

ATTACHMENT B SCOPE OF SERVICES

Teague Nall and Perkins, Inc., (ENGINEER) shall render the following professional services necessary for the development of the project:

A. DATA COLLECTION

1. Perform up to two (2) field visits to evaluate the site conditions and understand drainage patterns, as well as potential construction constraints.
2. Obtain record drawings for existing infrastructure and developments in the area, as necessary.
3. Obtain existing hydrologic and/or hydraulic models as necessary for analysis.

B. DRAINAGE STUDY

ENGINEER shall perform a drainage study to evaluate peak discharges from the project site and determine if regional detention is needed to reduce the peak discharges from future development generally located southeast of the intersection of E College Street and E Valley Ridge Boulevard. This will generally involve the following tasks:

1. Existing Discharges – Determine the contributing drainage areas for release points from the project area and compute the SCS unit hydrograph hydrologic parameters associated with the drainage areas (area, weighted curve number, time of concentration and rainfall intensity). Compute the anticipated pre-project storm water runoff for the release points.
2. Changes in Discharges – Revise the contributing drainage area delineations to reflect the proposed site layout, recompute the hydrologic parameters associated with the revised drainage areas and estimate the anticipated post-project storm water runoff for the release points.
3. Conceptual Detention Analysis - If the results of the above tasks indicate the need for regional stormwater detention, a conceptual detention analysis will be performed. The conceptual detention analysis will identify the approximate size of the pond(s) and up to two (2) preferable pond locations.
4. Report – Compile the above information into a report.
5. Drainage Study Submission – The Study will be submitted to the City of Lewisville and appropriate forms will be completed. ENGINEER will address City comments and resubmit the report through Drainage Study acceptance.

C. FLOOD STUDY

ENGINEER will perform a floodplain analysis of Prairie Creek and/or the Elm Fork Trinity River if appropriate based on the findings of the Drainage Study. The analysis will be performed in accordance with City of Lewisville Standards and the minimum requirements of the National Flood Insurance Program (NFIP) as administered by the Federal Emergency Management Agency (FEMA). ENGINEER will perform the following tasks associated with the floodplain analysis:

1. Utilize existing hydraulic model and hydraulic work map(s) for Prairie Creek and/or the Elm Fork Trinity River as available.
2. Update the cross-section data in the hydraulic model for the sections that cross potential detention areas. Contour data based on the most recent available LiDAR for the area will be used to generate the updated cross section data.
3. Compute the expected 100-year flood elevations along Prairie Creek and/or the Elm Fork Trinity River, particularly across the project area. The computed floodplain elevations will be compared to the Base Flood Elevations (BFEs) of the existing hydraulic model.
4. Prepare exhibits delineating the existing and revised floodplain.
5. If necessary, evaluate the potential for reclaiming a portion of the 100-year flood area within the project area to accommodate potential regional detention.
 - a. Incorporate revisions to the site layout into the hydraulic model and re-evaluate the effect of the proposed site layout on the floodplain elevations.
 - b. Advise CLIENT of the potential effects of the proposed site layout on the floodplain on adjacent properties and recommend changes to the site layout to avoid adverse impacts on the adjacent properties.
6. Prepare a report summarizing the assumptions made, methodologies used, and conclusions reached in the flood study. The report will provide the technical background data to support a request for revising the current floodplain limits within the project area.

D. CORRIDOR DEVELOPMENT CERTIFICATE (CDC)

ENGINEER shall, if necessary, obtain the latest version of the Trinity River Corridor Development Certificate (CDC) hydraulic model and incorporate the proposed project into the model. ENGINEER will prepare a technical report documenting the analysis and impacts (if any) from the proposed project. ENGINEER shall complete the CDC Permit, attach all relevant documents, and submit it to the local CDC/Floodplain Administrator for review. ENGINEER will address any questions or comments related to the permit application.

Application fees are not included in the BASIC SERVICES fees and must be paid by the CLIENT prior to submittal.

E. FEE SUMMARY

Invoices will be divided into tasks as follows:

TASK	FEE
Data Collection	\$4,000
Drainage Study	\$22,000
Flood Study	\$20,000
Corridor Development Certificate	\$13,000
TOTAL	\$59,000

F. ADDITIONAL SERVICES

Any service provided by the CONSULTANT which is not specifically described in the scope of work for this contract as defined above or delineated in an attachment shall be considered additional services. Examples of additional services are provided Attachment A. Upon written authorization from the CLIENT, the CONSULTANT will perform Additional Services. Payment to the CONSULTANT for Additional Services shall be on a Fixed Fee basis, as described above, unless a contract amendment includes alternate payment basis. Additional services include, but are not limited to the following:

1. Survey not specifically described herein, including but not limited to topographic survey, ROW survey, finished floor elevations, or additional survey on private properties.
2. Engineering design of construction documents.
3. Engineering design of retaining walls, foundations for structures, soil conditioning plans, landscape features, entry gates or screening walls.
4. FEMA floodplain map amendments or studies (CLOMR, LOMA, LOMR, etc).
5. TCEQ dam permitting or dam breach analyses.
6. Environmental assessments or permitting.
7. Geotechnical evaluations.
8. Preparation of easement documents, right-of-way documents or abandonment documents.
9. Preparation of cost estimates beyond those quantified herein.
10. Presentations and public meetings not specifically described herein.
11. Subcontractor services.



