



AMERICAN
STRUCTUREPOINT
INC.

PROPOSAL FOR BURNET COUNTY

CONSULTING ENGINEERING SERVICES PLANNING AND DESIGN ENGINEERING SERVICES

RFP #20-4090-02

submitted February 10, 2020

A TEAM OF EXPERIENCED TRANSPORTATION DESIGN PROFESSIONALS

February 10, 2020

County Auditor/Purchasing Agent
Burnet County
133 E. Jackson Street
Burnet, Texas 78611

American Structurepoint is committed to providing solutions for Burnet County. Central Texas is home for our team, and we're excited by the growth that we see happening in your community. We want to work with you, as we've worked with other local counties, to plan and design projects that **meet your short- and long-term needs, and make responsible use of your funds.**

TRAVIS COUNTY. WILLIAMSON COUNTY. HAYS COUNTY...BURNET COUNTY.

The population of Burnet County is increasing, and the transportation needs of the County are changing. American Structurepoint, and our team leaders, have worked with other local counties as they upgraded their infrastructure to better serve local residents and businesses. We bring best practices from their successful projects to Burnet County, **allowing your projects to competently overcome common challenges.**

TCEQ. TXDOT. OTHER AGENCIES.

One of the most common challenges facing transportation improvement projects is the schedule. The design schedule can be impacted by environmental permitting complications, utility coordination issues, and department of transportation requirements. The current and local experience of American Structurepoint's team means that we have relationships with local agencies and knowledge of their current procedures for approval. Those tools will **expedite the design process for Burnet County projects.**

RESIDENTS. BUSINESSES. DEVELOPERS. SCHOOLS. CHURCHES. FARMERS.

Public support is a powerful tool in the progress of a transportation project. Cooperation during the right-of-way acquisition process can save time and money for the County. Our own Will Conley learned a lot about allaying the concerns of local businesses and residents during his 14-year tenure as a commissioner of Hays County. He will reach out proactively to stakeholders in Burnet County to identify their concerns about new transportation projects, and work with our experienced design team to **find solutions that meet the County's objectives and maintain the public's support.**

Over the last few decades, Central Texas has experienced tremendous growth. Communities who thought ahead and developed transportation systems to accommodate the growth, as Burnet County is doing, are thriving. I'm excited to work with Burnet County and provide leadership on the expansion of your roadway network. We have a great team of **experienced planners and designers to help Burnet County realize its goals.** Please give me a call at [512.750.5805](tel:512.750.5805) or email at rzamarripa@structurepoint.com with any questions that you might have.

Sincerely,
American Structurepoint, Inc.



Ricardo J. Zamarripa, PE
Vice President



1 CONSULTANT'S CAPABILITIES/EXPERIENCE/REFERENCES

With 500 experts working in-house across 11 disciplines, American Structurepoint's award-winning team understands how to successfully move your project from concept to completion.

We provide a wealth of experience and resources dedicated to helping you make your vision a reality. Since opening our doors in 1966, our mission has been to improve quality of life through our commitment to communities.



American Structurepoint's Texas team is comprised of 12 multidisciplinary professionals, with two Texas office locations in Round Rock and Austin. These offices provide innovative and progressive full-service engineering and transportation services, with experience delivering urban and rural roadway design projects, highway design, bridge design, traffic control, schematic design, hydrology and hydraulics, and construction phase services.

Our Texas team is fully supported by the robust resources from all of American Structurepoint's design centers throughout the US, and our company is consistently listed as a national Top 500 Design Firm by *Engineering News-Record*.

EXPERIENCE WITH SIMILAR PROJECTS

Our team has collaborated on many local transportation improvement projects in Central Texas. We are pleased to share details of, and references for, several projects similar to those anticipated in Burnet County.

RM 3237 SAFETY PROJECT WIMBERLEY, TEXAS



Owner: Hays County, Texas | **Reference:** Jerry Borchering, PE (Transportation Director) 512.393.7385

Similarities to Burnet County's Anticipated Projects

- ✓ Right-of-way and topographic surveying services
- ✓ Design schematics
- ✓ Geotechnical services
- ✓ Environmental services
- ✓ Utility location services
- ✓ Roadway project
- ✓ General public works project (drainage improvement)

This project consists of roadway safety improvements along a 3.59-mile segment between RM 12 and RM 150. The scope 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. The intersection of RM 3237 and RM 150 will be converted from a one-way, stop-controlled intersection to a modern single-lane roundabout. American Structurepoint is providing engineering services for development of intersection layouts. These services include preparing PS&E, public involvement, surveying and mapping, SUE, environmental clearance, culvert design, bridge hydraulic analysis, traffic control layout, and cross-sections. Additional services include, but are not limited to, preparing roadway design, hydrologic and hydraulic design, survey and ROW mapping, and geotechnical data collection.

Proposed Project Team Involvement: American Structurepoint (Prime Designer); Raba Kistner (Geotechnical Engineering); CD&P (Public Involvement Services)

Proposed Project Staff Involvement: R. Zamarripa (Project Manager and Principal-in-Charge); A. Bennett (Deputy Design Manager and Lead Drainage Engineer); F. Gaytan (QC Reviewer); A. Pfeiffer (Roadway Task Leader); J. Alchevsky (Engineer); R. Castilla (Engineer); T. Daigle (Engineer); J. Fowler (Engineer); H. Sulaica (Engineer)



SESSOM DRIVE INTERSECTION IMPROVEMENTS

SAN MARCOS, TEXAS



Owner: City of San Marcos, Texas | **Reference:** Rohit Vij, PE (Senior Project Engineer) 512.393.8090

Similarities to Burnet County's Anticipated Projects

- ✓ Right-of-way and topographic surveying services
- ✓ Design schematics
- ✓ Geotechnical services
- ✓ Environmental services
- ✓ Utility location services
- ✓ Roadway project
- ✓ General public works project (drainage improvement)

