

Attachment B



January 7, 2026

Project No. (AVO): 58516.001

City of Lewisville
Stacie Anaya, Director
Lewisville Parks & Recreation Department
191 Civic Circle
Lewisville, Texas 75067

RE: 30% Schematic Design LAKE PARK Phase A, and MARINA AREA Phase F, & G
600 Sandy Beach Rd, Lewisville, TX 75057

Dear Stacie Anaya,

At Halff we improve lives and communities by turning ideas into reality. We do that by working with great clients on meaningful projects. As such, we are pleased to submit the following Scope of Services for the Lewisville Lake Park 15% preliminary schematic design - Phase A, B, C, D, E AND Marina Area Phase F, G and H; and upon approval prepare 30% Schematic Design for LAKE PARK Phase (A) and MARINA AREA Phase (F, & G) for the City of Lewisville as shown in attachment C.

The proposed services to be performed are described in the Scope of Services (**Attachment A**). Proposed services that are not included as part of the Scope of Service are listed in the Exclusions/Available Additional Services (**Attachment B**); however, these services can be provided by Halff upon request as an additional service. A PROJECT Exhibit (**Attachment C**) and estimated PROJECT Schedule (**Attachment D**) is also included.

Unless otherwise modified, please note that the Scope of Services described herein shall remain valid and continue in effect for a period of 90 calendar days, after which it will require renewal in writing by CONSULTANT and CLIENT.

Thank you for the opportunity to work with you to improve lives and communities. Please feel free to contact me if you have any questions or comments regarding this Scope of Services.

Sincerely,

Lenny Hughes, PLA
Vice President, Halff
214.346.6266
lhughes@halff.com

ATTACHMENT A **SCOPE OF SERVICES**

PURPOSE

Halff (CONSULTANT) shall provide Landscape Architecture and Engineering Services for Lewisville Lake Park Phase A and Eagle Point Marina Area Phase F & G (PROJECT will be known as LAKE PARK, and MARINA AREA for the purpose of submitting to the USACE), and to the City of Lewisville (CLIENT). The purpose of the PROJECT is to take the final master plans completed and approved by the CLIENT and USACE in December 2024, and provide conceptual refinement and 15% preliminary schematic design for Phase A, B, C, D, E, F, G and H, and prepare 30% schematic design for LAKE PARK Phase A and MARINA AREA Phase F & G. Design services include SUE, surveying, landscape architecture, engineering, environmental, and hydraulic analysis for the proposed improvements.

SCOPE

The PROJECT is located at 600 Sandy Beach Rd, Lewisville, TX 75057 and will consist of approximately 115 acres in Lake Park, and 93 acres at Eagle Point Marina. This scope of work includes the project management, coordination (USACE, TxDOT/DART/DCTA/COL), public and stakeholder engagement, subsurface utility engineering (SUE), survey, geotechnical engineering, civil engineering, landscape architecture, 15% preliminary schematic design - Phase A, B, C, D, E, F, G and H and upon approval of the 15% preliminary schematic design, CONSULTANT will prepare 30% schematic design services for the LAKE PARK Phase A, and MARINA AREA Phase F & G improvements. This scope of work also includes the comprehensive traffic modeling and water/wastewater analysis and sizing for the entirety of the approved master plan. Phase A, F, and G improvements per the December 2024 Lake Park Master Plan approval by CLIENT and USACE are described as follows:

LAKE PARK Phase A

- Lake Park Road from North Mill Street to Sandy Beach Road and associated linear sidewalks and trails where adjacent to the roadway.
- Sandy Beach Road from Lake Park Road to Trotline Road with a roundabout intersection at Trotline and Sandy Beach and associated linear sidewalks where adjacent to the roadway.
- Trotline Road from Sandy Beach Road to approximately Hobie Point and two slip road style parking lots and associated linear sidewalks where adjacent to the roadway.
- Parking lot expansion improvements to the existing southern baseball and softball field lot along Lake Park Road.
- Improvements to the Lake Park Golf Course club house building area and parking lot, Golf Maintenance Area (fencing/yard), Welcome Center area and future controlled access.
- Loop road, five (5) parking lots, and connected trail improvements within the peninsula north of Sandy Beach Road between Catfish Road and Trotline Road.
- Day-use Park improvements, beach front development and picnic areas, signature playground, splash pad, volleyball and multi-use courts, pavilions, restrooms, parking, walkways, fishing piers, boardwalks, trails, and associated amenities.

- Sandy Beach Road from Lake Park Road to the intersection of Oakridge Boulevard and associated linear sidewalks where adjacent to the roadway.
- Oakridge Boulevard from North Mill Street to Sandy Beach Road and associated linear sidewalks where adjacent to the roadway.
- Northern RV camping pads associated loop roads, parking lots, connected trail improvements, and major site amenities called out on the aforementioned Master Plan.
- RV park amenity improvements, picnic areas, signature playground, splash pad, volleyball and multi-use courts, pavilions, restrooms, parking, walkways, fishing piers, boardwalks, trails, and associated amenities.

MARINA AREA Phase F

- Garden Ridge Boulevard extension from existing IH 35 terminus to West Shore Drive including roundabout intersection with Eagle Point Road, associated parking lots and connection to DCTA Lewisville Lake Station parking lot.
- Eagle Point Road to proposed center terminus and Eagle Point loop road with associated parking lots.
- Southern trail connection from Garden Ridge Boulevard extension to IH 35 and Sandra Drive.

MARINA AREA Phase G

- Eagle Point trail systems, perimeter lake trail connection from Phase F&G to Phase D&A, public amenity areas, lake access, and other major site amenities called out on the aforementioned Master Plan, excluding cabin trail system.

ASSUMPTIONS

This scope of services (the "Scope of Services") has been prepared using the following assumptions as a basis for its preparation:

GENERAL ASSUMPTIONS

1. The Scope of Services represents a single, stand-alone project consisting of the Lake Park and Eagle Point Marina development areas. The tasks described below for preliminary and final schematic design of the proposed improvements at Lake Park and Eagle Point Marina will be considered in their entirety with no removal or separation of tasks for the completion of the PROJECT.
2. Internal project meetings described herein will be held at the CLIENT's office or virtually, unless on-site meeting is specified. CONSULTANT shall notify CLIENT and request additional compensation if additional meetings are necessary for ongoing coordination and/or the completion of the PROJECT.
3. In addition to any base map data provided by the CLIENT (as described above), CONSULTANT will utilize publicly available and CLIENT-provided data (aerial ortho imagery, contours, record drawings, etc.) to supplement PROJECT development outside the limits of survey. Supplemental information will be used in the assessment, review, and design of the proposed improvements.
4. The PROJECT schedule shall be subject to CLIENT, USACE and Agency reviews within a maximum of 120 calendar days. Review periods exceeding 120 days may impact subsequent submittals and milestone dates.
5. The CLIENT will be responsible for distributing, coordinating, and facilitating all submittal milestones/packages to necessary stakeholders, including correspondence during the submittal

review period(s) and providing CONSULTANT with organized reviews and/or comments and/or feedback from reviewing entities.

6. All tasks/phases in this scope are lump sum unless stated otherwise (see Basis of Compensation)
7. CLIENT, will provide available existing conditions information and base-map data, including, but not limited to:
 - As-built plans, record drawings, and/or condition assessments for existing and proposed utilities located within the proximity or adjacent to the PROJECT area.
 - Current Park usage data.
 - Existing Plans, As-builts and proposed improvements for roadways, utilities, sites, etc.,
 - Tree Survey data, species and location for Lake Park area, as provided by Davey/Greehill
 - Current property and easement information.
 - Existing or previous environmental reporting.
 - Base information such as CADD or GIS data
 - GIS data for FEMA floodplain
 - Hydraulic models
 - Water and wastewater model

CONSULTANT will follow CLIENT guidelines for RFI's for all file request.

8. All of LAKE PARK and EAGLE POINTMARINA AREA will be completed to a 15% preliminary schematic design layout.
9. LAKE PARK Phase A, and MARINA AREA Phase F & G will be completed to 30% schematic design construction documents.
10. The 30% design will be based on the approved Master Plan completed December 2024
11. The CONSULTANT shall prepare a separate scope and fee to finish out the remainder of the design beyond the 30% drawing package.
12. The tree survey will include surveying individual trees, measuring trees 6" dbh and greater, to get a cumulative estimated total as an approved method by the USACE for the EAGLE POINT MARINA AREA only and along the proposed connecting trail to LAKE PARK. The CONSULTANT will utilize the tree survey data provide by the CLIENT & Davey/Greehill company for the LAKE PARK area, showing tree location, size, and species on plan and in data table format.
13. Environmental Assessment scope (EA) will be based on providing the necessary items as part of the EA for Eagle Point Marina demarcated by the lease line between the City of Lewisville and the USACE. EA scope of work will cover the Eagle Point Marina Upland Area ONLY and will not include water-based EA review of the Marina, Boat Slips, and Breakwater repair and replacement. Any EA reviews and or assessments of water-based activities as noted above, will require a contract amendment as approved by the COL.

PHASE 1 – PROJECT MANAGEMENT AND PRE-DESIGN

TASK 1.1 – PROJECT MANAGEMENT AND COMMUNICATION

Project Management Coordination, Communications, and Reporting:

CONSULTANT will provide monthly reports to the CLIENT in 8.5"x11" format, delivered electronically, which will detail the current progress, highlight any outstanding issues, and address future concerns. This will be combined with the monthly invoicing. Additionally, CONSULTANT will conduct internal meetings with their staff for effective coordination and communication regarding the PROJECT.

Monthly Project Coordination Meetings:

CONSULTANT will meet with the CLIENT once a month, over the course of the schedule, up to twenty-four (24) meetings, to answer questions related to the PROJECT and update the CLIENT on the PROJECT'S progress and schedule during the schematic design phase. Monthly reports and notes will be taken by the CONSULTANT to record items discussed and decisions made during this meeting and provided to all attendees.

USACE Coordination Meetings:

CONSULTANT in conjunction with the CLIENT will conduct up to six (6) in-person Agency meetings to introduce the Project Purpose and Understanding, outline project goals, schedule and timeline, gather input and provide project status update throughout the duration of the planning and design process and at major milestones at 15% Preliminary Schematic and 30% Final Schematic Design. We will review the proposed designs, improvements, and requirements for new construction. Agency partners shall include:

- **USACE Meetings**—One (1) meeting will occur at 15% preliminary schematic design and one (1) meeting at 30% final schematic design to provide the USACE an update on the PROJECT and to address relevant feedback from previous meetings. Based on the complexity and duration of the project, Halff will meet with the USACE throughout the process to provide updates and to seek additional comments/guidance based on progress of the proposed development. Additional meetings shall include up to four (4) meetings. **Meetings:** Six (6) meetings

Task 1.1 Deliverables:

Deliverables provided by the CONSULTANT shall include the following:

- *One (1) Digital PDF copy of the monthly progress reports and any presentations used during meetings (if requested).*
- *One (1) Digital PDF copy of the Agency coordination meeting notes, and any presentations used during meetings (if requested).*

TASK 1.2 – PROJECT KICK-OFF MEETING

Project Kick-off Meeting:

CONSULTANT will attend one (1) in-person coordination/project kick-off meeting with the CLIENT (determined by CLIENT) to confirm the goals, objectives, budget, schedule and program of proposed improvements of the PROJECT. Notes will be taken by the CONSULTANT to record items discussed and decisions made during this meeting and provided to all attendees.

- Project Kick-Off Meeting – One (1) in-person meeting (4 Hours maximum duration) (inclusive of travel time)

Task 1. 2 Deliverables:

- *One (1) Digital PDF copy of the Project Kick-Off meeting notes.*

TASK 1.3 – QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

CONSULTANT will perform internal Design Quality Control and Quality Assurance (QA/QC) reviews of CONSULTANT'S deliverables prior to each submittal milestone. CONSULTANT will ensure that quality

design principles are implemented across the project. Includes QA/QC of internal and external disciplines and sub-consultants.

TASK 1.4 – SITE OBSERVATION

Site Observation / Preliminary Field Review and Report:

CONSULTANT will initiate, schedule, and participate in one (1) Site Observation/Preliminary Field Review meeting with the CLIENT of the PROJECT area shown in Attachment C. An aerial photograph of the site will be taken to the site visit and used to confirm location and condition of existing improvements. The field review is necessary to identify key opportunities and constraints. The site observation will also include the gathering and evaluation of relevant information related to the PROJECT. CONSULTANT will prepare one (1) Field Review Report detailing the observations and identified opportunities and constraints associated with, but not limited to, topography of the site, utilities, vegetated areas, neighborhood impacts, drainage, and impacts to existing conditions. Evaluation of the site will be limited to visual field measurements and observations; no subsurface or interior investigations will be conducted. Photographs shall be taken by the CONSULTANT to record existing conditions and may be provided to the CLIENT.

