compensation for additional work conducted. Any such claim shall in no respect delay payment of fees for services performed by BIO-WEST.

ARTICLE 7. INDEPENDENT CONTRACTOR

- 7.1 It is understood and agreed that BIO-WEST shall perform the work according to its own means and methods, and shall be an independent contractor. All persons employed by BIO-WEST in connection with the work shall be BIO-WEST employees or consultants, subject only to its orders and supervision and shall be paid directly by it. Neither the CLIENT nor its agents, servants, or employees shall have the right to direct, supervise, or control the manner or method in which the work is performed, except as otherwise expressly provided herein. The CLIENT reserves the right upon itself and its agents to inspect the work, however, for the purpose of determining whether the work is being performed in conformity with the Contract Documents.

ARTICLE 8. ASSIGNMENT AND SUBCONTRACTING

- 8.1 This contract shall be binding on and inure to the benefit of the parties hereto and their respective successors and assigns; provided, however, that BIO-WEST shall not assign, transfer, let, or sublet, in whole or in part, the work under this Contract without written notice to the CLIENT and the agreement in writing of each such subcontractor to perform its work in conformity with the terms of the Contract Documents that apply to such work, and BIO-WEST shall be fully responsible for the acts and omissions of such subcontractors.

ARTICLE 9. NO WAIVER

- 9.1 Failure on the part of BIO-WEST or the CLIENT to timely enforce any condition or provision of the Contract shall not be deemed to be a waiver of such condition or provision, except to the extent that the same is expressly waived or consented to in writing by the party entitled to enforcement thereof.

ARTICLE 10. JURISDICTION

- 10.1 The parties agree that the courts of Cache County, Utah, shall (at the election of BIO-WEST) have original, exclusive jurisdiction of disputes arising hereunder.

ARTICLE 11. EXTENT OF AGREEMENT

- 11.1 The agreement, including these terms and conditions, represents the entire agreement between the CLIENT and BIO-WEST, and supersedes all prior negotiations, representations, or agreements, written or oral. The agreement may be amended only by written instrument signed by the CLIENT and BIO-WEST.

North Beach Phase 1 tasks and budget for the Harte Research Institute

Submitted to LAN on May 19, 2020

Submitted by James C. Gibeaut, Ph.D., PG

Task 1: Hydrodynamic modeling support

This task will generate hydrodynamic boundary conditions and provide a 2D, xyz grid for use in a CMS-Flow model. HRI will calculate water level and current velocity boundary conditions for neap and average tide conditions occurring over a 1-month long time series using HRI's Delft3D model of Corpus Christi Bay. The Delft3D model runs on Texas A&M – Corpus Christi's High-Performance Computing system. HRI will also create a 2D xyz grid needed to build the CMS-Flow model. The grid will merge existing bathymetric data along North Beach with the xyz data in the Delft3D model.

Task 2: Data collection support

HRI will assist in the effort to collect pertinent datasets and technical reports.

		Gibeaut (hrs)	Subedee(hrs)	Dotson(hrs)	Labor	Travel	Computing	Task Cost
Task 1	Hydrodynamic Modeling Support	30	125	50	15,534.00	700.00	500.00	\$16,734.00
Task 2	Data collection support	40	20	60	10,549.00	200.00	0.00	\$10,749.00
				Total Cost	\$26,083.00	\$900.00	\$500.00	\$27,483.00
		<i>Hourly rate</i>						
		<i>Gibeaut</i>	<i>\$155.20</i>					
		<i>Subedee</i>	<i>\$67.02</i>					
		<i>Dotson</i>	<i>\$50.01</i>					

Sample form for:
Payment Request
AE Contract
Revised 02/01/17

COMPLETE PROJECT NAME

Project No. XXXX

Invoice No. 12345

Invoice Date 01/01/2017

	Total			Current Invoice	Previous Invoice	Total Invoice	Remaining Balance	Percent Complete
	Contract	Amd No. 1	Amd No. 2					
Basic Services:	\$1,000.00	\$0.00	\$0.00	\$1,000.00	\$1,000.00	\$1,000.00	\$0.00	100.0%
	\$2,000.00	\$1,000.00	\$0.00	\$3,000.00	\$1,500.00	\$1,500.00	\$1,500.00	50.0%
	\$500.00	\$0.00	\$250.00	\$750.00	\$0.00	\$0.00	\$750.00	0.0%
	\$2,500.00	\$0.00	\$1,000.00	\$3,500.00	\$0.00	\$0.00	\$3,500.00	0.0%
	\$6,000.00	\$1,000.00	\$1,250.00	\$8,250.00	\$2,500.00	\$2,500.00	\$5,750.00	30.3%
Additional Services:								
	\$2,000.00	\$0.00	\$0.00	\$2,000.00	\$500.00	\$500.00	\$1,500.00	25.0%
	\$0.00	\$1,120.00	\$0.00	\$1,120.00	\$0.00	\$0.00	\$1,120.00	0.0%
	\$0.00	\$0.00	\$1,627.00	\$1,627.00	\$0.00	\$0.00	\$1,627.00	0.0%
	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Summary of Fees:	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	\$2,000.00	\$1,120.00	\$1,627.00	\$4,747.00	\$500.00	\$500.00	\$4,247.00	10.5%
	\$6,000.00	\$1,000.00	\$1,250.00	\$8,250.00	\$2,500.00	\$2,500.00	\$5,750.00	30.3%
	\$2,000.00	\$1,120.00	\$1,627.00	\$4,747.00	\$500.00	\$500.00	\$4,247.00	10.5%
	\$8,000.00	\$2,120.00	\$2,877.00	\$12,997.00	\$3,000.00	\$3,000.00	\$9,997.00	23.1%

Notes:

A PURCHASE ORDER NUMBER MUST BE INCLUDED ON ALL INVOICES AND INVOICE CORRESPONDENCE. FAILURE TO COMPLY WILL RESULT IN DELAYED PAYMENT OF INVOICES.

If needed, update this sample form based on the contract requirements.

If applicable, refer to the contract for information on what to include with time and materials (T&M).

