

## A. Executive Summary



Airport Expressway Partners, LLC (AEP) is a consortium that has the expertise, experience, and resources to address the development, design, construction, and maintenance challenges of each critical phase of the SH 183 Managed Lanes Project (the Project). The consortium is composed of our Design-Build (DB) contractor (a partnership of Fluor, Balfour Beatty, and Lane Construction) and our Operations & Maintenance (O&M) Contractor (a partnership of Fluor and DBi), and key participants (including AECOM, Raba Kistner, AMEC, and Kleinfelder) that have the life-cycle expertise to deliver a superior facility for this long-term contract. As corporate citizens of the DFW region whose employees use this critical corridor for their daily commute, we are fully vested in the successful completion of the project in a way that demonstrates true commitment to maintaining safety and mobility during construction. We are pleased to demonstrate our capabilities and commitment to the achievement of the goals that TxDOT and the citizens of the DFW Region have for the Project.

## Organization and Contents of the Proposal

AEP's proposal provides the information requested in the Instructions to Proposers (ITP) Exhibits B, C, and C-1. The information is organized to precisely follow the order dictated by ITP Exhibit E. The numbering of all proposal sections is based on the Exhibit E structure. The Technical Proposal as required by Exhibit B, the Financial Proposal as required by Exhibit C, and the Price Proposal are all bound separately and delivered as specified in the ITP.

The Technical Proposal follows the basic Exhibit E structure and is detailed to precisely follow the requirements in Exhibit B. Due to the volume of material, rolled drawings are provided in separate boxes labeled Technical Proposal, Appendix D.2-1, D.2-3, and D.2-4. The 11x17 bridge schematics are provided in a separate box labeled Technical Proposal, Appendix 2.2-2. Similarly, the Financial Proposal follows the basic Exhibit E structure and is detailed to precisely follow the requirements in Exhibit C. The Price Proposal includes the contents requested in Exhibit C-1 in the order requested in Exhibit E.

## Summary of Changes from the QS

The only changes to AEP's Qualification Statement (QS) are as listed in the following tables.

## Summary of Changes in AEP's Organization, Equity Members, other Major Participants and Key Personnel

We have changed our organization to conform to the changes and requirements of TxDOT's Development Agreement, and to deliver the project in the most cost-effective manner possible. This restructure combines the two primary entities involved in the design/construction and operations/maintenance phases of the project (SH 183 Constructors, and SH 183 Operators) into the entity which holds the contract with TxDOT (Airport Expressway Partners). This is the only substantive change in our organization. TxDOT has approved this change.

The following is a summary of changes in Key Personnel since the submittal of the QS as detailed in our March 10, 2014 letter to TxDOT. TxDOT has approved these changes.

### Changes:

Superintendent	Scott C. Yardas	Terry J. Oliver, P.E.
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### Additions (as required by RFP):

Position	Candidate's Name
Environmental Compliance Manager	John T. Ortlieb, CPESC
Lead Roadway Design Engineer	Matthew B. Anderson, P.E. and G. Keith Wetzig, P.E., alternate
Lead Bridge Design Engineer	Osama Shahawy, P.E.
Professional Services Quality Control Manager	Laura Weis, P.E.
Maintenance Manager	Gary Charlton, P.E.
O&M Safety Manager	Jim Conroy
Maintenance QC Manager	Howard (Howie) Kallman, P.E.
Public Information Coordinator	Jenny Paredes



Position	Candidate's Name
Utility Manager	David J. Dillmann, P.E. and Eric McCleary, alternate
Right-of-Way Acquisition Manager	Terry L. May, P.E.

### Summary of Proposed Management, Decision-Making and Day-to-Day Operation Structure of the Proposer

AEP's proposed management structure is designed specifically to deliver the following benefits:

- Integrate TxDOT and key stakeholders effectively into the Project team by providing key interface points with responsibility for working and communicating with TxDOT and key stakeholders
- Focus the Project team and participants on the importance of safety, quality, and maintenance of traffic, leveraging our experience like the conditions associated with the SH 183 Project.
- Effectively utilize the established working relationships the partners, our subcontractors and consultants have with regional stakeholders to make the Project a success – both in the outcome and execution.
- Proactively identify and manage project risks and issues, and resolve them at the earliest possible date.

Key management personnel for our organization will be seconded from the respective equity members of AEP, SH 183 Constructors, and SH 183 Operators, and committed to project goals established during our structured alignment/partnering process. During the early partnering sessions, key personnel from each entity will be matched with a TxDOT counterpart with whom they are to coordinate and communicate. Expectations for method and frequency of communication will be established. During the construction phase of the Project, the fast-paced nature of DB further accentuates the need to communicate, identify, and resolve issues early. Through our successful experience on DB and DBOM projects, we have found this is best accomplished when there is frequent and proactive communication between the Developer, the Lead Maintenance Firm, team members, and our public sector client.