Task 1.4 Deliverables:

- One (1) Digital PDF copy of the Field Assessment Report / Base Map.
- One (1) combined PDF of all Site Photographs.

TASK 1.5 – BASE MAP PREPARATION

Data Collection / Base Map Preparation:

The CLIENT will provide the CONSULTANT updated available data relevant to the PROJECT. With the assistance from the CLIENT, CONSULTANT will update the previously prepared project base map for use in the proceeding tasks. Updated available data may include the following information:

- Google Earth and/or Near Map existing aerial photography, mapping, and survey information
- Existing survey
- Utility (as-builts and/or record drawings) data including underground/at-grade/overhead, location, type, size, owner name and contact information
- Property Lines, Easements, ROW Limits, and other information (as available)
- Previously prepared drainage studies
- Soils information collection

Task 1.5 Deliverables:

- One (1) Digital PDF copy of the project Base Map.

TASK 1.6 – PUBLIC OUTREACH/STAKEHOLDER MEETINGS

Public Engagement Meetings:

CONSULTANT will conduct no more than three (3) Public Engagement meetings, five (5) Stakeholder meetings, two (2) Park Board meetings, and two (2) City Council briefings in coordination with the CLIENT to present the PROJECT vision, schedule, timeline, and to garner input from the public. Anticipated length of Public Engagement Meetings shall be 4 hours (inclusive of travel and setup time). Each stakeholder and agency meeting is limited to one (1) hour each not including travel time. All meetings will be held at a central location with adequate capacity. The meeting date will be scheduled at an appropriate time during the project schedule. The CLIENT will be responsible for reserving or

providing the meeting location and promoting the meeting. Unless otherwise directed by CLIENT, public meetings may have a virtual option available via Microsoft Teams (or equivalent) with the ability to develop participant polls/survey capabilities. If additional meetings are necessary for ongoing coordination and/or the completion of the Development Plan, CONSULTANT shall notify CLIENT and request additional compensation. MARINA AREA shall have separate Public Meetings focused on NEPA and the Environmental Impacts of the site. (SEE *Environmental Section below.*)

The public engagement meetings and presentation material will be as follows:

Public Engagement Meetings – Three (3) Meetings

CONSULTANT will prepare and conduct three (3) in-person meetings on days and locations to be determined. We will review the proposed preliminary and final schematic designs, programming, site/facility improvements, and discuss the proposed schedule and timeline. Following this presentation, we invite attendees to share feedback.

- **Meeting 1:** CLIENT and CONSULTANT will introduce the PROJECT and present the Vision using preliminary ideas of the approved master plan and strategies previously established, identifying opportunities, constraints, and possible amenities. The goal of the meeting is to garner feedback that can be used for the creation of the Preliminary Schematic Design.
- **Meeting 2:** CLIENT and CONSULTANT will present 15% Preliminary Schematic Design Plan concepts, addressing feedback received from Meeting 1. The goal of the meeting is to present the preliminary designs and ideas and garner feedback that can be used for the creation of the Final Schematic Design.
- **Meeting 3:** CLIENT and CONSULTANT will present 30% Final Schematic Design Plan, addressing feedback received from Meeting 2. The goal of the meeting is to present the final schematic design plan and garner any additional feedback. Comments received will be incorporated into the Final Plan.

Stakeholder Meetings – Five (5) Meetings

Present the proposed designs, concepts, programming, and site improvements, for preliminary and final schematic designs. At these meetings we will present the ideas and engage with stakeholder to present the proposed improvements for Lake Park.

- **Disc Golf:** CONSULTANT will reintroduce the PROJECT and present the Vision using preliminary ideas and strategies previously established in the approved master plan, identifying opportunities, constraints, and possible amenities. The goal of the meeting is to present the concepts and ideas of the master plan in more detail and to garner feedback that can be used for the creation of the Preliminary Schematic Design. **Meetings:** One (1) meeting
- **Fishing / Boating / RV Campers:** CONSULTANT will reintroduce the PROJECT and present the Vision using preliminary ideas and strategies previously established in the approved master plan, identifying opportunities, constraints, and possible amenities. The goal of the meeting is to garner feedback that can be used to verify user preferences and program elements that may be used in the creation of the Preliminary Schematic Design. **Meetings:** One (1) meeting
- **Arcis Golf:** CONSULTANT will provide an update to Arcis Golf at 15% preliminary schematic design, two (2) meetings, and 30% final schematic design, one (1) meeting, to provide Arcis Golf an update on the PROJECT status and to address relevant feedback from previous meetings. The goal of the meetings is to garner feedback and coordinate proposed improvements for the Golf Clubhouse, Maintenance Area, Parking and Future Clubhouse relocation that can be used for the creation of the Preliminary and Final Schematic Design. **Meetings:** Three (3) meetings

City Council Briefings – Two (2) Meetings

City of Lewisville City Council: CONSULTANT will brief Council on PROJECT status, design progress of proposed improvements, and status of projected construction costs based on provided OPCC's. The goal of the briefings is to present the concepts and ideas as developed throughout the Preliminary and Final Schematic Design phases and to garner feedback that may be used in the refinement of those plans. **Meetings:** Two (2) meetings

Park Board Meetings – Two (2) Meetings

City of Lewisville Parks Board: CONSULTANT will introduce the PROJECT and present the Vision using preliminary ideas and strategies, and communicate opportunities, constraints, and possible amenities established during the Master Plan process. The goal of the meetings is to present the concepts and ideas of the master plan in more detail and to garner feedback that can be used for the creation of the Preliminary and Final Schematic Design. **Meetings:** Two (2) meetings

Task 1.6 Deliverables:

Notes may be taken by the CONSULTANT to record items discussed and decisions made during project meetings as listed above and will be provided to the CLIENT in 8.5"x11" digital PDF format. Deliverables provided by the CONSULTANT shall include the following:

- One (1) Digital PDF copy of the Public Engagement, Stakeholder and Park Board meeting summary notes.
- One (1) Digital PDF copy of the presentation and boards.

TASK 1.7 – UTILITY/TRANSPORTATION COORDINATION

Utility Coordination - One (1) Meeting

The CONSULTANT will provide utility coordination services at the 30% design stage, which includes issuing project notifications, preparing utility layouts, recommended burials and/or relocation, creating contact lists, reviewing conflicts, and developing a utility conflict matrix. The CONSULTANT will deliver a Utility Conflict Layout, Electrical Service Demand, Conflict Matrix, and Contact List that identify potential conflicts based on the 30% design.

- Assessment of existing electrical service to LAKE PARK and MARINA AREA
 - Contact and coordination with electric utility company
 - Request and review the utility's as-built one-line diagram
 - Identify current electric service locations and voltage type available
 - Identify utility transformer rating and review available historical peak demands
 - Facilitate up to three coordination meetings (virtual) to validate data and discuss expansion options
 - Perform NEC (National Electrical Code) based electrical service load calculations for LAKE PARK and MARINA AREA Master Plan
 - Electrical service demand/load computations to include all and proposed facilities (per attached Master Plan Components)
- Utility Conflict Layout, Utility Conflict Matrix, Utility Contact List
 - The CONSULTANT shall prepare and deliver one (1) iteration of the Utility Conflict Layout, Utility Conflict Matrix (UCM), and Utility Contact List identifying potential known conflicts based on 30% design to support Utility Coordination Efforts conducted under a subsequent contract.
 - The layout and UCM shall include all existing utilities which are to remain in place, buried, those to be abandoned or removed, and those to be adjusted based upon the level of detail contained in the 30% design.

DART/DCTA/TxDOT Coordination - Four (4) meetings

The CONSULTANT will provide coordination services between DART, DCTA, and TxDOT on the master plan for Lake Park as it relates to transportation.

- CONSULTANT shall attend one (1) pre-design meeting with the DART and DCTA to discuss project goals and pre-design elements.
- CONSULTANT shall prepare, submit, and obtain one (1) right of entry application for the DART, DCTA, TxDOT properties affected by the Master Plan.
- CONSULTANT shall submit one (1) digital copy of the 15% preliminary design plans for DART, DCTA, and TxDOT at the completion of the 15% design phase. Comments on the 15% design set shall be addressed as part of the 30% design.
- CONSULTANT shall submit one (1) digital copy of the 30% design plans for DART, DCTA, and TxDOT at the completion of the 30% design phase. Comments on the 30% design set shall be addressed as part of the 60% design and will be negotiated under a separate contract.

Task 1.7 Deliverables:

- *Provide a 2-page Electrical Power Distribution, schematic design-type, narrative for LAKE PARK and MARINA AREA Master Plan specific to the electrical service.*
 - *Summary of assessment*
 - *Detailed NEC load-calculation tables and assumptions*
 - *Identify proposed electric service locations and voltage types*
- *One (1) digital PDF copy of Electrical Distribution Narrative.*
- *One (1) digital PDF copy of the 15% and 30% design set for comments to all parties listed above.*
- *One (1) digital PDF copy of Right of Entry (ROE) Application.*

TASK 1.8 – TOPOGRAPHIC SURVEY

Topographic Survey:

A licensed surveyor will perform detailed topographical surveying for the PROJECT. The survey will be based on Texas State Plane Coordinate System 4202 North Central Texas datum. The survey will include the following:

- A licensed surveyor will perform detailed topographical surveying for the PROJECT. The survey will be based on Texas State Plane Coordinate System 4202 North Central Texas datum. The survey will include the following:
- Approximately 220 acres of LAKE PARK and MARINA AREA combined. The limits are not intended to cover the entirety of the Lake Park tract and instead represent the areas adjacent to the proposed improvements.
- Horizontal and Vertical control points established such that all points of construction are within five hundred (500') feet of a control point.
- Topographic features will be surveyed within the limits of the project as defined in the attached exhibits.
- Ground surface contours at an interval of one (1') foot supplemented by appropriate spot elevations accurate to 0.1-foot elevation.
- Existing surface utility appurtenances (including overhead electric poles) will be identified, along with other visible surface features and existing improvements.
- Flow line elevations of all storm drain headwalls will be identified.
- Top of bank and flow line elevations will be identified.

- Underground public utilities will be shown, based on field ties of visible surface appurtenances and public utility plans provided by the client. The surveyor and engineer cannot certify as to the accuracy or completeness of the record documents used to depict the existing underground utilities. No underground utility locating services are to be utilized or provided as a part of this contract.
- Top of pavement grades will be identified into existing paving.
- Contours +532 and +537 will be highlighted on the topographic survey as the flood control pool and the flowage easement.

TASK 1.9 – TREE SURVEY

Tree Survey:

A certified arborist/surveyor in coordination with the CLIENT will locate, tag, and identify existing tree species (6" and larger) within the project limits of EAGLE POINT MARINA and the Proposed Trail Connection to LAKE PARK and summarize based on size, species and health characteristics. CONSULTANT will utilize Tree Survey Data as provided by the CLIENT & Davey/Greehill company, showing tree location, size, and species on plan and in data table format. This tree survey will consist of gathering information in two different ways under the following criteria:

1. **Individual tree locations** EAGLE POINT MARINA Area - Will be identified and recorded within open areas which are easily accessible with open understory.

Existing tree locations will be incorporated into the topographic survey and all base files for use and consideration during the design of specific improvements and amenity features.

Tree Summary Tables:

Existing tree survey information will be compiled into a single table which summarizes the information from the tree survey including total number of trees and caliper inches as part of the tree survey. As part of the 30% design package, the tree summary information will be provided to understand the potential impacts of the proposed improvements, however, will not determine status of existing trees to remain, removed, or protected until beyond 30%.

Task 1.9 Deliverables:

One (1) digital PDF copy of the tree inventory and summary table.

TASK 1.10 – SUBSURFACE UTILITY EXPLORATION (SUE)

SUE Services:

Consultant will perform SUE in accordance with ASCE/UESI/CI 38-22 "Standard Guideline for Investigating and Documenting Existing Utilities." This standard defines the following Quality Levels:

Quality Level-A: Precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point. Minimally intrusive excavation equipment is typically used to minimize the potential for utility damage. A precise horizontal and vertical location, as well as other utility attributes, is shown on plan documents.

Quality Level-B: Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. Quality Level-B data should be reproducible by surface geophysics at any point of their depiction. This information is surveyed to applicable tolerances defined by the project and reduced onto plan documents.

Quality Level-C: Information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to Quality Level-D information.

Quality Level-D: Information derived from existing records or oral recollections.

Quality Level-A Utility Test Holes (Vacuum Excavation):

Quality Level-A Test Holes are not part of this Scope of Services.

Quality Level-B Utility Designating:

Halff will designate the approximate horizontal position of conductive/toneable utilities within the project limits using geophysical prospecting equipment and mark using paint and/or pin flags. We anticipate the designation of buried communication, electric, natural gas, traffic signal, water, wastewater/sanitary sewer, and storm drain/storm sewer. Designation of irrigation lines, HDPE lines, gathering lines, asbestos concrete and/or pvc lines, as well as pvc lines without tracer wire or access are not part of this Scope of Services.

