

# STATEMENT OF QUALIFICATIONS FOR PLANNING ANDERSON MILL ROAD AND RM 620 EXTENSION

SUBMITTED OCTOBER 23, 2020





American Structurepoint confirms that our firm has at least one office registered with the Texas Board of Professional Engineers (TBPE) as an engineering firm in the state of Texas.

October 23, 2020

Williamson County Purchasing Department Attn: RFQ T1852, Planning for Anderson Mill Road and RM 620 Extension 100 Wilco Way, Suite P101 Georgetown, Texas 78626

**Dear Selection Committee:** 

American Structurepoint is part of the Williamson County community, with resident employees and an office in Round Rock. We're pleased to offer our services to the County, bringing capacity to achieve project goals on your schedule, experienced local leadership, and a project team curated to match your project.

#### CAPACITY

American Structurepoint's employees in Round Rock and Austin are all transportation-focused professionals, with work histories focused on Central Texas projects. These staff members will have increased availability (details shown in Section 8) in 2021, as their current assignments are nearing completion. Our local staff are backed by 500 specialized professionals from across our company to create comprehensive solutions for Williamson County.

#### **EXPERIENCED LOCAL LEADERSHIP**

While my talented colleagues in other locations are a valuable asset to our team, I believe that local leadership is a must for a successful project. It's important to have a project leader who is reaffirming his or her professional reputation in the community with each project completed. Our project manager, Sean Beal, and the major task leaders under his supervision are all locally based professionals. American Structurepoint commits that Sean will be the project manager for the duration of this contract. This includes commitment to each work authorization associated with the contract, without further delegation or substitution over the course of the contract.

We look forward to joining Williamson County to plan this enhancement to the local transportation system.

Sincerely,

American Structurepoint, Inc.

Ricardo J. Zamarriga, PE Principal-in-Charge PROPOSAL CONTACT Ricardo Zamarripa, PE

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LEADERS IN THEIR DISCIPLINES COLLABORATING FOR AN OPTIMIZED PROJECT PLAN



#### American Structurepoint, Inc.

- 3711 South Mopac Expressway, Building One, Suite 350 Austin, Texas 78746
- 9025 River Road, Suite 200 Indianapolis, Indiana 46240

Additional staff 810 Hesters Crossing Road, Suite 105 Round Rock, Texas 78681

#### CP&Y, Inc.

- 1 Chisholm Trail, Suite 130 Round Rock, Texas 78681
- 13809 Research Boulevard Suite 300 Austin, Texas 78750
- 12500 San Pedro Avenue Suite 450
   San Antonio, Texas 78216

#### Halff Associates, Inc.

- 9500 Amberglen Boulevard Building F, Suite 125 Austin, Texas 78729
- 100 NE Loop 410, Suite 200 San Antonio, Texas 78216

#### Raba Kistner, Inc.

 8100 Cameron Boulevard Suite B-150 Austin, Texas 78754

 $Resumes \ for \ all \ individuals \ shown \ on \ this \ organizational \ chart \ are \ provided \ in \ Appendix \ A \ of \ this \ proposal$ 

PM SEAN BEAL BRINGS UNMATCHED EXPERIENCE AND QUALIFICATIONS

#### **SEAN'S QUALIFICATIONS**

- 19 years of experience delivering innovative transportation infrastructure solutions to Central Texas
- Texas-licensed professional engineer pre-certified in multiple TxDOT transportation planning categories
- Experience on both the public agency owner and consultant sides of projects in Williamson County, and serving the Williamson County Road Bond Program as a GEC and consultant

## **SEAN'S EXPERIENCE**SH 45 45 SW, Travis County, Texas

Project Manager Sean managed the environmental study and final design of this environmentally sensitive project. To minimize impacts to trees, a tree survey was prepared, tree preservation areas were specified in the plans, and Sean developed detailed tree clearing requirements to address endangered species and improve public opinion of the project. The alignment of the road avoided known karst features. and Sean decided to use a common road bed to minimize impacts to both karst features and trees. Sean developed karst discovery protocols for initial ROW clearing, geotechnical investigation, drilled shafts, and general excavation. He worked with COA, TxDOT, and TCEQ to incorporate their input and obtain approval of the protocols. Sean led a series of consensus meetings with the design team, COA staff, TxDOT Austin District staff, TxDOT Environmental Division Staff, Travis County staff, and environmental stakeholders. He obtained consensus on environmental issues, including water quality, tree preservation, and roadway realignment for this contentious project. Sean prepared summary documents to keep Travis County commissioners, partner agencies, and stakeholders informed about the project. This project received a 2018 Brookfield

Residential Environmental Champion Award by the Austin Chamber of Commerce for sustainability, innovation, and leadership in the transportation industry.

#### Kellam Road, Austin, Texas

Project Manager Sean managed the environmental clearance phase and final design of the Kellam Road project for the CTRMA and Travis County. He worked with County staff, consultant teams, project stakeholders, and partner agencies to deliver environmental approval and final plans in line with a very aggressive schedule. To compress the schedule, Sean conducted roadway design concurrent with the environmental phase. Weekly meetings with County staff and the roadway and environmental teams allowed the project to open to traffic ahead of schedule and below budget.

## Williamson County Corridor E5 Study, Williamson County, Texas

Deputy Project Manager Sean is providing project updates and coordinating directly with the GEC and Commissioner Covey for this corridor study. He is managing internal and subconsultant staff; developed alignment alternatives; revised the alternatives per feedback from the GEC and Commissioner Covey; developed an alternatives evaluation matrix that is being used on other Williamson County Road Bond projects; and provided regular schedule and budget updates to the County.

#### **SEAN DELIVERS**

- Transportation planning documents that are ready for PS&E design, based on his extensive Central Texas corridor planning experience
- Efficient movement through the regulatory process, utilizing best practices from similar projects like the SH 455
   SW, Kellam Road, and E5 Corridor Study projects

AMERICAN STRUCTUREPOINT'S ROADWAY PLANNING AND DESIGN STAFF BRING CORRIDOR PLANNING EXPERIENCE IN CENTRAL TEXAS

#### **OUR TEAM'S QUALIFICATIONS:**

- Task leader Fernando Gaytán has more than 35 years of transportation design experience; he understands the long-term impacts of planning decisions
- Fernando worked on two different road bond programs as the GEC for Williamson County; he understands owner-side challenges
- Active projects with the County mean that we have an efficient communication plan in place for County staff, key stakeholders, and permitting agencies
- Central Texas residents will plan this project; we are creating a roadway that will work for our community

# OUR TEAM'S EXPERIENCE Williamson County Corridor E5 Study, Williamson County, Texas

With Fernando as schematic lead, Sean Beal serving as deputy project manager, and Adam Pfeiffer on the design team, American Structurepoint is providing engineering services and planning to develop Corridor E5 from IH 35 to FM 972. We are developing preliminary alignment alternatives for the E5 Corridor and conducting an alternatives analysis to identify the preferred alignment. We will revise the preferred alignment to address stakeholder input and environmental constraints, prepare hydrologic and hydraulic models, and prepare a schematic.

## Williamson County Corridor I2 Study, Williamson County, Texas

Fernando and Adam are providing planning, environmental, and schematic engineering (SE) services to develop Corridor I2 from US 183 to SH 29. Our deliverables include project management, developing a QA/QC plan, and a preliminary route concept and preliminary costs for the arterial connecting to the I2 corridor and SH 29.

## Road Bond Program 2000 and 2006, Williamson County, Texas

Fernando performed program administration, design management, construction management, public information, and document control for the \$350 million 2000 Williamson County road bond program. For the 2006 program, he worked with the Williamson County bond task force for development of the project list for the November 2006 \$228 million bond election.

## Road Bond Program 2000, Williamson County, Texas

Project Manager Sean Beal worked on the 2000 Road Bond Program on the GEC side, as a roadway project manager.

- Corridor planning experience; we've proven our ability to successfully develop roadway plans that result in efficient designs
- Williamson County experience; we know the challenges that have occurred on previous projects and will implement the solutions proven to avoid and overcome them
- Regional experience; our work in Central Texas means that we can build on existing relationships with permitting agencies and key stakeholders to move the project forward in a timely manner



AMERICAN STRUCTUREPOINT'S DRAINAGE FACILITY PLANNING AND DESIGN STAFF BRING BEST PRACTICES FROM LOCAL PROJECTS

#### **OUR TEAM'S QUALIFICATIONS:**

- Drainage task leaders John Conquest (Halff) and Amy Bennett (American Structurepoint) have successfully completed similar projects in the Edwards Aquifer Recharge Zone
- John and Amy have substantial experience planning drainage projects in Williamson County and Central Texas
- Best practices from successful projects led by our team members will help to alleviate potential issues with stream crossings along the corridor

#### **OUR TEAM'S EXPERIENCE:**

#### New Hope Road, Cedar Park, Texas

For this 1.21-mile-long boulevard section of New Hope Road, John's responsibilities included development of a Drainage Impact Report, design of water quality facilities, and permitting with TCEQ and the City of Cedar Park. He oversaw development and implementation of the drainage system, coordinated efforts with design staff, and provided technical guidance to TCEQ to allow a new technology to be used in the Edwards Aquifer. By using this new technology, John was able to save the City of Cedar Park over \$1 million in ROW and construction cost.

#### CR 412 PS&E, Williamson County, Texas

This 3.4-mile-long 2-lane roadway had significant drainage improvements included in its reconstruction. John performed analysis of existing cross-drainage structures and designed proposed cross-drainage structures, runoff determination, set horizontal and vertical profiles, analyzed existing and proposed conditions for cross-drainage structures, and set up plan and profile sheets.

## Williamson County Corridor E5 Study, Williamson County, Texas

American Structurepoint is providing engineering services and planning to develop Corridor E5 from IH 35 to FM 972 in Williamson County. As part of the process to develop preliminary alignment alternatives for the E5 Corridor, Amy is preparing hydrologic and hydraulic models in order to determine bridge lengths and culvert sizes at stream crossings.

#### CR 258, Williamson County, Texas

American Structurepoint is providing preliminary and final PS&E for a 0.5-mile extension including right- and left-turn lanes on US 183 into the new location of CR 258. Amy is leading hydrologic and hydraulic design for the project.

- Data-driven solutions created from specialized 2D and 3D modeling software
- Plans that provide safe and responsible drainage along this corridor without creating negative impacts elsewhere
- Context-sensitive solutions that are individualized to address the specific conditions of this corridor
- Innovative designs that create significant cost savings

AMERICAN STRUCTUREPOINT'S STRUCTURES PLANNING AND DESIGN STAFF PROVIDE SPECIALIZED SOLUTIONS FOR LOCATION-SPECIFIC CHALLENGES

#### **OUR TEAM'S QUALIFICATIONS:**

- As structures lead, Tom Ashcraft (CP&Y) brings 30 years of experience for progressive bridge
  design and structural analysis while receiving structure support from Kelly Ho (CP&Y) who brings
  14 years of experience delivering structural engineering, inspection, and load rating of existing
  structures in Texas
- Both Tom and Kelly are pre-certified in TxDOT bridge design; as are many supporting staff members from American Structurepoint, CP&Y, and Halff Associates
- Texas-licensed professional engineers with experience designing and analyzing prestressed concrete, reinforced concrete, and structural steel

### OUR TEAM'S EXPERIENCE: FM 1021 UPRR Overpass, TxDOT Laredo District, Texas

Bridge Project Manager Tom managed the layout, design, and aesthetic development of a seven-span bridge over the Union Pacific Railroad (UPRR). This bridge has a combination of Type IV prestressed concrete beam units and a simple span steel plate girder with inverted tee substructure elements. His responsibilities included oversight of the design of the bridge and two pedestrian structures which tie into the bridge as well as supervision of the structural sheets. During the project, meetings were held with TxDOT and city leaders to develop the theme to be used for aesthetic treatments on the bridge substructure as well as murals to be included on the retaining walls.

### Travis County Old San Antonio Road At Onion Creek Bridge, Travis County, Texas

Project Manager Tom manages the bridge replacement project of an existing low water crossing on Old San Antonio Road at Onion Creek in Travis County. While completing the project, Tom manages the CP&Y design team performing the preliminary engineering and final PS&E plan development. His responsibilities include coordination and management of in-house design staff and seven subconsultants performing environmental and engineering support

services. Tom regularly coordinates with the Travis County project manager concerning project issues and progress, and handles invoicing and other non-technical management aspects required on the project.

#### Marksheffel Road Bridge over Sand Creek, City of Colorado Springs, Colorado

Bridge Design Manager Tom was responsible for providing alternative analysis and preliminary design for six separate design alternatives with preliminary cost estimates to assist the City in selecting the best value design. This project included a three-sided arch structure spanning over Sand Creek, stream channel improvements with drop structures, and roadway design for approximately 150 LF of asphalt pavement bridge approaches, sidewalks, and Sand Creek trail. His responsibilities included managing the bridge design effort and reviewing bridge plans.

- Effective communication with all involved entities throughout the entire project to increase collaboration efforts
- High level of quality at every stage of the process while utilizing best practices from similar projects and experiences from location-specific issues
- Guaranteed review of all aesthetics and structural designs

AMERICAN STRUCTUREPOINT'S ENVIRONMENTAL STAFF PROVIDE THOROUGH INFORMATION LEADING TO SUCCESSFUL CORRIDOR PLANNING

#### **OUR TEAM'S QUALIFICATIONS:**

- Our environmental lead, Stacey Benningfield (CP&Y), brings 38 years of transportation experience with 29 of those years specializing in environmental planning; she was a resident of Williamson County for over 40 years
- Stacey and the other team members are pre-certified in many TxDOT environmental planning categories
- The environmental team has years of local project experience in a variety of environmental sectors like biological sciences, waters, public involvement, permitting, historic surveying, archaeological, socioeconomic, noise, and hazardous materials

### OUR TEAM'S EXPERIENCE: Corridor F/US 183 Feasibility Study, Williamson County, Texas

This project is a pre-NEPA corridor preservation study. Upon completion, Williamson County will initiate at-risk right-of-way acquisition to preserve the effective, long-term use of the US 183 transportation corridor. Key components of the study include: environmental constraints mapping and field investigations; preparation of resource-specific environmental "due diligence" technical reports; identification, development and evaluation of route options; traffic modeling and analysis; schematic development; and public outreach. Stacey Benningfield is the environmental task lead; Melissa Cross is a biologist involved in the development of the related hazardous materials existing conditions report.

### Central Texas Turnpike Program, Texas Turnpike Authority, Williamson and Travis Counties, Texas

Environmental Program Manager Stacey was responsible for all aspects of environmental planning, public involvement, agency coordination, and permitting for the four elements of the \$3.5B CTTP: SH 130 (a 90-mile new location turnpike), 183A (new location turnpike); Loop 1 North Extension (new location tolled extension of MoPac); and SH 45 North (new location turnpike). In addition to achieving records

of decision on each individual element of the program, Stacey also negotiated and secured an Individual Section 404 permit (and mitigation plan) for SH 130 and managed the Section 7 consultations for SH 45 North and 183A.

#### IH 35 at SH 29, Georgetown, Texas

Environmental Task Lead Stacey's duties included preparation of a Categorical Exclusion and Water Pollution Abatement Plan for the addition of a turnaround bridge on the IH 35 frontage road in Georgetown. She managed the preparation of the environmental documentation, conducted the QA/QC review, and coordinated with TxDOT on behalf of the project sponsor, Williamson County. While working with TxDOT and Williamson County, environmental clearance was successfully expedited allowing this project to become the first project funded under TxDOT's Pass Through Financing Program to advance to construction.

- Qualified experts who effectively collaborate on environmental planning tasks
- Variety of specialists, creating a one-stop shop for Williamson County
- Knowledge of best practices based on current training and vast experiences

AMERICAN STRUCTUREPOINT'S TEAM MEMBERS WERE SELECTED FOR THEIR AVAILABILITY TO COMPLETE THIS PROJECT ON YOUR SCHEDULE

### LEGEND

Project Commitments

Proposal Commitments

#### SEAN BEAL, PE PROJECT MANAGER

Total Commitments 40%

Available for Williamson County 90% (includes current projects)

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 70%

#### PROJECTED COMPLETION DATE



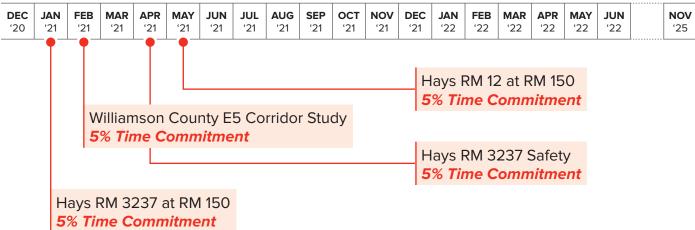
#### RICARDO ZAMARRIPA, PE PRINCIPAL-IN-CHARGE AND QUALITY MANAGER

Total Commitments 65%

Available for Williamson County 35%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 25%

#### PROJECTED COMPLETION DATE



Office Management & Other Duties 20% Time Commitment (Ongoing) -

Proposal Commitments 10% Time Commitment —



Project Commitments

Proposal Commitments

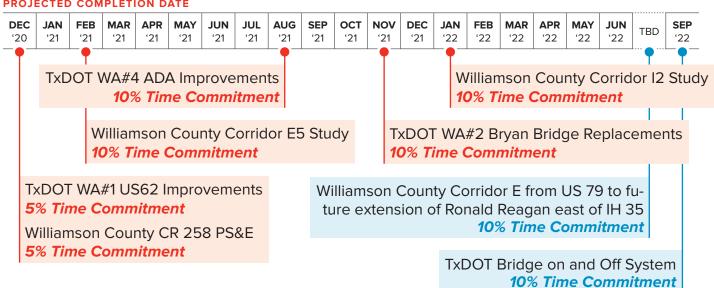
#### FERNANDO GAYTÁN, PE SCHEMATIC DEVELOPMENT LEAD

Total Commitments 60%

Available for Williamson County 60% (includes current projects)

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 20%



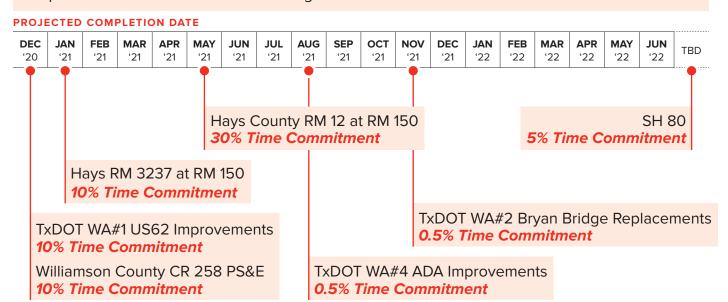


#### ADAM PFEIFFER, PE SCHEMATIC DEVELOPMENT SUPPORT

Total Commitments 60%

Available for Williamson County 50% (includes current projects)

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 20%





Project Commitments

Proposal Commitments

#### ANDY DUTTON, PE SCHEMATIC DEVELOPMENT SUPPORT

Total Commitments 70%

Available for Williamson County 30%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 10%

#### PROJECTED COMPLETION DATE



#### NICOLE DEBEVOISE, PE SCHEMATIC DEVELOPMENT SUPPORT

Total Commitments 80%

Available for Williamson County 20%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 10%





Project Commitments

Proposal Commitments

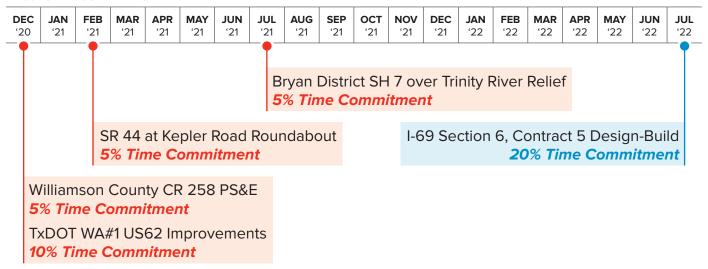
#### HARDIK SHAH, PE, PTOE TRAFFIC STUDIES LEAD

Total Commitments 70%

Available for Williamson County 30%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 10%

#### PROJECTED COMPLETION DATE



Office Management 25% Time Commitment (Ongoing) -

#### JOHN CONQUEST, PE, CFM DRAINAGE LEAD

Total Commitments 75%

Available for Williamson County 25%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 10%





Project Commitments

Proposal Commitments

#### AMY BENNETT, PE DRAINAGE SUPPORT

Total Commitments **55%** 

Available for Williamson County 45%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 10%

#### PROJECTED COMPLETION DATE

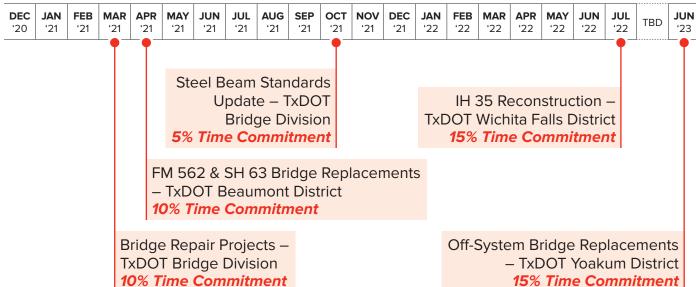


#### TOM ASHCRAFT, PE STRUCTURES LEAD

Total Commitments **55%** 

Available for Williamson County 45%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 5%





Project Commitments

Proposal Commitments

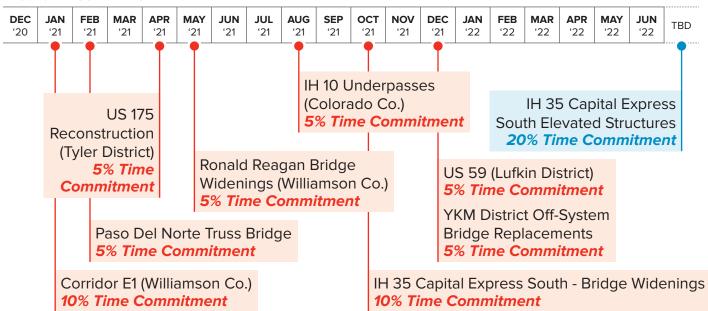
#### KELLY HO, PE STRUCTURES SUPPORT

Total Commitments 80%

Available for Williamson County 20%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 20%

#### PROJECTED COMPLETION DATE



#### GABRIEL ORNELAS, JR., PE, PMP GEOTECHNICAL LEAD

Total Commitments 45%

Available for Williamson County 45%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 10%





Project Commitments

Proposal Commitments

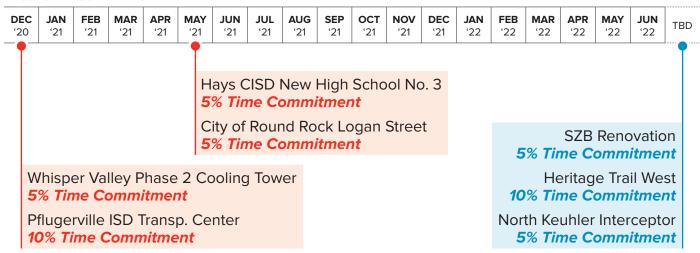
#### YVONNE GARCIA THOMAS, PE GEOTECHNICAL SUPPORT

Total Commitments 45%

Available for Williamson County 45%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 5%

#### PROJECTED COMPLETION DATE

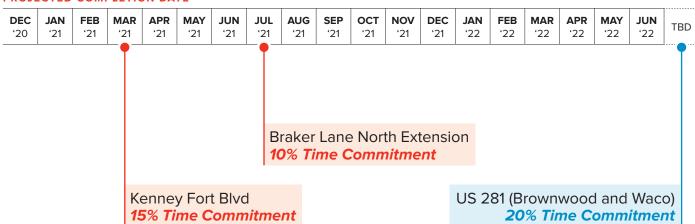


#### STACEY BENNINGFIELD ENVIRONMENTAL LEAD

Total Commitments 55%

Available for Williamson County **45-65%** (depending upon outcome of US 281 proposal)

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension **45%** 





Project Commitments

Proposal Commitments

#### MELISSA CROSS BIOLOGICAL SCIENCES

Total Commitments 70%

Available for Williamson County 30-40% (depending upon outcome of US 281 proposal)
Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 30%

#### PROJECTED COMPLETION DATE



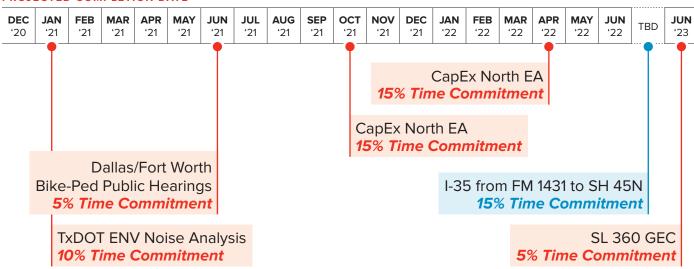
#### DARREN DODSON WATERS/PERMITTING

Total Commitments **75**%

Available for Williamson County 25%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 5%

#### PROJECTED COMPLETION DATE



Misc. 15% Time Commitment (Ongoing)



Project Commitments

Proposal Commitments

#### TORI RAINES HISTORIC

Total Commitments 60%

Available for Williamson County 40%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 20%

#### PROJECTED COMPLETION DATE



CapEx Central 5% Time Commitment (Ongoing) —

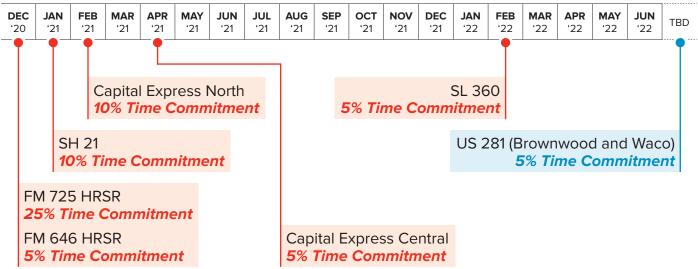
Various small ODOT projects and project management 20% Time Commitment (Ongoing)

#### LEIGH RADERSCHADT SOCIOECONOMIC

Total Commitments 70%

Available for Williamson County 30%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 5%





Project Commitments

Proposal Commitments

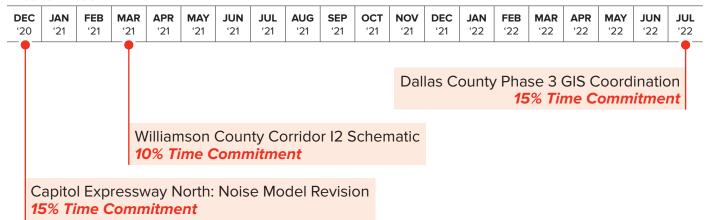
#### ANGELA GILLMEISTER GIS ANALYST

Total Commitments 70%

Available for Williamson County 20-30%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 25%

#### PROJECTED COMPLETION DATE



#### CHELSEA MILLER BIOLOGIST

Total Commitments 25%

Available for Williamson County 50%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 50%

#### PROJECTED COMPLETION DATE

DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TDD
'20	'21	'21	'21	'21	'21	'21	'21	'21	'21	'21	'21	'21	'22	'22	'22	'22	'22	'22	TBD

CR 112 Waters & Fieldwork (Fieldwork 10/21/2020) 25% Time Commitment



Project Commitments

Proposal Commitments

#### JOSÉ M. SANDOVAL, PE COST ESTIMATING LEAD

Total Commitments 53%

Available for Williamson County 47%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 20%

#### PROJECTED COMPLETION DATE



#### DAN FLAHERTY, RPLS SURVEY LEAD

Total Commitments 80%

Available for Williamson County 15%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 15%





Project Commitments

Proposal Commitments

#### MARGIE NOLEN, RPLS ROW SERVICES

Total Commitments 80%

Available for Williamson County 20%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 20%

#### PROJECTED COMPLETION DATE

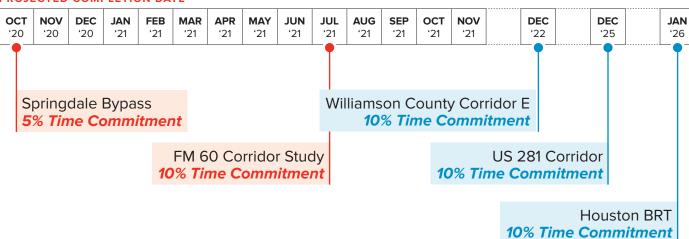


#### MICHAEL SEXTON, PE, AICP PLANNING LEAD

Total Commitments 60%

Available for Williamson County 40%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 10%





Project Commitments

Proposal Commitments

#### ERIC RATZMAN, PE PLANNING SUPPORT

Total Commitments 70%

Available for Williamson County 30%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 10%

#### PROJECTED COMPLETION DATE



#### WILL CONLEY AGENCY COORDINATION

Total Commitments 30%

Available for Williamson County 70%

Proposed Time Commitment for Planning of Anderson Mill Road and RM 620 Extension 2%

#### PROJECTED COMPLETION DATE

DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TDD
'20	'21	'21	'21	'21	'21	'21	'21	'21	'21	'21	'21	'21	'22	'22	'22	'22	'22	'22	TBD

Other Duties 30% Time Commitment (Ongoing) -

A THOUGHTFUL APPROACH TO SUCCESSFULLY COMPLETE PROJECT ELEMENTS

Our team understands from the LRTP that the Anderson Mill and Howard Lane projects will increase safety, connectivity, mobility, and emergency services response and make the western portion of the County significantly more accessible and attractive for new development.

