LJA ENGINEERING

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December 28, 2020

Williamson County Purchasing Department
100 Wilco Way, Suite P101
Georgetown, Texas 78626

Re: Williamson County RFQ #T2666, Planning for Ronald Reagan Corridor

The RFQ #T2666 has been issued to select firms to provide engineering services to assist Williamson County staff in the development of schematics to add control of access lanes to Ronald Reagan between FM 2243 to IH 35. Large scale projects with lengths of over 20 miles, performed by different firms can create three very significant challenges:

- Coordination between the design firm and repetitive contact with corridor-wide stakeholders
- Inconsistencies in design philosophy between design firms
- Loss of knowledge due to turnover in firm staff

If selected, the LJA Team can assure the County risks associated with these challenges will not only be mitigated but can be strengths of the corridor. The LJA Team is perfectly positioned to meet these unique corridor delivery challenges by:

1. Demonstrated success on previous projects including FM 110 in Hays County which had three major firms designing similar sized sections to Reagan under the supervision of the County GEC. LJA had frequent discussions with the other sections and made sure to request current coordination efforts with the GEC. A specific example of LJA being a team player, midway through the project LJA included a subconsultant from another team to do FEMA coordination since they were already engaged with the stakeholder, even though LJA was capable of doing the work in-house.
2. LJA is currently wrapping up a major corridor effort on LP 1604 in San Antonio with multiple segments that include similar design efforts. A design journal was kept to ensure that design philosophy will be maintained throughout. LJA will utilize a similar journal on this project to keep track of design decisions. We anticipate this will save the County money in throwaway costs.
3. The LJA Team is lead by shareholders in the company who have demonstrated loyalty to LJA and to Williamson County. I myself as PM and the Task Leads I have selected will be there till the end.

As a registered Texas Board of Professional Engineers (TBPE) engineering firm in the state of Texas, LJA's technical experience with these types of corridors, our local experience with multi-firm segment design, and our commitment to this project with consistent leadership make LJA a great partner for the County.

Sincerely,

Kenneth G Schrock

Ken Schrock, PE
Senior Vice President // LJA Engineering, Inc.
kschrock@lja.com // 512.983.5909 (Mobile)

2| ORGANIZATIONAL CHART

WILLIAMSON COUNTY » GENERAL ENGINEERING CONTRACTOR » LJA ENGINEERING

*Ken will be the **sole point of contact** for the County and the face of the project. He will hold the task leads accountable.*

PROJECT MANAGEMENT
- **PROJECT MANAGER**
  Ken Schrock, PE | Round Rock 50%
  Austin 50%

QA/QC
- **QA/QC MANAGER**
  Dave Garrett, PE | Round Rock 100%

ROADWAY
- **ROADWAY LEAD**
  Scott Bond, PE | Katy 80%/Austin 20%
- **ROADWAY SUPPORT**
  Zach Ryan, PE | Austin 80%/Round Rock 20%

DRAINAGE
- **DRAINAGE LEAD**
  Derek Bohls, PE, CFM | Round Rock 100%
- **DRAINAGE SUPPORT**
  Riley Sladek, PE | Round Rock 100%

STRUCTURES
- **STRUCTURES LEAD**
  Dacio Marin, PE | Austin 100%
- **STRUCTURES SUPPORT**
  Vasilis Samaras, PE | Austin 100%

ENVIRONMENTAL
- **ENVIRONMENTAL LEAD**
  Stephen Van Kampen-Lewis (SWCA)
  Austin 100%
- **ENVIRONMENTAL SUPPORT**
  Luke Rome, PG (SWCA) | Austin 100%

TRAFFIC
- **TRAFFIC LEAD**
  Ali Mozdabar, PE, PTOE | Round Rock 100%
- **TRAFFIC SUPPORT**
  Chad Wood, PE, PTOE | Round Rock 100%

GEOTECHNICAL
- **GEOTECHNICAL LEAD**
  Gabriel Ornelas, PE (RKI) | Austin 100%

SURVEY
- **SURVEY LEAD**
  Gordon Anderson, PLS, PSM, RPLS (LJAS)
  Austin 100%

3D MODELING
- **3D MODELING LEAD**
  Alan McCarthy | Austin 80%
  Round Rock 20%

COST ESTIMATING
- **COST ESTIMATING LEAD**
  Brian Young, PE | Austin 80%
  Round Rock 20%

LEGEND

TASK
- **PROJECT ROLE**
  Name (Sub Acronym) | Office Location

"I have been extremely pleased with the performance of Ken Schrock and the LJA Team on the FM 685 project for the City of Hutto. Their efforts and coordination with TxDOT has kept this project moving forward under difficult budget and time constraints. I would recommend Ken and his team on future projects where TxDOT is involved."

Matt Bushak, PE // City Engineering
City of Hutto City Engineer (Now with City of Round Rock)

PROJECT TEAM

PRIME CONSULTANT

LJA Engineering
LJA, founded in 1972, is an employee-owned company, offering full-service planning, engineering, surveying, and construction management to public and private sector clients. With over 1,100 employees in 33 offices across Texas and Florida, we are organized around nine comprehensive sectors: Public Infrastructure, Transportation, Land Development, Energy Services, Rail Services, Surveying, Flood Control & Drainage, CEI, and Environmental & Coastal.
Employees in County: 40 // Total Employees: 1,113
**Included in LJA Engineering Total*

LJA SUBSIDIARY

LJA Surveying (LJAS)
LJA Surveying is a multi-discipline, Surveying and SUE firm, serving both the public and private sectors. Their staff includes experienced Registered Professional Land Surveyors, a Licensed State Land Surveyor, GIS Specialists, Certified Survey Technicians, multiple CAD support staff, and multiple field crews.
*Employees in County: 0 // Total Employees: 11**

SUBCONSULTANTS

SWCA Environmental Consultants (SWCA)
Since 1981, SWCA has helped clients overcome environmental challenges. 100% employee-owned, offers comprehensive environmental planning, regulatory compliance, and natural/cultural resources management services.
Employees in County: 0 // Total Employees: 150

Raba-Kistner (RKI)
Founded in 1968, Raba Kistner, Inc. has become an industry leader among engineering consulting firms, specializing in addressing the key risk areas of management services that address their clients' capital investments.
Employees in County: 0 // Total Employees: 485

The LJA Team has over 40 local employees staffed in Williamson County to address any fast-paced project needs.

3| PROJECT MANAGER

KEN SCHROCK, PE | ROUND ROCK OFFICE 50% // AUSTIN OFFICE 50%

Ken will commit fully to the Ronald Reagan Boulevard project, dedicating his management time to only this project through the 100% design. Currently not managing projects, Ken's workload consists of managing his division's staff he has built over the past 10 years from one person to its current total of 139 and growing.

Ken's availability is one of his many stand-out elements as the choice of Project Manager for Ronald Reagan. **He is a proven Project Manager for Williamson County.** His familiarity with the Ronald Reagan Corridor and the landowners in the area will help facilitate public involvement for the project. **As a shareholder with LJA, Williamson County can trust Ken will lead and be available for the life of this project.**

PROJECT DETAILS	SERVICES PROVIDED		KEY FEATURES
Ronald Reagan Boulevard North Phase 4 *Williamson County* Cost: $20M	• Prelim Eng Report • Route Analysis • PS&E • Traffic Signals/ Control	• Roadway/Drainage • Geotech/Env • ROW Determination • PS&E	• Multiple Typical Sections • Multiple Routes • Phased Implementation • Development Coord. • TxDOT Coord.
Ken was PM for this new location project of a 2-lane interim (4-lane ultimate) rural roadway rural arterial. Ken and his team developed multiple alignments and connections to 2 TxDOT facilities while also coordinating with quarry owners and landowners for ROW donation and acquisition. Ken oversaw a detailed schematic used to purchase ROW during the detailed design. The project was a phased implementation with an interim and ultimate level of design building two lanes of a future 4-lane section.			
North Mays Street Extension *Williamson County* Cost: $45M	• Prelim Eng Report • Schematic/Route • Study • Roadway/Drainage • Traffic Signals/ Control	• FEAM Streams • ADA Compliance • Geotech/Env • ROW Determination • Railroad Coord.	• Multiple Typical Sections • Railroad Overpass • Unique Access Issues • Innovative Intersections • County Env Document • Multiple Gas Transmission Lines
Ken was PM for this 1.1-mile urban 4-lane arterial new location extension in Round Rock. The key feature of this project was a 1,200' long bridge over an Upper Brushy Creek WCID Inundation Easement that also crossed a local business access driveway. Ken coordinated with all stakeholders to ensure all WCID obligations were met, and that access to the local business was maintained both during/after construction.			
FM 110 *Hays County* Cost: $32M	• Schematic • Similar Location • Cost Estimates • ROW Coord. • Roadway • Drainage • Structures	• FEMA Studies • Traffic Signals/ Control • Geotech/Env • Railroad Coord. • Public Involvement • Utility Coord.	• Multiple Typical Sections • Multiple Routes • Phased Implementation • Development Coord.
This project featured a vast array of agency coordination, including the Federal Agency, Gary Job Corps, the City of San Marcos, Texas Aviation Partners, Hays County Floodplain Administrator, and UPRR Railroad crossing. Ken's forward-thinking coordination approach resulted in a timely project which had everyone on the same page and all agencies up to date with their particular issues. This approach resulted in the smallest detail being addresses, and no stone unturned.			

4| ROADWAY EXPERIENCE

ROADWAY LEAD // SCOTT BOND, PE

39 YEARS OF EXPERIENCE // AUSTIN OFFICE

Scott is a Central Texas native that will oversee the planning and design of this schematic. He has performed route studies, schematic design, and PS&E throughout the area for over 35 years and takes pride in finding innovative solutions that maximize traffic operations with minimal environmental impacts. He is very experienced in developing fully detailed geometric schematics to seamlessly move forward with ROW acquisition and Utility Relocation. Scott is knowledgeable in route and feasibility analysis, the planning and environmental process, schematic development, traffic engineering, and operational modeling, innovative intersection and interchange design, construction sequencing and traffic control requirements, final design/ PS&E, right-of-way (ROW) mapping and acquisition, and the construction process.

Scott understands the importance of maximizing the County's funds by making the best use of existing infrastructure. His goal in the layout of all projects is to minimize costs and environmental impacts by utilizing existing improvements and ROW to the greatest extent possible. In addition, he has extensive experience in outlining the phased implementation of improvements in fundable steps that construct the ultimate layout while minimizing temporary and throw-away work. Scott also has experience working with adjacent designers which is something this contract will require. He understands the importance of regular coordination meetings, sending/maintaining updated files, and communicating changes that could impact other sections. Scott's role as the Schematic Task Lead on SH 45 N from east of IH 35 to SH 130 for the upgrade of rural 2-lane and 4-lane roadways to the controlled access facility including the SH 130 direction interchange required ongoing coordination with the GEC, TTA, adjacent designers and the SH 130 design team. Scott has been a lead schematic designer since the mid-1980s on many other notable Travis and Williamson County projects including conceptual schematics for IH 35 from SH 130N to the Hays County line (MIS Phase I), design schematics for IH 35 from SH 130N to US 290E (MIS Phase II), and preliminary and final schematics for SH 71/ US 290W (Ben White Blvd) from Oak Hill Y to FM 973, SH 45 (original Austin Outer Parkway 84 mile loop), US 183 from US 290E to SH 71E, IH 35 at SH 45N interchange, US 290W and SH 71 from Circle Dr to William Cannon (latest Oak Hill Y project), IH 35 at US 290W/ SH 71 interchange, and SH 45SW at FM 1626 (continuous Green-T intersection. He has also performed the schematic design on numerous other Central Texas projects in Bexar, Comal, Kendall, Hays, Bell, Milam, and Coryell Counties.

ROADWAY LEAD // ZACH RYAN, PE

15 YEARS OF EXPERIENCE // AUSTIN 80%/ROUND ROCK 20% OFFICES

Zach brings 15 years of experience working in roadway design and management including major arterial, new location, and controlled access facilities. Specifically, his experience on LP 1604 developing two schematics for an interim and ultimate condition. The interim built two additional lanes within the existing ROW for a 4-lane divided arterial section. The ultimate used the lanes built in the interim as mainlanes and preserved ROW for an ultimate controlled access facility. Portions of Ronald Reagan will likely use a similar approach. Zach has extensive experience with TxDOT Criteria, AASHTO Criteria, Horizontal/ Vertical Alignments, Ramp Design, and Microsoft Open Roads. Zach also has experience with phased implementation, cost estimating, traffic projections, and interchange design. He has experience working with the County GEC and with large programs and ensuring schematics work when connected to other studies. Ronald Reagan will have similar challenges to LP 1604 E where he developed interim and ultimate schematics maximizing the existing pavement, converting the 2-lane to a 4-lane highway, and planning for an ultimate controlled access facility.

5| DRAINAGE EXPERIENCE

LJA has produced drainage studies, designed for water quality, open-channel hydraulic, and closed drainage systems, added capacity, mitigated adverse impacts, and worked with existing flooding issues on over eight FEMA Floodplains projects, for Central Texas cities and counties in the last five years. These projects included coordination with the Upper Brushy Creek WCID, Edward's Aquifer Protection Plans, New Location Roadway Impacts, and Karst Zones. The result of our approach and experience is a clear, concise report summarizing the results of findings along with every project discipline.

DRAINAGE LEAD // DEREK BOHLS, PE, CFM

16 YEARS OF EXPERIENCE // ROUND ROCK OFFICE

Derek's approach to design has won over the premiere local drainage experts at the Upper Brushy Creek WCID, TCEQ water quality reviewers, City of Round Rock Stormwater Program, City of Cedar Park Engineering, TxDOT Austin District, and CTRMA review teams. As an eminent leader in H & H assessment, community leaders rely on him to resolve their challenges. His designs include water quality regulations and permitting, floodplain mapping, scour analysis, water quality BMP design, impact analysis and documentation, detention and retention design, storm sewer design, culvert design, energy dissipater design, erosion control and SWP3, cost estimating associated with drainage structures. Derek brings a creative, innovative problem solving mentality to H & H design which benefits clients by navigating around the issues that arise during a design. He challenges himself, and his team, to produce multiple solutions to one problem to determine the most efficient, cost-effective solution. Derek has performed this same role for 17 similar projects in the Central Texas area. **Derek's experience includes detailed design and impact analysis on highly developed/ highly scrutinized controlled access projects like the MoPac Improvement Project in Austin, and US 281 in San Antonio. He provides innovative solutions like 2D modeling in order to reduce costs during preliminary bridge design.**

Derek will use his 16 years of experience to develop accurate bridge hydraulic models so that crossings pass future development peak flows, similar to what he did on US 281. Derek also has significant experience on new location/major widening projects that require ROW. He will use this experience to develop ditch designs to a 30% PS&E level so that ROW can be preserved/acquired with confidence. Lastly, Derek has designed a multitude of water quality and detention facilities and will work with the roadway group to best identify locations and determine ROW needs, similar to what he did on 183A.

DRAINAGE SUPPORT // RILEY SLADEK, PE

14 YEARS OF EXPERIENCE // ROUND ROCK OFFICE

Riley has 14 years of drainage design on multiple projects in Central Texas and across the state including new location, reconstruction, and widening in both rural and urban settings. He has worked on hundreds of FEMA stream crossings in the Central Texas area and will use that experience to develop cost-efficient hydraulic crossings at the multiple FEMA streams on these corridors. Riley also has experience designing water quality and detention facilities, on New Hope Drive and US 281, which will likely be required on these corridors. Riley excels in his communication throughout the team to ensure the drainage design is coordinated with all other disciplines including roadway, structures, and utilities. Riley has worked with Derek for over 7 years and their experience together provides efficiencies for the County.

6| STRUCTURES EXPERIENCE

Bridge Structures will be a significant part of the Ronald Reagan Corridor. **Our structures team has the lessons learned to successfully guide this critical component of the project.**

STRUCTURES LEAD // DACIO MARIN, PE

36 YEARS OF EXPERIENCE // AUSTIN OFFICE

Dacio has diverse bridge design experience developed while working on simple on and off system bridges, complex bridges, bridge widenings, and multi-level interchanges. In addition to his design experience, he has successfully led bridge design teams for nearly 20 years, including 14 years at the TxDOT – Bridge Division (TxDOT-BRG). His responsibilities include project management, design supervision, and structural design. In addition to leading the structural department for the firm, Dacio personally leads an Austin based Structural team doing primarily bridge design. This local team will be assigned to this project. For the Anderson Mill Road and RM 620 Extension project, Dacio will use his experience working collaboratively with the Roadway, Railroad and Drainage Leads to develop economical crossings at the many critical features of these corridors. Dacio has developed spreadsheets to allow his team to quickly evaluate economic span lengths, fill heights, and bridge widths so that during the alternative analysis period cost estimates can be generated efficiently. Additionally, Dacio has worked in Karst sensitive areas on over 12 projects and will help direct the geotechnical efforts so that data collection can provide his team with accurate information to assist in bridge foundation design. Lastly, Dacio worked closely with Derek Bohls (Drainage Lead) on New Hope Drive East which had a major bridge crossing over Brushy Creek and they were able to determine work zone areas outside the floodplain to ensure the bridge was constructible to avoid costly change orders during construction. Dacio has led the design of over 30 RR Bridge Under/Overpasses and will use that career-long experience to plan and design the multiple RR crossings on these corridors. **Dacio has unique experience in leading teams of multiple firms doing bridge design on a different section of a corridor (LP 1604 in San Antonio and IH 10 Connect in El Paso) which will guide him leading not only the Segment 2 Bridge and Interchange design but also ensuring Segment 1 and Segment 3 use similar approaches.**

STRUCTURES SUPPORT // VASILIS SAMARAS, PE

9 YEARS EXPERIENCE // AUSTIN OFFICE

Vasilis has over nine years of diverse experience and technical knowledge in designing and rehabilitating bridges that vary in complexity from simple bridge creek crossings to multi-level interchanges. His ability to provide innovative solutions in the preliminary design stage (schematic) is instrumental in obtaining overall cost savings for the project. Vasilis has multiple discipline experience including Retaining Wall Design and Roadway Design and this experience allows him to cost-effectively design structural facilities that maximize the ROW and reduce cost. He is currently designing multiple direct connectors on LP 1604 in San Antonio which require consistent coordination with the Drainage Lead, Roadway Lead and Structures Lead. **Vasilis is experienced in bridge projects and PS&E developments for TxDOT, HCTRA, various Counties (e.g., Williamson, Travis, Hays), various Cities (Pflugerville, Cedar Park), and municipalities.**

7| ENVIRONMENTAL EXPERIENCE

LJA has partnered with SWCA previously on the Liberty Hill Bypass and the Southwest Bypass because of their extensive experience in the Williamson County Area. Most importantly, they are experts in karst surveys, karst regulations, and permitting; and the Team has identified karst as the most critical environmental constraint for these corridors. The Team has the additional experience, as outlined below, necessary to complete the Environmental Planning for these corridors.

ENVIRONMENTAL LEAD
STEVE VAN KAMPEN-LEWIS
12 YEARS EXPERIENCE // AUSTIN OFFICE // SWCA

Stephen Van Kampen-Lewis has managed environmental permitting and due diligence projects for Williamson County roadways for two existing Williamson County road bond programs (2013 and 2019). Williamson County officials are familiar with SWCA's approach to these projects and trust Stephen's timeliness and dedication to high-quality work. He knows the relevant permitting issues and strategies to facilitate a streamlined approval process. Stephen guided Williamson County as it sought to maintain Endangered Species Act compliance while planning Southwest Bypass Segments I & II due to the presence of the Bone Cave harvestman (Texella reyesi) and the Inner Space Caverns mold beetle (Batrisodes texanus). The latter species is not covered under the Williamson County RHCP in this part of the County but is known to inhabit caves adjacent to the project. Williamson County officials also consider Stephen as a subject matter expert on endangered karst invertebrates and he has authored multiple white papers and a peer-reviewed papers on the subject. Stephen has experience with the Wilco Road Bond (2013 – Present)— CR 176, DB Wood Road at SH 29 intersection, Lakeline Boulevard turn lanes, Great Oaks Drive bridge replacement, Hairy Man Road widening, Ronald Reagan widening, SH 29 bypass, Sam Bass Road widening, CR 366 improvements, O'Connor Drive signal upgrades; Wilco Road Bond (2019 – Present)— Corridor I-1, Corridor I-2, Sun City Intersections; Southwest Bypass Phase I, Phase II, and Phase III; Leander Road improvements (east and west sides); Liberty Hill Bypass; Old Settlers Boulevard Extension; and Wyoming Springs Extension

ENVIRONMENTAL SUPPORT // LUKE ROME, PG
7 YEARS EXPERIENCE // AUSTIN OFFICE // SWCA

Luke Rome is Texas licensed Professional Geoscientist (PG) (#12028) and his understanding of the Edwards Plateau geology paired with his linear transportation project experience allows him to provide his clients with effective strategies to assist in the planning and construction within karst terrain. For example, Luke is currently excavating potential voids and mapping a known cave along the Leander Road project to assist Williamson County with their due diligence efforts and ultimately, their regulatory compliance strategies. He is skilled in Due Diligence Documentation, Permitting, Geological Assessments, Karst surveys, TCEQ Coordination, Subsurface Void/Cave Mapping, City of Austin Environmental Resource Inventories. Luke has experience with the Wilco Road Bond (2013 – Present)— O'Connor Drive signal upgrades; Wilco Road Bond (2019 – Present)— Corridor IH 1, Corridor IH 2, Sun City Intersections; Southwest Bypass Phase III; Leander Road improvements (east and west sides); Liberty Hill Bypass; Old Settlers Boulevard Extension; Wyoming Springs Extension; Williamson County Conservation Foundation.

8| AVAILABILITY MARCH 2021

KEN SCHROCK, PE // PROJECT PRINCIPAL

Availability at NTP: 70% // Project Need/Time Commitment: 50%

Projects	Commitment	Completion
LJA Engineering General Operational Management	30%	Ongoing

Proposals	Commitment	Completion
TxDOT Second Wave	5%	**Mar 2021**

Currently not managing any projects, Ken's workload consists of managing the Central Texas staff he has built over the past 10-years from one person to its current total of 139 staff members and growing.