EXHIBIT C

Insurance Requirements

1.1 Consultant must not commence work under this agreement until all required insurance has been obtained and such insurance has been approved by the City. Consultant must not allow any subcontractor to commence work until all similar insurance required of any subcontractor has been obtained.

1.2 Consultant must furnish to the Director of Engineering Services with the signed agreement a copy of Certificates of Insurance (COI) with applicable policy endorsements showing the following minimum coverage by an insurance company(s) acceptable to the City's Risk Manager. **The City must be listed as an additional insured on the General liability and Auto Liability policies, and a waiver of subrogation is required on all applicable policies. Endorsements must be provided with COI. Project name and or number must be listed in Description Box of COI.**

TYPE OF INSURANCE	MINIMUM INSURANCE COVERAGE
30-written day notice of cancellation, required on all certificates or by applicable policy endorsements	Bodily Injury and Property Damage Per occurrence - aggregate
Commercial General Liability including: 1. Commercial Broad Form 2. Premises – Operations 3. Products/ Completed Operations 4. Contractual Liability 5. Independent Contractors 6. Personal Injury- Advertising Injury	\$1,000,000 Per Occurrence \$2,000,000 Aggregate
AUTO LIABILITY (including) 1. Owned 2. Hired and Non-Owned 3. Rented/Leased	\$500,000 Combined Single Limit
PROFESSIONAL LIABILITY (Errors and Omissions)	\$4,000,000 Per Claim If claims made policy, retro date must

	be prior to inception of agreement, have 3-year reporting period provisions and identify any limitations regarding who is insured.
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1.3 In the event of accidents of any kind related to this agreement, Consultant must furnish the City with copies of all reports of any accidents within 10 days of the accident.

1.4 Consultant shall obtain and maintain in full force and effect for the duration of this Contract, and any extension hereof, at Consultant's sole expense, insurance coverage written on an occurrence basis, with the exception of professional liability, which may be on a per claims made basis, by companies authorized and admitted to do business in the State of Texas and with an A.M. Best's rating of no less than A- VII. **Consultant is required to provide City with renewal Certificates.**

1.5 Consultant is required to submit a copy of the replacement certificate of insurance to City at the address provided below within 10 days of the requested change. Consultant shall pay any costs incurred resulting from said changes. All notices under this Article shall be given to City at the following address:

City of Corpus Christi
Attn: Engineering Services
P.O. Box 9277
Corpus Christi, TX 78469-9277

1.6 **Consultant agrees that with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain the following required provisions:**

1.6.1 List the City and its officers, officials, employees and elected representatives as additional insured by endorsement, as respects operations, completed operation and activities of, or on behalf of, the named insured performed under contract with the City with the exception of the professional liability/Errors & Omissions policy;

1.6.2 Provide for an endorsement that the "other insurance" clause shall not apply to the City of Corpus Christi where the City is an additional insured shown on the policy;

1.6.3 Provide thirty (30) calendar days advance written notice directly to City of any suspension, cancellation or non-renewal of coverage, and not less than ten (10) calendar days advance written notice for nonpayment of premium.

1.7 Within five (5) calendar days of a suspension, cancellation or non-renewal of coverage, Consultant shall provide a replacement Certificate of Insurance and

applicable endorsements to City. City shall have the option to suspend Consultant's performance should there be a lapse in coverage at any time during this contract. Failure to provide and to maintain the required insurance shall constitute a material breach of this contract.

1.8 In addition to any other remedies the City may have upon Consultant's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the City shall have the right to order Consultant to remove the exhibit hereunder, and/or withhold any payment(s) if any, which become due to Consultant hereunder until Consultant demonstrates compliance with the requirements hereof.

1.9 Nothing herein contained shall be construed as limiting in any way the extent to which Consultant may be held responsible for payments of damages to persons or property resulting from Consultant's or its subcontractor's performance of the work covered under this agreement.

1.10 It is agreed that Consultant's insurance shall be deemed primary and non-contributory with respect to any insurance or self-insurance carried by the City of Corpus Christi for liability arising out of operations under this agreement.

1.11 It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this agreement.

EXHIBIT D

Excerpt from Corpus Christi General Conditions for Construction Projects Related to Design Services

Excerpt from FORM 00 72 00 GENERAL CONDITIONS for Construction Projects related to design services

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Terms with initial capital letters, including the term's singular and plural forms, have the meanings indicated in this paragraph wherever used in the Bidding Requirements or Contract Documents. In addition to the terms specifically defined, terms with initial capital letters in the Contract Documents may include references to identified articles and paragraphs, and the titles of other documents or forms.
1. Addenda - Documents issued prior to the receipt of Bids which clarify or modify the Bidding Requirements or the proposed Contract Documents.
 2. Agreement - The document executed between Owner and Contractor covering the Work.
 3. Alternative Dispute Resolution - The process by which a disputed Claim may be settled as an alternative to litigation, if Owner and Contractor cannot reach an agreement between themselves.
 4. Application for Payment - The forms used by Contractor to request payments from Owner and the supporting documentation required by the Contract Documents.
 5. Award Date – The date the City Council of the City of Corpus Christi (City) authorizes the City Manager or designee to execute the Contract on behalf of the City.
 6. Bid - The documents submitted by a Bidder to establish the proposed Contract Price and Contract Times and provide other information and certifications as required by the Bidding Requirements.
 7. Bidding Documents - The Bidding Requirements, the proposed Contract Documents, and Addenda.
 8. Bidder - An individual or entity that submits a Bid to Owner.
 9. Bidding Requirements - The Invitation for Bids, Instructions to Bidders, Bid Security, Bid Form and attachments, and required certifications.
 10. Bid Security - The financial security in the form of a bid bond provided by Bidder at the time the Bid is submitted and held by Owner until the Agreement is executed and the evidence of insurance and Bonds required by the Contract Documents are provided. A cashier's check, certified check, money order or bank draft from any State or National Bank will also be acceptable.
 11. Bonds - Performance Bond, Payment Bond, Maintenance Bond, and other Surety instruments executed by Surety. When in singular form, refers to individual instrument.
 12. Change Order - A document issued on or after the Effective Date of the Contract and signed by Owner and Contractor which modifies the Work, Contract Price, Contract Times, or terms and conditions of the Contract.
 13. Change Proposal - A document submitted by Contractor in accordance with the requirements of the Contract Documents:
 - a. Requesting an adjustment in Contract Price or Contract Times;

