

CITY OF CORPUS CHRISTI CONTRACT FOR ENGINEERING DESIGN

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 of Engineering Services) and **LNV, Inc.**, a Texas corporation, 801 Navigation, Suite 300, Corpus Christi, Nueces County, Texas 78408, (**Consultant**), hereby agree as follows:

1. SCOPE OF PROJECT

O.N. Stevens Water Treatment Plant Intermediate Sludge Removal Phase 1 (Project No. E16246) - This project will provide the City with Basic and Additional Services for the design and development of bid documents for the improvements necessary for the recommended sludge removal option identified in the ELR for Amendment No. 1 to O.N. Stevens Water Treatment Plant (ONSWTP) Interim Sludge Management Improvements (E13052). The recommended option generally consists of dredging Lagoon No. 7 and pumping the dredged material into geotextile tubes for dewatering. The geotextile tubes will be pre-staged in a newly constructed dewatering cell adjacent to Lagoon No. 7. The geotextile tubes will be allowed to remain on site, awaiting disposal, for a maximum of two (2) years, per Texas Commission on Environmental Quality (TCEQ) requirements. The final disposal solution for the geotextile tubes and dewatered sludge is yet to be determined by the City. This project will remove the maximum quantity of sludge from the lagoons allowable within specific program budget constraints and will provide ONSWTP with a solution to restore a portion of the sludge storage capacity at ONSWTP and particularly in Lagoon No. 7 (Washwater Return Basin).

2. SCOPE OF SERVICES

The Consultant hereby agrees to perform services to complete the Project, as detailed in **Exhibit "A"**. In addition, Consultant will provide monthly status updates (project progress or delays presented with monthly invoices) and provide contract administration services, as described in **Exhibit "A"**, to complete the Project. Work will not begin on Additional Services until requested by the Consultant (provide breakdown of costs, schedules), **and** written authorization is provided by the Director of Engineering Services.

3. ORDER OF SERVICES

The Consultant agrees to begin work on those authorized Basic Services for this contract upon receipt of the Notice to Proceed from the Director of Engineering Services. 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. The anticipated schedule of the preliminary phase, design phase, bid phase, and construction phase is shown on **Exhibit "A"**. This schedule is not to be inclusive of all additional time that may be required for review by the City staff and may be amended by or with the concurrence of the Director of Engineering Services.

The Director of Engineering Services may direct 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 of Corpus Christi within three (3) days of notice if tasks requested requires an additional fee.

4. FEE

The City will pay the Consultant a fee as described in **Exhibit "A"** for providing services authorized, a total fee not to exceed **\$95,467.00**. Monthly invoices will be submitted in accordance with **Exhibit "B"**.

5. INDEMNITY

Consultant shall fully indemnify and hold harmless the City of Corpus Christi and its officials, officers, agents, employees, or other entity, excluding the engineer or architect or that person's agent, employee or subconsultant, over which the City exercises control ("Indemnitee") 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 Indemnitee, 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 Indemnitee. If a claim is based wholly or partly on the negligence of, fault of or breach of contract by Indemnitee, 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.

6. INSURANCE

Consultant agrees to comply with the insurance requirements in **Exhibit "C"**.

7. TERMINATION OF CONTRACT

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

In the event of termination, the Consultant will be compensated for its services on all stages authorized based upon Consultant and City's estimate of the proportion of the total services actually completed at the time of termination.

8. LOCAL PARTICIPATION

The City Council's stated policy is that City expenditures on contracts for professional services be of maximum benefit to the local economy.

9. ASSIGNABILITY

The Consultant will not assign, transfer or delegate any of its obligations or duties in this contract to any other person without the prior written consent of the City, except for routine duties delegated to personnel of the Consultant staff. If the Consultant is a partnership, then in the event of the termination of the partnership, 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.

10. OWNERSHIP OF DOCUMENTS

All documents including contract documents (plans and specifications), record drawings, contractor's field data, inspection reports and submittal data will be the sole property of the City, may not be used again by the Consultant without the express written consent of the Director of Engineering Services. However, the Consultant may use standard details that are not specific to this project. The City agrees that any modification of the plans will be evidenced on the plans, and be signed and sealed by a professional engineer prior to re-use of modified plans.

11. STANDARD OF CARE

Services provided by Consultant under this Agreement shall be performed with the professional skill and care ordinarily provided by competent engineers or architects practicing in the same or similar locality and 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.

12. DISCLOSURE OF INTEREST

Consultant agrees to comply with City of Corpus Christi Ordinance No. 17112 and complete the *Disclosure of Interests* form as part of this contract.

13. CERTIFICATE OF INTERESTED PARTIES

For contracts that exceed \$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 requires disclosure of “interested parties” with respect to entities that enter contracts with cities. These interested parties include:

- (1) persons with a “controlling interest” in the entity, which includes:
 - a. an ownership interest or participating interest in a business entity by virtue of units, percentage, shares, stock or otherwise that exceeds 10 percent;
 - b. membership on the board of directors or other governing body of a business entity of which the board or other governing body is composed of not more than 10 members; or
 - c. service as an officer of a business entity that has four or fewer officers, or service as one of the four officers most highly compensated by a business entity that has more than four officers.
- (2) a person who actively participates in facilitating a contract or negotiating the terms of a contract with a governmental entity or state agency, including a broker, intermediary, adviser or attorney for the business entity.

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, notarized 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>.

14. CONFLICT OF INTEREST

Consultant agrees to comply with Chapter 176 of the Texas Local Government Code and file Form CIQ with the City Secretary’s Office, if required. 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>.

15. ENTIRE AGREEMENT AND CONTROLLING LAW

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. 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.

16. CONFLICT RESOLUTION BETWEEN DOCUMENTS

Consultant hereby agrees and acknowledges if anything contained in the Consultant-prepared **Exhibit “A”**, Consultant’s Scope of Services, or contained in any other document prepared by Consultant and included herein, is in conflict with this Agreement, this Agreement shall take precedence and control to resolve said conflict.

CITY OF CORPUS CHRISTI

J.H. Edmonds, P.E. Date
Director of Engineering Services

RECOMMENDED

Operating Department Date

APPROVED AS TO LEGAL FORM

Legal Department Date

APPROVED

Office of Management Date
and Budget

ATTEST

Rebecca Huerta Date
City Secretary

LNIV, INC.



Dan S. Leyendecker, P.E. Date
President

801 Navigation, Suite 300
Corpus Christi, Texas 78408
(361) 883-1984 Office
(361) 883-1986 Fax

Project Name O.N. Stevens Water
Treatment Plant Intermediate Sludge
Removal Phase 1
Project Number E16246
Accounting Unit 4093-041
Account 550950
Activity E16246014093EXP
Account Category 50950
Fund Name Water CIP

EXHIBIT "A"
CITY OF CORPUS CHRISTI, TEXAS

O.N. STEVENS WATER TREATMENT PLANT
INTERMEDIATE SLUDGE REMOVAL PHASE 1
PROJECT NO. E16246

I. SCOPE OF SERVICES

A. BASIC SERVICES

For the purpose of this contract, Preliminary Phase may include Schematic Design and Design Phase services may include Design Development as applicable to Architectural services.

