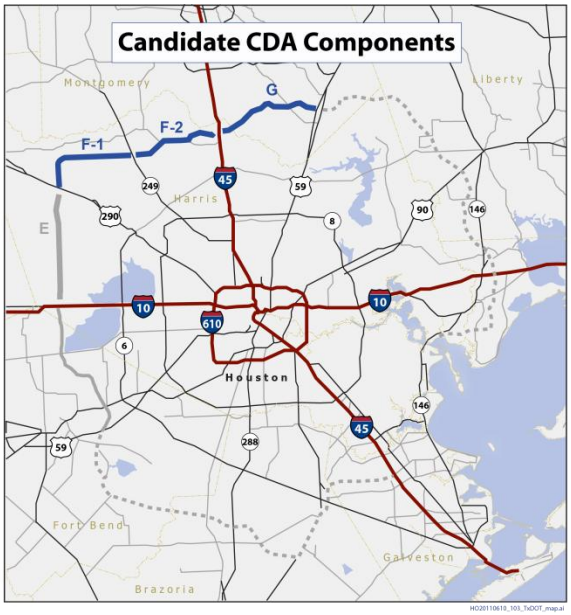
A. Executive Summary

As the Houston region continues to grow at a rapid rate, the SH99 Grand Parkway Project clearly represents a critical transportation need in the region's overall development plan. Completion of this critical corridor at the earliest possible date will not only dramatically improve regional mobility and air quality, but will spur economic development throughout the Houston Gulf Coast Region. It is equally important to complete the Project in a manner that fulfills TxDOT's commitments to customer groups for safety, maintenance of traffic during construction, and the completion of the project and interim phases of the project on schedule.

Achieving this will require a rapid start, and for all risk to project schedule and other commitments to be identified and mitigated from Day 1 and throughout the project. This demands TxDOT and their design build (DB) partners to come together immediately as an aligned, efficient team focused on project goals. Keys to making that happen include:

- Extensive due diligence during the pre-proposal period to identify the critical success factors and to identify and mitigate any potential risks to successful execution before Notice to Proceed;
- Systems, procedures, organizations, and plans proven on TxDOT DB Projects to deliver high quality results and identify and resolve any issues early before they impact any goals;
- Experienced Key Personnel who have an in-depth understanding of the DB execution environment and working knowledge with TxDOT Houston systems and requirements; and
- The culture, attitude, approach, and working relationships to work in effective partnership with TxDOT Houston District and the GEC

Fluor Balfour Beatty Williams Brothers (FBW), was specifically formed to meet this challenge of delivering the design, construction and maintenance of the Grand Parkway to meet all TxDOT commitments. We have lived in, and done business in Houston for over 60 years, and not only understand the importance of the success of the project, but also the commitments that TxDOT has made and why those are important. Many of our employees' and clients' lives are impacted by this corridor. More than any other team, we are positioned to immediately form that effective partnership with TxDOT. We have systems, procedures and plans proven on TxDOT projects for successful DB execution. We have more experience and established working relationships with the TxDOT Houston District than any other team. Because of our six decades of doing business in Houston, we have the knowledge of and established relationships with the agencies, municipalities, and stakeholders that will be critical for this project. We are singularly and uniquely aligned with TxDOT in that we both are fully vested in the complete success of the Grand Parkway Project and the accomplishment of all project goals. With over 120 combined years of executing Projects in the Houston area and our reputations with our clients on-the-line, we are highly motivated to finish the project on time and with a high level of satisfaction for TxDOT and the public.



Our Team

Fluor Balfour Beatty Williams Brothers (FBW) brings together three of the largest, most experienced, and most successful DB transportation firms experienced in delivering quality projects to TxDOT. As equal partners in our consortium, each team member brings TxDOT the benefit of a huge pool of expertise, experience, working relationships, and

critical resources (equipment and personnel) ready to address the key challenges of the Grand Parkway Project. Our experience working together on other complicated DB projects allows us to provide an already integrated unit with proven TxDOT DB procedures, ready to hit the ground running to complete the Project early for the citizens and stakeholders of the North Houston region.