DAVE GARRETT, PE // QA/QC MANAGER

Availability at NTP: 45% // Project Need/Time Commitment: 10%

Projects	Commitment	Completion
SL 195	10%	Jun 2021
IH 35 CapEx	25%	Nov 2021
Red Line Trail	10%	Jul 2021
Various Assignments	10%	Ongoing

Proposals	Commitment	Completion
TxDOT Second Wave	5%	**Mar 2021**

SCOTT BOND, PE // ROADWAY LEAD

Availability at NTP: 85% // Project Need/Time Commitment: 40%

Projects	Commitment	Completion
IH 10 HOU Schematic	10%	Dec 2023
Various Assignments	5%	Ongoing

Proposals	Commitment	Completion
TxDOT Second Wave	10%	**Mar 2021**

ZACH RYAN, PE // ROADWAY SUPPORT

Availability at NTP: 80% // Project Need/Time Commitment: 30%

Projects	Commitment	Completion
LP 1604	20%	**Mar 2021**
SH 302	10%	Jan 2022
Broadway Street	10%	Mar 2022

Proposals	Commitment	Completion
TxDOT Second Wave	10%	**Mar 2021**

DEREK BOHLS, PE, CFM // DRAINAGE LEAD

Availability at NTP: 60% // Project Need/Time Commitment: 40%

Projects	Commitment	Completion
Liberty Hill Bypass	20%	**Mar 2021**
Southwest Bypass	20%	**Dec 2020**
New Hope Drive	10%	Oct 2021
Red Bud Lane	20%	Dec 2021
Various Assignments	10%	Ongoing

Proposals	Commitment	Completion
TxDOT Second Wave	5%	**Mar 2021**

RILEY SLADEK, PE // DRAINAGE SUPPORT

Availability at NTP: 60% // Project Need/Time Commitment: 30%

Projects	Commitment	Completion
SL 195	20%	Jun 2021
Liberty Hill Bypass	30%	**Mar 2021**
Southwest Bypass	30%	**Jan 2021**
Various Assignments	20%	Ongoing

Proposals	Commitment	Completion
NA	-	-

DACIO MARIN, PE // STRUCTURES LEAD

Availability at NTP: 65% // Project Need/Time Commitment: 20%

Projects	Commitment	Completion
LP 1604	15%	Dec 2021
Borderland Expressway	10%	Jun 2021
LP 390/IH 369	10%	Jan 2022

Proposals	Commitment	Completion
TxDOT Second Wave	5%	**Mar 2021**

VASILIS SAMARAS, PE // STRUCTURES SUPPORT

Availability at NTP: 50% // Project Need/Time Commitment: 30%

Projects	Commitment	Completion
LP 1604	25%	Aug 2021
SH 63	10%	Apr 2021
Williamsburg-Gettysburg Bridge	15%	May 2021

Proposals	Commitment	Completion
NA	-	-

STEPHEN VAN-KAMPEN // ENVIRONMENTAL LEAD // SWCA

Availability at NTP: 50% // Project/Time Commitment: 40%

Projects	Commitment	Completion
Williamson County Conservation Foundation	10%	Ongoing
Williamson County Road Bond (2013) projects	10%	Ongoing
Williamson County Road Bond (2019) projects	20%	Ongoing
Various Assignments	5%	Ongoing

Proposals	Commitment	Completion
Various	5%	Ongoing

LUKE COMB // ENVIRONMENTAL SUPPORT // SWCA

Availability at NTP: 40% // Project/Time Commitment: 20%

Projects	Commitment	Completion
Williamson County Road Bond (2013 & 2019) projects	20%	Ongoing
Southwest Bypass	5%	Ongoing
RM 2243 (Southwest Bypass to Ronald Reagan)	10%	Ongoing
Various Assignments	20%	Ongoing

Proposals	Commitment	Completion
Various	5%	Ongoing

BRIAN YOUNG, PE // COST ESTIMATING LEAD

Availability at NTP: 75% // Project Need/Time Commitment: 20%

Projects	Commitment	Completion
IH 35: Rundberg to US 290 5 December 2021	5%	Dec 2021
Various Assignments	20%	Ongoing

Proposals	Commitment	Completion
TxDOT Second Wave	10%	**Mar 2021**

ALAN MCCARTHY // 3D MODELING LEAD

Availability at NTP: 45% // Project Need/Time Commitment: 20%

Projects	Commitment	Completion
Windy Hill Road	5%	Dec 2021
LP 1604	40%	Aug 2021
FM 110	10%	**Mar 2021**
Various Assignments	10%	Ongoing

Proposals	Commitment	Completion
TxDOT Second Wave	5%	**Mar 2021**

ALI MOZDBAR, PE, PTOE // TRAFFIC LEAD

Availability at NTP: 70% // Project Need/Time Commitment: 20%

Projects	Commitment	Completion
IH 35 CapEx ITS/Signals Design	10%	Oct 2021
Various Traffic Studies	20%	Ongoing

Proposals	Commitment	Completion
TxDOT Second Wave	10%	**Mar 2021**

CHAD WOOD, PE, PTOE // TRAFFIC SUPPORT

Availability at NTP: 45% // Project Need/Time Commitment: 20%

Projects	Commitment	Completion
East Pflugerville Parkway	10%	Nov 2022
Red Bud Lane	10%	Dec 2021
Various Traffic Studies	10%	Ongoing
IH 35 CapEx ITS/Signals Design	25%	Oct 2021

Proposals	Commitment	Completion
TxDOT Second Wave	5%	**Mar 2021**

GABRIEL ORNELAS, PE | RABA-KISTNER // GEOTECHNICAL LEAD

Availability at NTP: 90% // Project Need/Time Commitment: 10%

Projects	Commitment	Completion
Hernandez Middle School Gym Additions, Round Rock ISD	10%	**Mar 2021**
Heatherwilde Subdivision Pavement Rehab	10%	Nov 2021

Proposals	Commitment	Completion
Heritage Trail West, City of Round Rock	5%	**Feb 2021**

GORDON ANDERSON, RPLS | LJA SURVEYING // SURVEY SUPPORT

Availability at NTP: 60% // Project Need/Time Commitment: 10%

Projects	Commitment	Completion
Various Surveying Projects	40%	Ongoing

Proposals	Commitment	Completion
TxDOT Second Wave	5%	**Mar 2021**

With the current personnel on hand, LJA has a wealth of staffing and technical resources readily available to serve Williamson County.

10| PROJECT APPROACH

RONALD REAGAN CORRIDOR EXHIBIT LEGEND

Interchange ≈ Major Stream Crossing

The LJA Team has identified three key goals that will determine whether or not the Ronald Reagan Schematic Project is a success and we are confident we have the experience, technical ability, and availability to deliver on these goals.

#1: DETERMINE PURPOSE/NEED ADDRESSING IMMEDIATE AND LONG TERM NEEDS

LJA Plan: Utilize the vast experience of LJA, HDR, and Garver to set a Purpose and Need that will ultimately determine the path of the project. The LJA Team will use corridor experience, Williamson County experience, data collection, and previous project successes to develop a comprehensive and cohesive plan for the entire 24-mile corridor. This will include identifying ENV constraints such as Karst Features, archeological findings, and Regional Habitat Conservation Plan, as well as include Public Involvement efforts. The LJA Team will also identify and prioritize PS&E projects that address mobility concerns, fit within County financial goals, and limit throw-away cost by working within an overall corridor plan.

#2: FLEXIBLE APPROACH, RIGID OUTCOME

LJA Plan: There are multiple variables, and unknowns that make predicting an exact vision impossible; however, there are key features that the LJA Team will advocate for the County to develop this corridor. The County seeks to develop, plan, and preserve this corridor so that an ultimate freeway can be constructed to continue the growth of Williamson County well into the future. The LJA Team understands this and, with oversight, will be able to uniquely preserve the Williamson County Vision through a single resource.

#3: SEE THE PROJECT THROUGH TO COMPLETION

LJA Plan: A project of this magnitude requires a commitment from a firm and, more importantly, a Project Manager that will be there from contract execution to schematic approval. This could be years and the LJA Team is led by Ken Schrock, a Senior VP, and shareholder of LJA, and can promise he will be the face of this project until it is completed.

The LJA Team's technical approach to the key disciplines along the corridor.

Survey/ROW Documents: By using one overall surveyor, Inland, we can optimize the flights, utilize previous flights done by Williamson County, and reduce costs.

Environmental: Weaving in and out of both Karst Zone 1 and the Edward's Aquifer Contributing and Recharge Zones, the project requires permanent BMP's to treat runoff. LJA Team will size and locate these BMP's for each outfall and determine any necessary ROW required to treat the runoff in the ultimate condition and identify and avoid karst constraints.

Typical Section: We will maximize the efficiency of the existing pavement and plan for two future facilities, a 4-lane divided facility (ideally located in the existing ROW) and an ultimate controlled access facility. We will use OpenRoads to develop a true limit of construction that allows the County to advance to ROW acquisition with confidence.

Interchanges: Use traffic data (this contract or existing County contracts) to plan interchanges and use a prudent cost approach to meet mobility goals.

Public Involvement: Partner with County's preferred PI Firm. Provide technical data and boots on the ground. Ken did this on Ronald Reagan previously and will be the consistent face of the project.

H & H: LJA will analyze all impacts to proposed headwaters and tailwaters of major streams and outfalls to determine the need for detention or grading and the resulting need for additional ROW or easements.

KEN SCHROCK, PE

PROJECT MANAGER
ROUND ROCK AND AUSTIN OFFICES

LJA ENGINEERING

EDUCATION
1995, BS, Civil Engineering
University of Houston

PROFESSIONAL LICENSE
2004, Professional Engineer:
Texas #93593

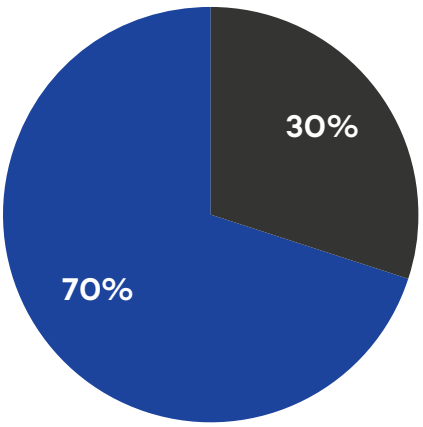
TXDOT PRECERTIFICATION
Employee Sequence No. 14457
Categories: 1.4.1, 1.5.1, 2.5.1, 3.2.1, 4.2.1, 8.1.1, 8.6.1, 10.1.1, 10.2.1, 10.3.1, 10.5.1

SPECIAL TRAINING
LGPP Qualified

FIELD ACCOMPLISHMENTS
TxDOT Instructor, Published

EXPERIENCE
Total: 25 Years // Firm: 10 Years

AVAILABILITY MAR 2021



Various Assignments
Availability

SUMMARY OF QUALIFICATIONS
Ken has 25 years of experience in transportation engineering and project management including planning, roadway design, traffic control, H & H, and construction phase services. He is experienced in the design of rural and urban roadways, and control of access highways. Ken's background is extensive in hydrologic and hydraulic evaluation and design, storm sewer design, floodplain analysis, bridge hydraulic design, scour analysis, impact analysis, detention basin design, water quality BMP's design, and drainage master plans.

Ken moved to Austin, Texas in 2000 and has worked almost exclusively in Central Texas on transportation planning and design projects. As PM, his clients have included Williamson County, Travis County, Hays County, City of Cedar Park, City of Round Rock, City of Hutto, City of Pflugerville, City of Austin, City of Kyle, City of San Marcos, Austin District of TxDOT. In every case, Ken has had repeat work with each of these clients.

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME								
TASKS	1	2	3	4	5	6	7	8	9
Controlled Access Facility									•
Added Capacity		•	•	•	•		•	•	•
Interim/Ultimate	•	•	•						
Schematic	•	•	•	•	•	•	•		
PS&E	•	•	•	•	•		•		•
ROW Identification	•		•	•					•
Traffic Studies	•		•	•	•				
Public Involvement	•		•	•					•
Edward's Aquifer Protection Zone	•		•						•
FEMA Streams	•	•	•	•	•	•	•	•	•
Bridge	•		•			•		•	•
Located in Williamson County	•		•			•		•	

1 | RONALD REAGAN BOULEVARD NORTH PHASE 4
Williamson County, Texas

Client: Williamson County // Completed: 2013 // Cost: $20M // Characteristics: Rural Ultimate 4-lane Divided // Relevance: Ronald Reagan Corridor, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Ken was Project Manager of 6.25 miles of a new location, 2-lane rural highway in Williamson County. Ken's oversight included preliminary route selection, interim and ultimate schematics, PS&E, and development of construction bid documents. He worked with a GEC, and performed public involvement with the County Commissioner, Valerie Covey, meeting with land owners individually, in small and large settings. The schematic phase included the design of an ultimate 4-lane divided rural highway. Throughout the project, Ken over saw the development of: Traffic Analysis, three FEMA floodplain reports, Wetlands Assessment, Geological Assessment, Karst Survey, Cattle passes, Construction Manual, Phase 1 ESA, WPAP, Vegetative Protection Plan, Cost Estimates, ROW documents, and Construction Schedule.

2 | FM 110 NORTH, LOOP AROUND SAN MARCOS
Hays County, Texas

Client: Hays County // Completed: Ongoing // Cost: $32M // Characteristics: Rural Ultimate 4-lane Divided, Interim 2-lane // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, FEMA Streams

Roles & Responsibilities: Ken is Project Manager of six miles of a new location, 2-lane rural highway in Hays County. His oversight includes schematic refinements, interim and ultimate schematics, PS&E, and development of construction bid documents. Ken is working with a GEC (Prime Strategies). The schematic phase included the design of an ultimate 4-lane divided rural highway. He is also overseeing the development of: Traffic Analysis, Schematics, Wetlands Assessment, Construction Manual, Cost Estimates, FEMA Floodplain Report and Detention design, ROW documents, and Construction Schedule. The roadway crossed a Concrete Mix Plant, a Quarry, and encroached on: a race track, by-pass creek (Zone AE), San Marcos Airport, Gary Job Corp (Federal Facility), and the floodplain of the San Marcos River.

3 | NORTH MAYS EXTENSION
Williamson County, Texas

Client: Williamson County // Completed: 2018 // Cost: $14M // Characteristics: Urban Ultimate 4-lane, Interim 2-lane // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Ken was Project Manager for the 1-mile of a new location. north-south by-pass of IH 35 roadway in Round Rock. Project ultimate 4-lane urban, interim 2-lane urban project included crossing Chandler Branch, a FEMA designated floodplain and an Upper Brushy Creek WCID Inundation Easement behind Dam #11, storm sewer design, and proposed cross culverts, relocation of a detention facility. Ken's oversight included a preliminary engineering report which considered 6 separate route alternatives, interim and ultimate schematic design, coordination with the Upper Brushy Creek WCID and negotiations on storage credits, stakeholder meetings, completion of a WPAP for TCEQ approval, and channel modifications to provide additional storage. Ken's deliverables included plans, specifications, estimates, construction schedule, environmental approval, ADA Compliance, and utility design.

4 | GILBERT ROAD EXTENSION
Travis County, Texas
Client: Travis County // Completed: 2017 // Cost: $4M // Characteristics: Urban 2-lane Roadway Relevance: Added Capacity, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, FEMA Stream
Roles & Responsibilities: Ken was Project Manager for the 1-mile, new location project on Gilbert Road extending it from FM 969 to the Austin's Colony subdivision. He provided oversight on a route study, schematic, PS&E, and CPS. The design includes 2-12' lanes, 4' shoulders, curb and gutter, and 5' ADA Compliant sidewalks, as well as four water quality ponds, and signal warrant and design. He lead the Public Involvement process, including meetings to solicit input from the community, and worked closely with Del Valle ISD to determine a solution to their access concerns that worked for this largely public involved project.

5 | PFLUGER FARM LANE PHASE A AND B
Travis County, Texas
Client: City of Pflugerville // Completed: 2014 // Cost: Ph A $2.3M, Ph B $2.9M Characteristics: Urban 3-lane Roadway // Relevance: Added Capacity, Schematic, PS&E, Traffic Studies, FEMA Streams
Roles & Responsibilities: Ken was Project Manager for the 1.2 miles of a new location, 2-lane rural highway in the City of Pflugerville. The project included a preliminary route selection phase for Phases A and B, schematic phase, PS&E, and Construction Phase Services. Phase A went to letting within three months of NTP to meet the demands of an incoming data center. Ken provided management of oversight on the route study, environmental process, schematic, PS&E, traffic studies, and FEMA studies. During the environmental process, a potential historic find was discovered which could have derailed the schedule, but Ken determined an alternative plan to move to construction to avoid the delay and meet the deadline. He also provided management and oversight on the addition of water, wastewater, and re-use use lines as well as a wastewater interceptor being constructed along the creek.

6 | COLLEGE STREET BRIDGE REPLACEMENT
Williamson County, Texas
Client: TxDOT // Completed: 2014 // Cost: $5M // Characteristics: Schematic 2-lane Urban Road and Bridge // Relevance: Schematic, FEMA Streams, Bridge, Located in Williamson County
Roles & Responsibilities: Ken was Project Manager for the schematic for a bridge replacement on College Street over the San Gabriel River and roadway reconstruction of College Street. The project spanned the San Gabriel River, a FEMA studied stream, and included working with the Parks and Recreation Department to coordinate an aesthetically pleasing solution for the bridge as well as for the stream. The project also included designing roadway improvements along College Street culminating in a roundabout connecting East Morrow Street, River Haven Drive, and College Street. The roundabout design, with sidewalks and ADA Compliant ramps and crosswalks, provided an elegant design solution to convey traffic safely through the park and provided a water quality feature in the median.

7 | 969 PASS-THROUGH TOLL PHASE 1 AND 2
Travis County, Texas
Client: TxDOT // Completed: Ongoing // Cost: Ph 1 $11.1M, Ph 2 $9.7M
Characteristics: Rural 5-lane // Relevance: Added Capacity, Schematic, PS&E, FEMA Streams
Roles & Responsibilities: Ken is Project Manager of four miles of converting an existing roadway to a 5-lane rural section with 8' shoulders and 5' sidewalks. The project is being split into two jobs; the west portion from Decker Lane to FM 973 existing today as a 4-lane, no shoulder roadway and includes a environmental Categorical Exclusion, the eastern project from FM 973 to Hunters Bend Road exists today as a 2-lane, no shoulder roadway and includes an Environmental Assessment. Ken's is also acting as TxDOT liaison, Public Involvement Lead, and Drainage Lead. Phase 1 is under construction, Phase 2 received a FONSI in 2017 and is at 60% PS&E.

8 | US 183A
Williamson County, Texas
Client: Central Texas Regional Mobility Authority // Completed: 2007 // Cost: $210M
Characteristics: Control of Access High Speed Roadway // Relevance: Added Capacity, FEMA Streams, Bridge, Located in Williamson County
Roles & Responsibilities: Ken was Drainage Technical Lead for 13 miles of tollway including storm sewer, culverts, detention ponds, water pollution abatement plan, and stream modeling. Ken coordinated with all disciplines, CTRMA, TxDOT, GEC. He also performed floodplain analysis on six FEMA designed Zone A or AE stream crossings, including preparation of reports to floodplain administrator. Ken designed mitigation solutions to offset potential hydrologic and hydraulic impacts including designing seven detention ponds with control structures, overflow weirs, and low flow channels. He evaluated and designed channel modifications to channelize a floodplain and reduce a 700' long bridge span to 150'. The channel modifications included preserving the Waters-of-the-US, without having to secure additional 404 permits. Ken also managed and provided oversight on the design of four water quality ponds.

9 | MOPAC LOOP 1, SCHEMATIC AND DESIGN/BUILD PS&E PROJECT
Austin, Texas
Client: Central Texas Regional Mobility Authority // Completed: 2018 // Cost: $200M
Characteristics: Control of Access High Speed Roadway // Relevance: Controlled Access Facility, Added Capacity, PS&E, ROW Identification, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge
Roles & Responsibilities: Ken was Roadway Lead during the schematic phase and the project was under the control of TxDOT. After the schematic phase, the project went through a feasibility study with CTRMA, and subsequently went out as a Design/Build (DB) Project. During the DB project, Ken served as the Drainage Technical Lead.

During the schematic phase, Ken oversaw the production of the schematic of the control of access roadway which included the addition of a proposed Managed Lane along 11.6 miles of MoPac Expressway, relocation of ramps, widening of portions of the existing frontage roads and general purpose lanes, and the addition of noise barriers to assist the public relation effort and gain the backing by the local community. Ken evaluated the entire project for drainage purposes and impacts to the local streams and managed a 4-mile segment of the schematic and roadway design. The analysis included an Impact Analysis, due to the project's relation to three separate watersheds, to determine potential impacts to the receiving streams from the increased impervious cover. The drainage team recommended solutions to mitigate for those impacts.

DAVE GARRETT, PE

QA/QC MANAGER
ROUND ROCK OFFICE

LJA ENGINEERING

EDUCATION

1981, BS, Civil Engineering
Texas A&M University

PROFESSIONAL LICENSE

2011, Professional Engineer: Texas #76626

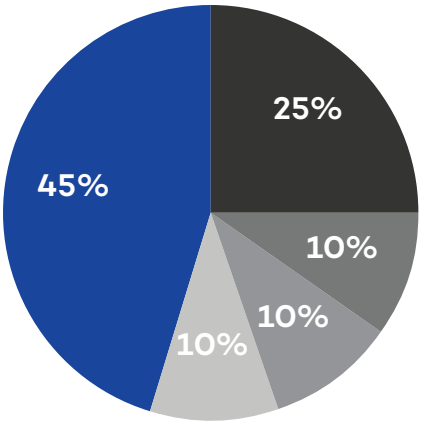
TXDOT PRECERTIFICATION

Employee Sequence No. 788
Categories: 3.2.1, 4.2.1, 8.1.1, 9.1.1, 10.1.1, 10.2.1, 10.3.1, 18.3.1

EXPERIENCE

Total: 36 Years // Firm: 6 Years

AVAILABILITY MAR 2021



SUMMARY OF QUALIFICATIONS

Dave has over 30 years of project management and highway design experience for transportation projects. He has been with LJA Engineering for the last six years, Serving as the QA/QC Manager for LJA's Central Texas Infrastructure group. He has experience as discipline design lead on numerous design-build projects. His responsibilities include geometric roadway design, drainage design, preparation of civil PS&E plans, utility coordination, ROW acquisition, signing and pavement markings, and traffic control plans. He has led designs on small and large scale projects, including fast-paced schedules, and projects that span longer periods of time to account for acquisition of right-of-way and relocation of utilities.

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME									
TASKS	1	2	3	4	5	6	7	8	9	10
Controlled Access Facility							•			
Added Capacity		•			•	•	•		•	•
Interim/Ultimate	•	•				•	•			•
Schematic	•	•		•					•	•
PS&E	•	•	•	•		•	•	•	•	•
ROW Identification	•	•								•
Traffic Studies	•	•								•
Public Involvement	•	•								•
Edward's Aquifer Protection Zone	•	•					•			•
FEMA Streams	•	•	•		•	•	•		•	•
Bridge	•	•	•	•	•	•	•	•		•
Located in Williamson County	•	•			•					•

1 | RONALD REAGAN BOULEVARD NORTH PHASE 4
Williamson County, Texas
Client: Williamson County // Completed: 2013 // Cost: $20M // Characteristics: Rural Ultimate 4-lane Divided // Relevance: Ronald Reagan Corridor, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge, Located in Williamson County
Roles & Responsibilities: Dave was QA/QC Manager providing coordination and quality control for the design of drainage and temporary erosion controls for section of Ronald Reagan Boulevard from SH 95 to IH 35. The drainage consisted of cross culverts, ditches, and channel improvements. Coordinated Water Pollution Abatement Plan preparation and submittal to TCEQ.

2 | ANDERSON MILL ROAD
Cedar Park, Texas
Client: City of Cedar Park // Completed: 2018 // Cost: $7M // Characteristics: Ultimate 4-lane Divided // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, Edward's Aquifer Protection Zone, Located in Williamson County
Roles & Responsibilities: Dave was QA/QC Manager for the south and north segments of the widening to a 4-lane divided urban roadway. The south segment is a little over 1 mile long and the north 1.5 miles long. Drainage design for this project includes culverts, storm sewer, detention ponds, and water quality for both TCEQ and LCRA. Culvert construction was phased in conjunction with the traffic control plan to maintain drainage during construction and provide a safe work zone.

3 | US HIGHWAY 290, FROM PAIGE TO GIDDINGS
Bastrop and Lee Counties, Texas
Client: TxDOT Austin // Completed: Ongoing // Cost: $40M // Characteristics: Rural 4-lane Divided, Shoulders // Relevance: PS&E, FEMA Streams, Bridge
Roles & Responsibilities: Dave was QA/QC Manager for the approximately 10-mile long widening of US 290 to convert to a 4-lane divided roadway. The drainage design consists of approximately 30 miles of ditch design, 25 cross culverts, and SW3P and erosion control. Culvert design includes replacing some culverts while extending others where the existing provides adequate capacity. The median ditch was drained into culverts with drop inlets.

4 | SH 71
Austin, Texas
Client: TxDOT // Completed: 2012 // Cost: $12M // Characteristics: Rural 4-lane Divided with Continuous Left Turn Lane and 10' Shoulders // Relevance: Schematic, PS&E, Bridge
Roles & Responsibilities: Dave was QA/QC Manager for the design of three miles of roadway widening and drainage, including storm water pollution prevention plan. Included HEC-RAS modeling of widened Barton Creek bridge. Project crossed environmentally sensitive Barton Creek and included a hazardous material trap at the Creek.

