WORK AUTHORIZATION NO. __1____

PROJECT: ____City Line Road_____

This Work Authorization is made pursuant to the terms and conditions of the Caldwell County Contract for Engineering Services, being dated _____, 20_____ and entered into by and between Caldwell County, Texas, a political subdivision of the State of Texas, (the "County") and ____LJA Engineering, Inc.___ (the "Engineer").

Part1. The Engineer will provide the following Engineering Services set forth in Attachment "B" of this Work Authorization.

Part 2. The maximum amount payable for services under this Work Authorization without modification is _$799,009.00___.

Part 3. Payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the Contract.

Part 4. This Work Authorization shall become effective on the date of final acceptance and full execution of the parties hereto and shall terminate on _October_22__, 2027__. The Engineering Services set forth in Attachment "B" of this Work Authorization shall be fully completed on or before said date unless extended by a Supplemental Work Authorization.

Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.

Part 6. County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. Engineer understands and agrees that County's payment of amounts under this Work Authorization is contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to continue to make payments under this Contract. It is further understood and agreed by Engineer that County shall have the right to terminate this Contract at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by County's budget for the fiscal year in question. County may effect such termination by giving written notice of termination to Engineer.

Part 7. This Work Authorization is hereby accepted and acknowledged below.

EXECUTED this ____ day of _____, 20___.

ENGINEER:

LJA Engineering, Inc.

By:_____
Signature

___Thomas Lowe_____
Printed Name

___Sr Vice President_____
Title

___9/25/2025_____
Date

COUNTY:

Caldwell County, Texas

By:_____
Signature

_____
Printed Name

_____
Title

LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

APPROVED
By Maria Castanon at 3:36 pm, Oct 27, 2025

ATTACHMENT A
SERVICES TO BE PROVIDED BY THE COUNTY
FOR CITY LINE ROAD

In general, Caldwell County and its representatives to their best efforts will render services as follows:

1. Name, business address and phone number of County's project manager.

2. Assistance to the Engineer, as necessary, with obtaining data and information from other local, regional, State and Federal agencies required for this project.

3. Obtain Rights of Entry from landowners that are unwilling to grant access to the Engineer.

4. Provide available appropriate County data on file, plans and specifications that are deemed pertinent to the completion of the work required by the scope of services (including previous hydraulic studies, models, previous reports and studies, available existing traffic counts, and design year traffic projections).

5. Provide available criteria and full information as to the client's requirements for the project. Provide examples of acceptable format for the required deliverables.

6. Provide information on any meetings/discussions held with adjoining property owners that may impact the project.

7. Provide timely reviews and decisions necessary for the Engineer to maintain the project work schedule. Review recommendations offered by the Engineer, progress of work, and final acceptance of all documents.

8. Submittal of documentation and permits to regulatory agencies for review and comment, when specified.

9. Support project development efforts with stakeholders, coordinate meetings and interface with stakeholders, as needed.

10. Provide a summary of prior communications with impacted landowners, related to this project.

11. Post and maintain project information for public consumption on the County website.

12. Assist with Coordination between the Engineer and the County's other Consultants.

13. Negotiate with all utility companies for any agreements and/or relocations required.

14. Provide an agent as necessary to secure proposed ROW/easements and relocate/remove improvements on proposed ROW.

15. Review Engineer's progress, submittals, and plan changes.

ATTACHMENT B
SERVICES TO BE PROVIDED BY THE ENGINEER
FOR CITY LINE ROAD
(SCHEMATIC)

PROJECT DESCRIPTION

Project Type & Limits

Schematic – SH 142 to Old Fentress Road (1.30 miles)

Existing Facility

City Line Road is an existing 2 lane undivided, asphalt paved roadway connecting to SH 142 at an angle with a stop sign at one end and connecting to Old Fentress Road on the other end at a T-intersection. The roadway has drainage ditches and no shoulders with approximately 60 ft existing ROW. There are several private driveways that tie into City Line Road and the roadway acts as a collector street for several developed and undeveloped tracts.

Proposed Facility

The project proposes a 3-lane roadway featuring a continuous two-way left turn lane from SH 142 to Old Fentress Road. The proposed roadway will have asphalt pavement and include curb & gutter drainage with standard shoulder width. The project will require ROW acquisition for the additional center turn lane and shoulders. Special features planned for this facility include sidewalks and a shared use path throughout the project limits. This project also proposes realigning the City Line Road tie-in connection at SH 142 to allow a perpendicular connection across from Windsor Boulevard to create a 4-way intersection that improves safety and mobility. The project also proposes to eliminate the offset in the Maple Street intersection.

Design Criteria

The proposed design criteria for the project will be developed from TxDOT design criteria manuals in association with Caldwell County Development Ordinances for Roadway and Drainage.

1. PROJECT MANAGEMENT

    a. Shall designate one Licensed Professional Engineer (Texas) to be responsible for the project management, and all communications with the County and its representatives.

    b. MONTHLY PROGRESS REPORTS, INVOICES, AND BILLINGS (**8** months assumed):

- Submit monthly progress status reports to the GEC. Progress reports will include: deliverable table, tasks completed, tasks/objectives that are planned for the upcoming periods, lists or descriptions of items or decisions needed from the County and its representatives. Subconsultant progress will be incorporated into the monthly progress report. A copy of the monthly progress report will be uploaded to the County's ProjectWise System.

- Prepare correspondence, invoices, and progress reports on a monthly basis in accordance with current County requirements.

c. QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PLAN:

- Prepare a project specific QA/QC plan and submit to the GEC within thirty (30) days of notice to proceed.

- For each deliverable, provide evidence of their internal review and mark-up of that deliverable as preparation for submittal and in accordance with submitted project specific QA/QC plan.

- Provide continuous QA/QC throughout the duration of the scheduled services included herein to appraise both technical and business performance and provide direction for project activities.

d. PROJECT COORDINATION & ADMINISTRATION:

- Prepare and maintain routine project record keeping including records of meetings and minutes.

- Correspondence and coordination will be handled through & with the concurrence of the GEC.

- Manage Project activities (including documenting emails, phone and conference calls, maintain project files for the length of the project, meeting agendas, meeting minutes, and schedule meetings), direct Engineer's team/staff, coordinate and review sub-consultant work, correspond with the County and its representatives, and assist the County and its representatives in preparing responses to Project-related inquiries.

