

CENTRAL TEXAS Regional Mobility Authority

# AGENDA ITEM #6 SUMMARY

Approve a work authorization for Atkins North America, Inc., to provide general engineering consulting and oversight services for the Bergstrom Expressway (183 South) project.

Strategic Plan Relevance:	Regional Mobility
Department:	Engineering
Associated Costs:	\$39,968,000
Funding Source:	Bond Sale Funds
Board Action Required:	Yes

Description of Matter:

This Supplemental Work Authorization No. 5 to Work Authorization No. 2 will allow for the continuation of GEC Support Services related to oversight of the activities progressed under the Design/Build Contract for the 183 South (Bergstrom Expressway) Project.

In summary, the services contained in this Supplemental Work Authorization #5 to Work Authorization No. 2 include project management, design oversight, construction oversight, and environmental compliance.

The performance of these services will be as directed by the CTRMA.

Reference documentation:	Supplemental Work Authorization No. 5				
	Draft Resolution				

Contact for further information: Wesley M. Burford, P.E., Director of Engineering

# EXHIBIT D WORK AUTHORIZATION

#### Supplement No. 5 to Work Authorization No.2

This Work Authorization is made as of this 1<sup>st</sup> day of July, 2014, under the terms and conditions established in the AGREEMENT FOR GENERAL CONSULTING ENGINEERING SERVICES, dated as of January 4<sup>th</sup>, 2010 (the Agreement), between the **Central Texas Regional Mobility Authority** (Authority) and **Atkins North America, Inc.** (GEC). This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

Bergstrom Expressway Oversight Services

#### Section A. - Scope of Services

A.1. GEC shall perform the following Services:

Please reference Attachment A - Services to be Provided by the GEC

A.2. The following Services are not included in this Work Authorization, but shall be provided as Additional Services if authorized or confirmed in writing by the Authority.

Not applicable.

A.3. In conjunction with the performance of the foregoing Services, GEC shall provide the following submittals/deliverables (Documents) to the Authority:

Please reference Attachment A - Services to be Provided by the GEC

#### Section B. - Schedule

GEC shall perform the Services and deliver the related Documents (if any) according to the following schedule:

Services defined herein are expected to be substantially complete within fifty four (54) months from the date this Supplement becomes effective. This Supplement will not expire until all tasks associated with the Scope of Services are complete.

#### **Section C. - Compensation**

C.1. In return for the performance of the foregoing obligations, the Authority shall pay to the GEC the amount not to exceed \$39,968,000, based on Attachment B -Fee Estimate. This will increase the not to exceed amount for Work Authorization No. 2 from \$12,443,922 to \$52,411,922. Compensation for Direct Expenses under this Supplement which are incurred as part of normal business operations (i.e., mileage, travel, leased vehicles, vehicle supplies, field/safety equipment, training, cell phones,

cameras, network/technology, internet service, phone service, desk phones, wiring, computers, e-builder licenses, Earthcam, miscellaneous supplies, ADA consulting and other expenses for field office as well as office supplies, print charges, deliveries, etc.) will be reimbursed on a Lump-Sum basis in the amount of: \$2,232,000 (with \$38,483 to be invoiced monthly). Profit will be 12% for all services. Compensation shall be in accordance with the Agreement.

C.2. Compensation for Additional Services (if any) shall be paid by the Authority to the GEC according to the terms of a future Work Authorization.

#### Section D. - Authority's Responsibilities

The Authority shall perform and/or provide the following in a timely manner so as not to delay the Services of the GEC. Unless otherwise provided in this Work Authorization, the Authority shall bear all costs incident to compliance with the following:

Not applicable.

#### **Section E. - Other Provisions**

The parties agree to the following provisions with respect to this specific Work Authorization:

Not applicable.

Except to the extent expressly modified herein, all terms and conditions of the Agreement shall continue in full force and effect.

