SHORT FORM OF AGREEMENT
BETWEEN OWNER AND ENGINEER
FOR PROFESSIONAL SERVICES

This is an Agreement between **City of Gladewater, Texas** (Owner) and **Schaumburg & Polk, Inc.** (Engineer). Owner's Project, of which Engineer's services under this Agreement are a part, is generally identified as the **Lake Gladewater Dam Rehabilitation, Engineering Analysis, Design & Regulatory Approval (TCEQ Inventory No. TX03725)** (Project). ***Engineer's services are described in the attached eleven (11)-page, "Specific Scope of Work" document. This proposal is Exhibit "A" to this Agreement and becomes a binding part of this Agreement.***

Owner and Engineer further agree as follows:

1.01 Services of Engineer

A. Engineer shall provide or furnish the Services set forth in this Agreement, and any Additional Services authorized by Owner and consented to by Engineer.

2.01 Owner's Responsibilities

A. Owner shall provide Engineer with existing Project-related information and data in Owner's possession and needed by Engineer for performance of Engineer's Services. Owner will advise the Engineer of Project-related information and data known to Owner but not in Owner's possession. Engineer may use and rely upon Owner-furnished information and data in performing its Services, subject to any express limitations applicable to the furnished items.

1. Following Engineer's assessment of initially-available Project information and data, and upon Engineer's request, Owner shall obtain, furnish, or otherwise make available (if necessary through retention of specialists or consultants) such additional Project-related information and data as is reasonably required to enable Engineer to complete its Services; or, with consent of Engineer, Owner may authorize the Engineer to obtain or provide all or part of such additional information and data as Additional Services.

B. Owner shall provide necessary direction and make decisions, including prompt review of Engineer's submittals, and carry out its other responsibilities in a timely manner so as not to delay Engineer's performance. Owner shall give prompt notice to Engineer whenever Owner observes or otherwise becomes aware of (1) any relevant, material defect or nonconformance in Engineer's Services, or (2) any development that affects the scope or time of performance of Engineer's Services.

3.01 Schedule for Rendering Services

A. Engineer shall complete its Services within a reasonable period of time.

B. 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.

C. Funding Contingency: Owner intends to fund the Project, in whole or in part, through federal Congressionally Directed Spending (the "Grant"). This Agreement, Engineer's obligation to

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perform Services, and Owner's obligation to pay for Services are contingent upon award of the Grant to Owner. Engineer shall not begin Services until Owner notifies Engineer in writing that the Grant has been awarded and authorizes Engineer to proceed ("Notice to Proceed"). Owner shall have no obligation to pay for Services performed before the Notice to Proceed. If the Grant is not awarded within twelve (12) months after the date this Agreement is signed by both parties, either party may terminate this Agreement by written notice to the other, without liability to either party.

4.01 Invoices and Payments

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.

B. Payment: As compensation for Engineer providing or furnishing Services and Additional Services, Owner shall pay Engineer as set forth in this Paragraph 4.01, Invoices and Payments. 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 must pay the undisputed portion.

C. Failure to Pay: 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; (2) in addition Engineer may, after giving 7 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, and in such case Owner waives any and all claims against Engineer for any such suspension; and (3) if any payment due Engineer remains unpaid after 90 days, Engineer may terminate the Agreement for cause pursuant to Paragraph 5.01.A.2.

D. Reimbursable Expenses: Engineer is entitled to reimbursement of expenses only if so indicated in Paragraph 4.01.E or 4.01.F. If so entitled, and unless expressly specified otherwise, the amounts payable to Engineer for reimbursement of expenses will be the Project-related internal expenses actually incurred or allocated by Engineer, plus all invoiced external expenses allocable to the Project, including Engineer's subcontractor and subconsultant charges, with the external expenses multiplied by a factor of 1.10.