- The Engineer shall utilize the County's document control system, ProjectWise, to assure the appropriate control of documentation and reporting. The Engineer shall maintain and upload complete and accurate records of design documents in County's File System, ProjectWise. This library will contain all pertinent Project documentation and will include, but is not limited to, copies of the following:

  - Agreements

- Permits
- Reports
- Design Submittals
- Correspondence
- Exhibits
- Native Files
- Meetings Minutes
- Agendas

- All contract documents, including native files, shall be turned over to the County at each milestone and at the completion of the project or as requested. Documents shall be posted to the County's ProjectWise document control system.

e. PROGRESS/COORDINATION MEETINGS (**36** biweekly meetings assumed, **4** external meetings assumed):

- Attend a kickoff meeting with the County and its representatives and stakeholders, as necessary to communicate development of the project and design issues.

- Attend a biweekly meeting and coordination/progress meeting with the County and GEC, as necessary to communicate development of the project and design issues. Updates shall include activities completed, upcoming action items, activities required by the next meeting, issues encountered, information or items required from other agencies/consultants, late activities, solutions for unresolved and/or anticipated problems with resolution timeframes, and any outstanding items needed to complete required deliverables.

- Prepare agenda and sign-in sheets for external coordination/progress meetings.

- Prepare meeting minutes for review via email within three (3) business days of the external coordination/progress meeting.

- Conduct internal coordination meetings as required to advance the development of the project.

f. PROJECT SCHEDULE:

- Baseline Schedule – Submit a CPM Baseline Schedule in calendar day (CD) format to the GEC for approval, using Microsoft Project in both pdf and native formats within 14 calendar days of the Work Authorization execution. This schedule should detail all work activities, including those by the County affecting the critical path. It shall outline the execution strategy, critical path, milestones, deliverables, and for each activity, its predecessors, successors, start and end dates, and float. Changes to schedule activities, durations, and dates require County consent, except for adjustments due to approved supplements or County-sanctioned project duration changes.

- Progress Schedule – Submit an updated Progress Schedule with each significant milestone and/or deliverable identified by the County, detailing actual work completion percentages, and incorporating all approved supplements. If the schedule deviates from the baseline, a recovery schedule approved by the County is required.

g. DELIVERABLES:

- Monthly Invoices and Progress Reports
- Project Specific QA/QC Plan
- QA/QC Documentation with Deliverables
- Project Files
- Meeting Minutes, Sign-In Sheets, and Agendas
- Baseline and Progress Schedules

2. <u>ROUTE AND DESIGN STUDIES</u>

a. DATA COLLECTION:

- Perform record research and obtain existing information, including but not limited to: as-built plans, construction plans, right of way maps, existing planimetric maps, traffic data, accident data, environmental reports, studies, future land use maps, existing channel and drainage easement data, floodplain data, floodplain, bridge inspection records, existing utilities, geotechnical reports, and drainage models and analyses. Obtain construction plans for projects within and adjoining the project limits and abutting TxDOT and County Roads. Obtain drainage studies, reports, and mapping for the project area, including reports for developments affecting the drainage area.

- Conduct a field investigation of the proposed roadway alignment and the surrounding area to determine field conditions including photographic

record of notable existing features. Pavement Condition Assessment should be conducted during the field investigation.

- Develop and maintain adjacent property ownership information (including owner's name, tenant name for leased property, mailing address, property address, property id number) spreadsheet to be used for disseminating project information.

- Review aerial photography and contours. Aerial photography and contours will be the basis for developing all constraints maps and route options.

- Obtain traffic counts including turning movement counts at major intersections. Obtain traffic projections from the County, if available and evaluate if the projections need adjusting.

- Review the data collected and organize the information.

b. DESIGN CRITERIA:

- Submit a Design Summary Report (DSR) per TxDOT Roadway Design Manual and typical sections.

c. CONSTRAINTS MAP (**2** preliminary alternatives assumed):

- Develop evaluation criteria to assist in evaluating route alignment and typical section alternatives.

- Develop a project constraints map and technical memorandum that includes environmental concerns, known constraints (structures, floodplain, karst features), aerial photography, contour information, utility information, based on research of public databases and sources and details screening measures and decision practices for eliminating non-viable corridors.

- Evaluate traffic growth patterns and generate traffic projections for the ultimate roadway.

- Develop preliminary alignments and preliminary costs for use in soliciting input during coordination meetings with stakeholders.

- Refine preliminary alignment based on stakeholder input, design criteria, existing structures, potential displacements, right of way limits and requirements, preliminary traffic control plan, known developments, FEMA floodplain areas, existing and proposed drainage structures, and environmental constraints.

d. DELIVERABLES:

- Results of Records Research
- Property Owner Spreadsheets
- Traffic Counts and Traffic Summary Memo
- Design Summary Report and Typical Sections
- Constraints Map with Preliminary Alternatives, and right-of-way; and cost estimates and Technical Memorandums
- Constraints Map with Refined Alignment, and right-of-way; and cost estimate and Technical Memorandum Recommendation

3. PUBLIC INVOLVEMENT

a. STAKEHOLDER COORDINATION (**5** meetings assumed):

- Meetings and coordination with affected local agencies, County's consultants, and community stakeholders.
- Prepare agendas, sign in sheets, meeting minutes, discussion topics, presentations, overall exhibits, and maps of the project limits for stakeholder coordination meetings.
- Support communication with stakeholders by phone and email. Respond to stakeholder comments and inquiries.

b. PROPERTY OWNER MEETING SUPPORT (up to **9** meetings assumed):

- Prepare agendas, sign-in sheets, meeting minutes, discussion topics, presentations, overall exhibits, and maps of the project limits for property owner meetings.
- Provide property owner exhibits identifying Parent tract (including area), Right-of-way acquisition (including parcel acquisition and remainder areas), and proposed improvements adjacent to the property as needed.
- Plan and facilitate property owner meetings in English or Spanish.

c. PUBLIC MEETING/OPEN HOUSE (**1** public meetings assumed):

- Prepare handout materials, presentation, and exhibits for public viewing. Develop an invitation list of affected property owners, elected officials, stakeholders, school districts, local affected agencies, utility owners, and any other individuals potentially impacted or who have shown interest in the project.

