

**PROFESSIONAL SERVICES
SUPPLEMENTAL AGREEMENT # 1
FOR
EAST PFLUGERVILLE PARKWAY
PS&E DEVELOPMENT
FROM WEISS LANE TO EAST CITY LIMITS**

STATE OF TEXAS §
 §
COUNTY OF TRAVIS §

This Supplemental Agreement No. 1 to a contract for Professional Services is made by and between the City of Pflugerville, Texas ("City") and LJA Engineering, INC. ("Consultant"). City and Consultant may be referred to herein singularly as "Party" or collectively as the "Parties."

WHEREAS, the City and Consultant executed an Agreement for Professional Services ("Agreement") on the 17 day of October, 2019 for the East Pflugerville Parkway project ("Project") in the amount of \$824,160.11; and

(insert an additional whereas statements for each supplemental agreement)

WHEREAS, the City and Consultant desire to enter into a Supplemental Agreement # 1 for Professional Services for the Project in the amount of \$355,494.75, on the 15th of January 2021 to add PS&E Development from Weiss Lane to East City Limits to the Agreement; and

WHEREAS, it has become necessary to amend the Agreement to modify the provisions for the Term of the Agreement, Scope of Services, Work Schedule, and Compensation; and

WHEREAS, it is necessary for the City to amend its agreements from time to time to comply with changes in state law relating to contracts of municipalities.

NOW, THEREFORE, premises considered, the City and the Consultant agree that said Agreement is amended as follows:

I.

Article II. Term shall be amended by changing the term of the Agreement to terminate on **August 31, 2022**, with the ratification and incorporation of the remaining terms of the Agreement.

Article III. Scope of Services and Exhibit A, shall be amended as set forth in the attached addendum to Exhibit A.

Article IV. Work Schedule and Exhibit B, shall be amended as set forth in the attached addendum to Exhibit B.

Article IV. Compensation to Consultant and Exhibit C (Fee Schedule), shall be amended by increasing by \$355,494.75 the amount payable under the Agreement for a total of \$1,179,654.86, as shown by the attached Addendum to Exhibit C (Fee Schedule).

2.

Except as amended hereby and as previously amended as indicated above, the terms of the Agreement shall remain unchanged and in full force and effect.

EXECUTED and **AGREED** to as of the dates indicated below.

**CITY OF
PFLUGERVILLE**

CONSULTANT



(Signature)

(Signature)

Printed Name: Sereniah Breland

Printed Name: **Brian Young, P.E.**

Title: City Manager

Title: **Vice President**

Date: _____

Date: 12-21-20

APPROVED AS TO FORM:

Charles E. Zech
City Attorney
DENTON NAVARRO ROCHA BERNAL & ZECH, P.C.

EXHIBIT A - SCOPE OF SERVICES**SERVICES TO BE PROVIDED BY THE ENGINEER**

Roadway: East Pflugerville Parkway
County: Travis County
Limits: East of Weiss Lane to Pflugerville City Limits

General Work Description: Develop 60%, 90% and 100% plans, specifications, and estimates (PS&E) and Technical Memos to prepare for construction of the East Pflugerville Parkway extension from Weiss Lane to the City's east City Limit (the PROJECT). The final PS&E plans will provide for the outside four (4) lanes and storm drain system of the ultimate six (6) lane divided roadway. Designs will also include pedestrian facilities (sidewalk and a shared-use path), roadside signs, pavement markings, and continuous illumination. The PS&E phase of the project will build off the preliminary designs from the schematic phase and produce construction plans, construction cost estimates, construction duration schedules, and bidding documents for the outside four (4) lanes.

Standards and Specifications

Designs and analysis will be based on the City of Pflugerville (the CITY) Engineering Design Manual and Construction Standards (the EDM) and supplemented by City of Austin or Texas Department of Transportation (TxDOT) standards or criteria as directed.

FC 120.2 - PUBLIC INVOLVEMENT

LJA will assist the CITY with public involvement during this phase to keep stakeholders updated on design progress, answer questions, and support the CITY with stakeholder communications. LJA will attend meetings with affected property owners as circumstances require and document meeting outcomes. LJA will provide updates to project materials and content for updates to the CITY project webpage.

Deliverables:

- Coordinate, attend, and document up to 2 stakeholder meetings
- Respond to stakeholder inquiries and provide project email updates
- Update project materials (fact sheet, maps and infographics)
- Provide content updates for CITY project webpage

FC 145 - PROJECT MANAGEMENT AND COMMUNICATION PLAN

1. Develop Project Management Plan
LJA will develop a Project Management Plan (PMP) that establishes all team members' roles and responsibilities, including the prime firm and subs. The PMP will also detail the process for all submittals.
2. Develop Project Specific QA/QC Plan
LJA will develop a project specific QA/QC plan that will be submitted within 30 days of NTP for approval which will detail the QA/QC process to be followed.

3. Meetings
 - a. Kickoff with City to include initial development of a design summary. A final design summary document will be submitted for approval afterwards.
 - b. Kickoff with Team - Hold initial kick-off meeting with all team members during the first week after receiving the notice to proceed.
 - c. Milestone Meetings - Milestone Meetings will be held for each of the following submittals: 60%, 90%, and 100%. These meetings will include CITY and project team staff and are estimated to last up to 2 hours.
 - d. Team Coordination Meetings - Hold staff/team meetings at the Engineers office beginning after the second week of the project. The staff attending will be based upon the current assignments (up to 24 meetings)
 - e. Engineer will provide meeting minutes for all meetings with CITY.
4. Invoicing and Contract Document Coordination
 - a. Prepare Subconsultant Contracts
 - b. Prepare monthly progress reports for invoicing
 - c. Prepare monthly invoices for submission to CITY
5. Manage Sub Consultants
 - a. Monitor and supervise sub consultant activities (staff and schedule)
 - b. Review and approve sub consultant invoices
6. Produce Project Scheduling
 - a. Prepare an initial critical path schedule in Microsoft Project format for approval by CITY indicating tasks, milestones, major meetings, and reviews
 - b. Update schedule with each milestone deliverable or monthly if the schedule is modified. Updated schedules should highlight changes to original schedule and reason for modification
7. Submittals
 - a. Prepare Submittals for CITY review (60%, 90%, & 100%)
 - b. Document control
8. Deliverables
 - a. PMP and QC/QA Plan
 - b. Project Schedule
 - c. Monthly Invoices with Progress Summary Reports