E. Basis of Payment

1. Lump Sum. Owner shall pay Engineer for Services as follows:

a. A Lump Sum amount of **$1,725,000.00** by task, as described in Exhibit A, as follows:

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Task 1	Project Management, Scheduling & QA/QC	$125,000.00
Task 2	Boundary and Bathymetric Survey	$125,000.00
Task 3	Geotechnical Investigation	$100,000.00
Task 4	CCTV Inspection of Low Flow Outlet Conduit	$20,000.00
Task 5	Preliminary Design / Alternatives Evaluation (30%)	$105,000.00
Task 6	Hydrologic & Hydraulic (H&H) Analysis	$105,000.00
Task 7	Detailed Engineering Design & PS&E	$505,000.00
Task 8	Permitting & Regulatory Approval (TCEQ Dam Safety)	$45,000.00
Task 9	Dam Breach Analysis, Inundation Mapping & EAP Update	$70,000.00
Task 10	Bidding Phase Services	$15,000.00
Task 11	Construction Phase Services	$435,000.00
Task 12	Grant Administration Services (Lone Star Consulting)	$75,000.00
Total Basic Services		**$1,725,000.00**

b. In addition to the Lump Sum amount, reimbursement of the following expenses: None.

F. 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, except for Task 12. As directed by Owner, invoicing from Lone Star Consulting for Task 12 will be processed as pass-through billing within this Agreement, at the amounts invoiced to Engineer by Lone Star Consulting, without markup, up to the Task 12 amount. Because Lone Star Consulting reports directly to Owner, Owner shall specifically approve each Lone Star Consulting invoice prior to its processing by Engineer. Additional Services: For Additional Services, Owner shall pay Engineer an amount equal to the cumulative hours charged in providing the Additional Services by Engineer's employees, times standard hourly rates for each applicable billing class; plus reimbursement of expenses incurred in connection with providing the Additional Services. Standard hourly rates are based on Engineer's most current rate sheet.

5.01 Termination

A. Termination for Cause

1. Either party may terminate the Agreement for cause upon 30 days' written notice in the event of substantial failure by the other party to perform in accordance with the terms of the Agreement, through no fault of the terminating party.

a. Notwithstanding the foregoing, this Agreement will not terminate under Paragraph 5.01.A.1 if the party receiving such notice begins, within 7 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 thereof; 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 will extend up to, but in no case more than, 60 days after the date of receipt of the notice.

2. In addition to its termination rights in Paragraph 5.01.A.1, Engineer may terminate this Agreement for cause upon 7 days' written notice (a) if Owner demands that Engineer

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furnish or perform services contrary to Engineer's responsibilities as a licensed professional, (b) if Engineer's services for the Project are delayed or suspended for more than 90 days for reasons beyond Engineer's control, (c) if payment due Engineer remains unpaid for 90 days, as set forth in Paragraph 4.01.C, or (d) as the result of the presence at the Site of undisclosed Constituents of Concern as set forth in Paragraph 6.01.I.

3. Engineer will have no liability to Owner on account of any termination by Engineer for cause.

B. Termination for Convenience: Owner may terminate this Agreement for convenience, effective upon Engineer's receipt of notice from Owner.

C. Payments Upon Termination: In the event of any termination under Paragraph 5.01, Engineer will be entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement, and to reimbursement of expenses incurred through the effective date of termination. Upon making such payment, Owner will have the limited right to the use of all deliverable documents, whether completed or under preparation, subject to the provisions of Paragraph 6.01.F, at Owner's sole risk.

1. If Owner has terminated the Agreement for cause and disputes Engineer's entitlement to compensation for services and reimbursement of expenses, then Engineer's entitlement to payment and Owner's rights to the use of the deliverable documents will be resolved in accordance with the dispute resolution provisions of this Agreement or as otherwise agreed in writing.

2. If Owner has terminated the Agreement for convenience, or if Engineer has terminated the Agreement for cause, then Engineer will be entitled, in addition to the payments identified above, to invoice Owner and receive payment of a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with Engineer's subcontractors or subconsultants, and other related close-out costs, using methods and rates for Additional Services as set forth in Paragraph 4.01.F.

6.01 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 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 will 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 that Constructor's furnishing and performing of its work. Engineer shall not be responsible for the acts or omissions of any Constructor.

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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 of probable construction cost (if any) 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.

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. Engineer grants to Owner a limited license to use the deliverable 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 deliverable 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 subconsultants;

3. Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and subconsultants 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 agree to transmit, and 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. Waiver of Damages; Limitation of Liability: To the fullest extent permitted by law, Owner and Engineer (1) waive against each other, and the other's officers, directors, members, partners, agents, employees, subconsultants, and insurers, 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, from any cause or causes, and (2) agree that

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Engineer's total liability to Owner under this Agreement shall be limited to $100,000 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 will be mediated. If mediation is unsuccessful, then the parties may exercise their rights at law.