- Provide experienced meeting facilitator and attend public open house meeting to solicit input from the general public.

d. DELIVERABLES:

- Stakeholder Meeting Agendas, Sign-In Sheets, Meeting Minutes, Presentations, Exhibits, and Maps
- Property Owner Meeting Agendas, Sign-In Sheets, Meeting Minutes, Presentation, Exhibits, and Maps
- Public Meeting Maps, and Exhibits

4. RIGHT OF WAY (ROW) SUPPORT

a. ROW MAP:

- Research and compile deed/plat records, including subdivision plats and existing easements, and build a working map from recorded data.
- Calculate approximate search data to recover right of way monumentation and make initial pass to recover right of way monumentation.
- Draft preliminary right of way map and list of impacted tracts.

b. PARCEL ACQUISITION DOCUMENTS (**10** parcel documents assumed, **10** staking assumed):

- Upon approval of final schematic, prepare a right of way strip map.
- Prepare draft parcel sketches and field note documents for right of way parcel and easement acquisition. Note any improvements requiring removal or relocation on parcel sketches.
- Set appropriate monumentation in accordance with County requirements. Prepare signed and sealed documents for right of way parcel and easement acquisition.

c. ROW STAKING (**10** parcels assumed):

- Stake proposed right of way with suitable markers as requested on a parcel-by-parcel basis for the purposes of fence construction, utility installation, or property owner requests.

d. CONDEMNATION HEARING EXHIBITS (**3** parcels/hearings assumed):

- Prepare preliminary and final condemnation hearing exhibits for acquisition parcels. Exhibits should include aerial imagery including the following information:

- A vicinity map with an overall project layout and limits (beginning and end)
- Existing and proposed typical road sections
- Parent tract (including area)
- Right-of-way acquisition (including parcel acquisition and remainder areas)
- Proposed improvements adjacent to the property.

e. CONDEMNATION HEARINGS (**3** parcels/hearings assumed):

- Engineer will attend meetings with the attorney to prepare for the hearings.
- Engineer will attend condemnation hearings in-person and testify as an expert witness on the Project to discuss matters related to drainage, grading, environmental compliance, basic hydrologic, hydraulic, and geotechnical information.

f. DELIVERABLES:

- Preliminary ROW Map and affected property owner list (drawing file, pdf)
- Final ROW Map and affected property owner list (drawing file, pdf)
- Draft Parcel Acquisition Documents (pdf)
- Final Parcel Acquisition Documents (pdf)
- Preliminary and Final Condemnation Hearing Exhibits (pdf)

5. **UTILITY SUPPORT**

a. INCORPORATE UTILITY INFORMATION INTO ENGINEERING DRAWINGS

- Incorporate utility information provided by others into design files.
- Add utility notes to plans and exhibits as necessary.
- Include known utilities in the DSR.
- Consider and incorporate utility work into preliminary traffic control planning as necessary for joint bid utility relocations.

b. UTILITY MEETINGS (**4** meetings assumed):

- Meet with utility coordinator and review utility impacts and potential relocations to identify appropriate approach to reducing/mitigating impacts.

- Attend meetings with utility companies as requested.

c. DELIVERABLES:

- Utility information incorporated into plans and design files.

6. SURVEYING

a. RIGHT OF ENTRY (**10** letters assumed):

- Upon receiving approval from GEC, prepare and mail right of entry letters per the County's standard for the project team including geotechnical and environmental. Send a second follow up letter to non-responsive property owners.

b. FIELD SURVEYING:

- Survey the corridor area at approximately [100-foot sections 200-feet] on either side of the proposed roadway centerline including identify existing landowners, deed recordation information, locate visible improvements and utilities including driveways, water wells, storage tanks, drainage structures (size, material, flowline elevations), edge of pavement/shoulder, physical centerline, guardrail, fences, signs, mailboxes, trees 12" inch diameter and greater, locate property boundaries sufficient to re-establish ROW. Place a One-Call to have underground utilities marked. Map the utility markings as placed by One-Call.

- Establish horizontal and vertical control and set temporary benchmarks.

c. DELIVERABLES:

- Certified Mail Right of Entry Letters, Follow Up Letters, and Executed Right of Entry Documents.

- Mapping in 2-D and 3-D MicroStation Files (Surface – Texas Coordinate System South Central Zone NAD83 scaled to surface using County Wide scale factor provided in TxDOT survey Manual

- Pdf of Surveyor Project Notebook

- DTM of Proposed Corridor

7. SCHEMATIC DEVELOPMENT

a. SCHEMATIC:

- Prepare preliminary schematic submittal per Caldwell County submittal requirements and selected design criteria including proposed cross sections, typical sections, roadway centerline, proposed drainage structures, direction of flow and number of travel lanes, intersecting streets, property boundaries and information, ROW and easement locations, preliminary pavement section, driveway locations, horizontal alignment data, profile data, identification of known utilities, retaining walls, and bridge locations.

- Prepare final schematic submittal per Caldwell County submittal requirements and selected design criteria.

- Prepare cost estimate using TxDOT Average low bid prices.

b. DELIVERABLES:

- Preliminary Schematic Submittal including cost estimate per submittal requirements.

- Final Schematic Submittal including cost estimate per submittal requirements.

8. <u>DRAINAGE STUDY</u>

a. HYDROLOGIC/HYDRAULIC MODELING (**0** major channel crossings, **3** cross drainage structures assumed):

- Prepare hydrologic and hydraulic models or modify existing models (FEMA, drainage districts, river authorities, cities, etc.) if available, to define the drainage infrastructure required for the project. Detail the methodologies employed and recommendations. The analysis will include: preparation of a preliminary design of the right of way drainage system, cross drainage structures, right-of-way drainage, major channel crossings to reflect the existing and proposed conditions, recommended minimum pavement elevations based on cross drainage flood elevations, right of way requirements, identify potential needs for FEMA Coordination. HEC-RAS shall be utilized for all stream modeling. HY-8 will be utilized for all culverts. Atlas 14 impacts will be reviewed and incorporated.

- Exhibits and analysis will be prepared in the GIS environment to the extent practical.

- Preliminarily

b. IMPACT AND MITIGATION ANALYSIS

- Prepare an impact analysis to determine increases in peak flow rates for the 100-year storm including: existing and proposed peak flow rates and fill volume mitigation analysis. It is not anticipated that detention ponds will be required on this project.

c. DELIVERABLES:

- Preliminary & Final Drainage Report.

9. ENVIRONMENTAL SERVICES

a. COUNTY DUE DILIGENCE:

- The Environmental Services will include studies and documentation required, per the Caldwell County Environmental Protocol, for the various regulating authorities, including the Texas Historical Commission (THC), U.S. Army Corp of Engineers (USACE), and U.S. Fish and Wildlife Service (USFWS). The intention of the Environmental Services is to prepare the technical reports for environmental compliance, summarize the results of those studies in the due diligence report, and attain necessary clearance letters and approvals in order to proceed with the proposed project. Any technical reports shall be included as appendices to the due diligence report.

- The portion of the project at the northern terminus at SH 142/San Antonio Street will be evaluated by the SH 142 project and will not be part of this projects environmental study area.

b. DATA COLLECTION & FIELD RECONNAISSANCE:

- Obtain and update periodically publicly available information including but not limited to: locations of public buildings (schools, churches, parks, emergency responders), aerial photography, National Wetland Inventory Maps, County Soil Survey Maps, TCEQ & EPA Hazardous Materials Database Information, FEMA Floodplain Information, vegetation information, and environmental information from the appropriate local, State, or Federal agencies, including for state and federally-listed species.