Because of limited utility record information and the possibility of non-conductive/un-toneable utilities, Halff cannot guarantee all utilities will be found and marked within the project limits.

Quality Level-C Surveying:

Quality Level-B Utility Designation paint markings, pin flags, and above ground utility appurtenances will be surveyed and tied utilizing project survey control provided by the Client.

Quality Level-D Records Research:

Any available Records will be provided to Halff by the Client. Halff will perform additional record research as needed to successfully complete the project.

Because there are situations where the utility does not have a metallic composition, a metallic tracer line attached, or access to insert a tracer line, the approximate location of the utility may be determined by the use of utility records and direct correspondence with the utility owner/representative. In these areas, the information will be considered Quality Level-D, depicted according to utility record information only.

SUE Field Manager / Professional Engineer:

A SUE Field Manager will be on-site for a portion of this project for field crew supervision, field quality control, and coordination with on-site personnel. A Professional Engineer will be responsible for QA/QC, management of the contract, signing the final deliverables and coordination with the project team.

SUE Deliverables / CADD:

Deliverables for the Quality Level B 2D Utility Designation will be 11-in. x 17-in. SUE plan sheets depicting the findings of the investigation. Electronic files will be provided in MicroStation and/or AutoCAD format along with PDFs. A Utility Investigation Report will be provided in accordance with ASCE/UESI/CI 38-22.

Right-of-Entry:

Right-of-Entry is not part of this Scope of Service. If right-of-entry is required, it will be performed and provided to Halff by the Client. Halff will coordinate with property owner(s) once right-of-entry has been obtained.

Permitting:

Permitting is not part of this Scope of Services.

Work Zone Traffic Control:

Halff will provide standard temporary work zone traffic control consisting of cones and free-standing signage for this project. This Scope of Services does not include lane closure(s), flag person(s), changeable message board(s), arrow board(s) and/or engineered traffic control plans.

1. If an engineered traffic control plan is required for permit approval or if unique traffic control conditions exist, Halff will notify the Client and submit a supplemental agreement for authorization prior to proceeding with additional work.

TASK 1.11 – GEOTECHNICAL REPORT

Subsurface Drilling:

Experienced drillers and technicians will evaluate subsurface conditions with a total of eighty (80) sample borings according to the following field program:

- Proposed Structures - Eighteen (18) borings to depths of 30 to 50 feet below existing grades
- Trails/paving, utility/drainage, and retaining wall design - sixty-two (62) borings to depths of 15 to 20 feet

Geotechnical Report:

A geotechnical report will be prepared to present the results of the field and laboratory testing together with an analysis of the results and provide recommendations. CLIENT will be provided three (03) 8.5"x11" printed copies and a PDF electronic copy of the report. The report will address the following:

- General soil and ground-water conditions
- Recommendations for foundation type, depth and allowable loading
- Minimum penetration of piers to resist uplift (if required)
- Foundation construction requirements
- Recommendations for slab support, including an evaluation of the swell characteristics of the subgrade soils
- Recommended lateral pressures for the design of retaining structures
- Comments on difficulty of excavation, including water, caving soils and granular materials
- Recommendations for pipe installation, including bedding and backfill
- Earthwork recommendations
- Guidelines for pavement design

Task 1.11 Deliverables:

- *One (1) digital PDF copy of the Geotechnical Report*
- *One (1) bound hard copy of the Geotechnical Report*

TASK 1.12 – TRAFFIC ANALYSIS

Traffic Analysis Data Collection:

CONSULTANT will conduct a comprehensive traffic study and data collection to assess roadway conditions around a development site. This includes performing a site visit to evaluate existing conditions and conducting 24-hour traffic counts at key intersections and road segments during weekdays, and Holiday Weekend. The team will gather information from the client, including historical and projected park usage, planned developments and roadway improvements, and traffic signal timing plans. Additionally, the team will coordinate with TxDOT to obtain historical traffic data, plans for future improvements, and crash data within the study area.

- Conduct a site visit to identify the existing roadway conditions in the immediate area of the development site.

- Conduct weekday and Holiday Weekend 24-hour turning movement traffic counts (TMCs) at the following intersections:
 - Northbound IH 35E frontage road / Garden Ridge Boulevard
 - Southbound IH 35E frontage road / Garden Ridge Boulevard
 - Garden Ridge Boulevard / north – south on-site connector road east of IH 35E
 - Oakridge Boulevard / Sandy Beach Road / Mill Street
 - Lake Park Road / Mill Street
- Conduct weekday and Holiday Weekend 24-hour bi-directional link volume traffic counts at the following locations:
 - On the north – south on-site connector road just south of the DCTA station south driveway
- Acquire the following information from the Client and / or the project team:
 - Historical park usage data
 - Projected future park usage and special event information
 - Planned or proposed developments in the study area
 - Planned or proposed roadway improvements in the study area
 - Projected development construction schedule:
 - Full construction start and end dates
 - Construction phases start and end dates, if applicable
 - Traffic signal timing plans for the Garden Ridge Boulevard intersections with the IH 35E frontage roads
- Acquire the following information from the Texas Department of Transportation (TxDOT):
 - Historical traffic count data in the study area
 - Plans for future roadway improvements in the study area
 - Crash data within the study area

Traffic Analysis/Evaluation:

Based in the data collected, the CONSULTANT will identify existing peak hour traffic volumes at key intersections, estimating and distributing trips for the proposed development, and developing background traffic volumes for a No Build scenario. The study will also analyze intersection level-of-service (LOS) for existing, No Build, and Build scenarios. Additionally, it addresses site circulation, internal traffic controls, special event traffic flow, and identifies mitigation measures to manage projected traffic impacts in the study area.

- Identify existing weekday AM and PM and Saturday peak hour volumes at the study intersections listed under Data Collection.
- Generate weekday 24-hour, AM peak hour, and PM peak hour and Saturday 24-hour and peak hour trips for the proposed development.
- Distribute the weekday AM and PM peak hour and Saturday peak hour development trips at the study intersections listed in Data Collection for the Build scenario.
- Develop weekday AM and PM peak hour and Saturday peak hour background (non-development) volumes at the study intersections listed in Data Collection for the No Build scenario.
- Develop weekday AM and PM peak hour and Saturday peak hour total (background plus development) volumes at the study intersections listed in Data Collection for the Build scenario.
- Conduct weekday AM and PM peak hour and Saturday peak hour intersection level-of-service (LOS) analyses at the study intersections listed in Task Data Collection for the following scenarios:
 - Existing (existing volumes only)
 - No Build (background growth of existing volumes)
 - Build (background volumes plus development site traffic)
- Address site circulation through the north and south sections of the park.
- Address traffic controls at the study intersections listed in Data Collection and at key intersections internal to the north and south sections of the park.
 - Includes Traffic Signal Warrant Analysis at Mill St. and Lake Park Rd.
- Address potential special event traffic flow options.

- Auto Turn analysis for RV's, Vehicle, Boat and Trailer, Semis at intersections
- Left / Right turn bays and queuing at peak analysis.
- Identify other mitigation measures, as necessary, to accommodate projected background and development-generated traffic in the study area.

Report Preparation:

The CONSULTANT will prepare a preliminary draft Traffic Engineering (TE) report that details the traffic analyses and proposed mitigation measures. Upon approval, a final signed and sealed TE report will be submitted to the client.

- Prepare a preliminary draft TE report that documents the traffic analyses and mitigation measures for review by the Client and project team.
- Coordinate with the Client and project team to address any comments identified in the preliminary draft TE report.
- Upon obtaining approval of the preliminary draft TE report from the Client, prepare a final, signed and sealed TE report and submit to the Client.

Conference Calls:

The CONSULTANT will schedule and attend up to three (3) conference calls with the Client and project team to discuss the project and TE report.

Task 1.12 Deliverables:

- *One (1) digital PDF copy of the traffic engineering report.*
- *Digital copies of the notes taken during the conference calls with the CLIENT.*

TASK 1.13 – WATER AND WASTEWATER MASTER PLAN DEVELOPMENT

Water/Wastewater Demand Calculations and Constraints:

The CONSULTANT will project water demands and wastewater flows, conceptually designing the water and wastewater pipe networks, and determining pipe sizes and lift station capacities. It includes assessing the impact of planned improvements on the existing infrastructure using available hydraulic models. Deliverables consist of a site map showing improvements included in the 30% design plans and a technical memorandum summarizing the findings.

The CONSULTANT will develop the Water and Wastewater Master Plan by performing the following tasks:

- Prepare water demand and wastewater flow projections for the approved 15% schematic design.
- Conceptually layout water pipe network and wastewater pipe system (including any lift stations) for the approved master plan.
- Determine pipe diameters and lift station capacities. A water hydraulic model will be used to size water system pipe diameters. A spreadsheet will be used to size wastewater pipe diameters and lift station head and horsepower requirements.
- Concept level determination of the impact from the water demands/wastewater flows of the approved master plan improvements on the existing City of Lewisville infrastructure. It is assumed the existing hydraulic models for the water and wastewater systems can be supplied to CONSULTANT from the CITY and utilized for this task. If not available, this task would be an Additional Service. The concept level determination will assume replacement of water/wastewater lines with larger diameter pipelines where hydraulic conditions dictate. This task does NOT include impact determinations on existing Lewisville treatment plants, storage, or pumping. If necessary, those can be evaluated as an Additional Service.

Task 1.13 Deliverables:

- One (1) digital PDF copy site map showing the water and wastewater improvements to be included in the 30% design plans.
- One (1) digital PDF copy of a brief Tech Memo documenting the findings.

PHASE 2 – CONCEPT REFINEMENT

TASK 2.1 – PRELIMINARY DESIGN STANDARDS FOR LAKE PARK and MARINA AREA

The CONSULTANT will prepare Preliminary Design Standards for LAKE PARK and MARINA AREA to establish a consistent framework for design, decision-making, and implementation. The design standards document will provide a cohesive vision to maintain consistency and quality of design throughout the phased development, in an effort to align elements with the park's overall goals and enhance user experience. Design standards will be in minimum 8.5"x11 format. The key objectives of the design standards document include:

1. **Consistency in Design:** Identify and categorize key components such as entry points, wayfinding and educational signage, trail systems and boardwalks, RV, cabin and tent camping zones, day-use areas, pavilions, restrooms, playgrounds, picnic areas, beach and amenity zones, fishing piers, landscaping and plant materials, smart infrastructure and support facilities. Develop an organized structure for the guideline/standards document, including sections on aesthetic standards, material selection, color palette, design language, architectural elements, and layout principles for each component. CONSULTANT will incorporate elements from the 'Lake District Design Standards' as considered and agreed upon.
2. **Long-Term Vision:** A design standards document captures the intended vision for LAKE PARK and MARINA AREA, with the goal of each development phase reflecting the overall goals and identity of the project.
3. **Quality Control:** Maintain a high level of quality in construction, landscaping, and other elements of the site to reduce the risk of subpar design choices that could impact the overall success and value of the development.
4. **Design Standards:** Define detailed design standards to guide the consistent appearance and quality of park features
 - a. Create specific guidelines for architecture, landscaping, and hardscaping elements, such as materials, color palettes, textures, finishes, and plant selections.
 - b. Specify standards for built features, including structures (pavilions, cabins, restroom facilities), site furnishings (benches, tables, lighting), and signage (informational, directional, and interpretive).
 - c. Develop graphic standards for wayfinding and interpretive signage to maintain a cohesive visual identity.
6. **Regulatory Compliance:** Document shall comply with USACE, AASHTO, ADA, NCTCOG, TxDOT, City of Lewisville design standards, environmental, safety, and accessibility regulations, providing a reference point for design decisions that align with local codes and standards.
 - **Flexibility and Adaptability:** The design guidelines establish the overall tone, and standards for LAKE PARK and MARINA AREA.

Task 2.1 Deliverables:

- One (1) Digital PDF copy of the Preliminary Design Standards Document for LAKE PARK and MARINA AREA.

TASK 2.2 – PRELIMINARY DESIGN STANDARDS REVIEW MEETING

Upon completion of the Preliminary Design Standards Document for Lake Park, the CONSULTANT will meet with the CLIENT to present the design standards with the intent to receive design feedback. Notes will be taken by the CONSULTANT and will be incorporated into the Final Design Standards.

Task 2.2 Deliverables:

- One (1) Digital PDF copy of the Preliminary Design Standards Review Meeting notes.

TASK 2.3 – FINAL DESIGN STANDARDS

Upon CLIENT concurrence of the Task 2.2 Meeting Notes and receipt of CLIENT comments on the Preliminary Design Standards Document for Lake Park, CONSULTANT will incorporate updates into the Final Design Standards Document for Lake Park and submit to the CLIENT.

Task 2.3 Deliverables:

- One (1) Digital PDF copy of the Final Design Standards Document.