5 | 183A TURNPIKE
Williamson County, Texas
Client: Central Texas Regional Mobility Authority // Completed: 2007 // Cost: $210M
Characteristics: Control of Access High Speed Roadway // Relevance: Added Capacity, FEMA Streams, Bridge, Located in Williamson County
Roles & Responsibilities: Dave was QA/QC Manager and he managed the drainage design for 13 miles of the design-build tollway including storm sewer for mainlanes, frontage roads, toll plazas and cross streets, culverts (bridge class and non-bridge class), detention ponds, water quality ponds, Water Pollution Abatement Plan, and major stream crossing modeling. This project was on new location and consisted of all new culvert construction. Culvert outfalls were designed so as to minimize existing channel disturbance and control outlet velocities. Also coordinated extensively with the utility coordination team to minimize utility relocations and adjustments.

6 | STATE LOOP 480
Eagle Pass, Texas
Client: TxDOT // Completed: Ongoing // Cost: $70M // Characteristics: Rural Ultimate 4-lane Divided // Relevance: Added Capacity, Interim/Ultimate Design, PS&E, FEMA Streams, Bridge
Roles & Responsibilities: Dave was QA/QC Manager for the new location 6-1/2 mile loop around Eagle Pass. The drainage design consists of the hydrologic and hydraulic design for 46 cross culverts, five of which are Bridge Class, one FEMA crossing (Elm Creek), one irrigation canal crossing, scour analysis, coordination with the Local FEMA Flood Plain Administrator, and approximately 20 miles of ditch design. Outlet velocities were kept at a minimum due to the erosive soils in the area. Outlet channels were lined with stone riprap, broken back profiles were used to flatten culvert slopes, and increasing the number of barrels, while downsizing the individual barrels sizes, were all used in various locations to mitigate the outlet velocities. Included in the design scope of this project is a comprehensive drainage study, including the preparation of a drainage report.

7 | US 281 PHASE 2
San Antonio, Texas
Client: TxDOT // Completed: 2021 (est) // Cost: $188M // Characteristics: Urban Freeway with Frontage Roads, Mainlanes, Impact/Detention Analysis, Grade Separations
Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, PS&E, Edward's Aquifer Protection Zone, FEMA Streams, Bridge
Roles & Responsibilities: Dave is the QA/QC Manager for drainage design for this 4.5-mile long freeway design project with frontage roads. Drainage design for this project consists of urban storm sewer, rural ditches, cross culverts, detention ponds, and water quality facilities. Storm sewer systems tied into the culverts at various locations, with inlets tying directly into box culverts in some cases. Headwalls placed and grading was designed to minimize ROW and drainage easements required. Outlet velocities were decreased using broken back profiles for the culverts as well as energy dissipation in the form of stone riprap. Considerable attention was paid to culvert construction sequencing to minimize conflicts with existing joint bid utilities.

8 | SH 121 SOUTHWEST PARKWAY
Fort Worth, Texas
Client: North Texas Turnpike Authority // Completed: 2015 // Cost: $140M
Characteristics: Urban Freeway w/Frontage Roads, Grade Separations // Relevance: PS&E, Bridge
Roles & Responsibilities: Dave was QA/QC Manager on SH 121. The project included storm sewer design, bridge drainage, HEC-RAS modeling of the North Fork of the Trinity River, detention pond design, channel improvements, temporary erosion control for SW3P, permanent storm water quality controls, and an impact analysis for approximately one mile of limited access freeway.

9 | FM 969 PHASE 1 AND PHASE 2
Travis County, Texas
Client: TxDOT // Completed: Ongoing // Cost: Ph 1 $11.1M, Ph 2 $9.7M // Characteristics: Rural 5-lane // Relevance: Added Capacity, Schematic, PS&E, FEMA Streams
Roles & Responsibilities: Dave served as the QA/QC Manager for the engineering design of widening FM 969 and adding a shared use path. Phase 1 included over two miles of roadway, drainage (including cross culverts), signing and pavement markings designed to TxDOT specifications. Phase 2 is currently in the schematic phase and consists of similar improvements to Phase 1 with some reconstruction included as well. Phase 2 is also approximately two miles in length.

10 | NEW HOPE DRIVE EXTENSION PHASE I
Cedar Park, Texas
Client: City of Cedar Park // Completed: 2019 // Cost: $8M // Characteristics: Urban 4-lane Divided Relevance: Added Capacity, Schematic, PS&E, ROW Identification, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Located in Williamson County
Roles & Responsibilities: Dave was the QA/QC Manager for this 4-lane divided arterial roadway project. His responsibilities include implementing the Quality Management Plan by ensuring that inter-discipline reviews and constructability reviews are performed and documented at each major milestone of the design process. The design for this project includes roadway, drainage, water and wastewater line design, erosion control, water quality and signing and pavement markings.

SCOTT BOND, PE

ROADWAY LEAD
KATY AND AUSTIN OFFICES

LJA ENGINEERING

EDUCATION

1980, BS, Civil Engineering
Texas A&M University

PROFESSIONAL LICENSE

1987, Professional Engineer:
Texas #62907

1994, Professional Engineer:
California #C51355

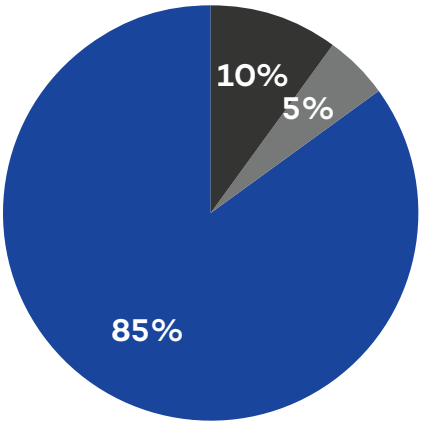
TXDOT PRECERTIFICATION

Employee Sequence No. 1856
Categories: 1.1.1, 1.2.1, 1.3.1, 1.4.1, 1.5.1, 1.6.1, 3.2.1, 4.2.1, 4.4.1, 7.1.1, 8.1.1, 10.2.1

EXPERIENCE

Total: 39 Years // Firm: 2 Years

AVAILABILITY MAR 2021



SUMMARY OF QUALIFICATIONS

Scott has 39 years of experience in Texas. His career has focused on new corridor development, schematic development, roadway rehabilitation and expansions for urban and rural highways. He is experienced in every aspect of highway design including feasibility, route and traffic studies. He has performed as project manager and technical manager on route studies, schematic and geometric design, capacity analysis of intersections and highway corridors, hydrologic and hydraulic studies, cost estimation, environmental investigations, preliminary engineering reports, major investment studies (MIS), Interstate Access Justification Reports (IAJR), and plans, specifications, and estimates (PS&E). Scott is experienced in the use of Microstation, GEOPAK, SignCAD, HCS, and CORSIM.

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME								
TASKS	1	2	3	4	5	6	7	8	9
Controlled Access Facility	•	•	•	•		•		•	
Added Capacity	•	•	•	•		•	•	•	•
Interim/Ultimate	•	•	•	•		•	•	•	•
Schematic	•	•	•	•	•	•	•	•	•
PS&E	•	•	•				•		
ROW Identification	•	•	•	•	•	•	•	•	•
Traffic Studies	•	•	•	•	•	•	•	•	•
Public Involvement	•	•	•	•	•	•	•	•	•
Edward's Aquifer Protection Zone		•		•		•			
FEMA Streams	•	•	•	•	•	•	•		
Bridge	•	•	•	•	•	•	•	•	•
Located in Williamson County	•		•						

1 | SH 45 NORTH

Williamson County, Texas

Client: TxDOT Austin District – TTA // Completed: 2009 // Cost: $70M // Characteristics: Controlled Access High Speed Roadway // Relevance: Controlled Access Facility, Added Capacity, Interim/ Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Scott was the Roadway Lead for schematic design of four miles of urban 6-lane controlled-access tollway located along existing 2-lane and 4-lane roadways which included both rural and urban sections and a directional interchange with SH 130. In addition, he performed the layout of the SH 45 North interchange at IH 35 in the adjoining section as part of the IH 35 MIS project listed below. Scott was also the lead schematic designer for the SH 45 (Austin Outer Parkway) route location and schematic design project that set the original layout in the late 1980s.

2 | SH 45 SW

Hays and Travis County, Texas

Client: Central Texas Regional Mobility Authority // Completed: 2015 // Cost: $85M Characteristics: Controlled Access High Speed Roadway, Rural Highway // Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge

Roles & Responsibilities: Scott was the Roadway Lead for the design schematics for rural 4-lane controlled-access tollway on new location. Creative geometry was used to avoid the numerous karst features and the layout of an innovative intersection at RM 1626 was included. Scott was also the lead schematic designer for the SH 45 (Austin Outer Parkway) route location and schematic design project performed in the late 1980s that set the original layout in this area.

3 | IH 35, MIS PHASE I AND II

Williamson and Travis Counties, Texas

Client: TxDOT Austin // Completed: 2003 // Cost: $1.5B // Characteristics: Controlled Access High Speed Roadway // Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Scott was the Roadway Lead for the conceptual schematic design of 40 miles (Georgetown to Buda) and detailed schematic design of 19 miles (South of Georgetown to US 290E) of urban controlled-access freeway reconstruction. Multiple alternatives were depicted including depressed and elevated freeway sections, collector-distributor roadway sections, HOV lanes, and methods of widening or eliminating the existing 2-level freeway section in downtown Austin. Scott was also the lead schematic designer for the SH 45 (Austin Outer Parkway) route location and schematic design project performed in the late 1980s that set the original route and layout in this area.

4 | IH 10 WEST, US 87 NORTH OF BOERNE TO HUEBNER ROAD

Bexar and Kendall Counties, Texas

Client: TxDOT San Antonio // Completed: 2009 // Cost: $275M // Characteristics: Controlled Access High Speed Roadway, Arterial Roadways // Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, Schematic, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge

Roles & Responsibilities: Scott was the Roadway Lead and Project Manager for drainage analysis, traffic studies, environmental studies and the preparation of design schematics and ROW maps for the upgrade of over 20 miles of rural 4-lane controlled-access freeway with both one- and two-way frontage roads to a 6- and 8-lane rural and urban section facility with one-way frontage roads. The schematic design included channel and other floodplain improvements at the Leon Creek crossing and the addition of two new diamond interchanges. Two separate schematics depicting interim improvements at Dominion Boulevard and Camp Bullis Road were also prepared.

5 | SH 127

Concan, Texas

Client: TxDOT San Antonio // Completed: 2014 // Cost: $10M // Characteristics: Rural 2-lane Roadway // Relevance: Schematic, ROW Identification, Traffic Studies, Public Involvement, FEMA Streams, Bridge

Roles & Responsibilities: Scott was the Roadway Lead for alternative analysis, river hydraulic analysis, and design schematics for the addition of a new bridge and roadway approaches to replace the existing Frio River low water bridge. Numerous alternative bridge clearance elevations of the river were analyzed. Property access to the improved roadway due to increased crossing elevation and maintaining recreational access to the river were critical issues. Project required development of an array of 3-D renderings to convey the project appearance to the public.

6 | US 290 W AT SH 71, OAK HILL "Y"

Austin (Oak Hill), Texas

Client: TxDOT Austin // Completed: 2017 // Cost: $250M // Characteristics: Controlled Access High Speed Roadway, Arterial Roadways // Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, Schematic, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge

Roles & Responsibilities: Scott was the Roadway Lead for alternative studies and conceptual schematics for the reconstruction/capacity improvements to five miles (west of Circle Drive to Joe Tanner Lane) of rural 4-lane highway. Numerous alternatives were developed including various combinations of managed mainlanes, continuous and non-continuous frontage roads, addition of direct connectors at SH 71, and options using indirect left turn and continuous flow tee innovative intersections. Scott was also the schematic design project engineer for the original schematics to convert 17 miles of SH 71/US 290 (Ben White Boulevard) from RM 1826 to FM 973 to the current controlled-access freeway facility.

7 | US 83, JUNCTION TO MENARD

Kimble and Menard Counties, Texas

Client: TxDOT San Angelo // Completed: 2008 // Cost: $95 M // Characteristics: Rural 4-lane Divided Roadway // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, FEMA Streams, Bridge

Roles & Responsibilities: Scott was the Roadway Lead and Project Manager for route studies, environmental studies, drainage analysis, design schematics, and ROW maps for the conversion of 29 miles of an existing 2-lane roadway to a 4-lane divided trunk system facility. Project required creative geometry design to fit the facility through the rugged terrain while minimizing environmental impacts, including endangered songbird species habitat. Complete design cross-section development including for all construction phases was performed to set ROW needs. Improvements to the IH 10 interchange were also included. PS&E was then developed for the 6.4-mile section from north of IH 10 in Junction.

8 | IH 35 AND WALTERS STREET

San Antonio, Texas

Client: TxDOT San Antonio District // Completed: 2008 // Cost: $20M // Characteristics: Control of Access High Speed Roadway, 6-lane Divided Roadway // Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, Schematic, ROW Identification, Traffic Studies, Public Involvement, Bridge

Roles & Responsibilities: Scott was the Roadway Lead and Project Manager for alternative analysis, environmental studies and the preparation of design schematics for frontage road, ramp and mainlane lane balance improvements for two miles of IH 35. Project included the preparation of separate schematics depicting the reconstruction of 1.5 miles of Walters Street to a 6-lane divided facility with bike lanes to serve as a new main entrance to Fort Sam Houston.

9 | FM 521 AND FM 2234

Harris County, Texas

Client: TxDOT Houston // Completed: 2015 // Cost: $25M // Characteristics: Urban 4-lane to 6-lane Divided Roadway // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, ROW Identification, Traffic Studies, Public Involvement, Bridge

Roles & Responsibilities: Scott was the Roadway Lead for environmental studies, alternative studies, and the preparation of design schematics for two railroad grade separations and two miles of 4-lane and 6-lane divided urban facility along FM 521 and one mile of 6-lane divided urban section along FM 2234. Multiple bridge layouts and structure types were evaluated to provide the most cost-effective design that met railroad requirements.

ZACH RYAN, PE

ROADWAY SUPPORT
ROUND ROCK AND AUSTIN OFFICES

LJA ENGINEERING

EDUCATION

2005, BS, Civil Engineering
University of Texas at Austin

PROFESSIONAL LICENSE

2010, Professional Engineer: Texas #106276

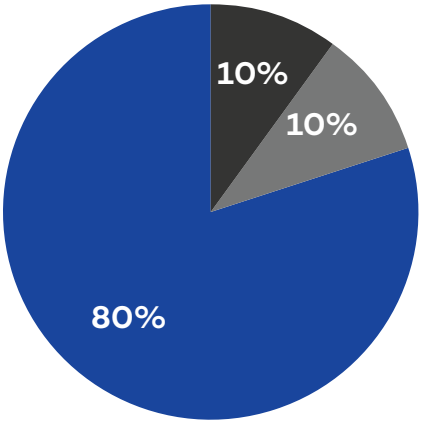
TXDOT PRECERTIFICATION

Employee Sequence No. 21710
Categories: 2.5.1, 3.2.1, 4.2.1, 4.4.1, 4.5.1, 8.1.1, 8.3.1, 9.1.1, 10.1.1, 10.2.1, 10.3.1, 10.5.1

EXPERIENCE

Total: 15 Years // Firm: 4 Years

AVAILABILITY MAR 2021



SUMMARY OF QUALIFICATIONS

Zach brings 15 years of Central Texas Roadway Design experience to the LJA Team. Zach has led the roadway design effort for numerous projects throughout Central Texas. He has experience working with Williamson County on significant projects as well as for TxDOT, Hays County, Travis County and local Cities such as Round Rock, Leander, Cedar Park and Georgetown. In addition to being technically capable, Zach brings a creative problem solving mentality to roadway design which benefits clients by navigating around the issues that arise during a design. Finally, the trait that sets Zach apart from other roadway designers is his experience in other aspects of roadway project development. His knowledge of drainage, TCP, environmental issues allows him to direct the roadway design in a proactive manner to avoid issues which could delay the project.

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME						
TASKS	1	2	3	4	5	6	7
Controlled Access Facility				•	•	•	
Added Capacity	•	•				•	•
Interim/Ultimate	•	•	•	•		•	•
Schematic	•	•	•		•	•	•
PS&E	•	•	•	•	•	•	•
ROW Identification	•	•	•		•		•
Traffic Studies	•	•	•	•			
Public Involvement	•	•			•	•	
Edward's Aquifer Protection Zone	•						
FEMA Streams	•	•					
Bridge	•	•		•			
Located in Williamson County	•						

1 | NORTH MAYS EXTENSION
Williamson County, Texas

Client: Williamson County // Completed: 2018 // Cost: $14M // Characteristics: Urban Ultimate 4-lane, Interim 2-lane // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Zach is serving as the Schematic and PS&E Roadway Task Lead for this 1-mile new location 4-lane divided arterial roadway in Round Rock. The project included a schematic and PS&E development. Zach worked closely with the Williamson County GEC during the project development. A unique feature of this project was the creation of both an interim and ultimate facility. The County desired to only construct two of the four lanes and the City of Round Rock would eventually construct the remaining lanes when traffic demands increased. Zach ensured that the interim facility minimized throw away construction and also ensured that the second phase could be constructed safely without disruption to the existing traffic. During the schematic phase Zach ran multiple analyses to optimize ROW requirements by evaluating ditch designs, earth embankment near the 1,200' bridge, retaining walls and slope paving. Zach ensured that the roadway design met County roadway criteria while also considering City criteria since the City would be the long term owner. Zach accounted for future development driveways by evaluating sight distance, left turn lanes and ditch grading. The County was not constructing a shared use path in the interim phase but Zach ensured there was a berm behind the curb so that a path could be constructed and graded all intersection and driveway crossings to meet ADA criteria.

2 | DACY LANE
Hays County, Texas

Client: Hays County // Completed: Construction Ongoing // Cost: $12M // Characteristics: Urban 5-lane and Rural 3-lane // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, FEMA Streams, Bridge

Roles & Responsibilities: Zach is currently the Project Manager and Roadway PS&E Lead for this 3.5-mile reconstruction and new location roadway expansion project in Hays County. Dacy Lane is an existing 2-lane rural roadway that included sharp horizontal curves and no shoulders which presented significant safety issues and frequent roadway flooding. Zach and his team discovered flaws in a previously completed schematic that presented safety issues and revised the schematic using an innovative approach. He utilized the AASHTO criteria manual, traffic study as well as the County desired goals and proposed to split the roadway to an urban and rural section so that the roadway could safety fit in the existing ROW. The complicated project also involved a robust TCP plan that Zach and his team detailed in three phases with multiple steps each. The crisscrossing existing and proposed alignments produced many challenges in the detailing of the TCP. Zach and his team prepared a clear and direct set of plans that will be easily constructible when the project goes to construction in 2020.

3 | FM 1626 SEGMENT A
Hays County, Texas
Client: Hays County // Completed: Under Construction // Cost: NA // Characteristics: 4-lane Divided Arterial // Relevance: Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies

Roles & Responsibilities: Zach was the Schematic and PS&E Roadway Task leader for this 3.5-mile reconstruction and expansion project. The roadway design had unique characteristics due to the varying typical section. The southern end of the project was a 5-lane rural roadway, the middle was a 4-lane divided and undivided section and the northern end was a 5-lane urban roadway. The roadway had super elevation in some sections due to a constrained right of way. There were unique access issues associated with the quarry located on both sides of the corridor. Zach also designed the alignment around the existing roadway to help reduce the Traffic Control requirements and increase the safety during construction. Zach met with the property owner to understand the access requirements for the quarry vehicles. A single haul road under the existing bridge and an at-grade crossing on FM 1626 were replaced with a double haul road under a large bridge structure. Additionally, the constrained ROW required a very detailed analysis of the roadway profile and how it interacted with the ditch construction. Zach worked closely with the Cross Section Task leader (Alan McCarthy) to ensure the design was contained within the ROW.

4 | IH 40 RECONSTRUCTION
Amarillo, Texas
Client: TxDOT // Completed: Under Construction // Cost: $89M // Characteristics: Controlled Access Facility // Relevance: Controlled Access Facility, Interim/Ultimate Design, PS&E, Traffic Studies, Bridge

Roles & Responsibilities: Zach served as the PS&E Roadway Task Leader on this 2.2-mile 6-lane Interstate reconstruction project. This project was unique because when Zach and his team took over the design the PS&E plans were at approximately 30%. TxDOT had done the project in house but had become very behind schedule and needed assistance to meet a set letting date. The project was located in a dense urban setting and had three existing grade separations that need replaced to achieve desirable vertical clearances. Zach and his team immediately evaluated what had been done to determine if there were any fatal flaws. His review found numerous errors with the weaving distances and his collaborative effort with the Drainage Task Lead found some necessary culvert improvements that would affect a critical entrance ramp. Zach oversaw the redesign of the ramp layouts and auxiliary lanes which included a revision to the IAJR and FHWA approval. Zach then worked closely with the Bridge Task Leader, Wall Task Leader and Traffic Control Leader to develop a quality set of PS&E plans.

5 | RAYFORD ROAD
Woodlands, Texas
Client: Montgomery County // Completed: 2015 // Cost: $35M // Characteristics: Controlled Access Facility // Relevance: Controlled Access Facility, Schematic, PS&E, ROW Identification, Public Involvement

Roles & Responsibilities: Zach served as the Deputy Project Manager and Schematic Roadway Task Leader on this complicated 3.2-mile reconstruction and expansion project for Montgomery County. The existing 4-lane roadway was to be expanded to a 6-lane. The project included numerous challenging aspects including an at-grade rail crossing that was changing to a grade separation, access issues near the RR and significant utility crossings (large petroleum lines) that affected the profile. Additionally, multiple

horizontal curves that did meet criteria but already had ROW set aside by a large development so acquiring additional ROW would mean purchasing homes. To resolve these issues Zach and his team developed multiple alternatives at each of these critical areas. Prudent financial management limited the alternative analysis to the critical areas, a full alternative analysis was not done when the expansion was typical. Zach and his team developed various alignments, typical sections and profiles to examine impacts to cost, land owners, access and design speeds. Zach developed exhibits for various alignments, profiles and access management that were clear and reviewable by the County Engineering Staff as well as useful in public involvement meetings. Zach and his team developed a Railroad Exhibit A.

6 | IH 10 WB FRONTAGE ROAD, ML WIDENING AND EXIT RAMP
Boerne, Texas

Client: City of Boerne // Completed: Construction 2017 // Cost: $6M // Characteristics: Controlled Access Facility // Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, Schematic, PS&E, Public Involvement

Roles & Responsibilities: Zach served as the Deputy Project Manager, Schematic, PS&E, and Roadway Task Lead for this 1.6-mile new location 3-lane frontage road, IH10 mainlane widening and exit ramp project. Zach's client for this project was the City of Boerne but TxDOT had complete control of the plans. The schematic required FHWA approval and an IAJR. The schematic established control of access along the new frontage road which required extensive public involvement, both following the TxDOT NEPA process and informal individual property owner coordination. The project contained retaining walls and Zach evaluated locations to meet clear zone requirements. A shared use path was designed for the entire length of the frontage road. Zach developed horizontal alignments and profiles for the main lanes, frontage road and ramps using Geopak. Zach helped prepare individual property exhibits and coordinated with future development for driveway locations. Setting the frontage road alignment and ramp location required a lot of analysis due to the significant elevation changes and sight distance challenges. Zach worked diligently with the Cross Section Designer to develop the most efficient design given the topographic and property access constraints to ensure weaving distance and sight distance were maintained. Additionally, TxDOT had high level plans to expand IH 10 in this high growth area and Zach ensured the project would coincide with the future improvements.

