TECHNICAL PROPOSAL

LOOP 375
BORDER HIGHWAY WEST EXTENSION PROJECT

BORDER HIGHWAY MOBILITY PARTNERS

In Partnership with
Archer Western • Sundt Joint Venture

VOLUME **1:**
Executive Summary

ORIGINAL

Exhibit E

SUMMARY AND ORDER OF PROPOSAL CONTENTS

Proposal Component	Form (if any)	ITP Section Cross-Reference	Proposal Cross-Reference
Technical Proposal			
Proposers shall follow the order of this checklist in their submissions. A referenced copy of this document shall be submitted with the Technical Proposal.			
A. Executive Summary			
Executive Summary **(Exclude price information)**	No forms are provided	Exhibit B, Section 3.1	Vol. 3 Executive Summary

Rendering of ATC-02 Executive Center Drive Blvd.

A. EXECUTIVE SUMMARY

The **Border Highway Mobility Partners (BHMP)** team was created to deliver the Loop 375 Border Highway West Extension Project (Loop 375) with a focus on short-term and long-term cost effectiveness, making a project the community will be proud of and find efficient for their transportation needs.

With a team that offers local members from the El Paso community and Texas, BHMP was strategically formed to combine the significant resources and expertise of **Joint Venture Team Archer Western Contractors, LLC (Archer Western) and Sundt Construction, Inc. (Sundt),** along with the Designer-in-Charge, **Parsons Transportation Group Inc. (Parsons)** and Maintenance Team, **Infrastructure Corporation of America (ICA).** Our team consists of first-class technical design-build (DB) experts who bring unsurpassed TxDOT, Texas and national experience on similar projects to Loop 375. We understand the importance of delivering a long-lasting and cost-effective Design, Construction and Maintenance of the Loop 375 project as described throughout our proposal.

Parsons is successfully leading the design on TxDOT's SH 99/Grand Parkway and IH 35E Managed Lanes DB projects. Parsons brings a strong supporting cast of El Paso and TxDOT-experienced design subconsultants, most of which are Disadvantaged Business Enterprises (DBE) to foster increased growth and opportunity in the El Paso region.

Serving as our lead maintenance firm is ICA, one of the nation's largest providers of performance maintenance and operation services. ICA provides long-term, comprehensive asset management services to maintain and operate interstate highways, tollways and other transportation-related facilities across the US, including President George Bush Turnpike and Harris County Toll Road. BHMP's complete team organization chart is located on page 3.

BHMP has advanced the design, addressed more details and researched the project elements more than any other proposer, as evidenced by our Technical Approach and span-by-span access plan design concept.

BHMP'S UNMATCHED QUALIFICATIONS FOR *LOOP 375 EXTENSION:*

AW/Sundt and Parsons have successfully completed **$2.5B** of work together.

BHMP design and construction firms have a $28B combined design-build portfolio.

Successfully coordinated or re-routed more than 32 miles of active Texas railroad track.

30 years working directly for **UPRR** and **BNSF** railroads on more than **$600M** of work.

21 projects completed **in El Paso valued at $831M** since 2000, including with CBP.

Completed $210M of CBP work.

Experience at managing transportation assets with more than 5,500 lane miles of roadway and **3,200** bridge structures maintained annually.

Dating as far back as 115 years, no member of our team has ever been debarred from a project, nor have we ever submitted a claim on a transportation project.

(a) An explanation of the organization and contents of the Proposal

BHMP has organized this proposal according to the Instruction to Proposers (ITP), Exhibit E. We have included a reference copy of Exhibit E, as requested.

BHMP's Organization of this Proposal	
Volume 1	A. Executive Summary
Volume 2	B. Proposer Information, Certifications & Documents
Volume 3	C. Project Development Plan
Volume 4	D. Appendices
Volume 5	Updated Financial Proposal
Volume 6	Price Proposal

(b) A summary of any changes to Proposer's QS

BHMP has made no changes to its organization since the submission of the Qualifications Statement, other than the changes related to Key Personnel identified below.

(c) A summary of any changes in Proposer's organization, Equity Members, other Major Participants and Key Personnel since submission of the QS

After thoughtful consideration and valuable input provided by TxDOT during the QS debrief meeting, BHMP received TxDOT approval of the better qualified Key Personnel listed below. These Key Personnel provide more relevant and similar experience to Loop 375.

All additions and changes to Key Personnel were approved by TxDOT per the letters received on March 4, 2014 and March 14, 2014. These include the following:

Key Personnel not required to be submitted in QS

Key Personnel	Position
Joe Lopez	Public Information Coordinator
Jaime Gallo, PE	Utility Manager
Jim Grady	Construction QC Manager
Ralph Browne, PE	Construction Quality Acceptance Manager
Zane Webb, PE	Maintenance QC Manager