Fluor Enterprises, Inc. (Fluor) is Headquartered in Texas, one of the largest engineering and construction companies in Texas and the world, has annual revenues of almost $30 billion and is ranked as one of the world's top contractors and DB firms by *Engineering News-Record* (ENR). Fluor brings a broad base of international experience in the planning, development, and financing of major highway and infrastructure projects, including many first-of-a-kind, DB transportation projects, such as SH 130 in central Texas and SH 161 in North Texas. Fluor's financial stability, its demonstrated ability to use innovations to advance infrastructure projects, and its capability to deliver a guaranteed price and schedule on major transportation projects will be a crucial contribution to the success of the Grand Parkway. With over 60 years of performing complex projects in the Houston area and more than 6,000 engineering and construction employees in the State, Fluor has the capabilities, knowledge, and position to make the Grand Parkway Project a success.

Balfour Beatty Infrastructure, Inc. (BBII) is a wholly owned subsidiary of Balfour Beatty plc, an engineering, construction, and services group serving the international markets for rail, road, utility systems, buildings, and complex structures. BBII's Southwest Region division is headquartered in Austin. BBII primarily serves the highway infrastructure markets for TxDOT, the North Texas Turnpike Authority (NTTA), and the Harris County Toll Road Authority and has executed major infrastructure projects in northern and central Texas and the Houston area. Successful projects have included the President George Bush Turnpike, the Dallas North Tollway, and multiple sections of the Sam Houston Toll Road, the Katy Freeway and the Westpark Tollway in Houston. Balfour Beatty was also an equity partner with Fluor on the SH 130 Project and the current SH 161 Project for the NTTA.

Williams Brothers Construction Company, Inc. is a Houston-based firm that was founded in 1955 by J.K. Williams, C.K. Williams and J.D. (Doug) Pitcock, Jr. Since 1998, the company has been in the process of converting to an employee-owned corporation. The company has completed 95% of its work (over 350 projects) for its principal client, TxDOT. The company has been awarded nearly $5 billion in federal aid highway work in the last ten years making Williams Brothers one of the largest highway contractors in the United States as well as the largest in Texas during this period. In 1998 and 1999, Williams Brothers was recognized as the largest federal aid highway contractor in the U.S.

The company has the ability to self-perform most construction tasks related to road and bridge construction. Williams Brothers currently operates in Houston, Beaumont, Dallas, and San Antonio areas.

WB and BBII completed the Katy Freeway Reconstruction Program consisting of reconstruction of twenty-five miles of one of Houston's busiest freeways and more than $300 million in utility relocation. It is the largest freeway reconstruction program ever performed in the State of Texas and stands as one of the Houston District's most successful projects.

The Katy Freeway Reconstruction Program – was the largest freeway reconstruction program ever performed in the State of Texas and stands as one of the Houston District's most successful projects resulting in the complete reconstruction of twenty-five miles of one of Houston's busiest freeways. All segments were opened to traffic ahead of schedule.

Other Key, Non-Equity Team Members

FBW has specifically selected other key subcontractors and subconsultants with specific skills, experience, tools and resources to supplement our team and improve our ability to deliver innovative solutions for the lowest cost and shortest schedule for Grand Parkway Project.

Our equity members have extensive experience with each of these companies. This allowed our team to rapidly integrate and become highly productive from release of the RFP and will allow us to be even more effective and productive at NTP. The following is a brief description of each of these companies.

Parsons Brinckerhoff , Inc. (Parsons Brinckerhoff) will be FBW's lead consultant for the overall design effort. Parsons Brinckerhoff is a leader in the development and operation of infrastructure project to meet the needs of communities around the world. Parsons Brinckerhoff has participated in some of the world's most notable transportation and DB projects, and has maintained a presence in Houston since 1980, where they have supported numerous clients such as TxDOT, Houston METRO, the City of Houston Airport system, and major private entities such as Reliant Energy in planning and implementing a wide range of projects. This experience includes high-visibility, TxDOT projects such as the $2.8 billion reconstruction of the Katy Freeway and the $1.02 billion DB DFW Connector project to improve mobility along 8.4 miles of the SH 114/SH121 corridor. Parsons Brinckerhoff's staff in Houston offers a mix of disciplines and backgrounds to serve transportation clients at any point in the project cycle and under any delivery method. Their strong knowledge of the regulatory and business environment in the State of Texas and working relationships in the Houston area in particular, promotes efficient and cost-effective project implementation.

