PUBLIC WORKS COMMITTEE MEETING

City Hall Council Chambers, 298 West Washington Street
Tuesday, March 30, 2021 at 5:30 PM

AGENDA

PUBLIC WORKS COMMITTEE
Alan Nix, Chair; Brandon Huckabee, Mark McClinton, Nick Robinson

1. Call to Order
2. Discuss 536 Well Field Development
3. Adjourn

Note: The Stephenville City Council may convene into Executive Session on any matter related to any of the above agenda items for a purpose, such closed session allowed under Chapter 551, Texas Government Code.

Notice is hereby given that members of the Stephenville City Council may participate in this meeting via teleconference or videoconference as allowed by Governor's Order due to the COVID-19 pandemic. As allowed by this Order, a quorum may not be present in a physical location.

Pursuant to Section 418.108(g) of the Texas Government Code, a Declaration of Local Disaster issued on April 22, 2020, and in the interest of public health, the city has exercised its right to limit ingress and egress in public buildings. As such, the public will be allowed into city facilities to attend the meeting on a limited basis.

Those wishing to address the Stephenville City Council may do so in person. Written correspondence may also be mailed to City Hall or emailed to Staci King, City Secretary, at slking@stephenvilletx.gov. Written correspondence must be received by 3:00 p.m. on March 30, 2021. For alternate arrangements, please contact Ms. King at least 48 hours prior to the meeting.

The meeting is available for viewing via livestream on the City's Facebook Page (City of Stephenville – City Hall).

In accordance with the Americans with Disabilities Act, persons who need accommodation to attend or participate in this meeting should contact City Hall at 254-918-1287 within 48 hours prior to the meeting to request such assistance.

Stephenville TEXAS

536 Well Field – Contract Proposal

PROVENANCE ENGINEERING
Rooted to Be *Uniquely Different*

COLLIER CONSULTING

March 25, 2021

Mr. Nick Williams
City of Stephenville
298 W. Washington St.
Stephenville, TX 76401

Subject: 536 Well Field Development – Contract Proposal

Dear Mr. Williams:

I am pleased to present our proposal for the 536 Well Field Development. I have prepared this proposal for your review and consideration based upon our discussions. Please find the attached items for your review and comment.

- Contract Agreement
- Exhibit A – Engineering Services Scope of Service
- Exhibit B – Fee Summary
- Exhibit C – Project Map
- Exhibit D – Opinion of Probable Construction Cost

I am excited about and honored with the opportunity to continue to work with you and your staff. Should you have questions or concerns regarding the proposal please feel free to contact me at (817) 694-6324.

Sincerely,

Kent Riker, P.E.
President

THIS IS AN AGREEMENT effective as of April 6, 2021 ("Effective Date") between City of Stephenville ("Owner") and Provenance Engineering, LLC. ("Engineer").

Owner's Project, of which Engineer's services under this Agreement are a part, is generally identified as follows: 536 Well Field Development ("Project").

Engineer's services under this Agreement are generally identified as follows: Design, Bid and Construction Phase Services of the development of the 536 Well Field including five water supply wells, pumps, pump controls, new service roads, electrical power and new raw water transmission pipeline. ("Services").

Owner and Engineer further agree as follows:

1.01 *Basic Agreement and Period of Service*

A. Engineer shall provide or furnish the Services set forth in this Agreement. If authorized by Owner, or if required because of changes in the Project, Engineer shall furnish services in addition to those set forth above ("Additional Services").

B. Engineer shall complete its Services within the following specific time period: 30 months including design, bidding, and construction presuming there are no delays between each phase. Design will be completed within 12 months.

C. If, through no fault of Engineer, such periods of time or dates are changed, or the orderly and continuous progress of Engineer's Services is impaired, or Engineer's Services are delayed or suspended, then the time for completion of Engineer's Services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.

2.01 *Payment Procedures*

A. *Invoices:* Engineer shall prepare invoices in accordance with its standard invoicing practices and submit the invoices to Owner on a monthly basis. Invoices are due and payable within 30 days of receipt. If Owner fails to make any payment due Engineer for Services, Additional Services, and expenses within 30 days after receipt of Engineer's invoice, then (1) the amounts due Engineer will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day, and (2) in addition, Engineer may, after giving seven days written notice to Owner, suspend Services under this Agreement until Engineer has been paid in full all amounts due for Services, Additional Services, expenses, and other related charges. Owner waives any and all claims against Engineer for any such suspension.

B. *Payment:* As compensation for Engineer providing or furnishing Services and Additional Services, Owner shall pay Engineer as set forth in Paragraphs 2.01, 2.02 (Services), and 2.03 (Additional Services). If Owner disputes an invoice, either as to amount or entitlement, then Owner shall promptly advise Engineer in writing of the specific basis for doing so, may withhold only that portion so disputed, and agrees to pay the undisputed portion.

2.02 *Basis of Payment—Lump Sum*

A. Owner shall pay Engineer for Services as follows:

1. A Lump Sum amount of $693,000.00 unless prior OWNER approval in writing.
   a. Payments to be made by Owner based on work progression.

2. In addition to the Lump Sum amount, reimbursement for the following expenses: NONE

B. The portion of the compensation amount billed monthly for Engineer's Services will be based upon Engineer's estimate of the percentage of the total Services actually completed during the billing period.

3.01 *Termination*

A. The obligation to continue performance under this Agreement may be terminated:

1. For cause,

   a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the Agreement's terms through no fault of the terminating party. Failure to pay Engineer for its services is a substantial failure to perform and a basis for termination.

   b. By Engineer:

      1) upon seven days written notice if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional; or

      2) upon seven days written notice if the Engineer's Services are delayed for more than 90 days for reasons beyond Engineer's control, or as the result of the presence at the Site of undisclosed Constituents of Concern, as set forth in Paragraph 5.01.I. The Owner anticipates lead-based paint may be present and therefore shall not be consider a Constituent of Concern.

   c. Engineer shall have no liability to Owner on account of a termination for cause by Engineer.

   d. Notwithstanding the foregoing, this Agreement will not terminate as a result of a substantial failure under Paragraph 3.01.A.1.a if the party receiving such notice begins, within seven days of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of notice; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

2. For convenience, by Owner effective upon Engineer's receipt of written notice from Owner.

B. In the event of any termination under Paragraph 3.01, Engineer will be entitled to invoice Owner and to receive full payment for all Services and Additional Services performed or furnished in accordance with this Agreement, plus reimbursement of expenses incurred through the effective date of termination in connection with providing the Services and Additional Services, and Engineer's consultants' charges, if any.