- b. Contesting an initial decision concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents;
 - c. Challenging a set-off against payment due; or
 - d. Seeking a Modification with respect to the terms of the Contract.
- 14. City Engineer - The Corpus Christi City Engineer and/or his designated representative as identified at the preconstruction conference or in the Notice to Proceed.
- 15. Claim - A demand or assertion by Owner or Contractor submitted in accordance with the requirements of the Contract Documents. A demand for money or services by an entity other than the Owner or Contractor is not a Claim.
- 16. Constituent of Concern - Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous wastes, and substances, products, wastes, or other materials that are or become listed, regulated, or addressed pursuant to:
 - a. The Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA");
 - b. The Hazardous Materials Transportation Act, 49 U.S.C. §§5101 et seq.;
 - c. The Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA");
 - d. The Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.;
 - e. The Clean Water Act, 33 U.S.C. §§1251 et seq.;
 - f. The Clean Air Act, 42 U.S.C. §§7401 et seq.; or
 - g. Any other Laws or Regulations regulating, relating to, or imposing liability or standards of conduct concerning hazardous, toxic, or dangerous waste, substance, or material.
- 17. Contract - The entire integrated set of documents concerning the Work and describing the relationship between the Owner and Contractor.
- 18. Contract Amendment - A document issued on or after the Effective Date of the Contract and signed by Owner and Contractor which:
 - a. Authorizes new phases of the Work and establishes the Contract Price, Contract Times, or terms and conditions of the Contract for the new phase of Work; or
 - b. Modifies the terms and conditions of the Contract, but does not make changes in the Work.
- 19. Contract Documents - Those items designated as Contract Documents in the Agreement.
- 20. Contract Price - The monetary amount stated in the Agreement and as adjusted by Modifications, and increases or decreases in unit price quantities, if any, that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
- 21. Contract Times - The number of days or the dates by which Contractor must:
 - a. Achieve specified Milestones;

- b. Achieve Substantial Completion; and
 - c. Complete the Work.
- 22. Contractor - The individual or entity with which Owner has contracted for performance of the Work.
- 23. Contractor's Team - Contractor and Subcontractors, Suppliers, individuals, or entities directly or indirectly employed or retained by them to perform part of the Work or anyone for whose acts they may be liable.
- 24. Cost of the Work - The sum of costs incurred for the proper performance of the Work as allowed by Article 15.
- 25. Defective - When applied to Work, refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. Does not conform to the Contract Documents;
 - b. Does not meet the requirements of applicable inspections, reference standards, tests, or approvals referred to in the Contract Documents; or
 - c. Has been damaged or stolen prior to OAR's recommendation of final payment unless responsibility for the protection of the Work has been assumed by Owner at Substantial Completion in accordance with Paragraphs 17.12 or 17.13.
- 26. **Designer** - The individuals or entity named as **Designer** in the Agreement and the subconsultants, individuals, or entities directly or indirectly employed or retained by **Designer** to provide design or other technical services to the Owner. **Designer** has responsibility for engineering or architectural design and technical issues related to the Contract Documents. **Designers** are Licensed Professional Engineers, Registered Architects or Registered Landscape Architects qualified to practice their profession in the State of Texas.
- 27. Drawings - The part of the Contract that graphically shows the scope, extent, and character of the Work. Shop Drawings and other Contractor documents are not Drawings.
- 28. Effective Date of the Contract - The date indicated in the Agreement on which the City Manager or designee has signed the Contract.
- 29. Field Order - A document issued by OAR or **Designer** requiring changes in the Work that do not change the Contract Price or the Contract Times.
- 30. Hazardous Environmental Condition - The presence of Constituents of Concern at the Site in quantities or circumstances that may present a danger to persons or property exposed to Constituents of Concern. The presence of Constituents of Concern at the Site necessary for the execution of the Work or to be incorporated in the Work is not a Hazardous Environmental Condition provided these Constituents of Concern are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract.
- 31. Indemnified Costs - All costs, losses, damages, and legal or other dispute resolution costs resulting from claims or demands against Owner's Indemnitees. These costs include fees for engineers, architects, attorneys, and other professionals.

32. Laws and Regulations; Laws or Regulations - Applicable laws, statutes, rules, regulations, ordinances, codes, and orders of governmental bodies, agencies, authorities, and courts having jurisdiction over the Project.
33. Liens - Charges, security interests, or encumbrances upon Contract related funds, real property, or personal property.
34. Milestone - A principal event in the performance of the Work that Contractor is required by Contract to complete by a specified date or within a specified period of time.
35. Modification - Change made to the Contract Documents by one of the following methods:
 - a. Contract Amendment;
 - b. Change Order;
 - c. Field Order; or
 - d. Work Change Directive.
36. Notice of Award - The notice of Owner's intent to enter into a contract with the Selected Bidder.
37. Notice to Proceed - A notice to Contractor of the Contract Times and the date Work is to begin.
38. Owner - The City of Corpus Christi (City), a Texas home-rule municipal corporation and political subdivision organized under the laws of the State of Texas, acting by and through its duly authorized City Manager and his designee, the City Engineer (the Director of Engineering Services), and the City's officers, employees, agents, or representatives, authorized to administer design and construction of the Project.
39. Owner's Authorized Representative or OAR - The individual or entity named as OAR in the Agreement and the consultants, subconsultants, individuals, or entities directly or indirectly employed or retained by them to provide construction management services to the Owner. The OAR may be an employee of the Owner.
40. Owner's Indemnitees - Each member of the OPT and their officers, directors, members, partners, employees, agents, consultants, and subcontractors.
41. Owner's Project Team or OPT - The Owner, Owner's Authorized Representative, Resident Project Representative, **Designer**, and the consultants, subconsultants, individuals, or entities directly or indirectly employed or retained by them to provide services to the Owner.
42. Partial Occupancy or Use - Use by Owner of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.
43. Progress Schedule - A schedule prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times. The Progress Schedule must be a Critical Path Method (CPM) Schedule.
44. Project - The total undertaking to be accomplished for Owner under the Contract Documents.