1. ~~**Preliminary Phase.** The Architect/Engineer-A/E (also referred to as Consultant) will:~~
 - a) ~~Prepare PowerPoint presentation in City format for City Council Meeting.~~
 - b) ~~Hold Project Kick-off Meeting. Prepare meeting agenda and distribute meeting meetings to attendees within five working days of the meeting.~~
 - c) ~~Prepare geotechnical investigation findings (see additional services).~~
 - d) ~~Request available reports, record drawings, utility maps and other information provided by the City pertaining to the project area.~~
 - e) ~~Develop preliminary requirements for utility relocations replacements or upgrades. Coordinate with the City's Project Manager and identify operating departments potential project needs.~~
 - f) ~~Develop preliminary street cross section recommendations. Prepare conceptual life-cycle cost estimate with recommended pavement sections using Federal Highway Administration (FHWA) Real Cost Program.~~
 - g) ~~Identify right-of-way acquisition requirements and illustrate on a schematic strip map.~~
 - h) ~~Prepare preliminary opinions of probable construction costs for the recommended improvements.~~
 - i) ~~Develop drainage area boundary map for existing and proposed drainage areas served.~~
 - j) ~~Conduct the hydraulic analysis to quantify the storm sewer design of existing and proposed systems. Include the analysis of inlet capacity.~~
 - k) ~~Identify electric and communication utility companies and private pipeline companies that may have existing facilities and must relocated to accommodate the proposed improvements.~~
 - l) ~~Coordinate with AEP and City Traffic Engineering to identify location of electrical power conduit for street lighting and traffic signalization.~~
 - m) ~~Identify and analyze requirements of governmental authorities having jurisdiction to approve design of the Project including permitting, environmental, historical, construction, and geotechnical issues; upon request or concurrence of the Project Manager, meet and coordinate with agencies such as TCEQ RTA, CDBG, USPS, affected school districts (CCISD, FBISD, etc.) community groups, TDLR, etc.~~
 - n) ~~Identify and recommend public outreach and community stakeholder requirements.~~
 - o) ~~Review City provided preliminary Traffic impact assessment and provide recommendation for integration and/or additional requirements as appropriate.~~

- p) ~~Prepare an Engineering Letter Report (20 – 25 page main-body text document with supporting appendices) that documents the analyses, approach, opinions of probable construction costs, and document the work with text, tables, schematic-level exhibits and computer models or other applicable supporting documents required per City Plan Preparation Standards Contract Format (CPPSCF). Engineering Letter Report to include:~~
1. ~~Provide a concise presentation of pertinent factors, sketches, designs, cross-sections, and parameters which will or may impact the design, including engineering design basis, preliminary layout sketches, construction sequencing, alignment, cross section, geotechnical testing report, right-of-way requirements, conformance to master plans, identification of needed additional services, identification of needed permits and environmental consideration, existing and proposed utilities, identification of quality and quantity of materials of construction, and other factors required for a professional design.~~
 2. ~~Include summary output tables from Hydraulic and Hydrologic analyses.~~
 3. ~~Include existing site photos.~~
 4. ~~Provide opinion of probable construction costs.~~
 5. ~~Identify and analyze requirements of governmental authorities having jurisdiction to approve design of the Project including permitting, environmental, historical, construction, and geotechnical issues; meet as City agent or with City participation and coordinate with agencies such as TCEQ RTA, CDBG, USPS, CCISD, community groups, TDLR, etc.~~
 6. ~~Provide an analysis on project impacts towards “re-engineering” and effects on cost savings toward City operations, which this project will affect.~~
 7. ~~Provide anticipated index of drawings and specifications.~~
 8. ~~Provide a summary table & required ROW parcels~~
- q) ~~Submit one (1) copy in an approved electronic format, and one (1) paper copy of the Draft Engineering Letter Report.~~
- r) ~~Submit computer model file, results and calculations used to analyze drainage.~~
- s) ~~Conduct Project review meeting with City staff to review and receive City comments on the Draft Engineering Letter Report as scheduled by City Project Manager.~~
- t) ~~Assimilate all City review comments of the **Draft Engineering Letter Report** and provide one (1) set of the **Final Engineering Letter Report** (ELR) (electronic and hard copies using City Standards as applicable) suitable for reproduction.~~
- u) ~~Assist City in presenting summary of ELR findings to the Bicycle and Pedestrian Subcommittee and the Transportation Advisory Committee (TAC). Prepare PowerPoint presentation, handouts and exhibits for meeting. Provide follow-up and response to comments.~~

City staff will provide one set only of the following information (as applicable):

- a) ~~Electronic index and database of City's record drawing and record information.~~
- b) ~~Requested record drawings, record information in electronic format as available from City Engineering files.~~
- b) ~~The preliminary budget, specifying the funds available for construction.~~
- c) ~~A copy of existing studies and plans. (as available from City Engineering files).~~
- d) ~~Field location of existing city utilities. (A/E to coordinate with City Operating Department)~~

- ~~e) Applicable Master Plans and GIS mapping are available on the City's website.~~
- ~~f) City Control survey Bench marks and coordinates.~~
- ~~g) Preliminary Traffic impact assessment.~~

The records provided for A/E's use under this contract are proprietary, copyrighted, and authorized for use only by A/E, and only for the intended purpose of this project. Any unauthorized use or distribution of the records provided under this contract is strictly prohibited.

2. **Design Phase.** Upon approval of the preliminary phase, designated by receiving authorization to proceed, the A/E will:
 - a) Provide coordination with electric and communication utility companies and private pipeline companies that may have existing facilities and must be relocated to accommodate the proposed improvements.
 - ~~b) Provide assistance to identify testing, handling and disposal of any hazardous materials and/or contaminated soils that may be discovered during construction (to be included under additional services).~~
 - c) Prepare construction documents in City standard format for the work identified in the approved ELR. Construction plans to include improvements or modifications to the storm water, water and wastewater systems within the project limits. Include standard City of Corpus Christi detail sheets as appropriate.
 - d) Prepare construction plans in compliance with CPPSCF using English units on 11"x 17".
 1. Prepare Traffic Control and Construction Sequencing Plans. The TCP will include construction sequencing, typical cross section and construction phasing plan sheets, warning and barricades, as well as standards sheets for barricades, traffic control plan, work zone pavement markings and signage.
 2. Provide Storm Water Pollution Prevention Plan, including construction drawings.
 - e) Furnish one (1) set of the **interim plans** (60% submittal - electronic and hard copies using City Standards as applicable) to the City staff for review and approval purposes with estimates of probable construction costs. Identify distribution list for plans and bid documents to all affected franchise utilities.
 1. **Required** with the interim plans is a "Plan Executive Summary, project checklist & drawing checklist" which will identify and summarize the project by distinguishing key elements and opinion of probable project costs.
 2. **Attend** 60% submittal meeting with City Staff to assist staff in review of 60% submittal.
 - f) Hold Project 60% review meeting. Prepare meeting agenda and distribute meeting agenda to attendees within five working days of the meeting. Assimilate all review comments, as appropriate and, upon Notice to Proceed.
 - ~~g) Provide one (1) set of the **pre-final plans and bid documents** (90% submittal - electronic and hard copy using City Standards as applicable) to the City staff for review and approval purposes with revised estimates of probable costs. Plan execution summary, project checklist and plan checklist.~~
 - ~~h) Hold Project 90% review meeting. Prepare meeting agenda and distribute meeting agenda to attendees within five working days of the meeting. Assimilate all review comments, and incorporate any requirements into the plans and specifications, and advise City of responding and non-responding~~

~~participants as appropriate and, upon Notice to Proceed.~~

- i) Provide one (1) set of the final (100%) plans (unsealed and unstamped - electronic and half-size hard copy using City Standards as applicable) for City's final review.
- j) Assimilate all final review comments Upon approval by the Director of Engineering Services, provide one (1) set of the **final plans and contract documents** (electronic and half-size hard copy using City Standards as applicable) suitable for reproduction. Said bid documents henceforth become the shared intellectual property of the City of Corpus Christi and the Consultant. The City agrees that any modifications of the submitted final plans (for other uses by the City) will be evidenced on the plans and be signed and sealed by a professional engineer prior to re-use of modified plans.
- k) Provide Quality Assurance/Quality Control (QA/QC) measures to ensure that all submittals of the interim, pre-final (if required), and final complete plans and complete bid documents with specifications accurately reflect the percent completion designated and do not necessitate an excessive amount of revision and correction by City. Additional revisions or design submittals are required (and within the scope of Consultant's duties under this contract) if, in the opinion of the City Engineer or designee, Consultant has not adequately addressed City-provided review comments or provided submittals in accordance with City standards..
- l) Prepare and submit Monthly Status Reports to the Project Manager no later than the last Wednesday of each month with action items developed from monthly progress and review meetings. See Exhibit "A-2" for required form.
- m) ~~Provide copy of contract documents along with appropriate fee to Texas Department of Licensing and Regulation (TDLR) for review and approval of accessibility requirements for pedestrian improvements (as authorized by Additional Services).~~

The City staff will:

- a) Designate an individual to have responsibility, authority, and control for coordinating activities for the construction contract awarded.
- b) Provide the budget for the Project specifying the funds available for the construction contract.
- c) Provide electronic copy the City's standard specifications, standard detail sheets, standard and special provisions, and forms for required bid documents.