Similar to our approach on the Corridor E5 study, we will work closely with the County to develop a Purpose & Need. Several alternatives will be evaluated, including a No-Build Alternative. Using the conceptual route set by the County, we will establish a wide study area to evaluate all environmental constraints and refine the alignments. We will assess the pros and cons of connecting Howard Lane to either Pearson Ranch or RM 620 and make a recommendation to the County. Evaluation criteria will be set up in a decision matrix, similar to the Corridor E5 Study, to score and prioritize each alternative.

#### SCHEMATIC DESIGN AND COST ESTIMATES

The majority of the alignment is on new location, which will allow us to determine the ROW footprint during the alternative development phase, but we will look at ways to optimize earthwork and intersection design when tying to existing roadways and determine alignments that avoid existing quarry areas. We will provide accurate cost estimates to validate the County's budget. Our QA/QC process uses discipline-specific reviews to verify that our quantities and rates are accurate.

**PUBLIC INVOLVEMENT** We will work with the County's GEC and assigned PI firm to support meetings with affected property owners and stakeholders, and consideration will be given to incorporating their comments into design.

**ENVIRONMENTAL DOCUMENTS** Constraints for this corridor include several possible WOTUS crossings, habitat for golden-cheeked warbler and mussel species, karst caves, geological assessments, and water quality requirements for the Edwards Aquifer Recharge Zone. Salamander habitats, parks, and cemeteries are not anticipated.

**TREE PRESERVATION** Our team will use proven strategies from the Oak Hill Parkway and SH 45

SW projects to efficiently prepare a tree survey, coordinate with stakeholders, and minimize impacts to heritage trees.

**SURVEY & ROW** CP&Y will ascertain ROE needs and follow the County's lead on accessing the parcels, recommend use of aerial LIDAR with supplemental ground survey for obscured areas, and will prepare legal descriptions for ROW acquisition.

**DRAINAGE** There are four FEMA Zone AE crossings: Davis Springs Branch of Lake Creek, Lake Creek and Rattan Creek. We will collect FEMA data, perform hydrologic & hydraulic analysis using Atlas 14 intensities, consider future land use, and propose a cost-effective design to mitigate impacts to surrounding properties.

**UTILITY PROTECTION & RELOCATION** We have determined that there are minimal utilities on the project. We will evaluate alignment options to have the least impact to utilities.

CMTA AND UPRR CROSSINGS, AND TXDOT COORDINATION We have experience with CMTA and UPRR rail coordination and crossings throughout the team and will develop alternatives that minimize impacts to the railroad. We recommend early coordination with both CMTA and UPRR which was critical to avoiding delay on the MoPac Improvement Project. Coordination with TxDOT will be important for connections at SH45 and MoPac. Our team has extensive experience working with TxDOT. We will follow the County's lead in coordination with these important stakeholders.

**GEOTECHNICAL CONSIDERATIONS** The project lies in the Edwards limestone formation with limestone at shallow elevations. Karst features and expansive clays are likely to be encountered and will be avoided or mitigated. Our team has experience mitigating these issues in foundation design and roadway pavement design.

## APPENDIX A



19 YEARS OF EXPERIENCE

#### **Education**

Bachelor of Science, Architectural Engineering, University of Texas, 2002

#### **License and Certifications**

Professional Engineer, Texas, #97451 TxDOT Precertification Sequence #28941

TxDOT Precertification Categories: 1.8.1, 2.14.1, 3.2.1, 4.2.1, 4.4.1, 7.1.1, 8.1.1, 9.1.1

Sean brings 19 years of experience in delivering innovative solutions for transportation infrastructure needs throughout Texas, including five years managing all aspects of project development for the Central Texas Regional Mobility Authority. Sean specializes in schematic and environmental document preparation for complex projects, and he excels at obtaining environmental approval for controversial roadway projects in Central Texas. His ability to work with regulatory agencies and key stakeholders to address water quality requirements, karst features, endangered species, and heritage trees led to approval of the US 183 North Mobility Study, SH 45 SW, and the Kellam Road Projects.

## SEAN BEAL

PROJECT MANAGER

#### **RELEVANT PROJECTS**

Williamson County Corridor E5 Study, Williamson County, Texas

Role: Deputy Project Manager

**Project Description:** American Structurepoint is providing engineering services and planning to develop Corridor E5 from IH 35 to FM 972. Our engineers will develop preliminary alignment alternatives for the E5 Corridor, conduct an alternatives analysis to identify the preferred alignment, revise the preferred alignment to address stakeholder input and environmental constraints, prepare hydrologic and hydraulic models, and then prepare a schematic that will include direct connectors at IH 35 and a fully directional interchange at the intersection with the Ronald Reagan Extension.

Activities Performed: Provided project updates and coordinated directly with the GEC and Commissioner Covey; managed internal and subconsultant staff; developed alignment alternatives; revised the alternatives per feedback from the GEC and Commissioner Covey; developed an alternatives evaluation matrix for screening alternatives; provided regular schedule and budget updates to County

**Project Relevance:** Williamson County Project (owner); road bond financed; new location facility; alternatives analysis; schematic and ready to move into PS&E stage; compliance with TxDOT standards; ROW determination; project managed by American Structurepoint; familiarity with both GEC and County coordination and standards

#### 183 North Mobility Project, Austin, Texas

Role: Project Manager

**Project Description:** The US 183 North Mobility Project, in a highly urbanized corridor with tight ROW, included improvements to US 183 and a connection from the US 183 North Express lanes to the existing MoPac Express lanes.

Activities Performed: Sean led all aspects of the environmental clearance for the project and worked with the Capital Area Metropolitan Planning Organization (CAMPO) to program adequate funding for the study. Sean also worked with project partners such as Williamson County, TxDOT, FHWA, and US Fish and Wildlife Service to facilitate review and approvals throughout the process. He communicated the project's status and schedule to stakeholders



## **BEAL** (CONT.)

including the Williamson County commissioners, judges, and department directors. Sean convened a site visit with different bicycle and pedestrian advocacy groups (including the Bicycle Advisory Council and Mobility Austin), City of Austin, TxDOT, and the roadway design team. This group toured the project site together and reviewed crash history data, identified areas with high pedestrian traffic and no sidewalk accommodations, and identified obstructions that would affect sight distance and present a safety issue. Sean's effort identified solutions in the field and avoided a series of costly and time-consuming project meetings. This also served as a team building exercise for groups that have historically opposed each other.

Sean was the speaker for the project at the public hearing and prepared the summary and analysis for the study. A Finding of no Significant Impact was issued on April 26, 2016.

**Project Relevance:** Corridor planning in an environmentally and politically sensitive area, meetings with public and property owners, evaluation of alternatives, access planning, coordination with local, state, and federal agencies, Williamson County Project (location), environmental protection of karst features, Edwards Aguifer Recharge Zone

#### Central Texas Turnpike Project (CTTP), Austin, Texas

Role: Design Project Manager

**Project Description:** Projects included Mobility Improvement Projects at Loop 1 and Parmer Lane, SH 45 Collector-Distributor Roads at Parmer Lane, IH 35 at Hester's Crossing Improvements; and US 183 Improvements.

Activities Performed: Sean was responsible for coordinating the design and implementation of several multi-million dollar design-build change orders as the General Engineering Consultant Contract (GEC) for Texas Department of Transportation (TxDOT) on the Project. Sean provided design support services for construction of the nine sections comprising the CTTP corridor. He managed and coordinated the design needs of the project with project design consultants and the GEC design team. Sean's primary responsibilities included working with design consultants, TxDOT, and the GEC design team to develop a set of change order construction plans. Additional duties included providing scheduling assistance for construction and cost estimates associated with the change order construction plans. A contractor requested revised TCP for the Hester's Crossing Bridge crossing shortly after construction began. Sean was tasked with developing three phases of complex TCP in three months (typically a nine-month process). Sean established an aggressive schedule with buy-in from TxDOT and CEI consultant reviewers and held weekly meetings with TxDOT to get timely decisions. These efforts avoided construction delay and met project milestones.

**Project Relevance:** Williamson County Project (location); Edwards Aquifer Recharge Zone; bridges and culvert crossings; compliance with TxDOT standards; new location facility; intersection improvements

## MoPac Improvement Project, Central Texas Regional Mobility Authority, Austin, Texas

Role: Project Manager

**Activities Performed:** Sean managed the Environmental Clearance phase of the project. He worked closely with consultant teams, project stakeholders, and partner agencies in order to deliver approval of the Environmental Assessment in line with a very aggressive schedule. Partnered with reviewing agencies to get timely review of contract documents, which positioned the project to receive construction funding when it became available. Sean prepared the Summary and Analysis for the project.



### **BEAL** (CONT.)

Environmental Approval and the Finding of No Significant Impact was issued on schedule in August of 2012. During the Mopac Improvement Design-Build Procurement, Sean facilitated workshops between short listed proposers, UPRR and Capital Metro, providing an effective and timely way for TxDOT to communicate consistent information for this schedule-critical project. Sean recommended that CapMetro upgrade their cross-arm assembly independent of the project. This solution reduced project costs for the cross-arm assembly replacement, eliminated additional ROW costs, and most importantly allowed the project to stay on schedule.

**Project Relevance:** Coordination with stakeholders on tree preservation, coordination with CAMPO policies, coordination with local, state, and federal agencies, environmental assessment for transportation improvements, utility coordination, railroad coordination (UPRR and CMTA)

#### Wells Branch Parkway, Travis County, Texas

Role: Roadway Design Lead

**Project Description:** The roadway extension project called for an interim 2-lane section and ultimately a 6-lane section.

Activities Performed: Sean used the Travis County Design Criteria Manual and the TxDOT Roadway Design Manual to design a 6-lane divided extension of Wells Branch Parkway in Travis County, Texas. Sean coordinated with a developer adjacent to the project and the City of Pflugerville to establish tiedown points at the project limits. He designed the horizontal and vertical alignments for the roadway, generated existing and proposed grade profiles, and calculated earthwork quantities. Sean verified that horizontal clear distance requirements were met, designed signing and striping for the project, and developed a traffic control plan that utilized daily lane closures at the project limits. He generated construction plans and estimates for both phases of the project. The design allowed for a phased implementation of infrastructure from a sidewalk and 2 lanes initially, to the final build-out of 6 lanes and sidewalks on both sides of the roadway. Sean coordinated with the drainage design team to verify culvert capacity during all phases. He also identified utility accommodations for the initial phase that would not be in conflict for the final build-out.

**Project Relevance:** Central Texas project; County project; interim construction of a future wider corridor; new location facility; phased design of interim 2-lanes of future 4-lane facility; intersection improvements; storm water management

#### 183A South Brushy Creek Pedestrian Bridge, Williamson County, Texas

Role: Project Manager

**Project Description:** The 183A South Brushy Creek Pedestrian Bridge project provided a connection between the US 183A shared use paths and the 7-mile long Williamson County Regional Trail. The project included a 10-foot-wide pedestrian bridge crossing of Brushy Creek, aesthetic treatments, a trailhead with vehicle parking, and exercise stations. Sean managed TxDOT funds to construct the US 183A South Brushy Creek Pedestrian Bridge, and coordinated with Williamson County to avoid any adverse impacts to the Williamson County Regional Trail network.

**Activities Performed:** Sean proactively identified several new accessibility standards that would have to be included in the project after the plans had been let for construction. He revised plans during the preliminary stages of construction and prevented a delay to the project schedule. Sean also managed all aspects of construction for the project and coordinated extensively with the Williamson



## **BEAL** (CONT.)

County Parks Department to ensure there were no adverse impacts to their regional trail network. He worked closely with the contractor to ensure the project was open to traffic as scheduled and found amicable solutions to conflicts that led to a successful delivery of the project.

**Project Relevance:** Williamson County project location; stakeholder coordination; compliance with TxDOT standards; coordination with CAMPO policies; coordination with state and local agencies

#### Williamson County 2000 Road Bond Program, Williamson County, Texas

Role: Roadway Project Manager

**Project Description:** This project included GEC oversight of Williamson County's road bond program. Key tasks included review of preliminary schematics and final plans to verify they conformed to the applicable criteria.

Activities Performed: Sean served as the roadway project manager for the general engineering consultant contract team for the \$350 million 2000 Williamson County road bond program. He reviewed roadway project schematics, design construction plans, specifications, and estimates to ensure they adhered to applicable criteria and presented cost-effective solutions to Williamson County's transportation needs. Sean used the Williamson County Design Criteria Manual to review design plans and estimates. He checked horizontal and vertical alignments, superelevation rates and transitions, signing and striping layouts, and traffic control plans. He also reviewed hydrologic and hydraulic calculations and verified drainage structure capacities. Sean ensured the accuracy of right-of-way (ROW) strip maps for ROW acquisition, generated detailed comment response matrices, and coordinated with consultants to resolve design conflicts.

**Project Relevance:** Williamson County project (owner); road bond financed; Edwards Aquifer Contributing zone; familiarity with both GEC and County coordination standards

#### Kellam Road, Austin, Texas

Role: Project Manager

**Project Description:** This collaborative project between Travis County and the Central Texas Regional Mobility Authority (CTRMA) is located in Southeastern Travis County. The project included the construction of a new 1.9-mile rural, 3-lane arterial (5-lane ultimate section) arterial corridor between Pearce Lane and State Highway 71.

Activities Performed: Sean managed the environmental clearance phase and final design of the new location for the Kellam Road project for the CTRMA and Travis County. Roadway design was conducted for the project concurrent with the environmental phase. To avoid any lost work, Sean facilitated weekly meetings with Travis County staff, the roadway design team, and the environmental team. Because of this coordination, the project obtained environmental clearance and was open to traffic ahead of schedule and below budget.

**Project Relevance:** Coordination with CAMPO, local agencies, and state agencies; corridor planning in an environmentally and politically sensitive area; county project; interim construction of future wider corridor; suburban location; TCEQ coordination; TxDOT coordination



#### 21 YEARS OF EXPERIENCE

#### **Education**

MBA, Business Management, St. Edwards University, 2005 Bachelor of Science, Civil Engineering, Texas A&M University, 1999

#### **License and Certifications**

Professional Engineer, Texas, #92818 TxDOT Precertification Sequence #13021

TxDOT Precertification Categories: 1.2.1, 1.3.1, 1.4.1, 1.6.1, 3.2.1, 4.2.1, 4.4.1, 8.1.1, 8.2.1, 9.1.1, 10.1.1, 10.2.1, 11.1.1

Ricardo has 21 years of experience in transportation engineering and project management including schematic design, roadway design, traffic control, illumination, hydrology and hydraulics, and construction phase services. He is experienced in the design of rural and urban roadways.

## RICARDO ZAMARRIPA, PE

PRINCIPAL-IN-CHARGE

#### **RELEVANT PROJECTS**

Williamson County Corridor E5 Study, Williamson County, Texas

Role: Principal-in-Charge

Project Description: American Structurepoint is providing engineering services and planning to develop Corridor E5 from IH 35 to FM 972, also known as the Ronald Reagan Extension, in Williamson County, Texas. Our engineers will develop preliminary alignment alternatives for the E5 Corridor, conduct an alternatives analysis to identify the preferred alignment, revise the preferred alignment to address stakeholder input and environmental constraints, prepare hydrologic and hydraulic models, and then prepare a schematic that will include direct connectors at IH 35 and a fully directional interchange at the intersection with the Ronald Reagan Extension.

**Activities Performed:** Allocated staff and resources

**Project Relevance:** Williamson County Project (owner); road bond financed; new location facility; alternatives analysis; schematic and ready to move into PS&E stage; compliance with TxDOT standards; ROW determination; project managed by American Structurepoint; familiarity with both GEC and County coordination and standards

Williamson County CR 258 Extension (US 183 to Sunset Ridge)
Williamson County, Texas

**Role:** Principal

**Project Description:** Preliminary and final PS&E plans for a 0.5-mile extension including right- and left-turn lanes on US 183 into the new location of CR 258; services include roadway design, hydrologic and hydraulic design, survey and right-of-way mapping

**Activities Performed:** Allocated staff and resources; GEC coordination

**Project Relevance:** Williamson County project; road bond financed; roadway extension

City of Georgetown Northwest Boulevard, Georgetown, Texas

Role: Principal, Project Manager



## ZAMARRIPA (CONT.)

**Project Description:** Alignment study, schematic, and PS&E design for the extension of NW Boulevard over IH 35 and upgrading the existing 2-lane roadway to a 4-lane roadway. The project includes the work from Austin Avenue to Washam Drive. Project required significant coordination for new location bridge over IH 35.

Activities Performed: Led production team; alternative analysis; and TxDOT coordination

**Project Relevance:** Roadway extension; ROW determination; schematic; located in Williamson County; TxDOT coordination

#### Hays County FM 1626 Segment A, Hays County, Texas

Role: Principal-in-Charge; Project Manager

**Project Description:** Schematic and PS&E design of 3.2-mile widening and reconstruction on existing alignment for Hays County under Pass-Through Finance Agreement with TxDOT. The limits for this project were between FM 2770 and RM 967 in Hays County, Texas. This project required following LGPP guidelines and coordination with Hays County GEC, the County, TxDOT, and adjacent projects. Project included both urban and rural proposed segments, utility coordination, TCEQ coordination for Edwards Aquifer recharge and transition zone, ROW acquisition, MAPO meetings, drainage, bridge structures, and retaining walls.

**Activities Performed:** Managed production team; attended ROW acquisition meetings with land-owners; prepared general sheets; performed quality control of drawings/calculations; led TxDOT coordination

Project Relevance: Schematic; county project; ROW determination; TxDOT coordination

#### FM 1626 Improvements, Travis County, Texas

Role: Principal-in-Charge; QA/QC Manager

**Project Description:** Environmental documents, schematic, and PS&E design for the reconstruction and widening of FM 1626 from 1,100 feet west of Brodie Lane to FM 2304. The project was funded through a pass-through finance agreement between Travis County and TxDOT.

**Activities Performed:** Coordinated with public works director; participated in public involvement; performed quality control on schematic; and managed quality assurance process.

**Project Relevance:** Environmental documents; ROW determination and acquisition; schematic; county project; TxDOT coordination

## US 271 Relief Route Pass Through Toll Project, Pate Transportation Partners/TxDOT Atlanta District, Titus County, Texas

Role: Roadway Task Leader

**Project Description:** PS&E development of a 6.1-mile new location controlled access facility. Prepared plans for the mainlanes, frontage roads, ramps, cross streets, grading, and roadway details. Substantial coordination effort with Union Pacific RR, geotechnical engineers, and environmental study was required for the project to comply with FHWA Criteria and Regulations. Prepared the PS&E from 30% design to 90% plans in just over three months. This project required multi-agency coordination with Titus County, TxDOT, UPRR, and FHWA.



## ZAMARRIPA (CONT.)

**Activities Performed:** Roadway geometry for five new location grade separations; one new location railroad grade separation; frontage roads and ramps; retaining wall design; grading; roadway details

**Project Relevance:** New location facility

#### 290 E from US 183 to SH 130, CTRMA, Austin, Texas

Role: Assistant Project Manager and Roadway Task Leader

**Project Description:** Design plan development converting 3.2 miles of roadway from a 4-lane divided facility to a 6-lane limited access tollway facility with frontage roads and ramps. Project includes five interchanges and three FEMA crossings. Responsibilities included project management, schematic optimization and development of construction plans involving roadway geometrics, retaining walls, pedestrian ramps, and sidewalk and shared-use path design. Coordinated signal design with City of Austin and TxDOT. Coordinated utility relocation and design including a dedicated utility corridor within the TxDOT ROW. During schematic optimization phase, reduced construction cost by \$2.5 million dollars. The project was successfully completed under budget and within accelerated schedule through extensive coordination and project oversight.

**Activities Performed:** Led the production team and subconsultants; schematic optimization; designed roadway geometrics to grade separate three intersections; grading; shared-use path; retaining walls; and ADA compliance

**Project Relevance:** Schematic optimization; TxDOT Coordination

#### Cypress Creek Boulevard Realignment, Round Rock, Texas

Role: Principal and Project Manager

**Project Description:** PS&E phase of \$1.65 million, 0.25-mile realignment project to eliminate offset intersection at Eagles Nest and Sunrise Road. The proposed roadway is new location median divided 4-lane section with 100 feet of ROW. The project included demolition of existing road, new roadway design, drainage analysis/design, Edwards Aquifer Contributing Zone Plan, and traffic signal design. It required extensive coordination with developer of adjacent tracts.

**Activities Performed:** Project management; developer coordination; illumination design; general sheets including typical sections

Project Relevance: New location; located in Williamson County; Edwards Aquifer Contributing Zone

#### Travis County Gilbert Road Extension, Travis County, Texas

Role: Roadway Task Leader and QA/QC

**Project Description:** Plans for 1-mile stretch of Gilbert Road to extend existing Gilbert Road from FM 969 to the Austin's Colony subdivision. The project is a new location roadway that included a route study, schematic, PS&E, and construction phase services. The design includes a roadway comprising two 12-foot lanes, 4-foot shoulders, curb and gutter, and 5-foot ADA-compliant sidewalks, as well as four water quality ponds, a signal warrant, and signal design. The project has a large public involvement component as the Austin's Colony has been experiencing heavy traffic congestion.

Activities Performed: Roadway & ADA design; QA/QC remaining disciplines of project

Project Relevance: New location extension; county project



## ZAMARRIPA (CONT.)

#### RM 3237 Safety Project, Wimberley, Texas

Role: Project Principal

**Project Description:** The project is a PS&E for a cumulative 2-mile "notch and widen" project from 2-lane rural to add shoulders and turn lanes at four intersections. It included environmental document, culvert extensions, culvert replacement, FEMA coordination, coordination with property owners, TxDOT coordination, utility coordination, TCEQ coordination and intersection improvements. The project followed LGPP guidelines. The project was within the Edwards Aquifer Recharge Zone and the Contributing Zone.

**Activities Performed:** Ricardo was responsible for client coordination, stakeholder meetings, managing team, and budget & schedule management.

**Project Relevance:** Central Texas project; compliance with TxDOT standards; corridor improvement project; county project; intersection improvements; local soils

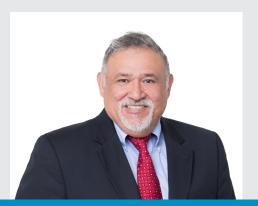
#### TxDOT FM1920 PS&E, Amarillo District, Texas

Role: Project Principal

**Project Description:** American Structurepoint prepared engineering plans, specifications and estimates (PS&E), and related documents for safety Improvements of a 16.5-mile long, 2-lane road in Hemphill and Lipscomb counties. The project limits are from RM3260 to US 60 in the TxDOT Amarillo District. Design efforts included widening two 11-foot lanes to 12-foot lanes, shoulder widening, safety treatment of slopes, designing 68 driveway reconstructions, 46 cross culvert extensions, adding safety end treatments, and a bridge widening over Sand Creek in Lipscomb County. Our engineers managed the project, and subconsultants prepared roadway and bridge design, hydrologic and hydraulic design, driveway design, and grading at intersections. The project was delivered on an accelerated schedule of 10 months.