4.01 *Successors, Assigns, and Beneficiaries*

A. Owner and Engineer are hereby bound and the successors, executors, administrators, and legal representatives of Owner and Engineer (and to the extent permitted by Paragraph 4.01.B the assigns of Owner and Engineer) are hereby bound to the other party to this Agreement and to the successors, executors, administrators, and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.

B. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, money that is due or may become due) in this Agreement without the written consent of the other party, except to the extent that any assignment, subletting, or transfer is mandated by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.

C. Unless expressly provided otherwise, nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Constructor, other third-party individual or entity, or to any surety for or employee of any of them. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Owner and Engineer and not for the benefit of any other party.

5.01 *General Considerations*

A. The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with any services performed or furnished by Engineer. Subject to the foregoing standard of care, Engineer and its consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.

B. Engineer shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Project site, nor for any failure of a Constructor to comply with laws and regulations applicable to such Constructor's furnishing and performing of its work. Engineer shall not be responsible for the acts or omissions of any Constructor.

C. Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish and perform its work.

D. Engineer's opinions (if any) of probable construction cost are to be made on the basis of Engineer's experience, qualifications, and general familiarity with the construction industry. However, because Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by Engineer. If Owner requires greater assurance as to probable construction cost, then Owner agrees to obtain an independent cost estimate.

E. Engineer shall not be responsible for any decision made regarding the construction contract requirements, or any application, interpretation, clarification, or modification of the construction contract documents other than those made by Engineer or its consultants.

F. All documents prepared or furnished by Engineer are instruments of service, and Engineer retains an ownership and property interest (including the copyright and the right of reuse) in such documents, whether or not the Project is completed. Owner shall have a limited license to use the documents on the Project, extensions of the Project, and for related uses of the Owner, subject to receipt by Engineer of full payment due and owing for all Services and Additional Services relating to preparation of the documents and subject to the following limitations:

1. Owner acknowledges that such documents are not intended or represented to be suitable for use on the Project unless completed by Engineer, or for use or reuse by Owner or others on extensions of the Project, on any other project, or for any other use or purpose, without written verification or adaptation by Engineer;

2. any such use or reuse, or any modification of the documents, without written verification, completion, or adaptation by Engineer, as appropriate for the specific purpose intended, will be at Owner's sole risk and without liability or legal exposure to Engineer or to its officers, directors, members, partners, agents, employees, and consultants;

3. Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and consultants from all claims, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from any use, reuse, or modification of the documents without written verification, completion, or adaptation by Engineer; and

4. such limited license to Owner shall not create any rights in third parties.

G. Owner and Engineer may transmit, and shall accept, Project-related correspondence, documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website, in accordance with a mutually agreeable protocol.

H. To the fullest extent permitted by law, Owner and Engineer (1) waive against each other, and the other's employees, officers, directors, members, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to this Agreement or the Project, and (2) agree that Engineer's total liability to Owner under this Agreement shall be limited to $40,000 or the total amount of compensation received by Engineer, whichever is greater.

I. The parties acknowledge that Engineer's Services do not include any services related to unknown or undisclosed Constituents of Concern. If Engineer or any other party encounters, uncovers, or reveals an unknown or undisclosed Constituent of Concern, then Engineer may, at its option and without liability for consequential or any other damages, suspend performance of Services on the portion of the Project affected thereby until such portion of the Project is no longer affected, or terminate this Agreement for cause if it is not practical to continue providing Services.

J. Owner and Engineer agree to negotiate each dispute between them in good faith during the 30 days after notice of dispute. If negotiations are unsuccessful in resolving the dispute, then the dispute shall be mediated. If mediation is unsuccessful, then the parties may exercise their rights at law.

K. This Agreement is to be governed by the law of the state in which the Project is located.

L. Engineer's Services and Additional Services do not include: (1) serving as a "municipal advisor" for purposes of the registration requirements of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) or the municipal advisor registration rules issued by the Securities and Exchange Commission; (2) advising Owner, or any municipal entity or other person or entity, regarding municipal financial products or the issuance of municipal securities, including advice with respect to the structure, timing, terms, or other similar matters concerning such products or issuances; (3) providing surety bonding or insurance-related advice, recommendations, counseling, or research, or enforcement of construction insurance or surety bonding requirements; or (4) providing legal advice or representation.

M. Liquidated Damages - Failure to meet the time lines for completion of work identified in (the project schedule – or other appropriate language) will result in liquidated damages of $50.00 per consecutive calendar day until the work identified in "Exhibit A" – Scope of Services is submitted. Liquidated damages are only applicable to items under the control of ENGINEER and will not be enforced due to circumstances out of the control of ENGINEER.

6.01 *Total Agreement*

A. This Agreement (including any expressly incorporated attachments), constitutes the entire agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

Definitions

B. *Constructor*—Any person or entity (not including the Engineer, its employees, agents, representatives, and consultants), performing or supporting construction activities relating to the Project, including but not limited to contractors, subcontractors, suppliers, Owner's work forces, utility companies, construction managers, testing firms, shippers, and truckers, and the employees, agents, and representatives of any or all of them.

C. *Constituent of Concern*—Asbestos, petroleum, radioactive material, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes 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 federal, State, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

Attachments: "Exhibit A", Engineer's Scope of Services

"Exhibit B", Fee Summary

"Exhibit C", Project Map

"Exhibit D", Opinion of Probable Construction Cost

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

Owner: City of Stephenville	Engineer Provenance Engineering, LLC.
By: _____	By: _____
Print name: Doug Svien	Print name: Kent W. Riker, P.E.
Title: Honorable Mayor	Title: President
Date Signed: _____	Date Signed: _____
	Engineer License or Firm's Certificate No.: 20783
	State of: Texas
Address for Owner's receipt of notices:	Address for Engineer's receipt of notices:
City of Stephenville	Provenance Engineering, LLC.
298 W Washington Street	401 Russell Lane
Stephenville, Texas 76401	Weatherford, Texas 76087
254.918.1223	817.775.7172

IN DUPLICATE

EXHIBIT - A

Project Description

The following scope of SERVICES clarifies and describes the SERVICES and associated project tasks to be performed and completed by the ENGINEER. SERVICES under this "EXHIBIT A" includes engineering services associated with the 536 Well Field Development Project. The OWNER desires the development of the 536 Property site as a new water supply to maximize the amount of water the City of Stephenville can receive from the 536 Well Field Development to supplement the water demand for the current population as well as for the projected growth. The OWNER has previously completed a feasibility study that recommended developing five new production wells into the Trinity Aquifer on the 536 Property. The proposed new wells will be collected via a proposed new raw water collection system that will connect at the point along Highway 67 as shown in "EXHIBIT C". The OWNER also desires the ENGINEER perform a Desktop Feasibility Concept Study to provide an initial determination if the water management strategy of Aquifer Storage and Recovery warrants further study by the OWNER at the 536 Property. Aquifer Storage and Recovery (ASR) is the intentional recharge of water to aquifers for subsequent recovery or environmental benefit. The proposed five new wells will require new power supply, service roads, and well fencing. The project will include:

Basic Services – Preliminary Design, Detail Design, Final Design, Bidding Services, and Construction Services for the following:

- Five (5) new water supply wells
  - Hydrogeology – well drilling, casing, gravel pack
  - Mechanical – pump design, well head, isolation valves and flow meter
  - Civil – well pad, fencing
  - Electrical – well pump motor and wiring, site lighting
  - Instrumentation & Control – pump, flow meter and valve control instruments, SCADA communication system
- Site Improvements
  - Civil – well collection system, roadway, drainage, gate entry
  - Electrical – power supply
  - Instrumentation & Control – basic site security measures including SCADA communication system
- New raw water transmission pipeline
  - Civil – 10-inch raw water transmission pipeline

Supplemental Services – Additional services at the OWNERs request include the following:

- ASR Desktop Feasibility Concept
  - Source water options evaluation
  - Siting options evaluation
- Funding Support Services
  - Assist the OWNER by providing exhibits, figures, and OPCC
- Resident Project Representative Services
  - Onsite representation during construction

Basic Services

Upon receipt of notice to proceed, the ENGINEER will begin Basic Services as outlined herein. The scope of SERVICES includes the development of a detailed drawings set, front-end documents, and technical specifications for the OWNER to bid the designed improvements.

The Basic Scope of SERVICES is separated into the following phases:

- **Phase 1 Design Services**
- **Phase 2 Bidding Services**
- **Phase 3 Construction Services**

Listed below is a specific description to be performed as part of the project.

Phase 1 Design Services $385,000.00

As part of the Design Services Phase, the ENGINEER will design the infrastructure required for the 536 Well Field Development. Key aspects of Phase 1 are listed below.

- Deliverables: Kick-off meeting agenda and minutes
  Monthly project status reports
  Detail Design Submittal
  Final Design Submittal
- Meetings: Kick-off meeting and site tour of existing facilities
  Monthly Conference Calls
  Detail Design Submittal Review
  Final Design Submittal Review

Design services will generally include the followings tasks and sub-tasks:

Task 1.100 – Project Management

The ENGINEER will manage the day-to-day progress of the project.

101. Project Setup –The ENGINEER will follow quality procedures to setup the project reporting and control structure internally.

1.110. Communication with OWNER – The ENGINEER will maintain consistent communication with the OWNER through the established protocol agreed upon by OWNER.

111. Standing Conference Call –The ENGINEER will have a standing monthly call with the OWNER's Project Manager to discuss the current project status report.

112. Invoice Management – The ENGINEER will submit a monthly invoice to the OWNER with the current project status report to the OWNER.

1.120. Progress Management – During the course of the project, ENGINEER will manage the day-to-day progress of the project. The ENGINEER will track the scope, schedule, and budget regularly. The ENGINEER will perform the following sub-tasks.

121. Documentation – Develop document management protocols for processing and documenting design drawings, calculations, OWNER decisions, and communication.

122. Project Status Report – Develop a project status report highlighting current scope and schedule progress; identifying potential changes to the scope of services; invoice status; on-going list of outstanding issues; decision log; and action item log.

1.130. Kick-off Meeting – Conduct a project kick-off meeting with OWNER to review the project scope of services and schedule, define lines of communication and protocols, review deliverables, and develop success factors for completing the project. The ENGINEER will conduct site investigation tour of the OWNER's facilities with the OWNER's staff.

1.140. Quality Assurance / Quality Control (QA/QC) – – The Engineer will follow internal QA/QC processes throughout the project. These processes include internal checking of calculations, review of documents, and checking of submittals. Deliverables will be submitted internally for Engineer's QA/QC Review by a senior level Engineer(s) and construction specialist(s) who is not directly involved with the design of the project.

Task 1.200 – Preliminary Design

1.210. Data Gathering – The ENGINEER will collect, and review data required for the analysis from the OWNER and other agencies. The data gathering will include, at a minimum, the following:

- All previous studies pertaining to the project site or impacting the site in any way.
- All facility record drawings related to infrastructure improvements within the project area for completed improvement projects, as well as any roadway, water, sanitary, sewer or storm water improvements pertinent to the project.
- OWNER's existing GIS data including: plats, tract maps, or right-of-way maps and easements; utility maps (water, sanitary sewer, storm sewer); contour maps (if required, ENGINEER will augment OWNER contour data with 1-ft. LIDAR contour data from TNRIS); and high-resolution aerial photography.
- Projects in progress – OWNER will help identify and assist ENGINEER to coordinate with other proposed projects within project area currently under design or construction.

1.220. Geotechnical Analysis - The ENGINEER will perform a geotechnical analysis of the proposed new service roads. The geotechnical analysis will include the following:

- Subsurface exploration including up to ten (10) sample bores to a depth of 15-ft.
- Laboratory tests for classification purposes and strength characteristics.
- Engineering services that address soil conditions for proposed service roads and pads.
- Prepare a geotechnical report that presents the results of the field and laboratory data as well as analysis and recommendations. The data contained in the geotechnical report will be made available to contractors during the bidding process for information purposes.

1.230. Survey – The ENGINEER will perform a design level survey. The survey will include the following:

- 100-foot wide along the proposed pipeline and service road route at the locations specified on "Exhibit C".
- Locate visible topographic features such as marked and existing utilities and their appurtenances, iron pins (if found), edge of pavement, structures, and fences.
- Establish control points along the route including up to four (4) permanent control points.

1.240. Conceptual Design – The ENGINEER will perform a conceptual design up to a 30% level of detail. The design will incorporate the following disciplines: hydrogeology, mechanical, civil. The detailed design process will be conducted in the following tasks.:

241. Conceptual Drawings – Develop a conceptual plan for well field and well site to be reviewed and confirmed with the OWNER.

242. Technical Memorandum – Develop will develop a concise basis of design memorandum to confirm the key design parameters needed for detailed design.

243. Submittal – The ENGINEER will deliver one (1) electronic set to the OWNER for review and comment.

244. Submittal Review Workshop – The ENGINEER will conduct a review meeting with the OWNER approximately two (2) weeks after the submission of the Conceptual Design Submittal, an approximate 30-percent level of design.

Task 1.300 – Detailed Design

The detailed design includes tasks necessary to design the modifications and improvements as outlined in the preliminary design to the 60% level of detail. The design will incorporate the following disciplines: hydrogeology, mechanical, civil, geotechnical, electrical, instrumentation, and control. The detailed design process will be conducted in the following tasks.