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

L. Engineer's 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.

7.01 Definitions

A. Constructor—Any person or entity (not including the Engineer, its employees, agents, representatives, subcontractors, and subconsultants), 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.

B. Constituent of Concern—Asbestos, petroleum, radioactive material, polychlorinated biphenyls (PCBs), lead based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to laws and regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

8.01 Successors, Assigns, and Beneficiaries

A. Successors and Assigns

1. 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 8.01.A.2 the assigns of Owner and Engineer) are hereby bound to the other party to this Agreement and to the successors, executors, administrators, and legal

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representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.

2. 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.

B. Beneficiaries: 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.

9.01 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.

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This Agreement's Effective Date is **the date of Owner's written Notice to Proceed issued under Paragraph 3.01.C.**

Owner:	Engineer:
City of Gladewater, Texas	Schaumburg & Polk, Inc.
(name of organization)	(name of organization)
By: _____	By: _____
(authorized individual's signature)	(authorized individual's signature)
Date: _____	Date: Nov 3, 2026
(date signed)	(date signed)
Name: _____	Name: Travis Reed, P.E.
(typed or printed)	(typed or printed)
Title: _____	Title: Vice President
(typed or printed)	(typed or printed)
Address for giving notices:	Address for giving notices:
City of Gladewater	Schaumburg & Polk, Inc.
P.O. Box 1725	320 South Broadway, Suite 200
Gladewater, Texas 75647	Tyler, Texas 75702

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SCHAUMBURG & POLK, INC.
ENGINEERING A BETTER FUTURE

EXHIBIT "A"

SPECIFIC SCOPE OF WORK

City of Gladewater, Texas
Lake Gladewater Dam Rehabilitation
Engineering Analysis, Design & Regulatory Approval
TCEQ Inventory No. TX03725
Prepared by Schaumburg & Polk, Inc. | TBPELS Firm No. 000520
November 2026

Items of work specified below are Exhibit "A" to the EJCDC E-520 Short Form of Agreement Between Owner and Engineer for Professional Services between the City of Gladewater, Texas (Owner or City) and Schaumburg & Polk, Inc. (Engineer or SPI). Compensation for these Services is set forth in Paragraph 4.01.E of the Agreement. Services are subject to the Funding Contingency in Paragraph 3.01.C of the Agreement.

1. Purpose and Objectives

The purpose of this engineering scope of work is to define the professional services required to bring Lake Gladewater Dam into compliance with TCEQ dam safety standards and to remedy the deficiencies documented in the November 10, 2025 inspection, in support of a federal grant funded through Congressionally Directed Spending. The objectives of this scope are to:

- Evaluate rehabilitation alternatives and confirm a preferred design approach with the City prior to detailed design.
- Perform a new H&H analysis to supersede the 2008 Adams Engineering analysis and confirm the design basis needed to satisfy 75% PMF passage under 30 TAC §299.15(a)(1)(A).
- Confirm, based on the H&H analysis, which spillway, crest, and freeboard elements require modification to achieve compliant PMF passage.
- Update the dam breach analysis and revise the Emergency Action Plan (EAP) inundation mapping to reflect the finalized spillway design.
- Investigate embankment and foundation conditions and inspect the low flow outlet conduit (CCTV) to inform the design.
- Prepare complete engineering design and construction documents (100% PS&E) for the spillway improvements, low flow outlet decommissioning, downstream slope stabilization, and permanent embankment seepage-monitoring instrumentation.
- Secure TCEQ Dam Safety Program approval of the design prior to construction.
- Provide bidding, construction phase, and grant administration services through construction completion and grant closeout.

2. Scope of Work

The construction ultimately to be designed under this Agreement is anticipated to consist of: (1) complete removal and replacement of the deteriorated concrete principal (service) spillway; (2) installation of permanent embankment seepage-monitoring instrumentation (piezometers); (3) decommissioning of the low flow outlet valve and conduit; (4) downstream slope stabilization; and (5) if determined necessary by the H&H analysis, modification of the auxiliary/emergency spillway, dam crest, and/or freeboard to achieve compliant PMF passage. The preliminary, planning-level construction cost estimate for this work is $7,000,000+; this figure is very early-stage and will be refined as design progresses.