Activities Performed: Allocated staff and resources

**Project Relevance:** Access planning, compliance with TxDOT standards, drainage design, hydraulic modeling, intersection improvements, transportation improvement project



#### **36 YEARS OF EXPERIENCE**

#### **Education**

Bachelor of Science, Civil Engineering, University of Texas at Austin, 1984

#### **License and Certifications**

Professional Engineer, Texas, #92244 TxDOT Precertification Sequence #14240

TxDOT Precertification Categories: 3.2.1, 4.2.1, 4.4.1, 7.1.1, 9.1.1, 10.1.1, 10.2.1, 11.1.1

Fernando is a senior project director with 36 years of experience in civil engineering. He specializes in transportation planning, design, and construction. His areas of expertise are roadway planning and design, drainage design, and traffic control plans. Experienced in various methods of project delivery and financing, from traditional design/bid/build and design/build projects to pass-through financing. He is a client liaison and supervisor for other professional engineers. He also reviews professional service agreements, manages quality control, and is responsible for the review of design, construction plans, cost estimates, specification, and engineering reports.

## FERNANDO GAYTÁN, PE

SCHEMATIC LEAD

#### **RELEVANT PROJECTS**

Williamson County Corridor E5 Study, Williamson County, Texas

Role: Schematic Lead

Project Description: American Structurepoint is providing engineering services and planning to develop Corridor E5 from IH 35 to FM 972, also known as the Ronald Reagan Extension, in Williamson County, Texas. Our engineers will develop preliminary alignment alternatives for the E5 Corridor, conduct an alternatives analysis to identify the preferred alignment, revise the preferred alignment to address stakeholder input and environmental constraints, prepare hydrologic and hydraulic models, and then prepare a schematic that will include direct connectors at IH 35 and a fully directional interchange at the intersection with the Ronald Reagan Extension.

**Activities Performed:** Responsible for leading the technical direction of the schematic layout, coordinating the preliminary drainage design, leading the conceptual cost estimating effort.

**Project Relevance:** Schematic, Wilco Road Bond Project, new location corridor study, conceptual cost estimating, public and property owners meetings, row determination and optimization.

## Williamson County Corridor I2 Study, Williamson County, Texas

**Role:** Project Management

Project Description: American Structurepoint, as a subconsultant to K Friese and Associates (KFA), is providing planning, environmental, and schematic engineering (SE) services to develop Corridor I2 from US 183 to SH 29 in Williamson and Burnet counties, Texas. Our deliverables include project management, developing a QA/QC plan, and a preliminary route concept and preliminary costs for the arterial connecting to the I2 corridor and SH29. We also are to assist in refining the recommended route option and assist KFA in preparing a Corridor I2 Route Study Report. We also are responsible for schematic development and preparing the preliminary and final schematic submittal and preparing preliminary hydrologic and hydraulic review for approximately one-third of the recommended alternative. The completed route study will identify opportunities to



## GAYTÁN (CONT.)

enhance safety and mobility to accommodate current traffic and anticipated growth. The proposed expressway is a controlled-access facility with two 2-lane mainlines, two 3-lane frontage roads with curb and guttering, a new storm sewer system, and two shared-used paths. The major arterial is a non-controlled access facility with a 6-lane divided median with curb and guttering, a storm sewer system, and two shared-use paths.

**Activities Performed:** Managed internal staff; provided regular schedule and budget updates to Prime consultant.

Project Relevance: Corridor study of a Wilco Road Bond project, Project is on new location.

Williamson County CR 258 Extension (US 183 to Sunset Ridge), Williamson County, Texas Role: Project Management

**Project Description:** Preliminary and final PS&E plans for a 0.5-mile extension to connect to US 183; services include roadway design, hydrologic and hydraulic design, survey and right-of-way mapping

**Activities Performed:** Managed internal and subconsultant staff; provided regular schedule and budget updates to County

**Project Relevance:** Created schematic, Williamson County project; road bond financed; roadway extension on new location.

#### Road Bond Program 2000 and 2006, Williamson County, Texas

Role: Project Manager at the GEC office

**Project Description:** 2000 Program – Involved in program administration, design management, construction management, public information, and document control for the \$350 million road bond program. 2006 Program – Worked with Williamson County bond task force for development of project list for November 2006 \$228 million bond election.

Activities Performed: 2000 Program – Served as general public contact regarding the Road Bond Program; attended and presented public meetings; managed construction contract execution and administration; provided utility coordination oversight, QA/QC, and management of construction services staff. Reviewed RFIs, change orders, and contractors' pay estimates. Coordinated with TxDOT and prepared work authorizations and project budgets. 2006 Program – Prioritized projects, provided estimating, and coordinated with local entities; provided oversight and supervision of consultants and presentation of weekly updates to county commissioners; attended project meetings as needed; managed the design plan review effort; provided client coordination regarding project status, schedules, and contract issues.

**Project Relevance:** Familiarity with both GEC and County coordination and standards; ROW acquisition determination and coordination; meetings with public and property owners; coordination with UPRR on several US 79 projects

## TxDOT SH 130 TTA Segments 1-4, Interim and Ultimate Schematic Optimization, Environmental Reevaluation and PS&E, Williamson and Travis Counties, Texas

Role: Lead roadway engineer for Segment 4

**Project Description:** Design of Segment 4, which extends 9.43 miles from south of the Colorado River to US 183 and consists of road, rail, and utility corridor for a 4-lane controlled-access toll road



## GAYTÁN (CONT.)

with ramps, toll plazas, frontage roads, and eight diamond interchanges.

Activities Performed: Directed the engineering evaluation and planning services for the optimization of the interim schematic and ultimate schematic for Segment 4. Coordinated with the environmental consultant to provide information for use in the reevaluation of the environmental document. Avoided multimillion dollar utility relocations of high-pressure fuel and gas lines by revising the profile and protecting lines in place. Fernando's big-picture approach to the schematic optimizations to the ROW and ditches, as well as profile changes, allowed for savings in retaining walls, earthwork, and ROW while ensuring positive drainage. Supervised design team and had responsible charge of the roadway portion of the plans, determination of ROW needs, design speed, clear zone, and ADA compliance as well as all aspects of geometry and coordination with other disciplines involved in the project. Responsible charge of Sections 1, 5, 14, and 15H. Developed alternative designs and cost estimates for value engineering and RCPs. Responded to RFIs and field change redesigns. Presented roadway testimony at the ROW condemnation special commissioner's hearing.

**Project Relevance:** Created Interim and Ultimate schematics, Williamson County project; local soils; ROW determination/optimization; new location

## Ronald Reagan Boulevard North Phase IV Planning, Environmental, and PS&E, Williamson County, Texas

Role: Project Manager

**Project Description:** Schematic and final design services for a new 6-mile, 4-lane divided section from SH 195 to IH 35. The design included three bridges, nine major cross culverts, and numerous driveway culverts. Coordination with Williamson County was necessary to develop an alignment that was cost-effective while minimizing environmental impact to the area. The design incorporated an interim 2-lane section. Ensured the design accommodated the proposed improvements to cross streets, including a future SH 195 realignment and overpass. The scope included environmental studies, alignment optimization, earthwork determination and balance, design for future expansion to 4 lanes, permitting, and development of a water pollution abatement plan to meet the Edward's aquifer regulations. The roadway is designed to meet Williamson County and TxDOT design standards.

Activities Performed: Set the profile grade line to optimize the earthwork along the route, layout of pavement marking and signing plans along existing SH 195 for the tie in and development of left turns into Ronald Reagan, including relocation of a commercial private driveway, drainage plans, and widening. Fernando designed plan and specified roadside protection for the columns of the new SH 195 overpass over Ronald Reagan. Fernando designed several revisions to driveways during construction, updated the WPAP, and coordinated with TCEQ to obtain a revised permit for the project.

**Project Relevance:** Williamson County project; road bond financed; new location; interim construction of future wider corridor

## Travis County Jesse Bohls Bridge Replacement, Planning, Environmental, and PS&E, Travis County, Texas

Role: Project Manager; Lead Designer

**Project Description:** PS&E for realignment of 0.25 miles of Jesse Bohls Road in Travis County, including replacement of a bridge over Wilbarger Creek and the design of three culvert replacements.



## GAYTÁN (CONT.)

The alternative analysis determined the footprint of the ultimate 4-lane divided arterial within the 114 feet of ROW. The planning of the route involved using context-sensitive methods during the public meetings. Fernando was instrumental in finding a drainage solution to a property owner's concern about drainage along a flat area along the edge of his property. Once the roadway alignment was determined, location of the replacement structure was finalized. Construction cost approximately \$3.5 million.

Activities Performed: Led QA/QC of the HEC-RAS modeling for Wilbarger Creek and adjustments to the model's drainage area; design of three culverts crossing the new alignment of Jesse Bohls; ditch design along Jesse Bohls – which was located in a very flat terrain and required careful placement of ditch and cross culverts; revisions to the profile grade line in Geopak and MicroStation; producing general notes, specifications and estimates, including producing the bid documents to be included in the County's bid package.

**Project Relevance:** Road project on new location; phased design of interim 2-lanes of future 4-lane facility; project for a neighboring county

#### Arterial A, Planning, Environmental, and PS&E, Travis County, Texas

Role: Project Manager

Project Description: Design of a proposed 4-lane divided major arterial between Parmer Lane and US 290 in northeast Travis County. The limits of the study are from FM 734 (Parmer Lane) to US 290 East. The primary objective of Arterial A was to provide much-needed north-south connectivity in northeast Travis County for the increasing development being planned in the area. The project's goal was to utilize context-sensitive solution (CSS) principles to develop safe transportation designs in harmony with community, aesthetic, historic, and environmental values for expedited approval of the project. The team developed alternatives analysis, context-sensitive solutions, final schematic and 60% plans, specifications, and estimates. Services included horizontal and vertical controls, hydraulic analysis, traffic control plans, signing and striping, traffic signals, environmental documentation, geotechnical reports, survey, right-of-way strip maps, utility coordination, bid phase services, and coordination with Travis County, City of Austin, Central Texas Regional Mobility Authority, TxDOT, CapMetro, and City of Pflugerville officials.

**Activities Performed:** Project management; QA/QC of 30% and 60% plans; coordination with City of Pflugerville personnel to relocate existing waterline

**Project Relevance:** Cap Metro, City of Austin Coordination, New location; alternative analysis and schematic and was ready to move to PS&E stage, 60% PS&E Plans.



#### **7 YEARS OF EXPERIENCE**

#### **Education**

Bachelor of Science, Civil Engineering, University of Nebraska at Lincoln, 2013

#### **License and Certifications**

Professional Engineer, Texas, #132899 TxDOT Precertification Sequence #29417

Local Government Project Procedures

Qualified

Adam is a project engineer with expertise in design, production, estimates, quality control, team organizational work, and 3D modeling. His focus is in transportation schematic-environmental and PS&E projects including: interstate and highway reconstruction, interchange reconstruction, intersection, roundabout design, and safety improvement projects. Adam assists with client management, budget and schedule management and design team coordination. He has technical experience in geometric design, traffic control, erosion control, signing and pavement markings, hydraulics and drainage design.

## **ADAM PFEIFFER, PE**

SCHEMATIC DEVELOPMENT SUPPORT

#### **RELEVANT PROJECTS**

Williamson County Corridor E5 Study, Williamson County, Texas

Role: Schematic Lead

Project Description: American Structurepoint is providing engineering services and planning to develop Corridor E5 from IH 35 to FM 972, also known as the Ronald Reagan Extension, in Williamson County, Texas. Our engineers will develop preliminary alignment alternatives for the E5 Corridor, conduct an alternatives analysis to identify the preferred alignment, revise the preferred alignment to address stakeholder input and environmental constraints, prepare hydrologic and hydraulic models, and then prepare a schematic that will include direct connectors at IH 35 and a fully directional interchange at the intersection with the Ronald Reagan Extension.

**Activities Performed:** Develop schematic exhibits showing alignment alternatives to be presented to the County and used for public meetings; coordinate with the County to accommodate property owners and community needs

**Project Relevance:** Alternative analysis and schematic

## Williamson County Corridor A-1 Study, Williamson County, Texas

Role: Project Engineer

**Project Description:** As part of the County's long-range transportation plan, Corridor A-1 was identified to be an east/west connector between SH 130 and FM 3349 to address rapid growth and immediate transportation needs

**Activities Performed:** Develop schematic exhibits showing alignment alternatives to be presented to the County and used for public meetings; coordinate with the County to accommodate property owners and community needs

**Project Relevance:** Corridor planning in an environmentally and politically sensitive area

#### CR 258 Extension, Williamson County, Texas

Role: Deputy Project Manager

**Project Description:** Preliminary and final PS&E plans for a 0.5-mile extension; services include roadway design, hydrologic and hydraulic design, survey and right-of-way mapping



# PFEIFFER (CONT.)

Activities Performed: Roadway and traffic control design leader for the development of the SE and

PS&E

Project Relevance: County project; road bond project; Williamson County project (owner)

### RM 3237 and RM 150 Intersection, Hays County, Texas

Role: Deputy Project Manager

**Project Description:** The RM 3237 and RM 150 intersection was converted from a 3-leg intersection to a modern high-speed roundabout providing safety and higher capacity in anticipation of surrounding development and increased traffic.

Activities Performed: Roadway and traffic control design leader for the development of the SE and

PS&E

Project Relevance: Intersection improvements, Edwards Aquifer Recharge Zone

### Brushy Creek Road Turn Lanes Project, Cedar Park, Texas

Role: Project Engineer

**Project Description:** Safety improvement project

Activities Performed: Analyzed the turn-lane geometry using Bentley OpenRoads and performed

the signing and striping design for five intersection locations along Brushy Creek Road

Project Relevance: Located in Williamson County; transportation improvement project

#### 19th Street, Lubbock, Texas

Role: Deputy Project Manager and Roadway Design Task Lead

**Project Description:** This TxDOT assignment improved an existing roadway in an urbanized area.

**Activities Performed:** Improving sidewalks, curb ramps, and driveways to be ADA compliant; coordination with traffic and drainage discipline leads to avoid conflicts with the proposed improvements; responsible for preparing quantities and a cost estimate

**Project Relevance:** Transportation improvement project

### Capital Metro Downtown Station Improvements, Austin, Texas

Role: Project Engineer

**Project Description:** Improved approximately four blocks of downtown Austin, approximately 1,400 lft, and a 70-foot-wide pavement section with pavement, earthwork, drainage, curb and gutter, water and wastewater facilities, a traffic signal, and the Lance Armstrong Bikeway trail

Activities Performed: Designed the signing and pavement markings, roadway plan and profile, and the Lance Armstrong Bikeway alignment; designed the grading plan for the plaza adjacent to the track platform and verified ADA compliance; reviewed as-built plans, GIS data, contours, design survey, and Google Earth to evaluate the limits of the storm sewer system and delineate drainage areas based on as-built records, GIS data, and Google Earth; calculated time of concentration and determined peak flows using the rational area method based on the City of Austin Drainage Criteria Manual; coordinated with utility designs (water, wastewater, and telecom) and the storm drain designer for a larger system, as well as coordinated with the adjacent project, the Sabine Street Promenade



# PFEIFFER (CONT.)

Project Relevance: Central Texas project; transportation improvement project

### RM 3237 Safety Improvements, Hays County, Texas

Role: Project Engineer

**Project Description:** Roadway safety improvements along a 3.59-mile segment between RM 12 and RM 150; includes intersection improvements (addition of right- and left-turn lanes as well as shoulders) at River Mountain Drive, St. Stephens Church and School, and Rolling Oaks Drive; intersection of RM 3237 and RM 150 will be converted from a one-way, stop-controlled intersection to a modern single-lane roundabout

**Activities Performed:** Roadway design services

**Project Relevance:** Central Texas project; transportation improvement project

### CR 1101 Bryan District Bridge Replacement, Bryan County, Texas

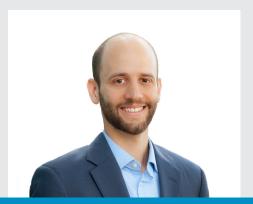
Role: Deputy Project Manager; Roadway Designer

**Project Description:** Proposed roadway and 95-foot bridge were realigned due to ROW issues

Activities Performed: Responsible for the roadway design, grading plans, and project coordination

efforts; designed a gabion retaining wall to avoid the acquisition of additional ROW

**Project Relevance:** Transportation improvement project-



11 YEARS OF EXPERIENCE

Bachelor of Science, Civil Engineering, University of Texas at Austin, 2009

# License and Certifications Professional Engineer, Texas, #117255

Andy has experience in the design of transportation projects and floodplain mapping. His experience includes engineering the development of plans and specifications for civil projects involving paving design, storm drainage design, American for Disabilities Act (ADA) compliant sidewalk, erosion control, traffic control, and signing and striping.

# ANDY DUTTON, PE

SCHEMATIC DEVELOPMENT

### **RELEVANT PROJECTS**

Edmond and Mills Street Roadway and Drainage Improvements: Phases 2 and 3, Taylor, Texas

Role: Project Manager

Project Description: PS&E for the reconstruction of approximately 1,600 If of Edmond Street, Cecelia Street, and Mills Street from 7th Street to McLain Street, along with storm sewer and water line improvements. This project is part of a PER developed by Halff for the Edmond and Mills corridor. The existing conditions consist of a large roadside ditch which frequently overflows and poses a hazard to drivers. The proposed storm sewer design begins to capture storm runoff at the intersection of Mills Street and McLain Street, and conveys it via enclosed storm drain system to tie into the previously completed storm system for Edmond Street Phase 1 project at the north side of Edmond St. and 6th Street.

**Activities Performed:** Managing survey, SUE, environmental, and geotechnical subconsultant efforts as well as drainage design and roadway design

**Project Relevance:** Drainage design; transportation improvement project; Williamson County project (location)

# Pflugerville 2019 Transportation Bond Projects, Pflugerville, Texas

Role: Design Engineer

**Project Description:** The project consists of design of three roadways as part of the 2019 Pflugerville Bond Program. These three roadways are Picadilly Drive (Central Commerce to IH 35 frontage road – 3098 lf), Royston Lane (Grand Avenue Parkway to Central Commerce – 3115 lf) and Central Commerce (City limits to Picadilly Drive – 2113 lf). The scope of services includes plan and profile of the roadways, pedestrian improvements, environmental analyses, preliminary geotechnical analyses, H&H analyses, offsite and roadway storm conveyance analyses, topographical survey, and SUE. A previous phase of this project included a preliminary schematic design and BUILD application process for federal funding via TxDOT.

**Activities Performed:** Preliminary sizing of storm sewer systems, roadway widening feasibility, and determining potential ROW needs; assisted the City in preparation of a federal



### **DUTTON** (CONT.)

BUILD application to secure additional funding for the project; application assistance included transportation time-saving calculations, conceptual exhibits, graphics, and application write-up verbiage

**Project Relevance:** Central Texas project; coordination with federal agencies; drainage design; infrastructure planning; transportation planning; TxDOT coordination

### Harold Green Road Extension, Travis County, Texas

Role: Design Engineer

Project Description: 1-mile long extension of Harold Green Road from SH 130 to Austin's Colony Boulevard; three-quarters of this new alignment was through property with a planned development; designed and evaluated four different alignment options, developed a matrix that weighed crucial project criteria; collaborated with the County to score, select and document the final alignment and developed the preliminary schematic; evaluated four different alignment options and developed a matrix consisting of seven project criteria covering economic, environmental, community/property owners, and floodplain considerations; collaborated with the County to weigh the various project criteria, then scored each alignment in the matrix which resulted in scores used to select the final alignment and document the reasoning for that selection; much of the property had either been quarried or contained dense vegetation so the alignment and profile took both conditions into consideration to minimize the amount of earthwork and tree removal/mitigation required; selected typical section consists of a new 2-lane, undivided collector roadway with on-street bike lanes and sidewalks. For the schematic stage, Halff provided roadway design, H&H analysis, and SUE services as well as overseeing environmental, surveying, and geotechnical work. The H&H analysis included 2-D modeling of Elm Creek to accurately determine the effects of Atlas 14 and the interaction between this watershed and the Colorado River watershed into which an overflow of Elm Creek flows during extreme events.

Activities Performed: Design of alignment alternatives and typical section alternatives

**Project Relevance:** Access planning; Central Texas project; County project; coordination with stakeholders on tree preservation; evaluation of alternatives; local soils; new location facility; roadway extension; schematic; transportation planning

### RM 620 Safety Improvements PS&E, Williamson County, Texas

Role: Project EIT

Project Description: Reconstruct the existing 4-lane rural highway as a 6-lane urban facility

**Activities Performed:** Preparation of roadway plan set, water pollution abatement plan, quantity/cost estimation, erosion control plan, signing and striping (per MUTCD), and traffic control measures

Project Relevance: Williamson County project (owner); transportation improvement project

### Capital Improvements Program Projects, Georgetown, Texas

Role: Project EIT

**Project Description:** Pavement repair ranging from pavement rejuvenation maintenance of existing pavement, hot in-place recycling of existing pavement, milling the surface and providing structural overlay, and full depth reconstruction; project also included driveway repair and replacement, potholing of water lines, waterline and wastewater line adjustments, storm sewer system design, striping, erosion/sedimentation, and traffic control



# **DUTTON** (CONT.)

**Activities Performed:** Determination of curb and gutter replacement, traffic control plans, ADA compliant sidewalk, signing and striping (per MUTCD), and erosion control plans

Project Relevance: Williamson County project (location); transportation improvement project

### RM 620 Safety Improvements, Deepwood Drive to IH 35, Round Rock, Texas

Role: Project Engineer

**Project Description:** 0.96 mile of 4-lane highway with frontage roads; includes an overpass over rail-road, water quality detention ponds, and a roundabout that incorporates a railroad crossing

**Activities Performed:** Designed storm sewer system, water quality treatment units, and incorporation of large existing off-site drainage facilities that pass through site

**Project Relevance:** Williamson County project (location); drainage design; railroad coordination; transportation improvement project

### Old Ranch Road 12 Bike/Pedestrian and Widening Project, San Marcos, Texas

Role: Design Engineer

**Project Description:** Design of 0.7 mile of roadway that will widen Old Ranch Road 12 from Holland Street to Craddock Lane. The proposed roadway section will include widening to three lanes (two through lanes and a 2-way left turn lane) with bike lanes on both sides, sidewalk both sides of the roadway and LID drainage improvements

**Activities Performed:** Designed sidewalks, roadside ditches, storm sewer, cross sections, driveway culverts, driveway profiles, and water quality biofiltration ponds; preliminarily designed drainage alternatives for runoff leaving the project site at Hughson Drive, Coers Drive, and Sarah Street

**Project Relevance:** Williamson County project (location); drainage design; transportation improvement project

# RM 620 Phase 2 Improvements, Wyoming Springs Drive to Deepwood Drive, Round Rock, Texas *Role:* Project Engineer

**Project Description:** Development of plans to reconstruct 0.78 mile of an existing 4-lane rural highway as a 6-lane urban facility

**Activities Performed:** Designed storm sewer system, incorporated water quality vaults, and incorporation of many existing off-site drainage facilities that pass through the site; prepared and submitted a WPAP to the TCEQ due to the project location in the Edwards Aquifer

**Project Relevance:** Williamson County project (location); drainage design; Edwards Aquifer contributing zone; TCEQ coordination; transportation improvement project



**7 YEARS OF EXPERIENCE** 

Bachelor of Science, Civil Engineering, Texas A&M, 2013

### License and Certifications

Professional Engineer, Texas, #130151

Nicole's experience includes roadway design, traffic control planning, storm drainage design, water and wastewater design, American with Disabilities Act (ADA) compliant sidewalk design, and shared-use path design

# **NICOLE DEBEVOISE, PE**

SCHEMATIC DEVELOPMENT

### **RELEVANT PROJECTS**

Pflugerville 2019 Transportation Bond Projects, Pflugerville, Texas

Role: Deputy Project Manager

**Project Description:** The project consists of design of three roadways as part of the 2019 Pflugerville Bond Program. These three roadways are Picadilly Drive (Central Commerce to IH 35 frontage road – 3098 If), Royston Lane (Grand Avenue Parkway to Central Commerce – 3115 If) and Central Commerce (City limits to Picadilly Drive – 2113 If). The scope of services includes plan and profile of the roadways, pedestrian improvements, environmental analyses, preliminary geotechnical analyses, H&H analyses, offsite and roadway storm conveyance analyses, topographical survey, and SUE. A previous phase of this project included a preliminary schematic design and BUILD application process for federal funding via TxDOT.

**Activities Performed:** Roadway widening geometrics; schematic development and off-site and roadway storm conveyance analyses; on-going effort with utility relocation and conflict analysis

**Project Relevance:** Central Texas project; coordination with federal agencies; drainage design; infrastructure planning; transportation planning; TxDOT coordination

# Black Locust Pavement Rehabilitation Project, Pflugerville, Texas

**Role:** Design Engineer

Project Description: Pavement rehabilitation for this 0.79-mile-long roadway was a combination of HMAC pavement on cement-treated, recycled base or HMAC milling, and overlay based on the condition of existing subgrade evaluated with geotechnical investigation. Coordination with the geotechnical subconsultant included determining a pavement mix design before final plans went out for bid. Additional alternatives to this plan set included pavement rehabilitation on 0.18 mile of Railroad Avenue and drainage improvements on Cactus Blossom Drive. The project included signing, pavement markings, and reconstruction of pedestrian curb ramps for ADA compliance. Halff worked closely with city staff to scope a project that met city goals for pavement rehabilitation within the allotted budget and the schedule.