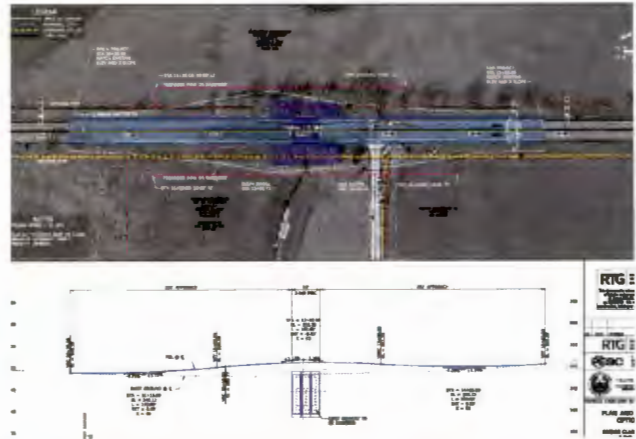
American Structurepoint is performing the PS&E design for this intersection and drainage improvements project at the intersection of Academy Street and West Sessom Drive. The drainage improvements consist of upgrading the existing storm sewer system within the project limits to the outfall on Texas State University property. In general, the existing 12-inch pipe between Orchard Street and West Sessom Drive will be abandoned so a 36-inch main trunk line can be placed along the south edge of Academy Street/West Sessom Drive. The drainage improvements will alleviate the flooding that occurs at this intersection and adjacent private properties. The Sessom Drive and Academy Street intersection improvements consist of converting the existing one-way, stop-controlled intersection to a signalized intersection. American Structurepoint prepared a traffic signal warrant study and traffic signal plans, including pedestrian signals and revised pavement markings design. Utility improvements for water and wastewater design are included in the scope.

Proposed Project Team Involvement: American Structurepoint (Prime Designer)

Proposed Project Staff Involvement: R. Zamarripa (Project Manager and Principal-in-Charge); F. Gaytan (QC Reviewer); A. Bennett (Lead Drainage Engineer); R. Castilla (Engineer); H. Sulaica (Engineer)

MANDA CARLSON ROAD BRIDGE NO. 134

TRAVIS COUNTY, TEXAS



Owner: Travis County, Texas | **Reference:** Mo Mortzavi (Project Manager) 512.854.7859

Similarities to Burnet County's Anticipated Projects

- ✓ General public works project (drainage improvement)
- ✓ Bridge project

American Structurepoint provided the hydraulic model, erosion control, and grading plan for this project. The existing Bridge 134 on Manda Carlson at Branch of Little Willow Creek in eastern Travis County is a multiple box culvert consisting of two 10' x 4' boxes. It is 23 feet long and 19.5 feet wide and considered functionally obsolete. This bridge was built in 1934 and has no railing or guard fence. The project is classified as a low-speed urban minor arterial and the existing roadway is 18 feet in width with 9-foot lanes and no shoulders. The proposed Manda Carlson Road bridge structure will replace the existing culvert structure with a 40-foot single-span, 12-foot prestressed concrete slab beams. This bridge design was determined to be the preferred alternative of several alternatives evaluated.

Proposed Project Team Involvement: P.E. Structural Consultants (Prime Designer); American Structurepoint (Design Subconsultant)

Proposed Project Staff Involvement: R. Zamarripa (Principal-in-Charge); F. Gaytan (QC Reviewer); A. Bennett (Lead Drainage Engineer); T. Daigle (Engineer); H. Sulaica (Engineer)



BITTING SCHOOL ROAD BRIDGE NO. 193

TRAVIS COUNTY, TEXAS



Owner: Travis County, Texas | **Reference:** Mo Mortzavi
(Project Manager) 512.854.7859

Similarities to Burnet County's Anticipated Projects

- ✓ Right-of-way and topographic surveying services
- ✓ Design schematics
- ✓ Geotechnical services
- ✓ Environmental services
- ✓ Utility location services
- ✓ Roadway project
- ✓ Bridge project
- ✓ General public works project (drainage improvement)

The existing Bridge 193 on Bitting School Road at Branch of Wilbarger Creek is a multiple pipe culvert, consisting of four 5-foot-diameter corrugated metal pipes, that overtops after relatively brief rainfall events. This requires closure of the road to local traffic, which limits access to residences along the road in the vicinity. This location is 4' lower than the adjacent Wilbarger Creek Bridge and floods before the bridge. The alternative chosen will raise 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. It will require raising the roadway profile by approximately 4 feet to remove the low point at Bridge #193.

Proposed Project Team Involvement: American Structurepoint (Prime Designer); P.E. Structural Consultants (Structural Engineer); Maldonado-Burkett (Surveying)

Proposed Project Staff Involvement: F. Gaytan (Project Manager); R. Zamarripa (Principal-in-Charge); A. Bennett (Lead Drainage Engineer); R. Castilla (Engineer); T. Daigle (Engineer); H. Sulaica (Engineer)

LITTIG ROAD BRIDGE NO. 161

TRAVIS COUNTY, TEXAS



Owner: Travis County, Texas | **Reference:** Mo Mortzavi
(Project Manager) 512.854.7859

Similarities to Burnet County's Anticipated Projects

- ✓ General public works project (drainage improvement)
- ✓ Roadway project
- ✓ Bridge project

The existing Bridge 161 on Littig Road at Branch of Elm Creek in eastern Travis County is a multiple box culvert consisting of three 10' x 4' boxes. It is 31 feet long and 21 feet wide and considered functionally obsolete. This bridge was built in 1934 and currently is load posted due to the severe scour at the bridge supports. The project is classified as a low speed minor collector and the existing roadway is 30 feet in width with 11-foot lanes and 4-foot shoulders on each side. The proposed Littig Road bridge structure will replace the existing culvert structure with a 60-foot single-span, decked slab beam superstructure. This bridge design was determined to be the preferred alternative of several alternatives evaluated.