Key Personnel Replacements since QS

Replacement Key Personnel	Position	Exceeds Predecessor in the Following Areas
Brett Myers	Construction Manager	• TxDOT award winner for exemplary cooperation and performance • Toll Facility experience • Long bridge structures • Bridges constructed above active freight railroad tracks
Kenneth Clark	Lead Quality Manager	• DB experience • Design Quality experience • Development of Quality Programs • Large transportation projects with similar aspects
Silas Fisher, CHST	Safety Manager	• Safety Manager experience on TxDOT projects totaling more than $200M • Three-time Archer Western safety award winner for mega project category • Safety Manager on more than 60 miles of railroad track projects
Chuck Jones	Maintenance Manager	• Capital and Life Cycle Maintenance Management • Asset Management • Incident Management

(d) A summary of the proposed management, decision making, and day-to-day operational structure of Proposer, and a statement that each Major Participant has committed to provide the relevant Key Personnel

Proposed Management Structure

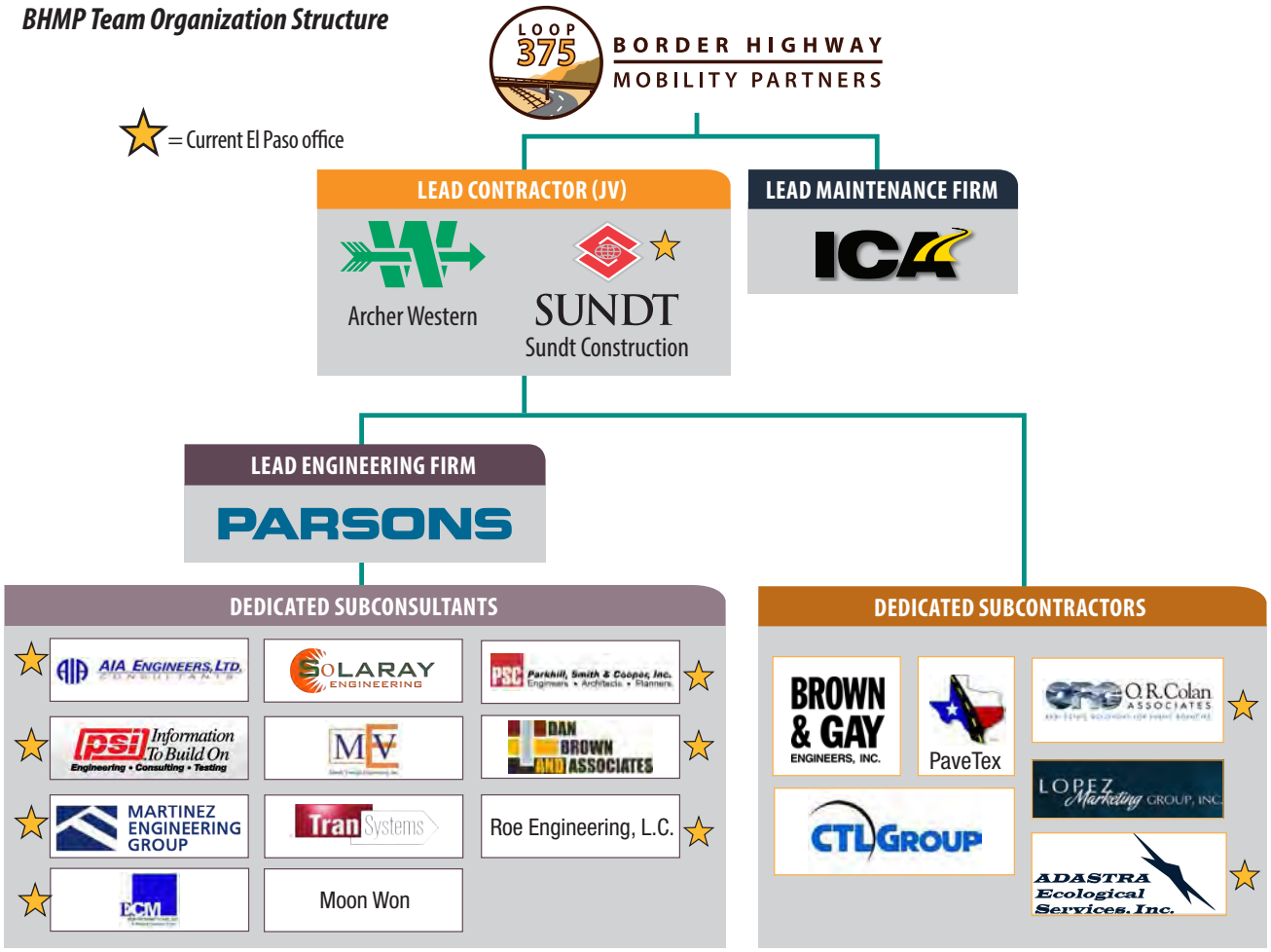
Our team has developed and successfully implemented a well-defined management plan led by seasoned, quality and safety-driven management. This team fully understands the requirements of Loop 375, which offers TxDOT the advantage of a team that will have no learning curve and will hit the ground running with Project Manager, Dave Moyar. We are prepared to co-locate at the project site to achieve collaboration and stellar performance on Loop 375. Our management philosophy promotes clear and effective lines of communication beginning and ending with TxDOT.