1.310. Drawings – The ENGINEER will develop design and details drawings to the 60% level of detail. The ENGINEER will perform the following sub-tasks.

311. Well – Develop plan, section, and detail drawings for each well. Design well pump to hydraulically perform under various operational conditions.

312. Well Site – Develop plans and details including site grading, well site gate, and well site fence for each of the five proposed wells.

313. 536 Property Improvements – Develop plans and detail drawings for the service roads to well sites, property entry gate, and any required security measures.

314. Well Collection System – Develop plan, profile, and detail drawings for the new well collection system. Include hydraulic models as required to develop hydraulic losses.

315. Raw Water Transmission Pipeline – Develop plan, profile, and details drawings for the new raw water transmission pipeline to TH #1.

316. Submittal – The ENGINEER will deliver one (1) electronic set to the OWNER for review and comment.

1.320. Specifications – The ENGINEER will prepare detail specifications for use in bidding and constructing the project. The ENGINEER will do the following sub-tasks.

321. Technical Specifications – Develop detailed equipment, materials and all other specification sections generally considered to be necessary for detailing the construction of the project.

322. Submittal – The ENGINEER will submit the Specifications in one (1) electronic set to the OWNER for review and comment.

1.330. Opinion of Probable Cost –The ENGINEER will prepare an opinion of probable cost for the project based upon the complete detail design documents.

1.340. Detail Design Submittal Review Meeting – The ENGINEER will conduct a review meeting with the OWNER approximately two (2) weeks after the submission of the Detail Design Submittal, an approximate 60-percent level of design.

Task 1.400 – Final Design

The final design includes those tasks necessary to finalize the design outlined in the Detailed Design Submittal. The final design will incorporate the following disciplines: hydrogeology, civil, mechanical, electrical, instrumentation and control. The final design process will be conducted in the following tasks.

1.410. Drawings – The ENGINEER will revise design and detail drawings based on comments from the Review Meeting. The ENGINEER will perform the following sub-tasks.

411. Revise Drawings – Revise drawings based on the comments from the OWNER.

412. Details – Develop project details to include in drawing set.

413. Submittal – Submit the Final Design Drawings in one (1) electronic set to the OWNER for review and comment.

1.420. Specifications – The ENGINEER will revise and prepare specifications for use in bidding and constructing the project. The ENGINEER will perform the following sub-tasks.

421. Front End Documents – Include the Engineer's Standard General Conditions section of specifications and modify as necessary in Supplementary Conditions for the project. Documents shall include General and Special Conditions, Bid Proposal Forms, Instructions to Bidders, and all other sections generally considered to be necessary for solicitation of bids.

422. Technical Specifications – Revise equipment, materials, and other specifications.

423. Bid Tab – Include equipment and material quantities in bid tab.

424. Submittal – Submit the Final Design Drawings in one (1) electronic set to the OWNER for review and comment.

1.430. Opinion of Probable Cost –The ENGINEER will prepare an opinion of probable cost for the project based upon the complete final design documents.

1.440. Final Design Submittal Review Meeting – The ENGINEER will conduct a review meeting with the OWNER approximately two (2) weeks after the submission of the Final Design Submittal, an approximate 100-percent level of design.

Task 1.500 – Permitting

1.510. TCEQ Regulatory Compliance – The ENGINEER will coordinate with the TCEQ for required regulatory compliance.

511. Submit Detailed Design – Submit letter and 60% drawings to the TCEQ at the detailed design phase on behalf of the OWNER.

512. Submit Drawings and Specifications – Submit final design drawings and technical specifications to the TCEQ on behalf of the OWNER. Respond to requests for additional information from TCEQ.

513. Modifications to Design – If required, update plans and specifications with any modifications requested by TCEQ prior to bidding.

1.520. Middle Trinity Groundwater Conservation District (MTGCD) – The ENGINEER will coordinate with the MTGCD for all required regulatory permits and compliance needs.

521. Submit Well Registration and Production Permitting – Submit application and supporting documentation needed by MTGCD to evaluate the application on behalf of the OWNER.

522. Respond to MTGCD Requests – Respond to requests for additional information from MTGCD on behalf of the OWNER.

523. Modifications to Design – If required, update plans and specifications with any modifications requested by MTGCD prior to bidding.

Phase 1 Supplemental Services $43,000.00

*Supplemental Services are not part of the Basic Services. Supplemental Services may be enacted upon request of OWNER. The ENGINEER shall provide a fee proposal upon request of OWNER for all Supplemental Services. The ENGINEER shall not begin working without written approval from the OWNER.

SS Task 1.100 – ASR Desktop Feasibility Study

The ENGINEER will perform an initial determination if the water management strategy of Aquifer Storage and Recovery warrants further study by the OWNER. This conceptual study will evaluate the 536 Property as a potential site. The findings will be delivered in a concise technical memorandum to the OWNER. The ENGINEER will do the following sub-tasks.

1.110 Water Supply Options – Identify the availability of source water(s) for injection (recharge) and the volume of water for recharge. This will include a historic search into the

surface water availability over the last 10-20 years. Estimate OWNER population growth and future water demands. Our Team will prepare various hypothetical thresholds based on flow and/or water stages to determine if and for what duration the OWNER would not be able to utilize an ASR system for storage.

1.120. Alternative Supply – Assess the opportunities to utilize water reuse for ASR.

1.130. Planning Analysis – Assist in determining the compatibility of recharge water with surface water management plans and permit conditions. Our Team will work with the OWNER to review their current contract with the Upper Leon River Municipal Water District (ULRMWD) and determine what, if any, environmental thresholds might determine the time periods and volumes the OWNER can inject into an ASR system.

1.140. Subsurface Assessment – The availability of potentially suitable sand units in the Trinity Aquifer to serve as viable ASR horizon(s) for the anticipated volume of water to be injected. The suitability of sand units will be based on geologic structure, stratigraphy, and mineralogy.

1.150. Siting Options – Assess if the OWNER has adequate land holdings for a potential ASR well field(s).

1.160. Ordinance Options – Evaluate OWNER ordinance options that would allow the OWNER to utilize the area inside the OWNER's City limits for a potential ASR well field.

1.170. Opinion of Cost – Provide a planning level opinion of probable cost for up to three options available to the OWNER.

SS Task 1.200 – Funding Support Services

The ENGINEER will aid the OWNER in preparing documents to request funding from a government or private funding agency at the OWNERs request. The OWNER will complete all paperwork necessary for the funding request. The ENGINEER will provide support to the OWNER in the development of exhibits, figures, and OPCC to accompany the paperwork. It is assumed the ENGINEER will not attend meeting(s) with funding agency.

