



3.1

EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

AGL2 developed our plan for design, construction, and maintenance to achieve TxDOT's stated goals.



Complete the Project on schedule and to the highest degree of quality possible.



We have seasoned design-build (DB) veterans from throughout our organization, a proven Project Management Plan (PMP) and supporting operating procedures, a comprehensive design and construction schedule, and a robust quality program focused on professionalism, craftsmanship, and a *do it right the first time* mentality.



Minimize delays to the traveling public and inconvenience to the surrounding communities while maximizing safety in the corridor during construction.



Traveler and worker safety are priority #1. We developed our plan for maintenance of traffic (MOT) within this confined corridor right of way to minimize shifts and establish substantial work zones. We minimize lane closures, accelerate cross-street bridge and intersection construction where possible, and maintain neighborhood access mobility for key stakeholder attractions like the Dallas Zoo.



Facilitate participation by DBEs, women-owned business enterprises and minority business enterprises.



We will exceed the stated 12.5 percent DBE goal by fostering capacity and capability through structuring procurement packages to afford maximum local participation, offering mentor-protégé opportunities and a formal on-the-job training program, and by proactively managing performance. We currently have teaming agreements with eight certified DBE subcontractors, and have contacted and/or accepted bid estimates from 30 others.



Ensure consistent communication and maintain commitments to the public and stakeholders throughout Project delivery.



We are ingrained in the South Dallas community through our past and ongoing work. We will employ the expertise of K Strategies to effectively manage our external communications, and have proven internal procedures and protocols to foster thorough and consistent communications to TxDOT, stakeholders and the Project team.



We are AGL2; the right team with the right plan, with the resources, will and the determination that can be entrusted to deliver the Southern Gateway Project.

OUR TEAM

Comprised of three of the top seven transportation contractors in the nation (2016 *Engineering News-Record*), AGL2 brings the highest level of Project-specific scope experience and capabilities to TxDOT. Our team members have worked together on \$12.2B in DB projects across the nation, including the \$1.1B TxDOT 35Express project right here in Dallas. AGL2 strategically maintained this partnership to provide TxDOT a ready and proven team that best knows the IH 35E corridor traffic volumes and the challenges it presents. We are supported by Parsons Transportation Group, Inc. as the Lead Engineering Firm. Please reference **Figure 3.1A**. Parsons served in a similar role on 35Express and brings a strong supporting group of local DB personnel and TxDOT-experienced design firms, many of which are Disadvantaged Business Enterprises (DBEs).

ORGANIZATION OF TECHNICAL PROPOSAL

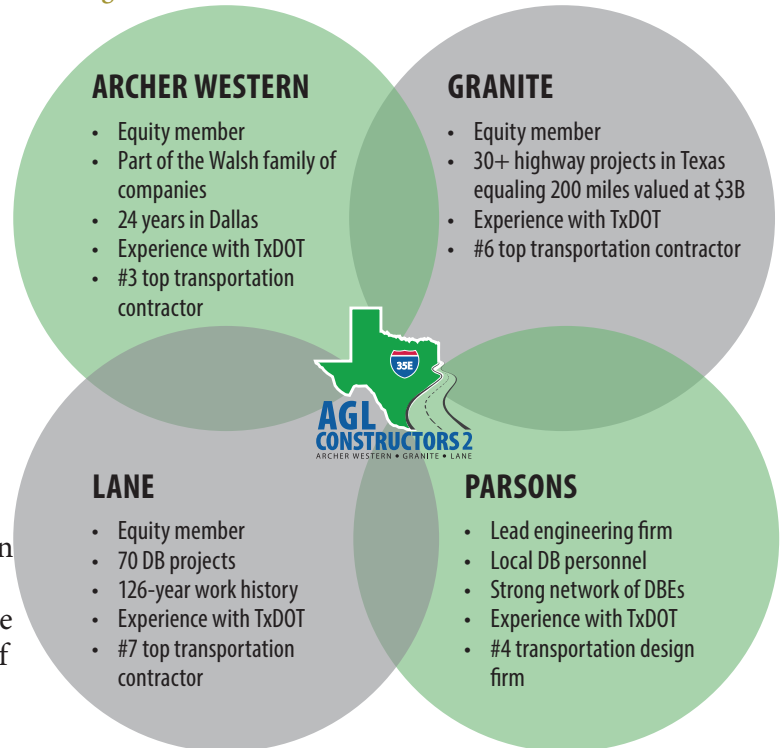
Following this Executive Summary, our proposal is divided into two primary sections:

1. Proposer Information, Certifications & Documents
2. Project Development Plan

In a separate Appendix binder, we provide the following items:

1. Key Personnel resumes, references (TxDOT Form G), and certifications
2. Technical Drawings, Graphs and Data
 - A. Utility Tracking Report
 - B. Preliminary Risk Matrix
 - C. Pavement Design Report

Figure 3.1A: The AGL2 Team



D. Bridges and Surface Structures Maps, Layouts and Typical Sections

E. Local Enhancement (LE) – Deck Plaza Structure supplemental narrative and renderings (added value)

3. Preliminary Project Baseline Schedule

In addition, we provided 172 roll plots in four separate tubes labeled:

1. Construction Staging, Sequencing and Traffic Management Section 1
2. Construction Staging, Sequencing and Traffic Management Section 2A
3. Roadway Section 1 and 2A
4. Drainage Section 1 and 2A

CHANGES

As requested by the Instruction to Proposers, Section 2.11.2, AGL2 designated Walsh Infrastructure Management, LLC (WIM) as our lead maintenance firm; submitted to TxDOT on February 2, 2017. This submission included Form G Key Personnel Resume and References for **Arvin Delgado, EIT**, Lead Maintenance Manager and **Keith Bilbrey**, Public Information Coordinator as well as Form F Safety Questionnaire and qualification information for WIM.

As that time, we also requested to replace **Arthur Champlin, PE** (proposed in our Statement of Qualifications) with **Christopher Rodriguez, PE**. These changes were approved on February 27, 2017 by TxDOT and is reflected in our current organization chart provided on page TP-5.

There are no changes to our equity members or major participants since the submission of the Statement of Qualifications.

PROPOSED MANAGEMENT, DECISION MAKING AND DAY-TO-DAY STRUCTURE

The timing of the Project aligns perfectly with the completion of the 35Express project. This schedule enables AGL2 to transfer our proven management team, their knowledge, expertise, resources and equipment easily and quickly from one TxDOT project to the next.

2017

AUG	○	35Express Substantial Completion
AUG	○	Southern Gateway Design NTP 1
OCT	○	Southern Gateway Design NTP 2
OCT	○	Southern Gateway Design Mobilization
OCT	○	Southern Gateway Construction NTP 2
OCT	○	Southern Gateway Construction Mobilization NTP 2

Summary of Proposed Management

Our team is led by Project Manager **Mark Smith**, who brings his experience managing TxDOT's 35Express project and strong local contracting relationships. He is supported by construction professionals and recognized industry leaders including:

- **Don Good, Construction Manager** - 35Express project with 42 years of experience
- **Mark Frye, PE, Design Manager** - 31 years of experience, worked on 35Express, SH 183 Managed Lanes and the Horseshoe project
- **Christopher Rodriguez, PE, Lead Structural Engineer** - worked on 35Express and SH 183 Managed Lanes with 26 years of experience
- **Pat Gibbons, PE, Lead Maintenance of Traffic Engineer** - 29 years of experience, worked on SH 183 Managed Lanes
- **David Falcon, PE, Lead Roadway Engineer** - 16 years of experience, worked on 35Express and SH 183 Managed Lanes
- **Bob Gonzalez, Safety Manager** - 38 years of experience, also worked on 35Express
- **Mark Metyko, PE, Professional Services Quality Assurance Manager** - 36 years of experience, extensive DB work
- **Ali Esmaili-Doki, PE, Independent Quality Assurance Manager** - 31 years of experience, also worked on 35Express
- **Keith Bilbrey, Public Information Coordinator** - 24 years of experience, worked on TxDOT's SH 360 South project
- **Joseph (Moss) Fennell, Environmental Compliance Manager** - 24 years of experience, also worked on 35Express
- **Arvin Delgado, Maintenance Manager** - 17 years of experience, has worked with DOT around the country

This management team is supported by JV Executive Management of senior management from the three JV firms. This well-balanced team provides both executive oversight and support and has full authority to authorize the resources necessary for Project success.

