

# Energy Sector

## Roadway Repair Project through a Design-Build Contract

### Executive Summary

#### Our Team

The Austin-Angel team includes JV partners and equity members Austin Bridge & Road and Angel Brothers Enterprises, Ltd; major participant and lead designer Burns & McDonnell; and major participant and construction quality acceptance firm, Fugro. The team has also been in contact with potential subcontractors James Construction Group, Bay, Ltd, A.L. Helmcamp, H.L. Zumwalt and Salinas Construction Technologies. Austin-Angel will provide construction management, specialty equipment, material resources and will self-perform the majority of the work. Our strong team of exclusive subcontractors will augment the JV with labor, equipment and materials needed to perform the scope of work for this project.





## Our Approach

The Austin-Angel team has thoroughly reviewed the challenges posed by this project and has developed our approach to achieve successful delivery of the maximum number of locations within the allotted budget and within 540 days of NTP1.

We have divided this project into three areas; each with a dedicated area manager (AM). These AMs are responsible for the day to day activities and communication with TxDOT offices. To achieve maximum effectiveness we have developed a series of protocols and communication strategies which can be found in our Project Management Plan (PMP).

## Summary of Changes to Proposer's QS

There have been no changes in our team's organization, Equity Members, Major Participants or Key Personnel since submission of our QS.

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

Communication is the foundation of our management plan, our construction approach and meeting TxDOT's established goal in cooperating and coordinating with the department.

Our approach includes the following elements:

- Regular project meetings to guarantee lines of communication are open between individual team members, TxDOT and other key stakeholders.
- A TxDOT/D-B contractor communication plan to provide a proactive approach in dealing with joint concerns and communicating with the public.
- Aggressive schedule and logistics management which includes rigorous solicitation of qualified local contractors to supplement labor and material resources.

Our AMs are empowered to make decisions in coordination with their TxDOT counterparts in order to maintain daily project progress and safety. Decisions are encouraged to be made at the lowest level possible.

A decision-making matrix establishing authorization levels is created at the initial project kickoff meeting, with final approval by Project Manager, Joel Michael and his TxDOT counterpart. Setting up clear lines of authority and communication is the initial step of our issues resolution process.

## Key Personnel Commitment Statement

Each major participant on the Austin-Angel team commits to providing the key personnel required to complete this project.

## Technical Solutions Summary

### *Construction Staging, Sequencing and Traffic Management*

Our construction plans require multiple operations occurring at the same time in various locations. The AMs will direct the daily traffic management and sequencing of each individual project. In accordance with the traffic control plan and with the assistance of our construction superintendents, TxDOT representative and traffic manager, each AM will set the appropriate traffic sequence for the operational activity. These sequences are determined well in advance during the weekly area scheduling and coordination meetings. After the traffic management is in place, the AM will perform daily inspections with the project personnel to ensure all devices are set properly and that all electronics are performing as desired.

The energy sector has increased the amount of traffic on rural roads, and to account for this increase in traffic the Austin-Angel team will take the following steps for the safety of the travelling public and our work force:

- Automated flagger assistance devices will allow our flagging operators to manage the flagging operation at a safe distance away from the flow of traffic, which will provide a greater command of the roadway.
- Temporary rumble strips (if approved by district) will provide the traveling public with a physical reminder that they are entering into a work zone. This mechanism has recently been implemented throughout the state, and heralded by TxDOT, as part of an effort to increase safety and reduce traffic accidents in the work zone.



- Message boards will allow us to provide additional messaging to the traveling public such as “use alternate route,” “slow down,” or “My Daddy Works Here.” These are messages that we have used on projects throughout the state, which relay the seriousness of travelling through a work zone.
- Behind protective barriers, equipment will only display yellow lights per TxDOT’s new requirements.
- Daytime running lights will be used on equipment in unprotected work zones.

### ***Maintenance of Locations During Construction Work***

Our maintenance team will inspect conditions on a daily basis and provide maintenance services, including ordinary and replacement maintenance for each project location under barricades. We will prepare and submit the initial maintenance management plan (MMP) for TxDOT approval in accordance with the Technical Provisions. The MMP will provide the foundation for the management and execution of maintenance, repair and replacement.

### ***Utilities***

Austin-Angel will build upon pre-proposal work to verify TxDOT and utility owner information. We will use a combination of verification methods to accurately locate and map the utilities.

