

**City Council  
Staff Agenda Report**

**Agenda Item: 9a.**

**Agenda Subject:** Discussion and possible action regarding a scope of work from Freese and Nichols for Elkins Dam, and associated scope of work for tree and brush removal on the Elkins Dam site per TCEQ guidelines and regulations.

<p><b>Meeting Date:</b>  December 16, 2021</p>	<p><b>Financial Considerations:</b> <b>\$52,000 for FNI</b>  <b>Plus costs to remove brush and certain trees</b>  <b>Budgeted:</b>  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</p>	<p><b>Strategic Vision Pillar:</b></p> <p><input type="checkbox"/> Financial Stability  <input checked="" type="checkbox"/> Appearance of City  <input checked="" type="checkbox"/> Operations Excellence  <input checked="" type="checkbox"/> Infrastructure Improvements/Upgrade  <input type="checkbox"/> Building Positive Image  <input type="checkbox"/> Economic Development  <input type="checkbox"/> Educational Excellence</p>
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**Background Information:** The Elkins Dam Committee met with Freese and Nichols (FNI) to discuss a scope of work for Elkins Dam.

In the original quotes presented for dam safety improvements, contingencies were high because new models and data are needed to obtain more accurate quotes. Currently, a surveyor needs to access the full site area and is unable because of the heavy brush. Thus, included with FNI’s costs are quotes for clearing the area as described in the Professional Services Agreement. The area to be cleaned has been modified and guidelines for clearing changed from a previous scope, and that is why the language in the quotes differ from what you now see in the Agreement. Before any work begins, staff will ensure the chosen contractor has the new guidelines. FNI is willing to mark trees that need removal prior to tree work (included in their quote). That way staff and the Elkins Dam Committee can ensure removal is desired.

Because it is costly to clear/clean the entire specified area at once, staff requested multiple quotes to include the following.

1. Quote 1 – Just the spillway area north of the pad site, east side only (west side is already cleared because XTO maintains it): \$15,000 total to include rock for erosion control
2. Quote 2 – Shredding the entire area on the west side of the pad site (excludes spillway area): \$10,000
3. Quote 3 – Entire area: \$40,000

Two things not accounted for are potential issues with removing trees on the steep slope where gypcrete exists (west side of pad site), and staff reducing costs for mowing the far south side of the marked area. The furthest area south was mowed in the past but just not maintained. Staff intends to mow what is possible with the equipment we have and where safe to do so which should reduce some costs.

**Recommended Action/Motion:** Provide direction by way of motion on desired area and specs for clearing, and approve Freese and Nichol’s Professional Agreement and services.

- Attachments:** Professional Services Agreement  
 Alternatives Figure  
 Three Estimates for Clearing and Grubbing  
 Parameters and Map Used for Quotes  
 Site Photos

**PROFESSIONAL SERVICES AGREEMENT**

STATE OF TEXAS §

COUNTY OF TARRANT §

This Agreement is entered into by City of Dalworthington Gardens, Texas, hereinafter called "Client" and Freese and Nichols, Inc., hereinafter called "FNI." In consideration of the Agreements herein, the parties agree as follows:

- I. **EMPLOYMENT OF FNI:** In accordance with the terms of this Agreement, Client agrees to employ and compensate FNI to perform professional services in connection with the Project. The Project is described as Lake Elkins Dam - Dam Safety Improvements Phase 1.
- II. **SCOPE OF SERVICES:** FNI shall render professional services in connection with Project as set forth in Attachment SC – Scope of Services and Responsibilities of Client which is attached to and made a part of this Agreement.
- III. **COMPENSATION:** Client agrees to pay FNI for all professional services rendered under this Agreement. FNI shall perform professional services as outlined in the "Scope of Services" for a lump sum fee of Fifty – two Thousand Dollars, \$52,000.

If FNI's services are delayed or suspended by Client, or if FNI's services are extended for more than 60 days through no fault of FNI, FNI shall be entitled to equitable adjustment of rates and amounts of compensation to reflect reasonable costs incurred by FNI in connection with such delay or suspension and reactivation and the fact that the time for performance under this Agreement has been revised.

- IV. **TERMS AND CONDITIONS OF AGREEMENT:** The Terms and Conditions of Agreement as set forth as Attachment TC – Terms and Conditions of Agreement shall govern the relationship between the Client and FNI.

Nothing under this Agreement shall be construed to give any rights or benefits in this Agreement to anyone other than Client and FNI, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Client and FNI and not for the benefit of any other party.

This Agreement constitutes the entire Agreement between Client and FNI and supersedes all prior written or oral understandings.

This contract is executed in two counterparts. IN TESTIMONY HEREOF, Agreement executed:

**Freese and Nichols, Inc.**

**City of Dalworthington Gardens, Texas**

By: Murphy Parks

By: \_\_\_\_\_

Murphy Parks, P.E.,  
Principal and Vice President

\_\_\_\_\_  
Print Name and Title

Date: December 8, 2021

Date: \_\_\_\_\_

ATTEST: Janice Brown

ATTEST: \_\_\_\_\_

## **ATTACHMENT SC**

### **STATEMENT OF WORK ELKINS LAKE DAM DAM SAFETY IMPROVEMENTS – PHASE 1**

This Agreement is entered into by The City of Dalworthington Gardens, hereinafter called “CLIENT” and Freese and Nichols, Inc., hereinafter called “FNI.”