3. **Bid Phase.** The A/E will:

- a) ~~Prepare draft Authorization to Advertise (ATA).~~
- b) Participate in the pre-bid conference and provide a meeting agenda for critical construction activities and elements impacted the project.
- c) Assist the City in solicitation of bids by identification of prospective bidders, and review of bids by solicited interests.
- d) Review all pre-bid questions and submissions concerning the bid documents and prepare, in the City's format, for the Engineering Services' approval, any addenda or other revisions necessary to inform contractors of approved changes prior to bidding.
- e) Attend bid opening, analyze bids, evaluate, prepare bid tabulation, and make recommendation concerning award of the contract.

- f) In the event the lowest responsible bidder's bid exceeds the project budget as revised by the Engineering Services in accordance with the A/E's design phase estimate required above, the Engineer will, at its expense, confer with City staff and make such revisions to the bid documents as the City staff deems necessary to re-advertise that particular portion of the Project for bids.
- ~~g) Prepare Agenda Memoranda and PowerPoint presentation in City format for City Council Meeting.~~

The City staff will:

- a) Arrange and pay for printing of all documents and addenda to be distributed to prospective bidders.
- b) Advertise the Project for bidding, maintain the list of prospective bidders, receive and process deposits for all bid documents, issue (with the assistance of the A/E) any addenda, prepare and supply bid tabulation forms, and conduct bid opening.
- c) Receive the Engineer's recommendation concerning bid evaluation and recommendation and prepare agenda materials for the City Council concerning bid awards.
- d) Prepare, review and provide copies of the contract for execution between the City and the contractor.

4. **Construction Administration Phase.** The A/E will perform contract administration to include the following:

- a) Participate in pre-construction meeting conference and provide a recommended agenda for critical construction activities and elements impacted the project.
- b) Review, Contractor submittals and operating and maintenance manuals for conformance to contract documents.
- c) Review and interpret field and laboratory tests.
- d) Provide interpretations and clarifications of the contract documents for the contractor and authorize required changes, which do not affect the contractor's price and are not contrary to the general interest of the City under the contract.
- e) Make regular visits to the site of the Project to confer with the City project inspector and contractor to observe the general progress and quality of work, and to determine, in general, if the work is being done in accordance with the contract documents. This will not be confused with the project representative observation or continuous monitoring of the progress of construction.
- f) Prepare change orders as authorized by the City; provide interpretations and clarifications of the plans and specifications for the contractor and authorize minor changes which do not affect the contractor's price and are not contrary to the general interest of the City under the contract.
- g) Review, evaluate and recommend for City consideration Contractor Value Engineering proposal.
- h) Attend final inspection with City staff, provide punch list items to the City's Construction Engineers for contractor completion, and provide the City with a Certificate of Completion for the project upon successful completion of the project.
- i) Review Contractor-provided construction "red-line" drawings. Prepare Project record drawings and provide a reproducible set and electronic file (AutoCAD r.14 or later) within two (2) months of final acceptance of the project. All drawings shall be CADD drawn using dwg format in AutoCAD, and graphics data will be in dxf format with each layer being provided in a separate file. Attribute data will be

provided in ASCII format in tabular form. All electronic data will be compatible with the City GIS system.

The City staff will:

- a) Prepare applications/estimates for payments to contractor.
- b) Conduct the final acceptance inspection with the Engineer.

B. ADDITIONAL SERVICES

This section defines the scope of additional services that may only be included as part of this contract if authorized by the Director of Engineering Services. A/E may not begin work on any services under this section without specific written authorization by the Director of Engineering Services. Fees for Additional Services are an allowance for potential services to be provided and will be **negotiated** by the Director of Engineering Services as required. The A/E shall, with written authorization by the Director of Engineering Services, perform the following::

1. **Permit Preparation.** Furnish the City all engineering data and documentation necessary for all required permits. The A/E will prepare this documentation for all required signatures. The A/E will prepare and submit identified permits **as applicable** to the appropriate local, state, and federal authorities, including:
 - a. ~~Union Pacific Railroad, Missouri Pacific Railroad, or any other railroad operating in the area~~
 - b. ~~TxDOT utility and environmental permits, multiple use agreements~~
 - c. ~~Wetlands Delineation and Permit~~
 - d. ~~Temporary Discharge Permit~~
 - e. ~~NPDES Permit/Amendments (including SSC, NOI/NOT)~~
 - f. ~~Texas Commission of Environmental Quality (TCEQ) Permits/Amendments~~
 - g. ~~Nueces County~~
 - h. ~~Texas Historical Commission (THC)~~
 - i. ~~U.S. Fish and Wildlife Service (USFWS)~~
 - j. ~~U.S. Army Corps of Engineers (USACE)~~
 - k. ~~United States Environmental Protection Agency (USEPA)~~
 - l. ~~Texas Department of Licensing and Regulation (TDLR)~~
 - m. ~~Texas General Land Office (TGLO)~~
 - n. ~~Other agency project-specific permits~~
2. **Right-of-Way (ROW) Acquisition Survey.** ~~All work must comply with Category 1-A, Condition I specifications of the Texas Society of Professional Surveyors' Manual of Practice for Land Surveying in the State of Texas, Ninth Edition. All work must be tied to and in conformance with the City's Global Positioning System (GPS) control network. All work must comply with all TxDOT requirements as applicable.~~
 - a) ~~Perform surveys to determine apparent right-of-way widths.~~
 - b) ~~Research plats, ROW maps, deed, easements, and survey for fence corners, monuments, and iron pins within the existing ROW and analyze to establish existing apparent ROW. A/E must obtain Preliminary Title Reports from a local title company and provide copies of the title reports to the City. Preliminary Title Report shall identify title ownership and any title encumbrances to all right-of-way to be acquired.~~
 - c) ~~Provide a preliminary base map containing apparent ROW, which will be used by the A/E to develop the proposed alignment and its position relative to the existing~~

~~and proposed ROW. This preliminary base map must show lot or property lines, land ownership and addresses as per appraisal district records.~~

- ~~d) Prepare Metes and Bound Instrument with supporting exhibits as required and agreed upon, subsequent to ELR acceptance for ROW parcels, utility easements and temporary construction easements.~~

3. **Topographic Survey and Parcel Descriptions** All work must be tied to and conform with the City's Global Positioning System (GPS) control network and comply with Category 6, Condition I specifications of the Texas Society of Professional Surveyors' ☐ Manual of Practice for Land Surveying in the State of Texas, Ninth Edition. Include reference to a minimum of two (2) found boundary monuments from the project area.