Decision Making and Day-to-Day Operational Structure

The ultimate responsibility for effective management, execution and decisions making primarily resides with four Key Personnel:

- For overall management decisions – Project Manager, **Mark Smith**
- For construction decisions – Construction Manager, **Don Good**

AGL2 provided a supplemental narrative and renderings describing our approach to constructing the LE deck plaza. Please see Appendix page A-152.



- For design decisions – Design Manager, **Mark Frye, PE**
- For maintenance and lifecycle decision – Maintenance Manager, **Arvin Delgado, EIT**

These four leaders set the overall tone, culture, and functionality of the Project. Our organization is integrated to foster decision-making at the proper levels so decisions are easily and quickly made and efficiently communicated across the full-breadth of the Project team. Many decisions are collaborative, which is fostered through multi-discipline task teams and interdisciplinary coordination to drive issue resolution at the execution level.

As presented in our PMP, Figure 4.1A (page TP-5) shows AGL2's organizational chart and Figure 4.1B (page TP-6) displays our key construction, design, safety, quality and supporting personnel and the day-to-day reporting structure.

Commitment Statement

AGL2, as the proposer for the Project, hereby commits to TxDOT that the individuals identified by name and designated for the positions described above will be available for active involvement in the Project.

PROJECT DEVELOPMENT PLAN

Project Management Plan and Maintenance Management Plan

GENERAL PROJECT MANAGEMENT

TxDOT's requirements for the Design-Build Agreement will be met or exceeded through execution of AGL2's Project Development Plan. Our general Project management approach emphasizes:

Co-Location: Our personnel will work directly with TxDOT staff at our co-located office. This facilitates continuous collaboration and partnering. Our integrated office is within one mile from the Project right of way and will provide a collaborative mission-driven environment.

Task Teams: Our task teams meet weekly to focus on developing specific DB solutions with design, construction, maintenance and TxDOT staff. Task teams are organized by discipline with a clear leader. Each meeting facilitates communication, encourages real-time design review, establishes action items with responsibility and time line. Utility and railroad representatives and other Customer Groups will be actively involved with task teams relating to their interests.

Technology: AGL2 staff uses current communication technology for efficient interaction among TxDOT, utility owners, and Customer Groups. Our suite of software provides real-time updates of field work, such as material deliveries, inspection results, haul time cycles, and production rates.

Safety: AGL2 does not sacrifice safety for production. We lead the industry in promoting safety because we provide the training and culture to ensure a safe work environment. Safety is an integral part of QC, cost control and job efficiency. Every supervisor monitors the safety performance demonstrated by employees under their management. This successful and applied safety culture has led our team members to achieve a high level of safety consciousness and incident prevention.

Partnering: AGL2 embraces partnering on the premise that important, complementary opportunities exist between all Project participants. When the right



Our approach provides state-of-the-art Fire and Life Safety Systems and Emergency Response Planning, systems integration, remote and on-site monitoring and control, and fully integrated infrastructure.

people are brought together in an open and honest environment with an effective organizational process, a mutually beneficial relationship develops, resulting in a successful Project. AGL2 has currently identified 14 partners (see **Figure 3.1B**) and have already integrated them into the existing team through our weekly task team meetings.

RISK MANAGEMENT

Our approach provides a consistent methodology that identifies critical Project risks, assesses their likelihood of occurring and the potential magnitude of outcomes. AGL2 has identified design, construction and maintenance risks and likelihood before and

after mitigation. We understand success requires all parties to recognize critical Project risks and work cooperatively to manage and mitigate the total shared risk. Our approach involves TxDOT and Customer Groups as active participants in our identification of risks and how to respond to them proactively, while recognizing our ownership of contractual risks assigned to us as the DB contractor.

CONSTRUCTION AND TRAFFIC MANAGEMENT

MOT is the controlling factor in AGL2's scheduling and sequencing of construction work. To effectively manage traffic flows and provide vertical clearance for

Figure 3.1B: AGL2 Subcontractors and Subconsultants



new bridges over existing pavement, we customized phasing and sequencing for each Project section. Our well-thought-out plan considers and recognizes the specific needs of each area for those traveling the corridor, as well as residents, businesses, and pedestrians along it. To illustrate:

- Section 1, I-35E from Colorado Boulevard to Ann Arbor Avenue, including the US 67 interchange, follows a four-phase traffic management approach
- Section 2A, US 67 from South of Kiest Boulevard to north of US 20, front-loads all major construction activities so that work is accomplished in just two Phases

PROFESSIONAL SERVICES MANAGEMENT

For effective management, the Project has been organized into six distinct zones and 22 work areas (Figure 3.1C); Section 1 (I-35E) is divided into five zones and Section 2A (US 67) is one zone. To manage design execution and effectively deliver design packages we create design teams by Project section, resulting in two concurrently functioning multi-discipline production teams matrixed with the corridor-wide technical leads for Roadway, Structures, and MOT. Corridor-wide technical leads drive consistent criteria and coordination, while production teams drive RFC package delivery sequenced with critical path procurement and construction needs.