Authority:	Central Texas Regional Mobility Authority	GEC:	Atkins North America, Inc.
By:	Mike Heiligenstein	By:	
Signature:		Signature:	
Title:	Executive Director	Title:	
Date:		Date:	

#### **CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

#### SUPPLEMENTAL WORK AUTHORIZATION NO. 5 TO WORK AUTHORIZATION NO. 2 Atkins

#### ATTACHMENT A SERVICES TO BE PROVIDED BY GEC

#### GENERAL

The work to be performed by the General Engineering Consultant (GEC) will include project management services necessary to oversee the design and construction of the Bergstrom Expressway (183 South) Project through the use of a Design/Build Contract (hereinafter referred to as the D/B Contract). This will entail those professional services and associated deliverables required to complete the oversight activities associated with the management of the Design/Build Contractor (hereinafter referred to as the D/B Contractor).

The Mobility Authority intends to procure Public Involvement, Construction Inspection, Materials Testing, and Survey contracts to support the project oversight team. The GEC will provide support to assist with administering these oversight team service provider contracts.

The GEC will be the single point of contact between the Mobility Authority and D/B Contractor, acting as an extension of the Mobility Authority's staff by providing qualified technical and professional personnel to perform the duties and responsibilities assigned under the terms of this Agreement. The GEC shall not control the design and construction under the D/B Contract. Oversight reviews by the GEC will not relieve the D/B Contractor of sole responsibility for the means and methods of design and construction, or for health or safety precautions in connection with the work under the D/B Contract. With comments and recommendations provided by the GEC, Final Acceptance decisions for design and construction shall be made by the Mobility Authority staff and coordinated with TxDOT as applicable.

The GEC will maintain core D/B Oversight staff at the D/B Contractor-provided Project/field office(s) to manage and administer the planning, execution and construction; including invoicing and administrative support, for activities required to complete the overall oversight efforts. This staff will represent the Mobility Authority's interests on the Bergstrom Expressway Project.

#### TASK 1 PROJECT MANAGEMENT (CODE 13730)

The GEC will provide staff to administer, manage, review and coordinate development of the Project. The GEC will develop and maintain a staffing plan for consistency and appropriate levels of Project staffing. Activities included in this task:

#### A. CDA Contracting Support

Complete various Contracting phase efforts associated with the CDA procurement, including:

- Assist Mobility Authority in identifying Proposer commitments and negotiating the final agreement language.
- Assist Mobility Authority in reviewing insurance and bond documents for inclusion in the conformed CDA.
- Assist Mobility Authority in preparing the final conformed CDA document for execution.
- Conduct debriefings on behalf of the Mobility Authority for proposers to the RFDP that were not selected to enter CDA with the Mobility Authority.
- Final filing and documentation.

# **B.** Bond Sale/Finance Support

- Develop detailed capital cost estimates defining all elements necessary for project implementation as part of the System.
- Develop detailed annualized cost estimate for funding of necessary operations, maintenance, and renewal & replacement elements for the duration of the bonds.
- Develop comprehensive schedules defining all elements of the project, including the critical path tasks that directly affect the opening of the project.
- Prepare the Consulting Engineer's Report necessary for the bond sale with a detailed description and history of the bonded project, comprehensive schedules, detailed capital cost estimates, and annualized operations, maintenance, and renewal & replacement cost estimates.
- Support the Mobility Authority in development of the Preliminary Official Statement and the Final Official Statement.
- Coordinate as necessary with the Authority, Bond Counsels, Financial Advisors, and Underwriters on the bond finance team.
- Issue such certificates as are required to be delivered by the GEC regarding specific scope of the project; estimated capital costs; estimated operations, maintenance, and renewal & replacement costs; implementation/open to traffic schedule; and necessity to acquire certain real property for the project.
- Present the accuracy and reliability of project costs and schedules to the bond rating agencies and insurers during bond sales.
- Support the Mobility Authority with the preparation of a TIFIA application and supporting documentation.
- Provide support as needed for the development of a Financial Assistance Agreement with TxDOT.
- Prepare an Initial Finance Plan (IFP) as well as Annual Updates to the finance plan, as required by FHWA on major projects.