Phase 2 Bidding Services — Estimated $22,000.00

Phase 2 will commence only upon written authorization from the Owner. Phase 2 services are estimated at $22,000.00 in 2021 dollars and are acceptable at least until May of 2022. The final amount will be finalized and agreed upon with written authorization to proceed.

The Bidding Phase services will include those tasks necessary to advertise, bid, and provide a recommendation of award of Construction Contract. Key aspects of Phase 2 are listed below.

- Deliverables: Project Advertisement
  Bid Documents
  Answer Bidder Questions

Addenda (if necessary)
Contractor Award Recommendation Letter
Conform to Bid Documents

- Meetings: Pre-Bid meeting
  Bid Opening

Specific tasks to be performed for the Bidding Phase are listed below.

Task 2.100 – Project Management

2.110. Communication with OWNER – The ENGINEER will maintain consistent communication with the OWNER through the established protocol agreed upon.

111. Standing Conference Call –The ENGINEER will have a standing monthly call with the OWNER's Project Manager to discuss the current project status report.

112. Invoice Management – The ENGINEER will submit a monthly invoice to the OWNER with the current project status report to the OWNER.

2.120. Progress Management – The ENGINEER will monitor the overall progress of Phase 2 services. The ENGINEER will do the following sub-tasks.

121. Documentation – Route Contracts for Execution and insertion into Conformed to Bid Documents. Document bid documents and communication.

122. Project Status Report – Develop a project status report highlighting current progress; distribution log; list of outstanding issues; and action item log.

Task 2.200 – Contract Documents Bid Set

2.210. Seal and Sign – The ENGINEER will incorporate the comments for the 100-percent review meeting. The ENGINEER will seal and sign the completed set of documents.

2.220. Project Advertisement – The ENGINEER will coordinate with city staff, create, and send bid advertisement to OWNER's Purchasing Department. The ENGINEER will contact Contractors to help advertise the project.

2.230. Contract Documents Distribution – The ENGINEER will publish on CivCast (or similar platform) the contract bid documents to prospective bidders and vendors and maintain a log of distribution. The ENGINEER will charge bidders and vendors a fee for Contract Documents. The ENGINEER will provide two (2) sets of half-size drawings and specifications for the OWNER.

2.240. Clarifications to Prospective Bidders – The ENGINEER will provide clarifications and answer questions from prospective bidders made during the bidding phase. Two (2) rounds of written clarifications and responses to questions will be distributed to perspective bidders.

2.250. Addenda – Modification(s), if necessary, to the Contract Bid Documents will be distributed to perspective bidders via addenda.

2.260. Conform to Bid Documents – Once the OWNER has accepted a bid, the ENGINEER will conform the Bid Documents to include all addenda issued to form the Conform to Bid set of Contract Documents. The ENGINEER will provide up to six (6) sets of half-size drawings and specifications, as well as an electronic set, for OWNER's use.

Task 2.300 – Meeting

2.310. Pre-Bid Meeting – The ENGINEER will conduct one (1) pre-bid meeting. The pre-bid meeting will include a project overview presentation at a location designated by the OWNER and project site visit led by the ENGINEER with prospective bidders.

2.320. Bid Opening Meeting – The ENGINEER will attend the bid opening announcement led by the OWNER followed by a meeting to discuss the results.

Task 2.400 – Evaluation of Bid Packets

2.410. Bidding Log – The ENGINEER will review all submitted bids for compliance with Contract Documents and provide OWNER a log of all valid bidders.

2.420. Review Bids – The ENGINEER will review valid submitted bids and verify apparent low bidder's references. The ENGINEER will make recommendations for contract award based upon 'best value' for the OWNER.

Phase 3 Construction Services Estimated $88,000.00

Phase 3 will commence only upon written authorization from the Owner. Phase 3 services are estimated at $88,000.00 in 2021 dollars and are acceptable at least until May of 2022. The final amount will be finalized and agreed upon with written authorization to proceed.

The Construction services will include those tasks necessary to represent the OWNER during the project construction. Key aspects of Phase 3 are listed below.

- Deliverables:
  - Construction meeting minutes
  - Contractor Payment Application recommendations
  - Shop Drawing responses
  - Request for Information responses
  - Change Order recommendations, if required
  - Field Order(s), if required
  - Record Drawings
- Meetings:
  - Construction Kickoff Meeting
  - Construction progress meetings
  - Equipment start-up and training
  - Substantial completion inspection
  - Final completion inspection

During the Construction Phase, the following tasks will be provided.

Task 3.100 – Project Management

3.110. Communication with OWNER – The ENGINEER will maintain consistent communication with the OWNER through the established protocol agreed upon.

111. Standing Conference Call –The ENGINEER will have a standing monthly call with the OWNER's Project Manager to discuss the current project status report.

112. Invoice Management – The ENGINEER will submit a monthly invoice to the OWNER with the current project status report to the OWNER.

3.120. Progress Management – The ENGINEER will monitor the overall progress of Phase 3 services including tracking the scope, schedule, and budget regularly. The ENGINEER will perform the following sub-tasks.

121. Documentation – Develop document management protocols for processing and documenting submittals, shop drawings, requests for information, operation and maintenance manuals, pay applications, field orders, change orders and as-built drawings.

122. Project Status Report – Develop a project status report highlighting key issues; identifying potential changes to the scope of SERVICES; invoice status; active submittal(s) and log; active RFI(s) status and log; CMR status and log; list of outstanding issues; decision log; and action item log.

Task 3.200 – Submittals

3.210. Submittal Management –The ENGINEER will use Project Mates platform to log-in, track, and distribute submittals internally and provide review comments to Contractor and OWNER. It is assumed an average of no more than two (2) resubmittals will be required.

3.220. Construction Execution Plan – The ENGINEER will review the Contractor's execution plan and provide comments. The plan will be measured against the Contractors actual progress results.

3.230. Shop Drawing – The ENGINEER will perform technical and functional review of all shop drawings and other submittals and provide responses.

3.240. Field Testing Reports – The ENGINEER will review Field Test reports and flag any potential tests that do not conform to the Contract Document requirements.

3.250. Contractor Payment Requests – The ENGINEER will review all Contractor Payment Requests for accuracy and provide recommendations.

3.260. Operation and Maintenance (O&M) Manuals – The ENGINEER will review the O&M manuals for compliance with Contract Documents and provide comments.

Task 3.300 – Request for Information (RFI)

The ENGINEER will review and respond to all RFIs, as necessary, submitted by the Contractor. The ENGINEER will coordinate with the OWNER on RFIs that require information from the OWNER. Draft responses will be submitted to the OWNER for review and comment prior to submitting to the Contractor.