- Conduct a regulatory records review to identify listed hazardous waste generators, treatment, storage and disposal facilities; solid waste landfills, unauthorized sites; documented spills; oil and gas exploration and production sites; and underground storage tank sites within the proposed site location. The review will also identify any other environmental risks along the project corridor.

- Conduct field reconnaissance to visually inspect the project site for additional risks and field verify any environmental risks identified by the regulatory records review.

c. HAZARDOUS MATERIALS ENVIRONMENTAL SITE ASSESSMENT:

d. Perform a hazardous materials Environmental Site Assessment (ESA) within the proposed project area identifying potential environmental concerns related to the presence of hazardous substances or petroleum products on the Property. Review standard environmental records, historical aerial photography, and historical topographic maps, and perform site reconnaissance. SECTION 404 CLEAN WATER ACT COMPLIANCE:

- Delineate wetlands and/or "waters of the US" (WOTUS) present on the subject site that are subject to jurisdiction of the US Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbor Act in order to quantify the extent of jurisdictional areas on the subject site that may be impacted by proposed site development, so that an appropriate permitting strategy can be identified, if needed. If no water resources are identified in the project area, document these findings in the water resources section of the due diligence report.

- Review any recent jurisdictional determination reports prepared for the subject site, or conduct an examination of aerial photographs, soil information, topographic maps, and other published sources in order to estimate the general location and characterization of jurisdictional areas requiring delineation.

- Conduct a detailed field reconnaissance to gather necessary information as well as to flag and/or stake jurisdictional areas (if applicable) for future survey. The WDM-prescribed methodology requires data collection from transects at appropriate intervals across the property and documentation of dominant vegetation, soils, and hydrologic indicators for areas to be classified as wetlands. Data sample information will include dominant vegetation, hydrologic indicators, and soil characteristics. Stream channels, ponds, and other WOTUS are delineated based on physical and hydrological characteristics described in RGL 05-05. Prepare a report suitable for submission to the USACE for wetland delineation verification and/or an Approved Jurisdictional Determination (AJD). The report will include a description of the site location and general conditions, descriptions of jurisdictional areas (including their approximate sizes and locations), field data forms, and a site map identifying the jurisdictional areas and locations of specific data-collection points. If requested by the client, submit the jurisdictional delineation report and supporting documentation to the USACE and request an AJD.

e. Contact the County to discuss permitting needs and prepare a separate proposal for permitting assistance efforts. Project impacts involving the placement of fill within any jurisdictional areas delineated on the subject site may require permitting actions with the USACE for project authorization. Triggering a 404 permit with the USACE may also necessitate a cultural resources survey under Section 106 of the National Historic Preservation Act, as well as a threatened or endangered species assessment. It is anticipated that this project will be covered under a Nationwide Permit (NWP 14) without a pre-construction notification (PCN).ENDANGERED SPECIES ACT COMPLIANCE:

- Review of agency literature to determine which federally listed threatened or endangered (T/E) species are known to occur in Caldwell County, whether the subject site or immediate area are likely to exhibit preferred habitat characteristics for any of the listed species; and whether any of the listed species have been documented occurring on or immediately adjacent to the subject site.

- Conduct a pedestrian reconnaissance of the subject site to confirm whether it contains potential habitat for the listed species. If potential habitat is identified during the site reconnaissance, its location will be mapped with GPS equipment. Prepare a letter documenting the project's effects on federally listed Threatened & Endangered Species to document the project's compliance with the Endangered Species Act based on data collection and field reconnaissance.

f. HISTORICAL SITE COMPLIANCE:

- Perform basic archival research at the THC, the General Land Office (GLO), the National Park Service's (NPS) online National Register Information System (NRIS), and/or other relevant archives for information on previous cultural resources investigations conducted in the vicinity of the project area and previously recorded archeological sites and historic properties within and in the vicinity of the project area.

- Review the abovementioned archives; historical, geological, topographic, and soil maps; and aerial photographs prior to initiating fieldwork to evaluate the potential for encountering significant cultural resources within the project area.

- Define the Area of Potential Effect (APE) of the proposed project based on applicable federal and state agency guidelines.

- Summarize the desktop research in the form of a technical memorandum and submit to the client for initial review and, with the client's permission, to the THC for review and comment.

- If the THC determines that an archeological survey is not required for the project, Horizon's scope of work for archeological services would be considered complete at this stage, and the subsequent archeological survey tasks would be activated. As the project would primarily involve construction within proposed new rights-of-way in relatively undeveloped areas, Horizon anticipates that an archeological survey will be required by the regulatory agencies.

- A cultural resources survey may still be required for the portion of the project area that falls within TxDOT's regulatory oversight, and Horizon will inform the GEC of the need for this survey as part of the project background technical report in the form of a desktop constraints map.

- Apply for and obtain a Texas Antiquities Permit from the THC (required for any project that falls under the jurisdiction of the Antiquities Code of Texas). The application for a Texas Antiquities Permit requires the signature of the project sponsor and/or landowner, as appropriate, as well as the archeological Principal Investigator. The Texas Antiquities Permit must be issued by the THC prior to the initiation of any cultural resources field activities.

- Perform an intensive archeological survey consisting of pedestrian walkover with surface inspection and systematic shovel testing at a level of intensity sufficient to meet or exceed the Texas State Minimum Archeological Survey Standards (TSMASS) and guidelines established by the CTA unless field conditions warrant excavation of more or fewer shovel tests.

- Document any cultural resources encountered to a sufficient degree to make preliminary recommendations of the significance of the resources in terms of their eligibility for inclusion in the NRHP and/or for designation as SALs, as appropriate.

- Inspect the locales of any previously recorded archeological sites within the project area, assess their current condition, and document the sites to a sufficient degree to make preliminary recommendations of the significance of the resources in terms of their eligibility for inclusion in the NRHP and/or for designation as SALs, as appropriate.

- Complete and submit *State of Texas Archeological Site Data Forms* (for new archeological sites) or *State of Texas Archeological Site Update Forms* (for previously recorded archeological sites) to the Texas Archeological Research Laboratory (TARL) once directed to do so by the GEC.

- Assess the significance of any cultural resources within the project area in terms of their potential eligibility for inclusion in the NRHP and/or for designation as SALs, as appropriate.

- Develop a draft technical report detailing the project background, environmental and cultural setting of the project area, research goals and survey methods, survey results, recommendations for any cultural resources documented during the survey, and a bibliography of references cited.

- Submit a preliminary review copy of the archeological draft report describing the results of the survey in electronic (PDF) format to the client for review. Following approval of the draft report by the client, submit an electronic copy of the report to the THC and any other applicable regulatory agencies for review and comment once directed to do so by the GEC.