Transfield Services Infrastructure Inc. (Transfield Services), Transfield Services is a leading international provider of operations, maintenance, asset management and project management services. Transfield Services Inc., which was founded in 1995 to develop the idea of asset management—a business approach to operations and maintenance that treats infrastructure as an investment to be managed to meet a predetermined rate of return. Today, Transfield Services provides a full range of maintenance services for more than 13,000 lane miles of highway throughout North America, including projects in Texas, Alaska, Florida, Maryland, North Carolina, Virginia, the District of Columbia, and Ontario and New Brunswick in Canada. Transfield Services was notably a team member of Fluor and BBII's on the SH 130 DB project in Austin, Texas. Transfield Services also provided maintenance services under contract to TxDOT Waco District for 115 miles of I-35.

Raba-Kistner Infrastructure, Inc. (R K) R K has provided innovative engineering solutions and quality management services and systems for both the public and private sectors on roadway and bridge projects throughout Texas and Utah for the past 44 years. R K will provide the independent QA function, construction QA as well as function supporting environmental compliance monitoring and permitting along with Right-of-Way services and Maintenance QC under the CMA.

Kleinfelder (50 years in business) Kleinfelder is a leader in geotechnical services for the transportation industry with extensive experience in DB delivery of numerous transportation projects throughout the United States from conceptual planning through construction. Kleinfelder recently acquired the Houston-based firm of Corrigan Consultants, Inc., an environmental consulting services firm, providing a local base of operations in preparation for the Grand Parkway Project. Kleinfelder will serve as the lead geotechnical engineer for the project and will utilize local firms to supplement its staff and local geotechnical knowledge. In particular, Kleinfelder is partnering with using Toluney-Wong, a local consultant with extensive experience in Houston and, in particular, with the TxDOT Houston District. Having extensive experience on projects with the equity partners of FBW, Kleinfelder and Toluney-Wong professionals will be able to quickly integrate into this team and provide innovative solutions based on sound engineering principals that often result in substantial cost, time and risk savings. Above all, Kleinfelder will be sure the

geotechnical aspects of the project meet the expectations of Houston District.

Organization and Contents of the Proposal

Our proposal provides the information requested in the Instructions to Proposers (ITP) Exhibits B 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. Volume 1 is the Technical Proposal as required by Exhibit B, and Volume 2 is the Financial Proposal as required by Exhibit C-1.

Volume 1 follows the basic Exhibit E structure and is detailed to precisely follow the requirements in Exhibit B, Sections 3 and 4. Because of the volume of material:

- Proposer Information, Certification and Documents are provided in Volume 1a.
- Rolled Drawings are provided as Volumes 1b. The proposal text and table of contents and the Summary and Order of Proposal Contents are all referenced for ease in understanding the multiple volumes.

Similarly, Volume 2 follows the basic Exhibit E structure and is detailed to precisely follow the requirements in Exhibit C-1, Section 2.

Summary of Changes to the Proposer's Qualification Statement

Other than the changes described below, there have been no changes to FBW's Qualification Statement (QS).

Summary of Changes in Proposers Organization and Key Personnel Since Submission of the Qualification Statement

FBW has only two changes in our organization since the submission of our QS. TJ Lambrecht, a dedicated subcontractor to FBW, has made a decision to no longer bid construction work and is in the process of dissolving their business. Therefore, they are no longer a part of our team. We have also added Crouch Environmental Services, Inc. to perform Public Information and DBE Outreach services.

In addition, FBW's Capital Maintenance Team Member has changed their name from VMS, Inc. to Transfield Services Infrastructure, Inc.

Some minor changes have occurred in the key personnel since the submittal of the QS. The following is a summary of those changes, as detailed in our June 19th, 2012 letter to TxDOT.

Changes to Key Personnel are as follows:

- Deputy Project Director - Construction: Dan Young changed to Jeff Berger
- Design Quality Manager: David Skaleski changed to James J. Rozek, P.E.
- Environmental Compliance Manager: Marcus Anderson changed to Steve Funderburg, P.E.