- a) Establish Horizontal and Vertical Control.
- b) Establish both primary and secondary horizontal/vertical control.
- c) Set project control points for Horizontal and Vertical Control outside the limits of project construction disturbance.
- d) Horizontal control will be based on NAD 83 State plane coordinates (South Zone), and the data will have no adjustment factor applied – i.e. – the coordinate data will remain in grid.
- e) Vertical control will be based on NAVD 88.
- f) All control work will be established using conventional (non-GPS) methods. Perform topographic surveys to gather existing condition information.
- g) Locate proposed soil/pavement core holes as drilled by the City's Geotechnical Engineering Consultant.
- h) Obtain x, y, and z coordinates of all accessible existing sanitary sewer, storm sewer, water and gas lines as well as any other lines owned by third-parties and locate all visible utilities, wells and signs within the apparent ROW width along project limits. No utility connections will be shown. Surveying services, related to subsurface engineering (SUE) shall be provided as part of the scope of work for SUE.
- ~~i) Locate improvements within the apparent ROW.~~
- ~~j) Locate and identify trees, at least five inches in diameter within the apparent ROW.~~
- ~~k) Generate electronic planimetric base map for use in project design.~~
- ~~l) Set property corners and prepare right of way strip parcel map depicting all parcels proposed for acquisition. Metes and bounds descriptions must indicate parent tract areas based on the most accurate information available. Strip map will show entire parent tracts at "not to scale" and for information only. All existing easements within the parcels to be acquired and those within adjacent parcels must be shown.~~
- ~~m) Prepare individual signed and sealed parcel maps and legal descriptions for the required right of way acquisition for parcels and easements. A strip map showing all parcels required will be submitted along with parcel descriptions. Additional fees may be required in resolving boundary conflicts between Owners. A/E shall submit parcel maps and legal descriptions prior to the 60% submittal.~~

4. **Environmental Issues.** ~~Identify and develop a scope of work for any testing, handling and disposal of hazardous materials and/or contaminated soils that may be discovered during construction.~~

5. ~~**Public Involvement.** Participate in two public meetings. One public meeting shall be held after submittal of the Final Engineering Letter Report and one public meeting shall be held prior to start of project construction. Prepare notices, PowerPoint presentations, handouts and exhibits for meetings. Provide follow-up and response to citizen comments. Revise contract drawings to address citizen comments, as directed by the City. Prepare notices, handouts and exhibits for public information meetings.~~
6. **Subsurface Utility Investigation**
- a) ~~Provide subsurface utility engineering in accordance with ASCE Standard "ASCE C-1, 38-02, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data" including, but not limited to, hydro-excavation. The proposed subsurface utility investigation will be as follows:~~
- i) ~~Excavation — The survey scope includes working with a subsurface utility excavator to perform Quality Level A investigation of underground utilities in specified areas through the project limit. (Quality Level A involves the use of nondestructive digging equipment at critical points to determine the horizontal and vertical position of underground utilities, as well as the type, size, condition, material, and other characteristics.) Utilities located at this quality level will be physically located and tied to the topographic survey control. The utility will be identified and an elevation will be obtained to the top of the utility.~~
- ii) ~~Utility Location — The survey scope includes locating certain utilities to Quality Level B (Quality Level B involves surveying visible above-ground utility facilities, such as manholes, valve boxes, posts, etc., and correlating this information with existing utility records.) These utilities will be located by obtaining a One-Call Notice and measuring the marked locations.~~
- iii) ~~Storm Water — Storm water facilities within the project limits will be located to Quality Level C. Locations will be based on the surveyed locations of accessible storm water manholes and drainage inlets.~~
- iv) ~~Wastewater — Wastewater facilities within the project limits will be located to Quality Level C. Locations will be based on the surveyed locations of accessible wastewater manholes. Wastewater lines that are not to be replaced as part of this project and that fall within the footprint of construction-related excavation shall be located at Quality Level A.~~
- v) ~~Water — Water facilities within the project limits will be located to Quality Level C.~~
- vi) ~~Gas — Gas facilities within the project limits will be located to Quality Level C by the A/E. The City of Corpus Christi Gas Department will provide Quality Level A. The A/E will coordinate this activity.~~
- b) ~~Inform local franchises whose utilities fall within the footprint of construction-related excavation of the potential for encountering their utility lines during construction.~~
7. **Construction Observation Services.** To Be Determined.
8. **Warranty Phase.** Provide a maintenance guaranty inspection toward the end of the one-year period after acceptance of the Project. Note defects requiring contractor action to maintain, repair, fix, restore, patch, or replace improvement under the maintenance guaranty terms of the contract. Document the condition and prepare a report for the City

staff of the locations and conditions requiring action, with its recommendation for the method or action to best correct defective conditions and submit to City Staff. Complete the inspection and prepare the report no later than sixty (60) days prior to the end of the maintenance guaranty period.

9. ~~**Start-Up Services.** Provide on-site services and verification for all start-up procedures during actual start-up of major Project components, systems, and related appurtenances if needed and required.~~
10. **Contractor and Invoice Coordination for Contract Renewal (TBD).** Please see Exhibit A-1.

Provide the services above authorized in addition to those items shown on Exhibit "A-1" Task List, which provides supplemental description to Exhibit "A". Note: The Exhibit "A-1" Task List does not supersede Exhibit "A".

II. **SCHEDULE**

Date	Activity
TBD	A/E Contract Execution (NTP)
2 Months after NTP	60% Design Submittal
4 Months after NTP	100% Design Submittal
5 Months after NTP	Final Design Submittal
6 Months after NTP	Advertise for Bid
9 Months after NTP	Award Construction/Service Contract
15 Months after NTP	Dredging Operation Completion

III. **FEES**

- A. **Fee for Basic Services.** The City will pay the A/E a fixed fee for providing for all "Basic Services" authorized as per the table below. The fees for Basic Services will not exceed those identified and will be full and total compensation for all services outlined in Section I.A.1-4 above, and for all expenses incurred in performing these services. **The fee for this project is subject to the availability of funds. The Engineer may be directed to suspend work pending receipt and appropriation of funds.** For services provided, A/E will submit monthly statements for services rendered. The statement will be based upon A/E's estimate (and with City's concurrence) of the proportion of the total services actually completed at the time of billing. City will make prompt monthly payments in response to A/E's monthly statements.
- B. **Fee for Additional Services.** For services authorized by the Director of Engineering Services under Section I.B. "Additional Services," the City will pay the A/E a not-to-exceed fee as per the table below:

Summary of Fees

Basic Services Fees	
1 Preliminary Design Phase	\$0
2 Design Phase	\$45,105
3 Bid Phase	\$10,080
4 Construction Phase	\$32,770
Subtotal Basic Services Fees	\$87,955
Additional Services Fees (Allowance)	
1 Permit Preparation	\$1,300
2 ROW Acquisition	\$0
3 Topographic Survey	\$4,092
4 Environmental Issues	\$0
5 Public Involvement	\$0
6 SUE	\$0
7 Construction Observation Services	\$0
8 Warranty Phase	\$2,120
9 Start-Up Services	\$0
10 Contractor & Invoice Coord. for Contract Renewal (TBD)	\$0
Sub-Total Additional Services Fees Authorized	\$7,512
Total Authorized Fee	\$95,467



EXHIBIT "A-1"
SCOPE OF WORK

CITY OF CORPUS CHRISTI
O.N. STEVENS WATER TREATMENT PLANT
INTERMEDIATE SLUDGE REMOVAL PHASE 1
CITY PROJECT NO. E16246

PROJECT DESCRIPTION:

The purpose of this project is to remove the maximum quantity of sludge from the lagoons at the City of Corpus Christi's O.N. Stevens Water Treatment Plant (ONSWTP) allowable within specific program budget constraints. This project will provide ONSWTP with a solution to restore a portion of the sludge storage capacity at ONSWTP and particularly in Lagoon No. 7 (Washwater Return Basin). The consultant will design and develop bid documents for the improvements necessary for the recommended sludge removal option identified in the ELR for Amendment No. 1 to O.N. Stevens Water Treatment Plant Interim Sludge Management Improvements (E13052). The recommended option generally consists of dredging Lagoon No. 7 and pumping the dredged material into geotextile tubes for dewatering. The geotextile tubes will be pre-staged in a newly constructed dewatering cell that will be designed to contain and convey permeate and stormwater runoff from the dewatering cell back to Lagoon No. 7, preventing unauthorized discharge. The geotextile tubes will be allowed to remain on site, awaiting disposal, for a maximum of two (2) years, per TCEQ requirements. The final disposal solution for the geotextile tubes and dewatered sludge is yet to be determined by the City. In addition to Design Phase services, the consultant will also provide Bid Phase and Construction Administration services. The scope of work is further detailed in the following sections.