TASK 2.4 – FINAL DESIGN STANDARDS REVIEW MEETING AND SUBMITTAL

Upon completion of the Final Design Standards Document, the CONSULTANT will meet with the CLIENT to present the design standards with the intent to receive design feedback. Notes will be taken by the CONSULTANT and will be incorporated into the Final Design Standards. Based on final comments received, CONSULTANT shall incorporate updates into the Final Design Standards Document and submit to the CLIENT.

Task 2.4 Deliverables:

- One (1) Digital PDF copy of the Final Design Standards.
- Up to three (3) printed copies upon request

TASK 2.5 – PRELIMINARY CONCEPT REFINEMENT

Preliminary Concept Refinement:

CONSULTANT will refine various components of the approved master plan dated December 2024. The design refinement shall include the layout of proposed amenities and associated improvements identified under the proposed improvements for LAKE PARK and MARINA AREA Phases **A, B, C, D, E, F, G, and H**. CONSULTANT will develop preliminary concept plan for the following items to illustrate the design intent of the proposed improvements and investigate opportunities to incorporate 'green infrastructure' components. These concept plans will include at a minimum site amenities/improvements including:

- Gate House and Controlled access
- RV, Cabins, Tent Camping areas and Waste Stations
- Hardscape/Paving/Decorative Paving
- Site Lighting
- Roadway, Parking and Access Drives
- Swimming Areas and Lake Access
- Identify Disc Golf Course boundaries
- Kayak launches/Rentals
- Stationary and Floating Piers and Boardwalks
- Benches, picnic tables, drinking fountains, trash receptacles, bollards, and bike racks
- Landscape Plant Material

Concept Sketch Renderings:

- Primary Amenity Area including:
 - Playground layout
 - Playground equipment location/use zones
 - Multipurpose courts
- Signage and Monumentation
 - Park entry signage/monumentation
 - Wayfinding/educational signage
- Amenity Pavilions
- Day Use Pavilions
- Restrooms/Bath Houses
- Boardwalk/Fishing Piers and Trail including layout, location, and materials.

Task 2.5 Deliverables:

Deliverables provided by the CONSULTANT shall include the following:

- *One (1) Digital PDF copy of the Refined Concepts including site layout plan, example imagery and concept sketch renderings of the proposed improvements.*

TASK 2.6 – PRELIMINARY CONCEPT REVIEW MEETING

Upon completion of the Preliminary Concepts, the CONSULTANT will meet with the CLIENT to present the preliminary concepts with the intent to receive design feedback. Notes will be taken by the CONSULTANT and will be incorporated into the Final Concept Refinement.

Task 2.6 Deliverables:

- *One (1) Digital PDF copy of the Preliminary Concept Master Plan Review Meeting notes.*

TASK 2.7 – FINAL CONCEPT REFINEMENT

Based on the input gathered from the Preliminary Concept Review Meeting, CONSULTANT will prepare final concept plans, showing overall plan layout, design improvements, site amenities, sketch renderings, example imagery and submit final concept plan to the CLIENT.

Task 2.7 Deliverables:

Deliverables provided by the CONSULTANT shall include the following:

- *One (1) Digital PDF copy of the Final Concept Plan(s).*

TASK 2.8 – FINAL CONCEPT REFINEMENT REVIEW MEETING

Upon completion of the final concept plan, the CONSULTANT will meet with the CLIENT to present the final concept plan with the intent to receive final design feedback. Notes will be taken by the CONSULTANT and will be incorporated into the 15% Preliminary Schematic Design.

Task 2.8 Deliverables:

- *One (1) Digital PDF copy of the Final Concept Master Plan.*

PHASE 3 – H&H FLOODPLAIN

TASK 3.1 – H&H PROJECT MANAGEMENT AND COMMUNICATION

Project Management Coordination, Communications, and Reporting:

CONSULTANT will meet internally with staff for coordination and communication related to **Task 1.1** of this PROJECT.

TASK 3.2 – PRELIMINARY HYDROLOGY/HYDRAULICS ANALYSIS

Hydrology and Hydraulic Analysis of Crossings/Culverts:

CONSULTANT will provide analysis of each crossing and culvert necessary as part of the 30% design improvements as designated in the 30% schematic design. Tasks associated with the hydrologic and hydraulic analysis will include:

- Perform one field visit to identify and photograph the existing sites.
- Prepare pre-development hydrology for the existing sites (on-site and off-site (upstream of the site) basins)
- Prepare existing conditions hydraulic models for each crossing.
- Utilize any current effective FEMA models, if available.
- Add cross sections to the FEMA current effective model as necessary through the site to model the proposed improvements.
- Utilize TNRS 2019 or best available topography to cut cross section geometry within the project area.
- Prepare proposed conditions models for each crossing.
- Input proposed grading and culverts
- Revise culverts as needed and coordinate with design team.
- Prepare a brief report describing procedures and results.

PHASE 4 – ENVIRONMENTAL

TASK 4.1 – ENVIRONMENTAL PROJECT MANAGEMENT AND COMMUNICATION

Project Management Coordination and Communications:

CONSULTANT will meet internally with staff for coordination and communication related to **Task 1.1** of this PROJECT. EA scope of work includes the Eagle Point Marina Upland Area ONLY and will not include water-based EA review of the Marina, Boat Slips, and Breakwater repair and replacement. Any EA reviews and or assessments of water-based activities as noted above, will require a contract amendment as approved by the COL.

TASK 4.2 – WATERS OF THE UNITED STATES DELINEATION

CONSULTANT will conduct an aquatic resources delineation by reviewing available environmental data, followed by a multi-day site visit to identify and map aquatic resources, including wetlands and streams, with sub-meter GPS accuracy. Findings will be documented in a report covering assessment methods, regulatory context, and jurisdictional analysis for identified resources.

- CONSULTANT will perform an Aquatic Resources Delineation in general accordance with the U.S. Army Corps of Engineers (USACE) 1987 Wetlands Delineation Manual and appropriate USACE Regional Supplement (Great Plains Region). CONSULTANT will perform a desktop review by locating readily available resource

documents which may include aerial photographs, historic topographic maps, soil surveys, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps, National Hydrography Dataset (NHD), Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), and other related data for a desktop review of site conditions.

- CONSULTANT will mobilize staff to perform a one (1) continuous single site visit over multiple days to evaluate the existence and locations of aquatic resources on the site. Completion of USACE wetland determination data forms will be completed as appropriate. The ordinary high-water mark (OHWM) for streams will be identified in the field. Following the site visit, CONSULTANT will prepare exhibits showing the boundaries (polygons) and acreage and/or linear footage (if applicable) of aquatic resources identified onsite during the site visit as collected utilizing a GPS capable of sub-meter accuracy.
- CONSULTANT will prepare a report documenting the results of the aquatic resources delineation. The report will address the applicable regulatory framework, describe the assessment methodology, findings, provide site-specific conclusions and jurisdictional analysis of identified features.

TASK 4.3 – SECTION 404 PERMITTING ASSESSMENT

CONSULTANT will collaborate with design engineers to assess site alternatives under Section 404 of the Clean Water Act and facilitate a pre-application meeting with the USACE to discuss permitting requirements. A memorandum will outline permitting responsibilities and potential impacts to waters of the United States. This task does not include submitting Section 404 permit documents or addressing impacts related to threatened species or cultural resources, which will be handled in future phases.

- Permit specialists will coordinate with design engineers to review, guide, and evaluate site alternatives pursuant to the nationwide permit program implemented under Section 404 of the Clean Water Act (Section 404). A pre-application meeting will be coordinated with the USACE Regulatory Division to present the project alternatives and to discuss the federal permitting requirements pursuant to Section 404. This meeting will establish a Regulatory project number and permit manager for future submittals. The pre-application meeting will allow Halff, CLIENT, and USACE representatives to discuss the proposed project design, alternatives considered, appropriate permitting mechanism, and potential compensatory mitigation requirements. A pre-application meeting request along with meeting agenda will be submitted to the USACE Fort Worth District.
- A copy of the meeting minutes will be submitted to the USACE and CLIENT to document the proposed project's federal permitting requirements and assist in the development of scope for future phases.
- Halff will outline Section 404 permitting responsibility as appropriate for the ultimate design scenario and incorporate as a separate memorandum. This assessment will solely estimate impacts to waters of the United States resulting from the design scenarios and will not take into consideration potential impacts related to threatened/endangered species or cultural resources. Proposed impacts to threatened/endangered species and/or cultural resources will be documented in the eventual Environmental Assessment that will be provided for under a future scope of work. This task does not assume the preparation and submittal of any Section 404 permit documents to the USACE.

TASK 4.4 – USACE/Environmental Assessment (EA) Scoping Meeting

CONSULTANT will schedule one (1) meeting with the USACE Operations Division, including staff members of the USACE Lewisville Lake Office, to host a scoping meeting to support the preparation of an Environmental Assessment to comply with NEPA. The scoping meeting will establish the following:

- A. The limits of the proposed action to be evaluated in the environmental assessment and addressed in the purpose and need.
- B. The range of build alternatives that must be measured against the proposed action.
- C. Resources of interest that should be emphasized within the affected environment and impacts section of the environmental assessment.

- D. Non-statutory mitigation requirements (e.g. tree removal).
- E. Agency coordination list, including federal, state, tribal, and local government.
- F. Coordination of other applicable federal regulations under the purview of the USACE as the lead agency (Section 404, Section 106 of the National Historic Preservation Act, Section 7 of the Threatened and Endangered Species Act.
- G. Additional information as it pertains to feasibility and market studies.
- H. A copy of the scoping meeting minutes will be submitted to the USACE and CLIENT to document the formalize the expected scope of the environmental assessment. The minutes, once approved by the USACE Operations Division, may be used as guidance for preparation the future scope of work for the environmental assessment.

TASK 4.5 – USACE Environmental Assessment

An EA will be prepared in accordance with USACE regulations implementing the National Environmental Policy Act of 1969 (NEPA), as established in 33 CFR 230 and Engineering Regulation 200-2-2 for the Eagle Point Marina (MARINA AREA) (see maps below). The EA will involve the following tasks and objectives:

- A. USACE Coordination
Halff will meet with the CLIENT and USACE on a biweekly bases for up to fifteen meetings to discuss EA progress and next steps throughout the process.
- B. Section 1.0: Introduction
Halff will briefly describe the proposed project and the purpose of the EA.
- C. Section 2.0: Proposed Action
Halff will define the proposed project including the proposed elements of the project, planned construction phasing, and facility operations.
- D. Section 3.0: Purpose and Need
Halff will consult and coordinate with CLIENT to define the need and purpose of the proposed action. This will briefly describe the history of the planning process and any other information pertinent to the need and purpose.
- E. Section 4.0: Alternatives
Halff will coordinate with the CLIENT to define and summarize the history and process that guided past development of alternatives and how alternatives that were initially considered were subsequently eliminated in favor of the current proposed alternative. Halff will describe the current preferred alternative. The no-action alternative (i.e., do nothing) will also be discussed to serve as a baseline for determining environmental consequences.
- F. Section 5.0: Affected Environment
Halff will collect and review data, maps, and literature to document the existing environment within the project study area. Halff will obtain available information from appropriate local, state, and federal agencies. The data collected will include, but is not limited to the following social, economic, natural, and physical environmental resources:
 - Physical Resources
 - Topography
Halff will describe the project topography and potential environmental consequences of the proposed action and no action alternatives.
 - Soils and Geology

Halff will describe the soils and geology in the proposed project area and potential environmental consequences of the proposed action and no action alternatives.

- Air Quality
A qualitative discussion of the impacts to air quality resulting from the proposed action will be prepared. A detailed, quantitative air quality analysis, such as emissions modeling and data analysis for construction equipment, is not anticipated to be required for this project and is not included in the scope of work.
- Climate Change
Halff will include the USACE Climate Change Adaptation Policy Statement information and qualitatively discuss any potential impacts of the proposed action and no action alternatives.
- Noise
Halff will qualitatively discuss current noise sources, city ordinances or quiet zones, and typical noise levels for the project area. Short term and long term potential noise impacts will be qualitatively discussed for the proposed action and no action alternatives.

This scope of work includes up to three ambient noise readings to capture existing noise levels in the project area. Ambient noise readings would be collected during a non-holiday week and during non-peak hour times. Weather forecasts would be monitored to confirm noise readings are taken during a day of no active or recent rain and that wind speeds are predicted to be less than 15 mph. Noise measurements would be conducted using an Extech SDL600 Type 2 sound meter (calibrated to 94 dB(A)) which meets the standards of the American National Standards Institute. Noise readings would be collected for 15 minutes at each site with the noise meter 5 feet above the ground surface, as this is considered the average height of the human ear. In addition, the study team would complete field measurement data sheets, take pictures in each cardinal direction, take a GPS point of the noise meter location, and note any exceptions that would impact noise measurements, such as an emergency vehicle siren, animal noises, or active heavy equipment.

