



EXECUTIVE SUMMARY



A. EXECUTIVE SUMMARY

A.1 An explanation of the organization and contents of the Technical Proposal.

The I-2 Connector Team combines two respected and experienced design-build contractors; **Johnson Bros. Corporation (JBC)** and **Anderson Columbia Co. (ACC)**. The members of this LLC have formed two (2) separate entities specifically to deliver the **I-2 / I-69C Interchange Project** (“Project”) for TxDOT. The **I-2 Connector, LLC** is the overall developer and the DB Contractor and the **I-2 Maintenance, LLC** will undertake the capital maintenance contract (if this component is awarded). JBC and ACC will be 50/50 ‘joint and several’ members of both companies assuring TxDOT continuity and single source of responsibility. **Infrastructure Consulting & Engineering, PLLC (ICE)** will be the Lead Engineering Firm. **PAVETEX** will be the Lead Independent Quality Firm covering both design and construction quality assurance functions.

A.2 A summary of any changes to Proposer’s QS.

The I-2 Connector Team has made no changes to its organization since the submission of the QS on July 25, 2018 with the additional clarifications submitted on August 3, 2018.

A.3 A summary of any changes in Proposer’s organization, Equity Members, other Major Participants and Key Personnel since submission of the QS.

No changes to the I-2 Connector Team’s Organization, Equity Members, Major Participants or Key Personnel have been made since the submission of the QS in July 2018.

A.4 A summary of the proposed management, decision making, and day-to-day operation structure of Proposer, and a statement that each Major Participant has committed to provide the specified people.

The I-2 Connector Team uses a well-defined management plan implemented by an experienced and quality-driven management team to achieve success on this Project. Our organization and management will promote clear and effective lines of communication throughout our DB Team to meet the Project goals of **safety, mobility, quality, environmental compliance, budget, and schedule**. The organizational structure provides open partnering relationships that provide TxDOT with a superior management team that will remain intact through substantial completion and the transition to the long-term maintenance component. Our Team approach is organized by function with clear objectives and responsibilities, stressing the need for an adaptable, flexible organizational structure capable of responding to the specific demands of

Proposal Organization & Content

The Technical Proposal has been organized based on ITP, Exhibit E instruction as follows:

A. Executive Summary

- A1. Executive Summary

B. Proposers Information, Certifications & Documents

- B1. Form A
- B2. Authorization Documents
- B3. Form B-1
- B4. Form B-2
- B5. Form C
- B6. Form D
- B7. Key Personnel Changes
- B8. Organization Changes
- B9. Form E
- B10. Form F
- B11. Form H
- B12. Form I
- B13. Form J
- B14. Form K
- B15. Form L
- B16. Form M
- B17. Surety Information
- B18. Form N (sealed envelope)
- B19. Exhibit H-1
- B20. Exhibit H-2

C. Technical Solutions

- C1. Project Management
- C2. Quality Management
- C3. Health and Safety
- C4. Design and Construction Plans

D. Appendices

- D1. Detour Traffic Analysis
- D2. Preliminary Pavement Design Worksheets
- D3. Preliminary Project Baseline Schedule (PBS1)
- D4. Roadway Roll Plots
- D5. Drainage Roll Plots
- D6. MOT Roll Plots
- D7. Bridge Roll Plots
- D8. Retaining Wall Roll Plots



this Project. All of our design, construction, quality acceptance and maintenance personnel will partner with TxDOT and other stakeholders to form a cohesive team focused on delivering project design, construction and maintenance solutions quickly and efficiently. We have customized a proven structure to specifically focus on the following goals for the Project:

- *Maintenance of traffic and safety of the traveling public during construction*
- *Increased public awareness and public support through proactive stakeholder engagement*
- *Respect for the environment and the commitments made to the communities along this corridor*
- *A strong partnership between the Team, the TxDOT Pharr District, Project Stakeholders, and the residences and businesses in the Project Area*
- *Strong local and DBE participation*
- *Superior quality and continuous performance improvements*
- *Early completion of the facilities and any elements therein that could lead to earlier improvements in mobility for the traveling public*
- *Design elements to address lifecycle cost considerations and operability and maintainability issues*

The I-2 Connector management structure is designed to promote a) Responsiveness to client concerns, b) Enhanced communication to identify and resolve potential issues quickly, c) Superior quality in each stage of the Project, d) Independent Design and Construction QA reporting (outside of our project production staff) to TxDOT, and, e) Design and Construction QC activities that are independent from production.