#### **BACKGROUND**

Elkins Lake Dam is located within the City of Dalworthington Gardens, Texas. The dam is situated in the Trinity River Basin and impounds water along an unnamed tributary of Rush Creek. The approximate latitude and longitude coordinates of the reservoir are 32.704°N and 97.160°W.

In September 2014, Freese and Nichols, Inc. (FNI), was retained by Lloyd Gosselink Rochelle & Townsend, P.C. (Lloyd Gosselink) on behalf of the City of Dalworthington Gardens to respond to Texas Commission on Environmental Quality (TCEQ) Compliance Investigation. As a result of this investigation, a Probable Maximum Flood (PMF) analysis and breach analysis of Elkins Lake Dam were completed in November 2014. The results of these analyses were provided in the FNI report *Elkins Lake Dam (TX07432) Breach Analysis* which was an appendix included in the *Elkins Lake Dam (TX07432) Emergency Action Plan*. Based on the height of the dam embankment and the maximum storage within the lake, Elkins Lake Dam is classified as a small size structure, according to Texas Commission on Environmental Quality (TCEQ) criteria.

The inundation mapping developed from the results of the breach analysis demonstrated that more than three habitable structures representing more than seven lives, as well as a roadway that is potentially used as a school bus route (Spanish Trail), would be impacted by a breach of Elkins Lake Dam. This results in a high hazard classification for the dam. According to Texas Administrative Code §299.15, a small size, high hazard structure is required to pass 75 percent of the PMF without being overtopped. The 2014 report showed that the dam only passed 21 percent of the PMF, well short of the required minimum.

In February of 2020, FNI submitted the Alternatives Analysis which included additional modeling to evaluate alternatives for improvement and achieve compliance with TCEQ. The alternative analysis provided feasibility level cost opinions (AACE Class 5 “Screening of Feasibility”) to assess the project’s feasibility. As part of the alternative analysis, it was recommended to further develop the preferred alternative to a conceptual design level to set project funding for implementation.

In September of 2021, The City of Dalworthington Gardens selected Alternative 3 from the Alternatives Analysis. Alternative 3 consists of removing the six 60-inch culverts under the access road and creating a 45 foot wide spillway that will act as low water crossing for XTO. The spillway to the right side (looking downstream) of the XTO well pad along with approximately a 2 foot dam raise allows the dam to pass 75 percent of the PMF event without overtopping and meet dam safety criteria. The spillway crest elevation was assumed to be at normal pool which is elevation 561.3 feet.

The City of Dalworthington Gardens has determined that an evaluation of the dam and advancement of the design be performed, as necessary, to comply with TCEQ Dam Safety regulations. Class 5 level opinion of probable construction cost (OPCC) for this project at the alternative analysis was \$1,010,000. This OPCC needs to be validated and refined as part of the evaluation and design effort. Per CLIENT's request, FNI will generate a ACE Class 4 level estimate "Concept Study or Feasibility, or Schematic Design", which corresponds to a project maturity level of between 1 and 15 percent completeness to reduce the level of uncertainty associated with the project costs.

The Texas Commission on Environmental Quality (TCEQ) adopted changes to the dam safety rules in Chapter 299 of the Texas Administrative Code, effective January 1, 2009. The TCEQ also adopted the Hydrologic and Hydraulic Guidelines for Dams in Texas in January 2007 for analysis of dams. The analysis of Elkins Lake Dam will be conducted by FNI following these established guidelines.

Upon the City of Dalworthington Garden's written authorization to proceed, the following professional engineering services shall be provided for engineering analysis for Elkins Lake Dam. The Basic Services to be performed by FNI shall be as follows:

TASK 1 – Project Management

TASK 2 – Existing Condition Evaluation And Verification Of H&H Modeling

TASK 3 – Detailed Analysis For Selected Alternative

### **SCOPE OF SERVICES – BASIC SERVICES**

#### **TASK 1 - PROJECT MANAGEMENT**

FNI will provide project administration and management activities including staffing, subconsultant coordination, budget management, schedule management, and coordination with the CLIENT. FNI will maintain the quality of the work products defined within this scope consistent with applicable standards. Project management includes internal management based on the tasks in this Scope of Engineering Services throughout the life of the project, as follows:

- A. Prepare for and attend virtual project kickoff meeting with CLIENT.
- B. Prepare and submit six monthly status reports including an updated project schedule, status of the project tasks, and project financials.
- C. Coordinate and manage subconsultant surveyor.

D. Perform quality assurance and quality control (QA/QC) reviews for the Project.

## TASK 2 – EXISTING CONDITION EVALUATION AND VERIFICATION OF H&H MODELING

The objective of Task 2 is to further develop the Alternative 3 from the Alternatives Analysis, which includes removing the six 60-inch culverts under the access road and creating a 45 foot wide spillway that will act as low water crossing for XTO and a 2 foot dam raise. Survey will be collected to assist in the design. Hydrologic and hydrologic modeling will be validated and compared to the Jacobs April 2009 Report titled “*Flood Study for XTO Pappy Elkins Pad Site Along an Unnamed Tributary to Rush Creek*”.