# **DEBEVOISE** (CONT.)

Activities Performed: Design for pavement rehabilitation

Project Relevance: Central Texas project; drainage design; local soils; reconstruction of an existing

roadway

### Harold Green Road Extension, Travis County, Texas

Role: Design Engineer

**Project Description:** 1-mile long extension of Harold Green Road from SH 130 to Austin's Colony Boulevard; three-quarters of this new alignment was through property with a planned development; designed and evaluated four different alignment options, developed a matrix that weighed crucial project criteria; collaborated with the County to score, select and document the final alignment and developed the preliminary schematic

**Activities Performed:** Worked closely with the developer and County to determine the typical section, right-of-way, and alignment that was mutually beneficial

**Project Relevance:** Access planning; Central Texas project; County project; evaluation of alternatives; local soils; new location facility; roadway extension; schematic; transportation planning

### Barron and Capstone Alignment Project, Preliminary Design, College Station, Texas

Role: Design Engineer

**Project Description:** Realignment and widening of 0.8 miles of Barron Road and Capstone Drive; the City did not wish to purchase additional ROW along Barron Road, and the existing culvert conditions and shallow downstream flowlines resulted in innovative drainage solutions including open back inlets and rip-rap channels out-falling to grate inlets

**Activities Performed:** Led PS&E production and related supporting documents including coordination with UPRR and production of an 'Exhibit A' for the new railroad crossing; coordinated traffic signal and utility relocation designs with the subconsultants; designed an extensive traffic control plan including interim drainage solutions to allow for access to all roadways during construction

Project Relevance: Drainage design; railroad coordination; utility coordination



**30 YEARS OF EXPERIENCE** 

Bachelor of Science, Civil Engineering, University of Texas at Austin, 1989

### **License and Certifications**

Professional Engineer – Texas #81411 + 3 additional states
TxDOT Precertification Categories: 5.2.1, 5.3.1

Tom has 30 years of progressive bridge design experience in the state of Texas and manages the **Bridges and Special Structures** Group for CP&Y. Tom has served as a bridge design task leader on numerous rural and urban projects involving new bridges, bridge replacements, widening, and drainage structures. Tom is recognized for his strong technical skills and thorough understanding of bridge details and plans. He is also an effective communicator who has established a reputation for providing a high level of service to a wide variety of clients. Tom is experienced in the structural analysis and design of prestressed concrete, reinforced concrete, and structural steel.

# THOMAS ASHCRAFT, PE

**STRUCTURES** 

### **RELEVANT PROJECTS**

SH 130/TTA Design/Build Competition, Austin, Texas

Role: Task Force Member

**Project Description:** Preparation of the construction bid package for this 91-mile highway project

Activities Performed: Served on the bridge and retaining wall task force groups for the Four River Developers; oversaw the development of all 21 preliminary bridge layouts in Segment 4 for both the combined and split roadway bid conditions; worked closely with contractors and other team members to develop effective solutions to streamline design and reduce costs in bridge and retaining wall construction; coordinated design information with the roadway and hydraulic disciplines, ensured that project design criteria were followed and delivered the required estimates and documentation on time

**Project Relevance:** Bridges and culvert crossings; Central Texas project; transportation improvement project

# Colorado River Bridge Reconstruction, TxDOT Brownwood District, Texas

Role: Key Designer

**Project Description:** \$300,000 emergency repair project for a three-year-old bridge on US 377 between Brownwood and Brady, Texas; structure had experienced a slope failure at Abutment No. 6 necessitating removal of the last span and the extension of the bridge to natural ground

Activities Performed: Design of two new 85-foot-long prestressed concrete beam spans with an additional interior bent, new abutment, and a joint reconstruction at existing Bent No. 5; analyzed crane loads on existing structure used during demolition; worked with Brownwood District personnel in coordination of bridge plan details

**Project Relevance:** Bridges and culvert crossings; transportation improvement project; TxDOT coordination

# Marksheffel Road Bridge over Sand Creek, City of Colorado Springs, Colorado

Role: Bridge Design Manager

**Project Description:** Three-sided arch structure spanning over Sand Creek, stream channel improvements with drop structures, roadway design for approximately 150 LF of



# **ASHCRAFT** (CONT.)

asphalt pavement bridge approaches, sidewalks, and Sand Creek trail

**Activities Performed:** Alternative analysis and preliminary design for six separate design alternatives with preliminary cost estimate to assist the City in selecting the best value design; responsibilities included managing the bridge design effort and reviewing bridge plans

Project Relevance: Bridges and culvert crossings; transportation improvement project

### Academy Boulevard Bridge over Cottonwood Creek, City of Colorado Springs, Colorado

Role: Bridge Design Manager

**Project Description:** This ACEC Engineering Excellence Award winning CM/GC project included the replacement of the Academy Boulevard Bridge and the connection of the Cottonwood Creek Trail on either side of Academy Boulevard with a grade-separated trail crossing

**Activities Performed:** Managing the bridge design effort and reviewing bridge plans **Project Relevance:** Bridges and culvert crossings; transportation improvement project

### Babcock Road (Phase V), Bexar County, Texas

Role: Bridge Design Task Leader

**Project Description:** Full-width reconstruction of Babcock Road from Heurmann Road to Camp Bullis Road; replacement of low water crossings with two-span, prestressed concrete beam bridges at four locations along Maverick Creek; all four structures were sized for hydraulic requirements, and abutments and bents were placed parallel to stream flow to minimize obstruction to stream flow; foundations consisted of reinforced concrete drilled shafts and were designed to accommodate scour potential

**Activities Performed:** Oversaw development of the bridge layouts for all four structures and coordinated with roadway and hydraulic disciplines to determine appropriate bridge length, profile, and configuration; supervised staff working on the bridge design and details, and performed the senior review of the bridge plans

**Project Relevance:** Bridges and culvert crossings; Central Texas project; transportation improvement project

### FM 2696 (Blanco Road), Bexar County, Texas

Role: Bridge Design Task Leader

**Project Description:** Widening of a non-freeway facility, which included two phased bridge replacements (one prestressed beam structure and one flat slab structure)

Activities Performed: Developed the bridge layouts for both structures and coordinated with road-way and hydraulic disciplines to determine appropriate bridge length and profile; both structures used stone riprap at the abutment embankments for erosion protection, and foundations were designed for to accommodate scour potential; supervised staff working on the bridge design and details and oversaw completion of the condition surveys performed on three existing bridge class culverts on the project; work was completed on an accelerated design schedule, designing both bridges in less than three months; provided review of shop plans and RFI support during construction

**Project Relevance:** Bridges and culvert crossings; Central Texas project; transportation improvement project



# **ASHCRAFT** (CONT.)

### FM 3090 Re-Alignment, TxDOT Bryan District, Grimes County, Texas

Role: Project Manager

**Project Description:** PS&E contract to replace re-align ¼ mile segment of FM 3090 and replace three bridges to improve roadway conditions to pass the 25 yr WSEL

**Activities Performed:** Managed CP&Y staff designing roadway, complex hydraulics and bridge design, as well as sub-consultants performing survey, ROW mapping documentation and geotechnical investigations; coordinated regularly with TxDOT and led submittal review meetings with TxDOT; partnered with TxDOT in coordination with USACE on the project and provided engineering support during construction

**Project Relevance:** Bridges and culvert crossings; Central Texas project; coordination with federal agencies; transportation improvement project

### FM 2551 at Maxwell Creek, Collin County, Texas

Role: Engineer-of-Record

**Project Description:** Phased bridge replacement project involving a 116-foot-long, 103-foot overall width single-span structure with sidewalks on both sides of the bridge

**Activities Performed:** Oversaw development of the bridge and retaining wall layouts on the project as well as the design of all bridge structural elements including prestressed concrete TxDOT TX 46 I-girders, reinforced concrete abutments, and foundation design; oversaw all detailing of bridge plans for inclusion in final PS&E plans

**Project Relevance:** Bridges and culvert crossings; transportation improvement project

### Caddo Creek and Brushy Creek Bridges, TxDOT Tyler District, Texas

Role: Bridge Design Task Leader

**Project Description:** Design of a phased replacement structure and a new bridge

Activities Performed: Developed bridge layouts; coordinated with roadway and hydraulic disciplines to determine appropriate bridge length and profile to satisfy freeboard requirements; incorporated scour analysis and available soil borings to determine appropriate type of substructure and foundations (drilled shafts) to be used on both bridges; completed the structural design for both bridges and oversaw all detailing of superstructure and substructure elements, finishing ahead of project schedule and under budget

Project Relevance: Bridges and culvert crossings; transportation improvement project

### Sand Creek Bridge, City of Sherman, Texas

Role: Bridge Design Task Leader and Engineer-of-Record

**Project Description:** Bridge replacement project involving a 130-foot-long, 40-foot overall width two-span structure with sidewalks on both sides of the bridge

**Activities Performed:** Oversaw development of the bridge and retaining wall layouts on the project as well as the design of all bridge structural elements including prestressed concrete TxDOT TX 34 l-girders, reinforced concrete abutment and bent caps, columns, and foundation design; oversaw all detailing of bridge plans for inclusion in final PS&E plans; provided review of shop plans and RFI support during construction



# **ASHCRAFT** (CONT.)

Project Relevance: Bridges and culvert crossings; transportation improvement project

### Travis County Old San Antonio Road At Onion Creek Bridge, Travis County, Texas

Role: Project Manager

**Project Description:** Bridge replacement project of an existing low water crossing; evaluation of replacement alternatives, environmental assessments, public involvement, utility coordination, survey, geotechnical investigations, roadway design, bridge design, traffic control, survey, and hydraulic design

Activities Performed: Managing the CP&Y design team performing the preliminary engineering and final PS&E plan development; coordination and management of in-house design staff and seven subconsultants performing environmental and engineering support services; coordinates with the Travis County project manager concerning project issues and progress, and handles invoicing and other non-technical management aspects required on the project

**Project Relevance:** Bridges and culvert crossings; Central Texas project; county project; transportation improvement project

### FM 1021 UPRR Overpass, TxDOT Laredo District, Texas

Role: Bridge Project Manager

**Project Description:** Layout, design, and aesthetic development of a seven-span bridge over the Union Pacific Railroad (UPRR); bridge has a combination of Type IV prestressed concrete beam units and a simple span steel plate girder with inverted tee substructure elements

**Activities Performed:** Oversight of the design of the bridge and two pedestrian structures which tie into the bridge as well as supervision of the structural sheets; meetings were held with TxDOT and city leaders to develop the theme to be used for aesthetic treatments on the bridge substructure as well as murals to be included on the retaining walls

**Project Relevance:** Bridges and culvert crossings; railroad coordination (UPRR); stakeholder coordination; transportation improvement project; TxDOT coordination



14 YEARS OF EXPERIENCE

Bachelor of Science, Civil Engineering, University of Texas at Austin, 2006

### **License and Certifications**

Professional Engineer – Texas #112947 TxDOT Precertification Categories: 5.2.1

Kelly has 14 years of structural engineering experience. He has experience in prestressed concrete, reinforced concrete, and structural steel design. He also has experience in the inspection and load rating of existing structures that compliments his ability to compile preliminary engineering reports. He is familiar with American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) and Standard Specifications as well as Texas Department of Transportation (TxDOT) preferred practices.

# KELLY HO, PE

**STRUCTURES** 

**RELEVANT PROJECTS**RM 620 Railroad Grade Separation,
City of Round Rock, Texas

Role: Project Engineer

*Project Description:* Overall project includes the design of two overpass structures and a total of 15 retaining walls on RM 620. The structures include a two-span, 240-ft long overpass at Lake Creek Drive and a five-span, 498-ft long overpass over the Union Pacific Railroad and at-grade frontage road roundabout; the retaining wall portion of project includes 13 MSE walls, a soil nail wall and a spread footing wall; the bridges utilize prestressed concrete l-girders and conventionally reinforced inverted T bent caps; the project contains a major aesthetic theme for both overpass and retaining walls

**Activities Performed:** oversight and coordination of the design and detailing tasks, including aesthetic details, related to the preparation of the bridge and retaining wall portion of the contract PS&E package

**Project Relevance:** Bridges and culvert crossings; Central Texas project; transportation improvement project; Williamson County project (location)

# FM 2551 (Maxwell Creek Bridge on Murphy Road), TxDOT, Collin County, Texas

Role: Structural Lead Designer

**Project Description:** Multi-phased construction bridge replacement on FM 2551 at Maxwell Creek

Activities Performed: Performed TX 46 prestressed girder design, reinforced concrete design for abutment caps, foundation design and calculated bearing seat elevations for a skewed, 116-foot-long single-span bridge with an overall 103-foot-wide deck; developed four MSE retaining wall configurations adjacent to bridge; oversaw implementation of design into structural detail sheets and calculated bridge pay item quantities

**Project Relevance:** Bridges and culvert crossings; transportation improvement project



# HO (CONT.)

### CR 2372 at Branch of Black Creek, TxDOT, Wise County, Texas

Role: Structural Project Engineer and Engineer-of-Record

**Project Description:** Single phased, single-span bridge replacement using TX 28 girders

Activities Performed: Utilized TxDOT standards but implemented modifications to abutment, span and prestressed concrete panels standards in order to accommodate an 8 ½-inch deck per direction of the District and TxDOT Bridge Division's Recommended Corrosion Protection Measures Guidelines; provided header slope embankment protection by specifying stone protection riprap in conjunction with a gabion mattress at the channel bottom to mitigate scour at the toe of bank; developed a Gabion and Riprap Layout to provide the configuration and armoring details of stone protection riprap and gabion mattress.

Project Relevance: Bridges and culvert crossings; transportation improvement project

# Talley Road, FM 1957 (Potranco Rd) to Wiseman Boulevard, Bexar County Public Works Department, San Antonio, Texas

Role: Structural Design

**Project Description:** \$22.3M roadway expansion and reconstruction project that will be designed and constructed utilizing Alamo RMA "Vehicle Registration Funds"; proposes a major reconstruction and widening of a 2.3-mile segment of an existing 2-/3-lane rural collector to a 4-lane divided urban collector with a raised center median and left turn lanes at certain locations

Activities Performed: Responsible for the structural design of the multi-phased, 3-span, 240-footlong bridge; design effort included prestressed concrete beam design, abutment and interior bent cap designs, lateral capacity check for columns, drilled shaft foundation design, and calculated bridge geometry for bearing seat elevations and bridge quantities; methodically placed the phase construction joint in the bridge deck and substructure elements to provide sufficient area for traffic to be maintained on the bridge during construction while providing enough room for reinforcing bars to be lapped with subsequent phase reinforcing bars; allowing the contractor to splice bars instead of using expensive mechanical couplers not only decreased cost but increased efficiency in the field; design of cast-in-place spread footing walls on the project; utilizing TxDOT standard designs for cast-in-place spread footing walls coupled with the project's geotechnical design parameters and recommendations allowed Kelly to efficiently size the appropriate footing for each wall

**Project Relevance:** Bridges and culvert crossings; Central Texas project; compliance with TxDOT standards; County project; reconstruction of an existing roadway

# Yoakum District Narrow Bridge Replacements, FM 108 at Elm Creek Branch and FM 951 at North Fork Queens Creek, TxDOT, Gonzales and Dewitt Counties, Texas

Role: Structural Project Engineer and Engineer-of-Record

**Project Description:** Multi-phased construction bridge replacement on FM 108 and single-phased construction bridge replacement at FM 951

**Activities Performed:** Developed bridge span arrangement at both locations to meet conveyance requirement set forth by hydraulic analysis; determined phase construction joint for proposed FM 108 bridge to accommodate two-way traffic on existing bridge and provide ample construction space; performed prestressed concrete slab beam design, reinforced concrete designs for abutment and



# HO (CONT.)

interior bent caps, foundation design and calculated cap elevations for both bridges; oversaw implementation of design into structural detail sheets and calculated bridge pay item quantities

**Project Relevance:** Bridges and culvert crossings; hydraulic modeling; transportation improvement project

### CR 266 over Green Creek, TxDOT, Erath County, Texas

Role: Structural Project Engineer

**Project Description:** Single-phased replacement of a 97-foot-long by 16-foot concrete deck on steel beams structure with a 160-foot-long by 26-foot-wide prestressed Type TX 28 girder bridge; utilized TxDOT and Fort Worth District Standards, with modifications made for an 8.5-inch deck depth; bridge designed with AASHTO 2012 LRFD specifications; bridge utilized skewed abutments to match direction of flow in the creek and oriented to reduce hydraulic impact

**Activities Performed:** Preliminary engineering and development of bridge layout, prestressed concrete l-girder design, drilled shaft foundation design and estimated quantity calculations; coordinated all detailing tasks relating to the preparation of the bridge portion of the contract PS&E package

**Project Relevance:** Bridges and culvert crossings; hydraulic modeling; transportation improvement project

# SH 36 at Wolf Creek – Emergency Bridge Replacement, Washington County (TxDOT BRG DIV and Bryan District)

Role: PM and Bridge Design Task Leader

**Project Description:** Replacement of existing 7-span concrete slab and tee beam bridge due to sudden substructure and foundation capacity loss as a result of multiple concrete piles being damaged by debris during a major flooding event with a 3-span, prestressed concrete TX34 girder type bridge; project design from NTP to final PS&E submission took less than 4 months

Activities Performed: Match proposed NB bridge profile with existing SB bridge edge of deck profile and calculated the necessary bearing seat elevations; proposed bridge replacement provided fewer bents in the channel and mitigated major scour occurring at header slopes of the existing SB SH 36 Wolf Creek abutments immediately adjacent to the NB Wolf Creek bridge by reducing debris collection at the upstream side of the columns; worked with hydraulic team to recommend the removal of existing concrete riprap at both SB and NB Wolf Creek bridges and replace with stone protection riprap to facilitate flexible but robust embankment protection; coordinated with TxDOT BRG DIV and Bryan District to set up a project site and scoping meeting to identify the issues, locate potential utility conflicts, and define the scope of work; authored a Work Authorization contract stemming from the Master Bridge ID contract and developed a design fee in short order to facilitate an immediate project kickoff; coordinated with survey team and mobilized them at the on-set of the project to reduce design schedule delays; conferred with the BRG Geotechnical Branch and utilized borings previously used in the design of the existing SB and NB Wolf Creek Bridges for faster foundation design

**Project Relevance:** Bridges and culvert crossings; hydraulic modeling; transportation improvement project



# HO (CONT.)

### Yoakum District Off-System Bridge Replacement Projects, TxDOT Yoakum District

Role: Deputy Project Manager and Bridge Design Task Leader

**Project Description:** Five year contract to provide engineering services for the development of plans, specifications and estimates (PS&E) of 51 off-system bridge replacements within the 11 counties overseen by the TxDOT Yoakum District

Activities Performed: Designed 16 bridges and guided three bridge design subconsultants in the design of their assigned bridges; utilized various standard bridge types, such as prestressed slab beam and prestressed box beams, to provide a shallow superstructure depth to allow a minimal raise in roadway profile to mitigate ROW acquisition and/or temporary construction easements while providing sufficient opening for meets-or-exceeds hydraulic conditions; evaluated constructability at the bridge site including limitations for beam transport as a result of tight, short radius curves on county roads; served in a DPM role helping to manage and coordinate design tasks with various subconsultants providing roadway, hydraulic, bridge design as well as survey and geotechnical investigations; reviewed plans, construction timelines, and cost estimates to ensure quality and prepared various PS&E documents such as Form 1002, Stage Gate Checklist, and General Notes for every submittal milestone

**Project Relevance:** Bridges and culvert crossings; hydraulic modeling; transportation improvement project

### FM 3090 at Spring Creek and Holland Creek, TxDOT Bryan District, Grimes County, Texas

Role: Structural Project Engineer and Engineer-of-Record

**Project Description:** 3 single-phased bridge replacements using TX 28 girders; bridge span configurations included a single span, three-span and four-span arrangement; utilized TxDOT standards for superstructure and substructure design including additional shear key details between prestressed beams to mitigate lateral displacement from hydraulic storm event; provided header slope protection by specifying stone protection riprap and riprap toe wall

**Activities Performed:** Developing several different bridge configurations in order to provide the most cost-efficient structure in conjunction with the necessary hydraulic conveyance; bridge layout development, foundation design and estimated quantity calculations; coordinated all detailing tasks relating to the preparation of the bridge portion of the contract PS&E plans

**Project Relevance:** Bridges and culvert crossings; compliance with TxDOT standards; reconstruction of an existing roadway



22 YEARS OF EXPERIENCE

Bachelor of Science, Civil Engineering, University of Texas at San Antonio, 1995

### **License and Certifications**

Professional Engineer, Texas, #87851 Project Management Professional #1324181

TxDOT Precertification Sequence #6386

TxDOT Precertification Categories: 12.1.1, 12.1.2, 14.1.1, 14.2.1, 14.3.1, 14.4.1

Gabriel has more than 20 years work 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.

# **GABRIEL ORNELAS JR., PE**

GEOTECHNICAL LEAD

#### **RELEVANT PROJECTS**

CR 119 - Limmer Loop to Chandler Road, Williamson County, Texas

Role: Principal-in-Charge

**Project Description:** Proposed extension of CR 110/Ed Schmidt Boulevard from Limmer Loop to Chandler Road; 2 lanes of a future 4-lane roadway with shoulders and a traffic signal

**Activities Performed:** Conducted the geotechnical engineering study

**Project Relevance:** Williamson County project (owner); roadway planning project; roadway extension; local soils

### Sam Bass Road/Chisholm Trail, Round Rock, Texas

Role: Principal-in-Charge

**Project Description:** 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

**Activities Performed:** Construction materials testing and observation services

**Project Relevance:** Williamson County project (location); local soils

### San Gabriel Parkway Extension, Leander, Texas

Role: Principal-in-Charge

**Project Description:** 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-inch water line

Activities Performed: Geotechnical engineering study

Project Relevance: Williamson County project (location);
local soils

# Heritage Trail West Chisholm Trail, Round Rock, Texas

Role: Principal-in-Charge

**Project Description:** Realignment of Chisholm Trail Road along the segment of roadway extending from Brushy Creek to Sunset Drive



# **ORNELAS** (CONT.)

Activities Performed: Geotechnical engineering study – drilling borings along the existing Chisholm Trail Road performing laboratory testing to classify and characterize subsurface conditions, preparing an engineering report presenting foundation design and construction recommendations for the proposed realignment of Chisholm Trail Road, as well as providing pavement design and construction guidelines

Project Relevance: Williamson County project (location); local soils

### Peer Review of HR 79 Bodenman Tract, Round Rock, Texas

Role: Principal-in-Charge

**Project Description:** Study peer review for the HR 79 Bodenman Tract

Activities Performed: Reviewed subsurface conditions, engineering reports presenting foundation

design and construction recommendations

**Project Relevance:** Williamson County project (location); local soils

### Peer Review of Turtle Creek Village, Round Rock, Texas

Role: Principal-in-Charge

**Project Description:** Study peer review for the Turtle Creek Village construction

Activities Performed: Reviewed subsurface conditions, engineering reports presenting foundation

design and construction recommendations

Project Relevance: Williamson County project (location); local soils

### Roundville Lane Reconstruction, Round Rock, Texas

Role: Principal-in-Charge

Project Description: Geotechnical engineering study for the reconstruction of Roundville Lane

**Activities Performed:** 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

Project Relevance: Williamson County project (location); local soils

#### US 79 Widening Harrell Parkway, Round Rock, Texas

Role: Principal-in-Charge

Project Description: Geotechnical Engineering study for the US 79 Widening Harrell Parkway

**Activities Performed:** 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

Project Relevance: Williamson County project (location); local soils

### Heatherwilde Boulevard Improvements, Pflugerville, Texas

Role: Geotechnical Engineer



# **ORNELAS** (CONT.)

**Project Description:** Geotechnical engineering study for the Heatherwilde Boulevard Improvements

Activities Performed: Subsurface investigation and analysis

Project Relevance: Roadway improvement project; Central Texas project; local soils

### Water Oak Parkway Major Arterial Improvements, Georgetown, Texas

Role: Geotechnical Engineer

Project Description: Geotechnical engineering study for the Water Oak Parkway Major Arterial

**Improvements** 

**Activities Performed:** Subsurface investigation and analysis

Project Relevance: Williamson County project (location); roadway improvements; local soils

### Retaining Wall and Pavement Design for FM 110, Hays County, Texas

Role: Geotechnical Engineer

**Project Description:** Geotechnical engineering study for the Retaining Wall and Pavement Design for FM 110; project consists of the construction of a new roadway alignment to be located near its intersection with SH 123 and extending 0.25-mile west in Hays County

**Activities Performed:** Drilling soil borings in the vicinity of the proposed Mechanically Stabilized Embankment (MSE) walls; perform laboratory testing to classify and characterize subsurface conditions; prepare an engineering report presenting foundation design and construction recommendations; a Global Stability Analyses was performed

Project Relevance: Roadway improvement project; Central Texas project; local soils

### Cougar Avenue & Brushy Creek Road Rehabilitation, Cedar Park, Texas

Role: Geotechnical Engineer

**Project Description:** Geotechnical engineering study for the proposed roadway section of Brushy Creek Road and South Cougar Avenue located in Cedar Park, Texas.

**Activities Performed:** Drilling borings along the existing roadway, performing laboratory testing to classify and characterize subsurface conditions, preparing an engineering report presenting foundation design and construction recommendations for the roadway section, as well as providing pavement design and construction guidelines.

Project Relevance: Williamson County project (location); new location facility; local soils

### Hero Way-County Road 269 Extension, Leander, Texas

Role: Geotechnical Engineer

**Project Description:** Geotechnical engineering study for the Hero Way-County Road 269 Extension project in Leander, Texas.

**Activities Performed:** Drilling borings along the existing roadway, performing laboratory testing to classify and characterize subsurface conditions, preparing an engineering report presenting foundation design and construction recommendations for the roadway section, as well as providing pavement design and construction guidelines.

Project Relevance: Williamson County project (location); roadway improvements; local soils



17 YEARS OF EXPERIENCE

Bachelor of Science, Agricultural Engineering, Texas A&M University, 1999

#### **License and Certifications**

Professional Engineer, Texas, #111414

Yvonne's responsibilities include subsurface investigations and engineering analysis and consulting of the design and construction of foundations, pavements, and roadways. She has consulted on various foundation and pavement design recommendations for residential. commercial institutional, schools, industrial projects, as well as infrastructure. She is responsible for writing and reviewing geotechnical and construction reports, investigating and consulting on all issues related to geotechnical, foundation design, pavement/roadway and concrete construction. Additional duties include supervising the soils laboratory, managing budgets, managing backlog projections, marketing, preparing technical proposals, and mentoring and developing the engineering and technical staff.