Austin-Angel will initiate a proactive utility management program. Through this utility management program, we will host regularly scheduled utility coordination meetings, attended by interested parties from TxDOT and utility owners. Through these meetings, we will establish efficient means for protecting and/or relocating utilities.

### **Summary of Project Management Plan** ***Providing Equipment, Materials and Personnel***

The combined resources of Austin-Angel will be deployed as necessary to meet requirements of the design-build contract and will ensure the successful completion of the project.

Austin-Angel currently owns or leases more than 2,000 units of paving and roadway equipment

and has a combined total of 18 asphalt plants. In addition, our local, dedicated subcontractors are committed to providing the necessary resources for this project.

### ***Managing Subcontractors and Subconsultants***

All design subconsultants will follow design protocol for communication, quality, calculations and documentation, established by the project development plan.

Austin-Angel’s subcontract agreement will ensure a defined subcontractor scope of work and required attendance at all appropriate area coordination and scheduling meetings for coordination of the work across all locations. We will also require our subs to meet the necessary safety, quality, schedule and environmental requirements of the project.

### ***Controlling Project Schedule and Minimizing Costs***

Our superintendents will control the project schedule and cost through active, daily oversight. In addition, the superintendents will report weekly at the area scheduling and coordination meetings. Through this structure, project management will track progress, have real-time scheduling capabilities, the ability to minimize delays and mitigate potential cost impacts through advanced identification and communication.

This daily management will be supplemented by our schedule tracking team. We will use Primavera 6 (P6) to monitor progress and track that each Location is staying on schedule.

Austin-Angel will use the following tools as needed to ensure that the project is successfully delivered:

- Austin-Angel will subsidize subcontractor work immediately with additional resources, if their performance is not meeting project schedule.
- Additional work hours including night work.
- Performance-based incentives with subcontractors.
- Alternative traffic control measures, if needed that will meet or exceed the requirements of the contract.



### **Managing Environmental Impacts and Risk**

As part of the project management plan, the team will develop an effective comprehensive environmental protection program (CEPP) to achieve consistent environmental oversight throughout the life of the project.

Austin-Angel will proactively mitigate risks by maintaining open communications with all stakeholders. This will be accomplished through discussions at area scheduling and coordination meetings. A TxDOT/D-B contractor communication plan will be developed upon NTP1 to provide a proactive approach in dealing with joint concerns and communicating with stakeholders.

### **Managing Safety and Health**

Project safety will be integrated into every operational phase through detailed planning and coordination. The safety manager will serve as the primary resource to all operational teams in the planning and implementation of risk mitigation.

To effectively integrate safety into every level of the project organization, the safety manager will support project supervisors and safety representatives from each of the contractors/sub-contractors on site.

A safety representative meeting will be held, every two weeks to review the following:

- Safety performance and trends on the project
- Injury/incident review and discussion
- Safety audit results
- Process and procedures reviewed and revised for continuous improvement

Sub-contractor safety representatives will also be required to submit pre-construction documentation that verifies critical aspects of competence and training while establishing minimum expectations to begin work. Furthermore, project safety representatives will be expected to conduct scheduled site specific

safety orientations, perform internal safety audits, and special safety training as needed – all of these actions under the direction of the project safety manager.

### **Summary of Quality Management Plan**

The Austin-Angel team will provide a quality management plan that is ISO compliant and integrates TxDOT into the quality management system to monitor, audit, and measure the DB contractor's performance in the management of design and construction of the project.

As detailed in the quality management plan (QMP), the design manager, construction quality acceptance manager (CQAM), construction quality control manager (CQCM) and their support staffs will have defined authority and responsibilities for ensuring the QMP is implemented and adhered to. Each will have the authority and obligation to stop work should a quality-related issue warrant such action. The CQAM will report jointly to TxDOT and a member of the Austin-Angel JV team. The quality functions for the project have been organized and structured in such a manner where quality will be achieved and maintained by those performing the work; and personnel not directly responsible for performing the work will evaluate the effectiveness of the quality processes.

### **Satisfying DBE Requirements**

The Austin-Angel team conducted a DBE outreach event for this project on October 29, 2013 in San Antonio, and is actively communicating with potential DBE subcontractors. Each member of the Austin-Angel team is committed to providing opportunities not only on construction projects but in every aspect of our business. Through our comprehensive DBE outreach and mentoring program we are confident we will exceed the 7% DBE requirement for this project.