- Respond to any comments on the draft report offered by the THC and any other applicable regulatory agencies and produce a final report.

- Submit the final report to the client and the THC once directed to do so by the GEC.Prepare project records for curation at TARL.

g. DELIVERABLES:

- Draft & Final Environmental Due Diligence Report

- Draft & Final Cultural Resources Background Review and Agency Consultation

- Draft & Final Regulatory Records Review

- Draft & Final Hazardous Materials Environmental Site Assessment (ESA) Report

- Draft & Final Wetlands Determination/Jurisdictional Waters Determination

- Draft & Final Threatened and Endangered (T&E) Species Assessment

- Draft & Final T&E Presence/Absence Surveys

- Draft & Final Texas Antiquities Permit Application Associated Scope of Work and Report

- Draft & Final Texas Antiquities Permit Application Associated Scope of Work and Report

- Draft & Final USACE Section 404 General or Individual Permit Preparation
- Draft & Final Stormwater Pollution Prevention Plan (SW3P)
- Final Acceptance Correspondence of Approved Permits

10. DELIVERABLES

a. DOCUMENTS:

- All contract documents, including hard copies and electronic files, shall be turned over to the County at each milestone and at the completion of the project. Documents shall be posted to the County's project management database as requested. Submittals to regulatory agencies will not be sent without express direction from the GEC.