Dave Moyar's Leadership:

Western Wake Freeway Design-Build, a $469M project completed ahead of schedule, finishing within budget and achieving the following awards:

- *NCDOT GOLD for Safety*
- *2012 Southern AASHTO Southeast Region "On-Time" category*
- *2012 Carolinas AGC Pinnacle Award for Best Highway Project*
- *2012 Marvin M. Black Partnering Award*

BHMP Team Organization Structure



BHMP Decision Makers will Exceed TxDOT's Goals

BHMP's management approach begins with our selection of the most qualified individuals. The largest DB project in West Texas deserves the leadership of a Project Manager (PM) with proven performance delivering projects of similar size, scope and complexity. PM, Dave Moyar was chosen to lead BHMP because within the last eight years alone, he has successfully led DB transportation projects valued at $679M. His 32 years of experience includes projects involving ROW acquisition, complex bridges, high traffic volumes, railroad coordination and tight schedules; rendering industry award-winning results and owner satisfaction for early completion, safety, quality and partnering.

Dave brings the expertise of delivering large, complex transportation projects involving multiple stakeholders such as toll authorities, freight railroads, FHWA, community groups and state DOT departments. In addition to Dave's leadership capabilities, we have built a winning team around him.

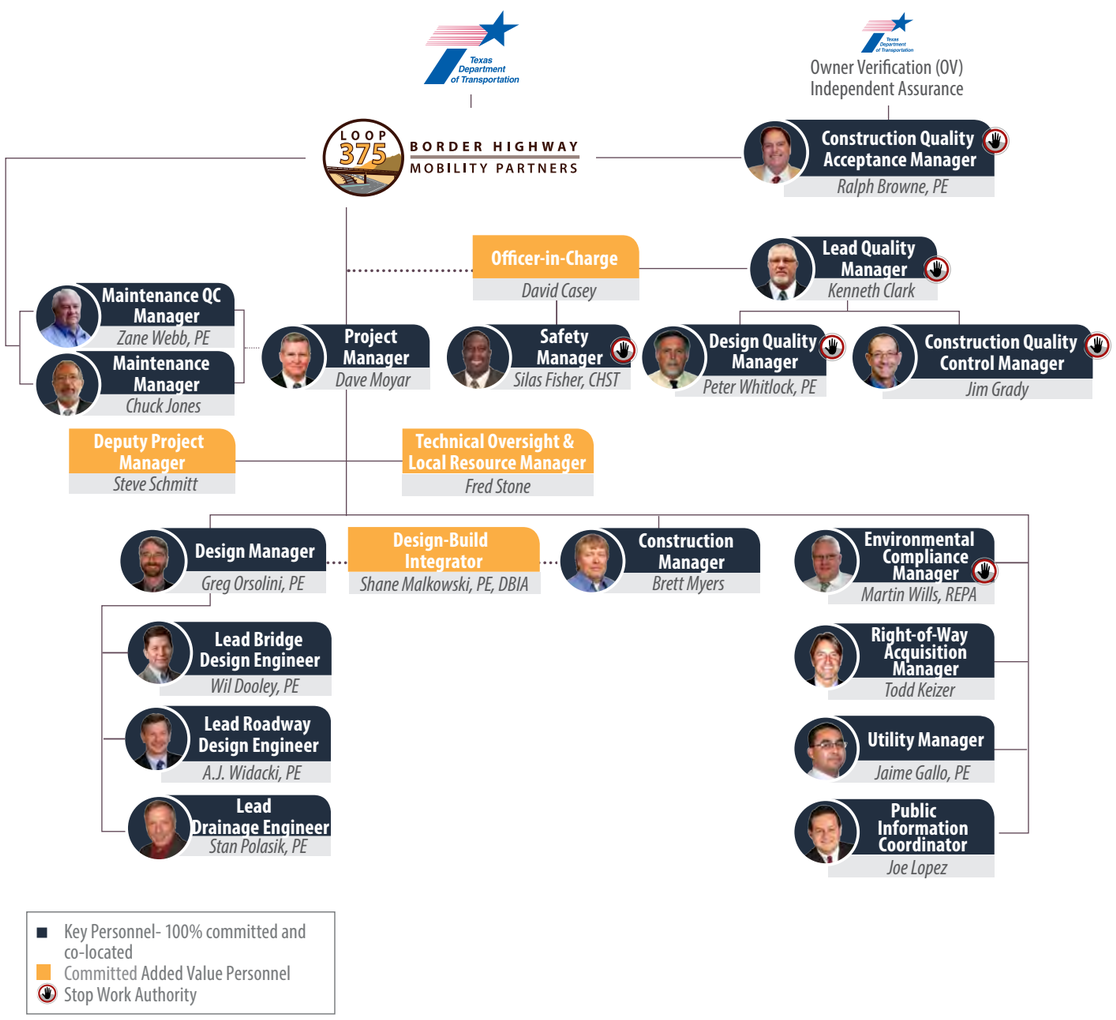
Dave will implement and oversee this project's day-to-day operations, including project team management, design coordination, TxDOT, stakeholder and agency involvement.

(e) A summary of the Project Development Plan including:

e-1: A summary of the Technical Solutions, Span-by-Span Approach to Design and Construction

Through our experience, similar corporate philosophies and collaboration of innovative thinking, BHMP has succeeded in the approval, or conditional approval, of 16 Alternative Technical Concepts (ATC) and the integration of numerous community and environmental betterments, as well as cost-saving elements.