# C. Project Management Plan (PMP)

This will include an update to the Project Management Plan to include the selected D/B Contractor and oversight team service providers' information. The component parts of the Project Management Plan (PMP) include:

- Project Administration
- Design quality management plan (as prepared by the D/B Contractor)
- Construction quality management plan (as prepared by the D/B Contractor)
- Comprehensive Environmental Protection Program (as prepared by the D/B Contractor)
- Public information and communications
- Safety (as prepared by the D/B Contractor)
- Communications management
- Right of Way Acquisition management
- Cost management
- Schedule Management

#### **D.** Project Administration

- Review and report on the D/B Contractor's submittals of records and reports including:
   weekly payroll
  - o statement of wage compliance
  - o requests for payment of materials on hand

- $\circ\,$  DBE compliance and/or other reports and records as required for the Project by TxDOT and/or FHWA
- Report Project progress and issues in a timely manner
- Review, monitor, and report on D/B Contractor's Project schedule
- Review and submit a report on the D/B Contractor's as-built plans
- Maintain accurate records of the costs involved in potential change order work. These records will include labor and equipment times and materials installed (temporary or permanent) in the portion of the work in dispute.
- Assist in the surveillance of the D/B Contractor's compliance with contract requirements. The GEC is responsible for reviewing, monitoring, evaluating, and acting upon documentation required for D/B Contract compliance and maintaining the appropriate files thereof. Typical areas of compliance responsibility include EEO Affirmative Action, DBE, OJT positions and number of hours, and payroll and subcontracts.
- Provide management and administrative support for Mobility Authority oversight team service providers that will perform public involvement, construction inspection, materials testing, and survey services as part of the oversight team.
- Provide compliance oversight of third party agreements and development permits that are to be completed and executed by the D/B Contractor including:
  - o Dewatering permits
  - NPDES permits
  - Demolition permits
  - Noise permits
  - Corps of Engineer permits
  - Utility Permits
  - Capital Metro agreements

# E. Project Coordination

- Work with the Mobility Authority, TxDOT, D/B Contractor, third party consultants, utility companies, public agencies, contractors and the general public to coordinate Project development and implementation.
- Coordinate the details of and participate in Project's partnering meeting to be held shortly after notice to proceed has been given to the D/B Contractor.

# F. Sub-Consultants

• Coordinate, contract, and provide oversight for all sub-consultants to the GEC.

# G. Program Reporting

- Prepare and issue monthly reports on the Project's status which will document any issues, delays encountered, and corrective actions as necessary.
- Provide a monthly update to the Mobility Authority on key milestones accomplished during the preceding month, meetings and key activities for the upcoming month, and identify outstanding issues requiring resolution.
- Track, monitor, and report on contracts and budgets for the GEC, third party consultants and the D/B Contractor.
- Track, monitor, and prepare reports on DBE/HUB utilization for D/B Contractor's DBE/HUB program, third party consultants, and GEC Team.

# H. Project Schedule

The GEC will provide staff to coordinate the Project scheduling efforts. Specific activities include:

- Evaluate, monitor and verify according to contractual requirements, the D/B Contractor's Project schedule (baseline and updates) and Recovery Schedule.
- Report and verify the D/B Contractor's progress and upcoming milestones on a monthly basis to the Mobility Authority.
- Identify, catalog, and archive Baseline Schedule, schedule revisions, updates and Recovery Schedules. Evaluate time impacts and report recommendations to the Mobility Authority.
- Develop and maintain a detailed owner project schedule that will be used to independently assess the status and health of the project.

# I. Change Order Processing & Management

- Provide review of potential change orders on the Project and process in accordance with the D/B Contract and coordinate with external agencies as required.
- Review change order cost estimates prepared by the D/B Contractor, evaluate D/B Contractor claims for extension of time, and provide comments and recommendations to the Mobility Authority.
- Maintain log and retain all documents associated with potential change orders.
- Provide constructability reviews of Work Sequence Plans submitted by the D/B Contractor. The D/B Contractor will be responsible for final approval.
- Assist in review of D/B Contractor initiated alternative design or substitution proposals. The Engineer(s) of Record will be responsible for the design and approval of any design alternative, alteration or revision.
- Prepare status reports and presentation for the Dispute Resolution Board.

# J. Dispute/Claims Support

The GEC will provide consultation and assistance to the Mobility Authority and their General Council related to aspects of the design, construction, duties and services required during the development and implementation of the Project:

- Assemble supporting documentation, review, analyze and provide recommendations to the Mobility Authority on the D/B Contractor's submittal of a dispute
- Review, analyze and make recommendations to the Mobility Authority on the D/B Contractor's claim package submittal.
- Participate as needed in preparation and presentation to Dispute Resolution Board.
- Prepare progress updates to keep the DRB informed of project status and potential issues.