FC 160 - PS&E DEVELOPMENT - ROADWAY

Roadway Design: The Engineer shall use Bentley's 3D design technology in the design and preparation of the roadway plan sheets. The Engineer shall provide roadway plan and profile drawings using CADD standards as required by the CITY. The drawings shall consist of a planimetric file of existing features and files of the proposed improvements. Existing subsurface and surface utilities as well as existing and proposed ROW lines shall be shown. Proposed Plan and corresponding Profile information shall be shown on the same sheets.

The plan view shall be drawn to a scale of 1inch = 100 feet and shall contain, but shall not be limited to, the following design elements:

1. Calculated roadway centerlines, horizontal control points, and alignments calculated using OpenRoads and the Bentley suite of software
2. Pavement edges for all improvements (proposed lanes, cross streets, retaining walls, and driveways)
3. Lane and pavement width dimensions
4. Proposed structure locations, lengths, and widths (as applicable)
5. Direction of traffic flow, lane lines, and the number of lanes
6. Control of access lines, ROW lines and easements
7. Begin and end superelevation transitions and cross slope changes
8. Limits of riprap, block sod, seeding, and other erosion control items
9. Existing utilities and structures
10. Benchmark information
11. Radii call outs, curb location, Concrete Traffic Barrier (CTB), guard fence, crash safety items and American with Disabilities Act Accessibility Guidelines (ADAAG) compliance items.

The profile view shall be drawn to a scale of 1 inch = 10 feet and shall contain, but shall not be limited to, the following design elements:

1. Calculated profile grade for the proposed roadway and all cross streets including vertical curve data with “K” values
2. WSELs at each stream crossings for design and 100 year storms
3. The location of cross streets, cross culverts, or other structure including cross sections of any proposed or existing roadway, structure, or utility crossing.

Typical Sections: LJA shall prepare typical sections for all proposed and existing roadways and structures. Typical sections shall include width of travel lanes, shoulders, outer separations, border widths, curb offsets, and ROW. The typical section shall also include Proposed Profile Grade Line (PGL), centerline, existing and proposed pavement structure design, longitudinal joints, side slopes, sodding or seeding limits, concrete traffic barriers, sidewalks, station limits, common proposed and existing structures including retaining walls, existing pavement removal, riprap, limits of embankment and excavation, and other relevant details.

Cross Streets and Side Streets: The Engineer shall provide an intersection layout detailing the pavement design and drainage design at the intersection of each cross street, and side street and/or driveway. Layouts shall include horizontal and vertical alignments, curb returns, geometrics, transition lengths, stationing, pavement and drainage details, and ADAAG compliance items. The Engineer shall design for full pavement width, widening, overlay, or any combination thereof, and provide a transition to the existing roadway.

Temporary Dead End: The Engineer shall provide a layout detailing the pavement and drainage design at the temporary dead end to the roadway at the City Limits. Layouts shall include a turn around design including horizontal and vertical alignments, curb returns, geometrics, transition lengths, stationing, pavement, and drainage details, and ADAAG compliance items.

Cut and Fill Quantities: The Engineer shall develop an earthwork analysis to determine cut and fill quantities and provide final design cross sections at 100 foot intervals. Cross sections shall be delivered in standard OpenRoads format on 36-inch roll plots, and electronic files. The Engineer shall provide all templates, corridors and surfaces files used

to generate the design cross sections. Cross sections and quantities shall include existing pavement removals. Annotation shall include at a minimum existing and proposed ROW, cross slopes, offset and elevation callouts of key points, side slopes (front & back), profiles (centerline or baseline PGL locations), any existing longitudinal utilities to be removed, relocated, or remain as well as proposed utilities.

Deliverables:

LJA will produce the following PS&E Sheets:

1. Title Sheet
2. Index Sheet
3. General Notes Sheets
4. Project Layout Sheets
5. Typical Sections; existing and proposed
6. Horizontal Alignment Sheets
7. Roadway Plan and Profile Sheets
8. Cross Street Plan and Profile Sheets
9. Intersection Grading Sheets
10. Miscellaneous Roadway Detail Sheets
11. Driveway Plan & Profile Sheets
12. Cross Section Sheets
13. Quantity Summaries
14. Standard Details

FC 161 - DRAINAGE

Storm Drains: The Engineer shall provide the following services:

1. Design and analyze storm drains using Geopak Drainage
2. Size inlets, laterals, trunk lines and outfalls. Develop designs that minimize the interference with the passage of traffic and minimize the likelihood to incur damage to the highway and local property in accordance with the City's design criteria.
3. Determine hydraulic grade line (HGL) for the design storm starting at the outfall channel for each storm drain design. Use the design WSEL of the outfall as the starting basis (tailwater) for the design of the proposed storm sewer system.
4. Calculate manhole head losses. Compute manhole head losses as per FHWA's Hydraulic Engineering Circular-22 (HEC-22).
5. Identify areas requiring trench protection, excavation, shoring, and de-watering.
6. Include proposed drainage structures in the 3D model. The Engineer shall use Bentley's 3D design technology in the design and preparation of the 3D model.

Cross-Drainage Structures: The Engineer shall provide the following services:

1. Finalize drainage areas, times of concentration, runoff coefficients, and flows for cross culvert drainage systems based on Atlas 14 rainfall data.