I. SCOPE OF SERVICES

A. BASIC SERVICES

1. ~~PRELIMINARY PHASE~~

The Preliminary Phase for this project has been largely completed and presented in the ELR for Amendment No. 1 to O.N. Stevens Water Treatment Plant Interim Sludge Management Improvements (E13052) and as such will not require an additional ELR.

2. DESIGN PHASE

Although an additional ELR will not be required, the previous ELR was not a full 30% design and did not include plan sheets at a 30% level of completion. This portion of the design development will be completed in the Design Phase.

- a) The Consultant will develop the appropriate construction drawings, specifications and contract documents to deliver the project improvements and services in two separate parts as described below. The intention of dividing the project elements in to two separate parts is that Part 1 will be a one time construction project to make necessary improvements to the ONSWTP site. Part 2 will be a bid package for a renewable service contract for dredging and dewatering. While both parts will be bid together for the initial contract, Part 2 will be available to be reissued for subsequent service contracts with minimal revision.

(1) Part 1 – Dewatering Cell Construction

Part 1 will consist of the improvements at ONSWTP required to allow sludge dewatering using geotextile tubes.

(a) Dewatering Cell Design

The Consultant will develop the appropriate construction drawings and specifications for a dewatering cell designed to contain the permeate from the geotextile tubes during the sludge dewatering process. The cell will be designed to collect and convey the permeate in addition to any stormwater runoff from rainfall that falls within the dewatering cell. The necessary capacity will be determined by combining anticipated dewatering flow rates and stormwater flow rates. The dewatering cell design will generally consist of the following tasks:

(i) Establish Dewatering Cell Boundary

The boundary will be established by conducting a topographic survey and reviewing record documents in order to identify underground utilities in the proposed area. Additionally, the size and spacing of the geotextile tubes required to dewater the desired amount of sludge will be further defined. The dewatering cell boundary will be designed to ensure adequate space for the required geotextile tubes.

(ii) Select Dewatering Cell Liner Material

The liner material will be selected in order to facilitate dewatering by promoting positive drainage away from the geotextile tubes. Additionally, the consultant will consider the durability of various liner material options to provide optimal operational life expectancy when subjected to heavy equipment during the removal of dewatered sludge.

(iii) Develop Dewatering Cell Drainage Channel Layout

The drainage channels within the dewatering cell will be designed to minimize footprint while having adequate capacity to convey peak flows and facilitate dewatering by promoting positive drainage away from the geotextile tubes.

(iv) Evaluate Peak Permeate Flow Rate

In order to properly size the drainage channels, the peak permeate flow rate must be calculated. This peak flow rate will account for the water pumped during dredging that is not retained in the geotextile tube as well as the water that will

- continue to permeate the tubes at flow rates that will vary with time and decreased water content in the solids.
- (v) **Select Design Storm and Evaluate Peak Runoff**
The design storm will be selected based on best practices for structures of a similar nature. The design storm rainfall intensity will be used for evaluation of the peak stormwater runoff expected from the dewatering cell.
 - (vi) **Develop Dewatering Cell Containment Berm Height, Material, and Construction Requirements**
The consultant will consider expected permeate flow rate, stormwater flow rate, topography, in-situ material, flow velocity and various other characteristics of the dewatering cell design to select an appropriate berm height, cross section, material composition, and construction requirements.
 - (vii) **Develop Dewatering Cell Drainage Channel Cross Section(s)**
The Consultant will consider the drainage channel layout, expected flow rates, slopes, and allowable space within the dewatering cell to determine the required width and depth of the individual drainage channels. Additionally, the Consultant will make considerations for minimizing flow velocity and erosion potential.
- (b) **Road Crossing & Outfall Structure Design**
The Consultant will develop the appropriate construction drawings and specifications for a drainage structure designed to convey peak flows from the dewatering cell to Lagoon No. 7. This conveyance structure will cross the dirt access road on the northwest side of Lagoon No. 7. The dewatering cell design will generally consist of the following tasks:
- (i) **Establish Optimum Road Crossing Location**
The road crossing location will make use of the topographic survey, record documents and input from plant staff. The road crossing location will be selected to minimize conflicts with plant operations and infrastructure and to maximize drainage from the dewatering cell into Lagoon No. 7.
 - (ii) **Develop Detail for Connection of Outfall Structure to Dewatering Cell Drainage Channel(s) and Berm Penetration**
The consultant will design a structure similar to a culvert that will convey flows from the dewatering cell through the cell berm, under the dirt access road, and into Lagoon No. 7. The structure will consist of a transition from an open channel to a closed conduit before it crosses the containment berm. This transition will be designed to facilitate flows by reducing turbulence and obstruction while resisting erosion. The berm penetration will be designed to withstand the weight and differential settling forces possible within the berm while simultaneously maintaining the integrity of the berm, structurally and hydraulically.

- (iii) Develop Detail for Lagoon No. 7 Berm Penetration/Outfall Structure
The consultant will design the Lagoon No. 7 outfall structure which will be the discharge point for all flows contained and conveyed by the dewatering cell. The consultant will design the outfall structure to preserve the structural and hydraulic integrity of the Lagoon No. 7 berm. The consultant will also design the outfall structure to minimize or eliminate erosion potential and facilitate hydraulic flow into Lagoon No. 7.
- (iv) Establish Minimum and Maximum Road Crossing Flow Line Elevation and Pipe Diameter.
The Consultant will design the road crossing by evaluating the minimum required flow line, slope, and cross section of the conveyance structure that will provide adequate flow capacity and promote positive drainage to Lagoon No. 7.
- (v) Select Road Crossing Piping Material
The Consultant will execute this task simultaneously with task (vi) below in order to select a material that is cost effective and will provide adequate strength to resist the expected loads within given cover parameters.
- (vi) Determine Anticipated Loads and Minimum Cover Requirements
The consultant will evaluate the minimum cover requirements for the expected magnitude and frequency of vehicle and equipment loading in the immediate area. The minimum cover will be selected in conjunction with the material selected in task (v) above in order to maintain the structural integrity of the dirt access road and the structural and hydraulic integrity of the conveyance structure crossing the road.

(2) Part 2 – Dredging and Dewatering Services

Part 2 will consist of the services, materials, and equipment required to dredge and dewater sludge from Lagoon No. 7 using dredging equipment and geotextile tubes.

- (a) Lagoon No. 7 Dredging
The consultant will develop drawings and specifications as required to establish the limits, technical requirements, and schedule allowances for the anticipated sludge removal quantities.
- (b) Sludge Distribution Piping
The Consultant will develop drawings and specifications as required to establish the technical requirements for the anticipated sludge removal quantities and flow rates.
- (c) Geotextile Tubes
The Consultant will develop drawings and specifications as required to establish the technical requirements for the geotextile tubes to effectively dewater sludge with considerations being given to removal rates and sludge characteristics. The

geotextile tubes will also be appropriately designed and sized to be compatible with the dewatering cell configuration.

b) 60% Design Submittal

The Consultant will prepare and submit, for City comment and approval, preliminary Contract Documents. The Contract Documents will include preliminary front end documents, preliminary plan sheets, and preliminary specifications which will all be developed to a 60% level of completion.

c) 100% Design Submittal

The Consultant will prepare and submit, for City comment and approval, 100% Contract Documents. The 100% set of Contract Documents will be a continuation of the 60% design phase. Work will generally include addressing review comments from the 60% design, completing general and project details, completing plan sheets, and completing specifications which will all be developed to a 100% level of completion. These documents will be submitted to the City for review, comment and approval.

d) Final Design Submittal

The Consultant will prepare the Final Design Submittal which will consist of a final set of specifications, plan sheets, and front end documents that have addressed all comments and are signed and sealed by a professional engineer registered in the state of Texas. The consultant will also prepare the documents for distribution to the City and bidding contractors.

e) Quality Assurance/Quality Control (QA/QC).