45. Resident Project Representative or RPR - The authorized representative of OPT assigned to assist OAR at the Site. As used herein, the term Resident Project Representative includes assistants and field staff of the OAR.
46. Samples - Physical examples of materials, equipment, or workmanship representing some portion of the Work that are used to establish the standards for that portion of the Work.
47. Schedule of Documents - A schedule of required documents, prepared, and maintained by Contractor.
48. Schedule of Values - A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for Contractor's Applications for Payment.
49. Selected Bidder - The Bidder to which Owner intends to award the Contract.
50. Shop Drawings - All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
51. Site - Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed. The Site includes rights-of-way, easements, and other lands furnished by Owner which are designated for use by the Contractor.
52. Specifications - The part of the Contract that describes the requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
53. Subcontractor - An individual or entity having a direct contract with Contractor or with other Subcontractors or Suppliers for the performance of a part of the Work.
54. Substantial Completion - The point where the Work or a specified part of the Work is sufficiently complete to be used for its intended purpose in accordance with the Contract Documents.
55. Supplementary Conditions - The part of the Contract that amends or supplements the General Conditions.
56. Supplier - A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with Subcontractors or other Suppliers to furnish materials or equipment to be incorporated in the Work.
57. Technical Data - Those items expressly identified as Technical Data in the Supplementary Conditions with respect to either:
 - a. Subsurface conditions at the Site;
 - b. Physical conditions relating to existing surface or subsurface structures at the Site, except Underground Facilities; or
 - c. Hazardous Environmental Conditions at the Site.
58. Underground Facilities - All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, other similar facilities or appurtenances, and encasements containing these facilities which are used to convey electricity, gases,

steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

59. Unit Price Work - Work to be paid for on the basis of unit prices.
60. Work - The construction of the Project or its component parts as required by the Contract Documents.
61. Work Change Directive - A directive issued to Contractor on or after the Effective Date of the Contract ordering an addition, deletion, or revision in the Work. The Work Change Directive serves as a memorandum of understanding regarding the directive until a Change Order can be issued.

1.02 Terminology

- A. The words and terms discussed in this Paragraph 1.02 are not defined, but when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. It is understood that the cost for performing Work is included in the Contract Price and no additional compensation is to be paid by Owner unless specifically stated otherwise in the Contract Documents. Expressions including or similar to “at no additional cost to Owner,” “at Contractor’s expense,” or similar words mean that the Contractor is to perform or provide specified operation of Work without an increase in the Contract Price.
- C. The terms “day” or “calendar day” mean a calendar day of 24 hours measured from midnight to the next midnight.
- D. The meaning and intent of certain terms or adjectives are described as follows:
 1. The terms “as allowed,” “as approved,” “as ordered,” “as directed,” or similar terms in the Contract Documents indicate an exercise of professional judgment by the OPT.
 2. Adjectives including or similar to “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or similar adjectives are used to describe a determination of OPT regarding the Work.
 3. Any exercise of professional judgment by the OPT will be made solely to evaluate the Work for general compliance with the Contract Documents unless there is a specific statement in the Contract Documents indicating otherwise.
 4. The use of these or similar terms or adjectives does not assign a duty or give OPT authority to supervise or direct the performance of the Work, or assign a duty or give authority to the OPT to undertake responsibilities contrary to the provisions of Articles 9 or 10 or other provisions of the Contract Documents.
- E. The use of the words “furnish,” “install,” “perform,” and “provide” have the following meanings when used in connection with services, materials, or equipment:
 1. Furnish means to supply and deliver the specified services, materials, or equipment to the Site or other specified location ready for use or installation.
 2. Install means to complete construction or assembly of the specified services, materials, or equipment so they are ready for their intended use.

3. Perform or provide means to furnish and install specified services, materials, or equipment, complete and ready for their intended use.
 4. Perform or provide the specified services, materials, or equipment complete and ready for intended use if the Contract Documents require specific services, materials, or equipment, but do not expressly use the words “furnish,” “install,” “perform,” or “provide.”
- F. Contract Documents are written in modified brief style:
1. Requirements apply to all Work of the same kind, class, and type even though the word “all” is not stated.
 2. Simple imperative sentence structure is used which places a verb as the first word in the sentence. It is understood that the words “furnish,” “install,” “perform,” “provide,” or similar words include the meaning of the phrase “The Contractor shall...” before these words.
 3. Unless specifically stated that action is to be taken by the OPT or others, it is understood that the action described is a requirement of the Contractor.
- G. Words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with this recognized meaning unless stated otherwise in the Contract Documents.
- H. Written documents are required where reference is made to notices, reports, approvals, consents, documents, statements, instructions, opinions or other types of communications required by the Contract Documents. Approval and consent documents must be received by Contractor prior to the action or decision for which approval or consent is given. These may be made in printed or electronic format through the OPT’s project management information system or other electronic media as required by the Contract Documents or approved by the OAR.
- I. Giving notice as required by the Contract Documents may be by printed or electronic media using a method that requires acknowledgment of the receipt of that notice.

ARTICLE 2 – PRELIMINARY MATTERS

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 Intent

- B. Provide equipment that is functionally complete as described in the Contract Documents. The Drawings and Specifications do not indicate or describe all of the Work required to complete the installation of products purchased by the Owner or Contractor. Additional details required for the correct installation of selected products are to be provided by the Contractor and coordinated with the **Designer** through the OAR.

3.02 Reference Standards

Comply with applicable construction industry standards, whether referenced or not.

1. Standards referenced in the Contract Documents govern over standards not referenced but recognized as applicable in the construction industry.

2. Comply with the requirements of the Contract Documents if they produce a higher quality of Work than the applicable construction industry standards.
3. **Designer** determines whether a code or standard is applicable, which of several are applicable, or if the Contract Documents produce a higher quality of Work.