A.5 Summary of the Technical Solutions

A.5.1 Summary of Project Management

The Team's well-defined management controls are implemented by experienced and quality-driven management to achieve Project success. Our management approach is centered on the following areas:

(i) Integrating a partnering plan. The Team embraces partnering based on the premise that important, complementary opportunities must exist between all Project participants. When the right people are brought together in an open and honest environment with effective organization, we can establish mutually beneficial relationships that result in successful Project delivery.

(ii) Empower all levels of the organization to make decisions with TxDOT counterparts. The Team will resolve issues at the lowest possible level with a process for escalating issues when a decision cannot be made at a lower level and the unresolved issue impacts scope or schedule. This escalation process can start at any level and will continue upward until the team achieves resolution.

(iii) Design Management. The Team's design management organization is structured to deliver the design on time, incorporate previous project experience collected by both TxDOT and the Team, and provide TxDOT with the best project value for the least public impact. Our Team, under the leadership of our **Design Manager (Peter Graf)**, is using several well-known Texas firms as subconsultants with expert knowledge of the Project's issues. The entire design team, particularly the environmental and utility managers, are familiar with TxDOT, City of McAllen, Hidalgo County and third-party utility specifications, and they are fully committed to working as partners.

(iv) Risk Management. To mitigate schedule challenges for the design, utility relocations, and construction, the **I-2 Connector, LLC** management group will give ICE a conditional NTP to start the design work at-risk. Our risk analysis indicates the major risks are construction phasing, MOT Plans, Utility Adjustments, Railroad Coordination, Business / Property impacts during construction and stormwater management.



(v) Construction and Traffic Management. For planning purposes, the Project will be divided into segments to reduce traffic switches, maximize work areas and expedite the schedule to take advantage of critical path items such as utility relocations. The Team will implement a comprehensive public information campaign to communicate our traffic control and sequencing plan to all stakeholders.

(vi) Schedule and Cost-Control Management. A Primavera P6 cost & resource loaded schedule is submitted as the Preliminary Project Baseline Schedule (PBS1). We will develop a realistic budget, monitor and track labor, equipment and material cost, analyze production and cost trends, and identify and implement construction efficiencies upon the award of the contract.

(vii) Environmental Management. Our environmental management plan establishes site controls during pre-operation planning that includes a series of environmental checklists to inspect, maintain and document compliance throughout the Project to comply with environmental commitments. A consistent approach to environmental management will result in positive working relationships with regulatory staff and inspectors.

(viii) Effective Public Outreach. Project success will be tied to receiving and maintaining strong support from TxDOT, the public and key stakeholders. Success also depends on developing plans and communication tools that keep the public well-informed and allows motorists to make informed drive-time decisions that will minimize impacts to their commutes. We also have public outreach plans and procedures that will be tailored to the specific needs of the I-2/I-69C Interchange Project. This will provide the foundation of a successful Public Outreach/Public Involvement Program to maintain the public support the Pharr District has worked so hard to establish.

A.5.2 Summary of Quality Management

Achieving a high level of quality is critical to avoiding rework and keeping these projects on schedule and under budget. A consistent approach is required to drive quality through each stage of the Project, while assuring the results are checked, validated, and (where necessary) corrected in a timely manner. The Team's comprehensive **Quality Management Plan (QMP)** will provide consistent procedures, reporting, and documentation to create an ingrained culture of quality in each stage and activity of the Project.

Our QMP is based on five core procedures: (1) Control of documents, (2) Control of records, (3) Opportunity for Improvement (containing provisions for corrective and preventive actions), (4) Control of non-conformance, and (5) an Internal Audit Program. These core procedures are woven into our overall quality management program and the individual quality management plans including: (1) our **Design Quality Management Plan (DQMP)**, (2) our **Construction Quality Management Plan (CQMP)**, and, (3) our **Maintenance Quality Management Plan (MQMP)**.