Key Personnel Organization Chart



Name	Role	Benefits to Loop 375
Dave Moyar	**Project Manager**	• 36 years of construction experience • Experience managing major highway projects with tight access in active areas, bridges, large earthwork quantities and railroad coordination • $679M of DB transportation projects
Brett Myers	**Construction Manager**	• 29 years of construction supervision experience • Received TxDOT's 2012 Award for exemplary performance/TxDOT Spur 366 Woodall Rogers Deck Park
Greg Orsolini, PE	**Design Manager**	• 34 years of experience working on large, complex transportation projects • Design management responsibility for 6 DB projects with innovative structures
Wil Dooley, PE	**Lead Bridge Design Engineer**	• 22 years of bridge design experience including complex and long structures • $1.6B DB project experience with elevated structures
AJ Widacki, PE	**Lead Roadway Design Engineer**	• 33 years of experience working on large Texas highway projects • Served as roadway designer on more than $2B of DB projects
Stan Polasik, PE	**Lead Drainage Engineer**	• 40 years of experience with large DB projects • Proven ability to manage complex projects in a DB environment
Ralph Browne, PE	**Construction Quality Acceptance Manager**	• 32 years of experience, 4 years in TxDOT's Bridge Division and 3 years in El Paso District • Implementation of TxDOT's QA processes
Kenneth Clark	**Lead Quality Manager**	• 25 years of experience performing Quality Control on transportation projects • Quality Manager on more than $2.5B DB transportation projects in past 15 years
Jim Grady	**Construction Quality Control Manager**	• 29 years of experience, including 18 years as a Lead QC Manager • Experience coordinating with the USACE and USCBP
Peter Whitlock, PE	**Design Quality Manager**	• 40 years of experience implementing QC programs for DB project with TxDOT • Served as DQM for $3.6B in highway and transportation DB projects
Silas Fisher, CHST	**Safety Manager**	• 23 years of experience, more than $1.5B as Safety manager in the past 10 years • Three time safety excellence award winner for mega projects from Archer Western and Dallas Area Rapid Transit for 3 years of safety management with no lost time accidents, working 5 million manhours
Joe Lopez	**Public Information Coordinator**	• 33 years of experience performing public information activities in El Paso • Experience coordinating with the TxDOT El Paso District Office
Todd Keizer	**ROW Manager**	• 35 years of ROW experience • Previous TxDOT experience: SH 99 Grand Parkway and SH 130 Segments #5& 6
Jaime Gallo, PE	**Utility Manager**	• 17 years of experience with relocating utilities in El Paso • Familiar working with TxDOT's El Paso District Office, City of El Paso, CBP, CRRMA and EPWU
Martin Wills, REPA	**Environmental Compliance Manager**	• 21 years of environmental compliance experience • Experience working in El Paso and with the USACE and Mexican Government
Chuck Jones	**Maintenance Manager**	• 15 years of experience including 2009 American Public Works Association National Award for response to straight line winds damage
Zane Webb, PE	**Maintenance QC Manager**	• 31 years of experience in maintenance management • Served as TxDOT's Director of Maintenance responsible for 177,000 miles of highways

Our team's dedication and research during the RFP phase, will deliver Loop 375 with minimal to no risk to TxDOT. BHMP will achieve the highest quality and safety standards in the industry while working to create the new standard for public outreach in El Paso.

BHMP's Span-by-Span Approach to Loop 375 Design and Construction: Our local team researched the details of Loop 375, driving and studying the alignment for five years prior to the release of the RFQ. During the RFP phase, we assigned our top technical experts who expended more than 65,000 hours creating an optimal design and approach. Our most significant offering to TxDOT is to construct Loop 375 through our innovative **span-by-span access plan**. This plan will increase level of service and minimize disruption to the traveling public throughout the construction of this project. We have summarized their components and advantages along with references to where more robust write-ups can be found within our proposal.

Detailed 3D span-by-span construction access models proved the viability of traditional construction equipment for a precast girder design.

Rendering of ATC-02: SPUI at Executive Center Blvd. with Loop 375 underpass.

Below is a list of our ATCs that are included in our proposal. We have incorporated all conditional requirements into our design. All listed ATCs provide the same functional scope, but represent genuine savings in capital costs, maintenance costs, environmental footprint and schedule.