PUBLIC INFORMATION AND COMMUNICATIONS

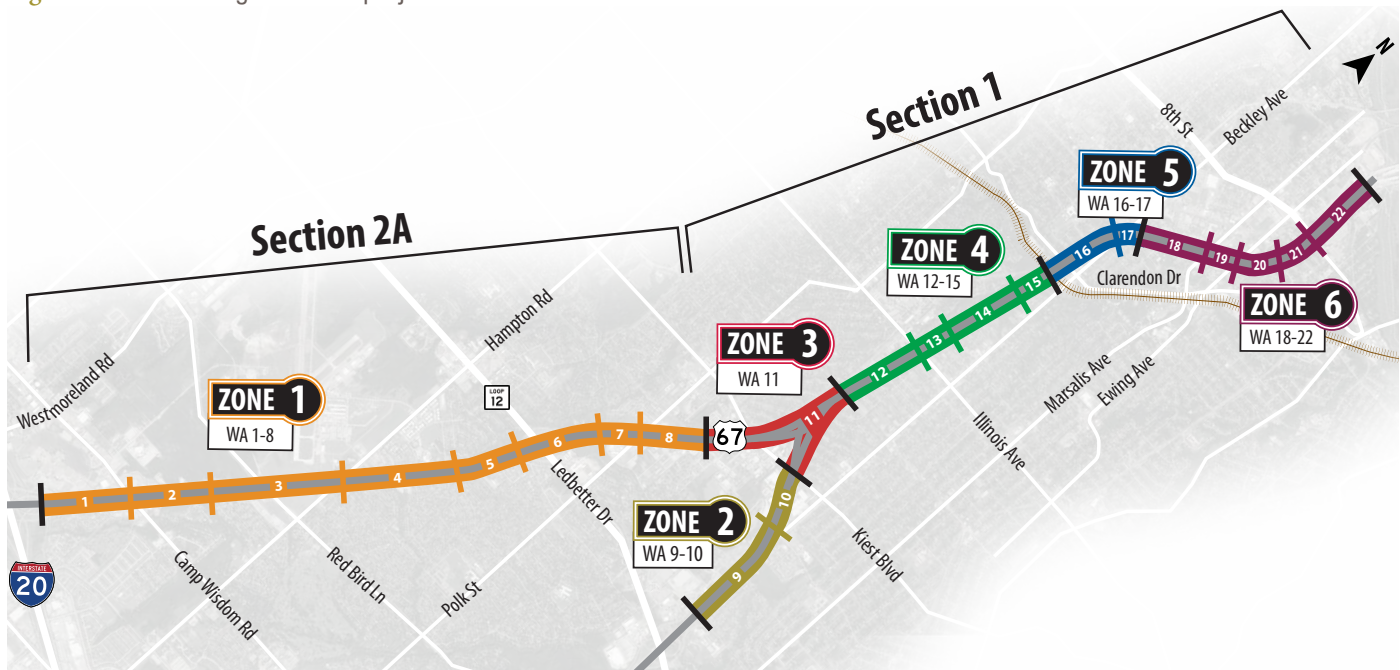
We understand in the eyes of the public and media, AGL2 is an extension of TxDOT. We care about TxDOT's reputation and how this important and highly visible Project affects Customer Groups. Our well-planned approach to public information and communications is built from three basic functions: truly listening, diligently sharing and effectively responding. This produces open two-way communication to both engage the community and minimize impacts.

AGL2 has partnered with local DBE, K Strategies, to lead our public information and communications approach. K Strategies is a women-owned, Dallas-based, award-winning public relations firm. **Keith Bilbrey** will serve as AGL2's Public Information Coordinator, with support from a dozen specialists in marketing, graphics design, web design, social media, and event planning.