Critical functions report directly to our D&C Project Manager, Scott C. Yargas: Professional Services (Design, Environmental Compliance, Public Information, and Independent QA), Construction Services (Construction, Safety, and Construction QC), and Business Services. We have intentionally designed a more flat organization to promote rapid decision making and issue resolution at the lowest level of the Project. Scott will be the single point of accountability to TxDOT.

Overlaying this backbone is our proven Technical Work Group (TWG) structure. This matrix approach to project execution creates specific focus groups to address each of the main components of the Project (Roadways, Structures, Drainage, Maintenance of Traffic, Utilities, Environmental, ROW, and Geotechnical). TWGs integrate professionals from design, construction, maintenance, quality, safety, and public outreach to support early issue resolution, and life-cycle cost focus, all focused in creating an environment that promotes the development of innovative ideas to reduce cost and schedule.

We have divided the Project into two major areas. This breakdown allows us to leverage the depth of resources that Fluor, Balfour Beatty, and Lane Construction offer and complete the design and construction at the earliest date possible with minimum disruption and inconvenience to the public and stakeholders. Each area has a dedicated management team, all reporting to the umbrella organization to drive consistency, quality, and control.

To make this organization structure a success for all project participants, we have identified key personnel with specific skills and experience to address the critical success factors. Each of the equity members and major participants on the AEP Team has committed to provide the specified people for the Project.

AEP's history together and working relationships allow us to focus on project goals and get a rapid start and achieve early completion of the Project.



### Summary of AEP's Project Development Plan

#### **Public Information and Communications**

Our public information and communications team will be led by K Strategies Group, a local award-winning public affairs firm, known for their success and experience in providing public information programs for large construction and transportation projects in the Dallas/Fort Worth area. The public information and communications approach will include the development of a comprehensive program to educate, inform, engage, and build positive working relationships with the multitude of stakeholder groups, businesses, commuters, and the public. Our proactive program will start immediately and use multiple modes of communication to ensure stakeholders can receive information in the mode they are most comfortable, including web-based, social media, smart phone applications, texting, email, print, roadway signage, and English- and Spanish-language messaging.

#### **Environment and Safety**

The AEP Team's working experience with environmental commitments similar to those for the Project combined with a working knowledge of local, regional, and state regulatory requirements and accepted practices will allow us to be proactive in meeting commitments and reacting to developing conditions.

Safety and health is the number one priority of all employees of the AEP organization. Any employee at any level has the authority to stop work when safety or health is questionable. Within the AEP organization the D&C Project Manager, Scott Yardas, has ultimate responsibility for safety and health on the Project. Maintaining a safe environment for AEP employees and the travelling public are the primary focus of the D&C and O&M Safety Managers.

Each member of our Project Management Team (PMT) – our D&C Manager, Deputy Project Manager for Professional Services, Superintendent, and O&M Project Manager – is directed to maximize effectiveness in communication, training, motivation, and monitoring techniques and apply every reasonable precaution to prevent incidents.

Every AEP D&C and O&M employee is empowered to take appropriate steps to eliminate incidents in the workplace.

#### **Innovative Concepts and Approved ATCs**

The AEP TWG developed numerous Alternative Technical Concepts (ATCs) to deliver the design, construction, operations, and maintenance of the project sooner and/or at lower life-cycle costs. These concepts were vetted thoroughly with TxDOT in one-on-one meetings. As such, 13 ATCs have been approved and incorporated into our proposal, as indicated on our schematic drawings.

#### **Approach for Acquisition of Right of Way**

Our approach will be based on lessons learned on the collective experience of AEP team members. Key elements of our systematic approach will be to:

- Identify and prioritize Right of Way (ROW) parcels that have the most potential to impact the construction schedule, and advance the acquisition and rights of entry to those parcels as efficiently and economically as possible.
- Further control the sequence of the development of acquisition packages so that acquisition supports the overall construction segments' schedule and MOT phasing.
- Conduct through internal quality control and quality assurance reviews of all packages submitted to TxDOT to minimize rework and avoid any restarts of processes.
- Work in partnership and close communication with TxDOT to focus development of high-quality ROW packages that are in full compliance with TxDOT procedures and Texas Law.
- Ensure that required documents and applicable regulations will be fully explained to each landowner and tenant so they understand their rights and entitlements under the law, including their right to legal process under the laws of Eminent Domain (ED) and the relocation appeals process.
- Manage the schedule by detailed work breakdown, including the steps of acquisition for each parcel in the Project Schedule.



- Develop ED packages in parallel with offer documentation.