Table 4.0-01: Summary of Technical Solutions ATCs

ATC No.	Description Use & Cross Reference
ATC-01	**Doniphan Drive Realignment** • Tightened alignment reduces excavation • Single span bridge spans Water 6 where stream is narrower
ATC-02	**Executive Center Blvd. Interchange** • Re-profile Loop 375 to pass under the crossroad
ATC-03	**No Cotton St. Bridge Construction** • Align US 85 to avoid bridge reconstruction
ATC-04	**Coles-Paisano Interchange Improvements** • Single structure for both connectors over local streets • Reconfigure intersection to improve operations
ATC-07	**Sign Supports on Bent Caps** • Extend bent caps at certain locations for monotube sign supports
ATC-08	**Concrete Sign Support Columns** • Square concrete columns to support monotube sign structures
ATC-09	**Replace Overhead Sign bridges with Cantilevers** • Use long-arm cantilevers to reach both lanes of traffic to replace overhead sign bridges at 9 locations • Use in areas where signage is only required over one direction of traffic
ATC-10	**Bridge Structure Aesthetics** • Revised detailing maintains aesthetic intent and enhances constructability
ATC-11	**Optimized Structure Depths and Span Lengths** • Girder depth variations by one size to account for column constraints
ATC-12	**Common Duct Bank for ITS and Toll Systems** • Install ITS fiber and Tolling fiber in the same duct bank as long as they are kept separate in ground boxes and vaults
ATC-13	**Use 2:1 Slopes in lieu of 4:1 Slopes** • 2:1 slopes with concrete rip rap in lieu of 4:1 slopes outside the clear zone
ATC-16	**Optimized rigid pavement design** • Use a concrete modulus of rupture of 680 psi at 28 days in lieu of 620 psi
ATC-20	**Railroad Fence** • Substitute weathered steel fence with a painted or powder coated post crimped tubular fence
ATC-21	**Conduit for ITS/Tolling/Lighting on Structures** • Place conduits either in bridge rail or under the bridge deck between girders • Use separate conduit and boxes for each system

ATC No.	Description Use & Cross Reference
ATC-24	**Use existing culvert at Outfall Structure 0-14** • Enlarged Pond B4 to reduce size of outlet pipe • Avoid conflicts with 42" Force Mains and new 48" Waterline • Clean and repair existing pipe and flap gate
ATC-25	**Communications to District Office** • Use common trench to TxDOT District Office with CRRMA approval • Assure existing systems are in good working condition

BHMP's design refinements resulted in a substantial reduction of bridge deck. Please see the table below:

Table 4.0-02: ATC/Design Refinement Bridge Deck Reductions

Name	Originally Proposed (SF)	BHMP Proposed (SF)	Reduction (SF)
Zones 1 and 2	1,869,251	1,487,309	381,942
Zone 3	781,871	752,631	29,240
Zone 4	108,667	87,617	21,050
TOTAL	**2,759,789**	**2,327,557**	**432,232**

The components listed in Table 4.0-03 exceed the stated project requirements and bring added value to TxDOT and the traveling public.

Table 4.0-03: Exceeding TxDOT's Requirements

Characteristics	Added Value
Span-by-span Access Plan	Construction Manager Brett Myers produced a complete access plan from drilling piers to deck placement for each and every bridge span on the project. It includes crane sizing with conservative safety factors and all necessary haul roads and shoring for the existing terrain **Cross Reference:** 4.1 - 4.2
Commence design at NOA, at risk	BHMP will continue design advancement at Notice of Award, at-risk, to guarantee on-time completion. PMP plans will be ready for TxDOT review at NTP-1 **Cross Reference:** 4.1.3.
Designed bridges around access	Access is the biggest constraint on this project. BHMP's basis of design is centered around access availability that yielded simple structures that are easily maintained **Cross Reference:** 4.1.1.2.
Solutions to railroad issues and challenges	BHMP has already identified constructability issues with the ML #4 shoofly, as confirmed by UPRR, and has a design prepared to eliminate this conflict **Cross Reference:** 4.1.1.3. and 4.2.1.
Established relationships with all 14 utility owners	Having met with all 14 utility owners has given our team the most comprehensive understanding of underground design and schedule constraints, each have been designed around or included for relocation **Cross Reference:** 4.1.1.6. and 4.2.1.
Base design refined-ATCs modified 2 miles of the project	In addition to many design refinements, our base design includes 16 approved/conditionally approved ATCs of which 3 ATCs resulted in major modifications to 2.6 miles of the 9 mile project alignment **Cross Reference:** 4.1.1.1. - 4.1.1.11.
In-house maintenance expertise	BHMP equity member has a complete staff prepared to manage or self-perform, if necessary, the capital and routine maintenance **Cross Reference:** 4.1.2.
Inspected existing bridges and drainage	All existing bridge and paving facilities were inspected onsite and include capital maintenance during construction to ensure life expectancy beyond TxDOT's requirements **Cross Reference:** 4.1.1.2. and 4.1.1.8.
Reduced inverted "tee" caps	BHMP's bridge design replaced 125 inverted "tee" caps with "hammer head" conventional caps which in turn reduced the long term maintenance of 125 sealed expansion joints **Cross Reference:** 4.1.1.2.
CRCP downtown	Oregon Street and Father Rahm Avenue asphalt roads were designed for full depth concrete paving to account for the heavy BNSF intermodal facility traffic and will receive this when Loop 375 project is complete **Cross Reference:** 4.1.1.7. and 4.1.1.10
Maintenance and access for future roads	BHMP's **span-by-span access plan** accommodates future TxDOT maintenance roads **Cross Reference:** 4.1.1.7. and 4.1.1.10
3D modeling tied to GPS construction equipment	Designed and integrated to field and used for presentations to the public to show access and planned construction **Cross Reference:** 4.1.1.1. and 4.1.1.6.

e-2: A summary of the Project Management Plan

BHMP's project management plan involves coordination, communication and collaboration on Loop 375. BHMP will provide superior quality, on budget and on time competion. We will focus our skilled and experienced personnel and resources on specific areas of the project to meet TxDOT's project goals of safety, mobility, quality, environmental compliance, budget and schedule. Our approach encompasses co-location, task force teams and technology.