SCHEDULE AND COST CONTROL MANAGEMENT

Our integrated Project management systems provide timely and effective control and coordination of documents, Project costs and schedule. Our team's previous experience together on 35Express provides familiarity with existing procedures while easily

Figure 3.1C: AGL2 organized the project into six zones and 22 work areas



“ [AGL] extended services to our commercial stakeholders in ways that have not been seen or heard of before by a contracted construction company and your office has been responsive to all concerns we have had as construction progresses through our City. There has been no concern too small to warrant your full attention. ”

– Fred Gibbs, Director of Planning and Development, City of Corinth

enabling us to customize existing software to optimize Project controls. Document, cost control and schedule management are serviced by ProjectWise, CMiC and P6 scheduling. We administer document control through SharePoint.

ENVIRONMENTAL MANAGEMENT

AGL2 understands the environmental requirements and processes associated with this Project. We've identified TCEQ, USACE, TPWD, and EPA as agencies with regulatory jurisdictions. We work in collaboration with TxDOT and these agencies to ensure environmental commitments are integrated into the design, construction and maintenance of the Project. We implement a Comprehensive Environmental and Protection Program. Our Environmental Compliance Manager, **Joseph Moss Fennell**, will lead our effort to comply with all environmental approvals, permits, agency regulations and laws within the jurisdictional authorities.

MENTORING AND JOB TRAINING

Our team members' have a long history of commitment to the utilization of DBEs. AGL2's formal mentoring and on-the-job training program increases the knowledge, skill level and exposure of each DBE. Moreover, equal opportunities for participation by subcontractors, suppliers, consultants, and small businesses is provided in accordance with the regulations of the US Department of Transportation, 49 CFR Part 26, the Texas Administrative Code, the DB Agreement, and the CMA.

MAINTENANCE MANAGEMENT

As previously noted, WIM is AGL2's Lead Maintenance Firm. WIM is experienced in Operations, Maintenance and Rehabilitation (OM&R) with staff

that has provided services over the past 25 years in a wide range of delivery models such as performance-based asset maintenance, design-build-operations-maintenance-rehabilitation and public-private partnerships, working with TxDOT, FDOT, NCDOT and PennDOT. WIM is corporately related to Archer Western.

WIM, through Maintenance Manager **Arvin Delgado, EIT**, has been an integral part of AGL2's procurement in supporting the optimization of our design-build-maintain solution for the Project, by evaluating life-cycle, durability and maintainability of the proposed design.

Quality Management Plan

Our Quality Management Plan (QMP) is comprised of proven systems and controls that will be administered by industrial leaders.

We have segmented our QMP into a design quality management plan (DQMP) led by **Mark Metyko, PE**, of ATSER and a construction quality management plan (CQMP) led by **Ali-Esmaili-Doki, PE** of STL Engineers. Each of these distinct plans will have a common quality management system, Assure-IT, so that all reports and actions — such as document control, process auditing, and corrective and preventative action — are addressed with a single approach.

Ali and Mark report directly to TxDOT's Owner Verification Independent Assurance Group. All quality control and assurance personnel and are fully independent from the production of the work, with no other duties assigned. They are authorized to effect change by correcting deficiencies, and in the event of noncompliance with the contract documents, are empowered with stop-work authority.

DESIGN QUALITY MANAGEMENT PLAN

This plan governs the process for independent checks, formal design reviews at Preliminary, Final and RFC thresholds.

As described in detail on TP-35 under tab 4.2, design deliverables go through a rigorous in-house quality process to verify contract requirements, design standards, constructability, usability, reliability, availability, maintainability, operability, safety, life-cycle costs and aesthetics .

All RFC submittals, including plans, specifications, calculations, and reports for design will be stamped, signed and dated by a registered Texas professional engineer. In all cases our Design Manager, **Mark Frye, PE** will certify in writing that the design submittals in accordance with the requirements of the contract documents, applicable law and governmental approvals; and checked in accordance with our approved DQMP. Mark will certify compliance of every RFC package, including changes.