3.03 Reporting and Resolving Discrepancies

3.04 Interpretation of the Contract Documents

Submit questions regarding the design of the Project described in the Contract Documents to the OAR immediately after those questions arise. OAR is to request an interpretation of the Contract Documents from the **Designer**. **Designer** is to respond to these questions by providing an interpretation of the Contract Documents. OAR will coordinate the response of the OPT to Contractor.

- C. OPT may initiate a Modification to the Contract Documents through the OAR if a response to the question indicates that a change in the Contract Documents is required. Contractor may appeal **Designer's** or OAR's interpretation by submitting a Change Proposal.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

5.02 Use of Site and Other Areas

5.03 Subsurface and Physical Conditions

5.04 Differing Subsurface or Physical Conditions

OAR is to notify the OPT after receiving notice of a differing subsurface or physical condition from the Contractor. **Designer** is to:

1. Promptly review the subsurface or physical condition;
 2. Determine the necessity of OPT's obtaining additional exploration or tests with respect to the subsurface or physical condition;
 3. Determine if the subsurface or physical condition falls within one or more of the differing Site condition categories in Paragraph 5.04.A;
 4. Prepare recommendations to OPT regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question;
 5. Determine the need for changes in the Drawings or Specifications; and
 6. Advise OPT of **Designer's** findings, conclusions, and recommendations.
- C. OAR is to issue a statement to Contractor regarding the subsurface or physical condition in question and recommend action as appropriate after review of **Designer's** findings, conclusions, and recommendations.

5.05 Underground Facilities

The **Designer** is to take the following action after receiving notice from the OAR:

1. Promptly review the Underground Facility and conclude whether the Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy;
 2. Prepare recommendations to OPT regarding the Contractor's resumption of Work in connection with this Underground Facility;
 3. Determine the extent to which a change is required in the Drawings or Specifications to document the consequences of the existence or location of the Underground Facility; and
 4. Advise OAR of **Designer**'s findings, conclusions, and recommendations and provide revised Drawings and Specifications if required.
- D. OAR is to issue a statement to Contractor regarding the Underground Facility in question and recommend action as appropriate after review of **Designer**'s findings, conclusions, and recommendations.

ARTICLE 6 – BONDS AND INSURANCE

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

ARTICLE 8 – OTHER WORK AT THE SITE

ARTICLE 9 – OWNER'S AND OPT'S RESPONSIBILITIES

9.01 Communications to Contractor

- A. OPT issues communications to Contractor through OAR except as otherwise provided in the Contract Documents.

9.02 Replacement of Owner's Project Team Members

- A. Owner may replace members of the OPT at its discretion.

9.03 Furnish Data

- A. OPT is to furnish the data required of OPT under the Contract Documents.

9.04 Pay When Due

9.05 Lands and Easements; Reports and Tests

- A. Owner's duties with respect to providing lands and easements are described in Paragraph 5.01. OPT will make copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions relating to existing surface or subsurface structures at the Site available to Contractor in accordance with Paragraph 5.03.

9.06 Insurance

9.07 Modifications

9.08 Inspections, Tests, and Approvals

- A. OPT's responsibility with respect to certain inspections, tests, and approvals are described in Paragraph 16.02.

9.09 Limitations on OPT's Responsibilities

- A. The OPT does not supervise, direct, or have control or authority over, and is not responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or related safety precautions and programs, or for failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. OPT is not responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 Undisclosed Hazardous Environmental Condition

- A. OPT's responsibility for undisclosed Hazardous Environmental Conditions is described in Paragraph 5.06.

9.11 Compliance with Safety Program

- A. Contractor is to inform the OPT of its safety programs and OPT is to comply with the specific applicable requirements of this program.

ARTICLE 10 – OAR'S AND DESIGNER'S STATUS DURING CONSTRUCTION

10.01 Owner's Representative

- A. OAR is Owner's representative. The duties and responsibilities and the limitations of authority of OAR as Owner's representative are described in the Contract Documents.

10.02 Visits to Site

- A. **Designer** is to make periodic visits to the Site to observe the progress and quality of the Work. **Designer** is to determine, in general, if the Work is proceeding in accordance with the Contract Documents based on observations made during these visits. **Designer** is not required to make exhaustive or continuous inspections to check the quality or quantity of the Work. **Designer** is to inform the OPT of issues or concerns and OAR is to work with Contractor to address these issues or concerns. **Designer's** visits and observations are subject to the limitations on **Designer's** authority and responsibility described in Paragraphs 9.09 and 10.07.
- B. OAR is to observe the Work to check the quality and quantity of Work, implement Owner's quality assurance program, and administer the Contract as Owner's representative as described in the Contract Documents. OAR's visits and observations are subject to the limitations on OAR's authority and responsibility described in Paragraphs 9.09 and 10.07.

10.03 Resident Project Representatives

- A. Resident Project Representatives assist OAR in observing the progress and quality of the Work at the Site. The limitations on Resident Project Representatives' authority and responsibility are described in Paragraphs 9.09 and 10.07.

10.04 Rejecting Defective Work

- A. OPT has the authority to reject Work in accordance with Article 16. OAR is to issue a Defective Work Notice to Contractor and document when Defective Work has been corrected or accepted in accordance with Article 16.

10.05 Shop Drawings, Modifications and Payments

- A. **Designer's** authority related to Shop Drawings and Samples are described in the Contract Documents.
- B. **Designer's** authority related to design calculations and design drawings submitted in response to a delegation of professional design services are described in Paragraph 7.15.
- C. OAR and **Designer's** authority related to Modifications is described in Article 11.
- D. OAR's authority related to Applications for Payment is described in Articles 15 and 17.

10.06 Decisions on Requirements of Contract Documents and Acceptability of Work

- A. OAR is to render decisions regarding non-technical or contractual / administrative requirements of the Contract Documents and will coordinate the response of the OPT to Contractor.
- B. **Designer** is to render decisions regarding the conformance of the Work to the requirements of the Contract Documents. **Designer** will render a decision to either correct the Defective Work, or accept the Work under the provisions of Paragraph 16.04, if Work does not conform to the Contract Documents. OAR will coordinate the response of the OPT to Contractor.
- C. OAR will issue a Request for a Change Proposal if a Modification is required. OAR will provide documentation for changes related to the non-technical or contractual / administrative requirements of the Contract Documents. **Designer** will provide documentation if design related changes are required.
- D. Contractor may appeal **Designer's** decision by submitting a Change Proposal if Contractor does not agree with the **Designer's** decision.