# YVONNE GARCIA THOMAS, PE

GEOTECHNICAL ENGINEER

### **RELEVANT PROJECTS**

Heatherwilde Boulevard Improvements, Pflugerville, Texas

Role: Geotechnical Engineer

**Project Description:** Geotechnical engineering study for the Heatherwilde Boulevard Improvements

**Activities Performed:** Subsurface investigation and analysis **Project Relevance:** Roadway improvement project; Central Texas project; local soils

# Water Oak Parkway Major Arterial Improvements, Georgetown, Texas

Role: Geotechnical Engineer

**Project Description:** Geotechnical engineering study for the Water Oak Parkway Major Arterial Improvements

Activities Performed: Subsurface investigation and analysis Project Relevance: Williamson County project (location); roadway improvements; local soils

# Retaining Wall and Pavement Design for FM 110, Hays County, Texas

Role: Geotechnical Engineer

**Project Description:** Geotechnical engineering study for the Retaining Wall and Pavement Design for FM 110; project consists of the construction of a new roadway alignment to be located near its intersection with SH 123 and extending 0.25-mile west in Hays County

**Activities Performed:** Drilling soil borings in the vicinity of the proposed Mechanically Stabilized Embankment (MSE) walls; perform laboratory testing to classify and characterize subsurface conditions; prepare an engineering report presenting foundation design and construction recommendations; a Global Stability Analyses was performed

**Project Relevance:** Roadway improvement project; Central Texas project; local soils

# Cougar Avenue & Brushy Creek Road Rehabilitation, Cedar Park, Texas

Role: Geotechnical Engineer

**Project Description:** Geotechnical engineering study for the Retaining Wall and Pavement Design for FM 110; project



### GARCIA THOMAS (CONT.)

consists of the construction of a new roadway alignment to be located near its intersection with SH 123 and extending 0.25-mile west in Hays County

**Activities Performed:** Drilling soil borings in the vicinity of the proposed Mechanically Stabilized Embankment (MSE) walls; perform laboratory testing to classify and characterize subsurface conditions; prepare an engineering report presenting foundation design and construction recommendations; a Global Stability Analyses was performed

Project Relevance: Roadway improvement project; Central Texas project; local soils

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Role: Geotechnical Engineer

**Project Description:** Geotechnical engineering study for the Hero Way-County Road 269 Extension project in Leander, Texas.

**Activities Performed:** Drilling borings along the existing roadway, performing laboratory testing to classify and characterize subsurface conditions, preparing an engineering report presenting foundation design and construction recommendations for the roadway section, as well as providing pavement design and construction guidelines.

Project Relevance: Williamson County project (location); roadway improvements; local soils

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Role: Project Manager

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Role: Project Engineer

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Activities Performed: Construction materials testing and observation services

Project Relevance: Williamson County project (location); local soils

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Role: Project Engineer

**Project Description:** 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-inch water line

**Activities Performed:** Geotechnical engineering study



# GARCIA THOMAS (CONT.)

**Project Relevance:** Williamson County project (location); local soils

Heritage Trail West Chisholm Trail, Round Rock, Texas

Role: Project Engineer

**Project Description:** Realignment of Chisholm Trail Road along the segment of roadway extending

from Brushy Creek to Sunset Drive

Activities Performed: Geotechnical engineering study—drilling borings along the existing Chisholm Trail Road performing laboratory testing to classify and characterize subsurface conditions, preparing an engineering report presenting foundation design and construction recommendations for the proposed realignment of Chisholm Trail Road, as well as providing pavement design and construction guidelines

Project Relevance: Williamson County project (location); local soils

Peer Review of HR 79 Bodenman Tract, Round Rock, Texas

Role: Project Engineer

**Project Description:** Study peer review for the HR 79 Bodenman Tract

Activities Performed: Reviewed subsurface conditions, engineering reports presenting foundation

design and construction recommendations

Project Relevance: Williamson County project (location); local soils

Peer Review of Turtle Creek Village, Round Rock, Texas

Role: Project Engineer

**Project Description:** Study peer review for the Turtle Creek Village construction

Activities Performed: Reviewed subsurface conditions, engineering reports presenting foundation

design and construction recommendations

Project Relevance: Williamson County project (location); local soils

Roundville Lane Reconstruction, Round Rock, Texas

Role: Project Engineer

Project Description: Geotechnical engineering study for the reconstruction of Roundville Lane

**Activities Performed:** 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

**Project Relevance:** Williamson County project (location); local soils



**38 YEARS OF EXPERIENCE** 

# License and Certifications TxDOT Precertification Categories: 2.1.1, 2.4.1, 2.4.2, 2.5.1, 2.7.1, 2.13.1, 2.14.1

Stacey has over 38 years of transportation experience, including 29 years of specialization in environmental planning. She possesses extensive knowledge of the transportation development process and the state and federal laws, rules, and regulations governing that process. Stacey's expertise includes preparation of National Environmental Policy Act (NEPA) documents, environmental field investigations, agency coordination, public involvement, and environmental permitting and mitigation planning. She has prepared environmental impact statements (EISs), environmental assessments (EAs), categorical exclusions (CEs), EIS/EA reevaluations, Section 4(f)/6(f) evaluations and has successfully negotiated Section 404 permits, wetland mitigation plans and protection plans for threatened/ endangered species.

### STACEY BENNINGFIELD

**ENVIRONMENTAL LEAD** 

**RELEVANT PROJECTS**Corridor F/US 183 Feasibility Study,
Williamson County, Texas

Role: Environmental Task Lead

**Project Description:** This project is a pre-NEPA corridor preservation study. Upon completion, Williamson County will initiate at-risk right-of-way acquisition to preserve the effective, long-term use of the US 183 transportation corridor.

Activities Performed: Environmental constraints mapping and field investigations; preparation of resource-specific environmental "due diligence" technical reports; identification, development and evaluation of route options; traffic modeling and analysis; schematic development; and public outreach

Project Relevance: Access planning; Central Texas project; compliance with TxDOT standards; corridor Improvement project; County project; Edwards Aquifer Contribution Zone; environmental documents; evaluation of alternatives; familiarity with both GEC and County coordination and standards; infrastructure planning; meetings with public and property owners; reconstruction of an existing roadway; road bond financed; roadway expansion; stakeholder coordination; transportation improvement project; transportation planning; TxDOT coordination; Williamson County project (location)

US 190 Feasibility Study, Texas Department of Transportation and Killeen-Temple, Metropolitan Planning Organization, Bell County, Texas

Role: Deputy Project Manager

**Project Description:** Pre-NEPA corridor planning study to evaluate the feasibility of upgrading and possibly relocating a 20-mile segment of US 190 in eastern Bell County

Activities Performed: Environmental constraints mapping and field investigations, alternatives identification and evaluation, and extensive public involvement

**Project Relevance:** infrastructure planning; transportation improvement project; transportation planning



# BENNINGFIELD (CONT.)

### Fredericksburg Relief Route Study, TxDOT, Gillespie County, Texas

Role: Project Manager

Project Description: This project is a pre-NEPA planning study exploring the feasibility of constructing a US 290 relief route around the City of Fredericksburg in Gillespie County, Texas.

**Activities Performed:** Environmental constraints mapping; preparation of resource-specific environmental technical reports; identification, development and evaluation of route options; traffic modeling and analysis; schematic development; and extensive public outreach

**Project Relevance:** Access planning; Central Texas project; compliance with TxDOT standards; environmental documents; evaluation of alternatives; infrastructure planning; meetings with public and property owners; new location facility; stakeholder coordination; transportation improvement project; transportation planning; TxDOT coordination

### Kenney Fort Boulevard Segments 2 and 3, City of Round Rock, Texas

Role: Project Manager

**Project Description:** 1.5-mile extension of Kenney Fort Blvd between Forest Creek Drive and SH 45 North; off-system project was federally-funded; thus, all work was done in accordance with TxDOT standards and required TxDOT approvals/coordination

**Activities Performed:** Managed the schematic and PS&E development, public involvement and environmental studies for this new location, six-lane, divided arterial roadway

**Project Relevance:** Alternatives analysis & schematic (ready for PS&E stage); Central Texas project; Compliance with TxDOT standards; coordination w/CAMPO policies; coordination with Federal agencies; coordination with state agencies; County project; EA for transportation improvements; environmental documents; evaluation of alternatives; infrastructure planning; meetings with public and property owners; new location facility; stakeholder coordination; transportation improvement project; transportation planning; TxDOT coordination; Williamson County project (location)

### IH 35 at SH 29, TxDOT and Williamson County, Georgetown, Texas

Role: Environmental Task Lead

**Project Description:** Preparation of a Categorical Exclusion and Water Pollution Abatement Plan for the addition of a turnaround bridge on the IH 35 frontage road in Georgetown, Texas; working with TxDOT and Williamson County, environmental clearance was successfully expedited allowing this project to become the first project funded under TxDOT's Pass Through Financing Program to advance to construction.

**Activities Performed:** Managed the preparation of the environmental documentation, conducted the QA/QC review, and coordinated with TxDOT on behalf of the project sponsor, Williamson County

**Project Relevance:** Central Texas project; compliance with TxDOT standards; County project; environmental documents; infrastructure planning; transportation improvement project; transportation planning; Williamson County project (location)

Central Texas Turnpike Program, Texas Turnpike Authority, Williamson and Travis Counties, Texas Role: Environmental Program Manager



# BENNINGFIELD (CONT.)

**Project Description:** Four elements of \$3.5B CTTP: SH 130 (a 90-mile new location turnpike), 183A (new location turnpike); Loop 1 North Extension (new location tolled extension of MoPac); and SH 45 North (new location turnpike)

**Activities Performed:** Responsible for all aspects of environmental planning, public involvement, agency coordination and permitting; achieved records of decision on each individual element of the program, Stacey also negotiated and secured an Individual Section 404 permit (and mitigation plan) for SH 130 and managed the Section 7 consultations for SH 45 North and 183A

**Project Relevance:** Alternatives analysis & schematic (ready for PS&E stage); Central Texas project; compliance with TxDOT standards; contribution to an EIS; coordination with Federal agencies; coordination with local agencies; coordination with state agencies; Edwards Aquifer Contribution Zone; Edwards Aquifer Recharge Zone; environmental documents; environmental protection of karst features; evaluation of alternatives; infrastructure planning; meetings with public and property owners; new location facility; stakeholder coordination; transportation improvement project; transportation planning; TxDOT coordination; Williamson County project (location)

# 183 North Mobility Project, Central Texas Regional Mobility Authority, Travis and Williamson Counties, Texas

Role: Environmental Specialist

**Project Description:** This 13-mile long project added two express lanes in each direction, a fourth general purpose lane in areas where there are currently three, direct connectors at SH 45/RM 620 and MoPac, sidewalks, and shared use paths where feasible.

**Activities Performed:** Primary author of the environmental assessment for the 183 North Mobility project (RM 620/SH 45 North to Loop 1)

**Project Relevance:** Alternatives analysis & schematic (ready for PS&E stage); Central Texas project; Compliance with TxDOT standards; EA for transportation improvements; environmental protection of karst features; infrastructure planning; transportation improvement project; transportation planning

### Mobility35 Program, TxDOT, Williamson, Travis, and Hays Counties, Texas

Role: Environmental Program Manager

**Project Description:** Managed the development of the IH 35 Capital Area Improvement Plan and the \$4 billion program of projects outlined in that plan; responsible for all aspects of the project planning and development process including NEPA compliance

**Activities Performed:** Collectively, the projects identified in this award-winning plan, serve to address the mobility issues along and across a 65-mile section of IH 35. This community-driven, community-focused effort included more than 200 stakeholder meetings and numerous public meetings, open houses and virtual open houses.

**Project Relevance:** Central Texas project; compliance with TxDOT standards; coordination with local agencies; corridor Improvement project; corridor planning in an environmentally & politically sensitive area; infrastructure planning; reconstruction of an existing roadway; roadway expansion; transportation improvement project; transportation planning



# BENNINGFIELD (CONT.)

### US 290 East, Central Texas Regional Mobility Authority, Travis County, Texas

Role: Environmental Task Lead

**Project Description:** Managed the preparation of the environmental assessment, conducted the QA/QC review, and coordinated with TxDOT and the Federal Highway Administration on behalf of the project sponsor Central Texas Regional Mobility Authority

**Activities Performed:** Responsible for development of an environmental assessment for this toll project. Developed and pioneered the methodology now considered the standard in Texas for addressing the impacts of tolling on Environmental Justice (low income and minority) populations

**Project Relevance:** Central Texas project; compliance with TxDOT standards; EA for transportation improvements; environmental documents; evaluation of alternatives; infrastructure planning; meetings with public and property owners; reconstruction of an existing roadway; roadway expansion; stakeholder coordination; transportation improvement project; transportation planning; TxDOT coordination

### SH 45 Southeast, Texas Attorney General's Office, Travis County, Texas

Role: Expert Services Contractor

**Project Description:** Under an Expert Services contract to the Texas Attorney General's Office, led a study to assess indirect land use impacts resulting from SH 45 Southeast and authored a re-evaluation of the environmental impact statement (EIS); land use study included an evaluation of historic and projected growth in the project area, and extensive outreach to local officials and members of the development community; the re-evaluation of the EIS included a first-of-its-kind (in Texas) comprehensive/quantified assessment of indirect and cumulative environmental impacts owing this new location tollway.

**Activities Performed:** Led the outreach effort and met with stakeholders to collect data and identify planned land development in the study area

**Project Relevance:** Central Texas project; compliance with TxDOT standards; contribution to an EIS; coordination with local agencies; coordination with state agencies; environmental documents; evaluation of alternatives; infrastructure planning; meetings with public and property owners; new location facility; stakeholder coordination; transportation improvement project; transportation planning; TxDOT coordination



ZI TEARS OF EXPERIEN

Master of Science, Biology, Southwest Texas State University, 2001 Bachelor of Science, Geography, Texas A&M University, 1995

### **License and Certifications**

TxDOT Precertification Categories: 1.4.1, 1.8.1, 2.1.1, 2.3.1, 2.4.1, 2.4.2, 2.6.2, 2.13.1, 2.14.1

Darren is skilled in managing the NEPA process for transportation projects, including environmental field investigations, document preparation, agency coordination, public involvement and permitting. He has prepared Environmental Impact Statements (EIS), Environmental Assessments (EA), Categorical Exclusions, EIS/EA Reevaluations, and EA's for Texas Parks and Wildlife Recreational and Regional Grants, as well as Housing and Urban Development (HUD) funded projects. He has has completed the Wetland Training Institute's 40-hour 'Wetland Delineation' training and 36-hour 'Assessing Wetland Functions and Health' training.

### **DARREN DODSON**

WATERS/PERMITTING

### **RELEVANT PROJECTS**

Williamson County Karst Foundation, Williamson County, Texas

Role: Biologist

**Project Description:** The Williamson County Karst Foundation is a mitigation bank whose goal is to provide for conservation and eventual recovery of endangered, cave-dwelling invertebrates in the Williamson County area.

**Activities Performed:** Assisted in developing and maintaining the database, including location, landowner information, site characteristics and karst zonation, for all known Williamson County karst features

**Project Relevance:** Central Texas project; environmental protection of karst features; Williamson County project (owner)

# Tannehill Branch Environmental Assessment, City of Austin, Austin, Texas

Role: Biologist

**Project Description:** Municipal road project

**Activities Performed:** Conducting vegetation analysis and wetland determination; tree survey in compliance with Austin's Tree Protection Ordinance

**Project Relevance:** Central Texas project; environmental assessment for transportation improvements; performing a tree survey

### FM 1626 from Brodie Lane to FM 2304, Travis County Transportation and Natural Resources Department, Travis County, Texas

Role: Environmental Task Lead

**Project Description:** One-mile widening of FM 1626 from 2 lanes to 4 lanes; project also included the addition of sidewalks throughout the corridor to provide increased pedestrian mobility

**Activities Performed:** Oversaw the development of the Environmental Assessment and accompanying resource specific technical reports

**Project Relevance:** Central Texas project; environmental assessment for transportation improvements; transportation improvement project



# **DODSON** (CONT.)

### FM 2001 from IH 35 to SH 21, Hays County, Texas

Role: Environmental Task Lead

**Project Description:** 8.5-mile realignment of FM 2001 **Activities Performed:** Managed development of the EA

Project Relevance: Central Texas project; environmental assessment for transportation improve-

ments; transportation improvement project

### CR 351 at Donahoe Creek, Williamson County, Texas

Role: Project Manager

**Project Description: PCE** 

Activities Performed: Conducted the air quality analysis and habitat evaluation

Project Relevance: Central Texas project; environmental assessment for transportation improve-

ments; transportation improvement project

### US 183 Intersection, Williamson County, Texas

**Role:** Project Manager **Project Description:** PCE

Activities Performed: Conducted the air quality analysis and habitat evaluation

Project Relevance: Central Texas project; environmental assessment for transportation improve-

ments; transportation improvement project

### Drainage and Streetscape Improvement Project, City of San Marcos, Hays County, Texas

Role: Project Manager

**Project Description:** Proposed drainage improvements, including the construction of a water quality pond and outfall structure in the San Marcos River; the project also consisted of aesthetic improvements to sidewalks in the project area

**Activities Performed:** Performed a wetland delineation and preparing a Nationwide Permit Preconstruction Notification and Blanket Categorical Exclusion

**Project Relevance:** Central Texas project; drainage design; environmental assessment for transportation improvements; transportation improvement project

### Scott Street Extension | City of Houston, Harris County, Texas

Role: Senior Environmental Planner

**Project Description:** Expanding and extending Scott Street from Almeda Genoa Road to Orem Drive

Activities Performed: Prepared a natural resources assessment report (wetland delineations/T&E

assessment)

Project Relevance: Environmental assessment for transportation improvements; transportation im-

provement project



### **DODSON** (CONT.)

### Ellington Field Wetland Delineation, Houston, Texas

Role: Senior Environmental Planner

**Project Description:** Proposed improvements to Horsepen Bayou

Activities Performed: Performed a wetland delineation and prepared a Nationwide Permit

**Project Relevance:** Environmental assessment for transportation improvements; infrastructure planning

### Spring Creek Greenway Project-Taylor and St. John Tracts, Montgomery County, Texas

Role: Project Manager

**Project Description:** This site will serve as mitigation land for the Spring Creek Greenway Projects

In-Lieu Fee Mitigation Program (ILF-001)

Activities Performed: Prepared a Wetlands and Waters of the US Determination Report for an ap-

proximately 20-acre and an approximately 10-acre tract of land

**Project Relevance:** Infrastructure planning

### Montgomery County Precinct 2-Seven Coves Road Mitigation Site, Montgomery County, Texas

Role: Project Manager

Project Description: Approximate 15-acre tract of land to serve as mitigation land for the FM 830

project

Activities Performed: Prepared a Wetlands and Waters of the US Determination Report

Project Relevance: Environmental assessment for transportation improvements; infrastructure planning

### CR 187 West Mill Creek, TxDOT Houston District, Austin County, Texas

Role: Environmental Planner

**Project Description:** Proposed bridge replacement on CR 187 over West Mill Creek

Activities Performed: Provided wetland and waters of the US determinations and delineations

**Project Relevance:** Environmental assessment for transportation improvements

### **Environmental Assessment for FM 3535, Camp County, Texas**

Role: Environmental Planner

**Project Description:** Extension of FM 3535 from US 271 to FM 1520

Activities Performed: Environmental services, including wetland determinations/delineations

Project Relevance: Environmental assessment for transportation improvements; roadway extension

### **Environmental Assessment Update on US 84, Shelby County, Texas**

Role: Environmental Planner

Project Description: Replacement of the Sabine River Bridge and approaches located on US 84 in

Shelby County, Texas and DeSoto Parish, Louisiana

Activities Performed: Engineering services for the preparation of an Environmental Assessment

**Project Relevance:** Environmental assessment for transportation improvements



### 14 YEARS OF EXPERIENCE

#### **Education**

Master of Regional and City Planning, University of Oklahoma College of Architecture, 2013 Master of Arts, History and Culture Studies: Historic Preservation, Union Institute and University, 2011 Bachelor of Arts, Anthropology, University of Texas, 2006

# **License and Certifications** *TxDOT Precertification Categories:*

2.8.1, 2.11.1, 2.15.1, 2.15.2

Tori's technical expertise includes historic building surveys and documentation, property type identification and assessment to determine National Register eligibility, assessment of effect for Section 106 and NEPA compliance, National Register and HABS/HAER documentation, building condition assessments, rehabilitation and master plans, developing programmatic agreements and mitigation plans, and all components of Section 106 consultation process.

# **VICTORIA "TORI" RAINES**

ARCHITECTURAL HISTORIAN

### **RELEVANT PROJECTS**

RM 620 in Austin Historic Resources Tasks, TxDOT, Travis County, Texas

Role: Architectural Historian/Principal Investigator

**Project Description:** Reconstruct the existing 4-lane rural highway as a 6-lane urban facility

Activities Performed: Prepared project coordination request and research design prior to field survey; conducted field reconnaissance survey and produced Historic Resources Survey Report with the findings of the survey and recommendations regarding NRHP eligibility of historic resources; prepared individual resource forms for each resource

**Project Relevance:** Central Texas project; environmental assessment for transportation improvements; infrastructure planning; transportation planning

# US-75 at Preston Road, ODOT, Okmulgee County, Oklahoma

Role: Architectural Historian and Public Involvement

**Project Description:** Intersection improvement

Activities Performed: Coordinated with local officials to determine appropriate meeting location and time for public open house; conducted door-to-door campaign to address public concerns and extend invitations to open house; prepared presentation materials for open house; project is ongoing and historic resources documentation will be conducted

**Project Relevance:** Environmental assessment for transportation improvements; infrastructure planning; stakeholder coordination; transportation planning

# US 281 over Canadian River Bridge Rehabilitation, ODOT, Canadian County, Oklahoma

Role: Architectural Historian

**Project Description:** Rehabilitation of nationally significant bridge along historic Route 66

**Activities Performed:** Coordinated with local and national stakeholders to determine best course of action for the bridge and surrounding historic features; conducted desktop-level reconnaissance study and produced report with initial findings and high-level viewshed analysis of proposed alternatives and rehabilitation options



# RAINES (CONT.)

**Project Relevance:** Environmental assessment for transportation improvements; stakeholder coordination; transportation improvement project

### SH 66 Historic Preservation, ODOT, Lincoln County, Oklahoma

Role: Project Manager/Architectural Historian

**Project Description:** National Register of Historic Places eligibility assessments as Architectural Historian for multiple historic-age buildings along SH 66

**Activities Performed:** Prepared the Historic Preservation Resource Identification forms and made eligibility assessments

**Project Relevance:** Coordination with federal agencies; environmental assessment for transportation improvements; transportation improvement project

# SH 33 over Cottonwood Creek Mitigation Stipulation EC1420A Task Order 2, ODOT, Guthrie, Oklahoma

Role: Project Manager/Architectural Historian

**Project Description:** Preparation of removal of 11 properties listed in the NRHP by transportation project

**Activities Performed:** Prepared intensive documentation with high-quality digital photographs, context, and description of the properties; chain of title research on each building, Sanborn and other historic map investigation, and architectural description of each building

**Project Relevance:** Coordination with federal agencies; environmental assessment for transportation improvements; transportation improvement project



**8 YEARS OF EXPERIENCE** 

Master of Science, Community and Regional Planning, Historic Preservation Specialization, University of Texas at Austin, May 2017 Bachelor of Science, History, South Dakota State University, 2007 Bachelor of Science, Interior Design, South Dakota State University 2007

# **License and Certifications** *TxDOT Precertification Category: 2.15.1*

Leigh has assisted with historic resource surveys and written Socioeconomic Analysis reports as well as several Community Impact Assessment and historic **Project Coordination Request** technical reports. Leigh has experience in conducting research and site visits as well as preparing analyses for both social justice and cultural resource components of multiple projects. She has experience in conducting research and site visits as well as preparing analyses for both environmental justice and cultural resource components of multiple projects. Additionally, Leigh has worked on several indirect and cumulative impact reports.

### LEIGH RADERSCHADT

SOCIOECONOMIC STUDIES

### **RELEVANT PROJECTS**

North 16-mile Comprehensive Project, IH 35 at Parmer Lane, and IH 35 from SH 45N to Grand Avenue Parkway, TxDOT, Travis and Williamson Counties, Texas

Role: Environmental Professional

**Project Description:** Prepare Community Impact Assessment technical reports for the IH 35 corridor in Texas between Austin and Round Rock as well as separate reports for individual intersection projects

**Activities Performed:** Performed census data analysis, site visits, and created Land Use and Environmental Justice maps; conducted research of historic and eligible resources as well as created location maps to prepare historic Project Coordination Requests for the same projects

**Project Relevance:** Central Texas project; corridor improvement project; environmental assessment for transportation improvements; environmental documents; intersection improvements; transportation planning; Williamson County project (location)

### Economic Impact of Historic Preservation in Texas, University of Texas at Austin, Texas Historical Commission, Texas

Role: Environmental Professional

**Project Description:** Worked with UT and Rutgers faculty to create and analyze the financial impact that historic preservation and heritage tourism projects and programs have on the Texas economy

Activities Performed: Performed research and conducted phone interviews in order to write case studies highlighting various Texas Historical Commission (THC) programs including Federal Tax Credits, Texas Main Street Program, Texas Historic Courthouse Preservation, Texas Heritage Trails, THC State Historic Sites, and Museums

**Project Relevance:** Coordination with state agencies

### RM 620, TxDOT, Travis County, Texas

Role: Planner and Architectural Historian

**Project Description:** Reconstruct the existing 4-lane rural highway as a 6-lane urban facility

Activities Performed: Gathered and analyzed census, land use data, and planning documents - worked with multiple



# RADERSCHADT (CONT.)

agencies—and conducted site visit to assess community and regional impacts; completed a Community Impact Assessment and Indirect Impact analysis; as Architectural Historian, assisted with Cultural Resources Survey identifying and documenting resources

**Project Relevance:** Central Texas project; environmental assessment for transportation improvements; environmental documents; transportation planning

IH 35 in Cleveland County Reconnaissance Study, ODOT, Cleveland County, Oklahoma

Role: Planner

**Project Description:** Prepare GIS maps for EJ populations and land use for the Cities of Norman and Moore, Oklahoma

**Activities Performed:** Extracted US Census data and researched comprehensive plans; compiled transportation project information from multiple transportation plans, trail maps, and city plans for inclusion in final recon report

Project Relevance: Environmental documents; transportation planning



### 9 YEARS OF EXPERIENCE

#### **Education**

Certificate, Geographic Information Systems (GIS), Austin Community College, 2012 Bachelor of Arts, International Studies,

Bachelor of Arts, International Studies, Texas State University at San Marcos, 2010

License and Certifications
TxDOT Precertification Categories:
2.1.1, 2.2.1

Angela has six years of project experience in traffic noise modeling and air quality analysis for roadway projects. She is very familiar with the best practices and technical nuances of traffic noise modeling using the Federal Highway Administration's (FHWA) TNM 2.5 software. She utilizes her GIS expertise to streamline this modeling process. Angela has also conducted numerous quantitative air quality analyses, including both mobile source air toxics (MSAT) and carbon monoxide (CO) analysis, and additionally holds a strong understanding of air quality requirements in terms of project conformity and congestion management process. She is experienced with performing traffic noise and air quality analyses for a variety of roadway project types.