This Agreement covers full design services through 100% Plans, Specifications & Estimate (PS&E), Bidding Phase and Construction Phase services described under Tasks 10 and 11, and City-directed Grant Administration services described under Task 12. No schedule in this Exhibit is tied to a funding award date; durations below reflect task sequencing only.

Task 1: Project Management, Scheduling, and Quality Assurance / Quality Control (QA/QC)

A project schedule will be maintained and QA/QC procedures implemented throughout the design process, including peer review and technical audit of design deliverables at the 30%, 60%, 90%, and 100% design milestones. Project management includes a project kickoff meeting and milestone coordination with the City.

Task 2: Boundary and Bathymetric Survey

A boundary survey and a bathymetric survey of the dam and reservoir will be coordinated. The boundary survey will establish the property boundary, existing easements, and rights-of-way relevant to the rehabilitation design, with a plat prepared and sealed by a licensed Texas RPLS. The bathymetric survey will establish current lake-bottom topography and sediment conditions using a survey-grade sonar and GPS-equipped survey vessel, producing a bathymetric contour map and an updated reservoir storage-capacity calculation. Survey results will inform the Preliminary Design / Alternatives Evaluation (Task 5) and the H&H Analysis (Task 6).

Task 3: Geotechnical Investigation

A geotechnical investigation of the embankment and spillway foundation will be performed, including field investigation, laboratory testing, engineering analysis, and a sealed geotechnical report. Utility location and coordination will be completed prior to drilling, particularly in the vicinity of the WTP raw water lines. The geotechnical investigation, and incorporation of its sealed conclusions into the design, are included in this scope. The investigation consists of the following components:

A. **Field Investigation:** advancement of 13 soil borings along the approximately 1,000-foot-long embankment per the following schedule: two 50-ft borings and one 70-ft boring at the dam crest, six 10-ft hand-auger borings through the shell, and four 30-ft borings at the downstream toe and spillway; sampling at 2.5-ft intervals to 10 ft and at 5-ft intervals thereafter; monitoring and documentation of groundwater conditions during and after drilling; grout backfilling of boreholes; installation of temporary 2-inch piezometers for

investigation readings; and field logging of soils by a qualified geotechnical technician or engineer.

B. **Laboratory Testing:** moisture content and dry density, soil classification (Atterberg limits and grain size analysis), unconsolidated/undrained and consolidated/undrained triaxial compression, permeability, dispersion (crumb/pinhole), consolidation testing, hydrometer analysis, and direct shear testing.

C. **Engineering Analysis and Report:** onsite evaluation by a geotechnical engineer; evaluation of soil stratigraphy, groundwater conditions, and engineering properties, including up to seven site trips for piezometer readings; development of design parameters for shallow and/or deep foundation design as applicable to the spillway replacement; assessment of potential settlement and/or heave; a slope stability analysis using a cross-section modeling the worst-case condition among rapid drawdown, post-construction, and steady-state seepage loading, with seismic loading evaluated per the applicable guidance for the site's low-seismicity region; recommendations for slab support, subgrade preparation, fill placement, and site design considerations; and preparation of a sealed geotechnical report summarizing methods, findings, and recommendations.

Task 4: CCTV Inspection of Low Flow Outlet Conduit

A CCTV inspection of the low flow outlet conduit will be coordinated and performed from the upstream side. The inspection can be conducted at normal pool elevation. WTP operational restrictions associated with the inspection will be coordinated with the City and WTP operations staff.

Task 5: Preliminary Design / Alternatives Evaluation

Preliminary design concepts will be developed for the principal spillway, low flow outlet, and downstream slope, and alternative approaches to each will be evaluated based on technical performance, constructability, and preliminary cost. Alternatives will be presented to the City for selection of a preferred approach before detailed design proceeds. Preliminary design will incorporate the results of the survey, geotechnical investigation, and CCTV inspection (Tasks 2 through 4), which will be completed before the 30% milestone. This preliminary phase constitutes the 30% (conceptual) design milestone.