11. EXCLUSIONS

a. **GEOTECHNICAL SERVICES**

b. **PLANS, SPECIFICATIONS AND ESTIMATE (PS&E)**

c. **BIDDING PHASE SERVICES**

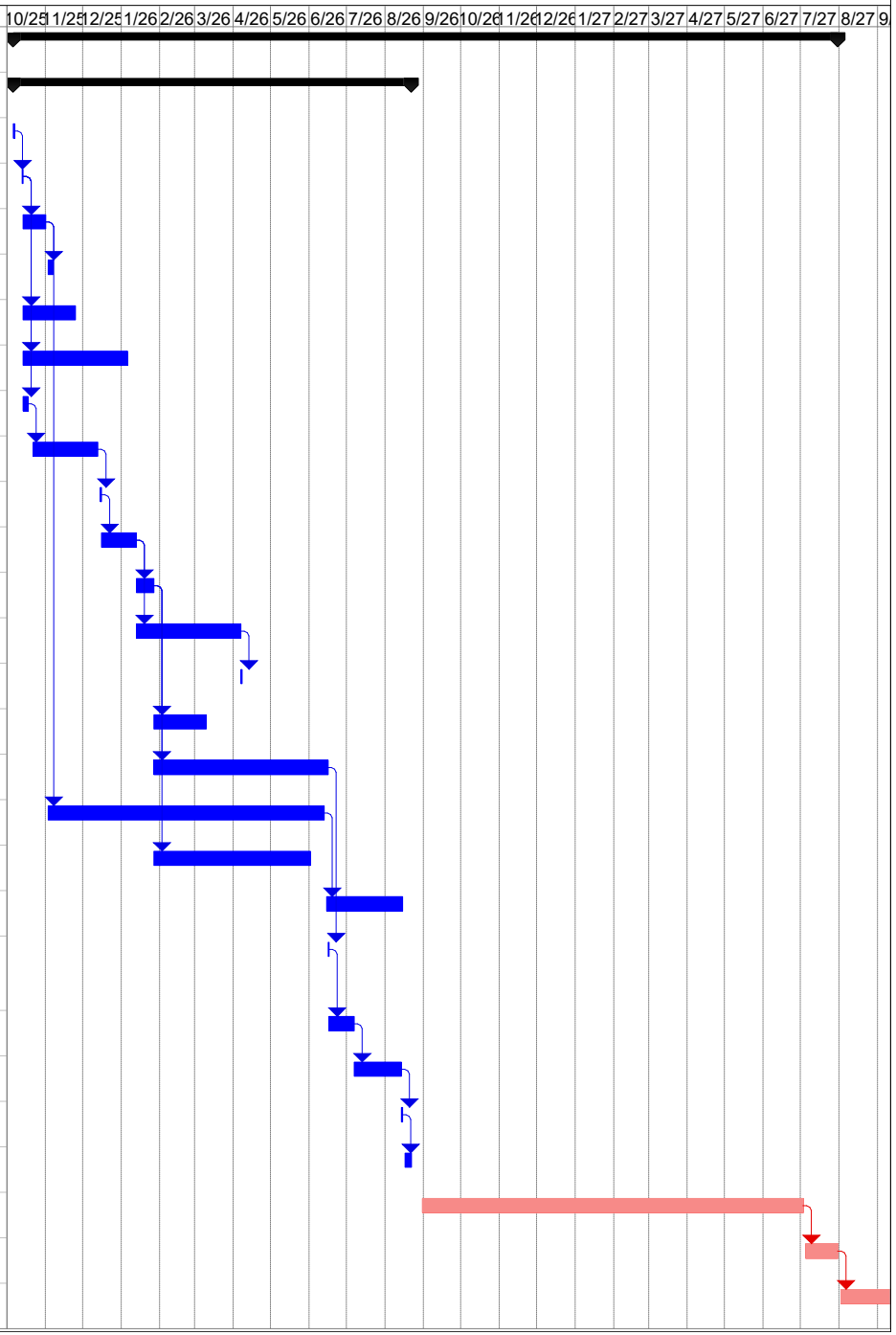
d. **CONSTRUCTION PHASES SERVICES**

e. **FEMA CLOMR OR LOMR**

f. **UTILITY SUE OR COORDINATION**

City Line Road - Attachment C

ID	Task Name	Duration	Start	Finish
1	**City Line Road Project**	**475 days**	**10/6/25**	**7/30/27**
2	**Schematic and Environmental Phase**	**230 days**	**10/6/25**	**8/21/26**
3	Notice to Proceed (NTP)	1 day	10/6/25	10/6/25
4	Kickoff Meeting with County and GEC	1 day	10/13/25	10/13/25
5	Desktop Level Data Collection - General	14 days	10/14/25	10/31/25
6	Develop DSR and Project Criteria	4 days	11/3/25	11/6/25
7	Field Work Data Collection (Survey)	30 days	10/14/25	11/24/25
8	Collect Right of Entry ROE	60 days	10/14/25	1/5/26
9	Traffic Counts	4 days	10/14/25	10/17/25
10	Evaluate Conceptual Alignments and Typicals	38 days	10/22/25	12/12/25
11	Submit Constraints Map and Reports	1 day	12/15/25	12/15/25
12	GEC, County Review of Alternatives	20 days	12/16/25	1/12/26
13	Update Alternatives Based on Comments	10 days	1/13/26	1/26/26
14	Prepare for Open House #1	60 days	1/13/26	4/6/26
15	Host Open House #1	1 day	4/7/26	4/7/26
16	Host MAPO's	30 days	1/27/26	3/9/26
17	Develop Geometric Schematic for Preferred Alternative	100 days	1/27/26	6/15/26
18	Develop County Level Environmental Due Diligence Report	160 days	11/3/25	6/12/26
19	Coordinate with County Utility Coordinator	90 days	1/27/26	6/1/26
20	Develop Preliminary Proposed ROW Map & Parcel Docs	45 days	6/15/26	8/14/26
21	Submit Draft Geometric Schematic, Reports and Environmentl Documents	1 day	6/16/26	6/16/26
22	GEC and County Review of Draft Documents	14 days	6/17/26	7/6/26
23	Address GEC and County Comments	28 days	7/7/26	8/13/26
24	Submit all Final Deliverables	1 day	8/14/26	8/14/26
25	Work Authorization Close Out	5 days	8/17/26	8/21/26
26	**PS&E Phase**	**220 days**	**8/31/26**	**7/2/27**
27	**Letting**	**20 days**	**7/5/27**	**7/30/27**
28	**Construction Start**	**60 days**	**8/2/27**	**10/22/27**



ATTACHMENT D	
SERVICES FOR CITY LINE RD:	
LABOR & UNIT COSTS	
LJA Engineering (Prime)	$ 588,150.00
LJA Surveying (Survey)	$ 168,008.00
LJA Environmental (Environmental)	$ 32,875.00
DIRECT EXPENSES	
LJA Engineering (Prime)	$ 1,260.00
LJA Surveying (Survey)	$ 7,416.00
LJA Environmental (Environmental)	$ 1,300.00
TOTAL	**$ 799,009.00**

City Line Rd - LJA ENGINEERING																
	TASK DESCRIPTION	Project Principal 310.00 HOURS	Senior Project Manager 290.00 HOURS	Project Manager 260.00 HOURS	Quality Manager 260.00 HOURS	Senior Engineer 240.00 HOURS	Project Engineer 210.00 HOURS	Design Engineer 185.00 HOURS	Senior Designer 175.00 HOURS	Designer 125.00 HOURS	E.I.T. 150.00 HOURS	Senior Engineering Technician 160.00 HOURS	Senior CADD Operator 145.00 HOURS	CADD Technician 120.00 HOURS	Admin 90.00 HOURS	Total HOURS
TASK 1 – PROJECT MANAGEMENT																
1.a	**Communication**															
	Project management communication with County and its representatives	2	16													18
1.b	**Monthly Progress Report, Invoices, & Billings (18 months assumed)**															
	Monthly Progress Reports		8													8
	Monthly Invoices		8												8	16
1.c	**QA/QC Plan**															
	Prepare QA/QC Plan	1	2		4										2	9
	Internal Milestone QA/QC at Each Deliverable (Preliminary/Final)		8		40	8										56
	Provide Continuous QA/QC Throughout Project		8		8											16
1.d	**Project Coordination & Administration**															
	Prepare Project Records & Meeting Minutes		2												16	18
	Coordination with the GEC		40												8	48
	Coordination with Subconsultants		16												8	24
	Manage Project Activities (emails, calls, meetings, manage/review subs, coordination)		24				8								16	48
1.e	**Progress/Coordination Meetings**															
	Kickoff and Progress Meetings with County and Representatives	1	20				20								4	45
	Prepare Agenda and Sign-in Sheets						10								4	14
	Prepare Meeting Minutes						10								4	14
	Internal Bi-Weekly Coordination Meetings		20				20				20				8	68
1.f	**Project Schedule**															
	Maintain a Project Schedule		4													4
1.g	**Project Documents/Files**															
	Maintain project documents/files and provide at each milestone		8				8				8					24
	TASK 1 TOTAL HOURS	4	184	0	52	8	76	0	0	0	28	0	0	0	78	430
	TASK 1 TOTAL FEE	$1,240	$53,360	$0	$13,520	$1,920	$15,960	$0	$0	$0	$4,200	$0	$0	$0	$7,020	$97,220
TASK 2 – ROUTE AND DESIGN STUDIES																
2.a	**Data Collection**															
	Perform Record Research & Obtain Existing Information										2					2
	Conduct Field Investigation and Include Photographic Record (2 visits)		8								8					16
	Pavement Condition Assessment						4				4					8
	Develop and maintain adjacent property ownership information spreadsheet						2				16					18
	Obtain and review traffic counts, including movement counts at major intersections		2			8	16				8					34
	Review Collected Data						4				4					8
2.b	**Design Criteria**															
	Develop Preliminary Design Summary Report (DSR) and Typical Sections		2				4				16					22
	Develop Final Design Summary Report (DSR) and Typical Sections		1				2				4					7
2.c	**Alignment/Constraints Map**															
	Obtain/update public information						1				4					5
	Conduct regulatory records review						1				4					5
	Develop Project Constraints Map		2				16				20					38
	Develop Project Constraints Technical Memo		8				16				24					48
	Traffic Study		4				16				40					60
	Evaluate traffic growth patterns for ultimate roadway		2			2	8				16					28
	Develop Preliminary Alignments (2)		2			2	40				40	16				100
	Document operational and safety analysis for no-build and proposed alternatives					2	8				16					26
	Develop preliminary TCP plan for each alternative		2			4	16				40					62
	Develop Evaluation Criteria for route alignment and typical section alternatives		2			2	8									12
	Quantify effects on constraints with each alternative		2			2	16				16					36
	Conduct Screening Process and recommended alternative		2				8				8					18
	Refine recommended alternative		2				24				40	16				82
2.d	**Deliverables**															
	Upload and document all Task 2 Deliverables		4				8				8					20
	TASK 2 TOTAL HOURS	0	45	0	0	22	218	0	0	0	338	32	0	0	0	655
	TASK 2 TOTAL FEE	$0	$13,050	$0	$0	$5,280	$45,780	$0	$0	$0	$50,700	$5,120	$0	$0	$0	$119,930