2. Finalize Culvert Cross sections and identify each cross section's station location
3. Update the sizes of the drainage crossings, including extending, adjusting or replacing non bridge-class culvert crossings based on any updates from schematic design. Develop designs that minimize the interference with the passage of traffic and minimize the likelihood to incur damage to the highway and local property in accordance with the City's design criteria.
4. The Engineer shall evaluate the existing erosion and proposed erosion potential upstream and downstream of each structure and provide erosion control recommendations, as necessary.
5. Finalize detention design at Culvert/Outfall H including ditch sizing/grading, outfall pipe sizing, proposed headwater elevations and peak outflows.

Deliverables:

Produce the following PS&E Sheets:

1. Drainage Area Map Sheets
2. Culvert Layout Sheets
3. Drainage Plan & Profile Sheets
4. Storm Sewer Lateral Profile Sheets
5. Hydraulic Data Sheets – Culverts
6. Hydraulic Data Sheets – Drainage Areas
7. Hydraulic Data Sheets – Inlets
8. Hydraulic Data Sheets – Links
9. Hydraulic Data Sheets – Ditches
10. Detention Layout and details
11. Special Details
12. Quantity Summaries
13. Standard Details

FC 162.1 - SIGNING & PAVEMENT MARKINGS

- ◆ Signing and Pavement Marking Plans - Proposed Layouts will include pavement markings, object markers, delineators, and proposed roadside signs in accordance with the Texas Manual on Uniform Traffic Control Devices (TxMUTCD), and Texas Department of Transportation Sign Crew Field Book.
 - Signing and Pavement Marking Sheets (100 Scale)
 - Small Sign Summary Sheets
 - Standard Details
 - Quantity Summaries

FC 162.3 - TRAFFIC SIGNALS

- ◆ LJA will prepare plans, general notes, specifications, and estimates for traffic signal construction. The plans will be prepared in compliance with the Texas Manual on Uniform Traffic Control Devices (TMUTCD) and TxDOT and CITY standards, as applicable.

- ◆ LJA will prepare traffic signal modification plans for the East Pflugerville Parkway at Weiss Lane signalized intersection to include the following plan sheets:
 - General Notes
 - Summary of traffic signal quantities
 - Existing Conditions Layout
 - Proposed Traffic Signal Layout
 - Signal Phasing and Writing Charts
 - Proposed Traffic Signal Elevations
 - Proposed Intersection Pavement Marking, Signing, and Curb Ramp Layouts
 - Traffic signal pole, foundation, and electrical service standard sheets with quantities.
 - Select and prepare all applicable TxDOT standard sheets for traffic signal construction and traffic control during signal construction.

FC 163.3 - TRAFFIC CONTROL & EROSION CONTROL

- ◆ Design a Construction Phasing plan in accordance with CITY design standards and the Texas Manual on Uniform Traffic Control Devices (TxMUTCD) for the reconstruction of the PROJECT. It is anticipated that the construction of the PROJECT can be accomplished in 1 major phase with additional minor steps at the transition within the Weiss Lane intersection. The phasing plan will show barricade and channelization locations, spacing, work zone areas, necessary to construct the project and safely control traffic progression. The following Traffic Control Sheets will be produced:
 - Phasing Narrative
 - Phase 1 Layouts
 - Intersection Phasing Details
 - TCP and SW3P Standard Details
 - Quantity Summaries
- ◆ The temporary erosion control measures will be shown on the Traffic Control Layouts and quantity summaries per phase.
- ◆ A Construction Time Duration Schedule will be produced using Microsoft Project to estimate the construction duration at the 60%, 90%, and 100% milestone submittals.

FC 163.5 - ILLUMINATION

The engineer will prepare plans for continuous lighting along the PROJECT. The engineer will provide foundation design and details for all illumination elements. LJA will coordinate electric service details with electric service provider. Not included in the scope and fee for this project is lighting design for street and guide signs, wayfinding signs, or neighborhood marquee signs.

- Illumination Model & Analysis
- Illumination Schematic
- Illumination Layout Sheets (100 scale)
- Electrical Details Sheets with Circuit Diagrams

- Electrical Service Sheets with Conductor Sizing and Voltage Drop Calculations
- Luminaire and Electrical Standard Sheets
- Quantity Summaries

FC 163.17 - COMMENT RESOLUTION/QA/QC

- ◆ PS&E QA/QC & Comment Resolution at 60, 90, 100%
 - QA/QC of 60/90/100% Submittals
 - Responding to/Addressing City Comments

FC 160'S MILESTONE SUBMITTALS

- ◆ 60, 90% PS&E – 3 Sets of Hard Copies, 1 PDF
- ◆ 100% PS&E – 2 Sets of Hard Copies, 1 PDF
- ◆ Final PS&E and Project Manual, 2 Signed and Sealed originals, 1 PDF
- ◆ 60, 90, 100% and Final Construction Cost Estimates
- ◆ 60, 90, 100% and Final Construction Schedule

FC 309 - CONSTRUCTION PHASE SERVICES

FC 309.1 - Advertising, Bidding Phase

- ◆ The Engineer Will:
 - Prepare Contract Documents and Create Project Manual
 - Assist CITY with advertisement for bids including preparation of ad as required
 - LJA will provide online documents per CITY request
 - Conduct the Pre-Bid Conference
 - Answer Bid Questions and issue any Addenda necessary
 - Conduct the Bid Opening
 - Prepare Bid Tabulation and provide CITY with Letter of Recommendation for Award
 - Assist the City with execution of the construction contract.