Task 6: Hydrologic & Hydraulic (H&H) Analysis

A new H&H analysis of the dam, spillways, and watershed will be performed, superseding the 2008 analysis that found the structure capable of passing only 25% of the PMF against the 75% PMF standard required for a high-hazard, intermediate-size dam under 30 TAC §299.15(a)(1)(A). The analysis will follow the applicable TCEQ hydrologic and hydraulic guidance for dams and 30 TAC Chapter 299. It will establish the hydraulic design basis for the spillway improvements and will confirm which spillway, crest, and freeboard elements require modification to achieve compliant PMF passage.

Task 7: Detailed Engineering Design and Plans, Specifications & Estimate (PS&E)

Following completion of Tasks 2 through 6 and confirmation of the survey, geotechnical, and hydraulic design basis, complete engineering design and construction documents will be prepared through 100% PS&E for the following elements:

- Principal (Service) Spillway Replacement: full design of a replacement structure sized to the updated H&H analysis.
- Auxiliary/Emergency Spillway, Crest, and Freeboard Modifications (if required by the H&H analysis): design of modifications necessary to achieve compliant PMF passage, should the H&H analysis determine that principal spillway replacement alone is insufficient.
- Low Flow Outlet Decommissioning: design of decommissioning measures for the low flow outlet valve and conduit, informed by the CCTV inspection and coordinated with any branch connections serving the WTP raw water intake, so that continuity of the WTP raw water supply is maintained.
- Downstream Slope Stabilization: full engineering design, including slope stability analysis, regrading, and erosion control design. Revegetation is the preferred erosion control method; engineered alternatives such as ArmorMax matting or other suitable alternatives will also be evaluated.
- Embankment Seepage-Monitoring Instrumentation: design of permanent piezometers or equivalent instrumentation for long-term seepage monitoring.

The final design elements will be confirmed by the Task 6 H&H analysis. Should the H&H analysis determine that compliant PMF passage requires design beyond the elements listed above, such additional design will be addressed by contract amendment. The design will also address construction-sequencing constraints, including any temporary reservoir drawdown, cofferdam, and dewatering required to construct the spillway improvements, and the effect of such measures on continuity of the WTP raw water supply.

Design submittals will be provided to the City and, where applicable, to the TCEQ Dam Safety Program at the 60%, 90%, and 100% milestones, following the 30% preliminary milestone under Task 5, with milestone QA/QC reviews under Task 1.

Task 8: Permitting and Regulatory Approval

Design plans will be prepared and submitted to the TCEQ Dam Safety Program for approval under 30 TAC Chapter 299; this approval is required for construction and is included in this scope. A pre-submittal coordination meeting with the TCEQ Dam Safety Program is included to align on design criteria and submittal expectations.

Because the project is federally funded through Congressionally Directed Spending, federal Environmental and Historic Preservation (EHP)/NEPA review and Section 106 cultural resources review are anticipated to apply. This review is anticipated to be administered through the funding agency at no cost to the City. Coordination with the funding agency on these items is included; preparation of EHP/NEPA or Section 106 documentation, if it becomes the City's responsibility, can be provided as an Additional Service.

Other construction permitting that may apply to this project, including USACE Section 404, the TPDES Construction General Permit/SWPPP, and floodplain development permitting, is required for construction and is excluded from this scope. Where any such permit or a jurisdictional determination materially affects design, the applicable requirement will be identified and coordinated during design.

Task 9: Dam Breach Analysis, Inundation Mapping, and EAP Update

The dam breach analysis and EAP inundation mapping will be updated under this task once the new spillway design is finalized under Task 7, so that the breach analysis and mapping reflect as-designed conditions. The analysis will address the TCEQ-required breach scenario types: design storm breach, sunny-day breach, and barely-overtopping breach (if applicable). Deliverables will include breach outflow hydrographs, downstream flow velocities, and GIS-based inundation mapping highlighting critical infrastructure and residential areas, including US Highway 80 and the residential area located approximately 1.25 miles downstream of the dam. The revised inundation mapping will be incorporated into an updated Emergency Action Plan prepared for City adoption and submittal to the TCEQ Dam Safety Program.