10.07 Limitations on OAR's and **Designer's** Authority and Responsibilities

- A. OPT is not responsible for the acts or omissions of Contractor's Team. No actions or failure to act, or decisions made in good faith to exercise or not exercise the authority or responsibility available under the Contract Documents creates a duty in contract, tort, or otherwise of the OPT to the Contractor or members of the Contractor's Team.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

ARTICLE 12 – CHANGE MANAGEMENT

12.01 Requests for Change Proposal

- A. **Designer** will initiate Modifications by issuing a Request for a Change Proposal (RCP).
 - 1. **Designer** will prepare a description of proposed Modifications.
 - 2. **Designer** will issue the Request for a Change Proposal form to Contractor. A number will be assigned to the Request for a Change Proposal when issued.
 - 3. Return a Change Proposal in accordance with Paragraph 12.02 to the **Designer** for evaluation by the OPT.

12.02 Change Proposals

- A. Submit a Change Proposal (CP) to the **Designer** for Contractor initiated changes in the Contract Documents or in response to a Request for Change Proposal.
 - 1. Use the Change Proposal form provided.
 - 2. Assign a number to the Change Proposal when issued.
 - 3. Include with the Change Proposal:
 - a. A complete description of the proposed Modification if Contractor initiated or proposed changes to the OPT's description of the proposed Modification.
 - b. The reason the Modification is requested, if not in response to a Request for a Change Proposal.
 - c. A detailed breakdown of the cost of the change if the Modification requires a change in Contract Price. The itemized breakdown is to include:
 - 1) List of materials and equipment to be installed;
 - 2) Man hours for labor by classification;
 - 3) Equipment used in construction;
 - 4) Consumable supplies, fuels, and materials;
 - 5) Royalties and patent fees;
 - 6) Bonds and insurance;
 - 7) Overhead and profit;
 - 8) Field office costs;
 - 9) Home office cost; and
 - 10) Other items of cost.
 - d. Provide the level of detail outlined in the paragraph above for each Subcontractor or Supplier actually performing the Work if Work is to be provided by a Subcontractor or Supplier. Indicate appropriate Contractor mark-ups for Work

provided through Subcontractors and Suppliers. Provide the level of detail outline in the paragraph above for self-performed Work.

- e. Submit Change Proposals that comply with Article 15 for Cost of Work.
 - f. Provide a revised schedule. Show the effect of the change on the Project Schedule and the Contract Times.
- B. Submit a Change Proposal to the **Designer** to request a Field Order.
 - C. A Change Proposal is required for all substitutions or deviations from the Contract Documents.
 - D. Request changes to products in accordance with Article 25.

12.03 **Designer** Will Evaluate Request for Modification

- A. **Designer** will issue a Modification per Article 11 if the Change Proposal is acceptable to the Owner. **Designer** will issue a Change Order or Contract Amendment for any changes in Contract Price or Contract Times.
 - 1. Change Orders and Contract Amendments will be sent to the Contractor for execution with a copy to the Owner recommending approval. A Work Change Directive may be issued if Work needs to progress before the Change Order or Contract Amendment can be authorized by the Owner.
 - 2. Work Change Directives, Change Orders, and Contract Amendments can only be approved by the Owner.
 - a. Work performed on the Change Proposal prior to receiving a Work Change Directive or approval of the Change Order or Contract Amendment is performed at the Contractor's risk.
 - b. No payment will be made for Work on Change Orders or Contract Amendments until approved by the Owner.
- B. The Contractor may be informed that the Request for a Change Proposal is not approved and construction is to proceed in accordance with the Contract Documents.

ARTICLE 13 – CLAIMS

13.01 Claims

13.02 Claims Process

- A. Claims must be initiated by written notice. Notice must conspicuously state that it is a notice of a Claim in the subject line or first sentence. Notice must also list the date of first occurrence of the claimed event.
- B. Claims by Contractor must be in writing and delivered to the Owner, **Designer** and the OAR within 7 days:
 - 1. After the start of the event giving rise to the Claim; or
 - 2. After a final decision on a Change Proposal has been made.

- C. Claims by Contractor that are not received within the time period provided by section 13.02(B) are waived. Owner may choose to deny such Claims without a formal review. Any Claims by Contractor that are not brought within 90 days following the termination of the Contract are waived and shall be automatically deemed denied.
- D. Claims by Owner must be submitted by written notice to Contractor.
- E. The responsibility to substantiate a Claim rests with the entity making the Claim. Claims must contain sufficient detail to allow the other party to fully review the Claim.
 - 1. Claims seeking an adjustment of Contract Price must include the Contractor's job cost report. Provide additional documentation as requested by OAR.
 - 2. Claims seeking an adjustment of Contract Time must include native schedule files in Primavera or MS Project digital format. Provide additional documentation as requested by OAR.
- F. Contractor must certify that the Claim is made in good faith, that the supporting data is accurate and complete, and that to the best of Contractor's knowledge and belief, the relief requested accurately reflects the full compensation to which Contractor is entitled.
- G. Claims by Contractor against Owner and Claims by Owner against Contractor, including those alleging an error or omission by **Designer** but excluding those arising under Section 7.12, shall be referred initially to **Designer** for consideration and recommendation to Owner.
- H. **Designer** may review a Claim by Contractor within 30 days of receipt of the Claim and take one or more of the following actions:
 - 1. Request additional supporting data from the party who made the Claim;
 - 2. Issue a recommendation;
 - 3. Suggest a compromise; or
 - 4. Advise the parties that **Designer** is not able to make a recommendation due to insufficient information or a conflict of interest.
- I. If the **Designer** does not take any action, the claim shall be deemed denied.
- J. The Contractor and the Owner shall seek to resolve the Claim through the exchange of information and direct negotiations. If no agreement is reached within 90 days, the Claim shall be deemed denied. The Owner and Contractor may extend the time for resolving the Claim by mutual agreement. Notify OAR of any actions taken on a Claim.
- K. Owner and Contractor may mutually agree to mediate the underlying dispute at any time after a recommendation is issued by the **Designer**.

