INTRODUCTION

McCarthy Building Companies, Inc. (McCarthy) is one of the nation's leading design-build contractors. For the SH 71 Toll Lanes project, has recruited top tier talent from the transportation industry to demonstrate to TxDOT our commitment to, and expertise in, the design-build transportation market.

McCarthy has teamed with Lead Design Engineer Lockwood Andrews & Newnam, Inc. (LAN), in association with Kimley Horn Associates, Inc. (KHA), and a select group of specialty consultants to form our design-build team. Our combined resources, talent and experience makes the McCarthy Team capable of bringing significant value to TxDOT on the SH 71 Toll Lanes project.

Throughout the proposal period, our team has become intimately familiar with the SH 71 and FM 973 corridors. We have met with numerous utility companies and stakeholders in the area to develop a comprehensive project approach that meets the short and long term needs of TxDOT, CTRMA, and the community at large. Key elements to our project approach include:

- Five approved ATCs that reduce project capital costs by an estimated $1.5 million.
- Five-phased construction sequence that results in project completion three months ahead of schedule, providing earlier toll revenue collection.
- Optimized roadway and drainage profiles within the existing ROW to eliminate several major utility conflicts.
- Comprehensive traffic management plan that minimizes impacts to stakeholders, specifically Austin-Bergstrom International Airport and Circuit of The Americas race track.
- Highly qualified Project Management team with directly relevant design-build transportation experience.

The McCarthy Team brings the people, the resources, the expertise, and a demonstrated technical approach to deliver the SH 71 Toll Lanes project ahead of schedule and in a collaborative manner.

PROPOSAL CONTENTS

The Proposal has been organized according to the instructions to Proposers, Exhibit E. McCarthy has included a copy of Exhibit E as requested per the RFP.

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B. PROPOSAL INFORMATION, CERTIFICATIONS & DOCUMENTS
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- Organizational & Authorization Documents
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- Form O

F. APPENDICES
- Key Personnel Resumes
- Technical Drawings, Graphs, & Data
- Preliminary Project Baseline Schedule

A. SUMMARY OF CHANGES TO PROPOSER'S QS

There have been no changes to the QS other than those provided in Section C, changes in the McCarthy Team.

B. CHANGES IN THE McCARTHY TEAM

McCarthy's team members are shown on the chart on to the right. All Major Participants from the QS remain on the team. During the RFP, our team added two consultant firms to the team for minor support roles. These include:

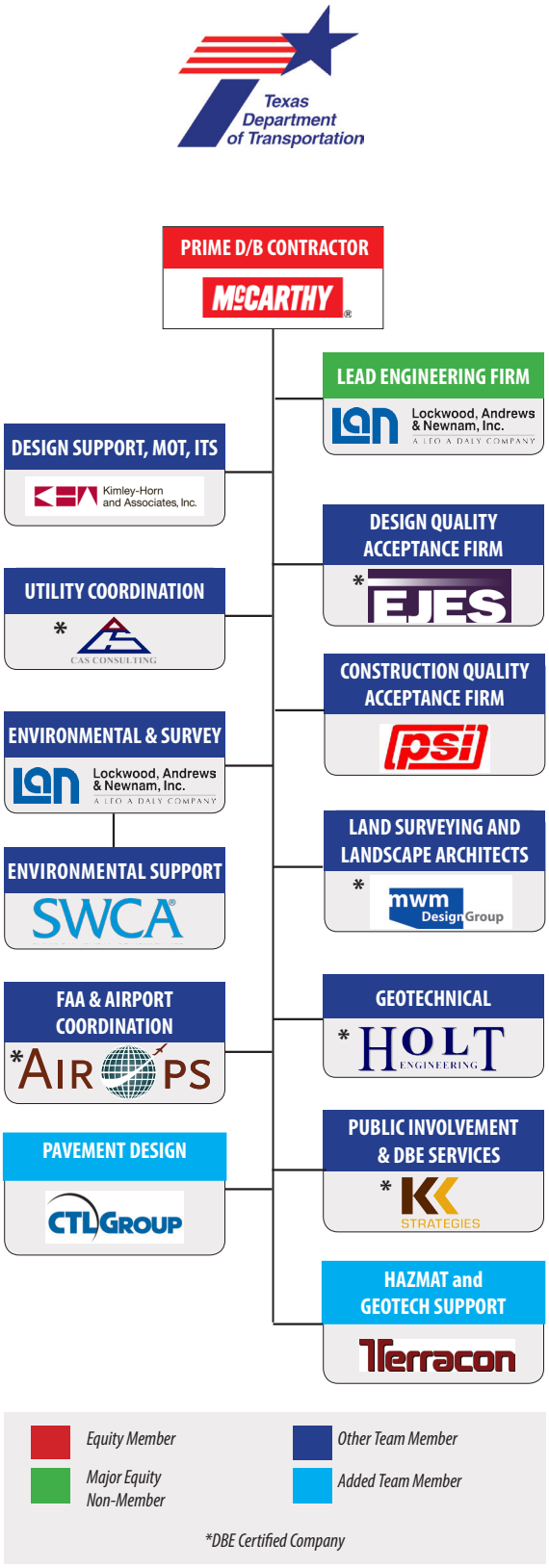
Terracon

Terracon is a multi-disciplined firm that specializes in Environmental, Facilities, Geotechnical and Materials engineering. Terracon will provide our team with Environmental Compliance Support (HAZMAT), and Geotechnical Support Services.

CTLGroup

CTLGroup is an internationally-recognized expert consulting engineering and materials science firm. Their Austin office will support our team by providing Pavement Design services.

No Changes have occurred to our Key Personnel since the QS.



C. SUMMARY OF PROPOSED MANAGEMENT, DECISION MAKING AND OPERATION STRUCTURE

The McCarthy Team's collective experiences and key personnel will bring value to TxDOT. Our design-build organization has been structured to allow highly qualified people to manage the design and construction in an integrated, collaborative environment. Our proposed key personnel are being made available for this project because they bring specific past experiences that will benefit the SH 71 project.

Our management structure is established to create a highly integrated structure with well-defined reporting lines and to promote coordination between the design and construction disciplines at all levels. The design-build team will be co-located throughout all phases of execution and will work collaboratively on all phases of the work.

Project Manager, Kurt Knebel, will have ultimate authority over all project-related matters and is accountable for the overall performance of the McCarthy team. Construction Manager, Jeff Billows, PMP, will lead the on-site construction team as well as all inter-disciplinary Task

Force meetings throughout the design phase. Design Manager, Larry Zamora, P.E. will work with Jeff in a co-located environment to ensure effective coordination of all design disciplines. Design Task Leads will participate in discipline-specific Task Forces with their construction counterparts to ensure collaboration and integration occur at the earliest stage possible.

While the entire McCarthy team is accountable to ensure quality expectations are met on the project, Construction Quality Control Manager, Jerry Mayer, P.E, will oversee implementation of the QA/QC program and will have direct authority to act for the design-builder to take any action necessary to fulfill the requirements of the contract documents and the QMP. Independent Design Quality Assurance Manager, Floyd Martinez, P.E, and Construction Quality Acceptance Manager Brandy Leighton, P.E., and will report to both the Project Manager and to TxDOT.

Our Safety Manager, Environmental Compliance Manager, Project Controls, and Public Involvement Coordinators will all report to the Project Manager.

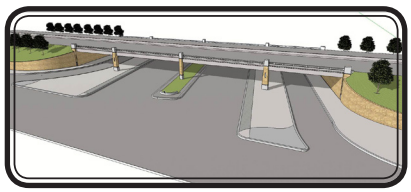
Construction Manager, Jeff Billows, PMP, brings 13 years of design-build transportation experience to this project. He is currently not assigned and is available to start work immediately.

D. PROJECT DEVELOPMENT PLAN

TECHNICAL SOLUTIONS

McCarthy takes great pride in our abilities as a design-builder to develop creative solutions that save time and money. During the proposal phase, our design and construction teams worked diligently to identify innovative ATCs that met the goals of the project, as well as TxDOT's criteria. Our team developed numerous ATCs and submitted eight to TxDOT for approval. Of those eight, five ATCs were approved and incorporated into our design solution, resulting in a project cost savings of $1.5 million. They include:

- **ATC #2** - Use of soil nail walls in lieu of sloped retaining walls at the SH 71 overpass of FM 973. Reduces bridge length by 130 feet.
- **ATC #3** - Reduces center median width from 31-ft to 18-ft at the FM 973 interchange. This reduces the bridge length and overall bridge area.
- **ATC #4** - Reduces center median width along FM 973 south of the SH 71 overpass to eliminate utility conflicts and simplifies the drainage system by utilizing ditches in lieu of pipe. Also allows for ease of future expansion of FM 973.
- **ATC #6** - Reduces the width of architectural pylons at Presidential Blvd bridge from 11' to 3', thus reducing the amount of substructure required to be coordinated with traffic flow.
- **ATC #7** - Integrates the architectural pylon into the Presidential Blvd bridge superstructure thus reducing future maintenance by decreasing the potential for differential settlement.