Summary of Proposed Management, Decision-Making, and Day-to-Day Operations Structure

FBW's organization is based on the foundation of a structure we have used in successfully completing many DB projects across the country, including the SH 130 Project in Austin, the SH 161 Project in Dallas, and the Loop 1604/US 281 Interchange in San Antonio. We have customized the backbone of this proven structure to specifically focus on the critical issues for the Project:

- Early completion of the corridor and Early Works;
- Maintenance of traffic and safety of the traveling public during construction
- Management and control of subcontractors
- Increased public awareness and public support through proactive stakeholder engagement
- Respect for the environment and commitments made to the community
- A strong partnership between FBW, TxDOT Houston District and the Project Stakeholders
- Local and DBE participation
- Superior quality and continuous performance improvement
- Management of an aggressive schedule
- Involvement of maintenance personnel in design to make sure life-cycle costs considerations and operability/maintainability issues have been addressed

The backbone of the FBW management structure is designed to promote:

- Responsiveness to client concerns
- Enhanced communication to identify and resolve potential issues quickly
- Superior quality in each stage of the Project

Critical functions report directly to our Project Director, Pat Stricklin:

- Professional Services (Design, Environmental Compliance, Public Information Involvement, and Design QA)
- Construction Services (Construction, Safety, Independent Construction QA/QC)
- Business administration, including Project Controls

We have intentionally designed a more flat organization to promote rapid decision making and issue resolution at the lowest level of the Project. Mr. Stricklin will be the single point-of-accountability to TxDOT.

The FBW Board, composed of senior executives of each of the equity members, will provide additional, independent review and auditing of the Project, as well as corporate oversight to make sure adequate resources are available to promote the rapid completion of the Project. This group of Senior Executives will also be available to address TxDOT concerns with the Project.

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, Geotechnical, Toll Systems). TWGs integrate personnel from design, construction, maintenance, quality, safety, and public information to assure early issue resolution, life-cycle cost focus, and an environment that promotes the development of innovative ideas to reduce life cycle cost and schedule.

We have also customized our traditional DB backbone to account for the unique aspects of the Grand Parkway project. We have broken the project into Segments matching the Project Segmentation so that there is no question about individual segment goals and who is accountable for them. Each segment has a dedicated management team, all reporting to the umbrella organization to drive consistency, quality, and control across the Project. This breakdown of work will allow us to leverage the depth of resources that our three member companies have to offer in the Houston area and complete the design and construction at the earliest date possible with the minimum amount of disruption and inconvenience to the public and stakeholders.

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 FBW Team has committed to provide the specified people for the Project.

One distinguishing factor in FBW's superior ability to facilitate rapid decisions in the best interest of TxDOT and the Grand Parkway Project is our experience in working together with TxDOT on CDA/DB Projects. No other bidding team is positioned as well to get a rapid start and achieve early completion of the Project.

Summary of the Project Development Plan

Summary of the Technical Solutions

The Technical Solutions contained in our proposal demonstrate our approach to designing and executing the Grand Parkway Project and reflect our combination of in-depth local knowledge and international experience on DB Projects. Our Technical Solutions result from the efforts of our multi-disciplinary TWGs. By organizing our planning, preliminary engineering, and construction staging efforts in this way, we were able to maintain focus on project goals and critical success factors. We placed enhanced emphasis on life-cycle cost and operations issues in all areas of the Project, including long-term maintenance requirements in the design.

In addition, we strategically planned our proposal efforts and worked diligently so that we could communicate our approaches and results with TxDOT early in the industry review process and through one-on-one meetings. Our purpose was to identify any owner concerns regarding planning, construction sequencing, maintenance, and operations that could be addressed at this early stage. Early and open communication with TxDOT will be our continuing approach throughout the Project. We know from our DB experience with TxDOT that this communication will pay great dividends throughout the life of the Project.

In particular, our Technical Solutions demonstrate:

- In-depth knowledge of TxDOT Houston District procedures for design, Houston area suppliers and subcontractors, and local agencies and municipalities that will facilitate approvals and improve quality.

- Broad international experience in the design and construction of highways and bridges, which maximizes innovative approaches to decreasing life-cycle cost, reducing schedule, and improving operations.
- A proven organization structure and TWG approach, which creates an innovative project environment and therefore creates opportunities to work with TxDOT to further reduce the cost and schedule of the Project.
- Project planning and construction sequencing, which minimizes impact on traffic, adds additional capacity early on this congested corridor and maximizes the safety and minimizes the disruption of the traveling public.
- Our extensive, early work with utility companies and other impacted stakeholders, which developed a better understanding of the challenges that this critical part of the Project may present.
- Alternative Technical Concepts (ATC's), which will decrease the cost of the Project, improve operations, and/or mitigate risk to completing the project and interim milestones on schedule.
- Our ability and experience in working with the TxDOT toll system integrator to expedite toll collection activities.