CONSTRUCTION QUALITY MANAGEMENT PLAN

Do it right the first time is at the core of our construction quality philosophy. We know that rework is expensive, negatively impacts productivity and schedule. Our goal is to provide quality work and document conformance with the requirements. Led by Ali, our CQMP guides the continuous improvement of construction quality and describes the internal quality control and independent quality acceptance policies, procedures and personnel. It includes items such as:

- Inspecting, sampling, and testing work items for acceptance
- Establishing documentation and quality record controls and reporting
- Identifying nonconforming work and issuing stop-work notifications
- Parameters for coordination with the Independent Quality Firm and TxDOT owner verification programs
- Procurement and subcontractor controls
- Corrective and preventive actions
- Guidelines for continuous improvement via corrective and preventive actions

In summary, AGL2's approach to quality is a collaborative one, with close coordination between our Independent Quality Firm (STL Engineers), our Professional Services Quality Assurance Firm (ATSER), TxDOT's Owner Verification Independent Assurance Group, the JV Executive Committee and the Project management team.

Having worked together on previous TxDOT projects, this team brings the expertise needed to ensure the highest degree of quality possible.

Technical Solutions

AGL2's overall technical approach and each solution to Project challenges considers two primary fundamental principles:

1. **Safety through MOT and Phasing:** We will minimize MOT shifts and greatly reduce the number of movements commuters encounter provides for a safer corridor. Substantial work zones with barriers, clear signage and pavement markings will guide motorists through the Project effectively and safely.
2. **Innovative approach to construction:** We will employ innovative construction techniques such as bolstering permanent bridge construction and strategically implementing jack-and-bore technology to reduce phasing and temporary costs.

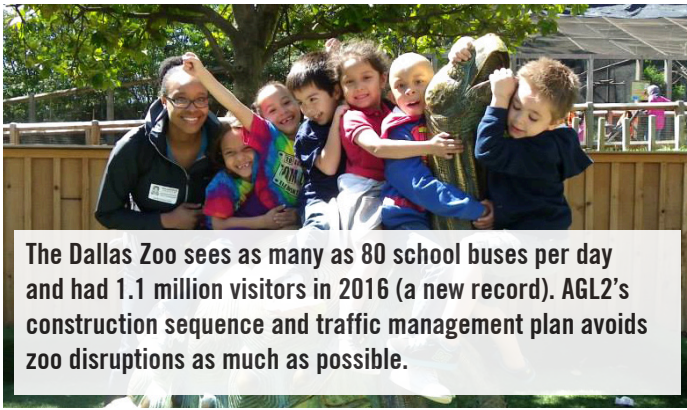
ALTERNATIVE TECHNICAL CONCEPTS (ATCS)

AGL2 actively participated in the ATC process and thoroughly understands the numerous logistical, administrative, and technical challenges related to the design, construction and potential maintenance of this congested roadway. We submitted a total 14 ATCs, 3 of which were approved and conditionally approved that we have included in our Technical Proposal.

CONSTRUCTION STAGING, SEQUENCING AND TRAFFIC MANAGEMENT

AGL2 has developed a traffic staging, sequencing, and management plan that will result in a safe and mobile work zone for the duration of construction. As articulated previously, we understand the Project goals, and through applying our fundamental principles to our technical approach our entire roadway, bridge, utility, and drainage designs are defined by the need to maintain traffic and safety for travelers and AGL2 workers.

In implementing our plan, we focus on advanced communication of closures and detours, timely setup, breakdown and clearing of traffic control, and responsiveness to clearing incidents and damaged assets. We will establish relationships with local emergency responders and police services, and utilize courtesy services to keep traffic moving.



The Dallas Zoo sees as many as 80 school buses per day and had 1.1 million visitors in 2016 (a new record). AGL2's construction sequence and traffic management plan avoids zoo disruptions as much as possible.

BRIDGES, RETAINING WALLS AND GEOTECHNICAL PLANS

AGL2 will leverage its relevant and recent experience delivering similar design and construction of bridge replacements, widenings, and rehabilitations for TxDOT's Dallas and Fort Worth districts. In addition, AGL 2 will incorporate JV partner AW's experience as the constructor of the highly acclaimed and **award-winning Klyde Warren Deck Park**.

We will widen 12 steel and prestressed concrete girder bridges using TxGirders and build 27 new and rehabilitate nine bridges using both TxGirders and steel-plate girders. Our LE is comprised of prestressed box beams with insets to accommodate tree-well requirements. We will construct seven bridges in multiple phases, and in two instances build those bridges on bolsters and then lower into final position when allowed by sequence.