- Surface Water Quality
Halff will describe the current water quality status per Section 303(d) of the Clean Water Act (CWA) and Section 401 Water Quality Certification under the CWA, as applicable. Potential environmental consequences would be qualitatively discussed for potential impacts during construction and operation of the facilities for the proposed action and no action alternatives. No water sampling is included in this scope of work.
- Groundwater Quality
Halff will qualitatively discuss groundwater quality with data from the CLIENT and qualitatively discuss potential environmental consequences of the proposed action and no action alternatives.
- Biological Resources
 - Aquatic Resources
Halff will describe the aquatic resources in the project area and potential environmental consequences to these resources from the proposed action and no action alternatives.
 - Vegetation
Halff will describe the existing vegetation in the project area and potential environmental consequences to these resources from the proposed action and no action alternatives.
 - Floodplains
Halff will identify floodplains in the project area and potential environmental consequences to these resources from the proposed action and no action alternatives.

- Wetlands

A survey to determine the presence or absence of waters of the United States pursuant to Section 404 of the Clean Water Act (Section 404) will be completed as part of the field survey included in **Task 4.2** above. A separate memorandum and summary of findings will be incorporated into the EA as an attachment. Permitting issues and requirements pursuant to Section 404 will be identified in the EA.
- Wildlife

Halff will document habitat types for the project area. Documentation of baseline conditions is critical to supporting any proposed mitigation that will occur on-site. Development of detailed mitigation plans is dependent on the extent of project impacts (unknown at this time) and is not included in this scope of work.
- Threatened and Endangered Species

A review regarding threatened and endangered species habitat will include review and coordination of U.S. Fish and Wildlife Service (USFWS) and Texas Parks and Wildlife Department sources. A summary of findings will be incorporated into the EA as an attachment. Permitting issues and requirements pursuant to Section 7 of the Endangered Species Act will be identified in the EA. This task does not include informal or formal coordination with the USFWS.
- Socioeconomic Resources and Land use
 - Light and Aesthetics

Halff will describe existing aesthetics and potential environmental consequences of the proposed action and no action alternatives.
 - Land Use

Halff will describe the current and future land use including any potential environmental consequences of the proposed action and no action alternatives.
 - Farmlands

Halff will identify any farmlands per the USDA NRCS Web Soil Survey and any potential environmental consequences of the proposed action and no action alternatives.
 - Socioeconomic Resources

The general population and income characteristics of the immediate project area will be documented, and business operations in the study area likely to be affected by the proposed project will be identified. A qualitative discussion concerning impacts, if any, in the immediate area will also be presented. A qualitative discussion of the potential economic benefits of the proposed project will be presented for comparison to the overall projected cost (i.e., construction, operation and maintenance, etc.) of the project.
 - Infrastructure

Halff will describe existing infrastructure and potential environmental consequences of the proposed action and no action alternatives.
 - Recreation

Halff will describe existing recreation in the project area and potential environmental consequences of the proposed action and no action alternatives.
- Historic and Cultural Resources

To comply with NEPA regulations, Section 106 and the ACT, Halff will perform the cultural resources services described below.

Antiquities Permit Application

Halff will consult the Texas Archeological Sites Atlas, historical maps, and other pertinent data to determine whether any archeological historic properties listed on or eligible for listing on the National Register of Historic Places (NRHP) or State Antiquities Landmarks (SALs) are documented within the project area or adjacent properties, the extent to which the project area has undergone prior cultural resources investigations, and the potential for buried and

intact archeological sites. The results of the background review will be summarized in a scope of work that outlines the methodology developed for an archeological survey of the project area. The scope of work will accompany an Antiquities Permit Application submitted for review and approval by the THC. A copy of the scope of work will be provided to USACE for review and approval.

Archeological and Historic Surveys

Upon issuance of the Antiquities permit number and approval of the scope of work by THC and USACE. Halff will conduct an intensive archeological survey that conforms to the Archeological Survey Standards for Texas outlined by the Council of Texas Archeologists. The survey will be conducted by archeologists who meet the U.S. Secretary of the Interior's Professional Qualification Standards for Archeology and Historic Preservation. In addition, any above-ground historic-age (those 50 years or older) resources will be evaluated for NRHP eligibility, and an effects assessment will be conducted by an SOI-qualified Architectural Historian.

Survey Report

At the conclusion of the survey, Halff will prepare and submit a draft report that summarizes the survey findings and provides recommendations pertaining to any effects to archeological or historic properties. Following a period of County review and comment, the draft report will be submitted for review by the THC and USACE. After addressing any agency comments, Halff will submit a final report to the City and THC.

Curation

Pursuant to 13 Texas Administrative Code 26.17, and after acceptance of the final report by the THC and U.S. Army Corps of Engineers, the field records, report, and photographs will be prepared for permanent curation at the Center for Archaeological Studies located at Texas State University in San Marcos, Texas.

- **Hazardous, Toxic, and Radioactive Concerns**

Hazardous materials sites will be identified in the project area through field surveys, a database search, and review of historic aerial photography. Field surveys will consist of a visual survey of the project area to ascertain existing conditions, looking specifically for potential hazardous material concerns such as aboveground or underground tanks, drums, impoundments, or waste piles. State and Federal databases will be reviewed. The information reviewed will be sufficient to establish whether there are potential HTRW concerns that would affect the proposed project.

G. Section 6.0: Cumulative Impacts

Halff will identify past impacts as well as current and reasonably foreseeable projects within a delineated area or zone of interest and qualitatively document anticipated project cumulative impacts to the social, economic, natural, and physical environmental resources mentioned above.

A quantitative indirect and cumulative effects analysis is not anticipated to be required for this project and is not included in the scope of work.

H. Section 7.0: Mitigation

The EA will discuss the potential mitigation along with associated costs, if any, for the project. EA will discuss how mitigation would eliminate or minimize harm to the natural and human environment. General mitigation options for impacted environmental resources will be provided. The EA will identify required permits and approvals for the project. Development of mitigation plans are not included in this scope of work.

I. Section 8.0 Agency Coordination

Halff will review information concerning the proposed action provided by CLIENT and incorporate appropriate information into the EA. Halff will review relevant studies and any prior agency coordination related to the proposed action, including any past studies that may be provided by the CLIENT.

Halff will mail agency coordination letters to solicit information regarding the interests of federal, state, and local agency contacts, including but not limited to:

- Federal Emergency Management Agency
- Natural Resources Conservation Service
- Railroad Commission of Texas
- Texas General Land Office
- Texas Parks and Wildlife Department
- Texas State Soil and Water Conservation Board
- Texas Water Development Board
- USACE Tulsa District
- US Environmental Protection Agency
- US Fish and Wildlife Service

Information provided from the agency coordination will be incorporated into the EA baseline conditions and impacts assessment as appropriate.

J. Finding of No Significant Impact (FONSI) Documentation

Halff will assist the USACE with putting together the FONSI documentation, which will include a summary of the proposed project, the alternatives evaluated in the EA, the summary of potential effects of the proposed project, and any mitigation or commitments included in the EA. The FONSI will be submitted for the USACE's signature.

K. Open House Public Meeting

This task includes compiling a mailing list of adjacent property owners and create a corresponding map. Reserve a suitable facility for one (1) open house format public meeting. Prepare public meeting exhibits and handouts. Attend a meeting with the CLIENT and USACE staff and obtain approval for exhibits and other materials. Prepare notice of public meeting. Submit the notice to the CLIENT and USACE for review no less than four (4) weeks prior to newspaper publication. Halff will publish the notice in a local newspaper (English and Spanish) once in advance of the public meeting as well as mail notices to adjacent property owners, elected officials, and agency staff. Halff will provide up to six (6) staff to perform registration and answer questions (bilingual staff will be available). Develop and submit to the CLIENT and USACE a written summary of the public meeting, including when the meeting was conducted, where the meeting was held and who was in attendance. The public meeting documentation shall also include the comments received and responses to comments.

Deliverables

- Electronic version of the draft EA document in Adobe Acrobat format for review by the USACE and CLIENT. Comments received will be addressed and the document will be re-submitted for approval. Once the USACE has determined the document is satisfactory for further processing, Halff will proceed with the open house public meeting.
- Final EA document to the CLIENT and the USACE upon completion of the public involvement process. The number of copies of the final EA is to be determined as requested by the CLIENT and the USACE (not to exceed 10 hard copies). A digital copy of the final EA will also be provided in Adobe Acrobat

format. The schedule for final project completion will be dependent upon the government agency review and public involvement process.

- Finding of No Significant Impact in Adobe Acrobat for review by the USACE and CLIENT and signature by the USACE.
- Public Meeting Documentation in Adobe Acrobat for review by the USACE and CLIENT to document the public meeting.

PHASE 5 – 15% SCHEMATIC DESIGN

TASK 5.1 – 15% SCHEMATIC DESIGN

15% Schematic Design:

Based on the input gathered from the kickoff meeting, site investigation and concept refinement, the CONSULTANT will prepare 15% Schematic Design Documents for LAKE PARK AND MARINA AREA **A, B, C, D, E, F, G, and H**. The 15% Schematic Design Document will help communicate the intent and vision of the final concept plan. The 15% Schematic Design shall include the layout of proposed improvements to demonstrate compliance with applicable Federal, State, and local/stakeholder rules, regulations, and codes. The CONSULTANT will identify known locations where exceptions to the established design standards may be necessary.

Proposed Improvements:

The 15% Schematic Design shall include the proposed improvements identified in Task 2.1 Concept Refinement. Design for improvements shall follow current CLIENT and USACE regulatory design standards, unless directed otherwise by the CLIENT. CONSULTANT's 15% Plans shall be prepared with the full-size set being 22-inch by 34-inch and of an appropriate scale to allow for the reduction and reproduction of a half size 11-inch by 17-inch set, formatted with black and white line work to illustrate the proposed improvements. Design shall be in general accordance with City standards and specifications, USACE, TXDOT standards and specifications, where applicable, and good consulting practices for projects off this nature.

In addition to the anticipated improvements described above, CONSULTANT's 15% Schematic Design plans will contain the following base information as applicable:

- Project name; and if applicable, the street address, and lot and block description.
- Date, scale, north arrow, and the name of the Licensed Professional preparing the plan.
- Approximate location of existing property lines and/or ROW limits.
- Approximate centerlines of existing water courses and the location of the floodplain; the approximate location of significant drainage features; and the location of existing parking lots, streets, driveways, and sidewalks on or adjacent to the PROJECT.
- Approximate location of known overhead lines, subsurface utility lines, and utility easements within the project limits, including the location of utility/power poles, generators, and equipment.

(15%) Preliminary Schematic Design Submittal Milestone Preparation:

CONSULTANT shall prepare and submit to the CLIENT the (15%) Preliminary Schematic Design Package, with the following anticipated sheets listed below:

- Cover Page
- General Notes
- Tree Survey/Tree Summary Table
- Lake Park Site Layout Plan
- Shoreline Trail Alignment
- Destination Playground and Amenity Area
- Beach Area and Amenities
- Cabin and RV Pad Layout and Amenity Area
- Fishing Piers and Boardwalk Layout
- Eagle Point Marina Site Layout Plan
- Roadway and Bridge Alignment
- Parking and Driveway Layout

Task 5.1 Deliverables:

- One (1) Digital PDF copy of the 15% Submittal.
- Up to Five (5) hard copies of the 15% Submittal (upon request).

TASK 5.2 – 15% PRELIMINARY SCHEMATIC DESIGN REVIEW MEETING

Upon completion of the 15% Preliminary Schematic Design package, the CONSULTANT will meet with the CLIENT to review comments provided by the CLIENT to receive design feedback. Notes will be taken by the CONSULTANT and will be incorporated into the final 15% Preliminary Schematic Design Submittal.

Task 5.2 Deliverables:

- One (1) Digital PDF copy of the Review Meeting notes.

TASK 5.3 – FINAL 15% SCHEMATIC DESIGN

Based on the input gathered from the 15% Preliminary Schematic Design Review Meeting, CONSULTANT will prepare Final 15% Schematic Design Plans, showing overall plan layout, design improvements, site amenities, and submit final 15% Schematic Design Plans to the CLIENT for review and comment.

Task 5.3 Deliverables:

Deliverables provided by the CONSULTANT shall include the following:

- One (1) Digital PDF copy of the Final 15% Schematic Design.

TASK 5.4 – FINAL 15% SCHEMATIC DESIGN REVIEW MEETING

Upon completion of the final 15% Schematic Design Plans, the CONSULTANT will meet with the CLIENT to present the Final 15% Schematic Design Plans with the intent to receive final design feedback. Notes will be taken by the CONSULTANT and will be incorporated into the 30% Schematic Design Plan.

Task 5.4 Deliverables:

- One (1) Digital PDF copy of the Review Meeting notes.