General Project Management

Safety, quality, the environment, maintenance and the community are at the heart of BHMP's commitment to design, build and maintain Loop 375. Our Project Manager, Dave Moyar, will lead our team to exceed TxDOT's goals for Loop 375.

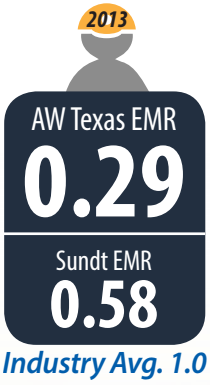
Co-Location: Our maintenance, design and construction personnel will work interdepartmentally with TxDOT staff at our co-located office. This will facilitate continuous internal value engineering,

collaboration and partnering. Our Integrated Project Management Office will be located at the Epicenter Office Park off of Executive Center Blvd., close to the project site.

Task Forces: Our task force teams will meet weekly to focus on developing specific DB solutions with design, construction, maintenance and TxDOT staff. Task force teams are broken down by discipline with a clear leader. Each meeting will facilitate communication, encourage real-time design reviews, establish action items and persons responsible and time line. Railroad representatives, utility owners and all other stakeholders will be actively involved with any task force relating to their interests.

Partnering Plan: BHMP embraces partnering based on the premise that important, complementary opportunities exist between all project participants. When the right people are brought together in an open and honest environment with an effective organizational process, a mutually beneficial relationship will develop, resulting in a successful project.

Safety: BHMP will not sacrifice safety for production. Safety will be an integral part of QC, cost control and job efficiency. Every supervisor will monitor the safety performance demonstrated by the employees under their supervision. This Safety Culture has led BHMP members to achieve a high level of safety consciousness and incident prevention. The program is extended not only to protect our work force, but also the public, at all times.



All members of management and field supervision are continuously trained to identify and prevent unsafe acts or conditions that could lead to occupational injuries or illnesses. While the ultimate success of a health and safety program depends upon the full cooperation of each individual employee, it is our management's responsibility to see that health and safety work practices and procedures are followed and craft workers have proper training and education.

Railroad Coordination

Our Railroad Manager, Joe Masterson's unique qualifications start with the first five years of his career working for the UPRR as a Roadmaster and Trainmaster and rail coordinator for projects for TxDOT, BNSF, UPRR, CSX, Caltrans and New Mexico DOT. He worked with UPRR representative, Steve Martchenke and BNSF representative, Tim Huya for approximately 20 years each, which will offer strong, established working relationships for Loop 375. Joe's team will include a specialist for each railroad entity. James Terry, of TranSystems, will lead coordination with UPRR. Jim has 43 years of experience working in the railroad industry; 32 of which were with the UPRR. Jamie Hamm, of TranSystems, will lead coordination with BNSF. Jamie's entire career of 15 years has been dedicated to rail projects across the US for BNSF. Jamie works daily on designs for the BNSF engineering division in Kansas City.

CBP and IBWC Coordination

Our Third Party Coordinator, Josh Bunting, will lead BHMP's coordination efforts with CBP. In our meeting with CBP, they expressed one over-arching requirement for the Loop 375 developer – the CBP Mission is to maintain operational capability at all times, just as Josh previously did on the Border Fence project. We will interface with CBP as we perform work in four categories:

- Towers relocation (Yandell, Chihuahuita and Bowie)
- Lighting and surveillance along the levee
- Maintenance roads and driveways
- Loop 375 construction within the CBP operations area

Table 4.0-04 includes preventative measures discussed during our meetings with CBP and IBWC.

Table 4.0-04: Preventative Measures for CBP and IBWC work

Provide continuous services of CBP's E-PAP cameras
Provide temporary lighting for CBP during all times of darkness
Train all workers to follow emergency directives from CBP agents
Install access roads to accommodate IBWC's haul truck and CBP's bucket truck
Utilize EPA Region 6 or TCEQ Residential classified soils for flooplain access roads
Maintain CBP's environmental monitoring system
Test for potential contaminated groundwater during geotechnical borings
Protect survey monuments buried 18 inches deep

Utility Interface

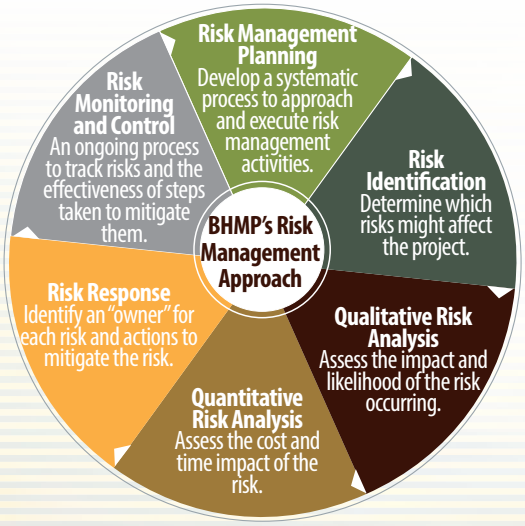
Table 4.0-04:
Detailed Utility Information Gathered