Upon receipt of authorization, FNI will render the professional services noted below. Project Management tasks will be performed as part of the Basics Services including internal project team meetings, quality assurance reviews, quality control reviews, schedule updates, subcontractor coordination, monthly progress reports, and invoices.

### A. Design Site Visit:

- 1) Make one (1) visit to the dam to assess existing dam and discuss project needs with CLIENT. This site visit is to be performed after the Clearing and Grubbing is performed on the area described in Attachment A. Clearing and Grubbing is to be performed by the CLIENT following Specification 31 11 00.13 Clearing and Grubbing in Attachment B.

### B. Survey:

- 1) Coordinate with Subconsultant Surveyor to perform land surveying services. This survey is to be performed after the Clearing and Grubbing is performed on the area described in Attachment A. Clearing and Grubbing is to be performed by the CLIENT following Specification 31 11 00.13 Clearing and Grubbing, included in Attachment B.
- 2) Perform the following:
  - i) Establish Horizontal and vertical control across the project site.
    - (1) Set two (2) temporary benchmarks at the dam site, placed at locations where they will not be impacted during construction. Reference the temporary benchmarks to the NAVD 88 vertical datum.
  - ii) Perform topographic survey of the dam site. Detail topographically access roads, the embankment, spillways, and discharge channels.
  - iii) Submit survey in AutoCAD format.
- 3) Review Topographic survey that was provided by Subconsultant.

### C. Verification of H&H Modeling:

- 1) Review past hydrologic and hydraulic data developed by FNI and provided by CLIENT.
- 2) Validate models to reflect current TCEQ Hydrologic and Hydraulic guidelines and existing spillway configurations to assess hydraulic adequacy. Hydrologic and

hydrologic modeling will be compared to the Jacobs April 2009 Report titled "Flood Study for XTO Pappy Elkins Pad Site Along an Unnamed Tributary to Rush Creek." The following Tasks will be performed:

- a. Perform a site visit to the area to assess local stormwater runoff patterns. Update the drainage area, if necessary
  - b. Request or otherwise obtain records for the local stormwater system - (Dalworthington Gardens and Arlington)
  - c. Determine sensitivity of stormwater system capacity (100 year) to PMF hydrology
  - d. Recompute hydrologic parameters
  - e. Verify elevation-storage capacity based on the newest publicly available LIDAR and topographic survey provided in Task 2
  - f. Compare difference between FNI and Jacobs rating curves
  - g. Potentially, recompute rating curve for existing conditions
  - h. Verify proposed low water crossing (spillway) dimensions, discharge capacity
  - i. Re-evaluate required dam raise
  - j. Compute 100-yr frequency event
- 3) Include a summary of the findings in the Technical Memorandum outlined in Task 3.

### TASK 3 – DETAILED ANALYSIS FOR SELECTED ALTERNATIVE

The objective of Task 3 is to perform a detailed engineering analysis for compliance with TCEQ Dam Safety requirements and development of engineering basis for construction documents.

#### A. Selected Alternative Technical Memorandum:

- 1) Prepare a draft technical memorandum summarizing existing conditions and the Selected Alternative. The selected alternative is outlined above. The memorandum will address the following:
  - a. Review of existing conditions
  - b. Summary of analysis and findings from Task 2
  - c. Summary of the condition of the dam based on visual observations after clearing and grubbing has been performed.
  - d. Plan view Figure of the Selected Alternative and typical section.
  - e. Opinion of probable construction cost (OPCC) for the Selected Alternative. The OPCC will generally follow AACE Class 4 guidelines with appropriate contingency to reflect the level of concept development.
  - f. Conclusions and Recommendations, including considerations for additional survey, geotechnical exploration, hydraulic modeling, and other services required for final design of selected alternative
- 2) Provide draft memorandum for internal review and comment as part of FNI's QC plan. Address comments and provide draft memorandum in PDF format to CLIENT for review and comment.

- 3) Participate in meeting (conference call) to discuss memorandum and review comments by CLIENT. Incorporate review comments as appropriate into the final memorandum. Submit final memorandum in PDF format to CLIENT.

## DELIVERABLES

The following is a summary of the deliverables as identified in the previous section of this proposal:

1. Monthly Progress Reports and Invoices: Electronic version (PDF) of progress reports along with invoices for professional services
2. Survey Data: AutoCAD Format from the Surveyor
3. Technical Memorandum: Electronic version (PDF) of Selected Alternative Technical Memorandum

## ADDITIONAL SERVICES

Services to be performed by FNI, if authorized by the Owner, which are **not** included in the above described services, will be considered an additional service.