FC 309.2 - Construction Phase Services

- ◆ The Engineer Will:
 - Attend Preconstruction Meeting to be conducted by LJA and the CITY PM
 - Track, review, and approve Construction Documentation
 - Review and approve submittals/shop drawings as received
 - Answer RFIs (3)
 - Prepare Design Change Notifications as necessary
 - Attend Construction Meetings (6 Meetings)

- Prepare and issue meeting minutes and attendance lists for each Construction meeting
- Provide status updates of received, reviewed, approved/rejected construction documentation (schedules updates, submittals/shop drawings, RFIs, etc...)
- Process pay applications
 - Verification of quantities will be performed by others
 - Approval by engineer is dependent on the City's Inspector approving quantities
- Coordinate with City Inspector and Contractor as necessary
- Review and Process Change Orders (2)
 - Review change order requests after approved by City inspector
- Prepare Record Drawing Plans

SERVICES ASSUMED TO BE PROVIDED BY THE CITY

- ◆ Provide CITY Project Manager as the primary point of contact for the consultant
- ◆ Provide all existing CADD files and pertinent as-built plans
- ◆ Attend Public Involvement Meetings
- ◆ Secure a location for the public involvement meetings
- ◆ Provide timely reviews in conjunction with the agreed upon schedule
- ◆ Provide right-of-way relocation assistance if necessary
- ◆ Provide payment for necessary permitting fees

ATTACHMENT 1: ACI ENVIRONMENTAL STUDY SCOPE



Contract Proposal 21-20-194

Proposal For	From	21 December 2020
Chad Wood LJA Engineering, Inc. P: (512) 439-4744	Project Manager Katie Canavan	
	Project Title	
	Environmental Assessment for East Plugerville Parkway 2,500-linear foot Project	

Project Description

aci consulting, a division of aci group, LLC is pleased to provide the following scope of services for the Environmental Assessment for East Pflugerville Parkway 2,500-linear foot Project in Travis County, Texas.

Scope of Services

aci consulting will execute the following tasks under this scope of work. The tasks are mutually dependent and scoped accordingly.

Task 1: Jurisdictional Waters Assessment, Endangered Species Habitat Assessment, and Phase I Environmental Site Assessment (ESA)

aci consulting will conduct a jurisdictional waters of the United States assessment, based on the current Environmental Protection Agency's (EPA) and U.S. Army Corps of Engineers' (USACE) guidance, within the approximately 2,500-linear foot proposed project area. The purpose of this assessment is to identify the location and extent of potential waters of the United States in accordance with Section 404 of the Clean Water Act (CWA). **aci consulting** will perform an analysis of the most current available aerial photographs, topographic maps, National Wetlands Inventory (NWI) database, National Hydrography Dataset (NHD), and soil surveys as well as conduct appropriate field work necessary to identify the location and extent of USACE jurisdictional waters and potential wetlands within the proposed project area. All potential habitat along the proposed project will be identified and provided in the Environmental Assessment report to the client.

Endangered Species Habitat Assessment

aci consulting will perform a threatened and endangered species habitat assessment along the study area. aci consulting will perform a desktop evaluation of the study area for federally listed species known to occur in Travis County, Texas, as well as a visual inspection within the study area. Potential habitat for federally-listed species impacted by this project will be incorporated into the Environmental Constraints report.



Phase I Environmental Site Assessment (ESA)

aci consulting will conduct and prepare a Phase I ESA report in accordance with American Society for Testing and Materials (ASTM) Standards 1527-13 and All Appropriate Inquiry (AAI).

Cost of Task 1: \$1,200.00

Task 2: Phase I Report

The purpose of this report is to identify the potential presence and negative impacts of hazardous materials in association with the property. An electronic copy of the report including all findings will be provided to the client as a stand alone appendix in the Environmental Assessment.

This report does not include SBA certification.

Cost of Task 2: \$1,500.00

Task 3: Cultural Resources Survey

aci consulting will conduct a cultural resources survey of the proposed project area that has not been previously surveyed for cultural resources. This task includes the preparation of a Texas Historical Commission (THC) Antiquities Code permit application. The THC permit application process includes a review of the Texas Archeological Sites Atlas and any necessary background research at the THC and the Texas Archeological Research Laboratory (TARL) to prepare the requisite research design in accordance with the level of effort required by the THC. The permit application will be provided to the client for review, comment, and signature prior to submission to the reviewer at the THC.

The cultural resources survey will include shovel testing, site photography, site recording, National Register and State Antiquities Landmark eligibility assessments, data analysis, and report preparation in accordance with THC and Council of Texas Archaeologists (CTA) standards. The reporting will involve the analysis of the data collected from the field work and the production of a draft report submitted to the client and to the THC for approval and concurrence. The final approved report will be produced and distributed to repositories as a requirement of the THC permit. This will be a non-collection survey so no artifacts will be collected as part of this effort and will therefore no artifact curation will be required. All field documents and photographs will be curated for submittal to TARL, as curation is required by the THC Antiquities permit.

Cost of Task 3: \$9,000.00

Task 4: Environmental Constraints Report

aci consulting will prepare an environmental constraints report to present the results of the desktop and field reconnaissance review of the study area. The findings from Tasks 1 and 2 will incorporated into this report, and the results of Task 3 will be included as an appendix. This task includes one round of comments from the project team. Following the comment response a finalized digital copy (PDF format) of the report will be submitted to the Client.



Cost of Task 5: \$2,550.00

Task 5: Project Coordination and Management

aci consulting will coordinate with the Client and project engineer throughout the environmental process. Coordination includes phone and email conversations and one meeting. Task 5 is anticipated to occur for three months.

Cost of Task 5: \$2,000.00

Cost of Tasks 1 through 5: \$16,250.00

Fee and Structure		Amount
Task 1: Jurisdictional Waters Assessment, Endangered Species Assessment, and Phase I Environmental Site Assessment	Fixed Fee	1,200.00
Task 2: Phase 1 Report	Fixed Fee	1,500.00
Task 3: Cultural Resources Survey	Fixed Fee	9,000.00
Task 4: Environmental Constraints Report	Fixed Fee	2,550.00
Task 5: Project Management	Fixed Fee	2,000.00
	Fee Total \$	16,250.00



Authorization and Acceptance (Acknowledgement of Concurrence with the foregoing)

A handwritten signature in black ink, appearing to read 'Katie Canavan', written over a horizontal line.