7 | HERFF ROAD
Boerne, Texas

Client: Kendall County // Completed: 2015 // Cost: $8M // Characteristics: Route Study, Access Issues, Utility Conflicts, Public Involvement // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification

Roles & Responsibilities: Zach served as the Project Manager, Schematic, PS&E, and Roadway Task Lead for this 1.4-mile reconstruction and new location project of a 2-lane rural roadway to a 4-lane urban/rural arterial. The project was the biggest that Kendall County had ever funded and was highly visible for the County. Zach and his team developed multiple alignments during the route study phase. The project had multiple options to terminate the new location roadway that had significant development implications depending on the route. Zach worked closely with the County, the land owners and provided insight on the pros and cons of various routes so the County could make a final decision. Once the route was established, a full schematic was developed and ROW was purchased based on the schematic design. Zach and his team developed detailed cross sections during the schematic phase so that the County could proceed with confidence during ROW acquisition. Late during the PS&E phase a gas line was discovered in the location of a significant ditch. Zach and his team modified the profile and the alignment to shift the low point of the ditch away from the utility.

DEREK BOHLS, PE, CFM

DRAINAGE LEAD
ROUND ROCK OFFICE

LJA ENGINEERING

EDUCATION

2004, BS, Civil Engineering
University of Texas at Austin

PROFESSIONAL LICENSE

2009, Professional Engineer: Texas #103424

2014, Certified Floodplain Manager: #2671-14N

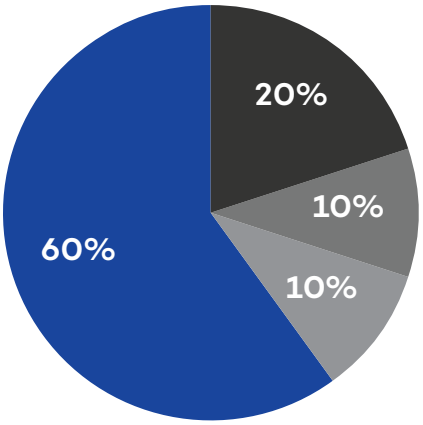
TXDOT PRECERTIFICATION

Employee Sequence No. 18360
Categories: 2.5.1, 10.1.1, 10.2.1, 10.3.1, 10.5.1, 10.7.1

EXPERIENCE

Total: 16 Years // Firm: 8 Years

AVAILABILITY MAR 2021



SUMMARY OF QUALIFICATIONS

Derek has 16 years of H & H design experience on transportation projects across the state of Texas. His responsibilities include schematic development and design, PS&E, rural and urban drainage design, water quality regulations and permitting, floodplain analysis, scour analysis, water quality BMP design, impact analysis, storm sewer design, culvert design, erosion control plans, energy dissipater design, and hydrologic modeling for projects. Derek has been involved in large projects such as the MoPac Improvement Project, North Tarrant Expressway, and US 281; as well as many traditional PS&E projects such as New Hope Drive (two phases), North Mays Street, and Weiss Lane. Derek is proficient with Microstation, GeoPak, HEC-RAS, HEC HMS, XP SWMM, ArcGIS, and HY-8.

COMPARABLE EXPERIENCE MATRIX

TASKS	PROJECTS IN RESUME 1	2	3	4	5	6	7	8	9
Controlled Access Facility			•						
Added Capacity			•	•	•	•	•		•
Interim/Ultimate	•	•	•	•	•	•	•	•	•
Schematic				•	•	•	•		•
PS&E	•	•	•	•	•		•		•
ROW Identification	•			•	•	•	•	•	•
Traffic Studies	•	•		•	•	•	•		•
Public Involvement	•	•		•	•	•	•		•
Edward's Aquifer Protection Zone	•	•	•	•	•				
FEMA Streams	•	•	•	•	•		•	•	•
Bridge	•		•	•	•				•
Located in Williamson County	•	•		•	•		•	•	

1 | LIBERTY HILL BYPASS
Williamson County, Texas

Client: Williamson County // Completed: Ongoing // Cost: $7.5M // Characteristics: New Location Frontage Road // Relevance: Interim/Ultimate Design, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Derek was the Project Manager for new construction of 1.3 miles of 2-lane rural roadway from FM 1869 to FM 279. The corridor is the interim phase that will serve as a frontage road of a future controlled access highway with main lanes and frontage roads. Derek coordinated the design of all aspects of the project including roadway, drainage, bridge, water quality, detention, ROW determination, Survey, Geotechnical, traffic, and public involvement components. The project was delivered on time under an aggressive design schedule of seven months from NTP to 100% plans. During environmental investigations, a large stock pond was discovered to be jurisdictional waters of the US. Derek and his team navigated this challenge by quickly switching to a bridge solution without any affects on the project schedule.

2 | SOUTHWEST BYPASS
Williamson County, Texas

Client: Williamson County // Completed: Ongoing // Cost: $2.5M // Characteristics: New Location Frontage Road // Relevance: Interim/Ultimate Design, PS&E, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Located in Williamson County

Roles & Responsibilities: Derek was the project manager for new construction of 0.5 miles of 2-lane rural roadway from SH 29 to Wolf Ranch Parkway in Georgetown, Texas. The corridor is the interim phase that will serve as a frontage road of a future controlled access highway with main lanes and frontage roads. Derek coordinated the design of all aspects of the project including roadway, drainage, bridge, water quality, detention, Survey, Geotechnical, traffic, and public involvement components. The project was delivered on time under an aggressive design schedule of six months from NTP to 100% plans. The project was in the Edward's Aquifer Recharge Zone and Karst Zone 1. Several caves were discovered along the proposed roadway. All environmental commitments for the project were met and the project was delivered on time and on budget.

3 | US 281 PHASE 2
San Antonio, Texas

Client: TxDOT // Completed: 2021 (est) // Cost: $188M // Characteristics: Urban Freeway with Frontage Roads, Mainlanes, Impact/Detention Analysis, Grade Separations
Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, PS&E, Edward's Aquifer Protection Zone, FEMA Streams, Bridge

Roles & Responsibilities: As Drainage Lead, Derek successfully led the drainage on the SH 281 Phase 2 improvement project in the San Antonio District which included converting a 4-lane highway into a controlled access freeway with ramps and frontage roads. The design included cross culverts, storm sewer, roadside ditches, and outlet protection. The project also lies completely within the Edward's Aquifer Recharge and Contributing Zones. On and off-site drainage areas and hydrographs were produced to determine peak flow impacts due to the project. All increases were documented within the drainage report and detention solutions were applied in areas where the roadway was at the top of the drainage basin, or where outfalls tied into smaller downstream systems that could not handle the increased peak flows.

Outlet velocities were minimized to reduce susceptibility to scour and erosion. All design was confirmed to meet all Environmental commitments.

4 | NEW HOPE DRIVE PHASE I
Cedar Park, Texas

Client: City of Cedar Park // Completed: 2019 // Cost: $8M // Characteristics: Urban 4-lane Divided, Impact/Detention Analysis // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Derek was the Drainage Lead and Project Manager of schematic and PS&E development for a new construction 4-lane divided urban roadway in Cedar Park, Texas from Cottonwood Creek Trail to Ronald Reagan Boulevard (Phase 1), and from Ronald Reagan Boulevard to CR 175 (Phase 2). Derek coordinated the design of all aspects of the project including roadway, drainage, bridge, water quality, detention, retaining walls, ROW acquisition, Survey, Geotechnical, traffic, ADA, and public involvement components. Phase 1 of the project was design and constructed on time and under budget while Phase 2 of the project is currently under environmental review at TxDOT.

5 | NORTH MAYS EXTENSION
Williamson County, Texas

Client: Williamson County // Completed: 2018 // Cost: $14M // Characteristics: Urban Ultimate 4-lane, Interim 2-lane // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Derek was the Drainage Lead and Water Quality Lead for a new construction roadway in Round Rock, Texas. Derek performed floodplain analysis on a FEMA crossings using HEC-RAS and HEC-HMS; coordinated with the Upper Brushy Creek Water Control & Improvement District regarding development in the designated inundation easement behind Dam #11. Proposed bridge geometry design; drainage design for PS&E including storm sewer, ditch and cross culvert design using Geopak Drainage, HY-8; and water quality design. Prepared Water Pollution Abatement Plan to be submitted to TCEQ for approval.

6 | NORTH-SOUTH CONNECTOR
New Braunfels, Texas

Client: City of New Braunfels // Completed: 2018 // Cost: $3.2M // Characteristics: Interim 2-lane Arterial, Ultimate 4-lane Divided Arterial, Impact/Detention Analysis // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, ROW Identification, Traffic Studies, Public Involvement

Roles & Responsibilities: Derek was the Drainage Lead and Project Manager of schematic development for a new construction 4-lane divided urban roadway in New Braunfels, Texas from Alves Lane to IH 35. Derek coordinated the design of all aspects of the project including roadway, drainage, water quality, detention, ROW needs, Survey, traffic, ADA, and public involvement components. The project set the proposed limits of construction of the ultimate 4-lane road and interim 2-lane alternative in order to identify proposed ROW.

7 | RED BUD LANE
Round Rock, Texas
Client: City of Round Rock // Completed: Ongoing // Cost: $15M // Characteristics: Roadway Widening to 5-lane Urban // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, FEMA Streams, Located in Williamson County
Roles & Responsibilities: Derek was the Drainage Lead and Project Manager of schematic and PS&E development for a reconstruction/widening of a proposed 5-lane urban roadway in Round Rock, Texas from Forest Ridge Boulevard to Gattis School Road. Derek coordinated the design of all aspects of the project including roadway, drainage, water quality, detention, retaining walls, ROW acquisition, survey, geotechnical, traffic, SUE, ADA, and public involvement components.

8 | MEADOWS AREA DRAINAGE STUDY
Round Rock, Texas
Client: City of Round Rock // Year Completed: Analysis 2018 // Construction Cost: NA Characteristics: 2-D Flood Modeling, Preliminary Engineering, 2-D Drainage Analysis, Impact/Detention Analysis // Relevance: Interim/Ultimate Design, ROW Identification, FEMA Streams, Located in Williamson County
Roles & Responsibilities: Derek was the Drainage Lead and Project Manager on a comprehensive drainage study of both the Meadows and Greater Round Rock West subdivision area in Round Rock, Texas. Study included 2D hydrologic and hydraulic analysis of a 200-acre developed area with multiple locations of historic flooding issues. Developed an existing 2D model detailing land use, infiltration, and 1D existing conveyance features, and applying rain on grid inflow methodology. Calibrated the model with existing rainfall data from a 2015 event, and captured video footage of flooding within the area during the same event. Created inundation map of entire area, highlighted structures within the study area with anticipated inundation. Developed potential solutions to reduce flooding within the areas and modeled in 2D to create a proposed inundation map. Estimated costs of each improvement including storm sewer improvements, grading, utility relocation, traffic control, and ROW/easements.

9 | WEISS LANE
Pflugerville, Texas
Client: City of Pflugerville // Completed: 2016 // Cost: $18M // Characteristics: Urban/Rural 4-lane Divided, Impact/Detention Analysis // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, FEMA Streams, Bridge
Roles & Responsibilities: Derek was the Drainage Lead for three miles of roadway improvements in Pflugerville, Texas. Derek performed floodplain analysis on three FEMA stream crossings with new bridge locations using HEC-RAS and HEC-HMS; coordinated with the local floodplain administrator. Proposed bridge geometry design; drainage design for PS&E including storm sewer, ditch and cross culvert design using GEOPAK Drainage, and HY-8.

RILEY SLADEK, PE

DRAINAGE SUPPORT
ROUND ROCK OFFICE

LJA ENGINEERING

EDUCATION

2006, BS, Civil Engineering
Texas A&M University

PROFESSIONAL LICENSE

2011, Professional Engineer: Texas #108887

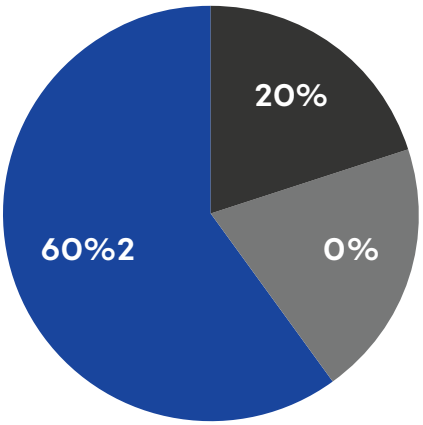
TXDOT PRECERTIFICATION

Employee Sequence No. 19961
Categories: 3.2.1, 4.2.1, 4.4.1, 7.1.1, 7.3.1, 7.4.1, 8.1.1, 8.3.1, 10.1.1, 10.2.1

EXPERIENCE

Total: 14 Years // Firm: 7 Years

AVAILABILITY MAR 2021



SUMMARY OF QUALIFICATIONS

Riley has 14 years of experience in transportation engineering and is currently serving as a project manager for LJA's Cedar Park office. His background consists of hydrology & hydraulic design, roadway design, traffic engineering, utility coordination, and design/build experience. Duties include preparation and review of civil PS&E, storm sewer design, culvert design, ditch/channel design, water quality design, impact analysis, development of drainage reports, FEMA floodplain analyses, geometric design, signing & striping, roadway cross section development, traffic control, traffic impact analyses, traffic signal warrants and design, and utility relocation management. Riley has worked for multiple TxDOT districts, Texas counties, toll authorities, private companies, and local municipalities all over the state.

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME									
TASKS	1	2	3	4	5	6	7	8	9	10
Controlled Access Facility							•			
Added Capacity	•	•	•	•		•	•	•		•
Interim/Ultimate	•		•	•		•	•	•		
Schematic	•	•	•			•		•		•
PS&E	•	•	•	•	•	•	•	•	•	•
ROW Identification	•	•						•		
Traffic Studies	•							•		
Public Involvement	•	•								
Edward's Aquifer Protection Zone		•	•				•			
FEMA Streams	•	•		•	•	•	•	•	•	•
Bridge	•			•	•		•	•		
Located in Williamson County		•	•							

1 | HODDE LANE
Pflugerville, Texas
Client: Travis County // Completed: 2019 // Cost: $5.4M // Characteristics: Interim 2-lane Arterial, Ultimate 4-lane Divided Arterial // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, FEMA Streams, Bridge
Roles & Responsibilities: Riley was Drainage Lead and Project Manager for a safety improvement project to realign an existing rural roadway, Hodde Lane. Riley led a team that developed a preliminary engineering report and designed a 4-lane divided arterial urban section for Travis County, which included improving the existing roadway alignment, intersection improvements, and eliminating floodplain issues. Riley analyzed one proposed bridge and one culvert crossing to determine impacts to the surrounding area. Proposed storm sewer and ditches were designed for interim conditions while incorporating the ultimate design. Additionally, Riley provided cost estimates for a preliminary engineering phase as well as each PS&E submittal.

2 | NEW HOPE DRIVE EXTENSION PHASE I
Cedar Park, Texas
Client: City of Cedar Park // Completed: 2019 // Cost: $8M // Characteristics: Urban 4-lane Divided Relevance: Added Capacity, Schematic, PS&E, ROW Identification, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Located in Williamson County
Roles & Responsibilities: Riley served as a Drainage Engineer for a new construction 4-lane divided urban roadway in Cedar Park, Texas. Project consisted of 3 major culvert crossings, closed storm sewer, and roadside ditches. Riley's preliminary analysis during the schematic phase included a preliminary report on culvert sizing/grading requirements and detention and water quality needs in order to set the necessary proposed ROW. Riley designed ditches and storm sewer systems to convey flows from the project to the receiving stream Designed permanent best management practices and submitted a Contributing Zone Plan to TCEQ for approval prior to construction activities. Riley also developed a cost estimate for drainage design to incorporate into the overall project cost estimate.

3 | ANDERSON MILL ROAD
Cedar Park, Texas
Client: City of Cedar Park // Completed: 2018 // Cost: $7M // Characteristics: Ultimate 4-lane Divided // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, Edward's Aquifer Protection Zone, Located in Williamson County
Roles & Responsibilities: As the Drainage Lead, Riley led a team which developed drainage design for segments of roadway widening and roadway realignment. Storm sewer, culvert, and ditch design were performed for the extent of the project. The project included schematic and PS&E phases. The team performed hydrologic and hydraulic calculations for existing and proposed conditions. Riley also coordinated with TCEQ to acquire WPAP approval for the project. Additionally, Riley provided cost estimates for interim and ultimate scenarios. The interim project was scoped based on these cost estimates to fit within the client's budget.

4 | STATE LOOP 480
Eagle Pass, Texas
Client: TxDOT // Completed: Ongoing // Cost: $70M // Characteristics: Rural Ultimate 4-lane Divided // Relevance: Added Capacity, Interim/Ultimate Design, PS&E, FEMA Streams, Bridge
Roles & Responsibilities: Riley served as Drainage Lead for a new location 2-lane interim controlled access roadway. Riley developed a comprehensive drainage study and performed drainage design for the 6.5-mile loop around Eagle Pass. The drainage design consisted of the hydrologic and hydraulic design for 20 cross culverts, 5 of which are Bridge Class, one FEMA crossing (Elm Creek), one irrigation canal crossing, scour analysis, coordination with the Local FEMA Flood Plain Administrator, storm sewer and approximately 20 miles of ditch design. Riley provided a drainage cost estimate to be included in the overall project Cost estimate.

5 | US HIGHWAY 290, FROM PAIGE TO GIDDINGS
Bastrop and Lee Counties, Texas
Client: TxDOT Austin // Completed: Ongoing // Cost: $40M // Characteristics: Rural 4-lane Divided, Shoulders // Relevance: PS&E, FEMA Streams, Bridge
Roles & Responsibilities: As Drainage Lead, Riley delineated drainage areas and peak flows for schematic and PS&E phases of a 10-mile widening project. Twenty-five culverts were analyzed, extended, or replaced based off the design year peak flows. One FEMA crossing was studied and improved to meet all design requirements. Ditch and storm sewer design were performed for the project limits. An overall drainage report was created to demonstrate the impacts of the project to the surrounding area. Riley also developed a cost estimate for drainage design to incorporate into the overall project cost estimate.

6 | FM 110 NORTH
Hays County, Texas
Client: Hays County // Completed: Ongoing // Cost: $32M // Characteristics: Rural Ultimate 4-lane Divided, Interim 2-lane // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, FEMA Streams
Roles & Responsibilities: As Drainage Lead, Riley developed hydrology for six miles of a new location 2-lane rural highway in Hays County. He designed 15 culverts, multiple ditches, and storm sewer throughout project limits. Riley also developed a cost estimate for drainage design.

7 | MOPAC IMPROVEMENT PROJECT
Austin, Texas
Client: Central Texas Regional Mobility Authority // Completed: 2018 // Cost: $200M
Characteristics: Control of Access High Speed Roadway // Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, PS&E, Edward's Aquifer Protection Zone, FEMA Streams, Bridge
Roles & Responsibilities: As Drainage Engineer, Riley created existing and proposed drainage areas for the 11-mile DB corridor improvement project. He modeled and analyzed existing and proposed drainage systems in Geopak Drainage, and evaluated data for overall project impact analysis. Riley designed proposed storm sewer, ditches, and culverts for the length of the project.

8 | SL 195
Roma, Texas
Client: TxDOT // Completed: Ongoing // Cost: $150M // Characteristics: 4-lane Divided
Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, FEMA Streams, Bridge
Roles & Responsibilities: Riley is currently Drainage Lead for PS&E production of SL 195 from Rio Grande City to Roma, Texas. A 17.25-mile new location, 4-lane divided roadway from FM 755 north of Rio Grande City to US 83 north of Roma. The typical section consists of 2' -12' lanes with 10' outside shoulders and 4' inside shoulders. The existing rural land topography is characterized by sections of rolling terrain and includes 27 bridges and six floodplain crossings. H & H calculations were performed for existing and proposed conditions of each crossing. Proposed culverts, storm sewer, and ditches were designed for interim conditions while incorporating the ultimate design.

9 | FM 27
Freestone County, Texas
Client: TxDOT // Completed: 2019 // Cost: $18.2M // Characteristics: 2-lane Rural
Relevance: PS&E, FEMA Streams
Roles & Responsibilities: Riley was Drainage Lead and Project Manager for a 16.27 mile safety improvement project that consisted of widening and rehabilitating an existing road in Freestone County. PS&E was developed for 51 culvert crossings that were extended and/or replaced and analyzed for existing and proposed conditions. Ditches were designed for the entire 16 mile project limits. SUE was provided throughout the corridor for culvert design to avoid utility conflicts throughout the project.

10 | FM 969
Travis County, Texas
Client: Travis County // Completed: 2018 // Cost: $11.1M // Characteristics: 5-lane Rural
Relevance: Added Capacity, Schematic, PS&E, FEMA Streams
Roles & Responsibilities: Riley served as Drainage Lead for the FM 969 Phase 1 roadway project (Decker Lane to FM 973). The project was a Travis County 2-mile conversion of an existing 4-lane (no shoulder) rural to a 5-lane (with shoulders) rural roadway and sidewalks within existing 100' ROW. Riley developed hydrologic calculations and performed a floodplain analysis for a FEMA bridge-class culvert crossing along FM 969. HEC-RAS models were created for existing and proposed conditions and a hydraulic analysis was completed. Scour potential, velocities, and sediment transport were investigated. All findings were compiled into a floodplain analysis report.

DACIO MARIN III, PE

STRUCTURES LEAD
AUSTIN OFFICE

LJA ENGINEERING

EDUCATION

1984, BS, Civil Engineering (Structural Emphasis), Texas A&M University

PROFESSIONAL LICENSE

1989, Professional Engineer: Texas #65549

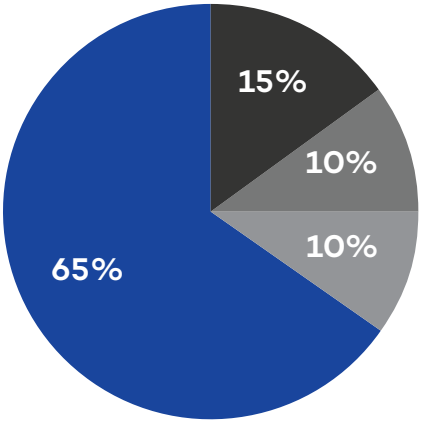
TXDOT PRECERTIFICATION

Employee Sequence No. 24077
Categories: 5.2.1, 5.3.1

EXPERIENCE

Total: 36 Years // Firm: 4 Years

AVAILABILITY MAR 2021



- LP 1604
- Borderland Expressway
- LP 390/IH 369
- Availability

SUMMARY OF QUALIFICATIONS

Dacio brings over 36 years of diverse bridge design experience. His background includes more than 18 years of bridge design and PS&E development plus 14 years of leading design teams consisting of engineers and CADD designers of various skill levels in developing PS&E plans at the Texas Department of Transportation – Bridge Division (TxDOT-BRG). In addition, for the last four years, Dacio has led the Structural Department for LJA Engineering in addition to personally leading a design team.

Dacio has developed expertise in bridge design varying in complexity from simple bridge designs to moderately complex to multi-level urban interchanges. In addition to developing PS&E, he spent a portion of this TxDOT-BRG career developing special designs for unique structural problems as part of the Special Projects team. His experience includes working on projects in Williamson, Travis and Hays Counties.

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME									
TASKS	1	2	3	4	5	6	7	8	9	10
Controlled Access Facility					•	•	•	•	•	•
Added Capacity		•	•		•	•	•	•	•	•
Interim/Ultimate	•				•	•	•	•		
Schematic	•	•				•			•	
PS&E	•	•	•	•	•	•	•	•	•	•
ROW Identification										
Traffic Studies										
Public Involvement									•	
Edward's Aquifer Protection Zone										
FEMA Streams	•		•	•						
Bridge	•	•	•	•	•	•	•	•	•	•
Located in Williamson County	•									

1 | NORTH MAYS EXTENSION
Williamson County, Texas
Client: Williamson County // Completed: 2018 // Cost: $14M // Characteristics: Urban Ultimate 4-lane, Interim 2-lane // Relevance: Interim/Ultimate Design, Schematic, PS&E, FEMA Streams, Bridge, Located in Williamson County
Roles & Responsibilities: Dacio was the Structures Lead for the 1-mile of a new location. north-south by-pass of IH 35 roadway in Round Rock. Ultimate 4-lane urban, interim 2-lane urban project included crossing Chandler Branch, FEMA designated floodplain and an Upper Brushy Creek WCID Inundation Easement behind Dam #11, storm sewer design, and proposed cross culverts, relocation of a detention facility. During schematic design, he was responsible for determining an optimized bridge length and bridge type. He provided technical guidance during PS&E development

2 | WEISS LANE
Pflugerville, Texas
Client: City of Pflugerville // Completed: Design 2016 // Cost: $18M // Characteristics: Urban/Rural 4-lane Divided // Relevance: Added Capacity, Schematic, PS&E, Bridge
Roles & Responsibilities: Dacio was the Structures Lead for over three miles of reconstruction plans along Weiss Lane. Project consists of the schematic and PS&E plans to convert the existing 2-lane rural roadway to a 2-lane rural that transitions to a 4-lane urban divided. Dacio performed a design study to determine the optimum bridge type and length and to meet the desired roadway operations.