ARTICLE 14 – PREVAILING WAGE RATE REQUIREMENTS

ARTICLE 15 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

ARTICLE 16 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

ARTICLE 17 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

ARTICLE 18 – SUSPENSION OF WORK AND TERMINATION

ARTICLE 19 – PROJECT MANAGEMENT

ARTICLE 20 – PROJECT COORDINATION

20.01 Work Included

20.02 Document Submittal

20.03 Communication During Project

- A. The OAR is to be the first point of contact for all parties on matters concerning this Project.
- B. The **Designer** will coordinate correspondence concerning:
 - 1. Documents, including Applications for Payment.
 - 2. Clarification and interpretation of the Contract Documents.
 - 3. Contract Modifications.
 - 4. Observation of Work and testing.
 - 5. Claims.

20.04 Requests for Information

- A. Submit Request for Information (RFI) to the **Designer** to obtain additional information or clarification of the Contract Documents.
 - 1. Submit a separate RFI for each item on the form provided.
 - 2. Attach adequate information to permit a written response without further clarification. **Designer** will return requests that do not have adequate information to the Contractor for additional information. Contractor is responsible for all delays resulting from multiple document submittals due to inadequate information.
 - 3. A response will be made when adequate information is provided. Response will be made on the RFI form or in attached information.
- B. Response to an RFI is given to provide additional information, interpretation, or clarification of the requirements of the Contract Documents, and does not modify the Contract Documents.
- C. **Designer** will initiate a Request for a Change Proposal (RCP) per Article 12 if the RFI indicates that a Contract Modification is required.

ARTICLE 21 – QUALITY MANAGEMENT

ARTICLE 22 – FINAL RESOLUTION OF DISPUTES

ARTICLE 23 – MINORITY/MBE/DBE PARTICIPATION POLICY

ARTICLE 24 – DOCUMENT MANAGEMENT

ARTICLE 25 – SHOP DRAWINGS

25.01 Work Included

- A. Shop Drawings are required for those products that cannot adequately be described in the Contract Documents to allow fabrication, erection, or installation of the product without additional detailed information from the Supplier.
- B. Submit Shop Drawings as required by the Contract Documents and as reasonably requested by the OPT to:
 - 1. Record the products incorporated into the Project for the Owner;
 - 2. Provide detailed information for the products proposed for the Project regarding their fabrication, installation, commissioning, and testing; and
 - 3. Allow the **Designer** to advise the Owner if products proposed for the Project by the Contractor conform, in general, to the design concepts of the Contract Documents.

25.02 Quality Assurance

25.03 Contractor's Responsibilities

25.04 Shop Drawing Requirements

- A. Provide adequate information in Shop Drawings and Samples so **Designer** can:
 - 1. Assist the Owner in selecting colors, textures, or other aesthetic features.
 - 2. Compare the proposed features of the product with the specified features and advise Owner that the product does, in general, conform to the Contract Documents.
 - 3. Compare the performance features of the proposed product with those specified and advise the Owner that the product does, in general, conform to the performance criteria specified in the Contract Documents.
 - 4. Review required certifications, guarantees, warranties, and service agreements for compliance with the Contract Documents.

25.05 Special Certifications and Reports

25.06 Warranties and Guarantees

25.07 Shop Drawing Submittal Procedures

25.08 Sample and Mockup Submittal Procedures

25.09 Requests for Deviation

25.10 **Designer** Responsibilities

- A. Shop Drawings will be received by the **Designer**. **Designer** will log the documents and review per this Article for general conformance with the Contract Documents.
 1. **Designer**'s review and approval will be only to determine if the products described in the Shop Drawing or Sample will, after installation or incorporation into the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. **Designer**'s review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
 3. **Designer**'s review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- B. Comments will be made on items called to the attention of the **Designer** for review and comment. Any marks made by the **Designer** do not constitute a blanket review of the document submittal or relieve the Contractor from responsibility for errors or deviations from the Contract requirements.
 1. **Designer** will respond to Contractor's markups by either making markups directly in the Shop Drawings file using the color green or by attaching a Document Review Comments form with review comments.
 2. Shop Drawings that are reviewed will be returned with one or more of the following status designations:
 - a. Approved: Shop Drawing is found to be acceptable as submitted.
 - b. Approved as Noted: Shop Drawing is Approved so long as corrections or notations made by **Designer** are incorporated into the Show Drawing.
 - c. Not Approved: Shop Drawing or products described are not acceptable.
 3. Shop Drawing will also be designated for one of the following actions:
 - a. Final distribution: Shop Drawing is acceptable without further action and has been filed as a record document.
 - b. Shop Drawing not required: A Shop Drawing was not required by the Contract Documents. Resubmit the document per Article 26.

- c. Cancelled: This action indicates that for some reason, the Shop Drawing is to be removed from consideration and all efforts regarding the processing of that document are to cease.
 - d. Revise and resubmit: Shop Drawing has deviations from the Contract Documents, significant errors, or is inadequate and must be revised and resubmitted for subsequent review.
 - e. Resubmit with corrections made: Shop Drawing is "Approved as Noted," but has significant markups. Make correction and notations to provide a revised document with markup incorporated into the original document so that no markups are required.
 - f. Returned without review due to excessive deficiencies: Document does not meet the requirement of the Specifications for presentation or content to the point where continuing to review the document would be counterproductive to the review process or clearly does not meet the requirements of the Contract Documents. Revise the Shop Drawing to comply with the requirements of this Section and resubmit.
 - g. Actions a through c will close out the Shop Drawing review process and no further action is required as a Shop Drawing. Actions d through f require follow up action to close out the review process.
- 4. Drawings with a significant or substantial number of markings by the Contractor may be marked "Approved as Noted" and "Resubmit with corrections made." These drawings are to be revised to provide a clean record of the Shop Drawing. Proceed with ordering products as the documents are revised.
 - 5. Dimensions or other data that does not appear to conform to the Contract Documents will be marked as "At Variance With" (AVW) the Contract Documents or other information provided. The Contractor is to make revisions as appropriate to comply with the Contract Documents.
- C. Bring deviations to the Shop Drawings to the attention of the **Designer** for approval by using the Shop Drawing Deviation Request form. Use a single line for each requested deviation so the Status and Action for each deviation can be determined for that requested deviation. If approval or rejection of a requested deviation will impact other requested deviations, then all related deviations should be included in that requested deviation line so the status and action can be determined on the requested deviation as a whole.
 - D. Requested deviations will be reviewed as possible Modification to the Contract Documents.
 - 1. A Requested deviation will be rejected as "Not Approved" if the requested deviation is unacceptable. Contractor is to revise and resubmit the Shop Drawing with corrections for approval.
 - 2. A Field Order will be issued by the **Designer** for deviations approved by the **Designer** if the requested deviation is acceptable and if the requested deviation will not result in a change in Contract Price or Contract Times. Requested deviations from the Contract Documents may only be approved by Field Order.
 - 3. A requested deviation will be rejected if the requested deviation is acceptable but the requested deviation will or should result in a change in Contract Price or Contract Times.