Katie Canavan
Project Manager

Chad Wood
P.E., PTOE

Date

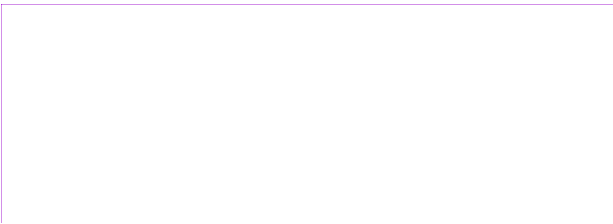
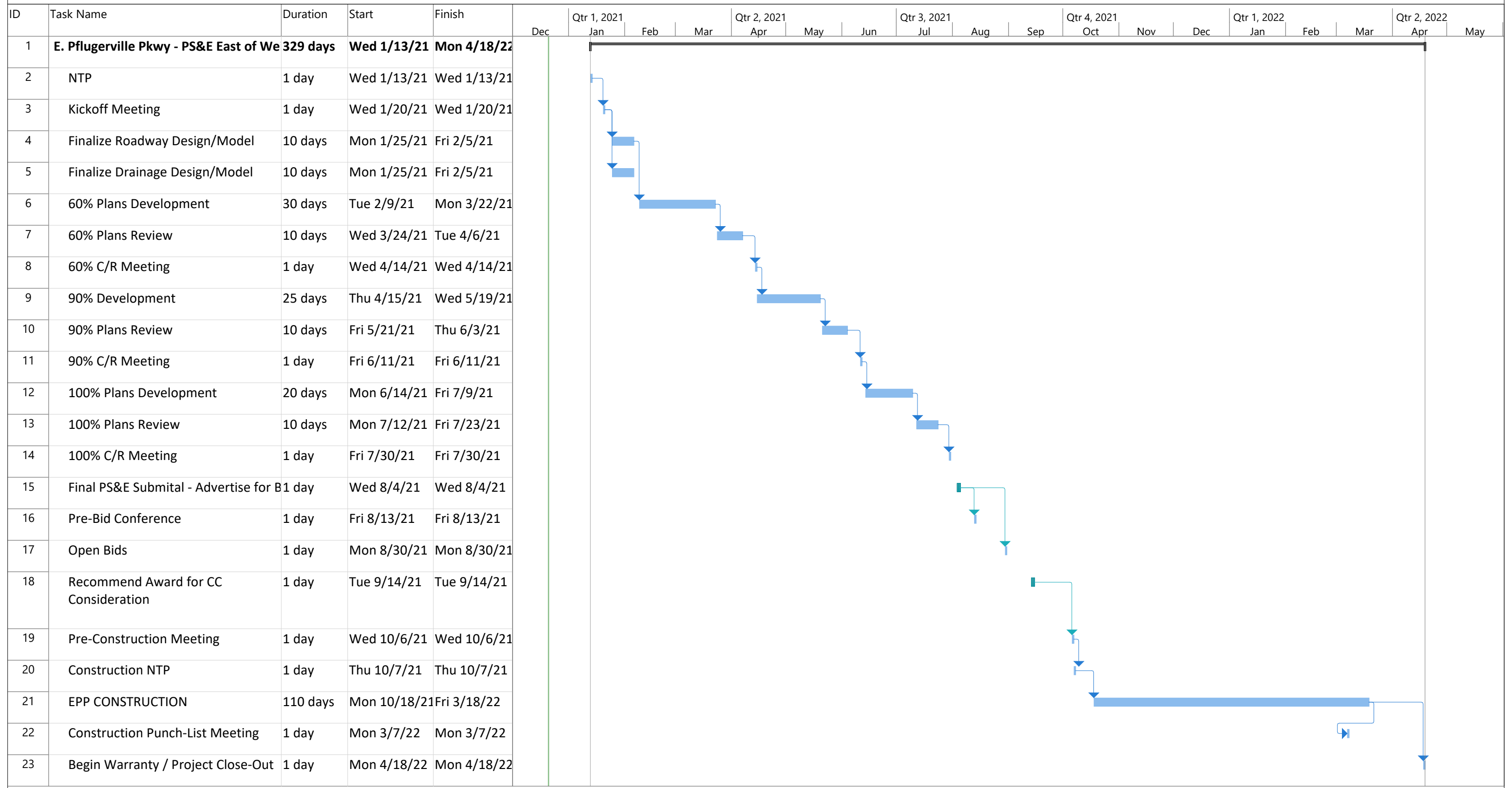


Exhibit B - E. Pflugerville Pkwy PS&E



Project: East Pflugerville Parkwa Date: Mon 12/21/20	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			

**E. Pflugerville Pkwy PS
Level of Effort Estimate**

EXHIBIT C

FEE SCHEDULE - PS&E, Bidding, & Construction Phase Services

PROJECT NAME: East Pflugerville Pkwy - Weiss Lane to Eastern City Limits

PRIME PROVIDER NAME: LJA Engineering, Inc.

Date: 12/21/2020

E. PFLUGERVILLE PKWY PS&E PROJECT								
TASK DESCRIPTION	Senior Project Manager	Senior Engineer/Planner	Project Engineer	E.I.T.	Senior Engineering Tech	CADD Operator	Admin	Total
FC 120.2 - Public Involvement								
Meet with Landowners (2 meetings)	8.0	8.0						16.0
Respond to public questions/comments	1.0	2.0	4.0			8.0		15.0
Update Project Materials & Content for CITY project webpage	1.0	2.0	4.0			8.0		15.0
HOURS SUB-TOTALS	10.0	12.0	8.0	0.0	0.0	16.0	0.0	46.0
LABOR RATE PER HOUR	\$230	\$180	\$160	\$135	\$120	\$85	\$70	
SUBTOTAL	\$2,300	\$2,160	\$1,280	\$0	\$0	\$1,360	\$0	\$7,100