The **QMP** will describe the system, policies, and procedures that ensure the Work meets the requirements of the RFP, DBC and CMC and provides documentation of such compliance. We have assigned **Danny Brown, PE** as our DQAM, and **Ernie De La Garza, PE** as our IQFM. Danny will be responsible for design quality assurance and Ernie will be responsible for construction quality acceptance. Danny will also implement procedures to ensure all design products are checked before release to the Construction Team and/or TxDOT.

A.5.3 Summary of Proposer's Safety and Health Plan

Safety is the number one priority of the Team and our subcontractors. Each employee is empowered to eliminate incidents in the workplace and protect the safety of the traveling public. A cornerstone of the Team's safety approach is to engage every employee, supervisor, manager, and subcontractor in our **"Zero Accident"** philosophy where everyone is responsible for their own safety and the safety of their fellow employees and travelling public. All managers, supervisors and craft employees are responsible to stop and correct any unsafe act or condition they observe. Our commitment to safety is consistent with TxDOT's **"Mission Zero"** policy. Several value-added initiatives have been proposed to improve the safety of the work zone for our workers and travelling public.



A.5.4 Summary of the Design and Construction Plan

(i) Maintenance of Traffic (MOT) and Construction Sequencing. Because of the extremely heavy volume of traffic that must navigate through this site (over 185,000 vehicles per day on I-2 and over 135,000 vehicles per day on I-69C), the Team has developed a conceptual MOT Plans to ensure a safe, timely and quality project with minimal disruption. The Team will maximize the use of night and weekend work to lessen impacts on traffic and provide safe access to work areas. The proposed MOT Plans are designed to keep three out of four direct connector ramps (DC-2, DC-3 and DC-4) open while the new direct connector ramps are built, with appropriate horizontal and vertical separations for the safety of our workers and the traveling public. Anderson Columbia's current work on I-2/Bicentennial Blvd. Project provides us with tested MOT strategies for this corridor, such as channelizing traffic to allow traffic merges while preventing excessive weaving that creates unsafe driving conditions and reductions in level of service. Using wire walls for staging the placement of ramp fills will allow these fills to be built without making drivers in adjacent lanes feel confined. Portable message signs will also be used extensively to warn drivers in advance of reduced speeds, alternate routes and upcoming traffic shifts.

(ii) Roadway. The Team has enhanced TxDOT's schematic plans to provide for proper separations (horizontal and vertical) for the existing and new director connector ramps (as discussed and approved by TxDOT) and implemented the approved ATC-11, which reduces both the embankment / retaining wall and the elevated structure portions of the new DC-1, resulting in significant cost savings and improved traffic speed during peak hours on the WB mainlanes with no appreciable drop in vehicle speed along the WB Frontage Road. A Perpetual HMA pavement is proposed for all new pavement features in accordance with TxDOT and 'best-in-class' design principles and construction materials including SMA surface course.

(iii) Bridges. The Team has developed concept design and plans which maximize value with TxDOT design and construction standards for bridge construction. The design and construction teams spent considerable time evaluating curved steel girders and chorded P/S concrete beams and straddle bents for the direct connectors.

(iv) Drainage. The region's flat topography creates drainage problems, and the flooding caused by record breaking rainfall in June of 2018 underscores the need to maintain positive drainage during and after construction. New drainage features, such as additional inlets and larger pipes for stormwater conveyance, will be integrated within our construction phasing to ensure drainage at all stages of construction.

(v) Utilities. Our approach to managing utility risks is straightforward: identify potential impacts as early as possible; maintain close and frequent contact with TxDOT and all affected utilities to manage the scope, sequencing, schedule and cost of utility adjustments; and work diligently with each affected utility to protect their investments. We know that utility issues can be a major source of headaches for the District, and our utility staff will provide TxDOT and the affected utility owners with a single, responsive point of contact to ensure smooth integration of this project with existing utilities.

A.6 Summary of the Proposer's approach to satisfying the DBE requirements.

The Team will exceed TxDOT's DBE goals of 6% of price allocable to design work, and 6% of the price allocable to construction work. We will track our DBE participation through monthly reports and document the additional opportunities we have provided. The Team affirms a strong, demonstrated commitment to TxDOT's goals for the Project's DBE program and we will foster meaningful DBE participation throughout the Project. We will seek additional opportunities by a) ensuring procurement packages are structured to allow DBE participation; b) ensure inclusion of DBE firms in all solicitations and, c) review solicitations to remove statements and clauses that tend to restrict participation.