Owner	Number of Conflicts	LF of Conflict
EPWU	16	7,023
El Paso Electric	54	26,823
AT&T	24	10,193
Texas Gas	17	4936
TxDOT	8	7,384
El Paso Natural Gas	2	922
MCI/Verizon	7	4,129
Level 3	6	2,370
Time Warner	3	1,163
Century Link/Quest	1	1,183
TW Telecom Inc.	1	800
AT&T Global Comm.	2	2,000
Oneok Gas	1	1,345
Sprint/Nextel	2	2,726

BHMP has met with or talked to all 14 utility owners that will be affected by the project. We have evaluated each utility to determine the project's impact and have determined the need to relocate, protect, or leave in place. The utility manager, Jaime Gallo, will maintain coordination and relationships.

Risk Management

Our approach provides a consistent methodology that identifies all critical project risks, assesses their likelihood of occurring and the potential magnitude of outcomes. BHMP has identified design, construction and maintenance risks, and their likelihood before and after mitigation. We recognize that success requires all parties to recognize each other's critical project risks and work cooperatively to manage and mitigate the total shared risk. Our approach involves TxDOT and project stakeholders as active participants in our identification of risks and how to respond to them proactively, while recognizing our ownership of contractual risks assigned to the developer.



Construction and Traffic Management During Construction Period

Our construction and traffic management plan during construction is centered on the **span-by-span access plan** developed by our Construction Manager, Brett Myers, to account for all public and construction movements. MOT plans will be evaluated daily by field personnel audited by safety representatives, communicated to the community, stakeholders and emergency responders; and continuously improved to adapt to stakeholder, environmental and public needs. As outlined in further detail in our proposal, BHMP proposes a detailed staging and phasing plan and has divided the project into four manageable zones based on bridge structure locations. This allows flexibility to independently advance each zone to meet TxDOT's aggressive schedule.

Schedule Management

Our integrated project management system provides for the effective control and coordination of documents, project cost and schedule during all phases of work. We have developed the Preliminary CPM Schedule using our **span-by-span access plan** to account for all design and access needs to efficiently deliver Loop 375. The analysis reduces cost, minimizes inconvenience to communities and limits adverse traffic, economic, environmental and safety impacts along Loop 375. BHMP developed our schedule to ensure that TxDOT's goals are attained throughout the duration of Loop 375. These goals include delivering the project on schedule, maintaining mobility and minimizing inconvenience for stakeholders and the traveling public.

The Preliminary Project Baseline Schedule PBS-1 is the foundation for subsequent submittals of PBS-2 and PBS-3. It includes the general sequence of design and construction activities, the critical paths of the Project and key schedule dates. Before submitting PBS-2, we will conduct over-the-shoulder review meetings with TxDOT to address any questions and comments and to resolve any issues prior to submittal. Our team will follow the same process with PBS-3.

> ***O.R. Colan and Associates will control the project schedule by using a "dual path" method, PUAs and specialized agents for R-106 and R-107 forms.***

Public Information and Communications

Joe meeting with Payless Shoe Source on El Paso Street to discuss Loop 375.

Communicating early and often with businesses, community and stakeholders is our team's highest priority. BHMP has enlisted the local expertise of the Lopez Marketing Group (Lopez), a 100% Hispanic-owned DBE public relations firm headquartered in El Paso for the last 23 years. Joe Lopez will serve as our Public Information Coordinator where his main priority is to make sure clear, concise and timely bilingual messages are delivered to the public. Joe brings previous TxDOT and City of El Paso experience with the International Port of Entry and the International Bridge. He understands the expectations of keeping the community and stakeholders informed to maintain positive public perception and support.

Environmental Management

BHMP understands the environmental process associated with this project and will work with TxDOT to guarantee that the environmental commitments are integrated into the design, construction and maintenance of the project. We will develop and implement a Comprehensive Environmental and Protection Program (CEPP). Our Environmental Compliance Manager, Martin Wills, REPA, will lead the effort to focus on environmental compliance with all approvals, permits, agency regulations and laws within the jurisdictional authorities.

Design Management

Our Design Manager (DM), Greg Orsolini, a design veteran of 34 years with recent DB management responsibility for 6 DB projects, including innovative structures with access constraints, has been leading the charge on our innovative and competitive design advantages for Loop 375. He has been working alongside AW/Sundt and ICA to make sure our design and design management process for this project addresses the needs of TxDOT, City of El Paso, utilities, UPRR and BNSF railroads, stakeholders and the corridor users.

The key to our design management operating structure and approach will be building a framework and schedule of weekly discipline focused task force and design coordination meetings. Issues and actions will be assigned to specific staff, given due dates and tracked to completion. Early and ongoing engagement between Parsons and AW/Sundt with TxDOT and other stakeholders will help us phase design deliverables to achieve the earliest possible construction start and focus on early completion of portions of the project as soon as possible.