TASK DESCRIPTION	Senior Project Manager	Senior Engineer/Planner	Project Engineer	E.I.T.	Senior Engineering Tech	CADD Operator	Admin	Total
FC 145 - Project Management								
Prepare Project Management Plan	1.0	4.0						5.0
Prepare Project Specific QA/QC Plan	1.0	4.0						5.0
Kick-off Meeting with City	1.0	2.0						3.0
Kick-off Meeting with Team	1.0	2.0	2.0	2.0	2.0	2.0		11.0
Milestone Meetings	6.0	6.0	6.0					18.0
Team Coordination Meetings (8)	8.0	8.0	8.0	8.0				32.0
Meeting Minutes (All Meetings)			24.0				12.0	36.0
Master Contract and Sub Consultant Contract Creation	1.0	4.0					6.0	11.0
Monthly Invoices	8.0		8.0				16.0	32.0
Manage Sub Consultants - ACI for CatEx	2.0	4.0					6.0	12.0
Project Schedule	2.0	8.0						10.0
Document Control							24.0	24.0
Prepare Submittals for City Oversight Reviews	2.0	8.0		8.0			4.0	22.0
HOURS SUB-TOTALS	33.0	50.0	48.0	18.0	2.0	2.0	68.0	221.0
LABOR RATE PER HOUR	\$230	\$180	\$160	\$135	\$120	\$85	\$70	
SUBTOTAL	\$7,590	\$9,000	\$7,680	\$2,430	\$240	\$170	\$4,760	\$31,870

E. Pflugerville Pkwy PS
Level of Effort Estimate

EXHIBIT C

FEE SCHEDULE - PS&E, Bidding, & Construction Phase Services

PROJECT NAME: East Pflugerville Pkwy - Weiss Lane to Eastern City Limits

PRIME PROVIDER NAME: LJA Engineering, Inc.

Date: 12/21/2020

E. PFLUGERVILLE PKWY PS&E PROJECT								
TASK DESCRIPTION	Senior Project Manager	Senior Engineer/Planner	Project Engineer	E.I.T.	Senior Engineering Tech	CADD Operator	Admin	Total
FC 160 - PS&E Roadway Design								
Finalize Plan, Profile, and 3D project model		8.0	16.0	40.0				64.0
Title Sheet		2.0	2.0	4.0		8.0		16.0
Index Sheet		2.0	2.0	4.0		8.0		16.0
Project Layouts Sheets		2.0	4.0	8.0		8.0		22.0
Typical Sections Sheets		2.0	8.0	16.0		16.0		42.0
Horizontal Alignment Sheets			2.0	4.0		2.0		8.0
Roadway Plan and Profile Sheets (3 sheets)		8.0	12.0	24.0		40.0		84.0
Intersection Layout/Grading Sheet		2.0	8.0	16.0	24.0			50.0
Miscellaneous Roadway Detail Sheets		2.0	8.0	8.0		12.0		30.0
Driveway Plan and Profile Sheets		2.0	8.0	12.0		24.0		46.0
Proposed Cross Section Sheets		4.0	8.0	24.0	40.0			76.0
Earthwork Sheet			4.0	8.0	8.0			20.0
Quantity Summaries		2.0	8.0	20.0		8.0		38.0
Cost Estimate (60, 90, 100%)		4.0	8.0	20.0				32.0
Standards			2.0	8.0		8.0		18.0
HOURS SUB-TOTALS	0.0	40.0	100.0	216.0	72.0	134.0	0.0	562.0
LABOR RATE PER HOUR	\$230	\$180	\$160	\$135	\$120	\$85	\$70	
SUBTOTAL	\$0	\$7,200	\$16,000	\$29,160	\$8,640	\$11,390	\$0	\$72,390

**E. Pflugerville Pkwy PS
Level of Effort Estimate**

EXHIBIT C

FEE SCHEDULE - PS&E, Bidding, & Construction Phase Services

PROJECT NAME: East Pflugerville Pkwy - Weiss Lane to Eastern City Limits

PRIME PROVIDER NAME: LJA Engineering, Inc.

Date: 12/21/2020

E. PFLUGERVILLE PKWY PS&E PROJECT								
TASK DESCRIPTION	Senior Project Manager	Senior Engineer/Planner	Project Engineer	E.I.T.	Senior Engineering Tech	CADD Operator	Admin	Total
FC 161 - PS&E Drainage Design								
Finalize Exterior Drainage Areas		2.0	4.0	4.0				10.0
Finalize Culvert Design	1.0	2.0	4.0	8.0				15.0
Produce Culvert Cross Sections				8.0	8.0			16.0
Finalize Interior Drainage Areas		2.0	4.0	8.0				14.0
Finalize Inlet Placement		2.0	4.0	8.0				14.0
Finalize storm sewer design		4.0	4.0	8.0				16.0
Design Roadside Ditches		2.0	4.0	8.0				14.0
Drainage Area Map Sheets		2.0	2.0	16.0		16.0		36.0
Culvert Layout Sheets		2.0	8.0	8.0	8.0	8.0		34.0
Drainage Plan & Profile Sheets		4.0	8.0	24.0	24.0	12.0		72.0
Storm Sewer Lateral Profile Sheets			2.0	12.0		16.0		30.0
Hydraulic Data Sheets – Culverts		1.0	4.0	8.0		8.0		21.0
Hydraulic Data Sheets – Drainage Areas		1.0	4.0	8.0		8.0		21.0
Hydraulic Data Sheets – Inlets		1.0	4.0	8.0		8.0		21.0
Hydraulic Data Sheets – Links		1.0	4.0	8.0		8.0		21.0
Hydraulic Data Sheets – Ditches		1.0	4.0	8.0		8.0		21.0
Detention Layouts and Summary		1.0	8.0	16.0				25.0
Quantity Summaries		1.0	8.0	16.0				25.0
Drainage Standards			2.0		4.0	4.0		10.0
HOURS SUB-TOTALS	1.0	29.0	82.0	184.0	44.0	96.0	0.0	436.0
LABOR RATE PER HOUR	\$230	\$180	\$160	\$135	\$120	\$85	\$70	
SUBTOTAL	\$230	\$5,220	\$13,120	\$24,840	\$5,280	\$8,160	\$0	\$56,850

E. Pflugerville Pkwy PS
Level of Effort Estimate

EXHIBIT C

FEE SCHEDULE - PS&E, Bidding, & Construction Phase Services

PROJECT NAME: East Pflugerville Pkwy - Weiss Lane to Eastern City Limits

PRIME PROVIDER NAME: LJA Engineering, Inc.