### ANGELA GILLMEISTER

NOISE AND AIR STUDIES

### **RELEVANT PROJECTS**

On-Call Traffic Noise Modeling and Air Quality Reviewer, TxDOT Environmental Affairs Division, Texas

Role: On-call traffic noise modeler

**Project Description:** Providing support to various TxDOT Districts across the state in conducting traffic noise analyses; simultaneously serves as the contract on-call Air Quality Reviewer, and reliably supports this division by performing reviews of air quality models and documents from across the state; to date, she has completed close to 100 air quality reviews for TxDOT

**Activities Performed:** From large highway systems to small county roads, she has performed dozens of noise analyses with varying scope and results

**Project Relevance:** Environmental documents; infrastructure planning; transportation improvement project; transportation planning

183 North Mobility Project, EA, Central Texas Regional Mobility Authority/TxDOT Austin District, Williamson and Travis Counties, Texas

Role: GIS Lead

**Project Description:** Environmental Assessment for a project to construct improvements to US 183 between the RM 620/SH 45 North interchange and MoPac; traffic noise analysis resulted in multiple noise impacts, but no proposed abatement measures were determined to be feasible and reasonable in the corridor; both the CO and MSAT quantitative analyses concluded that no air quality impacts were to be expected

Activities Performed: Gathered, created, and maintained all project-level GIS data and created figures for tech reports and public meetings; manipulated roadway design files and LiDAR in GIS to create the geometry and elevation input for the Traffic Noise Model (TNM 2.5) and conducted the noise analysis; using CALINE3 and GIS, completed the CO analysis and calculated the MSAT emissions based on the modeled traffic volumes

**Project Relevance:** Central Texas project; environmental documents; infrastructure planning; transportation improvement project; transportation planning; Williamson County project (location)



# GILLMEISTER (CONT.)

### Brushy Creek MUD GIS Support Services, Brushy Creek MUD, Texas

Role: On-call GIS support services

Project Description: Supports the Brushy Creek Municipal District (BCMUD) with on-call GIS support

services

**Activities Performed:** Implementation of ArcGIS Online for the organization and the development of web applications to assist with internal asset management and the coordination of assets with land developers and proposed infrastructure projects

**Project Relevance:** Environmental documents; infrastructure planning; transportation improvement project; transportation planning

# IH 45 North Houston Highway Improvement Project, DEIS, TxDOT Houston District, Harris County, Texas

Role: GIS Analyst

**Project Description:** Historical studies survey to identify NRHP-eligible resources that would potentially be impacted by any of the project alternatives of the project

**Activities Performed:** Maintained and created the multiple iterations of GIS files of proposed ROW for each segment and alternative and worked with the architectural historians to collect and manage field-identified resources by using ArcGIS Online; performed a proximity analysis to determine those resources that would be potentially affected by the alternatives, and ultimately created a map book showing all identified resources in comparison to each segment and alternative

**Project Relevance:** Environmental documents; infrastructure planning; transportation improvement project; transportation planning

# US 281 over South Canadian River, Viewshed Analysis and Reconnaissance Study, Oklahoma Department of Transportation, Canadian, Caddo, and Blaine Counties, Oklahoma

Role: GIS Analyst

**Project Description:** Environmental study of three alternatives to bypass the existing US 281 over the South Canadian River, a historic portion of Route 66

**Activities Performed:** Conducted a GIS viewshed analysis for the project to determine the visibility of the alignment alternatives from the historic Bridgeport Bridge. She also gathered and created all GIS data necessary for a comprehensive map detailing the environmental constraints within the project study area for the reconnaissance study

**Project Relevance:** Environmental documents; infrastructure planning; transportation improvement project; transportation planning

# US 290 Reevaluation, Traffic Noise Analysis, TxDOT Houston District, Harris County, Texas

Role: GIS Analyst

**Project Description:** An interim design change of the US 290 project triggered the need for a reevaluation of the previous noise analysis

Activities Performed: Researched updated land use areas and manipulated all design files in GIS to create the geometry input for the Traffic Noise Model (TNM 2.5); input the elevation, traffic, and



# GILLMEISTER (CONT.)

other parameters to conduct the noise analysis and propose noise barriers for abatement at affected locations of the project

**Project Relevance:** Environmental documents; infrastructure planning; transportation improvement project; transportation planning

### SH 45SW, State EIS, TxDOT Austin District, Travis and Hays Counties, Texas

Role: GIS Analyst

**Project Description:** New location project to construct a 4-lane divided toll road from MoPac to FM 1626 in Travis and Hays Counties

**Activities Performed:** Mapping support and technical preparation of the FEIS for this state and locally funded project

**Project Relevance:** Central Texas project; environmental documents; infrastructure planning; transportation improvement project; transportation planning

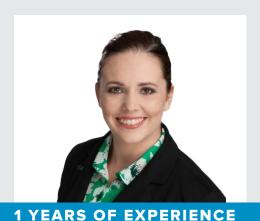
### **ODOT Archeological GIS Database, ODOT Department of Transportation**

Role: Lead GIS Analyst

**Project Description:** Paper to digital conversion for all statewide archeological sites located within ODOT's right-of-way; hard copy paper maps are georeferenced into ArcGIS and the site boundary is captured in a shapefile and joined with the data from a digital site form to create a comprehensive archeological sites GIS layer; this layer can be used to identify recorded archeological sites for future projects

Activities Performed: Managing the timeline of completion and QA/QC of the data

**Project Relevance:** Environmental documents; infrastructure planning; transportation improvement project; transportation planning



Master of Science, Biology, Texas State University, 2017 Bachelor of Science, Botany, Systematics and Ecology, Boise State University, 2014

Chelsea is an environmental specialist with one year of professional experience. She has experience with various environmental tasks including Phase I Environmental Site Assessments, **Environmental Information** Documents, and Biological Evaluations. She has supported a wide range of project types from water and wastewater to roadway projects.

### CHELSEA MILLER

HAZARDOUS MATERIALS

### **RELEVANT PROJECTS**

**BPC Basin Planning Project, SAWS, Bexar County, Texas** 

**Role:** Environmental Specialist

**Project Description:** Basin planning consulting for the east,

west and central basins

**Activities Performed:** Coordination with archeological subconsultant, performing hazardous materials assessments. including Phase I ESAs, wetland delineations, threatened and endangered species assessments, and supporting karst zone impact assessments

Project Relevance: Central Texas project; environmental documents; infrastructure planning

**Martinez IV Wastewater Treatment Plant, Collection** Line, and Lift Station, SARA, Bexar County, Texas

Role: Environmental Specialist

**Project Description:** Proposed wastewater treatment plant, collection line, and lift station project; construction was partially funded through the use of TWDB grant funds

Activities Performed: Prepared the Environmental Information Document (EID), which included developing a project description, alternative analysis, purpose/need, socioeconomic analysis, hazardous material risk analysis, biological, and water resources impacts; supported coordination and public outreach/involvement efforts for the project

Project Relevance: Central Texas project; environmental documents; infrastructure planning; stakeholder coordination

Blanco Road (West Oak Estates Drive to Borgfeld Drive), Alamo RMA, Bexar County, Texas

Role: Environmental Specialist

**Project Description:** Construction of a proposed 3.6-mile widening of Blanco Road from 2 to 4 lanes, including a raised median and sidewalks

Activities Performed: Prepared the Biological Evaluation and Tier I Assessment, Water Resources Technical Report, Hazardous Materials ISA, Air Quality Technical Report, and Traffic Noise Technical Reports; assisted and prepared public outreach and involvement materials for the project including a public meeting



## MILLER (CONT.)

**Project Relevance:** Central Texas project; environmental documents; infrastructure planning; stake-holder coordination; transportation improvement project; transportation planning

#### Salitrillo Wastewater Treatment Plant Expansion, SARA, Bexar County, Texas

Role: Environmental Specialist

**Project Description:** Proposed wastewater treatment plant expansion; construction was partially funded through the use of TWDB grant funds

**Activities Performed:** Performed field work for and prepared the Environmental Information Document (EID), which included developing a project description, alternative analysis, purpose/need, socioeconomic analysis, hazardous material risk analysis, biological, and water resources impacts; supported coordination and public outreach/involvement efforts for the project

**Project Relevance:** Central Texas project; environmental documents; infrastructure planning; stake-holder coordination



**40 YEARS OF EXPERIENCE** 

#### **License and Certifications**

Registered Professional Land Surveyor

— Texas #5004

40 hour HAZWOPER 29CFR 1910.120

Certified

TxDOT Precertification Categories:

15.1.1, 15.2.1, 15.2.2, 15.3.5

Dan has been surveying for 40 years, from field work to surveying management. He coordinates projects to meet client needs and delivers accurate results on time and within budget. Dan has completed an array of projects including roadways, alignments, topography, property boundaries, easements, design, and construction staking and is proficient in all aspects of survey procedures.

With his experience as a crew chief, technician, and survey intern, Dan uses his expertise to provide accurate deliverables on every project. His utilization of survey technologies including the latest GPS equipment, digital leveling, electronic theodolites, and data collectors enables him to produce a professional and cost-effective product.

## **DAN FLAHERTY, RPLS**

SURVEY

#### **RELEVANT PROJECTS**

Talley Road II, Wiseman Blvd to Tamaron Pass, Bexar County Public Works Department, San Antonio, Texas

Role: Project Surveyor

**Project Description:** Detailed 3D topographic design survey of the 2.1-mile-long continuation of Talley I; Primary control was used from Talley I to establish control for this segment; secondary control was established as needed; a benchmark system was established within the project limits with differential level lines utilized to establish the elevation of each benchmark

Activities Performed: Topographic data collected included edge of pavement, curbs, gutters, culverts, driveways, visible utilities, drainage features, trees 6-inches or larger, and any other visible improvements within the defined area; creek cross-sections were also obtained at specified locations; right-of-way (ROW) determination survey was performed to obtain all deeds and plats along the proposed project, locate existing property corners and determine the existing boundary or ROW lines

**Project Relevance:** Access planning; Central Texas project; infrastructure planning; new location facility; performing a tree survey; roadway extension; ROW determination; transportation planning

## Brushy Creek Regional Utility Authority, Cedar Park, Texas

Role: Project Manager

**Project Description:** Detailed boundary, topographic and tree survey of the proposed 39.255-acre water treatment plant site

Activities Performed: Platting the site as well as easement parcel descriptions and exhibits for this project; established horizontal and vertical control points on State Plane Coordinate System based on multiple City of Cedar Park monuments utilizing our GPS equipment

**Project Relevance:** Central Texas project; infrastructure planning; Williamson County project (location)



## FLAHERTY (CONT.)

### City of Round Rock Wastewater Collection System Rehabilitation, Round Rock, Texas

Role: Survey Project Manager

**Project Description:** Horizontal & vertical surveying of 25,500 linear feet of wastewater lines and 187 repair points in 14 different basins

**Activities Performed:** Preparing and staking five easement parcels for acquisition; projects were performed using GPS equipment and total stations with data collectors; horizontal and vertical datum was geo-referenced and projected to City of Round Rock datum

**Project Relevance:** Central Texas project; infrastructure planning; Williamson County project (location)

## Anderson Mill Road Improvements (Cypress Creek to Zeppelin Drive and Lime Creek Road to FM 1431), City of Cedar Park, Texas

Role: Surveyor

**Project Description:** Detailed 3D topographic surveys for over 3 miles along Anderson Mill Road; data collected included curbs, gutters, culverts, driveways, portions of parking areas, visible utilities, drainage features, striping, trees 6-inches or larger, and any other visible improvements within the defined area; a 1-foot contour interval Digital Terrain Model (DTM) was generated; deliverables included a Microstation 2D, 3D, TIN, DAT, and ASCII point file; right-of-way (ROW) determination survey was performed to obtain all deeds and plats along the proposed project, locate existing property corners and determine the existing boundaries or ROW lines

**Activities Performed:** Utilized the City of Cedar Park primary control monuments in the immediate vicinity of the project for the design and right-of-way survey; secondary control was established as necessary; a benchmark system was established within the project limits with differential level lines utilized to establish the elevation of each benchmark

**Project Relevance:** Access planning; Central Texas project; infrastructure planning; performing a tree survey; ROW determination; transportation planning; Williamson County project (location)

## ABIA Drainage Easement (6001.103), Austin, Texas

Role: Survey Project Manager

**Project Description:** Drainage easement

**Activities Performed:** Data research, topographic survey with 100-foot intervals and grade breaks, locate all hardwood trees 8-inches in diameter or greater, and provide two drainage easement exhibits and legal descriptions for determined alignment

**Project Relevance:** Central Texas project; infrastructure planning; performing a tree survey; ROW determination; transportation planning; Williamson County project (location)

#### **Veterans Park, City of Austin, Texas**

Role: Survey Project Manager

**Project Description:** Partial boundary, topographic, and tree survey at 2200 Veterans Drive; partial boundary verification was based on the limits of the survey provided by PARD which contained approximately 2.0 acres; tasks included reviewing and plotting pertinent ownership, right-of-way and easement information, and a topographic survey of the project site with 1-foot contours; survey included driveways, fences, signs, flow lines and visible utilities on the subject tract and along its



## FLAHERTY (CONT.)

perimeter; trees were also located per City of Austin standards

**Activities Performed:** Oversaw field crews, coordinated with consultants, and provided quality control services for the deliverables

**Project Relevance:** Central Texas project; infrastructure planning; performing a tree survey; ROW determination

## **Colony District Park, City of Austin, Texas**

Role: Project Manager

**Project Description:** Topographic and tree survey of the existing open park land known as Colony District Park; survey included elevations across the site adequate to develop 1-foot contours and to identify changes in grade; included driveways, fences, signs, flow lines, buildings, and visibility utilities; hardwood trees having a main truck of 4-inch diameter were located, tagged, and identified per City of Austin standards; mesquite and juniper were identified only if larger than 8 inches in diameter

**Activities Performed:** Oversaw field crews, coordinated with consultants, topographic and tree survey, and provided quality control services for the deliverables

**Project Relevance:** Central Texas project; infrastructure planning; performing a tree survey; ROW determination

## Chisholm Trail Road Improvement Project from Wolle Lane to IH 35 Southbound Frontage Road, City of Round Rock, Texas

Role: Survey Project Manager

**Project Description:** Right-of-way (ROW) survey, cross-sections, and detailed topographic survey of Chisholm Trail Road for approximately 3,800 LF

**Activities Performed:** Completed the preparation of parcel descriptions and exhibits for two ROW acquisition tracts and two utility easements, and the establishment of horizontal and vertical control points on State Plane Coordinate System based on City of Round Rock monuments utilizing GPS and conventional equipment

**Project Relevance:** Central Texas project; infrastructure planning; ROW determination; transportation improvement project; Williamson County project (location)

## Gattis School Road Turn Lanes Project from 200 feet east of Via Sonoma to 2600 feet west of Via Sonoma, City of Round Rock, Texas

Role: Survey Project Manager

**Project Description:** Right-of-way survey, cross-sections and detailed topographic survey of Gattis School Road for approximately 2,800 LF

**Activities Performed:** Established horizontal and vertical control points on State Plane Coordinate System based on City of Round Rock monuments utilizing GPS and conventional equipment

**Project Relevance:** Central Texas project; ROW determination; transportation improvement project; Williamson County project (location)



## FLAHERTY (CONT.)

### Thorpe Lane Intersections Improvements, City of San Marcos, Texas

Role: Survey Project Manager

**Project Description:** Right-of-way survey, cross-sections, detailed topographic survey and SUE of Thorpe Lane Intersections Improvements located at RM 12, Robbie Lane, and Springtown Way; right-of-way parcels for acquisition, driveway easements and construction easements were prepared, and Level B SUE services were provided

**Activities Performed:** Established horizontal and vertical control points utilizing GPS and conventional equipment

**Project Relevance:** Central Texas project; ROW determination; transportation improvement project; Williamson County project (location)



## **5 YEARS OF EXPERIENCE**

#### **License and Certifications**

Registered Professional Land Surveyor

– Texas #5589
TxDOT Precertification Categories:
15.1.1, 15.2.1, 15.2.2, 15.3.35

With 25 years of experience, Margie is well versed in all aspects of land surveying. Margaret communicates effectively with clients, subconsultants, and team members to ensure project goals are realized. She is highly skilled in cost estimating prospective projects, and monitors those budgets through the course of a project.

Margie has experience as a crew chief, survey technician, survey intern, and survey manager, and is knowledgeable of survey workflow, from field data collection and processing data to producing accurate design topographic and land title surveys.

## MARGARET "MARGIE" NOLEN, RPLS

RIGHT-OF-WAY ENGINEER

#### **RELEVANT PROJECTS**

Vista Ridge Regional Water Supply Project, Central Texas *Role:* Survey Manager

**Project Description:** Survey along a corridor crossing numerous parcels of land performing boundary surveys to establish a Private Utility Easement along with a Temporary Construction Easement (TCE), plus 4 Land Title Surveys; all work performed was coordinated with State, Local, and County officials and each private landowner with respect to their individual concerns

Activities Performed: Verification of GPS Control and Aerial Ground Control Points crossing 3 counties (Lee, Bastrop, and Caldwell); researched current vesting deed on each parcel in coordination with an Abstractor and Title Firm; all existing easements were reviewed to determine if they affected the subject tract; topographic surveys performed in heavily wooded areas, creeks, highway crossings and 300-foot-wide area crossing the Colorado River in accordance with Texas General Land Office (GLO) standards

**Project Relevance:** Central Texas project; infrastructure planning; meetings with public and property holders; ROW determination

## Williamson County/City of Cedar Park, Texas Lakeline Boulevard Extension, Cedar Park, Texas

Role: Survey Project Manager

**Project Description:** Topographic and tree survey for the approximate 3-mile extension of Lakeline Boulevard from Crystal Falls Parkway to RM 2243 in Williamson County

**Activities Performed:** Provided metes and bounds descriptions with sketches for right-of-way acquisition of the new right-of-way

**Project Relevance:** Central Texas project; infrastructure planning; performing a tree survey; roadway extension; Williamson County project (location)

City of Cedar Park, Texas GPS Control, Cedar Park, Texas

Role: Survey Project Manager

**Project Description:** Establishing 30 horizontal and vertical control points for the City of Cedar Park



## **NOLEN** (CONT.)

**Activities Performed:** Processed the field data utilizing Trimble Geomatics Office and StarNet adjustment program to compute Texas State Plane Central coordinates of all of the newly established control points

Project Relevance: Central Texas project; infrastructure planning; Williamson County project (location)

## Sanborn Mapping Services, Texas GPS Control, Central Texas

Role: Survey Project Manager

**Project Description:** GPS-derived aerial ground control for CAPCOG orthophoto and LIDAR aerial projects throughout Central Texas

Activities Performed: Control points were observed in the field using four field crews operating Trimble 4000ssi GPS receivers; field crews prepared GPS occupation sheets and sketches for each survey control point; post-processing and final adjustments were performed using Trimble Geomatics Office and StarNet software; ArcMap was used to manage the NGS control data sheets, panel configuration, photo ID images, and field logistics through the production of GIS navigational and panel placement map products, all of which were an integral part of defining and locating the survey control points; final survey report included GPS session planning worksheets, GPS occupation sheets and sketches, GPS loop closures, NGS data sheets, adjustment reports and final coordinate values

**Project Relevance:** Central Texas project; infrastructure planning submitted a Pre-Construction Notification to the Army Corps of Engineers, which was then accepted with no comments;



**5 YEARS OF EXPERIENCE** 

#### **Education**

Master of Science, Forest Economics, Stephen F. Austin State University Bachelor of Science, Forest Wildlife Management, Stephen F. Austin State University

# License and Certifications TxDOT Precertification Categories: 2.3.1, 2.3.2, 2.4.1, 2.4.2, 2.6.2

Melissa has five years of experience in the environmental field. She has experience collecting remote biological data, with an emphasis on wildlife and habitat assessment in Texas forests and the Intermountain West cold desert regions. She has prepared wetland delineation reports, biological evaluations, and helped clients maintain regulatory compliance with federal agencies. Melissa has also prepared documentation for various projects including Phase I Environmental Site Assessments (ESA), hazardous materials technical reports, habitat assessments, jurisdictional determinations, wetland delineations, and USACE 404 Permits.

## **MELISSA CROSS**

**BIOLOGIST** 

#### **RELEVANT PROJECTS**

Corridor F/US 183 Hazardous Materials Existing Conditions Report, Williamson County, Texas

Role: Biologist

**Project Description:** The project involved evaluating the hazardous material existing conditions, and included a site reconnaissance

**Activities Performed:** A Hazardous Materials Technical Report was produced for the County to summarize all potentially impactful hazardous conditions along the 13-mile corridor

**Project Relevance:** Central Texas project; County project; environmental assessment for transportation improvements; environmental documents; transportation planning; Williamson County project (owner)

## Kenney Fort Boulevard Hazardous Materials and Biological Assessment, City of Round Rock, Williamson County, Texas

Role: Biologist

**Project Description:** The project involved field reconnaissance to evaluate potential hazardous materials, jurisdictional water determinations, and species habitat determinations; technical reports were produced for water resources, threatened and endangered species (T&E), species habitat, and hazardous materials

**Activities Performed:** Responsible for the preparation of biological and hazardous materials technical documents

**Project Relevance:** Central Texas project; environmental assessment for transportation improvements; environmental documents; transportation planning; Williamson County project (location)

## FM 2854 Delineation and Biological Assessment, TxDOT Houston District, Montgomery County, Texas

Role: Biologist

**Project Description:** Evaluating the impacts of a redesigned right-of-way including jurisdictional waters determinations and biological assessments

**Activities Performed:** Successfully prepared and submitted a Pre-Construction Notification to the Army Corps of Engineers, which was then accepted with no comments;



## CROSS (CONT.)

project involved the preparation of biological reports and BEF/TIER I forms which were also approved

**Project Relevance:** Coordination with federal agencies; environmental assessment for transportation improvements; infrastructure planning; transportation planning

SH 205 from US 80 to SH 78 Biological Assessment, Rockwall and Terrell Counties, Texas

Role: Biologist

**Project Description:** Prepare biological documents for environmental clearance of project

Activities Performed: Background investigations and field reconnaissance, and assisting with com-

munity impacts data collection

Project Relevance: Environmental assessment for transportation improvements; infrastructure plan-

ning; transportation planning



## 15 YEARS OF EXPERIENCE

#### **Education**

Master of Science, Civil Engineering — Transportation Engineering, Purdue University, 2005 Master of Science, Civil Engineering

Construction Materials, Purdue
 University, 2004

### **License and Certifications**

Professional Engineer — Texas, #130967 +4 additional states Professional Traffic Operations Engineer TxDOT Precertification Sequence #23336 TxDOT Precertification Categories: 7.1.1, 7.3.1, 8.6.1

Hardik is a well-rounded expert in the area of traffic/transportation engineering, an outside-the-box thinker for innovative and value engineering solutions with 15 years of professional experience in the industry. Hardik has worked on over 150 transportation projects providing his technical expertise for transportation projects across the country.

## HARDIK SHAH, PE, PTOE

TRAFFIC STUDIES

#### **RELEVANT PROJECTS**

Michigan Boulevard, Michigan City, Indiana

**Role:** Traffic Engineer

**Project Description:** Rehabilitation and widening of existing roadway including drainage improvements

**Activities Performed:** Developed maintenance-of-traffic plan that accommodated regional train traffic and kept roadway open during construction

**Project Relevance:** Widening of existing roadway; roadway with rail crossing

## Veterans Memorial Parkway, Lafayette, Indiana

**Role:** Traffic Engineer

**Project Description:** Widen 1.7 miles of the corridor, from 2 lanes to 4 lanes; add left-turn lanes at major intersections; add a 10-foot-wide multi-use pedestrian and bicycle path; add street and path lighting to the corridor

**Activities Performed:** Analysis of roadway/rail interaction **Project Relevance:** Widening of existing roadway; roadway with rail crossing

## Ohio River Bridges East End Crossing P3 Design-Build, Utica, Indiana

**Role:** Traffic Engineer

**Project Description:** Complex bridge and roadway system that includes one multi-lane roundabout located adjacent to an at-grade railroad crossing. To ensure motorist safety and maintain some level of mobility during "gate down" events, Hardik and members of American Structurepoint team developed a unique design for the roundabout and associated traffic control devices to preempt traffic flow across the track as a train approaches. This innovative method of controlling traffic is the first of its kind in the US.

Activities Performed: Traffic operations analysis; a transportation management plan for construction; complex interchange analysis; signal preemption; ramp metering signal design; value engineering that resulted in approximately \$10 million in cost savings on the project

**Project Relevance:** Roadway with rail crossing



## **SHAH** (CONT.)

### Ronald Reagan Parkway from I-74 to I-65, Brownsburg, Indiana

Role: Traffic Engineer

**Project Description:** New 9.8-mile roadway including railroad crossing, five bridge/culvert structures,

and several at-grade intersections

**Activities Performed:** Analysis of roadway/rail interaction

**Project Relevance:** Roadway with rail crossing preliminary cost estimate; intersection improvements

## Park East Access Study, Lafayette, Indiana

Role: Traffic Engineer

Project Description: Study to provide access to future development surrounding Park East Boulevard

Activities Performed: Developed conceptual thoroughfare plan for the area and an interchange fea-

sibility study at I-65 & McCarty.