Task 3.400 – Contract Modifications Requests

3.410. Field Order (FO) Management – The ENGINEER will provide direction to the Contractor, as necessary, for modifications to the Bid Documents through FO to complete the Scope of SERVICES identified herein. FO are used to address unforeseen issues. FO will be submitted to the OWNER for review and comment before submitting to the Contractor.

3.420. Change Order (CO) Management – The ENGINEER will review and provide recommendation to the OWNER on all Change Order requests received by the Contractor. The ENGINEER will work with the OWNER to properly facilitate CO requests when appropriate.

Task 3.500 – Construction Meetings

3.510. Construction Kick-off Meeting – Conduct a construction kick-off meeting with the Contractor and OWNER to review the key construction processes outlined in Contract Documents, establish lines of communication and protocols, identify critical path of schedule, provide four (4) Conform to Bid Documents to Contractor, and issuing Notice to Proceed with executed Contracts to Contractor.

3.520. Construction Meetings – The ENGINEER will attend monthly construction progress meetings with OWNER and Contractor. An estimate of twelve (12) construction meetings are included, with one or two persons from the ENGINEER's project team attending.

3.530. Site Visits – The ENGINEER will make periodic visits, estimate of twelve (12), to the project site to observe the progress and quality of the various aspects of the Contractor's work.

3.540. Substantial Completion Inspection – The ENGINEER will participate in a substantial completion inspection and provide a list of noted items not in compliance with Construction Documents.

3.550. Final Completion Inspection – The ENGINEER will participate in a final completion inspection and provide a list of noted items not in compliance with Construction Documents.

3.560. Equipment Start-up – The ENGINEER will be on-site during equipment Start-up and witness field acceptance testing. Up to two (2) site visits are included.

Task 3.700 – Record Drawings

ENGINEER will develop As-Built drawings from the construction notes provided by the Contractor and OWNER. The Contractor and OWNER will provide ENGINEER with all field changes and notes to be incorporated into the As-Built documents. The ENGINEER will provide six (6) sets of half-size drawings and specifications and one (1) electronic copy for OWNER's use.

Phase 3 Supplemental Services $155,000.00

*Supplemental Services are not part of the Basic Services. Supplemental Services may be enacted upon request of OWNER. The ENGINEER shall provide a fee proposal upon request of OWNER for all

Supplemental Services. The ENGINEER shall not begin working without written approval from the OWNER.

SS Task 3.100 – Resident Project Representative

The Resident Project Representative will provide experienced construction inspection and oversight services. The inspector will observe and document that the work is being performed in accordance with the project plans and specifications. Monitor contractor QA/QC plans, perform photographic documentation of construction activities and progress, observe all major materials deliveries, oversee startup and commissioning plans and activities, oversee Maintenance of Plant Operations (MOPO) plans and activities, monitor SWPPP activities, monitor contractor safety plans and practices, provide any special inspections, prepare OWNER'S punch lists and approve completed punch list items, and review redline as-built drawings. Key aspects of Task SS3.100 are listed below.

- Deliverables: Daily Field Reports
  Photo Documentation
  QA/QC compliance reports

- Meetings: Construction Progress Meetings
  Startup & Commissioning Meetings
  Contractor Safety Meetings

3.110. Construction Safety – Note if the CONTRACTOR'S construction safety program is not being followed. The Contractor shall be responsible for construction safety and not the RPR.

3.120. On-Site Inspection and Oversight – Be onsite when the rig spuds and daily during drilling. When on location, CCINC will monitor the drilling, measure drilling fluid properties, monitor sample collection, and describe the drill cuttings. Analyze the Borehole Geophysical Logs and Integrate Them with the Cuttings to Assist the ENGINEER and Contractor in Determining Screen Placement. Assist the Contractor in selecting the correct filter pack and screen based on sieve analyses of the appropriate samples. CCINC will monitor construction during pressure cementing of the casing and installation of the screen and filter pack.

3.130. Construction QA/QC Management – Provide ongoing Quality management and administration. Monitor well development and analyze a video survey of the well screens.

3.140. Photographic Documentation – Photograph, record and deliver photographs of construction activities, quality non-conformance issues, special photographs, and videos for the project record.

3.150. Material and Equipment Certification – Observe and record all major material and equipment deliveries for damage and conformance to project specifications and submittals.

3.160. Startup and Commissioning – Review startup and commissioning plans, participate in startup and commissioning planning meetings, oversee startup and commissioning activities, coordinate plant shutdowns and/or operational requirements with OWNER and CONTRACTOR, certify started and commissioned equipment and processes.

3.170. Punch List – Prepare the OWNER'S punch list and administer and certify completion of punch list items.

3.180. Redline "As-Built" Drawings – Review and approve a complete set of redline "As-Built" drawings for incorporation into the final project record. Analyze and Archive the Final Video Survey as a Final Inspection and Permanent Record.

Time Period for Performance

Time periods for performance of the ENGINEER's services.

Phase 1 Design	**12 months**
Phase 2 Bidding	**3 months**
Phase 3 Construction	**15 months**

Method of Payment

The OWNER shall compensate ENGINEER on a lump sum basis in accordance with "EXHIBIT B" Fee Summary for the provided Basic Services described herein and the approved Supplemental Services described herein. Invoices shall be submitted monthly by the ENGINEER, in a format acceptable to the OWNER, based upon the percentage of SERVICES completed to date. The ENGINEER shall not exceed the stated fee amount without written approval from the OWNER. The ENGINEER shall seek written approval for any SERVICES outside of the stated scope before performing said SERVICES.

*Phase 2 and Phase 3 will commence only upon written authorization from the Owner. Phase 2 services are estimated at $22,000.00 and Phase 3 services are estimated at $88,000.00 in 2021 dollars and are acceptable at least until May of 2022. The final amount will be finalized and agreed upon with written authorization to proceed.

Assumptions

This Scope of SERVICES assumes the following:

- A two-week review period by OWNER for each submittal. All OWNER comments should be provided within the two-week review period. Any delays caused by the OWNER'S review shall be cause for an equitable extension of the design submittal timeline.