ATCs 2 and 3 at the 973 Interchange reduce bridge length and overall bridge area, saving time and money.

Numerous other technical solutions were incorporated by our team, some of which include improved roadway geometry, shared utility relocation strategy and a construction phasing approach that reduces impact to the traveling public and access to ABIA.

PROJECT MANAGEMENT PLAN

McCarthy brings proven design-build management tools to this project, including exclusive communication protocols and document control softwares, and design management methods such as Task-Force groups and co-location. Our proposal demonstrates how McCarthy will ensure project success.

ORGANIZATION McCarthy's organizational structure is structured to enhance team communication of project management from the top down while encouraging technical solutions to be developed from the bottom up. Our structure also assures that control and compliance of quality and safety goals are independent of the day-to-day project management.

SAFETY Safety, of our employees and the traveling public, is McCarthy's #1 priority, and a core tenet of our culture. This is evident by our EMR rates, which are a fraction of the industry average. Site-Specific Safety Plans, daily pre-work safety planning checklists, Task Hazard Analyses, and extensive training are just a few of the many ways we ensure safety on our projects.

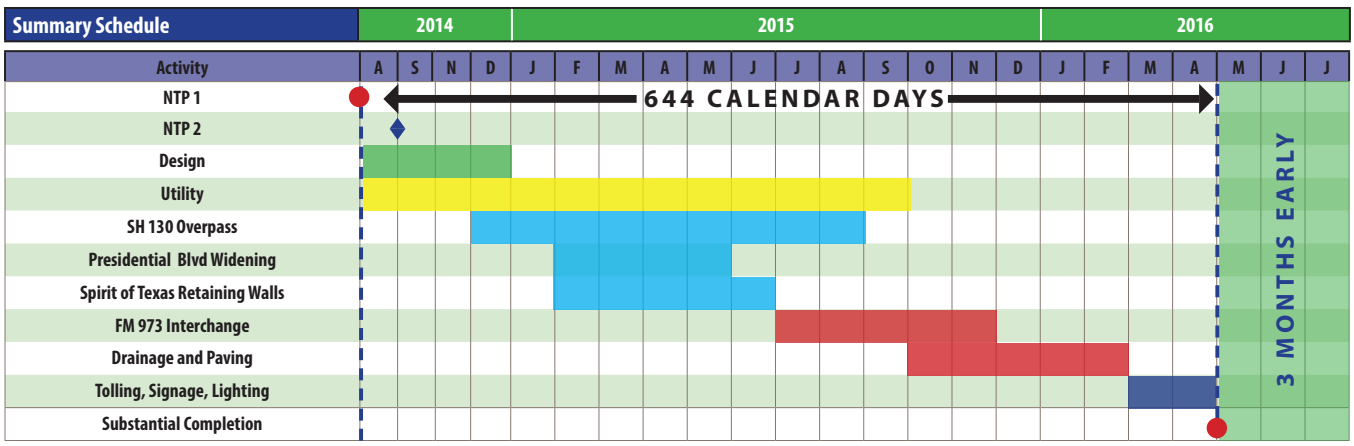
RISK MANAGEMENT McCarthy has thoroughly evaluated the risks to be addressed during this project, including design, market, and construction risks, and developed a detailed mitigation plan to deal with them. Our approach to risk management is a continuous, proactive process to ensure these risks won't negatively impact the outcome of the project.

TRAFFIC MANAGEMENT McCarthy has developed a 5-phase construction sequence and traffic approach that accelerates the schedule. Our detailed Traffic Management Plan (TMP) that will ensure that we minimize traffic impacts along the corridor and to key stakeholders and events such as ABIA and COTA.

ENVIRONMENTAL MANAGEMENT Our team is well aware of the environmental constraints that face this project and permits required to address them. Our Environmental Compliance Team is lead by ECM Jason Maldonado, CFM, who will be supported by Austin-area environmental specialist, SWCA.

SCHEDULE MANAGEMENT McCarthy utilizes Primavera P6 to create a series of schedules to manage the project, including a Milestone Schedule, Master Schedule, CPM schedule, and ongoing short-term look ahead schedules. McCarthy also conducts weekly "Pull Scheduling" meetings -where we include the entire team together to refine weekly short term schedules, addressing interrelated and dependent activities head on with respect to an end goal. We consistently find this yields improved efficiency of the construction operation. ***Our sequence approach will result in completion three months ahead of schedule and early revenue service.***

MENTORING & JOB TRAINING With team member K Strategies, we have developed a formal program to ensure DBEs have opportunities to learn, grow, participate on the project, and be able to perform successfully.