We feel strongly that our technical proposal is an early demonstration of the value we will bring to TxDOT as a true partner in the design and construction of the Project. Our focus on achieving project goals, reducing the life-cycle, cost and identifying and mitigating and risks to the schedule of the Project does not stop at submittal of the proposal, but will continue throughout the execution of the Project. We have demonstrated our ability to work with TxDOT, FHWA, and stakeholders to bring ideas to fruition, when we see opportunities to maintain quality while reducing cost and schedule.

Project Management Plan Summary

Because of its combination of size, aggressive schedule, regional importance, and visibility, the Grand Parkway Project presents project management challenges that make it one of the most demanding DB highway projects undertaken in Texas to-date. These challenges include:

- Planning, staging, sequencing, and conducting construction operations in a way that does not significantly impact the mobility or compromise the safety of the traveling public, particularly at the intersection with major commuter routes I 45, US 59, and US 290.
- Recruiting, aligning, and effectively managing the efforts of a large labor force and the many subcontractor and subconsultants necessary to execute a project of this magnitude on this timetable.
- Early identification, efficient escalation, and rapid resolution of issues that will occur on a project that requires execution on multiple fronts.
- Establishing a comprehensive quality system that consistently produces high quality within each individual activity and project phase and facilitates timely verification of quality by TxDOT.
- Attracting, developing, and retaining a skilled, labor work force that meets TxDOT goals for diversity, while competing against other major projects in the region for the same work force.
- Producing a project environment that encourages partnering with TxDOT to drive innovative solutions to reduce schedule and TxDOT costs.
- Proactively engaging, informing, and involving the diverse set of stakeholders, the public, utilities, and other third-parties impacted by this massive project in an effective and timely way that maintains support for the project and TxDOT's missions.
- Integrating TxDOT, engineering, construction, and maintenance personnel to produce a completed facility with maximum life-cycle value.

FBW's Project Management Plan addresses these challenges with a structure, proven plans and procedures, depth of local resources, and a team of key personnel that is experienced in working with each other and with TxDOT on CDA projects. No other team can bring this combination.

Summary of the Quality Management Plan

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 budget. One integrated and consistent approach to quality through each stage of the Project and each activity is required to drive high quality in all activities and components, while assuring 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, FBW 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 quality in each stage and activity of the Project. This program provides the level of consistency that will allow TxDOT to readily validate and confirm the quality of each activity and component and initiate corrective action when necessary.

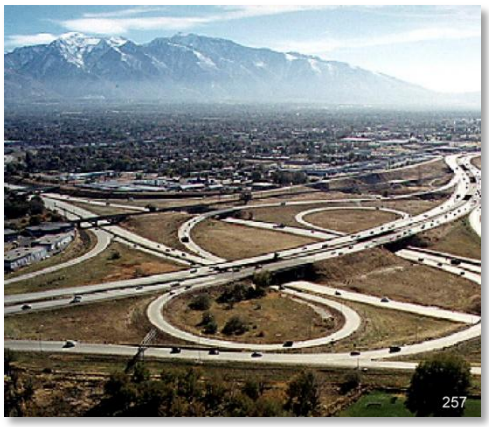
More importantly, FBW's Quality Management Program brings the plans and systems PROVEN on TxDOT DB projects to deliver consistent quality in design and construction. In addition, FBW's quality management firm, Raba-Kistner, has also served in the role of Independent Engineer for TxDOT on CDA projects and therefore has a keen understanding and appreciation for TxDOT's requirements, systems, and needs.

FBW's Quality Management Program is based on five core procedures, recognized by ISO as a requirement for the establishment of quality management systems:

- Control of documents
- Control of records
- Opportunity for Improvement (containing provisions for corrective and preventive actions)
- Control of non-conformance
- Internal Audit Program

These core procedures are woven into our overall quality management program and into each of the individual quality management plans that maintain superior quality at the discipline level:

- Design Quality Management Plan
- Construction Quality Management Plan
- Comprehensive Environmental Protection Plan
- Maintenance Quality Management Plan



I-15 Reconstruction in Salt Lake City, Utah – Completed 4 months early the project's public approval rating increased from 51 percent at project start to 76 percent at project completion.