NOTE:

Upon acceptance of 15% Schematic Design Consultant will prepare an order of magnitude estimate for completion of 30% Schematic Design through Final Design and an OPCC for the construction of Lake Park and Eagle Point Marina areas in its entirety not included in this contract. This includes Areas from the Master Plan identified as Areas B, C, D, E, and H.

PHASE 6 – 30% SCHEMATIC DESIGN

TASK 6.1 – 30% SCHEMATIC DESIGN

30% Schematic Design:

Based on the input gathered from the kickoff meeting, site investigation and concept refinement, the CONSULTANT will prepare 30% Schematic Design Documents for Phases LAKE PARK Phase A, and MARINA AREA Phase F & G that help communicate the intent and vision of the PROJECT. The Schematic Design shall include the layout of proposed improvements to demonstrate compliance with applicable Federal, State, and

local/stakeholder rules, regulations, and codes. The CONSULTANT will identify known locations where exceptions to the established design standards may be necessary.

Proposed Improvements:

The 30% Schematic Design shall include the proposed improvements identified in Task 5.1. Design for improvements shall follow current CLIENT and regulatory design standards, unless directed otherwise by the CLIENT. CONSULTANT's 30% Schematic Design plans shall be sheet sizes of 22-inch-Wide x 34-inch-Long, formatted with black and white line work with a scale appropriate to illustrate the proposed improvements. In addition to the anticipated improvements described above, CONSULTANT's 30% Schematic Design plans will contain the following base information as applicable:

- Project name; and if applicable, the street address, and lot and block description.
- Date, scale, north arrow, and the name of the Licensed Professional preparing the plan.
- Approximate location of existing property lines and/or ROW limits.
- Approximate centerlines of existing water courses and the location of the floodplain; the approximate location of significant drainage features; and the location of existing parking lots, streets, driveways, and sidewalks on or adjacent to the PROJECT.
- Approximate location of known overhead lines, subsurface utility lines, and utility easements within the project limits, including the location of utility/power poles, generators, and equipment.

(30%) Schematic Design Submittal Milestone Preparation:

CONSULTANT shall prepare the (30%) Schematic Design Package submittal milestone, with the following anticipated sheets listed below: Items that will be covered in both LAKE PARK and MARINA AREA are identified with an (*).

LAKE PARK

- *Cover Page
- *General Notes
- Project Layout and Survey Control (200 Scale)
- Tree Survey/Tree Summary Table
- Demolition Plans
- Material Plans
- Parking Paving Layout Plan
- Shoreline Trail Layout Plan
- Internal Trail Layout Plan
- Destination Playground and Amenity Area Layout
- Beach Area and Amenity Layout Plan
- North RV Pad Site Layout and Amenity Area
- RV Pad Site Typicals
- Fishing Piers and Boardwalk Layout
- ~~Eagle Point Marina Layout~~
- Roadway Plan and Profiles (20H; 4V scale)
- Roundabout Plan and Profile (20H: 4V scale)
- Parking Lot and Amenity Dimension Control Plans (30 scale)
- Pavement Marking and Signage Layout Plan (200 Scale)
- Pavement Marking and Signage Plans (30 scale)
- Site Grading Layout Plan (200 Scale)
- Site Grading Plans (30 scale)
- Project Drainage Area Maps (Scale as needed)
- *Typical Sections
- Hydrologic and Hydraulic Data Sheets
- Drainage Layout Plan

- Drainage Plans
- Ditch Profiles (20H; 4V scale)
- Storm Drain Profiles (20H; 4V scale)
- Culvert Profiles (20H; 4V scale)
- Utility Layout Plan
- Water and Sewer Plan

MARINA AREA

- *Cover Page
- *General Notes
- Project Layout and Survey Control (200 Scale)
- Tree Survey/Tree Summary Table
- Demolition Plans
- Material Plans
- Parking Paving Layout Plan
- ~~Shoreline Trail Layout Plan~~
- Internal Trail Layout Plan
- Playground and Amenity Area Layout
- ~~Beach Area and Amenity Layout Plan~~
- ~~North RV Pad Site Layout and Amenity Area~~
- ~~RV Pad Site Typical~~
- Hotel, Restaurant(s), and Cabin Layout and Parking
- Fishing Piers and Boardwalk Layout
- Roadway Plan and Profiles (20H; 4V scale)
- ~~Roundabout Plan and Profile (20H; 4V scale)~~
- Parking Lot and Amenity Dimension Control Plans (30 scale)
- Pavement Marking and Signage Layout Plan (200 Scale)
- Pavement Marking and Signage Plans (30 scale)
- Site Grading Layout Plan (200 Scale)
- Site Grading Plans (30 scale)
- Project Drainage Area Maps (Scale as needed)
- *Typical Sections
- Hydrologic and Hydraulic Data Sheets
- Drainage Layout Plan
- Drainage Plans
- Ditch Profiles (20H; 4V scale)
- Storm Drain Profiles (20H; 4V scale)
- Culvert Profiles (20H; 4V scale)
- Utility Layout Plan
- Water and Sewer Plan

Task 6.1 Deliverables:

- *The CONSULTANT shall provide copies of 30% Preliminary Schematic Design plan drawings for CLIENT review and for submission to other agencies for the purpose of coordinating work with stakeholders.*
- *One (1) Digital PDF copy of the 30% Preliminary Schematic Design Submittal.*
- *Up to Five (5) hard copies of the 30% Preliminary Schematic Design Submittal (upon request).*

TASK 6.2 – SCHEMATIC DESIGN REVIEW MEETING

Upon completion of the 30% Preliminary Schematic Design Plans and the Opinion of Probable Costs, the CONSULTANT will meet with the CLIENT to review and discuss received comments. Notes will be taken by the CONSULTANT.

Task 6.2 Deliverables:

- One (1) Digital PDF copy of the 30% Preliminary Schematic Design Review Meeting notes.

TASK 6.3 – FINAL 30% SCHEMATIC DESIGN

Based on the input gathered from the 30% Preliminary Schematic Design Review Meeting, CONSULTANT will prepare final 30% Schematic Design Plans, showing overall plan layout, design improvements, site amenities, and submit final 30% Schematic Design Plans to the CLIENT.

Task 6.3 Deliverables:

Deliverables provided by the CONSULTANT shall include the following:

- The CONSULTANT shall provide copies of final 30% Schematic Design plan drawings for CLIENT review and for submission to other agencies for the purposes of coordinating work with stakeholders.
- One (1) Digital PDF copy of the final 30% Schematic Design Submittal.
- Up to Five (5) hard copies of the final 30% Schematic Design Submittal (upon request).

TASK 6.4 – FINAL 30% SCHEMATIC DESIGN REVIEW MEETING

Upon completion of the final 30% Schematic Design Plans, the CONSULTANT will meet with the CLIENT to present the final 30% Schematic Design Plans with the intent to receive final design feedback. Notes will be taken by the CONSULTANT and will be incorporated into the final 30% Schematic Design Plan and submitted to the CLIENT.

Task 6.4 Deliverables:

- One (1) Digital PDF copy of the Review Meeting notes.
- One (1) Digital PDF copy of the final 30% Schematic Design

TASK 6.5 – OPINION OF PROBABLE CONSTRUCTION COST (OPCC)

Concept Refinement, 15% Schematic Design and 30% Schematic Design OPCC:

Upon completion of each of the Concept Refinements, 15% Schematic Design Plans, and the 30% Schematic Design plans, the CONSULTANT shall prepare an Opinion of Probable Construction Cost (OPCC) including escalation over a 5-year period. CONSULTANT's OPCC shall be based on the quantities indicated on the CONSULTANT's plans and on the unit prices current at the time of the probable cost opinion preparation. Quantities and available unit pricing included in the schematic design OPCC are preliminary and shall be subject to change due to significant fluctuations in the market and pricing changes beyond CONSULTANT'S control. OPCCs are intended for budget purposes only. No adjustments or value engineering to the OPCC will be prepared as part of this scope.

Task 6.5 Deliverables:

- One (1) Digital PDF copy of the Opinion of Probable Construction Cost listing bid items, quantities, and estimated bid costs at each submittal phase.

Subsequent Submittal Milestones:

All subsequent milestone deliverables following the 30% Schematic Design Documents will be a separate contract and will begin once the CLIENT has provided CONSULTANT with a formal Notice to Proceed (NTP) confirming the acceptance of the new scope.

BASIS OF COMPENSATION OVERALL

The basis of compensation for the services is Lump Sum and shall be as follows:

Task	PHASE 1 DESIGN SUPPORT SERVICES	CORE SERVICE	LAKE PARK	MARINA	SUBTOTAL
1.1	Project Management and Communication	\$157,500			\$157,500
1.2	Project Kick-Off Meeting	\$11,000			\$11,000
1.3	Quality Assurance/Quality Control	\$61,500			\$61,500
1.4	Site Observation	\$24,500			\$24,500
1.5	Data Collection / Base Map Preparation	\$22,800			\$22,800
1.6	Public Outreach/Stakeholder Meetings		\$76,900		\$76,900
1.7	Utility/Transportation Coordination	\$83,000			\$83,000
1.8	Topographic Survey		\$96,480	\$47,520	\$144,000
1.9	Tree Survey		\$8,980	\$80,820	\$89,800
1.1	SUE Survey		\$80,355	\$163,145	\$243,500
1.11	Geotechnical Report		\$84,755	\$41,745	\$126,500
1.12	Traffic Analysis	\$59,000			\$59,000
1.13	Water and Wastewater Master Plan Development	\$50,000			\$50,000
	PHASE 1 TOTAL (Tasks 1.1 – 1.13)	\$469,300	\$347,470	\$333,230	\$1,150,000
Task	PHASE 2 – CONCEPT REFINEMENT	CORE SERVICE	LAKE PARK	MARINA	SUBTOTAL
2.1	Preliminary Design Standards Concept Refinement	\$49,500			\$49,500
2.2	Preliminary Design Standards Review Meeting	\$4,800			\$4,800
2.3	Final Design Guidelines	\$29,500			\$29,500
2.4	Final Design Guidelines Review Meeting	\$4,800			\$4,800
2.5	Preliminary Concept Refinement	\$61,000			\$61,000
2.6	Preliminary Concept Review Meeting	\$4,800			\$4,800
2.7	Final Concept Refinement	\$29,500			\$29,500
2.8	Final Concept Review Meeting	\$4,800			\$4,800
	PHASE 2 TOTAL (Tasks 2.1 – 2.8)	\$188,700			\$188,700
Task	PHASE 3 – H&H FLOODPLAIN	CORE SERVICE	LAKE PARK	MARINA	SUBTOTAL
3.1	Project Management and Communication	\$6,500			\$6,500
3.2	Hydrologic/Hydraulic Analysis 30% Design	\$60,000			\$60,000
	PHASE 3 TOTAL (Tasks 3.1 – 3.2)	\$66,500			\$66,500

Task	PHASE 4 – ENVIRONMENTAL	CORE SERVICE	LAKE PARK	MARINA	SUBTOTAL
4.1	Project Management and Communication	\$21,400			\$21,400
4.2	Water of the U.S. Delineation	\$50,000			\$50,000
4.3	Section 404 Permitting Assessment	\$15,000			\$15,000
4.4	USACE/Environmental Assessment Coordination	\$12,000			\$12,000
4.5	Environmental Assessment (EA) for MARINA AREA*			\$356,000	\$356,000
	PHASE 4 TOTAL (Tasks 4.1 – 4.5)	\$98,400		\$356,000	\$454,400
Task	PHASE 5 – 15% SCHEMATIC DESIGN	CORE SERVICE	LAKE PARK	MARINA	SUBTOTAL
5.1	15% Schematic Design - Preliminary Layout		\$66,732	\$32,868	\$99,600
5.2	15% Schematic Design - Preliminary Layout Review Mtg.	\$8,600			\$8,600
5.3	15% Schematic Design - Final Layout		\$51,322	\$25,278	\$76,600
5.4	15% Schematic Design - Final Layout Review Mtg.	\$8,600			\$8,600
5.5	15% QAQC	\$9,300			\$9,300
	PHASE 5 TOTAL (Tasks 5.1 – 5.5)	\$26,500	\$118,054	\$58,146	\$202,700
Task	PHASE 6 – 30% SCHEMATIC DESIGN	CORE SERVICE	LAKE PARK	MARINA	SUBTOTAL
6.1	30% Schematic Design				
	Cover Sheet and Sheet Index	\$2,600			\$2,600
	General Notes and Legend	\$1,400			\$1,400
	Project Layout and Survey Control	\$1,500			\$1,500
	Demolition Layout Plan	\$1,400			\$1,400
	Demolition Plans		\$23,800	\$23,800	\$47,600
	Paving Layout Plan	\$1,100			\$1,100
	Existing and Proposed Typical Sections for Roadway Improvements	\$4,300			\$4,300
	Roadway Plan and Profiles		\$76,447	\$37,653	\$114,100
	Roundabout Plan and Profiles		\$11,256	\$5,544	\$16,800
	Trail Plan and Profiles		\$80,735	\$39,765	\$120,500
	RV Pad Sites, Parking and Amenity Plans		\$29,100		\$29,100
	Destination Playground and Amenity Area Plans		\$42,000		\$42,000
	Beach and Amenity Area Plans		\$26,000		\$26,000
	Fishing Pier and Boardwalk Plans		\$16,000		\$16,000
	Pavement Marking and Signage Layout Details	\$1,100			\$1,100
	Pavement Marking and Signage Plans		\$11,390	\$5,610	\$17,000
	Site Grading Layout Details	\$1,100			\$1,100