Task 10: Bidding Phase Services

Following City review and acceptance of the 100% PS&E design documents and TCEQ Dam Safety Program approval, SPI will assist the City in advertising, bidding, and awarding a construction contract for the rehabilitation work described above.

A. Provide contract documents and assist City in bidding the project.
B. Distribute advertisements directly to contractors to help advertise the project.
C. Advertise in online plan rooms.
D. Print and distribute Plans and Specifications to responsive contractors.
E. Conduct and attend a pre-bid conference with prospective bidders.
F. Prepare and issue addenda in response to bidder questions or plan revisions during the bidding period.
G. Conduct bid opening, evaluate and tabulate bids, and recommend award to City.

Task 11: Construction Phase Services

During construction, SPI will provide construction phase engineering services, including construction observation, submittal review, and pay application processing, through Substantial Completion, Final Completion, and warranty inspection of the Contractor's Work.

A. Review Contractor's insurance certificates and bonds prior to issuance of Notice to Proceed.
B. Conduct a Pre-Construction Conference prior to commencement of Work at the Site.
C. Receive, review, and determine the acceptability of any and all schedules that Contractor is required to submit to Engineer, including Progress Schedule, Schedule of Submittals, and Schedule of Values.
D. As appropriate, establish baselines and benchmarks for locating the Work which in Engineer's judgment are necessary to enable Contractor to proceed.
E. Make visits to the Site at intervals appropriate to the various stages of construction, as Engineer deems necessary, to observe the progress and quality of the Contractor's executed Work. Scope is based on averaging 40 hours per week of field observation by Engineer's

Construction Representative and 14 hours per week of engineering construction administration for a 36-week construction phase.

F. Attend periodic progress meetings during construction.
G. Maintain a field log of site visit observations.
H. Issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of the Contractor's work.
I. Respond to Contractor's Requests for Information (RFIs).
J. Recommend and prepare Change Orders and Work Change Directives to Owner, as appropriate.
K. Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit.
L. Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor.
M. Require such special inspections or tests of Contractor's work as deemed reasonably necessary, and receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Contract Documents.
N. Process pay applications from Contractor.
O. In company with Owner and Contractor, conduct an inspection to determine if the Work is substantially complete. If Engineer considers the Work substantially complete, Engineer shall deliver a certificate of Substantial Completion to Owner and Contractor.
P. Conduct a final inspection to determine if the completed Work of Contractor is acceptable so that Engineer may recommend, in writing, final payment to Contractor.
Q. Conduct a warranty (11-month) inspection prior to expiration of the correction period.
R. Assemble and provide a final set of as-built drawings based on Contractor's field plan set, Engineer's working plan set, and the Construction Representative's field set of plans. These plans will be provided to the Owner in both paper and digital format.

Task 12: Grant Administration Services

As directed by the City, grant administration services for the federal Congressionally Directed Spending award will be provided by Lone Star Consulting (LSC) as a subconsultant to SPI. LSC will report directly to the City and will take direction from the City on all grant administration matters. Invoicing from LSC will be processed by SPI as pass-through billing, as described in Paragraph 4.01.E of the Agreement, and the City will specifically approve each LSC invoice prior to its processing by SPI. LSC's services include:

A. Assist the City with execution of the grant agreement, including review of award terms and conditions and required certifications.
B. Establish and maintain the grant project file in accordance with funding agency requirements and 2 CFR Part 200 (Uniform Guidance), including record retention requirements.

C. Prepare and submit the periodic progress and financial reports required by the funding agency.
D. Prepare reimbursement requests (drawdowns) and supporting documentation for City approval and submittal.
E. Coordinate with the funding agency on EHP/NEPA and Section 106 review, in support of the coordination described in Task 8.
F. Review the construction procurement for compliance with federal procurement standards (2 CFR §§200.317 through 200.327), including inclusion of required federal contract provisions and certifications in the bid documents.
G. Monitor federal labor standards compliance during construction, if applicable to the award, including wage determinations and review of certified payrolls.
H. Prepare budget or scope modification requests to the funding agency, if needed.
I. Prepare and submit grant closeout documentation.
J. SPI does not direct or supervise LSC's grant administration services and is not responsible for their content, accuracy, timeliness, or compliance with funding agency requirements.