QUALITY MANAGEMENT PLAN

Quality is built in to everything we do at McCarthy - A key focus of our Quality Program is to integrate quality processes and activities into our culture – the way we do things. We implement comprehensive Quality Management Program (QMP) to guide those doing the work in achieving the level of quality expected (quality control) and an independent party accomplishes ongoing verification of quality achievement (quality assurance).

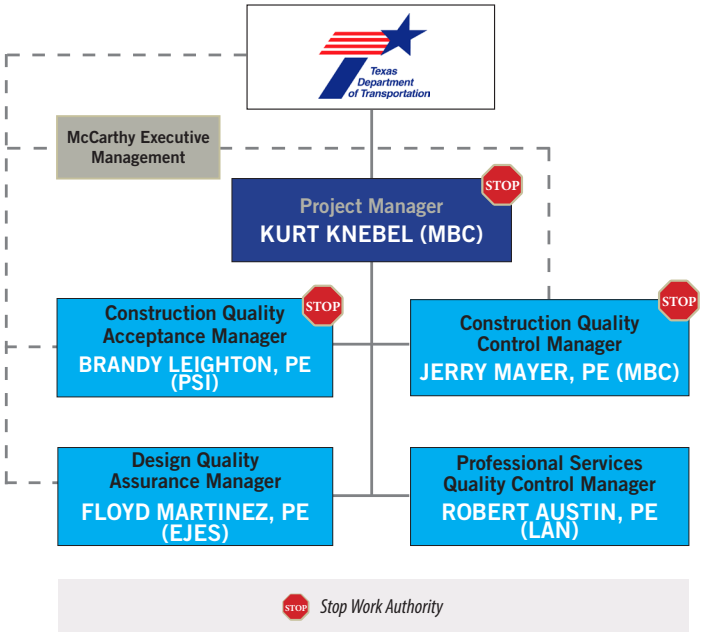
Our quality program personnel for the project have been organized and structured to ensure that:

- Quality will be achieved and maintained by those who have been assigned responsibility for performing the work.
- Persons or organizations not directly responsible for performing the work evaluate quality effectiveness.
- The individuals responsible for quality evaluations will have sufficient authority, access to work areas, and organizational freedom to identify quality compliance; verify implementation of solutions; and ensure that further processing, delivery, or installation is controlled until proper disposition of a nonconforming condition has occurred.
- Quality verification functions report to a level of management which provides sufficient authority and organizational freedom to ensure that appropriate action is taken to resolve conditions adverse to quality.

The Design QMP (DQMP) defines the design review, submittal, and revision process. The DQMP involves a series of informal over-the-shoulder review sessions throughout the process, as well as formal reviews including Detail Checks, Discipline Coordination Reviews, Independent Technical Reviews, and Constructability Reviews. We will ensure design plans conform with contractual requirements.

The Construction QMP (CQMP) focuses on adhering to the plans & specs, preventing deficiencies, and correcting non-compliance. Ours is a pro-active approach that involves lots of pre-planning, 1st installation verifications, and mock-ups. If an incident is identified as nonconforming, work is stopped. A nonconformance report is generated and documented in our Teamsight℠ system and shared with the project team. Root causes are determined, corrective actions are evaluated, agreed upon and implemented to prevent further nonconformance. We will include TxDOT staff and give adequate notice to facilitate quality oversight responsibilities.

QUALITY MANAGEMENT ORGANIZATION



E. APPROACH TO SATISFYING DBE REQUIREMENTS

McCarthy brings a long history of meeting and exceeding public sector disadvantaged, minority and/or women business (D/M/WBE) program requirements. Our team members have consistently exceeded participation goals and included D/M/WBE firms at all business levels. In 2013, McCarthy personnel developed and led the first Self-Perform Civil Contracting Short Course through the AGC DFW Industry Training Committee to help educate small businesses and grow capacity within the transportation market.

McCarthy is committed to creating opportunities for DBE firms on the SH 71 Toll Lanes Project as well through the creation of Heavy Highway Mentoring and Job Training Program. These programs will provide DBE firms with the opportunity to enhance their overall heavy highway business acumen, as well as a job training program aimed at enhancing craft worker skills. Our team member K Strategies Group is currently providing these training programs on the Horseshoe design-build project in Dallas.

We are very familiar with the local DBE subcontractors and vendors and are committed to engaging these businesses in execution of the work. **McCarthy is confident that will exceed TxDOT's 8% DBE goal during the construction phase.**