Proposed Project Team Involvement: P.E. Structural Consultants (Prime Designer); American Structurepoint (Design Subconsultant)

Proposed Project Staff Involvement: R. Zamarripa (Principal-in-Charge); F. Gaytan (QC Reviewer); A. Bennett (Lead Drainage Engineer); T. Daigle (Engineer); H. Sulaica (Engineer)



CR 258 EXTENSION FROM US 183 TO SUNSET RIDGE

WILLIAMSON COUNTY, TEXAS



Owner: Williamson County, Texas | **Reference:** Randy Ehresman (GEC Road Bond Program) 512.691.2229

Similarities to Burnet County's Anticipated Projects

- ✓ Right-of-way and topographic surveying services
- ✓ Design schematics
- ✓ Geotechnical services
- ✓ Environmental services
- ✓ Roadway project
- ✓ General public works projects (drainage improvement)

This 0.5-mile-long greenfield roadway extension project includes right- and left-turn lanes on US 183 into the new location of CR 258. The American Structurepoint team's design services include roadway design, hydrologic and hydraulic design, survey, and right-of-way mapping. The project includes environmental investigations and permitting, as well as investigations of karst features.

Proposed Project Team Involvement: American Structurepoint (Prime Designer); CD&P (Public Involvement Services)

Proposed Project Staff Involvement: F. Gaytan (Project Manager); R. Zamarripa (Principal-in-Charge); A. Bennett (Drainage Engineer); A. Pfeiffer (Roadway Engineer); J. Alchevsky (Engineer); R. Castilla (Engineer); T. Daigle (Engineer); J. Fowler (Engineer); H. Sulaica (Engineer)

POLICIES AND PROCEDURES FOR WORK QUALITY AND COST CONTROL

Quality

American Structurepoint is committed to achieving the highest level of quality in our work to provide long-term value to you. QA/QC Manager Ricardo Zamarripa will work closely with the project manager, Fernando Gaytan, in providing technical oversight and technical QA/QC of each project assigned to our team.

Having served as a senior technical advisor and quality manager on several projects, he has extensive QA/QC experience in the review of schematics and PS&E documents. Although the implementation of this approach is the responsibility of every team member, Ricardo will be responsible for developing and implementing quality management strategies to ensure the proper quality control processes are in place and that quality control is effective throughout the life cycle of each project.

Quality Assurance

- » Develop a project-specific QA/QC plan to ensure adherence to federal, state, and local guidelines
- » Conduct QA audits of design documents to verify compliance with project QC and close out corrective action requests
- » Prepare and maintain project records (quality control forms, checklists, comment resolution log at each submittal, "redlines" or check prints, and lessons-learned documentation)
- » Provide QC training to all members of the team
- » **Contractually obligate all subconsultants to implement a quality process by either adopting American Structurepoint's QA/QC plan or submitting their QA/QC plan for approval and conducting their own reviews for all deliverables**

QA



Quality Control

- » Implement QC procedures, including detailed work item lists, check prints, and multi-discipline/peer review checklists
- » Perform “over-the-shoulder” and formal reviews by independent professionals for conformance to design criteria and requirements, accuracy and consistency of information with all disciplines, and completeness & clarity of drawings/plans
- » Conduct frequent design coordination & progress meetings, communication with team and Burnet County

Addressing Design Deficiencies

During the design process, any design deficiency found will be corrected as part of the on-going design development and will be reflected in subsequent design submittals. These design deficiencies will be documented and reviewed with the design staff so that future design submittals do not have the same deficiency. If a design deficiency is discovered after the release of final construction design documents, it will be immediately processed through the design change notice process. Any design disciplines and construction personnel that are affected by the change will be notified and a collaborative discussion on the resolution of the deficiency will be held. Once a resolution is determined, the formal design change notice documents will be processed through the standard QC procedure, with a formal audit by the quality manager in a timely manner.

Cost Control

In order to implement cost-saving measures, we will look at the individual components of each project and reduce them – at the same time achieving the goals of the project and keeping safety of the traveling public in mind.



Pavement: Our design team will explore the reuse of existing pavement (overlays/spot reconstruction) as much as possible, reduce ROW acquisition, and consider narrower lanes if facility type allows. *On IH 35 – William Cannon Drive, Project Manager Fernando Gaytan worked with the Austin District to refine the pavement design to reduce the amount of asphalt and yielded several million dollars in savings. We will use “notch and widen” in locations where pavement is in good condition.*



Bridges and Culverts: We will widen bridges if the existing condition is determined suitable by bridge condition survey. Instead of replacing/extending culverts, we will consider design exceptions. We will perform a bridge vs. culvert cost-benefit analysis to make recommendations.



Earthwork and Retaining Walls: Cost savings can be realized by minimizing profile adjustments and reducing the need for retaining walls, earthwork, and special grading. We will balance the earthwork and explore using steep side slopes outside of clear zone if approved by our geotechnical engineer.



Drainage Systems: Our designers will consider an alternative ditch design that minimizes earthwork. We can design culverts and a drainage system to meet minimum requirements, minimizing pipe sizes. We will look into innovative ideas such as in-line detention instead of structural detentions of storm sewers. Keeping water quality features (if needed) within the ROW will reduce easement acquisition costs.



Alignment Adjustments: We will look at horizontal and vertical adjustments to avoid utilities, reduce right-of-way takes, and reduce drainage easements. Deviation from existing alignment and profile will be minimized to reduce throwaway pavement. *Led by Amy Bennett, American Structurepoint's drainage design on the Manda Carlson Road Bridge in Travis County adjusted ditch grading and a proposed driveway culvert to avoid a conflict with an existing overhead utility pole, saving both time and cost for the County.*



Traffic Control: Costs associated with traffic control will be kept as low as possible by minimizing traffic phasing shifts. *On Travis County's Jesse Bohls Road Bridge Replacement project, Fernando Gaytan oversaw a one-phase traffic control plan that constructed the majority of the project on new alignment, maintaining existing traffic with Texas MUTCD-compliant signage and protection.*



MANAGEMENT AND ORGANIZATIONAL STRUCTURE

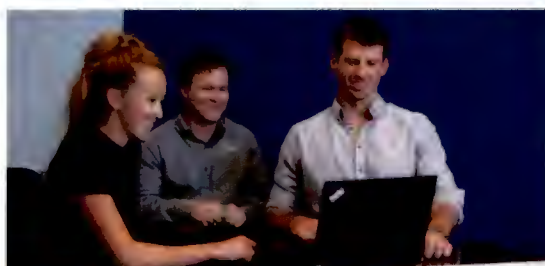
Fernando Gaytan, a 35-year transportation design professional, will be the project manager for this contract, and the sole point-of-contact for the County. Fernando works in American Structurepoint's Austin, Texas office with the contract's principal-in-charge, Vice President Ricardo Zamarripa.