3. Assumptions

- The City will provide access to the dam, reservoir, and adjacent property for survey, field investigation, and site visits.
- The City will furnish available record drawings, prior reports, the current Emergency Action Plan, and the 2008 H&H analysis.
- The reservoir will be held at or near normal pool during survey and field investigation; no reservoir drawdown is required for the investigation phase.
- Horizontal and vertical control will be based on the Texas State Plane Coordinate System (NAD83) and NAVD88, unless otherwise coordinated with the City.
- Deliverables will be provided electronically (PDF), with up to three hard copies furnished at each milestone upon request.
- One consolidated set of City review comments will be provided per milestone submittal; up to two review cycles per milestone are assumed.
- Up to two TCEQ Dam Safety Program review cycles (initial submittal and one resubmittal) are assumed.
- Sealed reports from specialty disciplines (survey and geotechnical) will be relied upon as prepared; independent re-analysis of that work is not included.
- Sediment removal and dredging are not included; the updated reservoir storage-capacity calculation supports the H&H analysis only.
- A project kickoff meeting, up to four City design review meetings (one per milestone), and one TCEQ Dam Safety pre-submittal coordination meeting are included; additional meetings will be treated as Additional Services.

- Temporary reservoir drawdown and dewatering required for construction will be defined in the design; means, methods, and any required interruption of the WTP raw water supply will be coordinated with the City.
- Environmental and Historic Preservation (EHP)/NEPA and Section 106 compliance associated with the federal grant funding is anticipated to be administered through the funding agency; support beyond coordination and provision of project data is not included unless added by amendment.
- The project will be bid and constructed as a single construction contract under a single bid advertisement.
- Construction Phase Services are based on a construction contract time of 36 weeks. Services required because of extensions of the Contractor's contract time are Additional Services.
- Task 12 services will be performed during the grant period of performance, concurrent with Tasks 1 through 11, and end at grant closeout.

4. Responsibilities of Owner

In addition to the responsibilities in Paragraph 2 of the Agreement, Owner shall:

- Pay all permit, application, review, and filing fees, including TCEQ, TxDOT, USACE, and floodplain administrator fees, as applicable.
- Pay all bid advertising costs, including newspaper legal notices.
- Provide right-of-entry to the dam, reservoir, and any property required for survey, field investigation, and construction observation.
- Furnish an independent testing laboratory for construction materials testing and special inspections required by the Contract Documents.
- Make WTP operations staff available to coordinate raw water supply operations during the CCTV inspection and construction.
- Adopt the revised Emergency Action Plan and distribute it to the parties on the EAP notification list.
- Provide legal, accounting, insurance, and bond counsel services the Owner requires for the Project.
- Accept the grant award, execute the grant agreement, direct LSC's grant administration services, and approve reimbursement requests, reports, and LSC invoices prepared under Task 12.

5. Exclusions

The following are not included in Engineer's Basic Services. Any of these may be provided as Additional Services under Paragraph 4.01.F of the Agreement when authorized in writing by Owner and consented to by Engineer.

- Construction permitting beyond the TCEQ Dam Safety Program approval described in Task 8, including USACE Section 404, the TPDES Construction General Permit/SWPPP, and floodplain development permitting.
- Preparation of federal environmental (NEPA/EHP) or cultural resources (Section 106) documentation, beyond coordination and provision of project data.
- Wetland delineations, threatened and endangered species surveys, cultural resources field surveys, and Phase I/II Environmental Site Assessments.
- Investigation, testing, abatement, or remediation of Constituents of Concern.
- TCEQ water rights permitting or amendments.
- Land, easement, or right-of-way acquisition, and preparation of easement documents or metes and bounds descriptions beyond the boundary survey plat in Task 2.
- Sediment removal and dredging.
- Design beyond the elements listed in Task 7, including design required by changes in TCEQ rules or criteria after the 60% milestone.
- Redesign after City selection of the preferred alternative in Task 5, or after the 60% milestone, at the City's request.
- TCEQ Dam Safety Program review cycles beyond those stated in Section 3, Assumptions.
- Design of relocations or modifications to WTP raw water intake, pumping, or treatment facilities, beyond the coordination described in Tasks 4 and 7.
- Design or relocation of franchise utilities.
- Value engineering studies or independent cost estimates.
- Rebidding the project, or bidding and administering more than one construction contract.
- Field observation or Resident Project Representative services beyond the hours described in Task 11.
- Construction staking or layout beyond the baselines and benchmarks described in Task 11.
- Construction materials testing and special inspections (performed by Owner's testing laboratory).
- Update of the dam's Operation and Maintenance (O&M) manual.
- EAP training, tabletop or functional exercises, and annual EAP updates after submittal of the revised EAP.
- Long-term instrumentation monitoring, data collection, or reporting after construction.
- Preparation of applications for additional or alternate funding sources.
- Expert witness services, litigation support, or resolution of disputes between Owner and Contractor.