Submit any requested deviation that requires a change in Contract Price or Contract Times as a Change Proposal for approval prior to resubmitting the Shop Drawing.

- E. Contractor is to resubmit the Shop Drawing until it is acceptable and marked Approved or Approved as Noted and is assigned an action per Paragraph 25.10.B that indicates that the Shop Drawing process is closed.
- F. Information that is submitted as a Shop Drawings that should be submitted as Record Data or other type of document, or is not required may be returned without review, or may be deleted. No further action is required and the Shop Drawing process for this document will be closed.

ARTICLE 26 – RECORD DATA

26.01 Work Included

26.02 Quality Assurance

26.03 Contractor's Responsibilities

26.04 Record Data Requirements

26.05 Special Certifications and Reports

26.06 Warranties and Guarantees

26.07 Record Data Submittal Procedures

26.08 **Designer**'s Responsibilities

- A. Record Data will be received by the **Designer**, logged, and provided to Owner as the Project record.
 - 1. Record Data may be reviewed to see that the information provided is adequate for the purpose intended. Record Data not meeting the requirements of Paragraph 26.02 may be rejected as unacceptable.
 - 2. Record Data is not reviewed for compliance with the Contract Documents. Comments may be returned if deviations from the Contract Documents are noted during the cursory review performed to see that the information is adequate.
 - 3. Contractor's responsibility for full compliance with the Contract Documents is not relieved by the review of Record Data. Contract modifications can only be approved by a Modification.
- B. **Designer** may take the following action in processing Record Data:
 - 1. File Record Data as received if the cursory review indicates that the document meets the requirements of Paragraph 26.02. Document will be given the status of "Filed as Received" and no further action is required on that Record Data.
 - 2. Reject the Record Data for one of the following reasons:
 - a. The document submittal requirements of the Contract Documents indicate that the document submitted as Record Data should have been submitted as a Shop

Drawing. The Record Data will be marked "Rejected" and "Submit Shop Drawing." No further action is required on this document as Record Data and the Record Data process will be closed. Resubmit the document as a Shop Drawing per Article 25.

- b. The cursory review indicates that the document does not meet the requirements of Paragraph 26.02. The Record Data will be marked "Rejected" and "Revise and Resubmit." Contractor is to resubmit the Record Data until it is acceptable and marked "Filed as Received." When Record Data is filed, no further action is required and the Record Data process will be closed.
 - c. The Record Data is not required by the Contract Documents nor is the Record Data applicable to the Project. The Record Data will be marked "Rejected" and "Cancel - Not Required." No further action is required and the Record Data process will be closed.
- C. Contractor is to resubmit the Record Data until it is acceptable and marked "Filed as Received."

ARTICLE 27 – CONSTRUCTION PROGRESS SCHEDULE

ARTICLE 28 – VIDEO AND PHOTOGRAPHIC DOCUMENTATION

ARTICLE 29 – EXECUTION AND CLOSEOUT

29.01 Substantial Completion

- A. Notify the **Designer** that the Work or a designated portion of the Work is substantially complete per the General Conditions. Include a list of the items remaining to be completed or corrected before the Project will be considered to be complete.
- B. OPT will visit the Site to observe the Work within a reasonable time after notification is received to determine the status of the Project.
- C. **Designer** will notify the Contractor that the Work is either substantially complete or that additional Work must be performed before the Project will be considered substantially complete.
 - 1. **Designer** will notify the Contractor of items that must be completed before the Project will be considered substantially complete.
 - 2. Correct the noted deficiencies in the Work.
 - 3. Notify the **Designer** when the items of Work in the **Designer's** notice have been completed.
 - 4. OPT will revisit the Site and repeat the process.
 - 5. **Designer** will issue a Certificate of Substantial Completion to the Contractor when the OPT considers the Project to be substantially complete. The Certificate will include a tentative list of items to be corrected before Final Payment will be recommended.
 - 6. Review the list and notify the **Designer** of any objections to items on the list within 10 days after receiving the Certificate of Substantial Completion.

29.02 Final Inspections

- A. Notify the **Designer** when:
 - 1. Work has been completed in compliance with the Contract Documents;
 - 2. Equipment and systems have been tested per Contract Documents and are fully operational;
 - 3. Final Operations and Maintenance Manuals have been provided to the Owner and all operator training has been completed;
 - 4. Specified spare parts and special tools have been provided; and
 - 5. Work is complete and ready for final inspection.
- B. OPT will visit the Site to determine if the Project is complete and ready for Final Payment within a reasonable time after the notice is received.
- C. **Designer** will notify the Contractor that the Project is complete or will notify the Contractor that Work is Defective.
- D. Take immediate steps to correct Defective Work. Notify the **Designer** when Defective Work has corrected. OPT will visit the Site to determine if the Project is complete and the Work is acceptable. **Designer** will notify the Contractor that the Project is complete or will notify the Contractor that Work is Defective.
- E. Submit the Request for Final Payment with the closeout documents described in Paragraph 29.06 if notified that the Project is complete and the Work is acceptable.

ARTICLE 30 – MISCELLANEOUS

END OF SECTION