Maintenance Plan

Our maintenance firm, ICA, has been intimately involved with the design and construction team during the RFP phase. ICA will remain a vital part of project decisions throughout the construction phase regarding material selections, installation procedures and other long-term maintenance decisions. See below life-cycle cost items that will reduce long term maintenance.

- Reduction of 430,000 SF of bridge deck area will benefit in eliminating the associated long-term maintenance and inspection demand
- Elimination of 6,000 LF of deck expansion joints by using "hammer head" caps allows us to use a single sealed expansion joint benefiting maintenance, inspection and periodic reconditioning/replacement demand
- Provision for uncracked concrete sections through post-tensioned bent caps for the majority of single-column bents. This, coupled with epoxy waterproofing on the top of bent abutment caps, maximizes the durability of the caps under joints
- Selection of CRCP over full depth hot mix asphalt placed over compacted sub-grade for the travel lanes, shoulders and ramps ensures minimum maintenance for 30 years and beyond
- Implementation of self-restoring REACT 350 impact attenuators to mitigate the recurring costs associated with labor and spare parts for restoring attenuation systems after crashes, compared to SET styles
- "Right-sizing" of drainage systems to provide self-flushing flow velocities that minimize recurring maintenance demands, which is particularly important in the El Paso sandy environment
- Placing traffic signal equipment at optimum locations to avoid impacts

- Using breakaway signage with pin anchoring to combat strong El Paso winds
- Provided concrete barrier in lieu of MBGF except at transition areas
- Moved 3 toll gantries off bridge structures to eliminate glass fiber reinforced deck
- Oregon Street and Father Rahm Avenue will have 8.5-in. CRCP; providing durability against heavy truck traffic from the BNSF facility
- Even though the existing structures carry a current rating above the requirement during construction, BHMP will rehabilitate bearings, seal cracks, repair joints and repair spalls to reduce long-term maintenance on both Loop 375 and Cotton St. Bridges

e-3: A summary of the Quality Management Plan

Our QMP will be fully compliant for all systems, plans and audits, per ISO 9001. Our LQM, Kenneth Clark, has an outstanding record for delivering high-quality, ISO-compliant, large DB highway projects throughout the country. He will verify that Loop 375's QMP is fully compliant with TxDOT's Section 2, QMP of Book 2 of the Technical Provisions.

Additionally, all project management and personnel will be held accountable to the random and continuous checking and auditing of their work products for making sure quality standards are held to the highest standard. The QMP establishes the foundation and processes for continuous improvement in every aspect of the Loop 375 project, with the final product and end-user in mind.

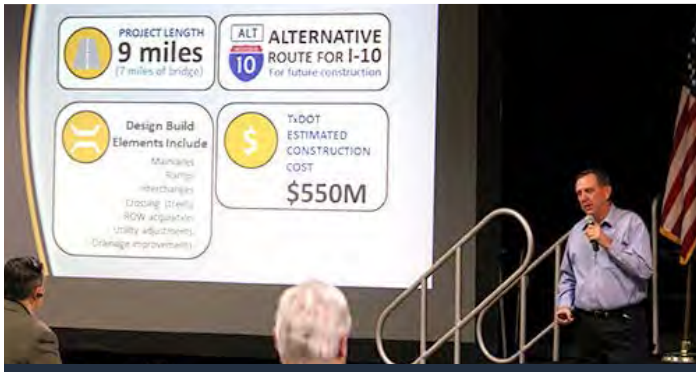
(f) A summary of the Proposer's approach to satisfying the DBE requirements

Fred Stone, our local Resource Manager, talking to local El Paso DBE firms at BHMP's February 5, 2014 outreach event.

Our team has a long history of working with local disadvantaged and minority firms. Our business philosophy and strategy is focused on competency building as well as capacity building. **We will exceed the DBE goal of 8% for Loop 375 just as we have done consistently on other recent transportation projects.** BHMP will provide a formal mentoring process and On-the-Job Training aimed at increasing the knowledge and skills of local design and construction DBEs. This formal mentoring pairs each firm with one of our managers allowing support to be tailored to each firm's needs. In addition, we will:

Over the last five years, we have awarded more than $500M in contracts to disadvantaged/ minority firms.

- Establish and implement a diversity plan
- Size appropriate bid packages/contracts for small and emerging businesses
- Utilize local outlets, newspapers and industry publications to advertise opportunities
- Ensure a clear understanding at outreach meetings of the contract requirements one-on-one prior to bidding



Our team has exceptional experience in providing numerous workshops to subcontractors. BHMP's Border Highway February 5, 2014 event at the El Paso Community College, attracted more than 50 interested subcontractors/suppliers.

(g) A summary of the Proposer's approach to satisfying the on-the-job training requirement

BHMP provides opportunities in the trades and strongly supports apprentices to transfer to other jobs. This allows the apprentices to continue with their field and classroom training while working toward journey level status. We have been actively involved in the AGC's apprenticeship program for heavy equipment operators and carpenters for over 10 years. Our training department employs a full time individual responsible for apprentice and craft training and our superintendents teach classes for the AGC's apprenticeship program.

Bridging the Gap

to Improved Mobility & Economic Growth

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