Our Round Rock- and Austin-based design staff have spent the vast majority of their careers working on infrastructure improvement projects in Central Texas. Their knowledge of local traffic patterns and geographic conditions enhances their ability to provide effective design solutions. The relationships that they have built with local residents, businesses, organizations, and officials allow them to expedite the early project development tasks, which can help us expedite your project schedules.

Fernando has created a multi-disciplinary team of experienced transportation design professionals. He will meet with the County as new projects are assigned to us, to fully understand the project goals and then create a project-specific team to efficiently create a design solution to meet your objectives.

CAPABILITY TO PERFORM THE WORK FOR THE DURATION OF THE PROJECT

Our Central Texas team is currently working on several projects for local clients. **The anticipated completion dates of these projects allows us plenty of staff availability for Burnet County's projects.**



We have eight active transportation design projects being managed from American Structurepoint's Round Rock and Austin offices that will be completed by the end of March 2020.

American Structurepoint has 280 transportation professionals firmwide. Project Manager Fernando Gaytan will be able to add team members to address specialized project components, or to add manpower to accelerate project schedules.

American Structurepoint has assembled a team of qualified consultants to provide a complete solution to the County. **The capabilities of many of our team member firms overlap, creating additional capacity and the opportunity to accelerate portions of the schedule to best fit the County's needs and finances.**





2 PROJECT TEAM

EXTENT OF PRINCIPAL INVOLVEMENT



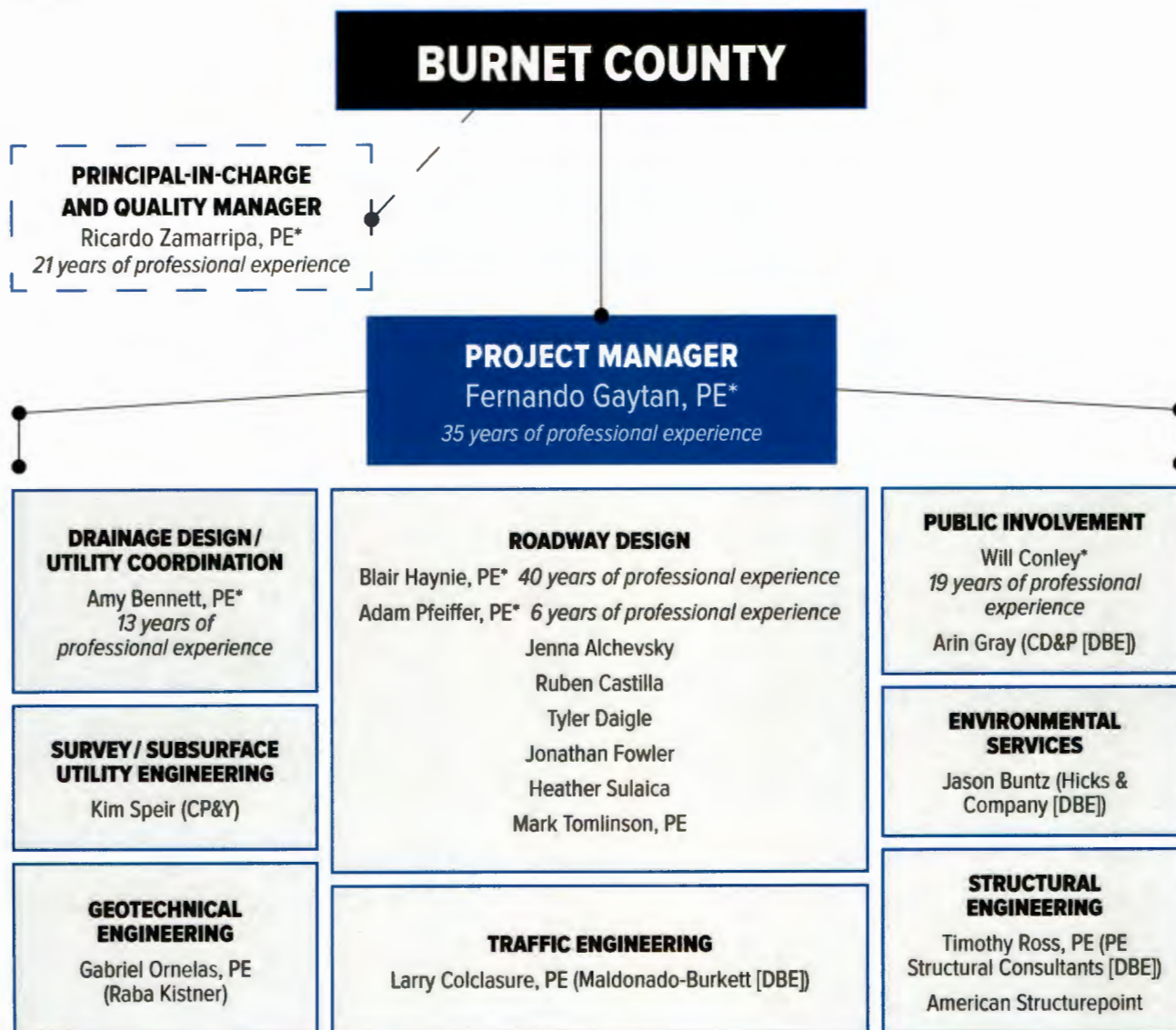
Achieving the goals of Burnet County is our primary goal for this contract. We will meet with the County at the beginning of the project, and at regular intervals throughout its duration, to assess the needs and desires of County management.

Principal-in-Charge Ricardo Zamarripa is a Central Texas resident who works alongside our project manager, Fernando Gaytan, and other key project staff. He will work with Fernando to verify that the appropriate staff and resources are available to complete your projects on your desired schedule.