- 1) Effort for necessary site evaluations for compliance with USACE requirements for construction in Water of the United States (WOTUS) and potential downstream flood impacts due to modifications in spillway capacity.
  - i. Waters of the US Delineation.
  - ii. BMPs and SWPPP Preparation.
  - iii. Federally-listed Habitat Assessment.
  - iv. Cultural and Historic Resource Review.
  - v. USACE Permit Submission – Nationwide Permit (NWP) 3 (Maintenance) Pre-Construction Notification (PCN).
- 2) Flood frequency analyses for the dam (existing dam and proposed alternative) for the 25, 50, and 500-year runoff events.
- 3) Erosion and breach potential of existing spillways using survey information, geotechnical investigation findings, the geologic profiles and geotechnical information.
- 4) Geotechnical and structural analyses to demonstrate adequate safety factors as required by TCEQ Dam Safety for all components of the structure for the following conditions, as needed:
  - a. Embankment slope stability under the following loading/scenarios:
    - (1) End-of-construction
    - (2) Steady state
    - (3) Rapid drawdown (upstream slope)
  - b. Embankment seepage analysis
    - (1) steady state conditions
    - (2) Dynamic seepage for Rapid Drawdown
  - c. Spillway Stability

- (1) Hydrostatic and hydrodynamic loads
- (2) Uplift loads
- d. Earthwork and site preparation related recommendations for use during development of the plans and specifications.
- 5) Design monitoring instrumentation for the embankment and spillway consisting of piezometers and settlement points.
- 6) Construction Documents: drawings and specifications.
- 7) Bid Documents: Comparison of bids and recommendation award letter
- 8) Construction Progress Reports: Site visit reports and monthly reports
- 9) Record drawings: Drawings incorporating contractor's as-built markups

## **SCHEDULE**

FNI is authorized to commence work on the Elkins Lake Dam upon execution of this agreement and the CLIENT's completion of the performance of the Clearing and Grubbing in the area described in Attachment A. Clearing and Grubbing is to be performed by the CLIENT following Specification 31 11 00.13 Clearing and Grubbing in Attachment B. FNI agrees to complete the services within 6 months from the Notice to Proceed and completion of Clearing and Grubbing by the CLIENT.

If FNI's services are delayed through no fault of FNI, FNI shall be entitled to equitable adjustment of compensation and FNI shall be entitled to adjust the contract schedule consistent with the number of days of delay.



**DESIGNATED REPRESENTATIVES**

FNI and Owner designate the following representatives:

Owner's Designated Representative

Name:  
Address:  
Phone:  
E-mail:

Owner's Accounting Representative

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Phone: \_\_\_\_\_  
E-mail: \_\_\_\_\_

FNI's Project Manager

Name: Nicole Wiesner, P.E.  
Address: 801 Cherry Street, Suite 2800  
Fort Worth, TX 76102  
Phone: 817-735-7281  
E-mail: nmw@freese.com

FNI's Accounting Representative

Name: Billy Metzger  
Address: 10431 Morado Circle, Suite 300  
Austin, TX 78759  
Phone: 512-617-3177  
E-mail: [Billy.Metzger@freese.com](mailto:Billy.Metzger@freese.com)

**COMPENSATION**

FNI's proposed fee to provide the professional services outlined the scope of work above is a lump sum fee of Fifty-two Thousand Dollars (\$52,000). If FNI sees the Scope of Services changing so that Additional Services are needed, FNI will notify the Owner for approval before proceeding.

Payment of the services shall be due and payable upon submission of a statement for services. Statements for services shall not be submitted more frequently than monthly.



**TERMS AND CONDITIONS OF AGREEMENT**

We propose to furnish our services as described herein in accordance with Attachment TC, "Terms and Conditions of Agreement".

We sincerely appreciate this opportunity to submit this proposal for engineering support. If you are in agreement with the services described above and wish for us to proceed with this assignment, please sign below and return one copy of the agreement for our files.

Yours very truly,

Approved:

**FREESE AND NICHOLS, INC.**

**City of Dalworthington Gardens**

By: *Murphy Parks*

By: \_\_\_\_\_

Murphy Parks, P.E.

\_\_\_\_\_  
Print or Type Name

Title: Principal and Vice President

Title: \_\_\_\_\_

Date: December 8, 2021

Date: \_\_\_\_\_

**Attachments:**

Attachment TC – Terms and Conditions

Attachment A – Lake Elkins Dam Survey and Clearing Area Map

Attachment B – Specification 31 11 00.13 Clearing and Grubbing



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**ATTACHMENT TC - Terms and Conditions**

**TERMS AND CONDITIONS OF AGREEMENT**

1. **DEFINITIONS:** The term City as used herein refers to the City of Dalworthington Gardens. The term FNI as used herein refers to Freese and Nichols, Inc., its employees and agents, and its subcontractors and their employees and agents. As used herein, Services refers to the professional services performed by FNI pursuant to the Agreement.
2. **CHANGES:** City, without invalidating the Agreement, may order changes within the general scope of the work required by the Agreement by altering, adding to and/or deducting from the work to be performed. If any change under this clause causes an increase or decrease in FNI's cost of, or the time required for, the performance of any part of the Services, an equitable adjustment will be made by mutual agreement and the Agreement modified in writing accordingly.
3. **TERMINATION:** The obligation to provide Services under this Agreement may be terminated by either party upon 10 days' written notice. In the event of termination, FNI will be paid for all Services rendered and reimbursable expenses incurred to the date of termination and, in addition, all reimbursable expenses directly attributable to termination.
4. **CONSEQUENTIAL DAMAGES:** In no event shall FNI or its subcontractors be liable in contract, tort, strict liability, warranty, or otherwise for any special, indirect, incidental or consequential damages, such as loss of product, loss of use of the equipment or system, loss of anticipated profits or revenue, non-operation or increased expense of operation or other equipment or systems.
5. **INFORMATION FURNISHED BY CITY:** City will assist FNI by placing at FNI's disposal all available information pertinent to the Project including previous reports and any other data relative to design or construction of the Project. FNI shall have no liability for defects or negligence in the Services attributable to FNI's reliance upon or use of data, design criteria, drawings, specifications or other information furnished by City and City agrees to indemnify and hold FNI harmless from any and all claims and judgments, and all losses, costs and expenses arising therefrom. FNI shall disclose to City, prior to use thereof, defects or omissions in the data, design criteria, drawings, specifications or other information furnished by City to FNI that FNI may reasonably discover in its review and inspection thereof.
6. **INSURANCE:** FNI shall provide City with certificates of insurance with the following minimum coverage:
 