The Consultant will follow established internal QA/QC procedures in order to ensure that all submittals to the City are consistent with the level of completion expected. As part of the established internal QA/QC procedures, all submittals will be reviewed by a subject matter expert who is not involved with the project design or administration. The submittal will be reviewed for general completeness, technical accuracy, and conformance with project scope and intent. Review comments will be issued and responses will be documented for each submittal.

3. Bid Phase

This task will consist of assisting the City with conducting a Pre-Bid Conference, preparing the Pre-Bid Conference minutes, responding to bidder questions, preparing addenda, and evaluating the bids, and recommending an award to the Contractor. The City will advertise the bid and distribute the bidding documents (plans, specifications, and addenda) to the interested bidders and suppliers.

a) **Sampling and Bench Testing Coordination & Support**

During bid advertisement, the consultant will coordinate with all identified prospective bidders to allow and assist them in obtaining sludge samples from Lagoon No. 7 for analysis and bench testing. This process will allow prospective bidders to determine effectiveness of dewatering equipment and the required quantities of polymer and other dewatering aids as necessary. By determining the effectiveness and required quantities, the accuracy of the bids will be improved.

b) **Pre-Bid Conference**

Approximately 3 weeks after the notice of bids has been advertised by the City, the Consultant will assist the City in conducting a Pre-Bid Conference to review the details of the project and solicit questions regarding the Bid Documents. The Consultant will prepare a draft agenda for City review, address the review comments and finalize the agenda, and document the conference in writing within 5 working days.

c) **Bidding Coordination and Addenda Preparation**

The Consultant will answer City and Contractor questions, develop written responses in the form of Contract Addenda, provide (1) set of any required addenda for distribution to Bidders, and provide overall support to City during the bid advertisement period. The addenda will include, as needed, (1) full size and (1) half-size sets of addenda drawings for distribution by the City to interested Bidders.

d) **Bid Evaluation and Recommendation of Award**

The Consultant will tabulate and review all bids received for compliance with the requirements of the Bid Documents, including addenda. After consultation with City, the Consultant will prepare a written award recommendation based on this review and knowledge of proposed contractors' and subcontractors' past performance records.

4. Construction Administration Phase

The intent of the Construction Administration Phase is to assist the City in confirming that construction of the Project is carried out in accordance with the requirements of the Contract Documents and to help facilitate and enable the Work

to progress in an efficient and cost-effective manner, while maintaining facility operations. The anticipated construction duration is **6 months**.

a) General Project Administration and Meetings

The tasks described below as part of the General Project Administration and Meetings task are estimated to consist of one Pre Construction Meeting and five (5) Monthly Status Meetings during the construction phase. Also included are approximately twelve (12) hours per month for six (6) months of coordination, correspondence, and record keeping. These tasks are further described below.

- (1) As the designated Design Consultant for the project, LNV will consult with and advise the City and act as its representative during construction. The Consultant will serve as the central point of contact for the Contractor. Instructions from the City to the Contractor(s) will be issued through the Consultant, who will have authority to act on behalf of the City to the extent provided in this Scope of Work, except as otherwise provided in writing. However, The Consultant will not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor(s) (except as otherwise specified in the Contract Documents) or the safety precautions and programs incident to the Work of the Contractor(s).
- (2) The Consultant will conduct specific inspections required by governing Codes, prepare applicable documentation and records of such inspections, and certify compliance with design requirements and governing Codes, as applicable. The Consultant will accompany visiting inspectors representing public or other agencies having jurisdiction over the Project and will record and report the outcome of these inspections.
- (3) The Consultant will review factory test reports as required by the Contract Documents and verify that the data reported meets the requirements of the contract documents. The Consultant will review test reports, whether by the Contractor or the Design Consultant, for compliance with quality standards and will take appropriate action to obtain additional data if necessary regarding the quality of materials and work in-place.
- (4) The efforts of the consultant will be directed toward providing a greater degree of confidence for the City that the completed Work of the Contractor conforms to the Contract Documents. However, the Consultant will not be responsible for the failure of Contractor to perform the Work in accordance with the Contract Documents.
- (5) On the basis of onsite examination of materials, equipment, and workmanship, the consultant will keep the City informed of the progress of the Work, will endeavor to guard the City against defects and deficiencies in such Work, and may disapprove or reject Work failing to conform to the Contract Documents. This task will include the following items:

- (6) Conduct a pre-construction conference. At the conference, the Consultant will identify field services to be provided and discuss appropriate coordination procedures. The Consultant will prepare an agenda for the meeting and will prepare and distribute the meeting notes.
- (7) Provide construction administration, quality control, value engineering support and coordination: The Consultant will provide construction administration and quality control services during the course of the project to assure that the overall technical correctness of the construction phase services and that specified procedures are being followed and the Consultant's schedules are being met. The Consultant will provide coordination functions during the construction phase as follows:
 - (a) Hold coordination meetings with the City and Contractor.
 - (b) Coordinate with regulatory and approving agencies and utilities as required.
 - (c) Coordinate the work of specialty sub-consultants assigned to the project.
- (8) Maintain and provide detailed project records and documentation during the construction phase. Project records will include correspondence, schedules, submittals, test data, project data, payments, change orders, meeting minutes, clarifications, mark-ups of drawings and specifications, Contractor daily logs and other such documentation. Daily logs will be kept to document the progress and issues associated with the Work. In particular, Contractor daily logs should include dredging progress, quantities and characteristics of sludge dredged and dewatered, moisture content of the solids at various stages of dewatering, sludge levels in the Lagoon, average sludge removal rate, and dewatering rates. Project records will be delivered to the City's representative upon completion of the construction contract. Records will be maintained at the Consultant's office.

b) Review Submittals and Test Results

- (1) The Consultant will receive, log and distribute for review and approval the submittals, shop drawings, samples, test results, operations and maintenance manuals, and other data that Contractor is required to submit. The Consultant will distribute and file the submittals after review action has been taken. The Consultant will follow-up to verify that revisions are made and resubmitted as required and will verify that such required submittals are received and approved prior to installation or payment for the materials covered. The Consultant will also perform a review of the schedule of shop drawing submissions and schedule of values prepared by Contractor and will discuss status of the submittals at construction progress meetings. The Consultant will be responsible for completing the submittal reviews within 15 business days and for monitoring the status and timeliness of responses.