Ricardo will see all project deliverables in his role as the project's quality manager. Quality control is our responsibility, not the County's, and no documents will go to you without having first received Ricardo's approval.

KEY TEAM MEMBERS AND THEIR RESPONSIBILITIES

All staff members listed on the organizational chart work from the Central Texas offices of American Structurepoint and our subconsultants.



*key staff member with qualifications provided; full resumes available for all staff members upon request



FERNANDO GAYTAN, PE
PROJECT MANAGER

- » Professional Engineer – Texas + 7 additional states
- » BS, Civil Engineering, University of Texas at Austin

Fernando is a senior project director with 35 years of experience in civil engineering. He specializes in transportation planning, design, and construction. Fernando has been involved in design-build projects in Texas in various roles such as designer, owner's representative, quality control manager, and project manager. His areas of expertise are project management, roadway design, drainage design, and traffic control plans.

He is 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. Fernando also reviews professional services agreements, manages quality control, and is responsible for the review of design, construction plans, cost estimates, specifications, and engineering reports.

Unique Value to Burnet County: Fernando has managed multi-disciplinary design teams on high-profile transportation projects during tight labor markets and times of material price volatility. His experience working under challenging conditions has instilled in him the value of producing accurate, high-quality plans that can be bid accurately and produce minimal change orders.

RONALD REAGAN BOULEVARD NORTH PHASE IV – PLANNING, ENVIRONMENTAL, AND PS&E WILLIAMSON COUNTY, TEXAS



While at a previous firm, Fernando was the project manager for schematic and final design services for a new \$14 million, 6-mile, 4-lane divided section from SH 195 to I-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. Fernando 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 four lanes, permitting, and development of a water pollution abatement plan to meet the Edwards Aquifer regulations.

Fernando's design team included four subconsultant firms

The roadway is designed to meet Williamson County and TxDOT design standards. In addition to project management duties, Fernando set the profile to optimize the earthwork along the route, created a layout of pavement marking and signing plans along existing SH 195 for the tie-in and development of left-turns into 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.

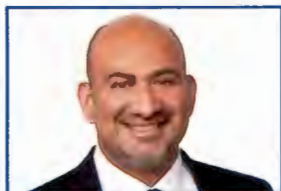
Owner: Williamson County, Texas | **Reference:** Robert Daigh (Sr. Director of Infrastructure) 512.943.3330



QUALIFICATIONS AND INDIVIDUAL EXPERIENCE

American Structurepoint will provide a team of qualified experts who are prepared to provide right-of-way and topographic surveying services, design schematics, geotechnical services, environmental services, and utility location services. **We are fully able to design roadway projects, bridge projects, and general public works projects such as drainage improvement and planning projects.**

American Structurepoint is registered with the Texas board of professional engineers and is pre-certified in 32 different categories by the Texas Department of Transportation.



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

- » Professional Engineer – Texas
- » MBA, St. Edwards University
- » BS, Civil Engineering, Texas A&M University

Ricardo has 21 years of experience in transportation engineering, operations management, 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 and tollway facilities.

At American Structurepoint, Ricardo has been the principal-in-charge for transportation improvement projects in Williamson, Hays, and Travis Counties. These projects have included roadway projects, bridge projects, and drainage improvement projects. American Structurepoint has self-performed design schematics, including grading plans, erosion and sediment control plans, and hydraulic modeling. The project teams have included complementary services like surveying, geotechnical investigation, utility coordination, and environmental investigation and permitting.

Unique Value to Burnet County: Ricardo has had executive responsibility on many transportation projects in Central Texas. He can be a resource to the County as they embark on new types of projects.



BLAIR HAYNIE, PE, CPP
ROADWAY DESIGN LEAD

- » Professional Engineer – Texas
- » MBA, West Texas A&M University
- » BS, Civil Engineering, Texas Tech University

Blair is a licensed professional engineer with over 40 years' experience working with all aspects of transportation infrastructures including highway, bridge, safety, and public transportation facilities. He managed and negotiated the impact of these facilities upon the transportation user, contractors, consultants, special interest groups, property and utility owners; and successfully managed public and political venues to facilitate the transportation avenues for better communities, region, and state. Blair has worked as a design consultant for six years, after a 32-year career at TxDOT, culminating in service as director of transportation planning and development in the Abilene District.

Unique Value to Burnet County: Blair's experience as both a consulting engineer and a TxDOT employee means that he understands the options for safe roadway design, and is able to apply innovative solutions to achieve goals in a cost-effective manner.



ADAM PFEIFFER, PE
ROADWAY ENGINEER

- » Professional Engineer – Texas
- » BS, Civil Engineering, University of Nebraska at Lincoln

As a project engineer in American Structurepoint's Road Group, Adam provides hands-on engineering design. He has developed roadway and bridge geometry using TxDOT criteria and designed ADA-compliant sidewalk and shared-use path. He is experienced in Bentley Open Roads, GeoPak (Roads and Drainage), MicroStation, VISSIM, SYNCHRO, and HEC-RAS to complete his design tasks.

Unique Value to Burnet County: Adam's skill with design and visualization software allows our team to create and view potential designs from a variety of perspectives, selecting designs that maximize available resources and meet TxDOT design criteria.



AMY BENNETT, PE
DRAINAGE DESIGN LEAD, UTILITY COORDINATION LEAD

- » Professional Engineer – Texas
- » BS, Civil Engineering, Florida Institute of Technology

Amy is a civil engineer with 13 years of experience in highway engineering design projects (rural and urban). Her expertise include 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 has led utility coordination efforts for over 20 schematic and PS&E projects in Central Texas. She has experience in identifying utility conflicts, coordination with design team on utility adjustments and replacements, and coordination with utility companies. Due to her roadway and drainage background, she is able to effectively coordinate with the design team to address utility challenges, avoid schedule delays, and provide cost savings.

Unique Value to Burnet County: Amy's knowledge of drainage design, utility coordination, and roadway design allows her to proactively design solutions to anticipated conflicts, avoid change orders during the construction phase.