<p><b>Commercial General Liability</b></p> <p>General Aggregate      \$2,000,000</p> <p><b>Automobile Liability (Any Auto)</b></p> <p>CSL                              \$1,000,000</p>	<p><b>Workers' Compensation</b></p> <p>As required by Statute</p> <p><b>Professional Liability</b></p> <p>\$3,000,000 Annual Aggregate</p>
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7. **SUBCONTRACTS:** If, for any reason and at any time during the progress of providing Services, City determines that any subcontractor for FNI is incompetent or undesirable, City will notify FNI accordingly and FNI shall take immediate steps for cancellation of such subcontract. Subletting by subcontractors shall be subject to the same regulations. Nothing contained in the Agreement shall create any contractual relation between any subcontractor and City.
8. **OWNERSHIP OF DOCUMENTS:** All drawings, reports, data and other project information developed in the execution of the Services provided under this Agreement shall be the property of City upon payment of FNI's fees for Services. FNI may retain copies for record purposes. City agrees such documents are not intended or represented to be suitable for reuse by City or others. Any reuse by City or by those who obtained said documents from City without written verification or adaptation by FNI, will be at City's sole risk and without liability or legal exposure to FNI, or to FNI's independent associates or consultants, and City shall indemnify and hold harmless FNI and FNI's independent associates and consultants from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom. Any such verification or adaptation will entitle FNI to further reasonable compensation. FNI may reuse all drawings, report data and other project information in the execution of the Services provided under this Agreement in FNI's other activities. Any reuse by FNI will be at FNI's sole risk and without liability or legal exposure to City, and FNI shall indemnify and hold harmless City from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom.
9. **POLLUTANTS AND HAZARDOUS WASTES:** It is understood and agreed that FNI has neither created nor contributed to the creation or existence of any hazardous, radioactive, toxic, irritant, pollutant, or otherwise dangerous substance or condition at the site, if any, and its compensation hereunder is in no way commensurate with the potential risk of injury or loss that may be caused by exposures to such substances or conditions. The parties agree that in performing the Services required by this Agreement, FNI does not take possession or control of the subject site, but acts as an invitee in performing the Services, and is not therefore responsible for the existence of any pollutant present on or migrating from the site. Further, FNI shall have no responsibility for any pollutant during clean-up, transportation, storage or disposal

activities.

10. **OPINION OF PROBABLE COSTS:** FNI will furnish an opinion of probable project development cost based on present day cost, but does not guarantee the accuracy of such estimates. Opinions of probable cost, financial evaluations, feasibility studies, economic analyses of alternate solutions and utilitarian considerations of operations and maintenance costs prepared by FNI hereunder will be made on the basis of FNI's experience and qualifications and represent FNI's judgment as an experienced and qualified design professional. It is recognized, however, that FNI does not have control over the cost of labor, material, equipment or services furnished by others or over market conditions or contractors' methods of determining their prices.
11. **CONSTRUCTION REPRESENTATION:** If required by the Agreement, FNI will furnish construction representation according to the defined scope for these services. FNI will observe the progress and the quality of work to determine in general if the work is proceeding in accordance with the Contract Documents. In performing these services, FNI will report any observed deficiencies to City, however, it is understood that FNI does not guarantee the Contractor's performance, nor is FNI responsible for the supervision of the Contractor's operation and employees. FNI shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, or the safety precautions and programs incident to the work of the Contractor. FNI shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the Project site or otherwise performing any of the work of the Project. If City designates a Resident Project Representative that is not an employee or agent of FNI, the duties, responsibilities and limitations of authority of such Resident Project Representative will be set forth in writing and made a part of this Agreement before the Construction Phase of the Project begins.
12. **GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT:** City agrees to include provisions in the General Conditions of the Construction Contract that require Contractor to include FNI: (1) as an additional insured and in any waiver of subrogation rights with respect to such liability insurance purchased and maintained by Contractor for the Project (except workers' compensation and professional liability policies); and (2) as an indemnified party in the Contractor's indemnification provisions where the Owner is named as an indemnified party.
13. **PAYMENT:** Progress payments may be requested by FNI based on the amount of Services completed. Payment for the Services of FNI shall be due and payable upon submission of a statement for Services to CITY and in acceptance of the Services as satisfactory by the City. Statements for Services shall not be submitted more frequently than monthly. Any applicable new taxes imposed upon Services, expenses and charges by any governmental body after the execution of this Agreement will be added to FNI's compensation.
 