City Line Rd - LJA ENGINEERING															
TASK DESCRIPTION	Project Principal 310.00 HOURS	Senior Project Manager 290.00 HOURS	Project Manager 260.00 HOURS	Quality Manager 260.00 HOURS	Senior Engineer 240.00 HOURS	Project Engineer 210.00 HOURS	Design Engineer 185.00 HOURS	Senior Designer 175.00 HOURS	Designer 125.00 HOURS	E.I.T. 150.00 HOURS	Senior Engineering Technician 160.00 HOURS	Senior CADD Operator 145.00 HOURS	CADD Technician 120.00 HOURS	Admin 90.00 HOURS	Total HOURS
TASK 3 – PUBLIC INVOLVEMENT															
3.a	**Stakeholder Coordination (2 meetings assumed)**														
	Coordinate with Local Agencies and County's Consultants	2	8				4								14
	Prepare Agendas, Meeting Minutes, Presentations for Stakeholder Meetings (2 Meetings)		2				2				4				8
3.b	**Property Owner Meeting Support (up to 4 meetings assumed)**														
	Prepare Materials and Exhibits for Meetings with Individual Property Owners		4				16				16				36
	Provide Property Owner ROW Acquisition Exhibits						2				4				6
	Attend Property Owner & Stakeholder Meetings (4 assumed) (1 Person)		8												8
3.c	**Public Meeting/Open House (1 meeting assumed)**														
	Prepare exhibits for public viewing		4				16				40				60
	Attend Public Meeting/Open House (1 Person)		4												4
	TASK 3 TOTAL HOURS	2	30	0	0	0	40	0	0	0	64	0	0	0	0	136
	TASK 3 TOTAL FEE	$620	$8,700	$0	$0	$0	$8,400	$0	$0	$0	$9,600	$0	$0	$0	$0	$27,320
TASK 4 – RIGHT OF WAY (ROW) SUPPORT															
4.a	**ROW Map**														
	ROW information incorporated into plans and design files		2				8				16				26
4.b	**Parcel Acquisition Documents**														
	Review Parcel Docs for comlpliance with plans		2				16				8				26
	TASK 4 TOTAL HOURS	0	4	0	0	0	24	0	0	0	24	0	0	0	0	52
	TASK 4 TOTAL FEE	$0	$1,160	$0	$0	$0	$5,040	$0	$0	$0	$3,600	$0	$0	$0	$0	$9,800
TASK 5 – UTILITY SUPPORT															
4.a	**Incorporate Utility Information into Engineering Drawings**														
	Utility information incorporated into plans and design files		2				16				16				34
4.b	**Utility Meetings**														
	Meet with Utility owners and create exhibits as necessary		2				8				16				26
	TASK 5 TOTAL HOURS	0	4	0	0	0	24	0	0	0	32	0	0	0	0	60
	TASK 5 TOTAL FEE	$0	$1,160	$0	$0	$0	$5,040	$0	$0	$0	$4,800	$0	$0	$0	$0	$11,000

City Line Rd - LJA ENGINEERING																
TASK DESCRIPTION	Project Principal 310.00 HOURS	Senior Project Manager 290.00 HOURS	Project Manager 260.00 HOURS	Quality Manager 260.00 HOURS	Senior Engineer 240.00 HOURS	Project Engineer 210.00 HOURS	Design Engineer 185.00 HOURS	Senior Designer 175.00 HOURS	Designer 125.00 HOURS	E.I.T. 150.00 HOURS	Senior Engineering Technician 160.00 HOURS	Senior CADD Operator 145.00 HOURS	CADD Technician 120.00 HOURS	Admin 90.00 HOURS	Total HOURS
TASK 6 – SURVEYING															
(See LJA Surveying Fee)															
TASK 7 - SCHEMATIC DEVELOPMENT															
7.a Schematic Development															
Prepare Preliminary and Final Ultimate Schematic		16			8	240				320	24				608
Develop Corridor Model in ORD		8			16	80				240	120				464
Prepare Preliminary and Final Cross Sections (Roll Plot)		4				24				80	16				124
Prepare Preliminary and Final Cost Estimate		8			4	16				16					44
TASK 7 TOTAL HOURS	0	36	0	0	28	360	0	0	0	656	160	0	0	0	1240
TASK 7 TOTAL FEE	$0	$10,440	$0	$0	$6,720	$75,600	$0	$0	$0	$98,400	$25,600	$0	$0	$0	$216,760
TASK 8 – DRAINAGE STUDY															
5.a Hydrologic/Hydraulic Modeling															
Identification of cross structure locations and preliminary sizing						8				16					24
Hydrologic Analysis (3 cross drainage structures; ROW drainage)		2			4	24				60					90
Hydraulic Analysis (3 cross drainage structures)		2			4	8				16					30
Preliminary Storm Drain Trunkline Analysis		2			2	40				80					124
Analyze On-site Parallel Drainage for ROW Determination (Assume 6 ditches)		2			4	40				80					126
Size Parallel Drainage for ROW Determination (24 driveway culverts)		2				16				24					42
5.b Impact and Mitigation Analysis															
Comparison of Existing & Proposed Conditions Flow Rates		2			8	16				24					50
Mitigation Analysis					4	8				8					20
5.c Deliverables															
Preliminary Drainage Report & Models		4			8	24				24				4	64
Final Drainage Report & Models		4			2	8				8					22
TASK 8 TOTAL HOURS	0	20	0	0	36	192	0	0	0	340	0	0	0	4	592
TASK 8 TOTAL FEE	$0	$5,800	$0	$0	$8,640	$40,320	$0	$0	$0	$51,000	$0	$0	$0	$360	$106,120
TASK 9 – ENVIRONMENTAL SERVICES															
(See Horizon Fee)															
TOTAL City Line Road Tasks															
TOTAL HOURS (LJA)	6	323	0	52	94	934	0	0	0	1482	192	0	0	82	3165
TOTAL LABOR FEE (LJA)	$1,860	$93,670	$0	$13,520	$22,560	$196,140	$0	$0	$0	$222,300	$30,720	$0	$0	$7,380	$588,150

Other Direct Expenses - LJA Engineering			
SERVICES FOR City Line RD:	**Rate**	**Quantity**	**Cost**
Photocopies B/W (8 1/2" X 11") / each	$0.12	500	$60.00
Photocopies B/W (11" X 17") / each	$0.20	1000	$200.00
Photocopies Color (8 1/2" X 11") / each	$0.75	200	$150.00
Photocopies Color (11" X 17") / each	$1.50	100	$150.00
Plots (B/W) / square foot	$2.00	50	$100.00
Plots (Color) / square foot	$5.00	50	$250.00
Mileage	Current Rate	500	$350.00
TDLR Plan Review and Registration	$2,800.00	1	$2,800.00
Traffic Counts	$1,200.00	4	$4,800.00
	TOTAL LJA DIRECT COSTS		**$1,260.00**