3 | OSR AT PEDERNALES RIVER
Gillespie County, Texas
Client: TxDOT Austin District // Completed: 2013 // Cost: $2.2M // Characteristics: Replacing Low Water Crossings // Relevance: Added Capacity, PS&E, FEMA Streams, Bridge
Roles & Responsibilities: Dacio was the Structures Lead and Project Manager for PS&E development of four county road bridges. The projects included PS&E preparation and FEMA stream crossings.

4 | BLANCO RIVER BRIDGE
Wimberley, Texas
Client: TxDOT Austin District // Completed: 2015 // Cost: $250,000
Characteristics: Emergency Services Following Flooding // Relevance: PS&E, FEMA Streams, Bridge
Roles & Responsibilities: Dacio was the Structures Lead and led the development of bridge repair plans sheets for this structure in Wimberley, Texas that was damaged during the May 2015 Memorial Day floods. Dacio analyzed the damaged to the bridge to determine if it could be opened prior to completing permanent repairs in addition to preparing bridge repair details. This work was accomplished in three days.

5 | US 190 RECONSTRUCTION
Temple, Texas
Client: TxDOT Waco District // Completed: 2002 // Cost: $12.3M
Characteristics: New Bridges and Widening Existing // Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, PS&E, Bridge
Roles & Responsibilities: Dacio was the Structures Lead responsible for managing the structural design team for this project with eight bridges. Included new bridges, the widening of existing bridges and the repair of bridges that were to remain. The bridges that were most visible to the traveling public incorporated aesthetic details developed by my design team and approved by the Waco District Landscape Architect and the District Engineer.

6 | IH 610 AND US 59 INTERCHANGE
Houston, Texas
Client: TxDOT Houston District // Completed: 2017 // Cost: $258.8M
Characteristics: Multi-level Urban Interchange // Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, Schematic, PS&E, Bridge
Roles & Responsibilities: Dacio was the Structures Lead for the PS&E development of this interchange. The project included two main-lane structures, one direct connector, one bridge ramp, and one bridge widening. PS&E of the reconstruction and widening of an existing freeway included rehabilitated frontage roads, three reconstructed diamond interchanges, and a reconstructed direct connect INT at IH 10. The project was part of the combined IH 610/IH 10 Interchange reconstruction project, which included plans developed by an adjacent section design engineer responsible for the IH 10 portion of the mainlanes and INT. Dacio also coordinated design activities with two adjacent section design engineers. Unique features of the project included the incorporation of multiple aesthetic schemes from the Green Ribbon Program and Uptown Houston District, and the accommodation of the future METRO light rail line through innovative bridge foundations and retaining walls design.

7 | IH 10, NECHES RIVER BRIDGE
Beaumont, Texas
Client: TxDOT Beaumont District // Completed: 2011 // Cost: $22M
Characteristics: Replacement of Existing Structure // Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, PS&E, Bridge
Roles & Responsibilities: As the Structures Lead, Dacio provided oversight and technical guidance for this project. The project included disassembling the existing Neches River Bridge in a manner that it maintained its structural stability throughout the construction phase of the new bridge. Disassembling the existing structure required developing custom bridge removal details. The new structure is a 6,121' long bridge with a variable width (58'8" to 70'). The main spans over the navigable waterway are a three span post-tensioned segmental bridge.

8 | STATE LOOP 480
Maverick County, Eagle Pass, Texas
Client: TxDOT Laredo District // Year Completed: 2020 // Construction Cost: $70M
Characteristics: 4-lane Divided Facility // Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, Schematic, PS&E, Bridge
Roles & Responsibilities: Dacio was the Structures Lead for bridge layouts and the detailed design of three creek crossings, three overpass structures, one cattle crossing, one drainage siphon and one rail-yard overpass of the Union Pacific Railroad tracks. Developed an optimized bridge design so more than 60% of the total bridge length was structurally identical and, therefore, design was sped up. The rail-yard crossing required extensive coordination with the railroad company to get approval to cross their ROW. The coordination including developing a construction sequence over the tracks to show the railroad that track closures were minimized to the extent possible. In order to speed approval by the railroad, a 3-D animation was developed and included in the documentation submitted. The animation showed the construction sequence so that it was clear to all stakeholders what will happen during construction. This new location facility is to be built in phases to match the proposed traffic projections. The first submittal includes 2-lanes of the future ultimate 4-lane divided facility.

9 | IH 10 CONNECT PROJECT
El Paso, Texas
Client: TxDOT El Paso District // Year Completed: Design 2018 // Construction Cost: $97.7M
Characteristics: Multi-level Urban Interchange // Relevance: Controlled Access Facility, Added Capacity, Schematic, PS&E, Public Involvement, Bridge
Roles & Responsibilities: Dacio was the Structures Lead for this 16-bridge project. The project reconfigured the interchange where IH 10, IH 110 and US 54 funnel traffic to and from the Bridge of the America's (BOTA) International crossing. The team included three firms doing structural engineering with LJA, under Dacio's leadership, serving as the structural lead. The project included new bridges, bridge widenings and bridge reconstructions. The new structures were designed to blend in with the existing aesthetic along IH 10 and to allow the community near the Lincoln area to add murals to the new columns just like had been done with the existing structures. Because of the complexity of the existing interchange and the requirement that traffic continue to move through the interchange, Dacio worked closely with the Traffic Control Engineers and the Geometric Design Engineers to develop a design to meet that challenge.

10 | US 69 CONNECTORS AND TURNAROUNDS
Lufkin, Texas
Client: TxDOT Lufkin District // Year Completed: 2014 // Construction Cost: $24M
Characteristics: Highway Bridges, U-Turn Bridges, Railroad Overpass, Bridge Widening
Relevance: Controlled Access Facility, Added Capacity, PS&E, Bridge
Roles & Responsibilities: As the Structures Lead, Dacio oversaw the development of the plan sheets for this eight bridge project consisting of two direct connectors, three bridge overpasses, two bridge widenings and the removal of an existing bridge that carried rail traffic. The substructure was optimized for the various unique locations including single column Inverted-T bent caps, straddle bents with standard reinforcing, straddle bents with post-tensioned bent caps and multi-column bents with standard reinforcing.

VASILIS SAMARAS, PE

STRUCTURES SUPPORT
AUSTIN OFFICE

LJA ENGINEERING

EDUCATION

2013, PhD, Civil Engineering
The University of Texas at Austin

2009, MS, Civil Engineering
The University of Texas at Austin

2007, BS, Civil Engineering
The University of Thessaly

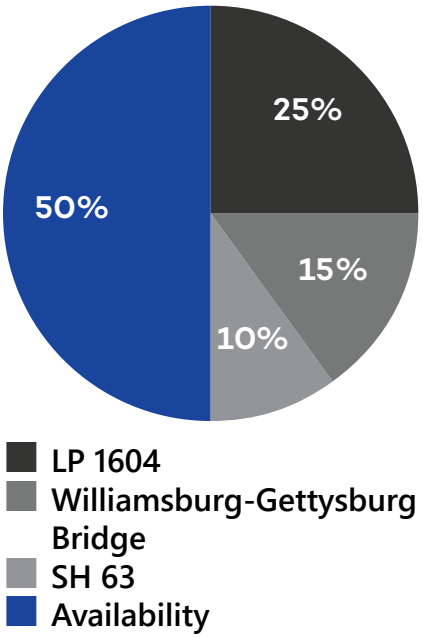
PROFESSIONAL LICENSE

2014, Professional Engineer:
Texas #119161

EXPERIENCE

Total: 9 Years // Firm: 3 Years

AVAILABILITY MAR 2021



SUMMARY OF QUALIFICATIONS

Vasilis has over nine years of diverse experience and technical knowledge in designing and rehabilitating bridges varying in complexity from simple bridge creek crossings to multi-level interchanges. Vasilis has worked on a variety of bridge projects and PS&E developments for TxDOT, HCTRA, various Counties (e.g., Williamson, Travis, Hays), various Cities (Pflugerville, Cedar Park), and municipalities.

Currently, Vasilis leads the Austin structural engineering team, which consists of engineers and CADD designers of various skill levels. At UT Austin, Vasilis was working on TxDOT funded research projects on bridges and his research findings were adopted by TxDOT Bridge Design Manual. As part of the LJA's Structures Group, Vasilis has played a key role in the successful delivery of various special emergency repair projects, such as Lynchburg Ferry Hurricane Harvey Emergency Repair that won the Silver Medal in 2020 ACEC Texas Engineering Excellence Awards.

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME							
TASKS	1	2	3	4	5	6	7	8
Controlled Access Facility			•	•		•		•
Added Capacity		•	•	•		•		•
Interim/Ultimate		•					•	
Schematic	•		•	•	•	•		•
PS&E	•	•	•		•	•	•	•
ROW Identification	•	•	•	•	•	•	•	
Traffic Studies			•					
Public Involvement			•		•			
Edward's Aquifer Protection Zone								
FEMA Streams	•	•			•		•	
Bridge	•	•	•	•	•	•	•	•
Located in Williamson County	•							

1 | NEW HOPE DRIVE EAST
Cedar Park, Texas
Client: City of Cedar Park // Completed: Design TBC Fall 2020 // Cost: $26M // Characteristics: Full Street Construction, Urban 4-lane Divided Principal Arterial, Drainage and Utility Improvements, Pavement Widening, Roadway Realignment, New Bridge Design // Relevance: Schematic, PS&E, ROW Identification, FEMA Stream, Bridge, Located in Williamson County
Roles & Responsibilities: Vasilis is the Structures Lead for the 2.2-mile of new street construction along New Hope Drive and the Engineer of Record of the creek crossing bridge. The project consists of the schematic and PS&E preparation to construct an urban 4-lane divided principal arterial from Ronald Reagan Blvd to Sam Bass Road over a FEMA stream. During the schematic design, Vasilis was responsible for optimizing the bridge geometry while focusing on construction cost savings and solutions to make construction easier. During the PS&E development, he designed the 300' (3-Span Unit) Prestressed Concrete I-Girder (Tx54) bridge superstructure and substructure according to AASHTO and TxDOT Specifications. Vasilis provided technical guidance on other design tasks such as illumination pole supports on the bridge, stone riprap geometry, and bridge foundation design.

2 | HODDE LANE
Pflugerville, Texas
Client: Travis County and Pflugerville ISD // Completed: Design 2018 // Cost: $5.9M
Characteristics: Rural Interim 2-lane Undivided Principal Arterial, Removing Existing Bridge, New Bridge Design // Relevance: Added Capacity, Interim/Ultimate Design, ROW Identification, PS&E, FEMA Stream, Bridge
Roles & Responsibilities: Vasilis was the Structures Lead for the 1-mile of street improvements along Hodde Lane and the Engineer of Record of the creek crossing bridge. The project consisted of the PS&E development to realign the existing 2-lane rural roadway to an interim 2-lane rural, while taking into consideration the future ultimate design of 4-lane divided roadway. During the preliminary design stage of the project, Vasilis was responsible to determine the bridge length, bridge type, and the optimum location of interior bents so that to simplify the construction of the bridge. He provided the location of the bridge soil borings to the geotechnical engineer and reviewed the bridge foundation recommendations included in the geotechnical report. Last, he designed 360' (3-Span Unit) Prestressed Concrete I-Girder (Tx54) bridge superstructure and substructure according to AASHTO and TxDOT Specifications, as well as the project requirements to meet the desired roadway operations.

3 | IH 10 CONNECT PROJECT
El Paso, Texas
Client: TxDOT El Paso District // Completed: Design 2018 // Cost: $97.7M
Characteristics: Interchange Improvements, Urban Multi-lane Divided Highway
Relevance: Controlled Access Facility, Added Capacity, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, PS&E, Bridge
Roles & Responsibilities: Vasilis was the Structures Lead and Engineer of Record for the complete design of two out of 16 bridges. The first bridge design was a direct connector that tied to two other bridges designed by other groups. The second design was a bridge widening of an existing bridge. The project objective was to reconfigure the interchange where IH 10, IH 110 and US 54 funnel traffic to and from the Bridge of the America's (BOTA) International crossing. His bridge designs optimized the time that adjacent traffic lanes need to be closed, decreased construction complexity while maintaining the safety

of the traveling public during construction. He also ensured that his bridge designs followed the existing aesthetic details along IH 10. Based on a request from the local community, he included in his bridge design protective systems to preserve the existing murals near the Lincoln area. Due to the complexity of the existing interchange, Vasilis had to work closely with the Roadway Engineers, Survey Team, and the Geometric Design Engineers to avoid conflicts with existing utilities and properly tie to existing structures while designing the bridges according to the TxDOT standards and specifications.

4 | SH 123 UNDERPASS AT FM 110 BRIDGE CROSSING
San Marcos, Texas

Client: Hays County // Completed: Design 2019 // Cost: $5.8M // Characteristics: Construction of Overpass, Rural 4-lane Divided Highway, New Bridge Design // Relevance: Controlled Access Facility, Added Capacity, Schematic, PS&E, ROW Identification, Bridge

Roles & Responsibilities: Vasilis was the Structures Lead for the 1-mile of roadway construction along FM 110 and the Engineer of Record of the bridge that carries FM 110 over SH 123. The project consisted of the PS&E development of a 4-lane rural highway and the design of the FM 110 bridge. Vasilis selected the best bridge type and length to maintain the required 18.5' vertical clearance on SH 123, which is designated as a TxDOT Freight Corridor. His recommendations on the bridge design during the schematic phase led to change the initial twin bridges to a single bridge. This change had a great impact to decrease the overall construction cost of the project. Last, he designed the 360' (3-Span Unit) Prestressed Concrete I-Girder (Tx54) bridge superstructure and substructure according to the TxDOT standards.

5 | ROGERS ROAD BRIDGE
Montgomery County, Texas

Client: Montgomery County // Completed: Design 2020 // Cost: $2.5M
Characteristics: Realignment of Existing Roadway, Rural 2-lane Undivided Local Collector, New Construction, New Bridge Design // Relevance: Schematic, PS&E, ROW Identification, FEMA Stream, Bridge

Roles & Responsibilities: Vasilis was the Structures Lead and Engineer of Record of the creek crossing bridge that was included in the 0.7-mile of roadway improvements along Roger Road. The project consisted of the PS&E development to realign the existing 2-lane rural roadway. Vasilis was responsible for determining the bridge length, bridge type, and the optimum location of interior bents to provide the required freeboard. Vasilis completed the standard bridge design of 120' (3-Spans) Prestressed Concrete Slab Beam (Ty 4SB12) Unit according to the project requirements and TxDOT standards. He also designed the bridge foundation that consisted of drilled shafts.

6 | SH 249 AT SH 99 INTERCHANGE
Harris County, Texas

Client: HCTRA // Completed: Design 2019 // Cost: $126M // Characteristics: Construction of Four Direct Connectors, Urban Multi-lane Divided Highway, New Construction, Design New Bridges Relevance: Controlled Access Facility, Added Capacity, Schematic, PS&E, ROW Identification, Bridge

Roles & Responsibilities: Vasilis was the Structures Lead and Engineer of Record of one of the four Curved Post-Tensioned Spliced Box Girder (U96) bridges for the two direct connectors. Based on the proven record of previous successful projects, HCTRA selected LJA to take the lead in coordinating the bridge design. The project consisted of THREE different firms that needed to work closely to produce robust designs and consistent plan details. This will be the first time that Curved Post-Tensioned Spliced Box Girder bridges will

be built in Texas, and that proves that the bridge design capabilities of LJA are always on the cutting edge of bridge engineering. Vasilis designed and led the PS&E preparation of a 428.00' Curved Post-Tensioned Spliced Box Girder (U96) bridge. Since several of the design items were new for TxDOT design practice, he was part of a team that had extensive discussions with TxDOT to get their approval. He modified the precast concrete panel (PCP) standard so the Contractor can utilize PCPs on the curved bridge. This decision was instrumental to accelerate the construction time and decrease the overall cost of the project.

7 | GREGG LANE AT WILBARGER CREEK

Travis County, Texas

Client: Travis County // Completed: Design 2020 // Cost: $3.0M
Characteristics: Realignment of Existing Roadway, Rural 2-lane Undivided Minor Arterial, Roadway Improvements, New Bridge Construction // Relevance: Interim/Ultimate Design, PS&E, ROW Identification, FEMA Stream, Bridge
Roles & Responsibilities: Vasilis was the Structures Lead and Engineer of Record of the creek crossing bridge that is included in the 0.7-mile of roadway improvements along Gregg Lane. The project consists of the PS&E development to realign the existing 2-lane rural roadway to an interim 2-lane rural while taking into consideration the future ultimate design. Vasilis designed the 375' (3-Span Unit) Prestressed Concrete I-Girder (Tx54) bridge superstructure and based on the TxDOT standards. He also designed the bridge foundation that consisted of drilled shafts.

8 | IH 35 AT YS 59 INTERCHANGE

Laredo, Texas

Client: TxDOT Laredo District // Completed: Design TBC Spring 2020 // Cost: $32M
Characteristics: Construction of Two Direct Connectors, Urban Multi-lane Divided Highway, Construction of Roadway and Retaining Walls, Design New Bridges // Relevance: Controlled Access Facility, Added Capacity, Schematic, PS&E, Bridge
Roles & Responsibilities: Vasilis is the Structures Lead and Engineer of Record for the complete design of one of the two direct connectors. Vasilis is responsible for designing and prepare the PS&E package of a 2,780' direct connector. This direct connector consists of two steel plate girder units (778' and 663'), and four prestressed concrete I-girder units. During the preliminary design stage (schematic), he recommended the use of precast elements to accelerate the bridge construction and decrease the overall construction cost through bridge element repeatability.

STEPHEN VAN KAMPEN-LEWIS

ENVIRONMENTAL LEAD
AUSTIN OFFICE

SWCA

EDUCATION

MBA, University of Hawaii at Manoa

BA, Marine Science, University of Hawaii at Hilo

PERMITS

Section 10(A)(1)(a) permit (TE800611-1)

WTI Wetland Delineator, 2012

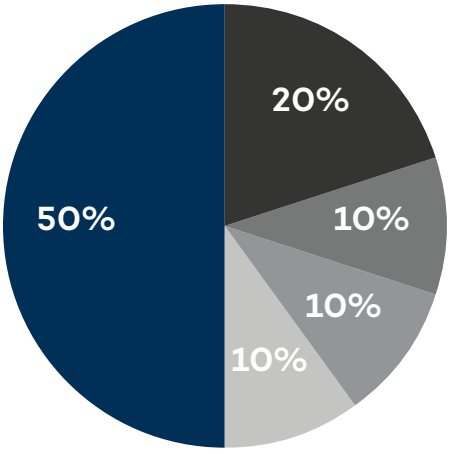
TXDOT PRECERTIFICATION

2.3.1 (Wetland delineation), 2.4.2 (Clean Water Act Sec. 404 Permits)

EXPERIENCE

Total: 12 Years / Firm: 7 Years

AVAILABILITY MAR 2021



- Wilco Road Bond (2019)
- Wilco Road Bond (2013)
- Wilco Conservation Foundation
- Various Assignments
- Availability

SUMMARY OF QUALIFICATIONS

Stephen has over 12 years of experience in natural resources services, business, and project management. His expertise includes Endangered Species Act and Clean Water Act compliance; and due-diligence documentation for road and highway projects, including environmental permitting and local, state, and federal state agency coordination. Through his management role, he is responsible for contract development, project scheduling, agency coordination, client/engineer/construction team coordination, and quality assurance/quality control (QA/QC) reviews. Stephen takes a highly organized approach to managing projects to meet time-critical deadlines and to keep projects within budget. Stephen has evaluated and is currently evaluating the environmental impact of numerous linear infrastructure projects in Williamson County, such as new-build roadway facilities and existing roadway expansion. Stephen has been an environmental lead on 15 on-going or recently completed roadway projects within Williamson County and has worked on these types of projects for six years. He is also SWCA's project manager for the Williamson County Conservation Foundation for five years and has worked with this same organization for seven years as the County maintains compliance with the Endangered Species Act through a Regional Habitat Conservation Plan.

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME								
TASKS	1	2	3	4	5	6	7	8	9
New Location Roadway	•	•						•	•
Schematic and Planning									
Railroad Coordination									
ROW Identification									
Quarry or Unique Landowner Coordination	•	•							
Edwards Aquifer Protection Zone	•	•	•	•	•	•	•	•	•
Karst Features	•	•	•			•	•	•	•
FEMA Streams	•			•	•	•		•	
Bridge Design				•		•		•	
Located in Williamson County	•	•	•	•	•	•	•	•	•

1 | SOUTHWEST BYPASS - SEGMENT I, II
Georgetown, Texas
Client: HDR/Williamson County // Completed: Segment I (2018), Segment II (2020) // Cost: $19.8M // Characteristics: Multi-lane Roadway in New Location // Relevance: New Location Roadway, Quarry or Unique Landowner Coordination, Edwards Aquifer Protection Zone, Karst Features, FEMA Streams, Located in Williamson County
Roles & Responsibilities: As Environmental Lead and Project Manager, Stephen successfully guided Williamson County through the environmental due-diligence process of a new location, multi-lane roadway connecting Interstate Highway 35 to Leander Road. He managed teams of natural and cultural resources personnel as they performed relevant tasks in the field. Several large voids were detected during the geological assessment that led to the discovery of multiple caves, including a cave now known to contain the federally endangered Bone Cave harvestman (Texella reyesi). Stephen and the SWCA team guided the county and client through the permitting process with the Texas Commission on Environmental Quality (TCEQ) and the Texas Historical Commission (THC), while maintaining compliance with the Endangered Species Act (ESA) through the Williamson County Regional Habitat Plan (RHCP).

2 | COUNTY ROAD 176
Round Rock, Texas
Client: HNTB/Williamson County // Completed: July 2020 // Cost: $2.5M // Characteristics: Realignment of Intersection // Relevance: New Location Roadway, Quarry or Unique Landowner Coordination, Edwards Aquifer Protection Zone, Karst Features, Located in Williamson County
Roles & Responsibilities: As Environmental Lead, Stephen successfully guided Williamson County through the permitting and environmental due-diligence process as the county realigned CR 176 to connect to Leander Road with a new location segment attached to existing roadway that also required widening. The southern terminus of the project crossed atop Snowmelt Cave, which is a known Bone Cave harvestman locality. Moreover, the entrance to the cave is located within a U.S. Fish and Wildlife Service (USFWS) approved preserve dedicated to the endangered arachnid. Stephen coordinated with USFWS to confirm the best course of action to widen the road at this location while maintaining compliance with the ESA. The new intersection with Leander Road also required a Texas Department of Transportation (TxDOT) categorical exclusion, which Stephen prepared and coordinated through completion. The SWCA team also guided the county through the permitting process with the TCEQ, the THC, and submitted an application with the Williamson County RHCP for ESA compliance.