If City fails to make any payment due FNI for services and expenses within 30 days after receipt of FNI's statement for services therefore, the amounts due FNI will be increased at the rate of 1 percent per month from said 30th day, and, in addition, FNI may, after giving 7 days' written notice to City, suspend services under this Agreement until FNI has been paid in full, all amounts due for services, expenses and charges.
14. **ARBITRATION:** No arbitration, arising out of or relating to this Agreement, involving one party to this Agreement may include the other party to this Agreement without their approval.
15. **SUCCESSORS AND ASSIGNMENTS:** City and FNI each are hereby bound and the partners, successors, executors, administrators and legal representatives of City and FNI are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of this Agreement.
 

Neither City nor FNI shall assign, sublet or transfer any rights under or interest in (including, but without limitation, moneys that may become due or moneys that are due) this Agreement without the written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted 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. Nothing contained in this paragraph shall prevent FNI from employing such independent associates and consultants as FNI may deem appropriate to assist in the performance of Services hereunder.
16. **PURCHASE ORDERS:** If a Purchase Order is used to authorize FNI's Services, only the terms, conditions/instructions typed on the face of the Purchase Order shall apply to this Agreement. Should there be any conflict between the Purchase Order and the terms of this Agreement, then this Agreement shall prevail and shall be determinative of the conflict.

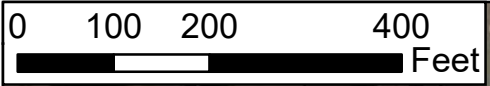





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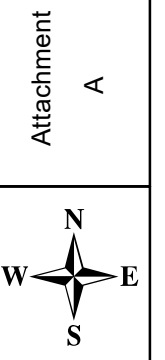
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**ATTACHMENT A - Lake Elkins Dam Survey and Clearing Area Map**



-  Area to be Cleared
-  XTO - Well Pad
-  Proposed Survey



**ELKINS LAKE DAM**  
**SURVEY AND CLEARING AREAS**

**FREESSE & NICHOLS**  
801 Cherry Street  
Suite 2800  
Fort Worth, TX 76102

FILE: LGB14516  
Client: City of Dalworthington Gardens, Elkins Lake Dam Survey & Clearing  
DATUM & COORDINATE SYSTEM  
NAD 83 2011 StatePlane Texas North Central FIPS 4202 FUS  
DATE: December 2021  
PREPARED BY: NMW

Attachment  
A



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**ATTACHMENT B - Specification 31 11 00.13 Clearing and Grubbing**



**31 11 00.13 CLEARING AND GRUBBING**

**1.00 GENERAL**

**1.01 WORK INCLUDED**

- A. Furnish labor, materials, equipment, and incidentals necessary to clear, grub, and dispose of cleared and grubbed materials. Maintain tools and other equipment necessary to completed specified work.

**1.02 JOB CONDITIONS**

- A. Debris, trash, or rubbish resulting from clearing and grubbing shall become property of the Contractor. It shall be promptly disposed of in compliance with the applicable ordinances.

**2.00 PRODUCTS (NOT APPLICABLE)**

**3.00 EXECUTION**

**3.01 CLEARING**

- A. Thoroughly clear to the limits indicated in Attachment A. Clearing shall consist of the felling, cutting up, and the satisfactory disposal of trees and other vegetation, together with the down timber, snags, brush, rubbish, and debris occurring within the area to be cleared. Cut off trees less than 6 inches in diameter, other vegetation, stumps, roots, and brush in the area flush with or slightly below the original ground surface.
- B. Remove timber, logs, stumps, roots, brush, rotten wood, and other refuse from the clearing operations from the Owner's property.
- C. Disposal of materials in streams shall not be permitted and no material shall be piled in stream channels or in areas where it might be washed away by floods. Timber within the areas to be cleared shall become the property of the Contractor, and the Contractor may cut, trim, hew, saw, or otherwise dress felled timber within the limits of the Owner's property, provided timber and waste material is disposed of in a satisfactory manner. No burning is allowed.