# K. Project Meetings & Documentation

The GEC will facilitate the following Project meetings to assess progress, schedule, and quality of services being provided as well as identify issues:

- Internal Team Meetings (Weekly)
- Internal Project Review Meetings (Monthly)
- Issue Resolution Meetings (As Needed)
- Mobility Authority Construction Status Update Meetings (Monthly)
- Mobility Authority Board Meetings (Quarterly)

The GEC will prepare agendas, meeting minutes, action plans and follow-up action item status for each of the GEC Project meetings and distribute to attendees and appropriate personnel.

In addition, the GEC will participate in D/B Contractor's meetings:

Partnering

- One-day facilitated Management Partnering Workshop (after award)
- One-day Full Team Partnering Workshop
- Monthly Strategy Meetings
- Quarterly Partnering Workshops

Design Phase

- Roadway, Drainage, Utilities, Environmental Compliance(Weekly)
- Structures, Signals, ITS, Illumination, Geotechnical(Bi-weekly)
- Maintenance of Traffic(Weekly)
- Toll System Integrator Coordination(Monthly)
- Design Leads(Weekly)
- Quality Assurance(Monthly)
- Design Submittal Review Meetings(Prior to submittals)
- Comment Resolution Meetings

Construction Phase

- Utilities(Weekly)
- Quality Assurance(Bi-weekly)
- Maintenance of Traffic(Weekly)
- Public Information(Weekly)
- Environmental Compliance(Weekly)

Oversight, Scheduling, and Coordination

- 4-Week Rolling Schedule Review(Weekly)
- Comprehensive Schedule (Monthly)
- Staffing Meeting(Monthly)
- Steering Committee(Bi-Weekly)
- Executive Management(Quarterly)

# L. Documentation

The GEC will review for completeness and accuracy the agendas, meeting minutes, action items and follow-up action item status prepared by the D/B Contractor for each of the D/B Contractor meetings.

# M. Document Controls

- Develop and implement a document control plan; including training of Project personnel in the use of document management system application and protocol.
- Maintain Project files for the duration of the Project.
- Transfer program files to the Mobility Authority upon completion of the work or as directed by the Mobility Authority.

- Import documents into the Mobility Authority Electronic Document Management System (EDMS) as necessary.
- Provide security monitoring of network access.
- Provide maintenance of GEC servers, workstations and network equipment as required.

# N. Tracking Database

• Maintain the tracking database for correspondence, transmittals, requests for information, meeting minutes, action items, submittals, Inspector daily reports, Project diary, Project schedule, change orders, pay estimates, lien waivers, shop drawings, working drawings, erection drawings, catalog cut sheets, mix designs, non-conformance reports, payment certifications, Insurance and Bonds, issues, material test data, schedules, audits, related technical data, and issues associated with the Project.

# O. Document Distribution

- Assign identification coding to incoming and outgoing Project related documentation and perform entry into the EDMS
- Prepare, manage, record, distribute and archive documentation of Project activities, progress, and related communications
- Log and track submittals and deliverables

# P. Trust Indenture Obligations

• Prepare a Quarterly Report with an Executive Summary that provides a comprehensive summary of the monthly reports and the overall Project progress

# Q. Response to Open Records Requests

• Perform retrieval of documents as a result of open records requests.

# R. Mail Services

• Provide mail services for the Project (US, Priority, Courier, Internal and External).

# TASK 2 – DESIGN OVERSIGHT (CODE 13730)

The GEC will provide professional services associated with design oversight that are required to oversee compliance of the design in accordance with the Project Development Agreement (PDA), the D/B Contract and the System Integrator (SI) Contract. The GEC will provide qualified technical and professional personnel to perform this task. In performance of the task, the GEC shall not direct, manage or control the D/B Contractor or SI's design work activities. Design oversight by the GEC will not relieve the D/B Contactor and SI of sole responsibility for design related services. Design oversight efforts will focus on coordination with the D/B Contractor's and SI's design process to provide monitoring and oversight of reasonable compliance with D/B Contract obligations, D/B contractor's Design Quality Management Plan (DQMP), SI Contractor obligations and sound engineering practices. The following activities are included:

# A. Design criteria

The GEC will provide clarifications on the design criteria, as necessary.