3 | STATE HIGHWAY 29 AT DB WOOD ROAD INTERSECTION IMPROVEMENTS
Williamson County, Texas
Client: HNTB/Williamson County // Completed: Ongoing // Cost: $5.4M
Characteristics: Roadway Improvement // Relevance: Edwards Aquifer Protection Zone, Karst Features, Located in Williamson County
Roles & Responsibilities: As Environmental Lead, Stephen led SWCA's natural resources project team through a complicated ESA permitting process that required a biological assessment (BA) and formal consultation with USFWS due to funding from the TxDOT. Due to the project's location within Karst Zone 1 and relative proximity to caves documented as inhabited by endangered karst invertebrates, the BA considered that potential impacts may adversely affect the Bone Cave harvestman and Coffin Cave mold beetle (Batrisodes texanus). The BA also considered that potential impacts may affect but are not likely to adversely affect the Georgetown salamander (Eurycea naufragia) and the Jollyville Plateau salamander

(E. tonkawae). This formal consultation was completed with an incidental take permit for relevant species from the USFWS on November 5, 2019. The SWCA team also guided the county through the permitting process with the TCEQ, the THC, and submitted an application with the Williamson County RHCP for ESA compliance.

4 | GREAT OAKS DRIVE BRIDGE AT BRUSHY CREEK
Williamson County, Texas
Client: HNTB/Williamson County // Completed: Mid 2022 (estimated) // Cost: $11.1M
Characteristics: Intersection Improvements // Relevance: Edwards Aquifer Protection Zone, FEMA Streams, Bridge Design, Located in Williamson County
Roles & Responsibilities: As Environmental Lead, Stephen successfully guided Williamson County through the environmental due diligence process that required a geological assessment and karst survey due to the project's location atop the Edwards Aquifer Contributing Zone and Karst Zone 1. Stephen also submitted an application with the Williamson County RHCP for ESA compliance.

5 | HAIRY MAN ROAD/BRUSHY CREEK ROAD SAFETY IMPROVEMENTS
Williamson County, Texas
Client: HTNB/Williamson County // Completed: Late 2021 (estimated) // Cost: $4.25M //
Characteristics: Safety Improvements // Relevance: Edwards Aquifer Protection Zone, FEMA Streams, Located in Williamson County
Roles & Responsibilities: As Environmental Lead, Stephen successfully guided Williamson County through the environmental due diligence process that required a geological assessment and karst survey due to the project's location atop the Edwards Aquifer Recharge and Contributing Zone, in addition to the project's intersection within Karst Zone 1. Stephen also submitted an application with the Williamson County RHCP for ESA compliance. This project became contentious with stakeholders and Stephen quickly provided several short notice, on-call deliverables related to local natural resource issues.

6 | CORRIDOR H/SAM BASS ROAD
Williamson County Texas
Client: HNTB/Williamson County // Completed: 2023 (estimated) // Cost: NA // Characteristics: Expansion and Intersection Improvements // Relevance: Edwards Aquifer Protection Zone, Karst Features, FEMA Streams, Bridge Design, Located in Williamson County
Roles & Responsibilities: As Environmental Lead, Stephen successfully guided Williamson County through the environmental due diligence process that required a geological assessment and karst survey due to the project's location atop the Edwards Aquifer Recharge and Contributing Zone, in addition to the project's intersection within Karst Zone 1. This project intersects designated critical habitat for the Jollyville Plateau salamander (E. tonkawae) and is currently working with Williamson County to determine the best course of action that will maintain compliance with the ESA while facilitating the desired project installation. Stephen will also assist HNTB and Williamson County with their RHCP application incidental take coverage related to endangered karst invertebrates.

7 | O'CONNOR DRIVE SIGNALS

Williamson County, Texas

Client: HNTB/Williamson County // Completed: 2020 // Cost: NA // Characteristics: Additional Signals // Relevance: Edwards Aquifer Protection Zone, Karst Features, Located in Williamson County

Roles & Responsibilities: As Environmental Lead, Stephen was informed that this project needed to be executed quickly due to time constraints. As project manager, he performed field work and finalized due diligence reporting within only a few weeks of notification to proceed. Location atop the Edwards Aquifer Recharge Zone and proximity to documented caves required a geological assessment and karst survey report, in addition to Williamson County RHCP submittal to maintain compliance with the ESA. While not a particularly difficult project, Stephen demonstrated his ability and desire to move this project to the "front of the line" for Williamson County in order to facilitate a rapidly evolving project.

8 | WYOMING SPRINGS SEGMENT 1

Round Rock, Texas

Client: Halff Associates, Inc./City of Round Rock // Completed: Ongoing // Cost: NA // Characteristics: Corridor Study/New Location Roadway // Relevance: New Location Roadway, Edwards Aquifer Protection Zone, Karst Features, FEMA Streams, Bridge Design, Located in Williamson County

Roles & Responsibilities: As Environmental Lead, Stephen was tasked with coordinating and preforming a GA, karst survey and associated report preparation due to the project's location atop the Edwards Aquifer Recharge Zone and Karst Zone 1. He is also tasked with Williamson County RHCP submittal to maintain compliance with the ESA. Additionally, the project crosses designated critical habitat for the Jollyville Plateau salamander (E. tonkawae) and requires Formal Section 7 consultation with the USFWS via the USACE Fort Worth District.

9 | SOUTHWEST BYPASS EXTENSION, WOLF RANCH PARKWAY TO STATE HIGHWAY 29

Georgetown, Texas

Client: LJA/City of Georgetown // Completed: Ongoing // Cost: $20 M // Characteristics: New Location Roadway // Relevance: New Location Roadway, Edwards Aquifer Protection Zone, Karst Features, Located in Williamson County

Roles & Responsibilities: As Environmental Lead, Stephen has worked through several iterations of this project over the years. He has performed and coordinated several field surveys for the environmental due diligence process of this new location, multi-lane roadway. He managed natural resources teams as they performed relevant tasks atop the Edwards Aquifer Recharge Zone, primarily geological assessment, endangered species surveys, and karst feature excavations. Several named caves are known from this tract that are documented to contain the federally endangered Bone Cave harvestman (Texella reyesi). Stephen will continue assisting the County through the permitting process with the TCEQ, the THC, and will work to maintain compliance with the ESA through the Williamson County RHCP. Additionally, he will be involved with a TxDOT Tier I Site Assessment, Biological Evaluation Form, and Hazardous Material Initial Site Assessment in support of a categorical exclusion at the intersection with SH 29.

LUKE ROME, PG

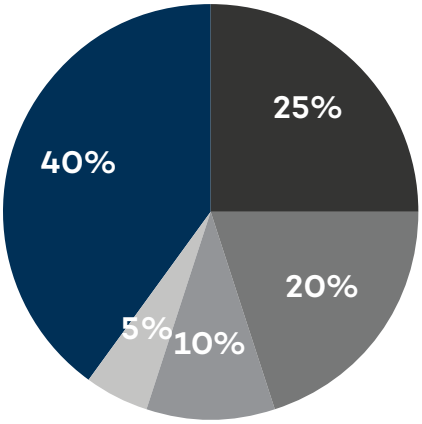
ENVIRONMENTAL SUPPORT
AUSTIN OFFICE

EDUCATION
BS, Geology, Auburn University

PROFESSIONAL LICENSE
Professional Geoscientist, #12028

EXPERIENCE
Total: 7 Years / Firm: 1 Year

AVAILABILITY MAR 2021



- Various Assignments
- Wilco Road Bond (2013 & 2019)
- RM 2243
- Southwest Bypass
- Availability

SUMMARY OF QUALIFICATIONS

Luke is a Texas licensed Professional Geoscientist and project manager at SWCA with seven years of experience preparing environmental due-diligence documentation, compliance monitoring, and permitting for linear transportation and land development projects. His technical background is in karst geology of the Edwards Plateau where he specializes in performing geologic assessments (GA), karst surveys, threatened and endangered (T&E) species habitat assessments, and preparing protocols and methodologies for karst void mitigation. Luke takes pride in his client focused approached to project management as he seeks to fully understand project challenges in order to better facility project strategies and execution. He also takes pride in maintaining excellent relationships with regulators in order maintain a timely review process and project completion.

Beyond karst geology, Luke's professional experience includes aquatic resource delineations and Clean Water Act (CWA) Section 404 permitting, storm water pollution prevention plan (SWP3) preparation and water quality monitoring, Phase I and II environmental site assessments (ESA), environmental assessments (EAs), and City of Austin environmental resource inventories (ERI).

COMPARABLE EXPERIENCE MATRIX

TASKS	PROJECTS IN RESUME 1	2	3	4	5	6	7	8	9
New Location Roadway	•		•		•	•	•	•	
Schematic and Planning									
Railroad Coordination									
ROW Identification									
Quarry or Unique Landowner Coordination				•		•			
Edwards Aquifer Protection Zone		•	•	•	•	•	•	•	•
Karst Features		•		•	•	•		•	•
FEMA Streams	•	•	•			•	•		
Bridge Design	•		•			•	•		
Located in Williamson County	•	•	•	•	•	•		•	•

1 | CORRIDOR E5 FROM INTERSTATE 35 TO FARM TO MARKET 972
Williamson County, Texas

Client: American Structurepoint, Inc. // Completed: Ongoing // Cost: $4.6M // Characteristics: Multi-lane Roadway in New Location // Relevance: New Location Roadway, FEMA Streams, Bridge Design, Located in Williamson County

Roles & Responsibilities: Luke provided Environmental Support as Project Manager and Geologist for the Williamson County solicited qualifications of engineering firms for the 2013 Road Bond program. As identified in the county's long-range transportation plan, the American Structurepoint team provided engineering services to assist Williamson County staff in developing a proposed two-lane roadway extending County Road 258 from U.S. Highway 183 to Sunset Ridge. SWCA facilitated environmental permitting and planning, hazardous materials assessment, cultural resources services, and CWA Section 404 compliance. Coordinated and oversaw the efforts of staff scientists, reviewed deliverables, and provided critical review of the hazardous materials assessment.

2 | ON-CALL ENVIRONMENTAL SERVICES FOR WILLIAMSON COUNTY; WILLIAMSON COUNTY CONSERVATION FOUNDATION (WCCF)
Williamson County, Texas

Client: WCCF/Williamson County // Completed: Ongoing // Cost: NA // Characteristics: On-call services related Williamson County's RHCP, including biota surveys, strategic planning, annual report creation and submittal to U.S. Fish and Wildlife Service, subject matter experts, etc. Relevance: Edwards Aquifer Protection Zone, Karst Features, FEMA Streams, Located in Williamson County

Roles & Responsibilities: Luke provided Environmental Support as Project Geologist. Luke assisted with the annual report, cave biota survey, and conducted karst faunal surveys within WCCF preserves and caves. SWCA conducted environmental on-call tasks as needed by the WCCF, such as meeting with U.S. Fish and Wildlife Services, creating new recovery unit maps for federally protected species, performing background research on local caves, conducting biota surveys on potential Williamson County parks acquisitions, assessing endangered bird habitat and conducting presence/absence surveys, and evaluating and responding to concerned citizen inquiries.

3 | OLD SETTLERS ROAD EXTENSION
Williamson County, Texas

Client: Aguirre & Fields // Completed: Ongoing // Cost: $12.8M // Characteristics: New location roadway with 4-Lane divided section with a bridge segment // Relevance: New Location Roadway, Edwards Aquifer Protection Zone, FEMA Streams, Bridge Design, Located in Williamson County

Roles & Responsibilities: Luke provided Environmental Support as Project Manager and Geologist. Luke coordinated fieldwork for aquatic resources, prepared T&E reports, and provided QA/QC of reports. The City of Georgetown selected the Aguirre & Fields team to design and environmentally clear the Old Settlers Road extension. For this project, SWCA supported the Aguirre & Fields team with environmental planning and natural and cultural resources services.

4 | RANCH TO MARKET 2243 (LEANDER ROAD) IMPROVEMENTS (NORWOOD DRIVE TO SOUTHWEST BYPASS)

Williamson County, Texas

Client: Aguirre & Fields // Completed: Ongoing // Cost: $8.9M // Characteristics: Roadway upgrade from 2-Lane to 4-Lane divided section with signal and pedestrian improvements // Relevance: Quarry or Unique Landowner Coordination, Edwards Aquifer Protection Zone, Karst Features, Located in Williamson County

Roles & Responsibilities: Luke provided Environmental Support as Project Manager and Geologist. Luke was responsible for team coordination, budget, and QA/QC of reports. SWCA performed a GA, karst survey and report preparation, and karst feature excavation. Due to Capital Area Metropolitan Planning Organization funding, SWCA completed the full suite of National Environmental Policy Act (NEPA) technical documentation in support of a Texas Department of Transportation (TxDOT) Austin District D-list categorical exclusions (CE), which included federally and state-listed species analysis and reporting, traffic noise analysis and reporting, community impact analysis and reporting, hazardous materials initial site assessment, and public involvement.

5 | SOUTHWEST BYPASS EXTENSION, WOLF RANCH PARKWAY TO STATE HIGHWAY 29

Williamson County, Texas

Client: LJA/City of Georgetown // Completed: Ongoing // Cost: $20M // Characteristics: New Location Roadway // Relevance: New Location Roadway, Edwards Aquifer Protection Zone, Karst Features, Located in Williamson County

Roles & Responsibilities: Luke provided Environmental Support as Project Manager and Geologist. Luke supervised and conducted field studies, reviewed and edited reports, and assessed options for permitting and compliance. SWCA is currently performing a suite of environmental services to facilitate the environmental permitting for construction of the proposed roadway. Services include GA, karst survey and report preparation, karst feature excavation, T&E habitat assessment and report, Williamson County Regional Habitat Conservation Plan (RHCP) application to address potential impacts to the golden-cheeked warbler (Dendroica chrysoparia), cultural resources investigations per the Texas Antiquates Code, a Tier I site assessment and biological evaluation form, hazardous material initial site assessment in support of a TxDOT Austin District CE at the intersection of the SW Bypass with State Highway 29.

6 | WILLIAMSON COUNTY ROAD BOND (2019)

Williamson County Texas

Client: HNTB/Williamson County // Completed: Ongoing // Cost: NA // Characteristics: All portions of the 2019 Williamson County Road Bond, including new location roadways, roadway improvements, and ancillary construction // Relevance: New Location Roadway, Quarry or Unique Landowner Coordination, Edwards Aquifer Protection Zone, Karst Features, FEMA Streams, Bridge Design, Located in Williamson County

Roles & Responsibilities: Luke provided Environmental Support as Project Manager and Geologist, Luke performed project management tasks, prepared scope and cost for work authorizations, coordinated field efforts with staff and landowners, conducted QA/QC of final deliverable, and provided critical review of available data. As part of the 2019 Williamson County Road Bond SWCA is assisting Williamson county with environmental services such as environmental constraints mapping, windshield surveys and T&E species investigations, RHCP application, biological or geological/karst investigations and assessments related to

construction or preservation projects, and advice to Williamson County staff and Commissioners Court on environmental issues. SWCA is currently assisting Williamson County with the following 2019 Road bond projects: Corridor IH 1, Corridor IH 2, and Ronald Reagan Boulevard at Silver Spur and Sun City Boulevard.

7 | EASTON PARK — FUTURE SECTIONS
Round Rock, Texas

Client: Brookfield Residential Properties, Inc. // Completed: Ongoing // Cost: NA // Characteristics: Multiple new roadways within residential development, William Cannon extension, Slaughter Lane extension // Relevance: New Location Roadway, Edwards Aquifer Protection Zone, FEMA Streams, Bridge Design

Roles & Responsibilities: Luke provided Environmental Support as Project Manager. Luke identified potential environmental constraints and scoped desktop and field investigations, oversees field mobilizations and reviews documentation, and coordinated with client and agency representatives. SWCA has assisted Brookfield Residential Properties in obtaining environmental clearance for multiple residential development phases and roadway extensions within the Easton Park master-planned community. Environmental services included City of Austin ERIs, functional assessments of floodplain health, T&E species assessments, aquatic resource delineations and CWA section 404 permitting. SWCA is currently assisting with the environmental permitting, including the preparation of TxDOT environmental documentation for the Slaughter Lane extension. Additionally, SCWA is actively assisting with the master-planning of Easton Park south.

8 | RONALD REAGAN BOULEVARD AT SILVER SPUR/SUN CITY BOULEVARD
Williamson County, Texas

Client: HNTB // Completed: 2021 // Cost: NA // Characteristics: Intersection improvements, additional turn lanes // Relevance: Edwards Aquifer Protection Zone, Karst Features, Located in Williamson County

Roles & Responsibilities: Luke provided Environmental Support as Project Manager and Geologist. Luke conducted field investigation, primary author of report, coordinated with client and project personnel. Under the 2019 Williamson County Road Bond, SWCA performed a GA at the intersection of Ronald Reagan Boulevard at Silver Spur and Sun City Boulevard. In addition, to the GA, SWCA documented compliance with the City of Georgetown water quality ordinance.

9 | O'CONNOR DRIVE SIGNALS
Williamson County, Texas

Client: HNTB/Williamson County // Completed: 2020 // Cost: NA
Characteristics: Additional Signals // Relevance: Edwards Aquifer Protection Zone, Karst Features, Located in Williamson County

Roles & Responsibilities: Luke provided Environmental Support as Project Geologist. Luke wrote and sealed the GA report. Under the 2013 Williamson County Road Bond Program, SWCA supported Williamson County on environmental needs. SWCA provided a T&E assessment, GA, and karst survey compliant with the RHCP.

BRIAN YOUNG, PE

COST ESTIMATING LEAD
ROUND ROCK AND AUSTIN OFFICES

LJA ENGINEERING

EDUCATION

2000, BS, Civil Engineering
University of Texas at Austin

PROFESSIONAL LICENSE

2006, Professional Engineer:
Texas #98239

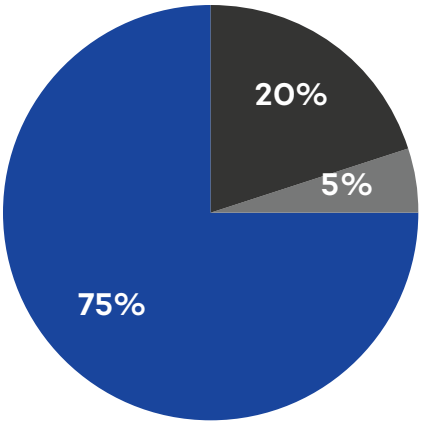
TXDOT PRECERTIFICATION

Employee Sequence No. 17543
Categories: 1.4.1, 2.5.1, 3.2.1, 4.2.1, 8.1.1, 10.1.1, 10.2.1, 18.2.1, 18.3.1, 18.4.1, 18.5.1, 18.6.1

EXPERIENCE

Total: 20 Years // Firm: 8 Years

AVAILABILITY MAR 2021



- Various Assignments
- IH 35: Rundberg to US 290
- Availability

SUMMARY OF QUALIFICATIONS

Brian has over 20 years of experience in civil engineering design. His duties include project management, roadway, geometric, drainage, and utility design, preparation of civil PS&E plans, schematic creation, utility coordination, ROW acquisition, traffic control, estimates, public meetings, writing and negotiating contracts, project budgeting/ forecasting, scheduling, training of EIT, PE's and technicians, staffing, employee management, marketing, business development, construction phase services, and establishing quality assurance and control procedures for all engineering and PS&E services. Brian has worked with Williamson County, multiple TxDOT districts, counties, toll authorities, private companies, and local governments such as Cedar Park throughout Texas.

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME							
TASKS	1	2	3	4	5	6	7	8
Controlled Access Facility								
Added Capacity		•	•		•		•	
Interim/Ultimate	•	•	•				•	
Schematic	•	•	•	•	•	•	•	•
PS&E	•	•	•	•	•	•	•	•
ROW Identification	•	•	•	•		•		
Traffic Studies	•	•	•	•	•			
Public Involvement	•	•	•	•				
Edward's Aquifer Protection Zone	•	•						
FEMA Streams	•	•	•	•	•		•	
Bridge	•	•	•	•				
Located in Williamson County	•	•		•				

1 | RONALD REAGAN BOULEVARD NORTH PHASE 4
Williamson County, Texas

Client: Williamson County // Completed: 2013 // Cost: $20M // Characteristics: Rural Ultimate 4-lane Divided // Relevance: Ronald Reagan Corridor, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Brian was the Cost Estimating Lead and a Project Engineer for the preliminary schematic design of a 6-mile, new location 4-lane divided arterial from SH 195 to IH 35. The design included multiple intersections with existing county roads, drainage crossings, public involvement with property owners, utility coordination, environmental constraint mapping (karst, caves, endangered species), and a determination of the recommended corridor. Coordination with the county, TxDOT, the public, and other resource agencies was crucial for the timely completion to this project.

2 | NEW HOPE DRIVE EXTENSION
Cedar Park, Texas

Client: City of Cedar Park // Completed: 2019 // Cost: $8M // Characteristics: Urban 4-lane Divided, Impact/Detention Analysis // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Brian was the Cost Estimating Lead and PS&E Roadway lead for the new location construction of 1.1-mile, 4-lane divided urban roadway in Cedar Park, Texas. He produced PS&E including geometric designs for horizontal and vertical alignments, shared use path, turn lanes, and coordinated conflicts with all other disciplines including drainage, utilities, and illumination design.

3 | WEISS LANE
Pflugerville, Texas

Client: City of Pflugerville // Completed: 2016 // Cost: $18M // Characteristics: Urban/Rural 4-lane Divided, Impact/Detention Analysis // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, FEMA Streams, Bridge

Roles & Responsibilities: Brian was the Cost Estimating Lead and Roadway Lead responsible for the schematic and PS&E creation for over three miles of reconstruction plans along Weiss Lane. Project consists of the schematic and PS&E plans to convert the existing 2-lane rural roadway to a 2-lane rural that transitions to a 4-lane urban divided. PS&E Designs included roadway, TCP, removals, signing and pavement markings, drainage, SW3P, structures, illumination, cross sections, environmental clearance, geotechnical design, ROW acquisition, CPS, utility coordination, waterline, and sanitary sewer.

4 | PARK STREET WIDENING AND RECONSTRUCTION
Cedar Park, Texas
Client: City of Cedar Park // Completed: 2012 // Cost: $18M // Characteristics: Urban 4-lane Relevance: Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, FEMA Streams, Bridge, Located in Williamson County
Roles & Responsibilities: Brian was the Cost Estimating Lead and PS&E Roadway lead for Park Street, which was a 2-lane arterial running east-west through the center of Cedar Park. Brian was responsible for developing plans for street widening and reconstruction, construction of sidewalks, drainage improvements, hydrology, storm sewer design, ditch design, a mill and overlay section, reconstruction of a drainage dip, public involvement, mailbox relocation, phased traffic control, SW3P, Edwards Aquifer Contributing Zone Plan, coordination with utilities and replacement of a 12" waterline. All this was accomplished within the existing ROW which ranged from 50' to 70'.

5 | PFLUGER FARM LANE PHASE A AND B
Travis County, Texas
Client: City of Pflugerville // Completed: 2014 // Cost: Ph A $2.3M, Ph B $2.9M
Characteristics: Urban 3-lane Roadway // Relevance: Added Capacity, Schematic, PS&E, Traffic Studies, FEMA Streams
Roles & Responsibilities: Brian was the Cost Estimating Lead and Roadway Lead for design and sheet creation for one mile of new location urban roadway in Pflugerville, Texas. Designs included roadway, drainage, SW3P, structural, traffic control, waterline, re-use line, wastewater line, FEMA floodplain analysis, bridge, illumination, and construction phase services. This was an accelerated project with phased design and construction that included going from NTP to 100% PS&E plans in three months. During design the discovery of a possible historical rubbish pile was discovered that required engineering solutions to allow the project to continue unimpeded and on schedule.

6 | BUNTON CREEK ROAD
Kyle, Texas
Client: City of Kyle // Completed: 2017 // Cost: $4.6M // Characteristics: Urban 3-lane Relevance: Schematic, PS&E, ROW Identification
Roles & Responsibilities: Brian was the Cost Estimating Lead and Project Manager responsible for the schematic and PS&E creation for over one mile of reconstruction plans along Bunton Creek Road. Bunton Creek was an existing 2-lane facility with large amounts of heavy truck and vehicle traffic due to its proximity to two schools, multiple industrial businesses, and multiple suburban neighborhoods in northern Kyle. Schematic and PS&E plans were prepared to widen and fully reconstruct the existing facility to a 3-lane facility. Designs included roadway, TCP, signing and pavement markings, drainage, SW3P, environmental clearance, geotechnical design, ROW acquisition, CPS, utility coordination, 12" waterline, 8" waterline, and sanitary sewer.