**3.02 GRUBBING (NOT USED)**

END OF SECTION

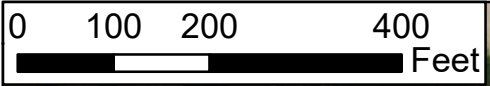
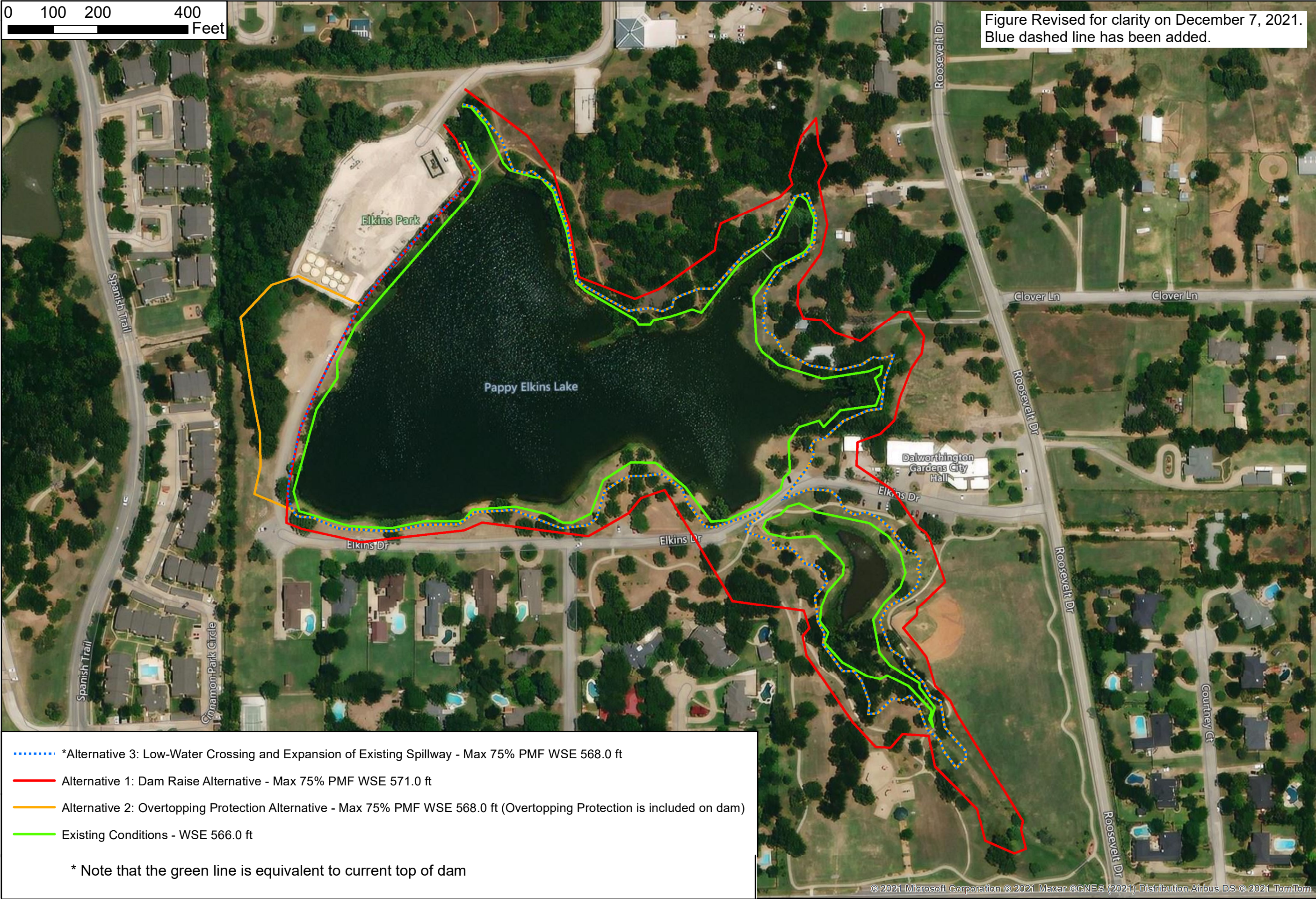
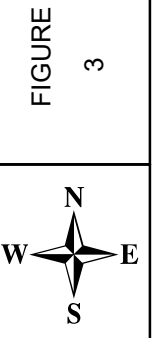


Figure Revised for clarity on December 7, 2021.  
Blue dashed line has been added.



- ..... \*Alternative 3: Low-Water Crossing and Expansion of Existing Spillway - Max 75% PMF WSE 568.0 ft
- Alternative 1: Dam Raise Alternative - Max 75% PMF WSE 571.0 ft
- Alternative 2: Overtopping Protection Alternative - Max 75% PMF WSE 568.0 ft (Overtopping Protection is included on dam)
- Existing Conditions - WSE 566.0 ft

\* Note that the green line is equivalent to current top of dam



**MAXIMUM FLOOD ELEVATIONS**  
**ELKINS LAKE DAM - ALTERNATIVES ANALYSIS**

**FREESSE & NICHOLS**  
4055 International Plaza  
Suite 200  
Fort Worth, TX 76109

FNI PROJECT	LGB14516
FILE	\\Lake Elkins Dam\GIS\Elkins_Alternatives.mxd
DATUM & COORDINATE SYSTEM	
WAD	1983 2011 State Plane Texas North Central FIPS 4202 FUS
DATE	January 2020
PREPARED BY	BET

## D3JD Enterprise LLC

10213 County Road 1001 Godley, TX 76044

682-597-9265 / d3jd2015@gmail.com

### **Estimate #1 for Dalworthington Gardens**

#### Scope of Work

The removal of all vegetation from the “spillway area” located on the northwest bank of Lake Elkins as defined in Exhibit B. This includes any and all trees (including root balls and stumps) as well as any vines, grass, weeds, etc. as outlined in Exhibit A. Once all vegetation is removed, the bottom and embankments of this area will be graded smoothly and lined with approximately 6” in diameter rock to prevent erosion and provide for a limited maintenance situation that can be sprayed for vegetation growth going forward. This area runs from the existing culverts leading under the lease road – southwest towards the water where an existing foot bridge is located.