WILL CONLEY
PUBLIC INVOLVEMENT LEAD

- » BA, Political Science, Texas State University

Will is an accomplished executive with over 15 years of public service in transportation, planning, water resources, school safety, budgeting, and public safety. He also has nearly two decades of experience as a small-business owner, providing him perspective on the impacts that transportation system designs have on economic opportunity.

Will has led public involvement for one of the fastest growing regions of the state. With CAMPO, he led the PI for their first bike and pedestrian plan and PI for various plans, projects, and initiatives. With Hays County, he created the highly regarded PI process for the FM 150 corridor study, led the PI for the 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.

Unique Value to Burnet County: Will brings best practices from addressing and overcoming the concerns of local residents and business owners during Hays County's transportation system expansion to Burnet County, streamlining your process for efficiency and effectiveness.



3 METHOD OF APPROACH

GENERAL APPROACH

Project Manager Fernando Gaytan will be the single point of contact for Burnet County and will coordinate any assignment to develop a scope, fee, and schedule for each project. A project management plan and QA/QC plan will be developed for each assignment with clearly delineated communication protocol and assignment of qualified personnel in all roles necessary for the assignment.

Our focus on public transportation improvement projects means our staff is very familiar with the funding mechanisms available to bring such projects to fruition. We pledge to be a true partner to the County through all phases of the project lifecycle, including assisting with identifying and applying for funding.

Capital Improvement Programming: We will advise the County in budgeting of projects and identifying funding sources for your programs. Our staff will serve as an extension of the County staff and manage the program at the level that the County desires. We will manage the program from development of RFQ and selection of consultants to managing the consultant scope and budget, reviewing deliverables, and providing bidding assistance and contractor oversight.

American Structurepoint's approach to managing capital improvement programs, including public utilities, is to serve as an extension of County staff. We have extensive experience managing large capital programs on city, county, and state levels. Our general approach and services with which we have experience will consist of:

- » Client scoping meeting and developing scope and fee and receive NTP
- » Assisting in identifying and prioritizing capital improvement projects
- » Identifying opportunities for partnerships to leverage funding to make dollars "go further"
- » Developing RFPs and assisting in selection of consultants
- » Document control and tracking of program related documents
- » Reviewing third-party scopes, fees, schematics, reports, and plan submittals
- » Management of design, scope, and schedule of third-party consultants
- » Assistance with public involvement and program website services if requested
- » Assistance and coordination of ROW acquisition services as requested
- » Construction phase services
- » Bidding document preparation, contractor selection
- » Responding to RFIs, utility conflict resolution, review of contractor pay requests
- » Assistance with contract modification recommendations
- » Assistance with claims, contract enforcement, project acceptance, and closeout
- » Post-construction services such as warranty inspections
- » Periodic progress reports and meetings to keep County informed

Throughout the process, communication is key to the success of any capital improvement process. Weekly progress reports on all projects will be key to keeping the County up to date and quickly addressing any issues that may arise. Weekly progress reports also help clearly identify any decisions that need to be made by the County. In addition, monthly updates on progress for the projects under construction will be produced.



Planning and Preliminary Engineering: The design team will collect available data and establish design criteria in collaboration with the County. We will perform surveys, environmental studies, traffic studies, and other data acquisition; develop preliminary concepts and cost estimates; coordinate and perform public involvement, and coordinate with other public entities such as TxDOT. An approved plan and/or schematic to move forward into construction plan development will be the result of the preliminary engineering phase.

The American Structurepoint approach to transportation planning, design, and engineering is to put our client's needs first. We will work with you and your stakeholders to completely understand the transportation needs in the community, then develop cost-efficient options to address them. Once you've chosen an option, we will apply our extensive experience working with city, county, and state-level clients to engineer a solution that meets the need in a way that can best be accepted and used by people in the community.

Construction Plans: Final construction plans will refine alignments, design pedestrian facilities, mitigate utility conflicts/relocations, and perform final design of traffic control plans, drainage, and intersection layouts.

QA/QC: At each step of the way, our proven QC plan described on page 5 will be followed.



PUBLIC INVOLVEMENT APPROACH

We are committed to individual meetings and public workshops to exceed what is required in the NEPA process. We will develop a stakeholder list of landowners, public officials, homeowner associations, and members of the public and send frequent project updates.



Potential Public Involvement (PI) Issues

- » Concerns for flooding and property loss, including historical farmland and changes in access
- » Concerns the upgraded roadway may bring faster development, more traffic, and more noise
- » Building trust that the County is minimizing environmental impacts
- » Explaining the need and benefits of transportation system expansion

Outreach Tools

Where the County sees a need, we will create a project website, Facebook page, and other social media as appropriate and develop an easily recognized unified theme with consistent graphics. We will work closely with the County to develop key messages we'll use throughout the planning effort. An important part of the website page will be an internet survey, so both people who live near planned projects and those who travel through them can give us input at any time.

Stakeholder Meetings/MAPOS

These meetings provide opportunities to introduce potential impacts in a non-confrontational manner, for stakeholders to share sensitive information privately, and to develop good relationships with the community. We have found this outreach beneficial and stakeholders appreciate the private setting before a public meeting. This outreach also serves as a way to discover any potential problems or opposition before we have public meetings, so we can address these in advance; it is also good for developing materials and messaging. We will evaluate the interactions and input received to help shape formal public outreach.

Through our team members' current and recent experience working in Travis, Hays, and Williamson counties, we have a deep understanding of the common concerns of local stakeholders. We know that proactive communication about potential projects is a key tool in building consensus and acceptance.

Public Meetings

On the Loop 360 Needs Assessment in TxDOT's Austin District, roadway team member Mark Tomlinson led a grassroots public involvement effort to discuss project concepts, develop potential project scenarios, and generate public support for proposed projects. He and his team held multiple stakeholder meetings involving adjacent landowners, commercial property owners, and commuters. After capturing public support, the project team developed six project scenarios, some currently being implemented.



Public meetings are held in community locations where the public already gathers, such as libraries, schools, and parks.