#### B. Schematic development

The GEC will oversee that the schematic plan development proceeds in accordance with the basic configuration provided in the D/B Contract as a part of the 30% plan review. Variances from the basic configuration will be tracked and resolved through the partnering process. The GEC may identify opportunities for changes to the schematic to accommodate Project goals. These opportunities will be coordinated with the D/B Contractor, the Mobility Authority, TxDOT, and FHWA.

#### C. Toll Collection System Development

The GEC will oversee the SI's development of the toll collection system layout, including the location of the toll collection gantries, toll collection system design and toll collection system infrastructure requirements and the integration with the D/B Contractor's schematic plan development. The GEC will monitor adherence to the Toll System Collection Responsibility Matrix by both the D/B Contractor and SI.

#### **D.** Production schedule

The GEC will coordinate with the D/B Contractor to provide GEC staffing levels accommodate the D/B Contractors proposed design production schedule. The D/B Contractor's production schedule will be coordinated with the Mobility Authority, TxDOT, and FHWA to keep Project stakeholders informed of key milestone dates and design reviews schedules.

#### E. Work group meetings

This task includes the attendance of the D/B Contractor's design work group meetings. In these meetings, the GEC will stay informed of design development issues and provide guidance to the D/B Contractor when required.

# F. Design reviews

After a design submittal has been through the Design Quality Control and the Design Quality Assurance reviews, the GEC will perform a Design Quality Oversight review. This review will:

- Audit records to verify compliance with the approved DQMP
- Check and review compliance with the D/B Contract.
- Audit design to confirm all previous review comments have been incorporated

The mandatory design reviews include:

- 30% plans
- 65% plans
- 100% plans

Other design reviews may include:

- Early release construction plans
- Over the shoulder reviews
- Request for information (RFI) submittals
- Shop and working drawing reviews

The GEC will coordinate with TxDOT and others as required to conduct Design Reviews. The GEC will consolidate review comments from the various entities and submit one set of review comments to the D/B Contractor. In the event design exceptions are agreed to between the

Mobility Authority and the D/B Contractor, the GEC will coordinate with TxDOT and prepare documentation in support of the design exception.

#### G. Design Acceptance

Once the D/B Contractor has incorporated all comments from the Final (100%) Design Submittal and resolved all concerns and comments, the D/B Contractor will submit the Final Design Package for acceptance. The GEC will review the acceptance package for the following components and make recommendations to the Mobility Authority regarding approval:

- Design plans
- Design calculations
- Design reports
- Construction Specifications
- Electronic files
- Government and utility owner approvals
- Design quality assurance firm certification of compliance with the DQMP and the D/B Contract

# TASK 3 – CONSTRUCTION OVERSIGHT (CODE 13730)

The GEC will provide professional services associated with construction oversight including the construction engineering in accordance with the PDA, D/B Contract and SI Contract. The GEC will provide qualified technical and professional personnel to perform this task. In performance of this task, the GEC shall not direct, manage or control the D/B Contractor's or SI's construction work activities. Construction Oversight by the GEC will not relieve the D/B Contractor or SI of sole responsibility for the means and methods of the construction, or for health or safety precautions in connection with this work. The Engineer(s) of Record will remain responsible for design related services.

The GEC will establish and maintain the Project Field Office operation within the D/B Contractorprovided facility; including the purchase/lease, installation and maintenance of IT equipment; leasing and maintenance of project vehicles; and any additional expenses required by the Project and not provided by the D/B Contactor.

Construction oversight efforts will focus on coordination with the D/B Contractor's and SI's construction processes to provide monitoring and oversight of reasonable compliance obligations, sound engineering practices and regulatory requirements. The GEC will develop the construction Quality Assurance Plan (QAP) which will be incorporated by reference into the D/B Contractor's Construction Quality Management Plan (CQMP). The following activities are included:

# A. General Technical Support

The GEC will provide technical support and management assistance as required by the Mobility Authority toward the successful completion of the Project; including:

- Advise the Mobility Authority on matters of engineering related to interpretation of design details, construction techniques and procedures, specifications, standard construction details, and construction plans prepared by the Design Engineer(s)
- Seek clarifications from the Design Engineer(s) when necessary on the intent reflected in the design plans and specifications. The Engineer of Record will remain responsible for design related services