Services Not Included

Any other services, including but not limited to the following, are not included in this Scope of SERVICES:

- Additional Construction Phase Services – The ENGINEER will perform the following Additional Construction Phase Services as requested in writing by the OWNER. A detailed scope, schedule and fee will be created upon request by the OWNER as these services are NOT included in this Scope of SERVICES or Fee.
    - SCADA wiring, termination, programming, integration
    - Geotechnical Construction Testing

- Services related to acquiring real property including but not limited to easements, right-of-way, and/or temporary right-of-entries.
- Preparation of Title Policies during property acquisition.
- Meetings beyond those identified in the scope.
- Preparation of platting documents and/or real property survey for site acquisition.
- Additional sets of bidding documents.
- Professional services associated with re-bidding the project.
- Construction Staking.
- Attendance at and/or preparation for more than one (1) Public Meetings.
- Making significant modifications to the plans and specifications after the preliminary submittals have been approved by OWNER.
- Any additional changes to the Contract Documents necessary to break the project into phases.
- Establish new survey monuments for any of the proposed sites.
- Sampling, testing, or analysis beyond that specifically included in the Scope of Services referenced herein above.
- Providing professional services associated with the discovery of any hazardous waste or materials in the project route.
- Assisting OWNER or Contractor in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this Agreement. Such services, if any, will be furnished by Engineer on a fee basis negotiated by the respective parties outside of and in addition to this Agreement.
- Preparing applications for government grants, loans, or planning advances, and providing data for detailed applications.
- Franchise Utility Design.
- Appearing before regulatory agencies or courts as an expert witness in any litigation with third parties or condemnation proceedings arising from the development or construction of the Project, including the preparation of engineering data and reports for assistance to OWNER.
- Performance of miscellaneous and supplemental services related to the project as requested by OWNER, other than those described in Supplemental Services section.
- "Value engineering'" after bidding
- Any other services not listed in the Scope of Services.

EXHIBIT - B

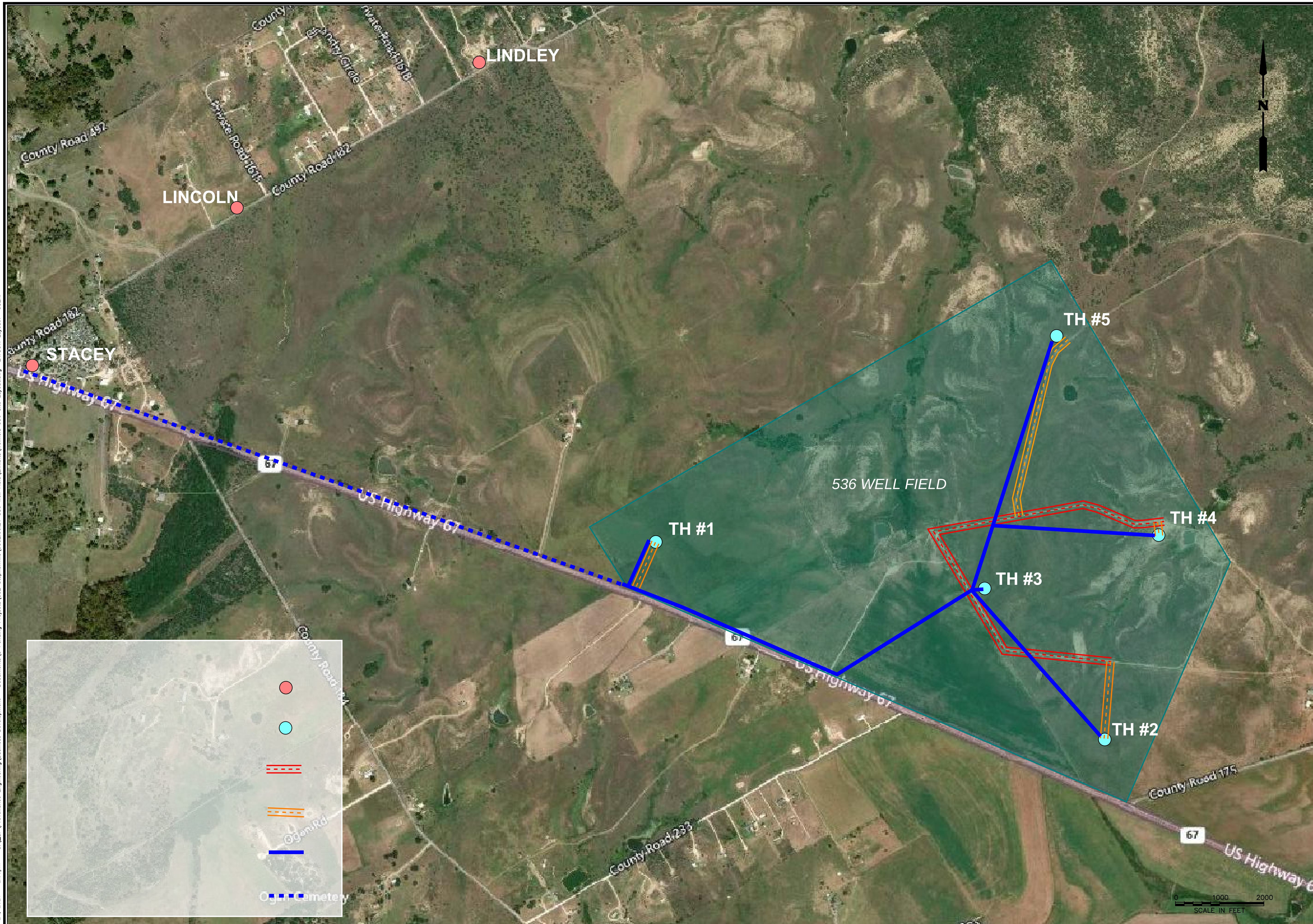
Stephenville TEXAS

CITY OF STEPHENVILLE
536 WELL FIELD DEVELOPMENT
PROFESSIONAL SERVICE FEE SUMARY

PROVENANCE ENGINEERING

Phase 1 Services	**Phase 1 - Design Phase Services**		
	Task 1.100 - Project Management	$	38,500
	Task 1.200 - Preliminary Design	$	77,000
	Task 1.300 - Detailed Design	$	154,000
	Task 1.400 - Permitting	$	28,875
	Task 1.500 - Final Design	$	86,625
	Sub-Total	$	385,000
	Supplemental Services		
	Water Development Board Funding Supporting Services	$	15,000
	ASR Desktop Feasibilty Concept	$	28,000
	Sub-Total	$	43,000
	Total fee for Design Phase Services	**$**	**428,000**
Phase 2 and Phase 3 Services	**Phase 2 Bid Phase Services**	$	22,000
	Subtotal	**$**	**22,000**
	Phase 3 Construction Services		
	Engineering Construction Administration Serices	$	88,000
	Subtotal	**$**	**88,000**
	Supplemental Services		
	Resident Project Repersenative - Estimated Services	$	155,000
	Subtotal	**$**	**155,000**
	Base Services for 536 Well Field Fee	$	495,000
	Supplemental Services	$	198,000
	Total Fee Proposal	**$**	**693,000**
	Opinion of Probable Construction Cost 536 Well Field	**$**	**5,429,000**