Date: 12/21/2020

E. PFLUGERVILLE PKWY PS&E PROJECT								
TASK DESCRIPTION	Senior Project Manager	Senior Engineer/Planner	Project Engineer	E.I.T.	Senior Engineering Tech	CADD Operator	Admin	Total
FC 162.1 - Signing and Pavement Markings								
Signing and Pavement Marking Sheets		4.0	12.0	24.0		24.0		64.0
Standards			4.0	8.0		4.0		16.0
Quantity Summaries		2.0	6.0	12.0		8.0		28.0
HOURS SUB-TOTALS	0.0	6.0	22.0	44.0	0.0	36.0	0.0	108.0
LABOR RATE PER HOUR	\$230	\$180	\$160	\$135	\$120	\$85	\$70	
SUBTOTAL	\$0	\$1,080	\$3,520	\$5,940	\$0	\$3,060	\$0	\$13,600

TASK DESCRIPTION	Senior Project Manager	Senior Engineer/Planner	Project Engineer	E.I.T.	Senior Engineering Tech	CADD Operator	Admin	Total
FC 162.3 - Traffic Signals								
Field Visit w/ CoPf Signal M&O Team	2.0	2.0	2.0					6.0
Existing Conditions Layout		2.0	4.0	8.0				14.0
Proposed Signal Layout	2.0	4.0	6.0	12.0				24.0
Proposed Signal Elevations		4.0	6.0	12.0				22.0
Proposed Signal Details		2.0	4.0	8.0				14.0
Proposed Wiring Diagram/Termination Chart		2.0	6.0	12.0				20.0
Standard SMA/DMA & Foundation Sheets		2.0	4.0	8.0				14.0
Other Standard Details		2.0	4.0	8.0				14.0
Signal Quantities, Summary Tables and OPC (90% and 100%)		4.0	8.0	12.0				24.0
								0.0
HOURS SUB-TOTALS	4.0	24.0	44.0	80.0	0.0	0.0	0.0	152.0
LABOR RATE PER HOUR	\$230	\$180	\$160	\$135	\$120	\$85	\$70	
SUBTOTAL	\$920	\$4,320	\$7,040	\$10,800	\$0	\$0	\$0	\$23,080

E. Pflugerville Pkwy PS
Level of Effort Estimate

EXHIBIT C

FEE SCHEDULE - PS&E, Bidding, & Construction Phase Services

PROJECT NAME: East Pflugerville Pkwy - Weiss Lane to Eastern City Limits

PRIME PROVIDER NAME: LJA Engineering, Inc.

Date: 12/21/2020

E. PFLUGERVILLE PKWY PS&E PROJECT								
TASK DESCRIPTION	Senior Project Manager	Senior Engineer/Planner	Project Engineer	E.I.T.	Senior Engineering Tech	CADD Operator	Admin	Total
FC 163.3 - Traffic Control and Erosion Control								
TCP Narrative		1.0	2.0	4.0				7.0
TCP Phase 1 Layout		1.0	4.0	8.0		12.0		25.0
Design of Temporary Erosion Control Measures		1.0	4.0	8.0		4.0		17.0
TCP Standards			2.0	4.0		4.0		10.0
TCP Quantity Summary		1.0	2.0	8.0		4.0		15.0
Temporary Erosion Control Standards			2.0	4.0		4.0		10.0
Temporary Erosion Control Quantity Summary		1.0	2.0	8.0		4.0		15.0
Construction Time Duration Schedule (60,90, 100)	2.0	16.0	8.0					26.0
HOURS SUB-TOTALS	2.0	21.0	26.0	44.0	0.0	32.0	0.0	125.0
LABOR RATE PER HOUR	\$230	\$180	\$160	\$135	\$120	\$85	\$70	
SUBTOTAL	\$460	\$3,780	\$4,160	\$5,940	\$0	\$2,720	\$0	\$17,060

TASK DESCRIPTION	Senior Project Manager	Senior Engineer/Planner	Project Engineer	E.I.T.	Senior Engineering Tech	CADD Operator	Admin	Total
FC 163.5 - Illumination								
Illumination Design & Analysis		4.0	8.0	24.0				36.0
Illumination Layout Sheets		4.0	8.0	24.0		24.0		60.0
Electrical Details Sheets		2.0	4.0	8.0		8.0		22.0
Circuit Diagram Sheets		2.0	4.0	8.0		8.0		22.0
Electrical Service Sheet		2.0	4.0	8.0		8.0		22.0
Voltage Drop Calculations		2.0	4.0	8.0				14.0
Coordination with ONCOR (including site visit)		4.0	8.0					12.0
Standards		1.0	4.0	8.0		4.0		17.0
Quantity Summaries		1.0	4.0	8.0		4.0		17.0
HOURS SUB-TOTALS	0.0	22.0	48.0	96.0	0.0	56.0	0.0	222.0
LABOR RATE PER HOUR	\$230	\$180	\$160	\$135	\$120	\$85	\$70	
SUBTOTAL	\$0	\$3,960	\$7,680	\$12,960	\$0	\$4,760	\$0	\$29,360

**E. Pflugerville Pkwy PS
Level of Effort Estimate**

EXHIBIT C

FEE SCHEDULE - PS&E, Bidding, & Construction Phase Services

PROJECT NAME: East Pflugerville Pkwy - Weiss Lane to Eastern City Limits

PRIME PROVIDER NAME: LJA Engineering, Inc.