Summary of the Proposer's Approach to Satisfying the DBE Requirements

FBW is committed to TxDOT's DBE participation goal and to meeting the other objectives for DBE participation and development outlined in the RFP. As a member of the Houston business community for more than six decades, we understand the importance of these goals to the Project's overall success and the success of the Region. Beyond that, we believe that DBE firms bring the local knowledge and diversity of thought that lead to better solutions. Our member firms have won awards for our efforts working with the DBE business community.

Projected growth of construction work in the Houston region within the next five years is expected to be substantial. That in turn means competition for DBE subcontractors and professional service consultants is expected to be intense during execution of Grand Parkway. By utilizing our proven plans for DBE Outreach and engagement and our advanced knowledge of and experience with the local market for DBE vendors, subcontractors, and consultants, FBW will make sure the DBE goals will be met while keeping the project-on schedule and on-budget.

Our commitment to maximize DBE participation entails:

- Packaging work into units which present opportunities for DBE vendors, consultants, and suppliers to bid and be competitive on;
- Categorizing work opportunities by trade;

- Updating the DBE database in order to learn of new certifications and additional abilities of already certified businesses;
- Regularly meeting with local business associations to raise awareness of Project subcontracting opportunities; and
- Mailing or faxing bid solicitation letters with sufficient time to allow for response.

To that end we have already begun extensive efforts to set the stage for the Project's success in this area, and have proactively identified qualified DBE firms.

On June 20th, 2012. FBW hosted a DBE Outreach event in Houston to inform DBE businesses of the opportunities available on the Grand Parkway Project.

Providing opportunities to qualified firms is premised by maximizing the project information available to the DBEs as they bid on work, negotiating fairly with successful bidders, and providing business mentoring to maximize the success of the DBEs. The basic steps are:

- Providing Bid Information. FBW will provide DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner considering the nature of the DB process.
- Good Faith Negotiation. FBW will negotiate in good faith with all firms. Evaluation of all pertinent background will enable FBW to determine the appropriate scope of that DBE's participation. If negotiations reveal barriers for a DBE to participate, we will provide support as needed.
- Assistance in Contract Execution. FBW will brief new contractors in project procedures and requirements. We will monitor ongoing activity and help provide mentoring or assistance in meeting requirements
- FBW's goals for DBEs participation will flow down to all tiers of consultants, contractors, and suppliers to maximize opportunities for DBEs.

We have already made substantial progress toward meeting these goals. The following DBE professional services firms are already confirmed to the team during the proposal phase, and assisted us in the development of our solutions and proposal:

- Pinnacle
- Gunda Corporation
- IDC
- Crouch Environmental Services

Conclusion

FBW has assembled a team with the right skills, tools, resources, experience, and relationships to address the key success factors for the Project.

Our companies and key personnel have the experience and established working relationships with TxDOT's Houston District, as well as with the agencies and municipalities that will be so crucial to on-time completion and support for the Project.

We had key personnel with decades of experience in Houston perform more than 60,000 hours of due diligence during the proposal period to make sure that we've identified and mitigated risks to achieving project goals, particularly the on-time completion of the Project and the interim milestones.

Our plans are based on the lessons learned from Texas DB Projects. We customized these plans to address the critical technical and logistical challenges of the Grand Parkway.

With FBW as the developer of the Grand Parkway Project, TxDOT will have the advantage of a team that can deliver:

- A guaranteed schedule and price for all project phases—completing the Project to improve mobility and quality of life in the region.
- Knowledge of and experience with TxDOT Houston District, the Houston corridor to provide early project completion and use.
- Consistency in management and performance by providing a single point-of-responsibility for the life of the Project.
- Demonstrated ability to gain the public confidence and support of the communities served by the corridor.

More importantly, we are prepared more than any other team to quickly form a partnership with TxDOT focused on achieving Project Goals and completing the Grand Parkway Project in a manner that engenders and maintains support for the Project.

FBW stands eager and ready to partner with TxDOT and to utilize our skills and experience to make the Grand Parkway Project a regional success and a model project for the District.