With a detailed baseline schedule and extensive internal communication on ROW status, we will have the basis to recognize problem areas early and the flexibility to adjust work sequence to meet our overall schedule as project conditions develop.

### ***Approach for Addressing Utility Adjustments***

To clearly determine the impact utility design and construction have on the Project, we detail each step in our critical path schedule and manage each activity aggressively. This approach allows us to identify potential issues and schedule impacts early and mitigate their impact. We have tied each utility construction activity to the acquisition of each individual ROW parcel, and specific roadway construction activities. We have also resource loaded the schedule with AEP and utility owner workforce. Our experience on the Dallas Horseshoe project has proven that an accurate forecast and close coordination helps the utility owners prepare and schedule their limited labor forces.

We have identified impacted utility owners in the corridor and met with them to understand their expectations to reflect them in the Project plan. This includes design reviews, approval of relocation plans and construction acceptance. We will continue to build on our understanding, conducting regular meetings with each utility owner to discuss production, schedule management, and report progress, and resolve any issues that arise.

### ***Approach to Coordinating with TxDOT, Stakeholders, and Other Third Parties***

AEP's approach to coordinating with TxDOT, Stakeholders, and other third parties is proactive and inclusive. During initial project alignment, key members of the Project management team will be matched with AEP, SH 183 Constructors, and SH 183 Operators, and expectations will be established for method and frequency of communication. TxDOT, along with appropriate stakeholders and third parties will also be invited to participate in TWG meetings so that concerns and potential issues can be identified and addressed as early in the process as possible. AEP's D&C Project

Manager will also conduct regular briefings with TxDOT's Project Manager to improve coordination and communication between the parties.

### ***Preliminary Project Baseline Schedule***

AEP's Preliminary Project Baseline Schedule (PBS-1), attached in Appendix D.3-1, is based on advanced planning and studies of many different alternatives to construct the Project. This approach allowed us to determine the staging and sequencing which results in completion of the Project in the safest and most efficient manner possible. We have a thorough understanding of TxDOT's concerns about any potential impacts on traffic due to construction within this strategic regional corridor and have developed our plans to effectively support a Maintenance of Traffic Plan which will maintain the high level of support for the Project that TxDOT has developed. Since many of our employees use this corridor for their daily commute to work, we are fully vested in completing the project in a way that minimizes impacts and maximizes safety of the traveling public and project workers. Despite the challenges, PBS-1 shows completion of the project in 1,480 days from NTP1, which is 60 calendar days less than the required schedule of 1,540 days.

### ***Approach for Delivery of Design and Construction***

AEP's approach to delivery of quality design and construction focuses on maximum integration of life-cycle expertise to deliver a project that optimizes life-cycle costs (including costs after hand-back to TxDOT), manages any potential project risks, and completes the project in a way that maintains high public support. The key to accomplishing these goals rests in our proven processes, procedures, plans, and systems for integrating TxDOT, AEP, SH 183 Constructors, SH 183 Operators, and impacted stakeholders and third parties into an aligned team that communicates effectively and is focused on Project goals from Day 1. Because of the fast-paced nature of the DB method of delivery, we have found this is best accomplished through a carefully designed system of face-to-face interaction, reinforced by systems for tracking action items, closely monitoring progress, and making timely



adjustments to any issues or risks that arise.

### Approach to Quality Management

DB is a highly integrated and fast-paced process involving the activities of distinctly different disciplines, working separately and together to complete a project in the fastest and most cost-effective manner possible. Achieving a high level of quality that is readily verifiable in a timely manner is critical to avoiding rework and keeping DB projects on schedule and on budget. A single, integrated, consistent approach to quality is required to drive high quality in all activities and components, while ensuring that the results are checked, validated, and (where necessary) corrected in a timely manner.

As opposed to simply providing separate and independent quality management plans for the various critical components of the Project, AEP will provide an overarching quality management program to integrate the various components. This quality management program is designed to provide a backbone of consistent procedures, reporting, and documentation that creates an ingrained culture and expectation of high quality in each stage and activity of the Project. This process will allow TxDOT to readily validate and confirm the quality of each activity and component and initiate corrective action when necessary. More importantly, AEP's quality management program brings the plans and systems proven on other TxDOT DB projects. AEP's Quality Management Program is based on five core procedures, recognized by ISO as a requirement for the establishment of quality management systems:

1. Control of Documents
2. Control of Records
3. Opportunity for Improvement (containing provisions for corrective and preventive actions)
4. Control of Non-Conformance
5. Internal Audit Program

### **Approach to Construction Sequencing, Traffic Management, and Mobility during Construction**

SH 183 Constructors' approach to construction sequencing and maintenance of traffic is based on the extensive experience our partners have in

constructing similar projects in urban areas with large volumes of traffic. This experience includes the 495 Express Lanes project in Washington, DC, I-15 in Utah, and the Horseshoe and IH 35E Managed Lanes projects in Dallas.