The team will assist the County with all aspects of public meeting planning and facilitation. For each meeting, we will develop a topic and focus outline with the County that could include:

- 1** Introducing the project; collecting input on existing conditions, travel patterns, and transportation needs; listening to concerns; and learning about the best way to engage stakeholders
- 2** Sharing different travel demand model scenarios and a range of alternatives, and getting feedback on alternatives and evaluation criteria
- 3** Presenting the alternatives, recommended alignment and preliminary project plan

We will work with the County to develop all meeting materials including announcements, exhibit boards, and maps, and we will look for opportunities to show information visually. This may include renderings and illustrations of the corridor. Our team has outstanding experience developing 3D visualization tools to help the public understand what is proposed. At each meeting, we will provide activities for children. We will develop community engagement performance measures to grade our effectiveness. We will issue meeting reports to document input and summarize comments and other feedback.



UTILITY DESIGN APPROACH

Utilities

We will review existing information of all utilities within the project area in detail using field verification, Texas 811, and Texas Railroad Commission website and identify any potential utility conflicts to create a utility conflict matrix. We will attend monthly utility coordination meetings to resolve utility assignments within the ROW and to ensure timely relocations.

Utility Coordination

Early coordination to resolve conflicts will be a priority to ensure project schedules are not impacted. American Structurepoint will be responsible for coordination and oversight of utility operations during the preliminary engineering, design, and construction phases. We will provide the following services:

- » Perform record research, SUE, and conflict analysis to evaluate alternatives
- » Coordinate with each utility company whose facilities impact the project
- » Coordinate new placements of affected utilities to ensure proper clearances and alignments; review relocation plans and cost estimates for compliance with the County standards, UAR, and other applicable design standards, reasonableness of costs, and phasing/sequencing
- » Prepare and have utility companies execute the Utility Permits or reimbursable Utility Agreement Assemblies as applicable

We will coordinate with the County and other utility providers to provide the best information possible for the contractor's use. In addition, if potholing by a third-party firm is needed, we have relationships with several and will work with the County to bring on a firm acceptable to you.

5 HABITS OF HIGHLY EFFECTIVE UTILITY COORDINATION

- 1** | We have a **PROACTIVE** approach to utility coordination. We believe having more knowledge up front will result in fewer changes during design, which impacts the project schedule and budget.
- 2** | We have a **THINK WIN-WIN** attitude. By always evaluating how we can design and build our project successfully, with minimal impacts to utilities, we keep the project and the utilities on time and on budget.
- 3** | We **SEEK FIRST TO UNDERSTAND, THEN TO BE UNDERSTOOD**. If we take the time to understand why a facility is so important to a utility, what their facilities are, and how much it would cost in both time and money to relocate, then we are better able to minimize, mitigate, or completely avoid costly relocations or design changes.
- 4** | We **PUT FIRST THINGS FIRST**. We can't design around something when we don't know what "it" is or where "it" is. When we obtain QL-B information on facility locations from the beginning, we can start the design with accurate information.
- 5** | We **SYNERGIZE**, or work as a team. We believe that treating utility owners as partners and allowing them a voice in the process gives them ownership to the success of the project.



4 UNDERSTANDING OF REQUESTED SERVICES AND LOCAL AREA

MEETING THE COUNTY'S NEEDS

Construction Cost and Value Engineering

American Structurepoint's history of working in Central Texas provides our understanding of the County's design requirements, listed Standard Products, and preferred equipment. Our ability to develop alternative engineering solutions to technical project challenges will maximize the cost benefit to the County. Design alternatives will be evaluated before selecting the best-fit alternative, the alternative that balances cost of construction with the value to the Public.

Minimize Public Impacts during Construction

The County's infrastructure is critical to the general public, and as such, must continue to perform its intended functions during construction of the project. We will provide continuity through careful consideration in the planning, design, and construction of the improvements and through construction sequencing, and scheduling of work, complete traffic control, and public safety provisions.

Long-Term Operation and Maintenance

Roadways must be designed to perform reliably over an extended service life. Accomplishing this in the project design requires understanding of the infrastructure's operational requirements, attention to design for ease of maintenance, selection of reliable equipment and appropriate construction materials, and experience in the areas of materials compatibility and corrosion control. Our experience designing transportation improvements in Central Texas ensures that we will achieve the County's long-term operation and maintenance requirements.

ACHIEVING PROJECT SUCCESS

American Structurepoint's planning and design documents are created with the end users of each transportation facility in mind.

We make a site visit to each proposed project location to verify provided data and look for other challenges which might affect the roadway's ultimate construction.

Geology

Burnet County has rolling hills and scenic lakes. Geotechnical investigations will be an important part of creating a long-lasting roadway surface and stable structural foundations for transportation improvements.

The subsurface geology within Burnet County is comprised of several geological formations that generally exhibit rather hard, dense rock materials. The western half of the county is primarily comprised of the Walnut Limestone formation with a band of Glen Rose Limestone formation extending through the city of Burnet. Both formations are comprised of limestone, dolomite, and marl. Rock quarries are often founded in the Glen Rose Formation as a result of the alternating resistant beds of fine-grained dolomite. In fact, Burnet has a few limestone quarries. Key geotechnical engineering concerns for development supported on this formation are the porous zones and the hardness of the limestone as it impacts excavation operations.

The eastern half of the county is comprised of two primary formations; the Wilberns Formation and the Valley Spring Gneiss. Anticipated subsurface soils in the Wilberns Formation will be comprised of siltstone, limestone, and shale. The Valley Springs Gneiss will be comprised of quartz gneiss. Key engineering considerations for development supported on the soils/rock of this formation typically include the presence of very hard sandstone, siltstone, shale and limestone formations.

American Structurepoint's team includes geotechnical specialty firm Raba Kistner. Raba Kistner is headquartered in San Antonio, with additional Central Texas offices in New Braunfels and Austin. The firm has an unmatched expertise with the subsurface conditions in Central Texas, and will be a key part of developing long-lasting solutions for Burnet County.

Local Weather Conditions

We are aware that much of this county is in "Flash Flood Alley", partially due to its topography. As a result of this reality, we take into consideration access for residents and first responders as it pertains to this potential liability and consider how infrastructure throughout the county can be improved to limit this liability.