EXHIBIT - C



PROVENANCE ENGINEERING
Rooted to Be Uniquely Different
Provenance Engineering Firm #20783
5049 Edwards Ranch Rd., Ste. 400, Fort Worth, TX 76109
817-785-7171 • www.provenanceengineering.com

Stephenville TEXAS
City of Stephenville
298 W Washington St., Stephenville, TX 76401
254-918-1220 • www.stephenvilletx.gov

Signature Date

NO.	REVISION	DATE

IF BAR DOES NOT MEASURE 1", ADJUST SCALE ACCORDINGLY

SHEET TITLE: 536 WELL FIELD SITE LAYOUT

PROJECT TITLE: CITY OF STEPHENVILLE, TEXAS 536 WELL FIELD DEVELOPMENT

DATE:	MAR. 2021
CHECKED BY:	KWR
DESIGNED BY:	TAM
DRAWN BY:	TAM
PROJECT I.D.	002.21.##
CONTRACT NO.	####-#####

DRAWING NO:

EXHIBIT 23 or 24

REFERENCES: ProvEng-Titleblock_recover.dwg _Std ENG SEALS
Mar 24, 2021 - 2:30pm C:_SP\Provenance Engineering\Business Development - Documents\3 Pending Projects\002 Stephenville\9002.06.21 536 Well Field\Exhibits\Wellfield 536 Site Layout.dwg LAYOUT: Layout1 USER:

EXHIBIT - D

Stephenville TEXAS

City of Stephenville
536 WELL FIELD
Opinion Of Probable Construction Cost
March 25, 2021

PROVENANCE ENGINEERING

MATERIAL DESCRIPTION	UNIT	UNIT COST	QUANTITY	ITEM COST
General Conditions				
Mobilization/Demobilization (Not to Exceed 5% of CC)	LS	$211,000	1	$240,000
SWPPP, TPDES Best management Practices	LS	$10,000	1	$10,000
Well Construction (5 Total Wells)				
Well Development with Casing, Screen, Gravel Pack	EA	$140,000	5	$700,000
Furnish, Set & Pull Test Pump	EA	$26,500	5	$132,500
Pump Test	EA	$12,000	5	$60,000
Sealing Block & Wellhead Foundation	EA	$8,000	5	$40,000
Install Pump assembly	EA	$44,000	5	$220,000
Wellhead Piping, Valves, Fittings and Appurtenances	EA	$13,000	5	$65,000
Disinfection of Pump and Well	EA	$2,750	5	$13,750
Water Quality Analysis and Testing	EA	$6,000	5	$30,000
Electrical and Instrumentation per Well, Including Lightning Protection	EA	$95,000	5	$475,000
Security Fence and Gates	EA	$10,000	5	$50,000
Misc Site Improvements	LS	$60,000	1	$60,000
Drilling Equipment mobilization between sites	LS	$15,000	1	$15,000
SUBTOTAL				**$1,862,000**
Well Collection Piping, Roads, Pads & Electrical Distribution				
Service Roads installation	SY	$22	7,000	$154,000
Road base for Well Pads	SY	$22	750	$16,500
Rehabilitate Existing Service Roads	SY	$15	12,000	$180,000
Raw Road base	CY	$30	15,000	$450,000
Electrical Power Distribution for Wells	LS	$825,000	1	$825,000
Collection 6" C900 PVC Pipe	LF	$45	7,700	$346,500
Raw Water Transmision 10" C900 PVC Pipe	LF	$60	12,000	$720,000
SUBTOTAL				**$2,692,000**
COMBINED SUBTOTAL				$4,804,000
CONTINGENCY		13%		$625,000
TOTAL				**$5,429,000**

This Opinion of Probable Construction Cost was prepared by Kent W. Riker, P.E. # 103730, firm No. 20783, and shall not be used for construction permitting or other construction purposes.

Public Works Committee

STAFF REPORT

SUBJECT: 536 Well Field Development – Professional Services
MEETING: Public Works Committee Meeting – 30 MAR 2021
DEPARTMENT: Public Works
STAFF CONTACT: Nick Williams

RECOMMENDATION:

Staff recommends entering into agreement with Provenance Engineering for the design of the 536 Well Field for $428,000.

BACKGROUND:

In 2013, the City of Stephenville purchased a 536-acre tract adjacent to the city's existing Airport Well Field with the intention of utilizing the property to augment the city's existing groundwater production supply.

Development of the 536 Well Field is intended to supplement the existing groundwater production well system and system improvements include a 1,000,000-gallon ground storage tank and pump station at the existing Airport Pump Station, the installation of a 16-inch diameter transmission pipeline as well as the construction of the well field.

Construction of the well field includes five (5) new water production wells, collection piping, roadways, and electrical connections. Five (5) production wells are included to coincide with the remaining capacity in the diameter of the existing transmission pipeline. The estimated cost of the well field construction is $5,429,000.

The estimated cost for a 1,000,000-gallon ground storage tank is approximately $2,000,000. The 16-inch transmission pipeline will connect to the existing transmission pipeline at County Road 182 and extend approximately 1-½ miles to the 536-acre property. The estimated cost of the pipeline is $785,000.

An agreement with Provenance Engineering was approved on December 1, 2020 for the design of the 1MG ground storage tank, pump station, and the transmission pipeline for the 536 Well Field. The design work is underway and is on schedule for delivery by September 2021.

PROPOSAL:

The attached proposal provides design services for five (5) new water supply wells including mechanical, civil, electrical, and instrumentation for system communication. The basic services provide for the design of the well casing and packing, pumps, wellheads, internal water transmission mains, roadways, power supply, as well as monitoring capability for well field management. Basic Services also include surveying and testing components as well as coordination with regulatory agencies: Texas Commission on Environmental Quality (TCEQ) and the Middle Trinity Groundwater Conservation District (MTGCD).

The proposal also provides budgetary cost estimates for Supplemental Services, which include an Aquifer Storage and Recovery (ASR) desktop feasibility analysis, engineering assistance with outside funding application requirements such as through the Texas Water Development Board, as well as onsite construction oversight. Supplemental Services must be approved in writing with council authorization prior to performing the work.

The proposal indicates the phase one Design Services will be complete within a 12-month timeline.

FISCAL IMPACT SUMMARY:

Funding was appropriated in the FY20-21 Budget in the amount of $540,000 for design services for the 536 Well Field. The proposed agreement provides the phase one basic design services, including the preparation of construction drawings and detailed specifications as well as coordination with TCEQ and the MTGCD for $385,000. Including Supplemental Services for assistance with funding agencies, such as the Texas Water Development Board ($15,000) and the ASR Desktop Analysis ($28,000) totals $428,000 leaving a budgeted balance of $112,000.

ATTACHMENTS:

536 Well Field Development – Professional Services Proposal