- Review, monitor and recommend modification to the D/B Contractor's maintenance of traffic/traffic control operations according to applicable specifications and standards.
- Document and issue deficiency reports to the D/B Contractor on any non-compliance of traffic control devices or layouts.
- Coordinate with the D/B Contractor, affected third parties, interested agencies, emergency responders and the Mobility Authority for major traffic disruptions.
- Attend meetings pertaining to the traffic control and maintenance of traffic that are held by the D/B Contractor, designers or interested parties.
- Track lane/should/ramp/cross-street rental and/or Liquidated Damages fees.
- Review ITS elements including CCTV, Microwave vehicle detection, fiber installation, DMS install, and ATM.

# B. Requests for Information (RFI) and Non-Conformance Report Processing and Management

- Review and comment on Project RFIs
- Prepare and manage Non-Compliance Reports (NCRs) for non compliant work
- Maintain, log and retain all documents associated with RFIs and NCRs

#### C. Shop Drawing / Submittals Processing and Management

- Review shop drawings, erection drawings, working drawings, samples, material and product certifications, and catalog cuts and brochure submittals for general conformance with the design plans and specifications submitted by the D/B Contractor. Check that the Engineer of Record has provided required approvals. The Engineer of Record will be responsible for final approval.
- Maintain, log and retain all documents associated with shop drawings
- Coordinate with the D/B Contractor on processing, submittal documentation, follow-up activities, and clarifications.

#### D. D/B Contractor Draw Requests

- Review completeness of D/B Contractor's submittal in accordance with the requirements of the D/B Contract, including:
  - o Cover sheet
  - Monthly progress report
  - Certification by design quality assurance manager and construction quality control manager
  - Report of personnel hours
  - Progressed schedule of values
  - DBE utilization report
  - Cash flow and payment curves
  - Updated Project schedule
  - Waiver of liens from previous draw requests
  - o Material on hand invoices
  - Lane rental fee report
- Evaluate that the request accurately reflects monies due for acceptable work completed
- Review and provide required certifications to the Mobility Authority for processing of the D/B Contractor's partial and final pay requests.
- Track Project contingency funds. Maintain, log and retain all documents associated with expenditure of Project contingency.

# E. Right-of-Way/Utility Oversight

The GEC will provide oversight, coordination, and assistance for right-of-way and utility related activities. Specific activities include:

- Provide information to the D/B Contractor concerning previous land acquisition negotiations with certain property owners along the Project corridor
- As requested, coordinate the preparation of Eminent Domain packages to be submitted by the D/B Contractor in relation to land acquisition
- Review utility plans for compliance with the TxDOT Utility Accommodation Policy, compatibility with the Project features, betterment inclusion and constructability
- Provide oversight review of location, materials, and backfilling of trenches associated with utility adjustments; not responsible for actual location of utilities
- Participate in meetings as necessary to effectively manage the utility coordination process
- If necessary, provide support to D/B Contractor in scheduling periodic meetings with utility and rail owner's representatives for coordination purposes
- Meet with the D/B Contractor as necessary to resolve matters relating to schedules, utility identification, design changes, conflict resolution, and negotiation with utility owners
- Support D/B Contractor with negotiating the details of utility agreements with the utility companies, as requested. Details will include any necessary betterment percentages, indirect costs, plans, estimates and schedules for the utility companies' activities
- Review of utility adjustment agreements including plans, estimates, and property interest
- Review of claims of unidentified utilities submitted by the D/B Contractor
- Monitoring payments from D/B Contractor to utility owners for utility adjustments
- Provide utility construction monitoring and verification
- Monitor and report utility adjustment status

# F. Mobility Authority Construction Coordination Support

The GEC will support the Mobility Authority in coordination and any interlocal agency agreements including exhibit preparation and supporting document preparation and assembly with the following agencies:

- Texas Department of Transportation (TxDOT)
- Federal Highway Administration (FHWA)
- Capitol Area Metropolitan Planning Organization (CAMPO)
- City of Austin
- Capitol Metropolitan Transportation Authority (CapMetro)
- Travis County
- Local Municipalities and Municipal Utility Districts
- Other Agencies as identified and as directed by the Mobility Authority

#### G. Final Punch List/Final Inspection/Notice of completion

The GEC will:

- Coordinate with the D/B Contractor and TxDOT in the generation of a final punch list.
- Monitor the resolution of outstanding construction items.
- Inspection of punch list completion.
- Verify there are no outstanding claims related to the D/B Contractor's work.
- Provide a Notification of Completion to the Mobility Authority.
- Review/Confirm accuracy of As-Built record drawings.