IMPROVING THE QUALITY OF LIFE FOR COMMUNITIES

American Structurepoint's team is structured with Amy Bennett specifically focusing on the drainage needs of transportation improvements. Amy works with geotechnical engineers and environmental professionals to identify the existing conditions, and models design storm and check storm events to determine the optimal solution using Atlas 14 intensities.

The hydraulic and hydrologic challenges created by flooding are also an important factor in designing safe and long-lasting bridge structures.

PE Structural Consultants is a leading transportation design firm in Central Texas whose engineers have significant experience designing for the extreme weather conditions faced by Burnet County and its neighbors. American Structurepoint and PE Structural have successfully completed multiple transportation improvement projects together, including three in 2019 for Travis County.

Growing Communities

Burnet County experienced population growth of over 11% from 2010 to 2018. The rapid influx of new residents simultaneously brings opportunities and challenges. We know that Burnet County is proud of the natural beauty in your land, and it's important to us that necessary infrastructure improvements are planned and designed to minimize negative consequences.

Hicks & Company Environmental/Archaeological Consultants is part of our team to help us investigate the existing conditions at each potential site and find ways to minimize or mitigate impacts. They will look for cultural resources, as well as water quality, natural plants, and animal habitats.

We must also look at the current culture within the County, and work to design transportation projects that enhance the lives of local residents and facilitate growth for businesses.

Concept Development & Planning (CD&P) is a Central Texas public involvement firm whose staff often work to build public support of new transportation projects. They will work in concert with American Structurepoint's Will Conley, who had a 14-year tenure as a Hays County commissioner. Together, they will meet with local residents and landowners to identify their concerns and proactively address them, building support for planned improvements.

Contracting Partners

We are committed to providing constructible plan documents to Burnet County. That includes using recent bid tabulations to identify materials which can be installed in the County at a reasonable cost. It also includes using common sections on multiple structures, where practical, to reduce the number of different components which must be sourced or fabricated.

Diversity of Partners

New transportation facilities will be utilized by people of all backgrounds and genders, and it is important to us that representative viewpoints are included in the planning and design processes.

As a starting point, we have assembled a project team that includes several diverse businesses.

American Structurepoint – available for mentor/protégé relationships
Project Manager / Prime Designer / Roadway Design / Drainage Design / Public Involvement

Concept Development & Planning (CD&P) – DBE Certified
Public Involvement

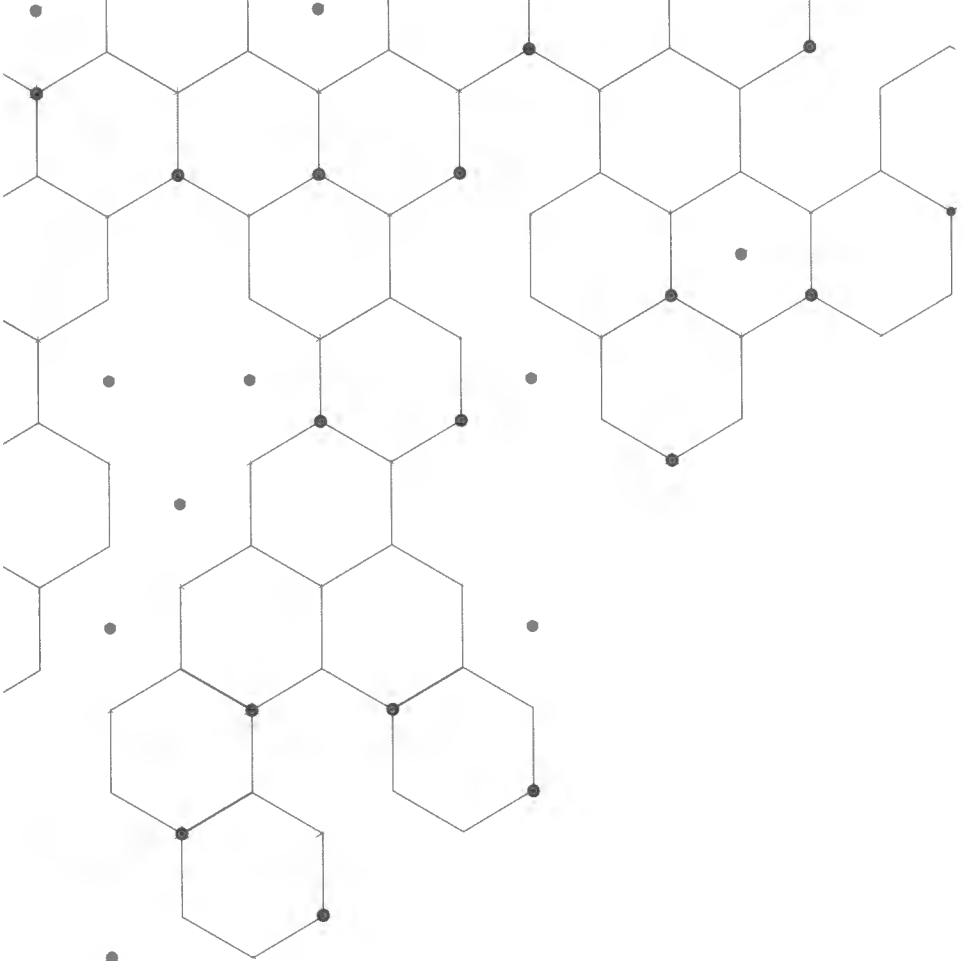
Hicks & Co Environmental/Archaeological Consultants – DBE Certified
Environmental Investigation / Environmental Permitting

PE Structural Consultants – DBE Certified, SBE Certified
Structural Design

Maldonado-Burkett – DBE Certified, SBE Certified
Traffic Engineering

Select American Structurepoint for:

- **Experience on similar projects** -- allowing your projects to competently overcome common challenges
- **Experience managing agency coordination:** expediting the design process for your projects
- **Experience achieving consensus among stakeholders:** finding solutions that meet the County's objectives and maintain the public's support



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