City Line Rd - LJA SURVEYING													
	TASK DESCRIPTION	Senior Project Manager 225.00 HOURS	Senior Project Surveyor 156.00 HOURS	Project Surveyor 135.00 HOURS	Senior Survey Techniciamn 120.00 HOURS	Survey Technician 100.00 HOURS	Certified Photogrametrist 145.00 HOURS	Lead Mapping Technician 138.00 HOURS	Analyitical Mapping Technician 127.00 HOURS	Aerial Mapping Technician 90.00 HOURS	Clerical/ Admin 75.00 HOURS	2 Man Survey Crew 175.00 HOURS	Total HOURS
TASK 5 – SURVEYING													
5.a	**Right-of-way Survey**												
	ABSTRACTING/PREPARE ABSTRACT MAP (30 PARCELS)	1	2	2	5	30					1		41
	FIELD SURVEY LOCATE ROW AND PROPERTY CORNERS	1			4	16					1	90	112
	PREPARE PRELIMINARY RIGHT-OF-WAY SHEETS	1	12	16	30	124					1		184
	PREPARE PARCEL PLATS AND FIELD NOTES (up to 10 parcel acquisitions)	4	6	20	66	144					1		241
	PREPARE FINAL RIGHT-OF-WAY SHEETS - SET PARCEL CORNERS	1	2	5	48	124					1	50	231
5.b	**Design Survey**												
	ROE LETTERS, TRACKING, REPORTS	1	2		5	16					6		30
	ESTABLISH CONTROL AND DIGITAL LEVEL LOOP (8 CONTROL MONUMENTS)	1	2	3	12	24					1	60	103
	PREPARE CONTROL AND DATA SHEETS	1	1	2	20	40					1		65
	SURVEY OF EXISTING IMPROVEMENTS; DRAINAGE, CROSS SECTIONS, FEATURES, CULVERTS, VISIBLE UTIL	1	1	1	24	32					1	60	120
	CREATE 3D DTM/TIN FILES, 2D; DRAINAGE FEATURES, VISIBLE UTILITIES, IMPROVEMENTS, CROSS SECTION	1	8		24	18					1		52
	Aerial Triangulation Processing						2		10				12
	Orthophotography Processing									34			34
	LiDAR Processing						4	12		40			56
	Prepare Planimetric 2D / 3D DGN, DTM, TIN models						4	14		48			66
	QA/QC, Statement of Map (Planimetric) Accuracy						6	18			3		27
	TASK 6 TOTAL HOURS	13.0	36.0	49.0	238.0	568.0	16.0	44.0	10.0	122.0	18.0	260.0	1374.0
	TASK 6 TOTAL FEE	$2,925	$5,616	$6,615	$28,560	$56,800	$2,320	$6,072	$1,270	$10,980	$1,350	$45,500	$168,008
	TOTAL HOURS (LJA)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL LABOR FEE (LJA)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Other Direct Expenses - LJA Engineering			
SERVICES FOR CITY LINE RD:	**Rate**	**Quantity**	**Cost**
Certified Letters (return receipt)	$6.00	30	$180.00
Deed Copies	$2.00	60	$120.00
Aerial Targets	$30.00	6	$180.00
Mobilization/Aerial Flight (UAV)	$6,320.00	1	$6,320.00
Plots (B/W) / square foot	$2.00		
Plots (Color) / square foot	$5.00		
Mileage	Current Rate	880	$616.00
	TOTAL LJA DIRECT COSTS		**$7,416.00**

Environmental - LJA Environmental									
Task	**Vice President**	**Sr. Project Manager**	**Project Manager**	**Project Leader II**	**Project Leader I**	**GIS Analyst I**	**Editor**	**Total Hours**	**Total Labor**
Rates	$255.00	$210.00	$190.00	$130.00	$120.00	$125.00	$120.00		
1. Project Management and Coordination								**0**	**$ -**
a. Communication								0	$ -
b. Monthly Progress Reports, Invoices , Including Deliverable Table								0	$ -
c. Project Specific QA/QC Plan								0	$ -
d. Project Coordination and Administration								0	$ -
e. Progress/Coordination Meetings								0	$ -
f. Project Schedule and Updates								0	$ -
8. Environmental Services								**169**	**$ 26,875.00**
a. County Due Diligence								0	$ -
b. TxDOT Environmental Clearance								0	$ -
c. Data Collection & Field Reconnaissance								0	$ -
d. Hazardous Materials Initial Site Assessment	2			16		4	2	24	$ 3,330.00
e. Section 404 Clean Water Act Compliance	2			16		4	2	24	$ 3,330.00
f. Endangered Species Act Compliance	2			14		2	1	19	$ 2,700.00
g. Cultural Resources Archival Research & Agency Coordination (Antiquites Code)	6					4		10	$ 2,030.00
h. Archeological Survey Fieldwork (Antiquities Code)			27	27				54	$ 8,640.00
i. Archeological Survey Report (Antiquities Code)	13		3	2		4		22	$ 4,645.00
j. Archeological Survey Records Curation (Antiquities Code)	2				12	2		16	$ 2,200.00
k. Deliverables								0	$ -
Total Horizon Direct Labor Hours	27	0	30	75	12	20	5	169	
Percent of Total Hours	16%	0%	18%	44%	7%	12%	3%		
Total LJA Environmental Direct Labor Cost									**$ 26,875.00**

Unit Costs - LJA Environmental				
Unit Costs	**UNIT**	**COST**	**QUANTITY**	**TOTAL COST**
Additional Fee per Prehistoric/Protohistoric Cultural Resource Recorded (includes extra field recording time, site form filing fee, mapping, and reporting)	EA	$2,500.00	1	$2,500.00
Additional Fee per Historic-age Cultural Resource Recorded (includes extra field recording time, site form filing fee, mapping, and reporting, and historical/archival research)	EA	$3,500.00	1	$3,500.00
Subtotal				$6,000.00
Unit Costs - Total				**$6,000.00**

Other Direct Expenses - LJA Environmental				
Direct Expenses	**Rate**	**Unit**	**Quantity**	**Cost**
CADD Color Plotting (Per SQ FT)	$ 1.50	Square Feet		$ -
Photocopies B/W (8.5x11)	$ 0.15	Each	500	$ 75.00
Photocopies B/W (11x17)	$ 0.60	Each	200	$ 120.00
Color Copies (8.5x11)	$ 0.49	Each		$ -
Color Copies (11x17)	$ 1.00	Each		$ -
Mileage	Current Rate	Miles	750	$ 525.00
Materials/Supplies	$ 10.00	Day	12	$ 120.00
Tablet/Geode	$ 40.00	Each		$ -
Postage	$ 1.15	Each		$ -
Overnight Mail- letter size	$ 25.00	Each		$ -
Site Forms	$ 110.00	Each		$ -
Hazmat Supplemental Records	$ 1,000.00	Each		$ -
TARL Records Curation Fee	$ 460.00	Project	1	$ 460.00
			TOTAL	**$ 1,300.00**