Date: 12/21/2020

E. PFLUGERVILLE PKWY PS&E PROJECT								
TASK DESCRIPTION	Senior Project Manager	Senior Engineer/Planner	Project Engineer	E.I.T.	Senior Engineering Tech	CADD Operator	Admin	Total
FC 163.17 - Comment Resolution/QA/QC								
QA/QC 60% Submittal	4.0	12.0	8.0					24.0
QA/QC 90% Submittal	4.0	12.0	8.0					24.0
QA/QC 100% Submittal	4.0	12.0	8.0					24.0
Respond to CITY comments 60%	1.0	8.0	8.0	20.0	4.0	20.0		61.0
Respond to CITY comments 90%	1.0	4.0	8.0	8.0	2.0	8.0		31.0
Respond to CITY comments 100%	1.0	2.0	4.0	4.0		4.0		15.0
HOURS SUB-TOTALS	15.0	50.0	44.0	32.0	6.0	32.0	0.0	179.0
LABOR RATE PER HOUR	\$230	\$180	\$160	\$135	\$120	\$85	\$70	
SUBTOTAL	\$3,450	\$9,000	\$7,040	\$4,320	\$720	\$2,720	\$0	\$27,250

TASK DESCRIPTION	Senior Project Manager	Senior Engineer/Planner	Project Engineer	E.I.T.	Senior Engineering Tech	CADD Operator	Admin	Total
FC 309 - Bid/Construction Phase Services								
Advertising, Bidding Phase								0.0
Prepare Contract documents and create project manual		8.0	24.0	40.0				72.0
Assist in Advertisement		2.0		2.0				4.0
Conduct Pre-Bid Conference		4.0		4.0				8.0
Answer Bid Questions		4.0	8.0	8.0				20.0
Conduct Bid Opening		1.0		2.0				3.0
Prepare Bid Tabulation and Recommendation for Award		1.0	4.0	8.0				13.0
Assist in execution of construction contract		4.0		4.0				8.0
Construction Phase Services								0.0
Attend Pre-Construction Meeting		4.0	8.0	4.0				16.0
RFI's (3)		6.0	12.0	16.0				34.0
Approve Specifications/Submittals		8.0	12.0	24.0				44.0
Conduct Construction Progress Meetings (6) with Meeting Minutes		12.0	24.0	6.0			12.0	54.0
Process Pay Applications		8.0					8.0	16.0
Prepare As-Built Plans		4.0	8.0	20.0		20.0		52.0
Prepare, process City Directed Change Order (2)		8.0	16.0	24.0		16.0		64.0
HOURS SUB-TOTALS	0.0	74.0	116.0	162.0	0.0	36.0	20.0	408.0
LABOR RATE PER HOUR	\$230	\$180	\$160	\$135	\$120	\$85	\$70	
SUBTOTAL	\$0	\$13,320	\$18,560	\$21,870	\$0	\$3,060	\$1,400	\$58,210

**E. Pflugerville Pkwy PS
Level of Effort Estimate**

EXHIBIT C

FEE SCHEDULE - PS&E, Bidding, & Construction Phase Services

PROJECT NAME: East Pflugerville Pkwy - Weiss Lane to Eastern City Limits

PRIME PROVIDER NAME: LJA Engineering, Inc.

Date: 12/21/2020

E. PFLUGERVILLE PKWY PS&E PROJECT								
TASK DESCRIPTION	Senior Project Manager	Senior Engineer/ Planner	Project Engineer	E.I.T.	Senior Engineering Tech	CADD Operator	Admin	Total Cost Task
FC 120.2 - Public Involvement	\$2,300	\$2,160	\$1,280	\$0	\$0	\$1,360	\$0	\$ 7,100.00
FC 145 - Project Management	\$7,590	\$9,000	\$7,680	\$2,430	\$240	\$170	\$4,760	\$ 31,870.00
FC 160 - PS&E Roadway Design	\$0	\$7,200	\$16,000	\$29,160	\$8,640	\$11,390	\$0	\$ 72,390.00
FC 161 - PS&E Drainage Design	\$230	\$5,220	\$13,120	\$24,840	\$5,280	\$8,160	\$0	\$ 56,850.00
FC 162.1 - Signing and Pavement Markings	\$0	\$1,080	\$3,520	\$5,940	\$0	\$3,060	\$0	\$ 13,600.00
FC 162.3 - Traffic Signals	\$920	\$4,320	\$7,040	\$10,800	\$0	\$0	\$0	\$ 23,080.00
FC 163.1 - Retaining Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$ -
FC 163.3 - Traffic Control and Erosion Control	\$460	\$3,780	\$4,160	\$5,940	\$0	\$2,720	\$0	\$ 17,060.00
FC 163.5 - Illumination	\$0	\$3,960	\$7,680	\$12,960	\$0	\$4,760	\$0	\$ 29,360.00
FC 163.17 - Comment Resolution/QA/QC	\$3,450	\$9,000	\$7,040	\$4,320	\$720	\$2,720	\$0	\$ 27,250.00
FC 309 - Bid/Construction Phase Services	\$0	\$13,320	\$18,560	\$21,870	\$0	\$3,060	\$1,400	\$ 58,210.00
SUBTOTAL LABOR EXPENSES	\$ 14,950	\$ 59,040	\$ 86,080	\$ 118,260	\$ 14,880	\$ 37,400	\$ 6,160	\$336,770
DIRECT EXPENSES	Rate	Quantity	Cost					
Mileage	\$0.58	250	\$143.75					\$143.75
Courier Services (Deliveries)	\$30.00	5	\$150.00					\$150.00
Photocopies B/W (8.5 X 11)	\$0.10	150	\$15.00					\$15.00
Photocopies B/W (11 X 17)	\$0.15	500	\$75.00					\$75.00
Photocopies Color (8 X 10)	\$0.75	20	\$15.00					\$15.00
Photocopies Color (11 X 17)	\$1.00	40	\$40.00					\$40.00
TDLR Plan Review and Registration	\$2,000.00	1	\$2,000.00					\$2,000.00
Postage	\$3.00	10	\$30.00					\$30.00
SUBTOTAL DIRECT EXPENSES								\$2,468.75
LJA ENGINEERING, INC. TOTAL								\$339,238.75
SUBCONSULTANTS								
ACI Env Constraints Report								\$16,256.00
TOTAL - SUB CONSULTANTS:								\$16,256.00
GRAND TOTAL								\$355,494.75