- (2) The Consultant will review and approve product data, shop drawings, samples, test results, operations and maintenance manuals, and other data that the Contractor is required to submit. However, such reviews will be conducted only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Such review and approval or other action will not extend to means, methods, sequences, techniques or procedures of construction selected by Contractor, or to safety precautions and programs incident thereto.
- (3) As part of this task, the Consultant will maintain a submittal log showing dates of submittal, transmittal action to other sub-consultants, dates of return and review action. Copies of the log will be furnished to the City and the Contractor monthly. The Consultant will also evaluate the Contractor's request for substitutions. Submittal review efforts are based on a maximum of two (2) reviews per submittal and that no more than fifty percent (50%) of the total number of first submittals will require two (2) reviews. The level of effort for this task is based on receiving 4 shop drawing submittals along with various material submittals. Not included in the scope of work for this task is the witnessing of specification compliance testing at manufacturer's factories.

c) Issue Interpretations and Clarifications

- (1) The Consultant will act as the main point of contact for interpretation of the requirements of the Contract Documents and judge of the acceptability of the work based on the requirements shown or specified. The Consultant will be responsible for responding to Requests for Information (RFI) within 5 business days and for monitoring the status and timeliness of responses.
- (2) As part of this task, the Consultant will maintain a RFI log showing dates of submittal, transmittal action to other sub-consultants, dates of return, and a summary of the response. Copies of the log will be furnished to the City and the Contractor monthly. The level of effort for this task is based on receiving 10 RFIs.
- (3) As specified in the General Conditions of the Contracts, the Consultant will interpret and issue decisions on claims of the Contractor(s) or the City relating to the acceptability of the work or the interpretation of the requirements of the Contract Documents or pertaining to the execution and progress of the work. The Consultant will also have authority, as the City's representative, to require special inspection or testing of the work.
- (4) The Consultant will issue interpretations and clarifications of the Contract Documents, as requested by the Contractor(s) or as deemed necessary by the Resident Engineer, to facilitate proper fabrication, construction, or installation of work. The Consultant will render interpretations or decisions in good faith and in accordance with the requirements of the Contract Documents (e.g., within 10-days).

- (5) In the event of a claim or dispute by the Contractor, the Consultant will interpret the requirements of the Contract Documents and judge the acceptability of the work. The Consultant will make written recommendations to the City on all claims of the Contractor related to acceptability of the work, or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of work, or additional work as deemed necessary by the City.

d) Site Visits

- (1) The Consultant will conduct regular visits to the site (at least two (2) per month) to familiarize themselves with the status of work, make spot checks of work-in-progress, verify conformance with the design intent, and conduct detailed coordination of construction issues. During site visits the Consultant will verify quantities and characteristics of sludge being dredged and dewatered along with moisture content of the solids at various stages of dewatering and sludge levels in the Lagoons based on Contractor daily logs in order to track and provide the data to the City monthly. A total of twelve (12) site visits are anticipated for the duration of construction.

e) Change Orders

- (1) The Consultant will review cost and time estimates for change orders and for Contractor's claims for additional cost or compensation due to differing site conditions, force majeure, material or equipment shortages, or other causes in order to determine whether they are justified under the Contract. The Consultant will also provide an estimate of the additional Design Consultant costs (if any) that would be incurred as a result of the change order.
- (2) The Consultant will make recommendations to the City's Project Manager on the amount of additional compensation, credit, or time extension due to the Contractor. In addition, the Consultant will clarify matters and work to resolve discrepancies with the Contractor.
- (3) The Consultant will perform necessary design revisions in connection with change orders to reflect modifications requested by the City, or as required by unforeseen conditions. Limited hours for coordination of the resulting change order requests and any additional Design Consultant research and design efforts are included in this scope.
- (4) The Consultant will also perform necessary design revisions authorized by the City in connection with change orders to reflect modifications requested by the Contractor and will perform services in evaluating substitutions proposed by Contractor. Limited hours for coordination of the resulting change order requests and any additional Design Consultant research and design efforts are included in this scope.
- (5) The Consultant will consider and evaluate Contractor's suggestions for changes in the Contract Drawings or Specifications and respond as appropriate or as required by the Contract Documents. The

Consultant will coordinate with the City and provide recommendations pertaining to the suggested design modifications.

f) Substantial Completion/Final Acceptance Inspection

- (1) Following notice from the Contractor, the Consultant will conduct an inspection to determine if the Project is substantially complete in accordance with the construction documents. If the Consultant considers the work substantially complete, then the Consultant will deliver to City and the Contractor a Certificate of Substantial Completion and a list of observed items requiring completion or correction (punch list), date for completion for the punch list, and recommendation for division of responsibilities between the City and the Contractor.
- (2) The Consultant will conduct a final inspection to determine if the finished Work has been completed to the standard required by the Contract Documents and that Contractor has fulfilled its obligations as required. This inspection will be based on the punch list and any other functional or operational deficiencies that occur in the time period between when the punch list is generated and the Final Inspection. A final list of items to be completed or corrected in accordance with the requirements of the construction documents will be prepared and submitted to the Contractor.
- (3) After the Contractor has completed the work of the final punch list and upon written notice from the Contractor, the Consultant will review and determine that items on the final list have been completed or corrected and make recommendations to the City concerning acceptance and final payment.

g) Record Drawings & O&M Manuals

- (1) The Consultant will prepare and deliver to the City record drawings of the constructed work both in hard copy and complete electronic files for the project in AutoCAD and PDF. Record drawing information will be obtained from redlined drawings prepared by the Contractor.
- (2) The Consultant will compile and review O&M Manuals prepared by the Contractor. The Consultant will request revisions as needed and deliver final O&M Manuals to the City in both PDF and hard copy formats.

B. Additional Services (Allowance)

1. Permit Preparation

- a) This item is for tasks to be determined and is an allowance in which the Consultant will provide permitting support to the City and Contractor as needed. This will include any required submittals notifying TCEQ of the commencement of dredging and sludge storage operations or other associated documentation still to be determined.

~~2. ROW Acquisition~~

This task will not be required for this project.

3. Topographic Survey

- a) A detailed topographic survey of the approximately 8 acres of proposed dewatering cell area will be conducted to identify natural drainage patterns and slopes. The topographic survey will also aid the Consultant in determining the cut and fill balance for the grading plan of the proposed dewatering cell. The topographic survey will be performed in accordance with the requirements stated in Exhibit A.

~~4. Environmental Issues~~

This task will not be required for this project.

~~5. Public Involvement~~

This task will not be required for this project.

~~6. Subsurface Utility Exploration~~

This task will not be required for this project.

7. Construction Observation Services

TBD

8. Warranty Phase

- a) The Consultant will coordinate warranty items between the City and the Contractor during the one year warranty period after substantial completion of the project. This task will include preparation of requests to Contractor on behalf of the City for warranty item service calls.
- b) The Consultant will coordinate and conduct a warranty site inspection and associated report in accordance with Exhibit. A.

~~9. Start-Up Services~~

This task will not be required for this project.

10. Contractor and Invoice Coordination for Contract Renewal (TBD)

Upon completion of Part 2 of the construction contract described above, the City will have the option to renew the contract for an additional quantity of sludge and contract time based on Contractor performance. The Consultant will perform tasks

during each renewal period to assist the City and Contractor in contract renewal efforts as described below.

- a) The Consultant will review and evaluate Contractor daily logs in order to determine anticipated dredging and dewatering rates for each subsequent contract renewal.
- b) Based on average dredging and dewatering rates, expected sludge production rates, and observed sludge levels, the Consultant will develop expected quantities for each subsequent contract renewal.
- c) The Consultant will provide suggestions for improvements to dredging and dewatering options and coordinate with City and Contractor to implement improvements as agreed upon by City and Contractor.
- d) The Consultant will revise applicable plan sheets as required to reflect the new dredging limits and issue revised sheets as a new Task Order.
- e) The Consultant will track program progress, expenditures and available program funds by compiling Contractor pay requests and sludge removal quantities from contractor daily logs and will provide the data to the City monthly.
- f) The Consultant will provide regular updates to the City on funds allocated and funds remaining.
- g) The Consultant will meet with City staff and Contractor to provide interpretations/clarifications of the plans, specifications and/or contract procedures.
- h) The Consultant will coordinate with City staff on any required changes throughout the duration of the project as directed by the City.
- i) The Invoice Coordination allowance described above is based on seven (7) months of service per calendar year for each contract renewal period and assumes an effort of approximately 19-hrs per month for a maximum of 5 contract renewals (5 years). The seven (7) month time frame is based on a one (1) month plan and contract document revision and re-issue period and six (6) month construction/service period.
- j) For contract renewals executed after the completion of the original contract, site visits will be reduced to once monthly for two (2) hours per visit for six (6) month construction duration for a maximum of five (5) contract renewals for a total of 60 hours over 5 years. An additional 2 hours per year is assumed for final walkthrough and closeout documentation.