Project Relevance: Corridor study; access planning

#### East Access Road, Westfield, Indiana

Role: Traffic Engineer

**Project Description:** Construction plans for a new 3-lane roadway alignment from Greyhound Pass to a new 2-lane roundabout at 151st Street. Includes a multi-use path, curb and gutter, storm sewer, asphalt pavement, roundabout landscaping, modular block retaining wall, and resurfacing along 151st Street.

**Activities Performed:** Developed traffic control phasing to maintain traffic, provide truck access to businesses, and utility relocation at 151st Street.

Project Relevance: New location; traffic control; intersection improvements

#### SR 37 Corridor Improvements, Fishers, Indiana

Role: Lead Traffic Engineer

**Project Description:** Design and engineering services to convert SR 37 from signalized intersections to a separated-grade facility. Traffic signals will be removed and replaced with roundabout interchanges. The roundabout interchanges will include sidewalks and crosswalks to allow for pedestrian and bicyclist traffic. SR 37 will be depressed to allow the local cross streets to remain near existing grade.

**Activities Performed:** Led and managed all traffic engineering tasks; facilitated coordination between multiple local municipalities, county government and state DOT

**Project Relevance:** Intersection improvements; complete streets

#### **Keystone Parkway Corridor, Carmel, Indiana**

Role: Lead Traffic Engineer

**Project Description:** Fast-track design of a 4-lane expressway, including grade-separated, full-access, roundabout interchanges at six existing intersections. Planning portion of the project evaluated the feasibility of lowering portions of existing Keystone Avenue and determined the effects the project would have on adjacent properties. Evaluated the use of modern roundabouts in various



## SHAH (CONT.)

configurations for the interchanges in lieu of tight diamonds or single-point interchanges. Conducted a corridor operations analysis for this corridor. Traffic counts were conducted at each of the study intersections, and 48-hour pneumatic tube counts were performed on the project links to aid in the development of a traffic-forecasting model for the entire corridor. Traffic volume matrix developed for the entire corridor were used as the basis to come up with appropriate capacity recommendations for all the roundabout interchanges. A traffic simulation model was prepared for the entire corridor for public outreach and getting the community familiarized with the unique plan prior to construction. American Structurepoint integrated the traffic simulations into 3D renderings, developing a realistic video to show to the public and to illustrate how well the new interchanges would look, blend into their surroundings, and operate once installed physically. A unique maintenance-of-traffic plan utilizing partially completed ramp systems and a large temporary retaining wall helped keep four lanes of Keystone Avenue open to traffic throughout the entire construction despite having excavations in excess of 20 feet.

**Activities Performed:** Corridor traffic modeling including traffic data collection, traffic forecasting, and preparation of traffic simulation model

**Project Relevance:** Roadway planning; roadway design; intersection improvements; corridor improvements; suburban location

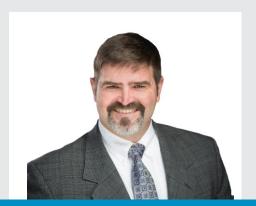
## Hunt Road and Plainfield Road Safety Study/Roundabout Design, Blue Ash, Ohio

**Role:** Traffic Engineer

**Project Description:** Studies to identify and evaluate potential countermeasures on corridor plagued by congestion and safety issues; crash evaluations, benefit/cost analysis, traffic operations, RSA, interchange operations study; alternatives analysis report identifying the preferred alternative for implementing the recommendations of the safety and traffic studies; assistance obtaining federal funding

**Activities Performed:** Traffic study of corridor; safety study which included a road safety audit; lead for alternatives analysis report

**Project Relevance:** Roadway planning; roadway design; innovative intersection design; upgrades to existing roadway



**27 YEARS OF EXPERIENCE** 

#### **Education**

Master of Engineering, Civil/Water Resources, Texas A&M, 2000 Bachelor of Science, Agricultural/ Environmental Engineering, Texas A&M, 1993

#### **License and Certifications**

Professional Engineer, Texas, #89243 + North Carolina Certified Floodplain Manager #3805-19N (Texas) TxDOT Precertification Categories:

2.5.1, 4.1.1, 4.2.1, 8.5.1, 10.1.1, 10.2.1, 10.3.1, 10.5.1

John has experience and expertise in water resources engineering. His specialized expertise includes H&H modeling, hydraulic design, flood studies, FIS and map revision requests, storm drainage design, structural and nonstructural mitigation analysis, and detention/retention basin design. John has experience in the design of civil and environmental engineering projects including roadway design, site grading, drainage, utilities, and frac pond facilities. His work experience includes working with federal, state, county, city, and private clients.

## JOHN CONQUEST, PE, CFM

DRAINAGE ENGINEER

## RELEVANT PROJECTS

CR 412 PS&E, Williamson County, Texas

Role: Project Manager

**Project Description:** Schematic and PS&E for 3.4 miles of 2-lane roadway reconstruction, including ditches and replacement of all cross-drainage structures

Activities Performed: Analysis of existing cross-drainage structures and designed proposed cross-drainage structures, runoff determination, set horizontal and vertical profiles, analyzed existing and proposed conditions for cross-drainage structures, and setup plan and profile sheets

**Project Relevance:** Williamson County project (owner); drainage design; local soils

## Chisholm Valley Storm Drain Improvements (Area 3), Round Rock, Texas

Role: Project Manager

**Project Description:** Previous work authorization developed flood mitigation solutions using a 2D hydraulic model to reduce local flooding within an older neighborhood constructed prior to current drainage criteria. This drainage improvement project includes design level survey, utility investigation, identification of environmental constraints, development of detailed construction plans, specification, and probable cost estimates for an improved storm drainage network. Storm drain improvements include over 2,000 lf of storm drain.

Activities Performed: 2D hydraulic modeling

**Project Relevance:** Williamson County project (owner); drainage design; local soils

## **H&H Review and Guidance, various locations, Texas**

Role: Project Manager

**Project Description:** Providing on-call QC review and guidance of drainage analysis to an outside firm for various solar sites across the state.

**Activities Performed:** Services have included reviewing Hydrologic (HEC-HMS) and Hydraulic (HEC-RAS) modeling, providing guidance on appropriate parameters and impact assessment methodology.

**Project Relevance:** Drainage design



## **CONQUEST** (CONT.)

## New Hope Road, Cedar Park, Texas

Role: Senior Drainage Project Manager

Project Description: PS&E, along with schematics, for design of 1.21 miles of the boulevard section

of New Hope Road

Activities Performed: Development of a Drainage Impact Report, design of water quality facilities and permitting with TCEQ and the City of Cedar Park. Oversaw development and implementation of drainage system and coordinating efforts with design staff and provided technical guidance to TCEQ to allow a new technology to be used in the Edwards Aquifer. By using this new technology, the design was able to save the City of Cedar Park over \$1M in ROW and construction cost.

**Project Relevance:** Williamson County project (location); drainage design; local soils; coordination with state agencies; TCEQ coordination

#### Park Street at Bell Boulevard, Cedar Park, Texas

Role: Senior Engineer

Project Description: The project scope consisted of design including reconstruction and widening of Park Street in Cedar Park, Texas from Parkway Drive to Old US Highway 183. This included reconstruction of the intersection of Park Street at Bell Boulevard (US 183) and redesign of Firestone Parking Lot associated with proposed widening of roadway ROW. Design included geometric design modifications to add left turn bays along Park Street at Bell Boulevard and Old US Highway 183, closed-system drainage design, pedestrian ramps and sidewalks, traffic signal design, erosion control plans, and signing and striping plans. Project included the design of specialized, Stormceptor chamber technology to meet local water quality requirements. Project also required extensive coordination with TxDOT for roadway design and construction within state ROW limits of Bell Boulevard (US 183).

**Activities Performed:** Overseeing design changes to existing storm sewer system, preparation of TCEQ Edwards Aquifer Permit and proposed parking lot regrading

**Project Relevance:** Williamson County project (location); drainage design; coordination with state agencies; TCEQ coordination; TxDOT coordination

#### Pflugerville 2019 Transportation Bond Projects, Pflugerville, Texas

Role: Senior Drainage Design Engineer

**Project Description:** The project consists of design of three roadways as part of the 2019 Pflugerville Bond Program. These three roadways are Picadilly Drive (Central Commerce to IH 35 frontage road – 3098 If), Royston Lane (Grand Avenue Parkway to Central Commerce – 3115 If) and Central Commerce (City limits to Picadilly Drive – 2113 If). The scope of services includes plan and profile of the roadways, pedestrian improvements, environmental analyses, preliminary geotechnical analyses, H&H analyses, offsite and roadway storm conveyance analyses, topographical survey, and SUE. A previous phase of this project included a preliminary schematic design and BUILD application process for federal funding via TxDOT.

**Activities Performed:** Responsible for the preparation of a cross drainage design alternatives and drainage design memorandum



## **CONQUEST** (CONT.)

**Project Relevance:** Central Texas project; coordination with federal agencies; drainage design; infrastructure planning; transportation planning; TxDOT coordination

## CR 132/IH 35 Interchange Design, TxDOT, Buda, Texas

Role: Senior Drainage Design Engineer

**Project Description:** The project scope consisted of engineering services including schematic roadway and bridge design and detailed PS&E for construction of new overpass, grade separation and other improvements to County Road 132 interchange at IH 35. Interchange included a 2,000-sf urban arterial, a 6,000-lf frontage road, a 22,000-sf bridge, 40,000 sft of retaining walls, and four ramps. Design also incorporated SUE, stormwater drainage, striping, signalization and traffic planning/analysis, limited surveying, geotechnical, and environmental services.

**Activities Performed:** Prepared a drainage impact report that documented no-rise to the receiving stream; oversaw design of the drainage system elements in accordance with the drainage report

**Project Relevance:** Central Texas project; drainage design; schematic optimization; transportation improvement project

## Gunn & Whittington Development Company, CR 132 Overpass Conceptual Study, TxDOT, Buda, Texas

Role: Senior Engineer

**Project Description:** This project consisted of preparing the conceptual layout for proposed overpass structure at intersection of IH 35 and CR 132. Services included layout for roadway and overpass, design of retaining walls, drainage and roadway geometry, and ROW determination. This project successfully demonstrated to TxDOT that an overpass structure was feasible at the project location.

**Activities Performed:** Responsible for preparing the conceptual drainage design and cost estimate of proposed culvert improvements under IH 35 and CR 132 within the FEMA Floodplain

**Project Relevance:** Central Texas project; drainage design; schematic optimization; transportation improvement project; TxDOT coordination

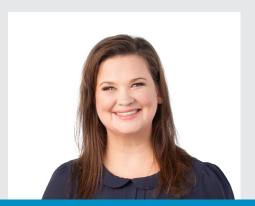
#### FM 3177 (Decker Lane), TxDOT, Austin, Texas

Role: Senior Drainage Design Engineer

**Project Description:** The project scope included design for widening of one mile of urban roadway to add two-way left-turn lane to accommodate turning traffic resulting from construction of new elementary and middle schools along route. Design also included extension of existing cross culverts and re-grading of open-ditch drainage.

Activities Performed: Responsible for oversight and review of drainage design

**Project Relevance:** Central Texas project; drainage design; stakeholder coordination



13 YEARS OF EXPERIENCE

#### **Education**

Bachelor of Science, Civil Engineering, Florida Institute of Technology, 2007

## **License and Certifications**

Professional Engineer, Texas, #123129 TxDOT Precertification Sequence #25868

*TxDOT Precertification Categories:* 2.5.1, 10.1.1, 10.2.1, 10.3.1, 18.4.1

Amy is a civil engineer with 13 years of experience in highway engineering design projects (rural and urban). Her expertise includes drainage (open and closed system) design, hydrology and hydraulics reports, HEC-RAS modeling at bridges and large culverts, utility coordination, utility engineering, utility construction management, water quality, erosion control, roadway design, and project management. Amy specializes in hydrology and hydraulics and has been the drainage task lead for multiple projects with American Structurepoint.

## AMY BENNETT, PE

DRAINAGE PLANNING SUPPORT

## **RELEVANT PROJECTS**

Williamson County Corridor E5 Study, Williamson County, Texas

Role: Drainage Lead Engineer

Project Description: American Structurepoint is providing engineering services and planning to develop Corridor E5 from IH 35 to FM 972, also known as the Ronald Reagan Extension, in Williamson County, Texas. Our engineers will develop preliminary alignment alternatives for the E5 Corridor, conduct an alternatives analysis to identify the preferred alignment, revise the preferred alignment to address stakeholder input and environmental constraints, prepare hydrologic and hydraulic models, and then prepare a schematic that will include direct connectors at IH 35 and a fully directional interchange at the intersection with the Ronald Reagan Extension.

**Activities Performed:** As the lead drainage engineer, hydrologic and hydraulic design using NOAA Atlas 14; six creek crossings within FEMA Zone A and AE; determined WSEL for existing and proposed conditions, and evaluated impacts to adjacent properties upstream and downstream of new corridor.

**Project Relevance:** New location facility, FEMA Flood Zone AE and A; Bridges and culvert crossings; Hydraulic modeling; Williamson County Project

## Williamson County CR 258 Extension (US 183 to Sunset Ridge), Williamson County, Texas

Role: Drainage Engineer

**Project Description:** Preliminary and final PS&E plans for a 0.5-mile extension including right- and left-turn lanes on US 183 into the new location of CR 258; services include roadway design, hydrologic and hydraulic design, survey and right-of-way mapping

Activities Performed: Hydrologic and hydraulic design

**Project Relevance:** Created schematic, Williamson County project; road bond financed; roadway extension on new location.



## BENNETT (CONT.)

### Road Bond and Pass Through Program GEC, Williamson County, Texas

**Role:** Lead QA/QC Reviewer for drainage and water quality plans for multiple projects throughout Williamson County

**Project Description:** This program managed multiple roadway improvement projects throughout the county, including added capacity and new construction projects.

**Activities Performed:** On the GEC team, Amy reviewed Water Pollution Abatement Plan (WPAP) plans, and Contributing Zone Plans, to ensure compliance with TCEQ requirements (RG-338). She also was drainage discipline lead reviewer for roadway projects plans and ensured compliance with Williamson County Drainage Design Criteria.

**Project Relevance:** Williamson County project; Edwards Aquifer Recharge Zone; TCEQ coordination

## Littig Bridge Replacement, Travis County, Texas

Role: Drainage Lead Engineer

**Project Description:** Replacement (in a FEMA Zone X) of an existing multiple-box culvert consisting of three 10'x4' boxes with a 60-foot single-span decked slab beam superstructure; preferred design chosen after evaluation of several alternatives

**Activities Performed:** Performed the hydrologic and hydraulics and scour analysis; wrote the drainage report and grading plan; created the HEC-RAS model using LiDAR and survey data; added ineffective flow areas and added the existing and proposed bridge (including alternatives) to perform the analysis; used HEC-RAS to perform the scour analysis; responsible for erosion control plans and coordinated with Travis County on the erosion control phases, restoration plan, and SW3P narrative

**Project Relevance:** Drainage design; Hydraulic modeling; Central Texas project; transportation improvement project

## Manda Carlson Bridge Replacement, Travis County, Texas

Role: Drainage Lead Engineer

**Project Description:** Replacement (in a FEMA Zone X) of an existing multiple-box culvert consisting of two 10'x4' boxes with a 40-foot single-span, 12" prestressed concrete slab beam superstructure

Activities Performed: Performed hydrologic and hydraulics, scour analysis; wrote the drainage report and grading plan; created the HEC-RAS model using LiDAR and survey data; added ineffective flow areas and added the existing and proposed bridge (including alternatives) to perform the analysis; used HEC-RAS to perform the scour analysis; responsible for erosion control plans and coordinated with Travis County on the erosion control phases, and restoration plan and SW3P narrative; worked with utility coordinator to avoid a conflict with overhead pole and proposed driveway culvert

**Project Relevance:** Drainage design; Hydraulic modeling; Central Texas project; transportation improvement project

#### **Bitting School Road, Travis County, Texas**

Role: Lead Drainage Engineer

**Project Description:** Existing Bridge 193 on Bitting School Road at Branch of Wilbarger Creek (FEMA Zone A), a multiple pipe culvert consisting of four 5-foot-diameter corrugated metal pipes, overtopped after relatively brief rainfall events, requiring closure of the road to local traffic; the chosen alternative



## BENNETT (CONT.)

raises this low point in the road so it is slightly higher than the Wilbarger Creek Bridge; four hydraulic alternatives were evaluated to address the project objectives – the preferred alternative consists of five 12'x 12' multiple box culverts and required raising the roadway profile by approximately 4 feet to remove the low point at Bridge #193

**Activities Performed:** Performed the hydrologic and hydraulics; wrote the drainage report; created the HEC-RAS model using LIDAR and survey data, and adding existing and proposed designs (including alternatives) to perform the analysis; began the coordination process with the floodplain administrator to comply with Conditional Letter of Map Recognition (CLOMR) preparation

**Project Relevance:** FEMA Flood Zone A; Drainage design; Hydraulic modeling; Central Texas project; transportation improvement project

## RM 3237 Safety Project, Hays County, Texas

Role: Lead Drainage Engineer; Deputy Project Manager

**Project Description:** PS&E for a cumulative 2-mile "notch and widen" project from 2-lane rural to add shoulders and turn lanes at four intersections; included environmental document, culvert extensions, culvert replacement FEMA coordination, coordination with property owners, TxDOT coordination, utility coordination, TCEQ coordination and intersection improvements; project is following LGPP guidelines. The project was within the Edwards Aquifer Recharge Zone and the Contributing Zone.

**Activities Performed:** Hydrologic and hydraulic design; water quality; client coordination; managing team; budget and schedule management; TCEQ coordination

**Project Relevance:** FEMA Flood Zone A; Edwards Aquifer Recharge Zone; TCEQ coordination; Coordination with local and state agencies; Central Texas project; transportation improvement project

### Sessom Drive Intersection Improvements, San Marcos, Texas

Role: Drainage Engineer

**Project Description:** PS&E design for this intersection and drainage improvements project at the intersection of Academy Street and West Sessom Drive. The drainage improvements will alleviate the flooding that occurs at this intersection and adjacent private properties

**Activities Performed:** Drainage analysis using Atlas 14 and design; designing a water quality feature; coordinating with water and wastewater designers to ensure no conflicts with storm sewer improvements

Project Relevance: Drainage design; Central Texas project; transportation improvement project

## CR 1101 Bryan District Bridge Replacement, Bryan County, Texas

Role: Drainage Engineer

**Project Description:** Bridge replacement project over Caney Creek Branch; proposed roadway and 95-foot bridge were realigned due to ROW issues

**Activities Performed:** Responsible for hydrology and hydraulic design and scour analysis using HES-RAS and the drainage report

Project Relevance: Drainage design; Hydraulic modeling; Transportation improvement project



## BENNETT (CONT.)

### CR 132/IH 35 Interchange Design Services, Buda, Texas

Role: Drainage Engineer

**Project Description:** Engineering services for this project included schematic roadway and bridge design and detailed PS&E for the construction of a new overpass, grade separation, and other improvements to the CR 132 interchange at IH 35. The interchange included 2,000 lft of urban arterial, 6,000 lft of frontage road, a 22,000-sft bridge, 40,000 sft of retaining walls, and four ramps. The design also incorporated SUE, stormwater drainage, striping, signalization and traffic planning/analysis, limited surveying, and geotechnical and environmental services.

Activities Performed: Amy's responsibilities included performing hydrologic and hydraulic analysis. She designed a bridge class culvert to meet utility accommodation rules (UAR) that crossed an existing 4" gas line, to remain in place. She coordinated with the utility coordinator and SUE team to collect test holes to confirm the depth and verify no conflict with the proposed culvert. Due to the proximity of the gas pipeline, she added notes to the contractor to hand excavate at the location of the pipeline and the culvert to be cast-in-place only. Coordinated with a developer designing water and wastewater within the project vicinity to ensure no conflicts with proposed storm sewer.

**Project Relevance:** Drainage design; Hydraulic modeling; Coordination with Utility Coordinator to identify test hole of utility pipeline to avoid conflict with large drainage culvert

### Evans Road, Alamo Regional Mobility Authority, Bexar County, Texas

Role: Drainage Engineer

**Project Description:** Schematic design for approximately 1.5-mile widening of Evans Road from existing 2-lane configuration to 4 lanes and dual turn lanes. Design included horizontal/vertical roadway geometry, grading, three culvert crossings, cross-sections, utilities, SUE, and WPAP.

**Activities Performed:** Calculated impervious area for existing and proposed conditions and used TCEQ TSS calculation spreadsheet to determine required load removal; evaluated preliminary locations for proposed vegetative filter strips along the project corridor

Project Relevance: TCEQ Coordination; Edwards Aguifer Recharge Zone

## Texas Department of Transportation Loop 1604 at SH 151, San Antonio, Texas

Role: Drainage Engineer

**Project Description:** PS&E for construction of Loop 1604 at SH 151 interchange, including 5,440 feet of roadway and bridge length of 188 feet.

**Activities Performed:** Drainage analysis and calculations; storm drain, erosion control, and signing and striping plans; overhead sign bridge calculations

Project Relevance: Central Texas project; transportation improvement project; Drainage design



**35 YEARS OF EXPERIENCE** 

#### **Education**

Bachelor of Science in Civil Engineering, Autonomous University of Nuevo León, 1985, Monterrey, Nuevo León, México

#### **License and Certifications**

Professional Engineer, Texas, No. 90593

TxDOT Precertification, No. 11303
TxDOT Precertification Categories:
3.2.1, 4.2.1, 4.4.1, 9.1.1

José's career has focused on the development and delivery of roadway plans, delivering safe and efficient solutions for urban, suburban, and rural locations. He has experience designing solutions for projects of varying degrees of complexity, both for TxDOT and for local communities throughout the state.

## **JOSE M. SANDOVAL, PE**

COST ESTIMATING LEAD

## **RELEVANT PROJECTS**

RM 3237 Safety Project, Wimberley, Texas

Role: Quality Manager

**Project Description:** The project was a PS&E for a cumulative 2-mile "notch and widen" project from 2-lane rural to add shoulders and turn lanes at four intersections. It included an environmental document, culvert extensions, culvert replacement, FEMA coordination, coordination with property owners, TxDOT coordination, utility coordination, TCEQ coordination and intersection improvements. The project followed LGPP guidelines. The project was within the Edwards Aquifer Recharge Zone and the Contributing Zone.

**Activities Performed: 90% QA/QC** 

**Project Relevance:** Central Texas project; compliance with TxDOT standards; corridor improvement project; county project; intersection improvements; local soils

## FM 907 From Bus 83 To Rancho Blanco Road, Hidalgo County, Texas

Role: Project Manager

**Project Description:** The project's goal was to develop alternative schematic and plans, specifications, and estimate (PS&E) documents for a major collector reconstruction from two 12-foot lanes with 2- to 8-foot shoulders to four 12-foot lanes with 16-foot two-way (continuous) left-turn lanes (TWLTL) median with curb and gutters.

This project included significant coordination with the Hidalgo County Drainage District No. 1 to secure where to outfall the project drainage outfall. This coordination led to the construction of a 1,100-foot-long Hidalgo County Drainage Ditch Alamo Drain. This project was designed using GEOPAK and MicroStation.

**Activities Performed:** As deputy project manager and roadway design task lead, José led the development of the alternative schematics and PS&E for this 2.4-mile-long project, with a construction cost of \$7.2 million.

As the roadway task lead, José was responsible for leading the alternative route studies schematic development and detailed design of horizontal, vertical, superelevation, structure clearance, cross-sections, and plan sheets development. Right-of-way identification and acquisition was completed to accommodate pedestrian ramps design at

## SANDOVAL (CONT.)

the intersections. José was also responsible for coordination with all disciplines, subconsultants, and the TxDOT project manager, including holding utility coordination meetings and sending correspondence to utility companies.

**Project Relevance:** Access planning; alternative analysis and schematic and was ready to move to PS&E stage; compliance with TxDOT standards; coordination with local agencies; coordination with state agencies; corridor improvement project; intersection improvements; roadway expansion; ROW determination and acquisition; schematic; schematic optimization; TxDOT coordination; utility coordination

### I-35 Ramp Reversal (GAP) From SH 45N to Grand Avenue Parkway, Texas

Role: Project Manager, Roadway Task Lead

**Project Description:** This project involved changing the ramp configuration from a traditional diamond interchange to an X pattern to improve mobility.

This project included significant coordination with the Hidalgo County Drainage District No. 1 to secure where to outfall the project drainage outfall. This coordination led to the construction of a 1,100-footlong Hidalgo County Drainage Ditch Alamo Drain. This project was designed using GEOPAK and MicroStation.

**Activities Performed:** As project manager and roadway task lead, José managed and led the PS&E development for this 2.005-mile-long project with a rough order of magnitude estimate (ROM Estimate) of \$8.5 million.

As the roadway task lead, José was responsible for leading the detailed design of horizontal, vertical, superelevation, structure clearance, 3D roadway model, and plan sheets development. This project was designed using the GEOPAK and MicroStation V8i SELECTseries 4 (SS4) with OpenRoads technology. José used Bluebeam Revu software to host and manage the QC process for every submittal. This process allowed all discipline QCers, task leaders, and staff engineers (prime and subs) to interact, review their plan sheets, make comments on other disciplines plan sheets, and see comments that others were making in their plan sheets in the same Bluebeam session. This process also allows staff engineers to start addressing comments once the task leaders "Originator" accepts the comments. José made sure all QCers reviewed all disciplines' plan sheets, looked for conflicts, and that all comments were responded to and addressed. As the project manager, José developed and negotiated the scope, fee, and CPM schedule; prepared project meeting agendas, minutes, and progress reports; reviewed invoices; made project submittals; addressed review comments; and updated the project schedule. As part of the coordination with the client, José submitted weekly and monthly progress reports. These reports were beneficial in informing the client of the development and items that required attention. Coordination with all disciplines is a must; José managed the weekly call to keep the team on track.