	<i>Site Grading Plans</i>		\$208,906	\$102,894	\$311,800
	<i>Project Drainage Area Maps</i>		\$17,487	\$8,613	\$26,100
	<i>Hydrologic and Hydraulic Data Sheets</i>		\$24,522	\$12,078	\$36,600
	<i>Drainage Layout Plan</i>		\$938	\$462	\$1,400
	<i>Drainage Plans</i>		\$94,671	\$46,629	\$141,300
	<i>Ditch Profiles</i>		\$16,214	\$7,986	\$24,200
	<i>Storm Drain Profiles</i>		\$16,080	\$7,920	\$24,000
	<i>Culvert Profiles</i>		\$10,385	\$5,115	\$15,500
	<i>Utility Layout Plan</i>		\$737	\$363	\$1,100
	<i>Water and Sewer Plans</i>		\$64,923	\$31,977	\$96,900
	<i>Traffic Sequencing Narrative</i>		\$5,427	\$2,673	\$8,100
6.1.1	30% Schematic Design - Final Plan Revision	\$123,200			\$123,200
6.2	Opinion of Probable Construction Cost	\$29,600			\$29,600
6.3	Schematic Design Submittal	\$7,400			\$7,400
	PHASE 6 TOTAL (Tasks 6.1 – 6.3)	\$174,700	\$777,018	\$339,082	\$1,290,800
		CORE SERVICE	LAKE PARK	MARINA	
	PHASE 1-6 TOTALS	\$1,024,100	\$1,368,971	\$1,148,729	\$3,353,100
	PHASE 1 - PROJECT MANAGEMENT AND PRE-DESIGN	\$1,150,000			
	PHASE 2 - CONCEPT REFINEMENT	\$188,700			
	PHASE 3 - H&H FLOODPLAIN	\$66,500			
	PHASE 4 - ENVIRONMENTAL	\$454,400			
	PHASE 5 - 15% SCHEMATIC DESIGN	\$202,700			
	PHASE 6 - 30% SCHEMATIC DESIGN	\$1,290,800			
	SUBTOTAL PHASE 1-6	\$3,353,100			
	**Direct Costs (Estimated Reimbursable Expenses)	\$25,000			
	PROJECT GRAND TOTAL (Phases 1-6 + Direct Costs)		\$3,378,100		

HOURLY BILLING RATES
January 2025

Labor Category	Level	Billing Rate Range		Description
		Low	High	
Landscape Architect /Planner	II	120.00	139.00	Landscape Designer
	III	153.00	173.00	Landscape Architect
	IV	191.00	232.00	PM / Sr. Landscape Architect
	V	300.00	380.00	Sr. PM / Principal
Engineer	I	116.00	155.00	EIT
	II	136.00	166.00	EIT / PE
	III	174.00	216.00	Sr. PE / PM
	IV	227.00	286.00	Sr. PM / Sr. PE
	V	287.00	380.00	Tech Advisor / Principal
Scientist (Environmental / Geologist)	I	86.00	101.00	Professional (BS in ENG, Geology or ENV Science)
	II	123.00	144.00	Experienced Professional
	III	151.00	187.00	PE, PG or similar license / registration
	IV	212.00	248.00	PM / Sr. Scientist
Surveyor	IV	182.00	224.00	RPLS / Geospatial PM
	V	229.00	345.00	Sr. / PM RPLS
Office/Field Tech (SUE)	III	102.00	126.00	Utility Coordinator
	IV	131.00	166.00	SUE Field Manager
	V	182.00	226.00	SUE Manager
Office Tech (CADD, Designer and Survey)	III	107.00	158.00	Jr. CADD/Designer/Survey Tech
	IV	133.00	166.00	Sr. CADD/Designer/Survey
	V	176.00	275.00	CADD Manager/Geo Spatial PM (unlicensed)
Clerical		97.00	150.00	Admin Assistant
Specialist (GIS)	I	90.00	109.00	Jr. Level GIS Analyst / ROW Support Staff
	II	118.00	148.00	GIS Analyst / ROW Agent
	III	152.00	199.00	Sr. / PM – GIS Analyst / ROW Agent
	IV	201.00	249.00	Sr. PM – GIS Analyst / ROW Agent
Intern		55.00	104.00	

The labor rates are valid through December 31, 2026

ATTACHMENT B

EXCLUSIONS / AVAILABLE ADDITIONAL SERVICES

The following services are not included in the scope or fees for this proposal; but can be provided by CONSULTANT, subject to negotiation:

GENERAL

- Any additional work not specifically included in the Proposed Scope of Services will be accomplished as Additional Services.
- Revisions to the plans requested by the CLIENT after the plans are approved, unless necessitated by negligent errors on the plans are excluded.
- Design of areas outside the limits of the defined project site are excluded.
- Design and coordination of existing utility relocations and modifications, including, gas, telephone, or other franchise utility improvements is excluded.
- Additional graphic products are excluded.
- Additional meetings not identified in the project scope of services are excluded.
- Printing of additional drawings, specifications and contract documents not identified in the project deliverables is excluded.
- The development design alternatives, or preparation of a feasibility studies are excluded.
- Negotiations with adjacent property owners are excluded.
- Separation of project documents into multiple submittals or tasks is excluded.
- Construction documentation beyond 30% for Lake Park is excluded.
- Record drawings are excluded.

IRRIGATION

- Irrigation design is excluded.

PUBLIC ENGAGEMENT

- Any meetings not specified in the above scope of work is excluded.

TRAFFIC

- Detailed Traffic Control and/or Roadway/Traffic Modification Plans are excluded.

PERMITTING

- Payment of any fees including but not limited to permit fees, filing fees, pro-rated fees, impact fees, taxes, federal and/or state regulatory agency review fees are excluded.

CONSTRUCTION DOCUMENTATION

- The preparation and development of Construction Documentation beyond the scope of services described above is excluded.

SUE

- Quality Level A is excluded.
- Permitting is excluded.
- Work Zone Traffic Control is excluded.

SURVEY

- Field survey of channel cross sections other than what is identified in the scope above is excluded.
- Geospatial Survey Services are excluded.

- Tree Survey for Lake Park is excluded. Halff will utilize tree survey data as provided by the CLIENT/Davey-Greehill.
- Right of Entry preparation and coordination is excluded.
- Boundary Research and Boundary Resolution Services are excluded.
- Easements or creating of easement documents are excluded.

ENVIRONMENTAL

- EA review of Marina, Boat Slips, Breakwater and other associated marina items are excluded from scope.
- Additional regulatory agency requirements not identified in the proposed scope of services are excluded.
- Threatened or endangered species surveys or Section 7 consultation with the United States Fish and Wildlife Service (USFWS) under the Endangered Species Act are excluded.
- Presence/absence surveys for state listed threatened or endangered species, and species of greatest conservation needs and consultation with Texas Parks and Wildlife (TPWD) are excluded.
- Preparation of any permitting documents (e.g. preconstruction notification) for yet to be determined applicable federal or state regulations (e.g., Section 404 of the Clean Water Act) are excluded.
- Phase I and II Environmental Site Assessment performed in accordance with applicable American Society for Testing and Materials (ASTM) standards or any surveys/investigations involving sampling and laboratory analysis (e.g., hazardous materials sampling and analysis, asbestos surveys, and lead-based paint surveys) are excluded.
- Federal, state, or local review and processing fees are excluded.
- Formal NRHP/SAL eligibility evaluations of archeological historic properties documented in the project area are excluded.
- Documentation or removal of human burials encountered during the field investigations or inadvertent discovery during construction is excluded.
- This scope of services does not include the preparation of a No Permit Required Letter, Approved Jurisdictional Determination (AJD).
- This scope excludes formal NRHP/SAL eligibility evaluations of archeological and historic properties documented in the project area.
- This scope excludes the documentation or removal of human burials encountered during the field investigations or inadvertent discovery during construction.
- This scope excludes costs associated with mechanized trenching.

HYDROLOGIC/HYDRAULIC (H&H)

- Scour analysis is excluded.
- 2D hydraulic analysis is excluded.
- Detention, downstream assessments, and local drainage analysis are excluded.
- Fees associated with data collection (model retrieval fee from data libraries, etc) and FEMA Project Library model retrieval costs are excluded. The fee depends on FEMA library charges for model retrieval and may increase without warning. FEMA Project Library model retrieval costs are excluded. This may be \$350.00 or greater. FEMA requests \$150.00 up front plus costs of materials
- Federal (FEMA) review and processing fees for LOMR/CLOMR are excluded. A review and processing fee of at least \$8,000 for a Letter of Map Revision and \$6,500 for a Conditional Letter of Map Revision will be assessed by FEMA. The fee listed is current as of date of this proposal, although fees may increase without warning.
- FEMA will require that a public notices of revisions to the floodplain maps be inserted in at least one local newspaper, the cost of which is determined by each newspaper. This cost is excluded in the scope of work.

REIMBURSABLE EXPENSES

- Costs for software licenses, logins, training, or annual fees are excluded.

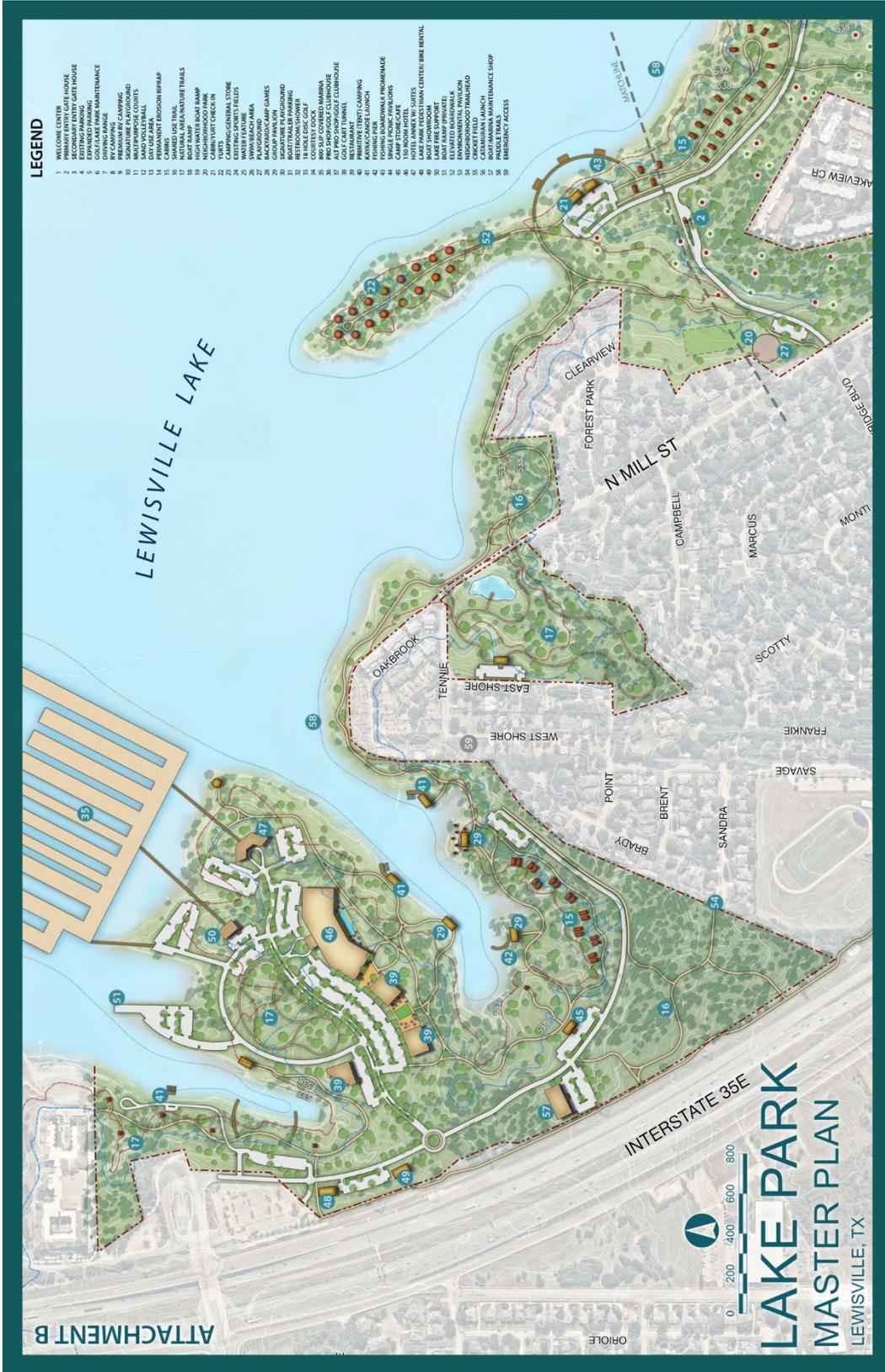
ATTACHMENT C PROJECT LOCATION AND LIMITS