7 | FM 110
Hays County, Texas
Client: Hays County // Completed: Ongoing // Cost: $32M // Characteristics: Rural Ultimate 4-lane Divided, Interim 2-lane // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, FEMA Streams

Roles & Responsibilities: Brian was the Cost Estimating Lead and PS&E Roadway lead for the creation for six miles of an interim rural 2-lane of a ultimate 4-lane divided arterial in Hays County. This new location facility will serve to provide the citizens of San Marcos and Hays County with a loop that will promote growth and corridor mobility within the region. Designs include interim schematic, ultimate schematic, and PS&E for roadway and geometric, signing and pavement markings, quarry crossing, retaining wall, intersection, traffic control, cross sections, drainage, structural, waterlines, cross sections, and grading designs.

8 | CITY OF KYLE ENGINEERING ROTATION LIST
Kyle, Texas
Client: City of Kyle // Completed: Ongoing // Cost: $1.5M // Characteristics: Roadway Engineering Relevance: Schematic, PS&E

Roles & Responsibilities: Brian was the Cost Estimating Lead and Project Manager responsible for the management and delivery of various project assignments from the City of Kyle. Completed LJA assignments include Bullock Tract Geotechnical and Environmental Field Investigations, conceptual designs for IH 35 City of Kyle Gateway Signage, Bunton Creek WW Interceptor Phase 3, Plum Creek Interceptor Phase 1, Elliot Branch WW Phase 2, Bunton Creek Interceptor Survey Verification, and Bunton Creek Interceptor Meets and Bounds. Active project assignments include the Schlemmer/Porter St WW rehabilitation project, Plum Creek Tank Rehabilitation, and Opal Lane Water extension.

ALAN MCCARTHY

3D MODELING LEAD
ROUND ROCK AND AUSTIN OFFICES

LJA ENGINEERING

SPECIAL TRAINING

Bentley Learn Conference 2013

Bentley Learn Conference 2016

Bentley Learn Server: Corridor Modeling Training

FIELD ACCOMPLISHMENTS

Corridor Modeling Instructor and Mentor within LJA

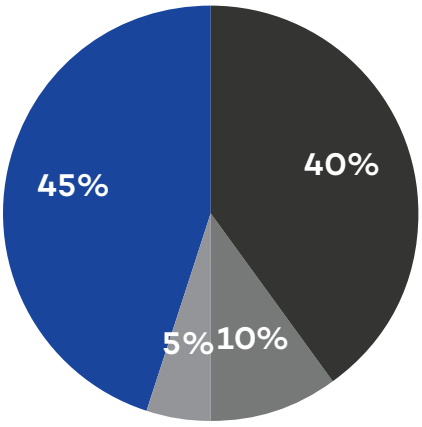
TXDOT PRECERTIFICATION

Employee Sequence No. 28171
Categories: 4.6.1

EXPERIENCE

Total: 14 Years // Firm: 7 Years

AVAILABILITY MAR 2021



SUMMARY OF QUALIFICATIONS

Alan has over 14 years of experience in civil engineering design and is currently serving a Project Manager for LJA. His experience includes creating information rich 3D design models on various urban freeway, interchanges, and roadway projects across the state of Texas for TxDOT and multiple municipalities. Our Lead utilizes Microstation Open Roads technology to create and maintain highly detailed corridor models, cross sections, terrain models, and 3D-contours. Alan's duties include roadway and geometric design; cross sections using GEOPAK criteria and corridor modeler; 3D modeling; detailed grading; preparation of civil PS&E plans; schematic creation; detailed cost estimates; and training of EIT/PEs and technicians. Alan is proficient in the use of Microstation, GEOPAK, Blender, ArcGIS, Axiom, Autoturn, Adobe, and Microsoft Office. His tasks in the experience table below are tailored to identify the more specific experience Alan has.

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME						
TASKS	1	2	3	4	5	6	7
Controlled Access Facility							
Added Capacity		•	•	•	•		
Interim/Ultimate	•	•	•	•			
Schematic	•	•	•	•	•	•	•
PS&E	•	•	•	•	•	•	•
ROW Identification	•		•	•		•	
Traffic Studies	•		•	•			
Public Involvement	•		•	•	•		•
Edward's Aquifer Protection Zone	•		•				
FEMA Streams	•	•	•	•			
Bridge	•		•	•			
Located in Williamson County	•		•				

1 | RONALD REAGAN BOULEVARD IH 35 INTERCHANGE
Williamson County, Texas

Client: Williamson County // Completed: 2013 // Cost: $20M // Characteristics: Rural Ultimate 4-lane Divided // Relevance: Ronald Reagan Corridor, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Alan was 3D Modeling Lead and CAD Manager for the schematic design of new grade separated intersection consisting of mainlanes, frontage roads, ramps, and U-turn bridges that connect to existing Ronald Reagan Boulevard. Alan was responsible for designs that included 3D Corridor model, proposed cross sections, and proposed tin files.

Alan was also responsible for earthwork quantities, cost analysis to save Costs of retaining walls versus embankment. Created roll plot schematic to Williamson County and TxDOT standards. All work was in accordance with the Mobility 35 program. Alan responded to TxDOT comments and working with the design engineer provided solutions.

2 | FM 110 NORTH, LOOP AROUND SAN MARCOS
Hays County, Texas

Client: Hays County // Completed: Ongoing // Cost: $32M // Characteristics: Rural Ultimate 4-lane Divided, Interim 2-lane // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, FEMA Streams

Roles & Responsibilities: Alan is 3D Modeling Lead and CAD Designer on the schematic and PS&E creation for six miles of rural 4-lane divided arterial in Hays County. This new location facility will serve to provide the citizens of San Marcos and Hays County with a loop that will promote growth and corridor mobility within the region. The project is 6.5 miles of a new location ultimate 4-lane facility with an interchange at SH 20 and a grade separation over the UPRR Railroad.

Alan's designs include interim schematic, ultimate schematic, and PS&E for roadway and geometric, signing and pavement markings, quarry crossing, retaining wall, intersection, traffic control, cross sections, drainage, structural, and grading designs is currently Project Manager of six miles of a new location, 2-lane rural highway in Hays County. Ken's oversight includes schematic refinements, interim and ultimate schematics, PS&E, and development of construction bid documents.

3 | NORTH MAYS EXTENSION
Williamson County, Texas

Client: Williamson County // Completed: 2018 // Cost: $14M // Characteristics: Urban Ultimate 4-lane, Interim 2-lane // Relevance: Added Capacity, Interim/Ultimate Design, Schematic, PS&E, ROW Identification, Traffic Studies, Public Involvement, Edward's Aquifer Protection Zone, FEMA Streams, Bridge, Located in Williamson County

Roles & Responsibilities: Alan was 3D Modeling Lead, Corridor Modeler, and CAD Manager for 1-mile of a new location. north-south by-pass of IH 35 roadway in Round Rock. Project ultimate 4-lane urban, interim 2-lane urban project included crossing Chandler Branch, a FEMA designated floodplain and an Upper Brushy Creek WCID Inundation Easement behind Dam #11, storm sewer design, and proposed cross culverts, relocation of a detention facility. Alan's designs include 3D model, interim schematic, ultimate schematic, and PS&E for roadway and geometric, intersection, cross sections, drainage, structural, and grading designs.

4 | US 281
Bexar County, Texas
Client: TxDOT // Completed: 2021 (est) // Cost: $188M // Characteristics: Urban Freeway with Frontage Roads, Main Lanes, Impact/Detention Analysis, Grade Separations
Relevance: Controlled Access Facility, Added Capacity, Interim/Ultimate Design, PS&E, Edward's Aquifer Protection Zone, FEMA Streams, Bridge
Roles & Responsibilities: Alan was 3D Modeling Lead and CAD Manager for five miles of converting 4-lane divided super street into urban freeway with frontage roads and braided ramps. Alan was responsible for a existing and proposed 3D Corridor models that included all structures, utilities, storm sewer, and retaining walls. Alan also produced existing and proposed cross sections, and proposed tin files.

5 | GATEWAY BOULEVARD
Forney Texas
Client: TxDOT // Completed: 2013 // Cost: $20M // Characteristics: Elevated Intersection Over UPRR and MAD4 // Relevance: Added Capacity, Schematic, PS&E, Public Involvement
Roles & Responsibilities: Alan was 3D Modeling Lead for the Forney Parkway Bridge, TxDOT (Forney Parkway and US 80, 2011) – New urban grade separation of US 80 and UPRR railroad consisting of mainlanes, frontage roads, ramps, and U-turn design. Alan was responsible for designs that included 3D Corridor model, proposed cross sections, retaining walls, intersection grading, and proposed tin files.

6 | FM 1431, PARMER LANE TO SAM BASS ROAD
Williamson County, Texas
Client: City of Cedar Park // Completed: 2016 // Cost: $23M
Characteristics: Urban Ultimate 6-lane Divided // Relevance: Schematic, PS&E, Public Involvement
Roles & Responsibilities: Alan was 3D Modeling Lead and CAD Manager for 2.2 miles reconstruction of and existing 5-lane undivided roadway into an urban 6-lane divided facility. He was responsible for designs that included 3D Corridor modeling, proposed cross sections, retaining walls, intersection grading, and proposed tin files.

7 | BEE CREEK ROAD
Travis County, Texas
Client: Travis County // Completed: 2015 // Cost: $9M // Characteristics: Urban 4-lane Divided
Relevance: Schematic, PS&E, Public Involvement
Roles & Responsibilities: Alan was 3D Modeling Lead and CAD Manager for 1-mile widening of an existing 2-lane to a urban 4-lane divided roadway with raised median. Improvements consist of upgrading Bee Creek Road from an existing 2-lane undivided roadway to a 4-lane divided roadway with raised median. Alan was responsible for designs that included 3D Corridor model, proposed cross sections, retaining walls, intersection grading, and proposed tin files.

ALI MOZDBAR, PE, PTOE

TRAFFIC LEAD
ROUND ROCK OFFICE

LJA ENGINEERING

EDUCATION

1988, MSCE, Civil Engineering,
University of Texas at Arlington

PROFESSIONAL LICENSE

1989, Professional Engineer,
Texas, #65430

1998, Professional Traffic
Operations Engineer, #14311

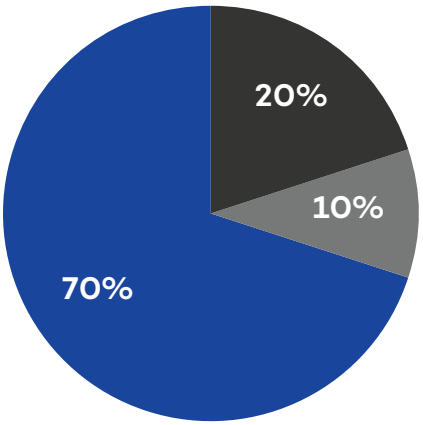
TXDOT PRECERTIFICATION

Employee Sequence No. 263
Categories: 1.1.1, 4.2.1, 7.1.1, 7.3.1, 7.4.1, 7.5.1, 8.1.1, 8.3.1, 8.6.1

EXPERIENCE

Total: 34 Years / Firm: 1 Year

AVAILABILITY MAR 2021



- Various Assignments
- IH 35 CapEx ITS/ Signals Design
- Availability

SUMMARY OF QUALIFICATIONS

Ali has over 34 years of program and project managements and extensive experience in field of Traffic Engineering; and working on a wide variety of programs and projects including traffic engineering projects spanning from traffic signal timing development and implementation, traffic signal designs, hardware, and equipment upgrades and modifications, traffic signal operational and safety improvements, intersection geometric improvements, ATMS plan development and implementation, ITS design and implementation, communication network design and implementation, traffic signal warrant analyses, technical specification development, PS&E development, and bidding and construction phase services.

COMPARABLE EXPERIENCE MATRIX

TASKS	PROJECTS IN RESUME 1	2	3	4	5	6	7	8	9
Controlled Access Facility									
Added Capacity									
Interim/Ultimate									
Schematic									
PS&E									
ROW Identification									
Traffic Studies	•	•	•	•	•	•	•	•	•
Public Involvement									
Edward's Aquifer Protection Zone									
FEMA Streams									
Bridge									
Located in Williamson County	•								

1 | CITY TRAFFIC SIGNAL RETIMING
Cedar Park, Texas
Client: City of Cedar Park // Year Completed: 2013 // Construction Cost: $200,000
Characteristics: City Traffic Analysis // Relevance: Traffic Studies, Located in Williamson County
Roles & Responsibilities: Ali was the City's Traffic Lead. As the City Traffic Engineer, and Project Manager, Ali retimed all 50 traffic signals in the City of Cedar Park. The project included evaluation and fine tuning of traffic signal timing at every individual intersection and development and implementation of synchronized timing plans along all major arterials in the city.

2 | RM 2222, NORTHLAND, PARKCREST, AND HIGHLAND CREST DRIVES
Austin, Texas
Client: City of Austin // Year Completed: 2019 // Construction Cost: $100,000
Characteristics: City Traffic Analysis // Relevance: Traffic Studies
Roles & Responsibilities: Ali was a Traffic Lead for the City as the City Traffic Signal Engineer and Program Manager for the City of Austin. Ali was responsible for monitoring and managing arterial traffic flow in an efficient and effective way. Ali identified this intersection was the bottleneck causing long westbound queues especially during PM rush hours. After analyzing details, Ali came up with the conceptual design and worked with TxDOT and TTI on the schematic design that would enhance westbound traffic flow along Northland drive. Construction plans for both intersection and signal were prepared and then constructed. The project was a success and showed tremendous improvements by eliminating the long queue.

3 | METRIC BOULEVARD, WEST HOWARD LANE, AND THERMAL DRIVE
Austin, Texas
Client: City of Austin // Year Completed: 2005 // Construction Cost: $200,000
Characteristics: City Traffic Analysis // Relevance: Traffic Studies
Roles & Responsibilities: Ali was a Traffic Lead for the City as the City Traffic Signal Engineer and Project Manager for the City of Austin when the need for traffic signal at this intersection was evaluated and approved. However, the project was more than just a traffic signal. Ali knew in most cases intersections with wide medians have negative impact on both intersection capacity and safety. he designed and reconfigured the eastbound and westbound left turn lanes on Howard lane to have a "positive offset" relationship vs. "negative offset". He knew that with "positive offset", the left turn indications would be protected/permitted type, allowing drivers to take advantage of available gaps and discourage drivers from running the red light as that most likely would have been the case with "protected only" indications. The traffic signal and intersection were designed and constructed per plan and the result was a safe, effective and efficient signalized intersections where the unnecessary delay for the left turn movements was eliminated.

4 | SOUTH 820 AND MARINE CREEK PARKWAY
Fort Worth, Texas
Client: City of Fort Worth // Year Completed: 2018 // Construction Cost: $500,000
Characteristics: City Traffic Analysis // Relevance: Traffic Studies
Roles & Responsibilities: Ali was a Traffic Lead for the City as the City Traffic Signal Engineer and Intersection Improvement Program Manager. Ali analyzed the operation and came up with a new innovative design referred to as "Flipped Left Turn Diamond Interchange".The intersection was

operating at failed LOS especially during AM and PM rush hours. The new design would improve operation by reducing intersection delay by about 40% during rush hours.

5 | HULEN STREET AND GRANBURY ROAD
Fort Worth, Texas
Client: City of Fort Worth // Year Completed: 2018 // Construction Cost: $600,000
Characteristics: City Traffic Analysis // Relevance: Traffic Studies
Roles & Responsibilities: Ali was a Traffic Lead for the City as the Traffic Program Manager. Ali came up with the new geometric layout that analysis showed improvements would result in increased intersection capacity while improving pedestrian crossing in terms of safety and delay. Beside operating un-efficiently and at failed level of service with long queues, the intersection was also not safe for pedestrians.

6 | SAM'S AND HOME DEPOT SHOPPING CENTER ON COOPER STREET
Arlington, Texas
Client: City of Arlington // Year Completed: 1992 // Construction Cost: $200,000
Characteristics: City Traffic Analysis // Relevance: Traffic Studies
Roles & Responsibilities: Ali was a Traffic Lead for the City as the City Traffic Signal Engineer. Ali was responsible for reviewing and approving traffic signal plans, and signalized intersections geometry. Ali received a request for a traditional four-legged intersection and a full traffic signal between two existing and closely spaced signalized intersections of I20/Cooper street and Bardin Road/Cooper Street. Ali knew that allowing a four-legged signalized intersection between these two would have un-bearable negative impact on traffic flow along Cooper street. He worked with shopping centers and came up with a unique intersection and signal design that not only satisfied the needs of shopping centers without impacting quality and capacity of traffic flow on Cooper street. Two separate half signals serving two separate half intersections were designed and constructed successfully without any negative impact to traffic on Cooper street. The shopping center developers were also satisfied with the outcome

7 | UNIVERSITY BOULEVARD LANE ASSIGNMENT RECONFIGURATION
Fort Worth, Texas
Client: City of Fort Worth // Year Completed: 2019 // Construction Cost: $75,000
Characteristics: City Traffic Analysis // Relevance: Traffic Studies
Roles & Responsibilities: Ali was a Traffic Lead for the City as the City Traffic Signal Engineer and Program Manager. Ali Analyzed the capacity and safety along University between W. 7th Street and White Settlement Drive. The cross section was three lanes in each direction with no left turn lane at intersections where safety of the driving public was compromised. Ali's recommendation was to change the cross section to two thru lanes in each direction plus a left turn lane at each individual intersection. Ali then worked with the consultants to prepare the proposed stripping plan. The plan was completed and the project was scheduled for implementation.

8 | IMPLEMENTATION OF LEFT TURN FLASHING YELLOW ARROW INDICATIONS
Fort Worth, Texas

Client: City of Fort Worth // Year Completed: 2018 // Construction Cost: $300,000
Characteristics: City Traffic Analysis // Relevance: Traffic Studies
Roles & Responsibilities: Ali was a Traffic Lead for the City as the City Traffic Signal Engineer. One of Ali's major responsibilities was to improve quality of traffic flow and traffic light synchronization in the city. Ali knew that in most cases optimized synchronization depends on the ability to operate the signals in lead-lag fashion to maximize the green bandwidth, which most of the signals did not have that capability. he also knew that ability to lead-lag left turn movements would enhance intersection capacity at individual intersections thus helping to enhance traffic flow and light synchronizations. He took the lead as a project manager to study and identify left turn signals at most intersections citywide that needed to be changed. He managed the project by converting many left turn signals from "protected only" mode, "permitted only" mode, or conventional "protected/ permitted" mode to Flashing Yellow Arrow (FYA) indications. The project was a success and resulted in reduced intersection delay, increased intersection capacity and improved synchronization along major arterials, and it was well received by the public.

9 | INTELLIGENT TRANSPORTATION SYSTEM (ITS)
Fort Worth, Texas

Client: City of Fort Worth // Year Completed: 2018 // Construction Cost: $1.5M
Characteristics: City Traffic Analysis // Relevance: Traffic Studies
Roles & Responsibilities: Ali was a Traffic Lead for the City of Fort Worth as the City Traffic Signal Engineer. One of the major programs he initiated was implementation of the City's ITS project. Having worked in traffic for many years, Ali understood through utilization of ITS technology is needed for an effective and efficient monitoring and management of traffic flow, it is also crucial to have an effective and efficient workforce and organization; and he knew implementation of ITS technology would be the key. Ali immediately started designing and implementing the ITS system that included use of 4G Cellular technology, PTZ cameras for real-time monitoring and management, and system detectors for automated and responsive mode of traffic operations.

CHAD WOOD, PE, PTOE

TRAFFIC SUPPORT
ROUND ROCK OFFICE

LJA ENGINEERING

EDUCATION

1998, BS, Civil Engineering,
University of Texas at Austin

PROFESSIONAL LICENSE

2003, Professional Engineer,
Texas, #92822

2011, Professional Traffic
Operations Engineer, #3082

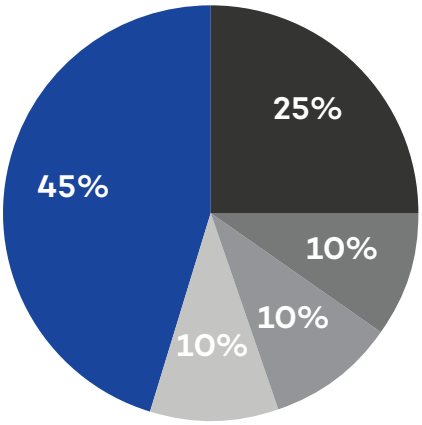
TXDOT PRECERTIFICATION

Employee Sequence No. 14562
Categories: 1.2.1, 1.3.1, 1.5.1, 3.2.1, 4.2.1, 4.4.1, 4.5.1, 7.1.1, 7.3.1, 8.1.1, 8.3.1, 8.6.1, 9.1.1, 11.1.1

EXPERIENCE

Total: 21 Years / Firm: 1 Year

AVAILABILITY MAR 2021



- IH 35 CapEx ITS/ Signals Design
- East Pflugerville Parkway
- Red Bud Lane
- Various Assignments
- Availability

SUMMARY OF QUALIFICATIONS

Chad has 21 years of experience in highway design, traffic engineering, construction management, and team leadership. He has served as Project Manager or lead designer developing TxDOT highway schematics and PS&E packages, improving municipal roadways and intersections, installing traffic signals and optimizing signal timings, and ensuring pedestrian safety on projects in rural, urban, and suburban settings across Texas.

COMPARABLE EXPERIENCE MATRIX

TASKS	PROJECTS IN RESUME 1	2	3	4	5	6	7	8
New Location Roadway	•					•		
Schematic and Planning		•	•	•	•	•	•	•
Railroad Coordination			•					•
ROW Identification			•	•				•
Quarry or Unique Landowner Coordination		•				•	•	
Edwards Aquifer Protection Zone					•			
Karst Features								
FEMA Streams								
Bridge Design								•
Located in Williamson County	•	•	•	•		•	•	•

1 | TRAFFIC SIGNAL DESIGN – NEW HOPE DRIVE EXTENSION
Cedar Park, Texas

Client: City of Cedar Park // Completed: 2019 // Cost: $8M // Characteristics: Urban 4-Lane Divided Relevance: New Location Roadway, Schematic and Planning, ROW Identification, Edwards Aquifer Protection Zone, FEMA Streams, Bridge Design, Located in Williamson County

Roles & Responsibilities: As Traffic Support, Chad led the signal design group responsible for developing full PS&E for the New Hope Drive at Ronald Reagan Boulevard intersection. Chad's team created proposed signal layout and elevation sheets, wiring diagrams and termination charts, and detailed quantities and construction cost estimates to be included within the New Hope Drive extension construction plans. Coordination regarding placement of proposed curb ramps and intersection pavement markings such as stop bars and cross-walks was required as was special considerations for a future widening project for the eastern leg of the intersection – conduit runs were specified at a minimum depth of 36".

2 | TRAFFIC SIGNAL IMPROVEMENTS FOR VISTA RIDGE BOULEVARD AT PARK STREET
Cedar Park, Texas

Client: City of Cedar Park // Completed: 2007 // Cost: NA // Characteristics: Traffic Signal Installation // Relevance: Schematic and Planning, Quarry or Unique Landowner Coordination, Located in Williamson County

Roles & Responsibilities: Chad provided Traffic Support as Project Manager for this City of Cedar Park traffic signal installation project. Chad oversaw development of all layout and elevation design details, wiring and electrical service specification details, and construction costs estimates. Bidding and construction phase services included advertisement and bid opening assistance as well recommendation for award and attendance at the pre-construction, pre-drilling, and final turn-on meetings with the contractor. Although the recent extension of Park St from the west created the need for this traffic signal, because it serves the main access driveway for Vista Ridge HS student and faculty parking the design and construction activities were accelerated to have it fully operable before the new school year began.