SUMMARY OF FEES:

Basic Services Fees	
1 Preliminary Design Phase	\$0
2 Design Phase	\$45,105
3 Bid Phase	\$10,080
4 Construction Phase	\$32,770
Subtotal Basic Services Fees	\$87,955
Additional Services Fees (Allowance)	
1 Permit Preparation	\$1,300
2 ROW Acquisition	\$0
3 Topographic Survey	\$4,092
4 Environmental Issues	\$0
5 Public Involvement	\$0
6 SUE	\$0
7 Construction Observation Services	\$0
8 Warranty Phase	\$2,120
9 Start-Up Services	\$0
10 Contractor & Invoice Coord. for Contract Renewal (TBD)	\$0
Sub-Total Additional Services Fees Authorized	\$7,512
Total Authorized Fee	\$95,467

SCHEDULE:

Date	Activity
TBD	A/E Contract Execution (NTP)
2 Months after NTP	60% Design Submittal
4 Months after NTP	100% Design Submittal
5 Months after NTP	Final Design Submittal
6 Months after NTP	Advertise for Bid
9 Months after NTP	Award Construction/Service Contract
15 Months after NTP	Dredging Operation Completion

EXHIBIT "B"

SAMPLE PAYMENT REQUEST FORM

Sample form for:
Payment Request
Revised 07/27/00

COMPLETE PROJECT NAME
Project No. XXXX
Invoice No. 12345
Invoice Date:

	Contract	Amd No. 1	Amd No. 2	Total Contract	Amount Invoiced	Previous Invoice	Total Invoice	Percent Complete
Basic Services:								
Preliminary Phase	\$1,000	\$0	\$0	\$1,000	\$0	\$1,000	\$1,000	100%
Design Phase	2,000	1,000	0	3,000	1,000	500	1,500	50%
Bid Phase	500	0	250	750	0	0	0	0%
Construction Phase	2,500	0	1,000	3,500	0	0	0	0%
Subtotal Basic Services	\$6,000	\$1,000	\$1,250	\$8,250	\$750	\$1,500	\$2,500	30%
Additional Services:								
Permitting	\$2,000	\$0	\$0	\$2,000	\$500	\$0	\$500	25%
Warranty Phase	0	1,120	0	1,120	0	0	0	0%
Inspection	0	0	1,627	1,627	0	0	0	0%
Platting Survey	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
O & M Manuals	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
SCADA	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
Subtotal Additional Services	\$2,000	\$1,120	\$1,627	\$4,747	\$500	\$0	\$500	11%
Summary of Fees								
Basic Services Fees	\$6,000	\$1,000	\$1,250	\$8,250	\$750	\$1,500	\$2,500	30%
Additional Services Fees	2,000	1,120	1,627	4,747	500	0	500	11%
Total of Fees	\$8,000	\$2,120	\$2,877	\$12,997	\$1,250	\$1,500	\$3,000	23%

EXHIBIT "C"

Insurance Requirements

Pre-Design, Design and General Consulting Contracts

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. **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
PROFESSIONAL LIABILITY (Errors and Omissions)	\$1,000,000 Per Claim (Defense costs shall be outside policy limits) If claims made policy, retro date must be prior to inception of agreement, have extended reporting period provisions and identify any limitations regarding who is insured.

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, 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 shall be 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 Provide thirty (30) calendar days advance written notice directly to City of any suspension, cancellation, non-renewal or material change in 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.



City of
Corpus
Christi

SUPPLIER NUMBER
TO BE ASSIGNED BY CITY
PURCHASING DIVISION

CITY OF CORPUS CHRISTI DISCLOSURE OF INTEREST

City of Corpus Christi Ordinance 17112, as amended, requires all persons or firms seeking to do business with the City to provide the following information. Every question must be answered. If the question is not applicable, answer with "NA". See reverse side for Filing Requirements, Certifications and definitions.

COMPANY NAME: LNV, Inc.

P. O. BOX: _____

STREET ADDRESS: 801 Navigation, Suite 300 CITY: Corpus Christi ZIP: 78408

FIRM IS: 1. Corporation ☒ 2. Partnership ☐ 3. Sole Owner ☐
4. Association ☐ 5. Other ☐

DISCLOSURE QUESTIONS

If additional space is necessary, please use the reverse side of this page or attach separate sheet.

1. State the names of each "employee" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Job Title and City Department (if known)
<u>N/A</u>	_____
_____	_____
_____	_____

2. State the names of each "official" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Title
<u>N/A</u>	_____
_____	_____
_____	_____

3. State the names of each "board member" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Board, Commission or Committee
<u>N/A</u>	_____
_____	_____
_____	_____

4. State the names of each employee or officer of a "consultant" for the City of Corpus Christi who worked on any matter related to the subject of this contract and has an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Consultant
<u>N/A</u>	_____
_____	_____
_____	_____

FILING REQUIREMENTS

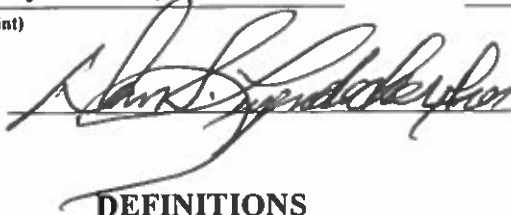
If a person who requests official action on a matter knows that the requested action will confer an economic benefit on any City official or employee that is distinguishable from the effect that the action will have on members of the public in general or a substantial segment thereof, you shall disclose that fact in a signed writing to the City official, employee or body that has been requested to act in the matter, unless the interest of the City official or employee in the matter is apparent. The disclosure shall also be made in a signed writing filed with the City Secretary. [Ethics Ordinance Section 2-349 (d)]

CERTIFICATION

I certify that all information provided is true and correct as of the date of this statement, that I have not knowingly withheld disclosure of any information requested; and that supplemental statements will be promptly submitted to the City of Corpus Christi, Texas as changes occur.

Certifying Person: Dan S. Leyendecker, P.E. Title: President
(Type or Print)

Signature of Certifying
Person:



Date: 4.12.16

DEFINITIONS

- a. "Board member." A member of any board, commission, or committee appointed by the City Council of the City of Corpus Christi, Texas.
- b. "Economic benefit". An action that is likely to affect an economic interest if it is likely to have an effect on that interest that is distinguishable from its effect on members of the public in general or a substantial segment thereof.
- c. "Employee." Any person employed by the City of Corpus Christi, Texas either on a full or part-time basis, but not as an independent contractor.
- d. "Firm." Any entity operated for economic gain, whether professional, industrial or commercial, and whether established to produce or deal with a product or service, including but not limited to, entities operated in the form of sole proprietorship, as self-employed person, partnership, corporation, joint stock company, joint venture, receivership or trust, and entities which for purposes of taxation are treated as non-profit organizations.
- e. "Official." The Mayor, members of the City Council, City Manager, Deputy City Manager, Assistant City Managers, Department and Division Heads, and Municipal Court Judges of the City of Corpus Christi, Texas.
- f. "Ownership Interest." Legal or equitable interest, whether actually or constructively held, in a firm, including when such interest is held through an agent, trust, estate, or holding entity. "Constructively held" refers to holdings or control established through voting trusts, proxies, or special terms of venture or partnership agreements."
- g. "Consultant." Any person or firm, such as engineers and architects, hired by the City of Corpus Christi for the purpose of professional consultation and recommendation.