AEP's lead traffic engineers and construction engineers have thoroughly evaluated the alignment of the project and the available ROW to develop a construction sequence which maximizes the number of general purpose lanes available and minimizes the number of shifts in traffic. Our MOT sequencing is based on the type of construction work that characterizes each work area, and is illustrated in the Appendix D.2-1, Conceptual Construction Staging Diagrams. Many of the work areas will have a similar sequencing approach. In MOT Phase 1, traffic will be undisturbed, and new construction will take place in new ROW areas. Once the new improvements in this phase, which are mostly frontage roads, are complete, traffic will be moved over to utilize the new pavement. Construction will then continue across the roadway, constructing new main lanes in Phase 2. This approach will result in the main lanes only being moved one or two times before being in their final locations. In Phase 3, the remaining frontage road will be reconstructed in halves to allow continued use of the frontage roads.

Daily commuters will need constant and consistent notifications on any changes to their daily route to allow for a safe and unimpeded trip to work or home. We will handle this using our Public Information (PI) Team, who will use a variety of news, web, social media, and direct contact methods to alert those travelers of any changes or issues in the corridor. Our D&C team will also design and disseminate alternate routes that will be shared with the public for use to bypass incidents, closures, or the project all together. AEP will assist those less familiar with traveling the project corridor by holding true to our own standards of utilizing signage that is placed in appropriate locations, and is easy to understand and read. Signage may be sized larger than required as permitted by TxMUTCD guidelines allowing for better visibility at a greater distance so drivers can make their way to exits and decision points with more time.



### **Approach to Operations, Maintenance, Renewal Work and Handback**

AEP's plan to successfully transition from construction to maintenance relies on the early and continued involvement of key maintenance staff during the DB phase. With the knowledge gained early and often throughout the execution of the DB phase, AEP's maintenance team will be well positioned to make a seamless transition from construction into the O&M period.

AEP's Maintenance Manager, Gary Charlton, and Maintenance Quality Control Manager, Howard (Howie) Kallman, P.E., have been involved during the pre-award phase evaluating technical solutions and approaches, and are fully knowledgeable on the scope of construction and improvements to be implemented during the DB phase. AEP's maintenance staff will have continued involvement during the Project by participating in periodic maintainability reviews to make sure they are aware of any change in the scope of construction or improvements during the DB phase and learn the status of quality performance. AEP maintenance staff will begin to mobilize for the Project on a full-time basis 180 days prior to Substantial Completion of construction, to commence training and to participate in alignment meetings designed to acquaint each staff member with the Project. During this time, the Project Maintenance Management Plan (MMP) and associated procedures will be developed and procurement will begin for specialty subcontractors to support maintenance.

### **Summary of AEP's Approach to Satisfying the Project DBE Requirements**

AEP is committed to meeting or exceeding the 7 percent DBE utilization goal for the Project. To ensure the maximum benefit and successful execution of the DBE performance plan, proven approaches will be used in the creation of a plan that includes public outreach, marketing and communication, procurement, contract compliance, and reporting processes.

We will use a number of methods to manage the DBE program effectively, including:

- Developing and maintaining lists of DBE bidders from the Texas Unified Certification

Program directory, North Texas trade associations, national minority trade associations, and other sources.

- Implement a team website during the procurement period with links for DBEs, and small businesses and suppliers to supplement information provided on the Texas Unified Certification program, and the North Central Texas Regional Certification Agency (NCTRCA).
- Structure procurement packages to afford DBEs maximum participation.
- Include DBEs in solicitations for products and services that they are capable of providing.
- Coordinate outreach events targeting second-tier and lower-tier bid opportunities.
- Review each major participant's subcontractor/subconsultant opportunities to ensure the DBE firms are certified and provide a commercial and useful function.

### **Conclusion**

AEP's experience in working together on other successful PPP and DB projects gives us the organizational alignment and proven structure and procedures that will allow us to focus on project goals from Day 1. We have an extensive track record of working together to execute projects to meet aggressive goals for schedule, quality, safety, and DBE participation. Our experience in working on other successful projects demonstrates our understanding of TxDOT's requirements and needs. Our major participants, including Fluor, Balfour Beatty, Lane, AECOM, and DBi, have the national experience and depth of resources on DBFM projects necessary to deliver on TxDOT's goals. We have specifically selected key personnel with experience and knowledge related to specific challenges related to the Project. In short, we are ready and eager to start developing the lowest life-cycle cost/highest-value solution, and to execute the Project to meet goals for safety, quality, and maintenance of traffic.