3 | ROUND ROCK QUIET ZONE PLANNING AND DESIGN
Round Rock, Texas

Client: City of Round Rock // Completed: 2009 // Cost: NA // Characteristics: Quiet Zone Planning Relevance: Schematic and Planning, Railroad Coordination, ROW Identification, Located in Williamson County

Roles & Responsibilities: Chad provided Traffic Support as the City of Round Rock Project Manager responsible getting the City's Quiet Zones out of concept, through planning, and into final design. Coordination with TxDOT and Union Pacific personnel was extensive, and Chad led these efforts from initial planning through final construction document approvals. Chad led the Diagnostic Review team through field visits and conceptual discussions at all nine public and private at-grade crossings within the city limits. Several crossings required only updated signing, however three crossings required extensive improvements including new quad-gates, train signals, and/or traffic signals. One crossing was treated with extended raised medians.

4 | HUTTO QUIET ZONE FEASIBILITY STUDY
Hutto, Texas
Client: City of Hutto // Completed: 2016 // Cost: NA // Characteristics: Quiet Zone Improvements
Relevance: Schematic and Planning, ROW Identification, Located in Williamson County
Roles & Responsibilities: Chad provided Traffic Support for the City of Hutto as Project Manager responsible leading City staff and several elected officials through a feasibility analysis of Quiet Zone improvement concepts and potential Quiet Zone calculator scores for the three grade crossings within city limits. Chad led all coordination efforts with TxDOT and Union Pacific Railroad personnel, including a preliminary Diagnostic Review team meeting and a Wayside Horn (WSH) demonstration where his team and City staff used several decibel meters to measure sound pressure effects at various locations around and away from the WSH. Chad's team documented all study options, UPRR and TxDOT recommendations, and public involvement input and submitted a final report recommending quad-gate installations at one crossing and WSH installation at the other.

5 | RM 2244 (BEE CAVES ROAD) SAFETY AND OPERATIONAL IMPROVEMENTS
Bee Caves, Texas
Client: TxDOT // Completed: 2009 // Cost: $2.5M // Characteristics: Congestion Improvements
Relevance: Schematic and Planning, Edwards Aquifer Protection Zone
Roles & Responsibilities: Chad provided Traffic Support as the Project Manager for critical congestion improvement project Chad provided TxDOT with traffic engineering and operational analysis using Synchro traffic modeling prior to beginning the preliminary engineering and schematic designs. Chad developed the plans and PS&E documents for additional lanes and signalized driveways, along with specific lane-use adjustments and a special Continuous-Green T signal design, that enabled the local transportation network to handle an additional 4,000 daily trips while reducing delays from the pre-existing conditions.

6 | ROUND ROCK AVENUE ALIGNMENT AND ROUNDABOUT IMPROVEMENTS
Round Rock, Texas
Client: City of Round Rock // Completed: 2014 // Cost: NA // Characteristics: Traffic Analysis and Traffic Volume Projections // Relevance: New Location Roadway, Schematic and Planning, Quarry or Unique Landowner Coordination, Location in Williamson County
Roles & Responsibilities: Chad provided Traffic Support as the City's Traffic Engineer. Chad provided preliminary traffic analysis and traffic volume projections to support the third phase of the Downtown Redevelopment program. This project removed Round Rock Ave, previously designated as RM 620, from the State's system east of Blair St with a new roundabout intersection. This eliminated the fifth leg at the Mays and Main intersection and allowed improved signal operations and pedestrian safety there and throughout the corridor. Once preliminary design and PS&E development began, Chad provided detailed reviews of the consultant's plan submittal for geometric design, constructability and traffic control, as well as signing and marking details.

7 | SUNDANCE PARKWAY REHABILITATION AND ROUNDABOUT IMPROVEMENT

Round Rock, Texas

Client: City of Round Rock // Completed: 2014 // Cost: NA // Characteristics: Roundabout Intersection Upgrade // Relevance: Schematic and Planning, Quarry or Unique Landowner Coordination, Location in Williamson County

Roles & Responsibilities: Chad provided Traffic Support as the City's Traffic Engineer, Chad worked with other Transportation Department CIP staff to program, plan, design, and reconstruct this critical city-owned retail access roadway. This project's main purpose was to rehabilitate and reconstruct the existing pavement structure. The existing circular intersection was upgraded with roundabout design criteria including improved entry flares and splitter-islands, fast-path controls using a raised truck apron, and full pedestrian accessibility.

8 | BRUSHY CREEK ROAD WIDENING

Cedar Park, Texas

Client: City of Cedar Park // Completed: 2010 // Cost: NA // Characteristics: Urban 4-Lane Widening Relevance: Schematic and Planning, Railroad Coordination, ROW Identification, Bridge Design, Located in Williamson County

Roles & Responsibilities: Chad provided Traffic Support and was responsible for schematic design, preliminary engineering, environmental clearance, and PS&E development of Cedar Park's 2+mile widening of this important arterial roadway. CAMPO funding with TxDOT oversight meant that Chad's team had to complete public involvement activities, planning and construction document development, and bidding phase services within the State's 18-month letting schedule. The project featured a 4-lane urban cross section with subsurface drainage systems employing Stormceptor® water-quality controls, two bridge-class culverts, continuous illumination, six traffic signals with emergency and rail pre-emption, and special construction phasing/TCP for the adjacent elementary school's activities.

GABRIEL ORNELAS, PE, PMP

GEOTECHNICAL LEAD
AUSTIN OFFICE

RABA KISTNER

EDUCATION
1995, BS, Civil Engineering,
University of Texas at San Antonio

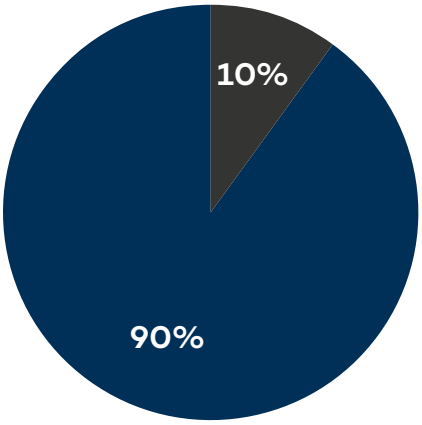
PROFESSIONAL LICENSE
2001, Professional Engineer: Texas #87851

2010, Project Management Professional No. 1324181

TXDOT PRECERTIFICATION
Employee Sequence No. 6386
Categories: 12.1.1, 12.1.2, 14.1.1, 14.2.1, 14.3.1, 14.4.1

EXPERIENCE
Total: 26 Years / Firm: 26 Years

AVAILABILITY MAR 2021



SUMMARY OF QUALIFICATIONS
As Senior Vice President and Manager of Raba Kistner's Austin office, Gabriel possesses the advanced technical, leadership, communication, and business skills to interact with clients and lead a consulting team to success. His principal practice areas relative to consulting and design experience include construction materials testing and engineering, forensic engineering, and geotechnical engineering.

Gabriel has experience involving management and execution of construction quality control testing and inspection services on major construction projects in Texas. He has technical and managerial expertise in concrete and soils testing and inspection, drilled pier inspection, and asphalt testing. Gabriel's construction materials testing and engineering experience includes several public, private, and industrial projects. Other related experience includes construction monitoring, litigation documentation, non-destructive/destructive testing and observation for change-of-use evaluations, trouble shooting of asphalt and concrete construction, ground vibration monitoring, swimming pool distress evaluations, and roof condition and damage causation studies.

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME								
TASKS	1	2	3	4	5	6	7	8	9
New Location Roadway		•	•		•		•	•	
Schematic and Planning	•	•		•	•	•	•	•	•
Railroad Coordination								•	
ROW Identification		•		•		•	•	•	
Quarry or Unique Landowner Coordination							•		
Edwards Aquifer Protection Zone				•	•	•	•	•	•
Karst Features				•	•	•	•	•	•
FEMA Streams			•	•	•	•	•	•	•
Bridge Design	•	•	•	•	•	•	•	•	•
Located in Williamson County	•	•	•	•	•	•	•	•	

1 | CR 119, LIMMER LOOP TO CHANDLER ROAD
Williamson County, Texas
Client: Bury Partners // Completed: 2014 // Cost: NA // Characteristics: Roadway Extension // Relevance: Schematic and Planning, Bridge Design, Located in Williamson County
Roles & Responsibilities: Gabriel was the Geotechnical Lead in charge of conducting the geotechnical engineering study for the proposed extension of CR110/Ed Schmidt Boulevard from Limmer Loop to Chandler Road located in Hutto, Texas. The project consisted of two lanes of a future 4-lane roadway with shoulders and a traffic signal.

2 | SAM BASS ROAD AND CHISHOLM TRAIL
Round Rock, Texas
Client: City of Round Rock // Completed: 2016 // Cost: NA // Characteristics: 4-Lane Divided Roadway // Relevance: New Location Roadway, Schematic and Planning, ROW Identification, Bridge Design, Located in Williamson County
Roles & Responsibilities: Gabriel was the Geotechnical Lead in charge of construction materials testing and observation services for Sam Bass Road/Chisholm Trail. The project involved construction of a portion of Sam Bass Road to a 4-lane divided roadway from Meadows Drive to the IH 35 SB frontage road, and a small portion of Chisholm Trail was reconstructed north of Sam Bass Road.

3 | SAN GABRIEL PARKWAY EXTENSION
Leander, Texas
Client: City of Leander // Completed: 2016 // Cost: NA // Characteristics: 4-Lane Divided Roadway // Relevance: New Location Roadway, FEMA Streams, Bridge Design, Located in Williamson County
Roles & Responsibilities: Gabriel was the Geotechnical Lead in charge of conducting the geotechnical engineering study for the proposed extension of San Gabriel Parkway from CR 270 to Ronald Reagan Boulevard as a 4-lane divided roadway with curb and gutter, storm sewers, water quality, detention, street lighting, landscaping, temporary irrigation system, 6' and 10' (dual use) sidewalks and a 24" water line.

4 | HERITAGE TRAIL WEST CHISOLM TRAIL
Round Rock, Texas
Client: City of Round Rock // Completed: 2017 // Cost: NA // Characteristics: Trail // Relevance: Schematic and Planning, ROW Identification, Edwards Aquifer Protection Zone, Karst Features, FEMA Streams, Bridge Design, Located in Williamson County
Roles & Responsibilities: Gabriel was the Geotechnical Lead in charge of Geotechnical Engineering study peer review for the HR 79 Bodenman Tract, located in Round Rock, Texas. Raba Kistner reviewed subsurface conditions, engineering reports presenting foundation design and construction recommendations.

5 | PEER REVIEW OF TURTLE CREEK VILLAGE
Round Rock, Texas
Client: City of Round Rock // Completed: 2017 // Cost: NA // Characteristics: Subdivision // Relevance: New Location Roadway, Schematic and Planning, Edwards Aquifer Protection Zone, Karst Features, FEMA Streams, Bridge Design, Located in Williamson County
Roles & Responsibilities: Gabriel was the Geotechnical Lead in charge of Geotechnical Engineering study peer review for the Turtle Creek Village construction, located in Round Rock, Texas. Raba Kistner reviewed subsurface conditions, engineering reports presenting foundation design and construction recommendations.

6 | ROUNDVILLE LANE RECONSTRUCTION

Round Rock, Texas

Client: City of Round Rock // Completed: 2017 // Cost: NA // Characteristics: Roadway Reconstruction // Relevance: Schematic and Planning, ROW Identification, Edwards Aquifer Protection Zone, Karst Features, FEMA Streams, Bridge Design, Located in Williamson County

Roles & Responsibilities: Gabriel was the Geotechnical Lead in charge of Geotechnical Engineering study for the reconstruction of Roundville Lane, located in Round Rock, Texas. Services included drilling borings along the existing Roundville Lane performing laboratory testing to classify and characterize subsurface conditions, preparing an engineering report presenting foundation design and construction recommendations for the proposed reconstruction of Roundville Lane, as well as providing pavement design and construction guidelines.

7 | US 79 WIDENING HARRELL PARKWAY

Round Rock, Texas

Client: City of Round Rock // Completed: 2018 // Cost: NA // Characteristics: Roadway Widening // Relevance: New Location Roadway, Schematic and Planning, ROW Identification, Quarry or Unique Landowner Coordination, Edwards Aquifer Protection Zone, Karst Features, FEMA Streams, Bridge Design, Located in Williamson County

Roles & Responsibilities: Gabriel was the Geotechnical Lead in charge of Geotechnical Engineering study for the US 79 Widening Harrell Parkway project located in Round Rock, Texas. Services included drilling borings along the existing Harrell Parkway performing laboratory testing to classify and characterize subsurface conditions, preparing an engineering report presenting foundation design and construction recommendations for the proposed widening of Harrell Parkway as well as providing pavement design and construction guidelines.

8 | WATER OAK PARKWAY MAJOR ARTERIAL IMPROVEMENTS

Georgetown, Texas

Client: City of Georgetown // Completed: 2018 // Cost: NA // Characteristics: Roadway Improvements // Relevance: New Location Roadway, Schematic and Planning, Railroad Coordination, ROW Identification, Edwards Aquifer Protection Zone, Karst Features, FEMA Streams, Bridge Design, Located in Williamson County

Roles & Responsibilities: Gabriel was the Geotechnical Lead for the geotechnical engineering study for the Water Oak Parkway Major Arterial Improvements in Georgetown, TX.

9 | RETAINING WALL AND PAVEMENT DESIGN FOR FM 110

Hays County, Texas

Client: City of San Marcos // Completed: 2018 // Cost: NA // Characteristics: Retaining Wall and Pavement Design // Relevance: Schematic and Planning, Edwards Aquifer Protection Zone, Karst Features, FEMA Streams, Bridge Design

Roles & Responsibilities: Gabriel was the Geotechnical Lead for the geotechnical engineering study for the Retaining Wall and Pavement Design for FM 110 located in Hays County, TX. The project consists of the construction of a new roadway alignment to be located near its intersection with SH 123 and extending 1/4-mile west in Hays County. Raba Kistner's scope of work consisted of drilling soil borings in the vicinity of the proposed Mechanically Stabilized Embankment (MSE) walls, perform laboratory testing to classify and characterize subsurface conditions, and to prepare an engineering report presenting foundation design and construction recommendations. As part of Raba Kistner's scope of work, a Global Stability Analyses was also performed.

GORDON ANDERSON, PLS, PSM, RPLS

SURVEY LEAD
AUSTIN OFFICE

LJA SURVEYING

EDUCATION

1979, Eng Technology Studies,
Portland Community College

PROFESSIONAL LICENSE

2016, Registered Professional Land Surveyor, TX #6617

2009, Professional Surveyor and Mapper, FL #6697

2015, Professional Land Surveyor, CA #9239; 2011, AL #32929; 2000, UT #3099116-2201; 1996, NV #12066; 1993, ID #7314

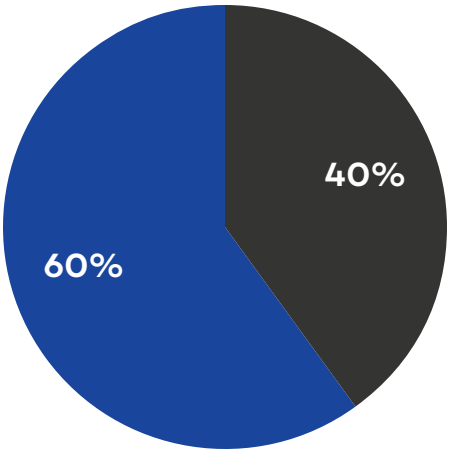
TXDOT PRECERTIFICATION

Employee Sequence No. 25109
Categories: 15.1.1, 15.2.1, 15.2.2
15.3.3, 15.3.4, 15.3.5

EXPERIENCE

Total: 41 Years // Firm: 1 Year

AVAILABILITY MAR 2021



Various Assignments
Availability

SUMMARY OF QUALIFICATIONS

Gordon possesses a broad range of operational and project management experience in the field of land surveying spanning 41 years, including roadway design and right-of-way acquisition surveys, site engineering surveys, aerial mapping control surveys, topographic and boundary surveys and large-scale control surveys.

He has also worked on numerous Roadway and Development sites throughout Williamson County and surrounding Counties, design surveys, aerial mapping control surveys, utility location surveys, railroad location and crossing surveys in the central Texas area

COMPARABLE EXPERIENCE MATRIX

	PROJECTS IN RESUME									
TASKS	1	2	3	4	5	6	7	8	9	10
New Location Roadway	•	•								
Schematic and Planning	•			•	•	•	•			
Railroad Coordination	•									
ROW Identification	•	•	•		•	•	•	•	•	•
Quarry or Unique Landowner Coordination	•									
Edwards Aquifer Protection Zone	•									
Karst Features	•									
FEMA Streams										
Bridge Design	•			•						
Located in Williamson County	•	•								•

1 | RONALD REAGAN BOULEVARD IMPROVEMENTS NORTH OF US-29
Williamson County, Texas

Client: Williamson County/CP&Y // Completed: 2019 // Cost: NA // Characteristics: Rural Multi-lane Improvements // Relevance: New Location Roadway, Schematic and Planning, Railroad Coordination, ROW Identification, Quarry or Unique Landowner Coordination, Edwards Aquifer Protection Zone, Karst Features, Bridge Design, Located in Williamson County

Roles & Responsibilities: Gordon was the Survey Lead for the rural, multi-lane improvements project which consisted of 5.3 miles of topographic/design route survey via combination of aerial mapping with ground truthing, conventional ground feature design survey, bridge structure and utility survey of Ronald Reagan Boulevard project from US 29 to FM 3405. The project also included boundary analysis to verify existing right-of-way takes and boundary lines.

2 | CR 258 CONNECTION PROJECT, FROM N HIGHWAY 183 TO CR 258
Williamson County, Texas

Client: Williamson County/American Structurepoint // Completed: 2019 // Cost: NA Characteristics: Rural 2-Lane // Relevance: New Location Roadway, ROW Identification, Located in Williamson County

Roles & Responsibilities: Gordon served as the Survey Lead for the topographic and tree survey of 5,300' new ROW thru existing ranch and farmlands. The project included extensive boundary analysis for ROW and Acquisition Plat and legal Description preparation for approximately five parcels.

3 | PEARCE LANE WIDENING
Travis County, Texas

Client: Travis County // Ongoing // Cost: NA // Characteristics: Rural Multi-lane Relevance: ROW Identification

Roles & Responsibilities: Gordon is the Project Manager for a 4-mile design survey of Pearce Lane from Kellam Road to Oak River Drive. The project includes primary control monuments, on the ground design survey to include utilities, culverts and topographic features. Locate monuments and property corners within existing right-of-way and adjacent rear property corners. Performed deed research/abstracting, right-of-way resolution and mapping. Produced planimetric 2D right-of-way mapping and parcel plats (35 parcels). Prepared and metes and bounds descriptions for right-of-way acquisition and 3D DTM Microstation surface base maps. Deliverables included GPS control survey network reports, data sheets, control sheets, signed and sealed parcel plats legal.

4 | SH 21 WIDENING PROJECT, FROM FM 1441 TO THE EAST COUNTY LINE OF LEE/BURLESON COUNTY LINE
Bastrop and Lee Counties, Texas

Client: TxDOT/ Alliance Transportation Group // Completed: 2019 // Cost: NA // Characteristics: Rural Multi-lane // Relevance: Schematic and Planning, Bridge Design

Roles & Responsibilities: Gordon was Survey Lead and Project Manager for a 32.4-mile design survey including airborne LiDAR, ortho photogrammetry, ground survey control survey, utilities, bridges and obscured area topographic features, set 36 primary and secondary control monuments within existing right-of-way, reduce bridge scanning, aerial LiDAR and ground survey data to produce planimetric 2D and 3D surface model in MicroStation format, tiled digital ortho photo imagery maps and final control sheets.

5 | IH 35, FROM HAYS/TRAVIS COUNTY LINE TO TRAVIS/WILLIAMSON COUNTY LINE

Travis County, Texas

Client: TxDOT // Completed: 2019 // Cost: $1.8M // Characteristics: Urban Major Corridor Divided
Relevance: Schematic and Planning, ROW Identification
Roles & Responsibilities: Gordon was Survey Lead and Project Manager for a 32-mile design survey including airborne, terrestrial and mobile LiDAR, ortho photogrammetry, ground survey control, utilities, bridges and obscured area topographic features, recover and set 45 primary control monuments within existing ROW and adjacent corridors, reduce bridge scanning, aerial LiDAR, mobile LiDAR data to produce planimetric 2D and 3D surface model in MicroStation format, tiled digital ortho photo imagery maps and final control sheets.

6 | NORTH LAMAR CORRIDOR PROJECT

Travis County, Texas

Client: City of Austin/Freese & Nichols / Completed: 2019 // Cost: NA // Characteristics: Urban Major Corridor // Relevance: Schematic and Planning, ROW Identification
Roles & Responsibilities: Gordon was the Survey Lead and Project Manager for a 6.1-mile right-of-way retracement survey, locate existing control, front parcel and right-of-way monuments. The project included deed and right-of-way plat research, right-of-way resolution calculation and interpretation. Deliverables in MicroStation format included, base mapping depicting right-of-way lines, easement line and potential conflict areas.

7 | MLK CORRIDOR PROJECT// CITY OF AUSTIN/ /TRAVIS COUNTY

Travis County, Texas

Client: City of AustiNAlliance Transportation Group // Completed: 2019 // Cost: NA
Characteristics: Urban Major Corridor // Relevance: Schematic and Planning, ROW Identification
Roles & Responsibilities: Gordon was the Survey Lead and Project Manager for a 1.2-mile mobile mapping, control survey, design survey, locate existing topographic features within existing ROW lines using mobile LiDAR and ground survey to collect bridge deck and abutments, drainage structures, cross sections in obscured areas, and set primary control monuments. Provided control sheets and 2D/3D MicroStation planimetric and surface data.

8 | SH 71/290 – OAKHILL CORRIDOR PROJECT/ TRAVIS COUNTY LINE TO TRAVIS/WILLIAMSON COUNTY LINE

Travis County, Texas

Client: TxDOT // Completed: 2018 // Cost: NA // Characteristics: Urban Major Corridor
Relevance: ROW Identification
Roles & Responsibilities: Gordon was the Survey Lead and Project Manager a 5.1-mile roadway design survey, including airborne LiDAR, ortho photogrammetry, set secondary survey control monuments, locate existing topographic features within proposed and existing ROW lines, collect bridge deck and abutments, drainage structures, cross sections and right-of-way mapping, parcel platting (80 parcels) for right-of-way acquisition. Surveying included abstracting, parcel plats, ROW maps, legal descriptions and GIS deliverables.

9 | US 77 SCHEMATIC DESIGN PROJECT

Fayette County, Texas

Client: TxDOT Yokum District / Rodriguez Transportation Group// Completed: 2020 // Cost: NA
Characteristics: Rural Highway Corridor // Relevance: ROW Identification
Roles & Responsibilities: Gordon was the Survey Lead and Project Manager for a 11.2-mile design survey including airborne LiDAR, ortho photogrammetry, ground survey control survey, utilities, bridges and obscured area topographic features, set 22 primary and secondary control monuments within existing right-of-way, reduce bridge scanning, aerial LiDAR and ground survey data to produce planimetric 2D and 3D surface model in MicroStation format, tiled digital ortho photo imagery maps and final control sheets.

10 | IH 35, FROM HAYS/TRAVIS COUNTY LINE TO TRAVIS/WILLIAMSON COUNTY LINE

Hays, Travis, and Williamson Counties

Client: TxDOT Yokum District / Rodriguez Transportation Group// Completed: 2020
Cost: NA // Characteristics: Rural Highway Corridor // Relevance: ROW Identification,
Located in Williamson County
Roles & Responsibilities: Gordon was Survey Lead and Project Manager for a 12.2-mile design survey including airborne LiDAR, ortho photogrammetry, ground survey control survey, utilities, bridges and obscured area topographic features, set 25 primary and secondary control monuments within existing right-of-way, reduce bridge scanning, aerial LiDAR and ground survey data to produce planimetric 2D and 3D surface model in MicroStation format, tiled digital ortho photo imagery maps and final control sheets.