**Project Relevance:** Alternative analysis and schematic and was ready to move to PS&E stage; bridges and culvert crossings; Central Texas project; compliance with TxDOT standards; coordination with local agencies; coordination with state agencies; corridor improvement project; corridor planning in an environmentally and politically sensitive area; design survey, project control, and digital terrain model (DTM) base mapping; drainage design; hydraulic modeling; infrastructure planning; interim construction of future wider corridor; intersection improvements; local soils; meetings with public



## SANDOVAL (CONT.)

and property owners; reconstruction of an existing roadway; roadway expansion; roadway extension; schematic; schematic optimization; TxDOT coordination; utility coordination

## I-35 and Riverside Drive, Schematic Design for Operational Improvements From South of Holly Street To North of Oltorf Street, Austin, Texas

Role: Deputy Project Manager, Roadway Task Lead

**Project Description:** This project involved developing a schematic design for operational improvements on an intricate 1.023-mile-long project with a rough order of magnitude estimate (ROM Estimate) of \$90 million. The project operational improvements included the design of the future transportation corridor (FTC) in the median of I-35 and the following facility enhancements:

- Redesign of the vertical curve along I-35's main lanes to improve the sight distance
- Design of ramps to allow north and southbound traffic to bypass the Riverside Drive traffic signal
- Frontage roads redesign
- Replacing bridge crossings at Riverside Drive and Woodland Avenue
- Widening I-35 bridges over Lady Bird Lake to accommodate intersection bypass lanes and widened shoulders
- Reconfiguring intersection lanes at Riverside Drive and Woodland Avenue to improve bicycle and pedestrian facilities along I-35 frontage roads.

All of this was completed with minimal right-of-way impacts and accommodating room for the future transportation corridor and the wishbone ramp entrance just north of Woodland Avenue.

Activities Performed: As deputy project manager and roadway task lead, José developed and updated project progress reports and invoices; coordinated subconsultants involving survey, ITS, illumination, and geotechnical engineering; led the progress meeting and developed the critical path method (CPM) Primavera P6 schedule while assisting in managing the project. José also managed and mentored production staff/engineers through the development of the design of roadway horizontal, vertical, superelevation, and structures clearance geometry; retaining wall design; bridge layouts; traffic control plans; shared-use path; and pavement marking layouts.

**Project Relevance:** Access planning; bridges and culvert crossings; Central Texas project; compliance with TxDOT standards; coordinating with stakeholders on tree preservation; coordination with federal agencies; coordination with local agencies; coordination with state agencies; corridor improvement project; corridor planning in an environmentally and politically sensitive area; design survey, project control, and digital terrain model (DTM) base mapping; drainage design; Edwards Aquifer contributing zone; Edwards Aquifer Recharge Zone; environmental assessment for transportation improvements; environmental documents; evaluation of alternatives; hydraulic modeling; familiarity with GEC and County coordination and standards; infrastructure planning; interim construction of future wider corridor; intersection improvements; local soils; meetings with public and property owners; performing a tree survey; reconstruction of an existing roadway; roadway expansion; ROW determination; ROW determination and acquisition; schematic; schematic optimization; stakeholder coordination; stormwater management; traffic impact analyses for planning; transportation improvement project; transportation planning; TxDOT coordination; utility coordination



## SANDOVAL (CONT.)

### Loop 1604 - Interim Design From IH 35 E to FM 1976, Texas

Role: Project Manager; Roadway Task Lead

**Project Description:** This project consisted of designing operational improvements for the west-bound frontage road and ramps and the east and westbound frontage road and ramps west of FM 1976. It also included adding one lane to the mainlines in each direction to go over Kitty Hawk Road.

The Phase 1 schematic effort developed LP 1604 as a fully controlled-access expressway from IH 35 to FM 78

**Activities Performed:** As project manager and roadway task lead, José managed and led development of the schematic for this 2.737-mile-long project with a rough order of magnitude estimate (ROM Estimate) of \$17 million.

As the Roadway Task Lead, José was responsible for leading the detailed design of horizontal, vertical, superelevation, structure clearance, and schematic roll development. This project was designed using the GEOPAK and MicroStation V8i SELECTseries 4 (SS4) with OpenRoads technology.

As the project manager, José developed the CPM schedule; prepared project meeting agendas, minutes, progress reports, and review invoices; made project submittals; and addressed review comments.

**Project Relevance:** Access planning; alternative analysis and schematic and was ready to move to PS&E stage; bridges and culvert crossings; Central Texas project; compliance with TxDOT standards; coordination with local agencies; coordination with state agencies; corridor improvement project; corridor planning in an environmentally and politically sensitive area; design survey, project control, and digital terrain model (DTM) base mapping; drainage design; environmental assessment for transportation improvements; environmental documents; evaluation of alternatives; familiarity with both GEC and County coordination and standards; hydraulic modeling; infrastructure planning; interim construction of future wider corridor; intersection improvements; local soils; railroad coordination; railroad coordination (UPRR); reconstruction of an existing roadway; roadway expansion; schematic optimization; suburban location; traffic impact analyses for planning; transportation improvement project; transportation planning; TxDOT coordination; utility coordination



**41 YEARS OF EXPERIENCE** 

#### **Education**

Bachelor of Science, Civil Engineering, Duke University, 1979

#### **License and Certifications**

Professional Engineer, Texas, #93516 +
South Carolina
American Institute of Certified
Planners, #100052
TxDOT Precertification Sequence
#11683

TxDOT Precertification Categories: 1.1.1, 1.2.1, 1.3.1, 1.4.1, 1.5.1, 1.6.1, 1.7.1, 1.8.1, 2.1.1, 2.2.1, 2.7.1, 2.12.1, 2.14.1, 3.2.1, 7.1.1, 7.3.1, 7.4.1, 8.1.1, 8.3.1, 9.1.1

Since 1979, Michael has directed or participated in numerous transportation planning and traffic operation studies throughout the United States and overseas. He has conducted numerous statewide planning studies to establish policies, develop planning procedures, measure highway needs, review and establish functional classification systems, and identify funding opportunities. In his career, Michael has conducted more than 15,000 miles of studies.

## MICHAEL SEXTON, PE, AICP

**PLANNING** 

#### **RELEVANT PROJECTS**

I-69 Feasibility Study, Texas to Michigan

**Role:** Transportation Planner

**Project Description:** Determine the feasibility and need for an interstate facility linking the United States with Mexico and Canada; traffic forecasts were used to establish overall need, and as basic inputs into traditional benefit/cost analyses as well as economic impact estimates

**Activities Performed:** Traffic forecasting for the eight-state study area

**Project Relevance:** Access planning; coordination with federal agencies; traffic impact analyses for planning

## I-69 Special Environmental Studies, Texas to Michigan

**Role:** Transportation Planner

**Project Description:** As a follow-up to the original Corridor study, this study concluded that each mode was substantially represented in the 2600-mile corridor, but that interstate highway improvements were the best way to solve existing deficiencies and provide adequate capacity for the long-range demands to move people and goods through the corridor.

Activities Performed: Refining traffic forecasts for the Corridor as a whole, and for each Section of Independent Utility; prepared an alternatives analysis of all possible modes in the eight-state study area, including barges, public transit, railroads, highways, and airports.

**Project Relevance:** Access planning; coordination with federal agencies; traffic impact analyses for planning

#### I-69 Corridor Feasibility Study, Texas

Role: Project Manager

Project Description: Corridor Feasibility Study for 150 miles of the Governor's proposed Trans-Texas Corridor along the nationally designated I-69 route; study was conducted in a "tiered" environmental and engineering process to speed the development of the most feasible and desirable alternatives; special features along the initial corridor through Kenedy, Willacy, and Cameron Counties included the King Ranch, and connections to the Mexican Border through fairly dense population centers



## SEXTON (CONT.)

Activities Performed: Extensive use of a software package called "Quantm" aided planners and engineers to identify the most cost-effective and least environmentally adverse alignments

**Project Relevance:** Access planning; coordination with federal agencies; environmental assessment for transportation improvements; evaluation of alternatives

## I-95 to Myrtle Beach Corridor Study, South Carolina

**Role:** Transportation Planner

**Project Description:** As part of national legislation, a highway corridor feasibility study was performed between I-95 near Florence to US 17 at Myrtle Beach, a distance of 70 miles. The study determined the environmental, engineering, and financial feasibility of improving travel conditions accessing the area. The alternatives in the analysis included a new, controlled access facility, an upgrade of existing highway facilities and a no-build option. A detailed public participation program was also performed in concert with the study.

**Activities Performed:** Developing computerized models to project and assign future year traffic volumes to the various roadway networks, analyzing alternatives, preparing socio-economic investigations, performing Benefit/Cost Analyses, and conducting accident analyses as well as developing final documents

**Project Relevance:** Access planning; coordination with federal agencies; traffic impact analyses for planning

## Statewide Corridor Planning Studies, TxDOT

Role: Statewide Team Member

**Project Description:** Michael served on a team selected by TxDOT's Transportation Planning and Programming (TP&P) Division to assist them with planning for various corridors throughout the state and provide inputs into the statewide plan. Besides the traditional skills of transportation planning, environmental planning, and schematic design this team provided financial planning and public outreach capabilities to augment TP&P's existing staff. This work is accomplished on a work order basis, and the team is structured so that numerous projects can be served at the same time. The work can vary from helping TxDOT deal with everything from small "brushfires" that require rapid but short responses to major corridor studies that may take several years to complete.

**Activities Performed:** Transportation planning, environmental planning, schematic design; financial planning; public outreach capabilities

Project Relevance: Coordination with state agencies; new location facility; transportation planning

## I-30 Corridor Study, Texas

Role: Project Manager

**Project Description:** Identify deficiencies and opportunities to improve safety and make travel more efficient along the 144-mile corridor; due to heavy use of this facility by trucks traveling to and from Memphis and the northeast, special emphasis was given to the examination of vertical clearances and the availability of truck facilities along the route, as well as the review of the Interstate's geometric design—including on and off-ramps



## SEXTON (CONT.)

Activities Performed: Origin/Destination studies were conducted of trucking movements along the corridor in order to evaluate the benefits of constructing truck-only lanes; recommendations were developed on how to prepare the interstate for emerging Transportation System Management Operations (TSMO) by laying a spine of fiber optic cable along the entire corridor with drops for DSRC communication devices so that variable message signage could be activated as necessary along the route, and surveillance could be performed by strategically placed video cameras

Project Relevance: Coordination with state agencies; transportation planning

#### US 281 EIS, San Antonio, Texas

**Role:** Transportation Planning Manager

Project Description: 7-mile long expansion of a radial corridor

Activities Performed: Preliminary alternatives development, analysis and screening, as well as public involvement and outreach for the US 281 Environmental Impact Statement including analyses of transit, parallel highway, TSM/TDM, Growth Management, as well as various Build Alternatives on the highway itself with tolled and non-tolled strategies; analysis of traffic forecasts for alternatives considered and performance metrics for alternatives based on measures of effectiveness; development of toll collection strategies and costing of toll equipment necessary to support managed lane concepts and full tolling of the facility; coordination with VIA (transit agency) to identify and develop concepts for high occupancy vehicle lanes and special ramps serving a proposed intermodal terminal near the north end of the project; generated technical memos and alternatives analysis report as reference documents to the EIS

**Project Relevance:** Central Texas project; coordination with state agencies; contribution to an EIS; transportation planning

## **US 290 Alternatives Analysis, Austin, Texas**

Role: Transportation Planner

**Project Description:** Alternatives analysis for highway

Activities Performed: Assisted the design team by testing a series of alternatives to determine what the best transportation investment would be in this existing highway linking the emerging suburban community of Dripping Springs with Austin; after evaluating existing traffic demands and developing traffic forecasts, Michael outlined the potential that a wide range of transportation improvements would have on existing and anticipated congestion in the corridor and ranked each in terms of both effectiveness and cost-effectiveness

**Project Relevance:** Central Texas project; traffic impact analyses for planning; transportation planning



## 24 YEARS OF EXPERIENCE

#### **Education**

Bachelor of Science, Civil Engineering, Texas A&M University, 1994

## License and Certifications

Professional Engineer, Texas, #86354

Eric has 24 years of experience in the design and management of transportation and public works projects. His experience includes transportation studies, schematic design, plan preparation, and construction management for highways, municipal roadways, drainage projects, utility projects, railroads, and hike and bike trails. His design expertise includes roadway geometry, paving, storm sewers, culverts, water and wastewater pipelines, retaining walls, bridge layouts, signing and pavement markings, traffic control plans, erosion control plans, storm water pollution prevention plans, and cost estimating. His clients have included cities, counties. TxDOT, toll authorities, economic development corporations, and land developers (for public works projects).

## ERIC RATZMAN, PE

**PLANNING** 

#### **RELEVANT PROJECTS**

**Harold Green Road Extension, Travis County, Texas** 

Role: Project Manager

**Project Description:** 1-mile long extension of Harold Green Road from SH 130 to Austin's Colony Boulevard; three-guarters of this new alignment was through property with a planned development; designed and evaluated four different alignment options, developed a matrix that weighed crucial project criteria; collaborated with the County to score, select and document the final alignment and developed the preliminary schematic; evaluated four different alignment options and developed a matrix consisting of seven project criteria covering economic, environmental, community/property owners, and floodplain considerations; collaborated with the County to weigh the various project criteria, then scored each alignment in the matrix which resulted in scores used to select the final alignment and document the reasoning for that selection; much of the property had either been quarried or contained dense vegetation so the alignment and profile took both conditions into consideration to minimize the amount of earthwork and tree removal/mitigation required; selected typical section consists of a new 2-lane, undivided collector roadway with on-street bike lanes and sidewalks. For the schematic stage, Halff provided roadway design, H&H analysis, and SUE services as well as overseeing environmental, surveying, and geotechnical work. The H&H analysis included 2-D modeling of Elm Creek to accurately determine the effects of Atlas 14 and the interaction between this watershed and the Colorado River watershed into which an overflow of Elm Creek flows during extreme events.

**Activities Performed:** Oversaw roadway design, hydrologic and hydraulic (H&H) analysis, and SUE services; oversaw environmental, surveying, and geotechnical work

**Project Relevance:** Access planning; Central Texas project; County project; coordination with stakeholders on tree preservation; evaluation of alternatives; local soils; new location facility; roadway extension; schematic; transportation planning



## RATZMAN (CONT.)

### Fallwell Lane Capital Renewal Project, Austin, Texas

Role: Senior Project Manager

**Project Description:** Preliminary Engineering for the complex project, which involved six city departments and various design challenges including roadway access, utility conflicts, and flood protection of critical infrastructure

**Activities Performed:** Managed the team to evaluate multiple alternatives and, through technical working groups, effectively communicated the alternatives and balanced the varied priorities among departments

**Project Relevance:** Access planning; Central Texas project; evaluation of alternatives; utility coordination

## Windermere/Heatherwilde Subdivision Street Reconstruction, Pflugerville, Texas

Role: Project Manager

**Project Description:** Preliminary engineering design of approximately 2.7 miles of roadway reconstruction located in two single-family residential neighborhoods; reconstruction of approximately 8,500 lf of sidewalk and approximately 250 driveway approaches

**Activities Performed:** Worked closely with city staff and geotechnical subconsultant to develop a pavement rehabilitation that would perform well in the high shrink/swelling clays, be constructible in existing neighborhoods, and fit within the city's approved bond budget; reconstructed section consists of HMAC on top of Cement Treated Recycled Base (method ensures that residents had minimal interruption to access of their homes during construction)

**Project Relevance:** Central Texas project; local soils; stakeholder coordination; transportation improvement project

## RM 620 Phase 2 Improvements, Wyoming Springs Drive to Deepwood Drive, Round Rock, Texas

Role: Project Manager

**Project Description:** Development of plans to reconstruct 0.78 mile of an existing 4-lane rural highway as a 6-lane urban facility

Activities Performed: Overseeing and managing the design team (internal staff and subconsultants); ensuring the design teams prepared PS&E to TxDOT design criteria and specifications; overseeing and obtaining environmental clearance and TxDOT review/approval of PS&E; coordinating with agencies and stakeholders including TxDOT, City of Round Rock, Round Rock ISD, property owners, Brushy Creek MUD, THC, TCEQ, and Williamson County GEC; ensuring the QA/QC process was followed, and design schedules were met

**Project Relevance:** Williamson County project (location); coordination with local agencies; drainage design; Edwards Aquifer contributing zone; familiarity with both GEC and County coordination and standards; TCEQ coordination; TxDOT coordination; transportation improvement project



## RATZMAN (CONT.)

### Helios Way and Sun Light Near Way Projects, Pflugerville, Texas

Role: Project Manager

**Project Description:** Preliminary design of approximately 2,200 If of a 4-lane roadway connecting Pecan Street and the existing Helios Way; project also included expansion of Sun Light Near Way from 2 lanes to 3 lanes and preliminary layout of future Helios Way extension; design included roadway vertical and horizontal alignment, enclosed storm sewer system, and roadway cross culverts

**Activities Performed:** Oversaw traffic analysis, surveying and ROW parcel preparation, and the geotechnical subconsultant

Project Relevance: Access planning; Central Texas project; drainage design; local soils

### FM 2439 (Hunter Road), San Marcos, Texas

Role: Project Manager

**Project Description:** Widening of a minor arterial road with a low water crossing that is subject to periodic flooding to a 3-lane roadway and a bridge over Purgatory Creek that allows for safe passage during the 25-year flood event

**Activities Performed:** Oversaw hydrologic and hydraulic modeling, roadway drainage design, erosion control plans, scour analysis, cost estimating, field surveying, ROW parcel preparation, utility coordination, subsurface utility engineering (SUE), and water quality design

**Project Relevance:** Bridges and culvert crossings; Central Texas project; drainage design; transportation improvement project

#### Heatherwilde Boulevard, Pflugerville, Texas

Role: Project Manager

**Project Description:** Development of construction plans, specifications and cost estimates for the reconstruction of approximately one mile of roadway from a rural 2-lane section to a 4-lane roadway consisting of a divided (MAD-4) typical section; project included paving, signing, striping, signalization, traffic control, sidewalks, drainage culverts, storm sewer, water, and sewer; design criteria were in accordance with the Engineering Design Guidelines

**Activities Performed:** Coordinated other services, included surveying, ROW parcel preparation, landscaping and irrigation design, SUE, and environmental; coordinated with utility companies and subconsultants

**Project Relevance:** Central Texas project; drainage design; transportation improvement project; utility coordination

## **Business 79/Second Street, Williamson County, Taylor, Texas**

Role: Project Manager

**Project Description:** Schematic and PS&E for reconstructing Business 79, an existing 4-lane rural roadway with side ditches, to a 4-lane urban facility with curb and gutter and enclosed storm sewers from West Loop 379 to SH 95/Main Street; drainage improvements included culvert replacement, channel improvements, storm sewer systems, and temporary drainage



## RATZMAN (CONT.)

**Activities Performed:** Oversaw design of paving, drainage, erosion control, water and wastewater replacement, signing, pavement markings, signalization, traffic control, and sidewalks

**Project Relevance:** Williamson County project (location); drainage design; transportation improvement project

## New Meister Lane, Pflugerville, Texas

Role: Project Manager and Engineer-of-Record

**Project Description:** Design of a 4-lane arterial undivided roadway

**Activities Performed:** Designed horizontal and vertical roadway alignments roadway, drainage, erosion control and sedimentation, signing, striping, and traffic control; coordinated with the City of Pflugerville and subconsultants throughout the project

Project Relevance: Central Texas project; transportation improvement project;

## Old Ranch Road 12 Bike/Pedestrian and Widening Project, San Marcos, Texas

Role: Project Manage

**Project Description:** Development of the PER and PS&E for full depth reconstruction of the roadway from Craddock Avenue to Hughson Drive, widening from east of Hughson to West Holland Street, drainage improvements, waterline and wastewater improvements. Drainage design included water quality features and preparation of a Contributing Zone Plan (CZP) to TCEQ for construction within the Edward's Aquifer

Activities Performed: Coordinated the project with the city, TxDOT, TCEQ, and Texas State University

**Project Relevance:** Alternative analysis and schematic and was ready to move to PS&E stage; Central Texas project; coordination with local agencies; coordination with state agencies; stakeholder coordination



**15 YEARS OF EXPERIENCE** 

#### **Education**

Bachelor of Arts, Political Science, Texas State University, 2000

Will is an accomplished executive with over 15 years of public service in transportation, planning, water resources, emergency response/recovery, budgeting, and public safety. He has led project development and public involvement (PI) for one of the fastest growing counties and regions of the state.

He led the highly regarded PI process for the FM 150 corridor and RR 12 study in Hays County, and led the PI for the Hays County transportation plan and various transportation bonds. He has also been involved with PI on every type of transportation project from greenfield construction to interstate improvement projects.

Will has successfully led several public involvement campaigns that went above and beyond what is required and garnered overwhelming support.

## WILL CONLEY

AGENCY COORDINATION LEAD

#### **RELEVANT PROJECTS**

Capital Area Metropolitan Planning Organization (CAMPO) Board, Central Texas

Role: Chairman, Board Member

Project Description: Partnerships were forged with government and transportation-related organizations in the state of Texas. Relationships between the Central Texas region, the local TxDOT district, TxDOT administration, and state leadership were strengthened. CAMPO worked with the Central Texas Regional Mobility Authority (CTRMA) on multiple, strategic projects - including the North Mopac managed lanes project that added one variably priced toll express lane in both directions. Relationships were formed with other planning organizations, including the Alamo Area Metropolitan Planning Organization (AAMPO). CAMPO worked with the state's transportation leadership to enhance mobility in the region. Some of the projects that were completed or started during Will's tenure on the board include:

- CAMPO's first regional bicycle/pedestrian plan was created
- A new and more inclusive public involvement plan was adopted
- The first regional incident management plan was established
- Coordinated and initiated the Capital-Alamo study on transportation options between Austin and San Antonio
- Began the Mokan study to reach a consensus on potential options for this vital corridor
- Started regional corridor studies
- Completed the CAMPO 2040 plan that includes all regionally significant road and transit projects in the Central Texas counties of Bastrop, Burnet, Caldwell, Hays, Williamson, and Travis that are expected to be implemented by 2040.
- Successfully led the largest project call ever for the six-county region of the MPO

**Activities Performed:** Board member for nine years, served as chairman for six of those years

**Project Relevance:** Extensive experience with Central Texas agencies, state agencies



## **CONLEY** (CONT.)

### RR 12 Corridor Preservation and Highway Improvements, Hays County, Texas

**Role:** Commissioner; County Regional Representative for Transportation

**Project Description:** \$35 million corridor preservation and highway improvements

Activities Performed: Led the 13-year formal partnership with TxDOT that led to over \$800 million worth of corridor preservation and state highway improvements in Hays County, including this project. Specifically, this project went through a two-year PI process, which was led by Will. Initially it was a very unpopular project proposed by the state. After the PI process, approval from local citizens in the community was over 80%. Will also negotiated many different types of advance funding agreements with the state in order to raise the necessary funding to fulfill the state and local goals that were developed through the PI process.

Project Relevance: County project; Central Texas project; transportation improvements

### FM 1626 Highway Improvements, Hays County, Texas

Role: Commissioner; County Regional Representative for Transportation

Project Description: \$75 million highway improvements on FM facility

**Activities Performed:** Led the 13-year formal partnership with TxDOT that led to over \$800 million worth of corridor preservation and state highway improvements in Hays County, including this project. Specifically, Will developed and negotiated the funding plan for this project, working with the Austin district and the TxDOT administration. This project was one of the first pass-through financing projects in the state.

**Project Relevance:** County project; Central Texas project; transportation improvements

## Highway 290 Highway Improvements, Hays County, Texas

Role: Commissioner; County Regional Representative for Transportation

**Project Description:** \$12 million highway improvements

**Activities Performed:** Led the 13-year formal partnership with TxDOT that led to over \$800 million worth of corridor preservation and state highway improvements in Hays County, including this project. Specifically, Will developed and negotiated the funding plan for this project, working with the Austin district and the TxDOT administration. This project was one of the first pass-through financing projects in the state.

**Project Relevance:** County project; Central Texas project; transportation improvements

## FM 2325 Highway Improvements, Hays County, Texas

Role: Commissioner; County Regional Representative for Transportation

**Project Description:** \$8.5 million improvements on FM facility

Activities Performed: Led the 13-year formal partnership with TxDOT that led to over \$800 million worth of corridor preservation and state highway improvements in Hays County, including this project. Specifically, Will led the PI process for Hays County and TxDOT on this FM roadway. The process included navigating through many school zones and flood-prone areas, as well as environmentally sensitive challenges. Hundreds of stakeholders were involved that included two municipalities, a school district, emergency services and public safety personnel, floodplain professionals, environmental organizations, TxDOT, and many business and landowners.



## **CONLEY** (CONT.)

Project Relevance: County project; Central Texas project; transportation improvements

Winters Mill Parkway Greenfield Construction, Hays County, Texas

Role: Commissioner; County Regional Representative for Transportation

Project Description: \$15 million greenfield project development

**Activities Performed:** Coordinated with the Austin district on two different state intersection improvements where Winters Mill Parkway intersected with the state system. Led process with US Fish and Wildlife to mitigate for endangered species that were present and developed a grade-separated hike and bike trail, along with 4 mile, 300 feet of corridor preservation.

Project Relevance: County project; Central Texas project; transportation improvements

Overpasses and Highway Improvements to I-35, Hays County, Texas

Role: Commissioner; County Regional Representative for Transportation

Project Description: \$50 million in overpasses and highway improvements to I-35

Activities Performed: Led the 13-year formal partnership with TxDOT that led to over \$800 million worth of corridor preservation and state highway improvements in Hays County, including this project

Project Relevance: County project; Central Texas project; transportation improvements

FM 150 Transportation Plan, Hays County, Texas

Role: Commissioner; County Regional Representative for Transportation

**Project Description:** County transportation plan

Activities Performed: Created and led efforts on the state/county FM 150 corridor project. This included developing corridor preservation plans that protected a 15 mile, 300 foot corridor along FM 150. This took an extensive PI process that became a model for many jurisdictions in central Texas that had similar situations of growing transportation demands in scenic, environmentally sensitive, rural and active areas of our state.

**Project Relevance:** County project; Central Texas project

RR 12 Transportation Plan, Hays County, Texas

Role: Commissioner; County Regional Representative for Transportation

**Project Description:** County transportation plan

**Activities Performed:** Led stakeholders' process and context-sensitive design exercises. This took an extensive PI process that became a model for many jurisdictions in central Texas that had similar situations of growing transportation demands in scenic, environmentally sensitive, rural and active areas of our state. The initial project TxDOT proposed was highly unpopular in the local area. By the end of the PI process, there was an approval rating of over 80%.

**Project Relevance:** County project; Central Texas project