STANDARD RATE SCHEDULE

Effective January 1, 2024 *

Engineering/Landscape Architecture/ROW	Hourly Billing Rate
Principal or Director	\$310.00
Team Leader	\$285.00
Senior Project Manager	\$280.00
Project Manager	\$240.00
Senior Engineer	\$290.00
Project Engineer	\$190.00
Senior Structural Engineer	\$295.00
Structural Engineer	\$210.00
Engineer III/IV	\$170.00
Engineer I/II	\$145.00
Senior Landscape Architect/Planner	\$290.00
Landscape Architect / Planner	\$210.00
Landscape Designer	\$150.00
Senior Designer	\$195.00
Designer	\$170.00
Senior CAD Technician	\$165.00
CAD Technician	\$130.00
IT Technician	\$190.00
Clerical	\$90.00
ROW Manager	\$265.00
Senior ROW Agent	\$195.00
ROW Agent	\$155.00
Relocation Agent	\$195.00
ROW Tech	\$110.00
Intern	\$90.00
Surveying	Hourly Billing Rate
Survey Manager	\$310.00
Registered Professional Land Surveyor (RPLS)	\$265.00
Field Coordinator	\$160.00
S.I.T. or Senior Survey Technician	\$155.00
Survey Technician	\$140.00
1-Person Field Crew w/Equipment**	\$170.00
2-Person Field Crew w/Equipment**	\$200.00
3-Person Field Crew w/Equipment**	\$225.00

Project Name: Valley Ridge Blvd/E. College St. Drainage Study
Client: City of Lewisville
TNP Project #: LEW 24080
Date: 5/21/2024

4-Person Field Crew w/Equipment**	\$245.00
Flagger	\$65.00
Abstractor (Property Deed Research)	\$105.00
Small Unmanned Aerial Systems (sUAS) Equipment & Crew	\$475.00
Terrestrial Scanning Equipment & Crew	\$290.00

**Hourly
Billing
Rate**

Utility Management, Utility Coordination, and SUE

Senior Utility Coordinator	\$190.00
Utility Coordinator	\$170.00
SUE Field Manager	\$190.00
Sr. Utility Location Specialist	\$180.00
Utility Location Specialist	\$135.00
1-Person Designator Crew w/Equipment***	\$165.00
2-Person Designator Crew w/Equipment***	\$220.00
2-Person Vac Excavator Crew w/Equip (Exposing Utility Only – 4 hour minimum)	\$335.00
Core Drill (equipment only – per day)	\$830.00
SUE QL-A Test Hole (0 < 8 ft; cost per each)***	\$2,400.00
SUE QL-A Test Hole (> 8 < 15 ft; cost per each)***	\$2,900.00

**Hourly
Billing
Rate**

Construction Management, Construction Engineering and Inspection (CEI)

Construction Inspector I/II	\$120.00
Construction Inspector III	\$140.00
Senior Construction Inspector	\$160.00
Construction Manager	\$235.00
Senior Construction Manager	\$280.00

Direct Cost Reimbursables

A fee equal to 3% of labor billings shall be included on each monthly invoice for prints, plots, photocopies, plans or documents on CD, DVD or memory devices, and mileage. No individual or separate accounting of these items will be performed by TNP.

Any permit fees, filing fees, or other fees related to the project and paid on behalf of the client by TNP to other entities shall be invoiced at 1.10 times actual cost.

Notes:

All subcontracted and outsourced services shall be billed at rates comparable to TNP's billing rates above or cost times a multiplier of 1.10.

* Rates shown are for 2024 and are subject to change in subsequent years.

** Survey equipment may include truck, ATV, Robotic Total Station, GPS Units and Digital Level.

*** Includes crew labor, vehicle costs, and field supplies.

Project Name: Valley Ridge Blvd/E. College St. Drainage Study

Client: City of Lewisville

TNP Project #: LEW 24080

Date: 5/21/2024



SAMPLE INVOICE

Teague, Nall & Perkins, Inc.

5237 N. Riverside Drive
Suite 100
Fort Worth, TX 76137
817-336-5773

David Salmon
City of Lewisville
151 W. Church St.
Lewisville, TX 75057

Invoice number
Date

Valley Ridge Blvd/E. College St. Drainage Study LEW XXXXX

Professional services rendered for the month ending June 30,2023

Description	Contract Amount	Percent Complete	Total Billed	Prior Billed	Current Billed
Data Collection	4,000	100.00	4,000.00	4,000	0.00
Drainage Study	22,000	80.00	17,600.00	13,200.00	4,400.00
Flood Study	20,000	60.00	12,000.00	10,000.00	2,000.00
Corridor Development Certificate	13,000	0.00	0.00	0.00	0.00
Total	59,000	59.95	33,600.00	27,200.00	6,400.00

Invoice total **6,400.00**

Please show project number on all payments of this statement

PROJECT SCHEDULE

SCHEDULE		
Task	Est. Task Duration	Est. Completion Time from NTP
Data Collection	1 Week	1 Week
Drainage Study	2 Weeks	3 Weeks
Flood Study	3 Weeks	6 Weeks
Corridor Development Certificate	2 Weeks	8 Weeks