LAKE PARK PROJECT LOCATION AND LIMITS



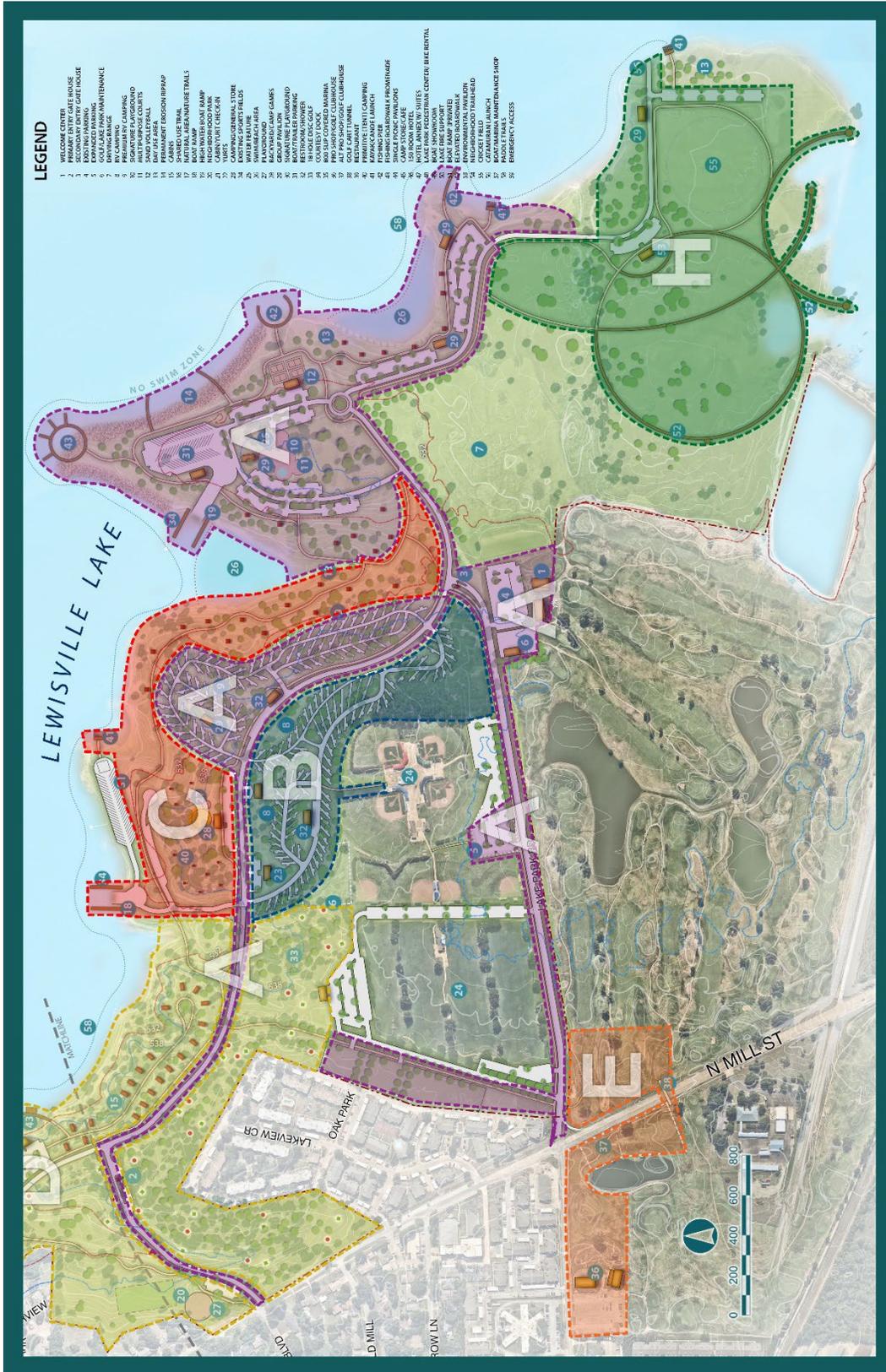
MARINA AREA PROJECT LOCATION AND LIMITS



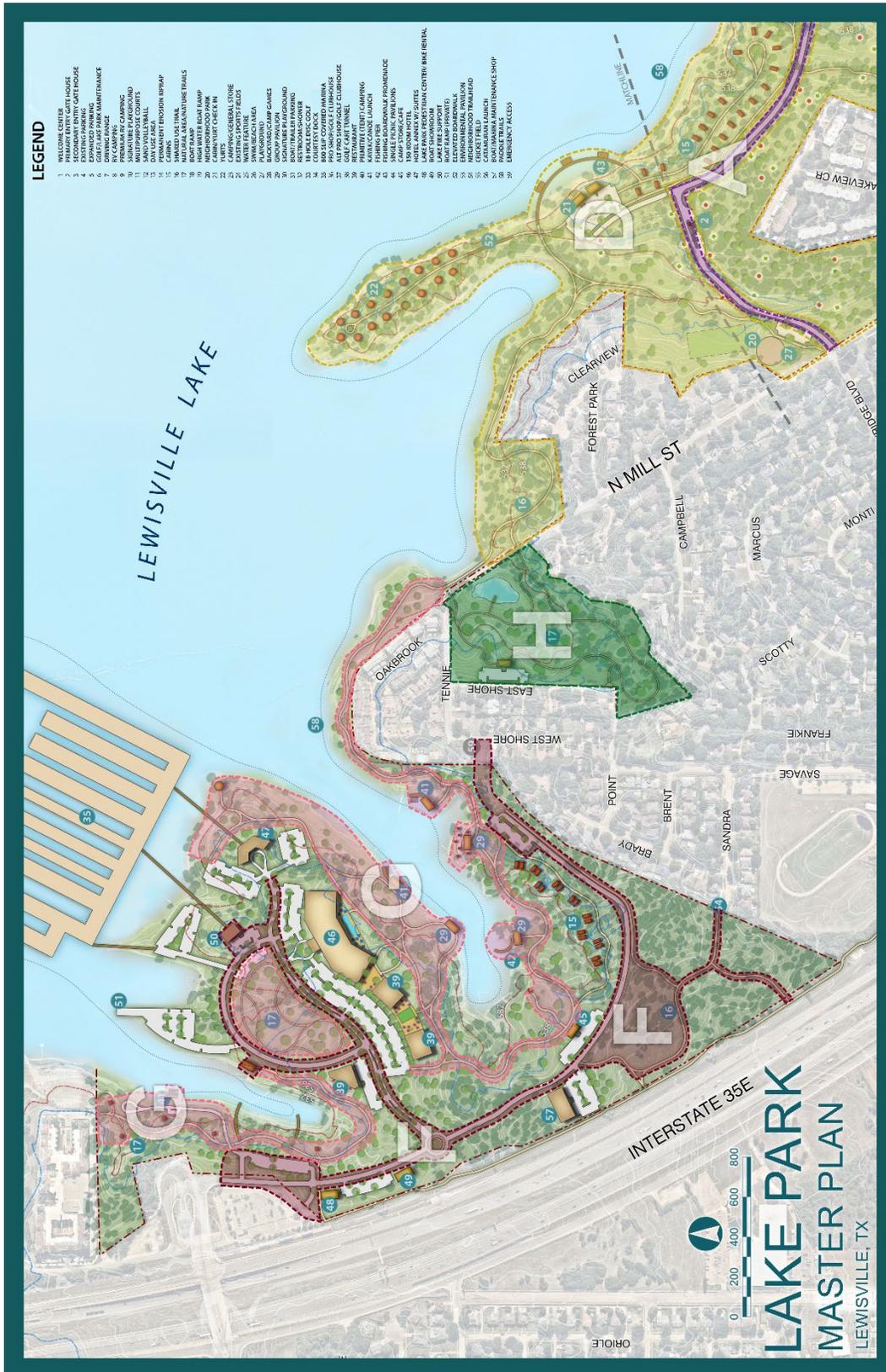
PROJECT LOCATION AND LIMITS PROJECT PHASING PLAN



LAKE PARK PROJECT PHASING PLAN



MARINA AREA PROJECT PHASING PLAN



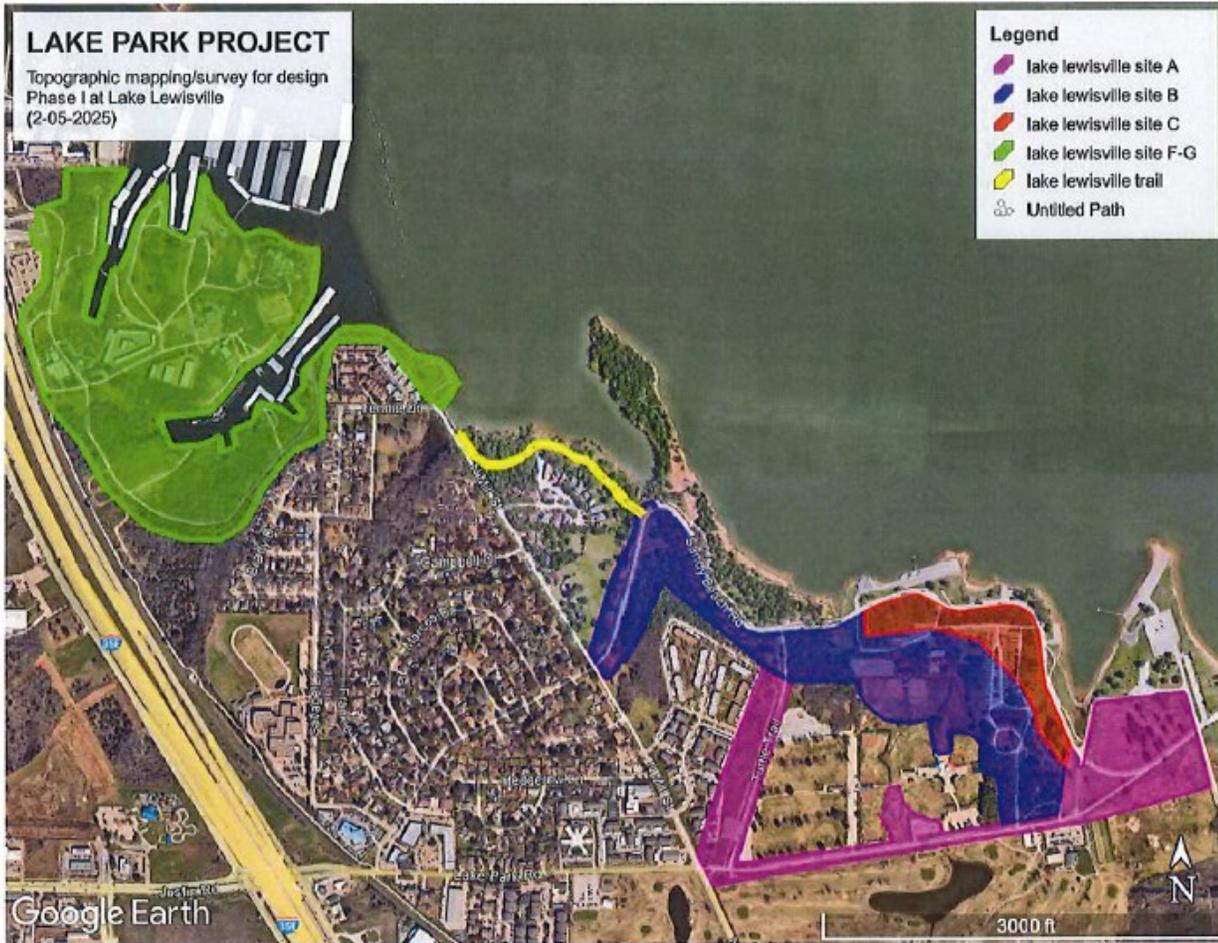
TREE SURVEY EXHIBIT (DAVEY/GREEHILL)



TREE SURVEY EXHIBIT MARINA AREA



TOPOGRAPHIC SURVEY EXHIBIT



ATTACHMENT D **PROJECT SCHEDULE**

Anticipated project schedule is anticipated to be approximately 24 months for design. Project schedule is subject to modifications due to delays, agency review turnaround time, etc. Please see attached. Modifications to this schedule will be communicated with the CLIENT as the project progresses.