#### Miscellaneous Information

D3JD Enterprise will provide all necessary labor, equipment, and materials necessary to complete this project as well as the disposal of any debris from the vegetation removal. Every effort will be made to adhere to local and industry safety parameters as well as frequent updates on the timeline from start to finish. Expected completion time from date which ground is broken is expected to be approximately 1 week depending on the weather.

Expected Cost = \$15,000 including rock

Mark DeMott

D3JD Enterprise LLC

## D3JD Enterprise LLC

10213 County Road 1001 Godley, TX 76044

682-597-92654 / [d3jd2015@gmail.com](mailto:d3jd2015@gmail.com)

### **Estimate #2 for Dalworthington Gardens**

#### Scope of Work

The “shredding” of all vegetation within the white line of the map Exhibit B (excluding the culvert area outlined in Estimate #1). This includes any and all vegetative material up to trees 6” in diameter. The vegetation will be cut down, mowed, “weed-eated”, or “shredded” up into a mulch like material to be left on the ground as cover. This also includes any basic tree trimming of those trees larger than 6” in diameter in order to provide accessibility for future ground maintenance.

#### Miscellaneous Information

D3JD Enterprise will all necessary labor, equipment, and materials necessary to complete this project. Every effort will be made to adhere to local and industry safety parameters as well as frequent updates on the timeline from start to finish. Expected completion time from date which ground is broken is expected to be approximately 1 week depending on the weather.

Expected Cost \$10,000

Mark DeMott

D3JD Enterprise LLC

## D3JD Enterprise LLC

10213 County Road 1001 Godley, TX 76044

682-597-92654 / [d3jd2015@gmail.com](mailto:d3jd2015@gmail.com)

### **Estimate #3 for Dalworthington Gardens**

#### Scope of Work

The removal of all vegetation within the white line of the map Exhibit B (including the culvert area). This includes any and all vegetation and trees, including root stumps and root balls. In areas that are an embankment or otherwise prone to erosion the addition of up to 6" in diameter rock will be installed in these areas. Every effort will be made to grade and smooth prior to the lining of the rock with drainage and erosion in mind.

#### Miscellaneous Information

D3JD Enterprise will all necessary labor, equipment, and materials necessary to complete this project. Every effort will be made to adhere to local and industry safety parameters as well as frequent updates on the timeline from start to finish. Expected completion time from date which ground is broken is expected to be approximately 1 week depending on the weather.

Expected Cost \$40,000 including rock

Mark DeMott

D3JD Enterprise LLC

### 3.01 CLEARING

A. Thoroughly clear to the limits of 10 feet outside the areas to be occupied by the embankment or structure, and to any additional limits indicated. Clearing shall consist of the felling, cutting up, and the satisfactory disposal of trees and other vegetation, together with the down timber, snags, brush, rubbish, and debris occurring within the area to be cleared. **Cut off trees less than 6 inches in diameter, other vegetation, stumps, roots, and brush in the area flush with or slightly below the original ground surface.** Trees and brush outside the limits of the indicated areas to be cleared, but within the immediate vicinity of the work that interfere with or retard the progress of construction operations, may be removed upon receipt of the approval of the Engineer. Clearing consists of removal flush with the ground surface.

B. **For trees larger than 6 inches in diameter and located within the area to be occupied by the embankment and structure, the following is required. Extra caution should be used for trees located on the crest of the dam or above** the half-way point on the downstream slope. To remove these trees the following method may be employed. Cut the tree one to four feet above the ground. A trench shall be dug around the tree stump. All roots shall be cut on each side of the trench. The tree stump shall be moved to allow the tap root to be cut and the tree stump shall be removed.

### 3.02 GRUBBING

A. Thoroughly grub the areas to be occupied by the embankment and structure and to any additional limits indicated. Grubbing shall consist of the removal and disposal of stumps and roots larger than 1 inch in diameter to the depth indicated, matted roots, and abandoned structures.

B. In foundation areas, excavate and remove stumps, roots, logs, or other timber more than 1 inch in diameter, matted roots, and other vegetative matter, and debris not suitable for foundation purposes to a depth not less than 18 inches below the final foundation ground elevation. Refill depressions excavated for and by the grubbing operations in the embankment area by placing material in 8-inch loose lifts and compacting. Continue the process until the refilled depression matches the surrounding grade.




C. Remove timber, logs, stumps, roots, brush, rotten wood, and other refuse from the clearing and grubbing operations from the Owner's property.

D. Disposal of materials in streams shall not be permitted and no material shall be piled in stream channels or in areas where it might be washed away by floods. Timber within the areas to be cleared shall become the property of the Contractor, and the Contractor may cut, trim, hew, saw, or otherwise dress felled timber within the limits of the Owner's property, provided timber and waste material is disposed of in a satisfactory manner.

# Lake Elkins Dam

Attachment A

**Legend**

-  Proposed Survey Area
-  XTO Well Pad
-  Area to be Cleared and Grubbed





# Elkins Dam Site



# Elkins Dam Site and XTO Pad Site



# Northeast Spillway - North of Pad Site



# East Side of Pad Site – Remain Untouched



# Northwest Spillway – North of Pad Site



# West Side of Site

Northwest Corner



Southwest Corner (both photos)



# West Side of Site Continued Clearing to Spillway Exit at Park Springs



# Far South End Showing Spillway Clearing