6. Deliverables

- Project schedule and QA/QC documentation.
- Boundary survey plat, sealed by a licensed Texas RPLS.

- Bathymetric survey report, contour mapping, and updated reservoir storage-capacity calculation.
- Sealed geotechnical report, including boring logs, laboratory test results, groundwater/piezometer readings, and slope stability analysis.
- CCTV inspection report of the low flow outlet conduit.
- Preliminary design / alternatives evaluation memorandum (30% milestone).
- Hydrologic & Hydraulic (H&H) Analysis Report.
- 60%, 90%, and 100% PS&E submittals for the principal spillway replacement, low flow outlet decommissioning, downstream slope stabilization, and embankment seepage-monitoring instrumentation (and auxiliary/emergency spillway, crest, or freeboard modifications, if required by the H&H analysis).
- TCEQ Dam Safety Program submittal package and record of approval.
- Updated Dam Breach Analysis Report and GIS-based inundation maps.
- Revised Emergency Action Plan (EAP) with updated inundation exhibits, prepared for City adoption and TCEQ submittal.
- Bidding and contract documents, addenda, bid tabulation, and recommendation of award.
- Construction field logs, Certificate of Substantial Completion, recommendation of final payment, and warranty inspection report.
- Construction record drawings, including digital files.
- Grant progress and financial reports, reimbursement requests, and grant closeout documentation.

7. Schedule

The schedule below reflects task durations and sequencing only. The calendar schedule will be established at the Notice to Proceed issued under Paragraph 3.01.C of the Agreement.

Task	Estimated Duration	Sequencing Note
1. Project Management, Scheduling & QA/QC Milestone Reviews (30% / 60% / 90% / 100%)	Embedded within Tasks 2 through 9	Begins with kickoff meeting; concurrent with design tasks
2. Boundary and Bathymetric Survey	3–5 weeks	Begins at Notice to Proceed
3. Geotechnical Investigation	8–12 weeks	Concurrent with Task 2
4. CCTV Inspection of Low Flow Outlet Conduit	2–4 weeks	Concurrent with Task 3, subject to WTP outage coordination
5. Preliminary Design / Alternatives Evaluation (30% Milestone)	6–8 weeks	Following completion of Tasks 2 through 4
6. Hydrologic & Hydraulic (H&H) Analysis	10–14 weeks	Following completion of Task 2; concurrent with Tasks 3 through 5
7. Detailed Engineering Design (60% / 90% / 100% PS&E)	20–26 weeks	Following completion of Tasks 2 through 6
8. Permitting & Regulatory Approval (TCEQ Dam Safety Submittal & Review)	6–8 weeks*	Following completion of Task 7 (100% PS&E)
9. Dam Breach Analysis, Inundation Mapping & EAP Update	6–8 weeks	Following completion of Task 7; concurrent with Task 8
10. Bidding Phase Services	6–8 weeks	Following TCEQ approval and City authorization to advertise
11. Construction Phase Services	36 weeks, plus 11-month warranty inspection	Following construction contract award
12. Grant Administration Services	Grant period of performance	Concurrent with Tasks 1 through 11, through grant closeout

** TCEQ's review and approval period is outside SPI's control and is not included within the design duration; the 6–8-week estimate is provided for planning purposes only and may vary based on TCEQ's workload and review comments.*

8. Compensation

Compensation for the Services described in this Exhibit is set forth in Paragraph 4.01.E of the Agreement.

END OF EXHIBIT "A"

Lake Gladewater Dam Rehab Engineering Agreement

Final Audit Report 2026-11-03

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By:	Andrew Wright (awright@spi-eng.com)
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