Retaining walls are designed and optimized based on type, including mechanically stabilized earth (MSE), soil nail, and drilled shaft depending on site conditions. AGL2 has developed a cut-wall design at the deck plaza tunnel that works efficiently to support earth pressure and the deck plaza superstructure regardless of when the deck plaza is constructed.

ROADWAY

Our proposed geometry optimizes use of available space within the tight ROW, while meeting the RFP requirements. Our solution provides a quality roadway design by focusing on ride quality and geometry requirements, avoiding temporary cross-street bridges through profile adjustments, improved safety, ADA compliance, and considers future maintenance costs. Complexity of cross street bridge construction and avoiding the need for temporary cross-street bridges

was our focus in development of the proposed geometry. The AGL2 approach brings both added value and cost savings by minimizing effects on traffic, which in turn improves safety as well as reduces construction costs.

DRAINAGE

AGL2 understands the drainage requirements for reconstructing this developed urban corridor. Our drainage design minimizes the many challenges of upgrading the existing drainage systems to drain the proposed roadway improvements. Our design:

- Maintains the established drainage patterns by integrating the existing drainage facilities and outfalls whenever appropriate.
- Incorporates the drainage design into phasing to provide positive drainage throughout construction and limit additional temporary drainage.
- Maximizes the use of the existing pipes in place, including existing outfalls, while mitigating Project impacts by incorporating detention.

ENVIRONMENTAL PERMITTING, MITIGATION AND IMPACTS

AGL2 has formed an exclusive partnership with VRX, Inc., an NCTRCA-certified DBE and TxDOT Historically Underutilized Business (HUB), to perform environmental compliance. VRX's **Moss Fennell** will be the Environmental Compliance Manager. He has 18 years of experience in field investigation of water bodies, wetlands, and terrestrial ecosystems in the state and has 8 years of experience in environmental compliance for large multi-phased urban freeway construction projects. He has worked for the past 3 years on the 35Express project with **Mark Smith**, AGL2's Project Manager.

UTILITIES

Led by Design Manager **Mark Frye, PE**, with support from our Utility Manager and Utility Design Coordinator, and along with utility subconsultant Solaray Engineering, we have supplemented preliminary investigation information supplied by TxDOT with additional site investigations and information provided by the utility owners, to quantify potential utility impacts. AGL2 has developed detailed relocation plans to expedite the construction of the impacted utilities.

RIGHT OF WAY ACQUISITION PLAN

AGL2 recognizes the complexity of implementing a major highway project and has an integrated team approach for management of resources. **Weekly task meetings with right of way management will ensure that Customer Groups are aware of the acquisition and relocation status.** Our team implements an organizational strategy that maximizes the use of in-house staff and qualified consultants with the knowledge, skills, and experience required to carry out the primary responsibilities of Project management, appraisal, appraisal reviews, acquisition, surveys, relocation, document control, and property management.

PRELIMINARY BASELINE SCHEDULE

Our Project Baseline Schedule and design and construction execution plan is based on sound, proven logic in the following primary areas:

- Safety for travelers and AGL2 workers by minimizing MOT shifts and establishing substantial work zones
- Strategic Project Zones and work areas with limits fostering MOT continuity, optimal use of equipment and resources, and independent concurrent production
- Design Packaging that aligns with procurement and construction

Schedule WBS and activities are managed by Work Zones and work areas, with assigned superintendents responsible for Zone production. Delivery of RFC design packages are organized and scheduled by Zone.

DBE REQUIREMENTS

We commit to exceed the DBE goal of 12.5 percent just as we have consistently done on other Texas transportation projects. We provide DBEs and MWBEs with the maximum available opportunities to participate in subcontracts and purchase orders generated by our projects. Our strategy is focused on building competency and capacity. We do this by:

1. Structuring procurement packages to afford maximum, local participation
2. Offering mentor-protégé opportunities and a formal on-the-job training program
3. Managing performance

These areas are described in more detail in section 4.1.8 starting on TP-27.

We have teaming agreements with eight certified DBE subcontractors, and to date have contacted and/or accepted bid estimates from 30 others.

Summary

AGL2's experience working on other successful, local projects demonstrates our understanding of TxDOT's requirements and needs, and our commitment to meet TxDOT's goals. Our team and work force are available immediately to mobilize and begin the Southern Gateway Project. We look forward to partnering with you and expanding this vital international artery through South Dallas.