#### TASK 4 – ENVIRONMENTAL COMPLIANCE (CODE 13730)

The GEC will provide staff to review and report on the D/B Contractor's environmental compliance efforts. Specific activities include:

- Oversight review and audits of the D/B Contractor's Comprehensive Environmental Protection Program (CEPP)
- Review of environmental site assessments (ESAs) submitted by the D/B Contractor for right of way (ROW) parcels for the Project, as required
- Review of Phase II ESA proposed scopes of work and Investigative Work Plans for ROW parcels with potential Recognized Environmental Conditions discovered during the ESA process, as required
- Review and approve D/B Contractor's HAZMAT Plan
- Monitor and quantify HAZMAT excavation materials
- Review letters to Affected Property Owners and meet with concerned citizens to discuss environmental issues, as required
- Review Archeological and Historic Property Phase I and II survey reports, Test /Data Recovery Plans and reports, and SHPO-FRHP nomination packages, as required
- Review design plans and design changes for conformance with environmental commitments
- Develop and maintain database to track and verify environmental commitments documented in the Environmental Documents and for permit compliance
- Monitor the D/B Contractor's activities to determine if environmental encounters are being promptly reported and managed in accordance with the CEPP, and applicable laws and regulations
- Perform re-evaluations as requested for owner director changes

#### TASK 5 – RIGHT OF WAY ACQUISITIONS (CODE 13410)

#### A. Appraisals

- Review completed right-of way maps and documents to ensure all necessary information is provided prior to initiating acquisition efforts.
- Obtain title reports for parcels to be acquired; the title reports will be preliminarily reviewed for accuracy, ownership verification, to determine if there are any existing liens or encumbrances which may prohibit the owner from conveying clear title.
- Conduct appraisals to determine the fair market value of the property to be acquired; appraisals will contain sufficient documentation, including valuation data and the appraiser's analysis of that data, to support his or her opinion of value.
- Conduct review appraisals to confirm that the appraisal has been completed in accordance with defined specifications/procedures and follows accepted appraisal principles/techniques; contains information and consideration of all compensable items, damages and benefits; and includes written approval of the fair market value contained in the appraisal.

- Conduct environmental site assessments, prior to acquisition of real property, on certain parcels to determine the potential of, and extent of liability for hazardous substances or other environmental remediation or injury. This includes a determination of the absence or presence of hazardous substances, as well as conditions that indicate an existing or past release.
- Provide exhibits for illustration of comparable properties for disputing appraisal differences.

# B. Negotiations/Voluntary Settlement

- Provide written notification, consistent with Federal regulations, to effected property owners stating the Mobility Authority's intent to acquire right-of-way; this correspondence will also inform the affected property owners of the basic protection to them by law.
- Develop offer letter and participate in a meeting with the affected property owner to present the offer.
- Participate in negotiations with the affected property owner; documentation of ALL negotiations will be maintained in writing in a negotiators log.
- In the event that negotiations result in a voluntary settlement acceptable to both parties, assemble a closing package containing all documents necessary to timely process the acquisition and relocation checks necessary for closing.
- Provide support for ROW Subcommittee Meetings.
- Provide support for the Mobility Authority Board Meetings.

# C. Relocation Assistance Services

• Conduct determination of relocation benefits, consistent with the Uniform Relocation Act, for both residential and business relocations.

# **D.** Right of Way Tracking

• Tract status of Appraisals, Offers, Counter Offers, Condemnation, property management services and relocation assistance in both dollars and schedule.

# TASK 6 - PUBLIC INVOLVEMENT (CODE 13750)

The GEC will provide staff as needed to support the Mobility Authority with the administration, management, coordination, and implementation of the public involvement oversight efforts. Activities included in this task:

# A. Support for Director of Community Relations

Provide assistance as requested from the Director of Community Relations for the day to day construction communications throughout the life of the contract, including:

- Acting as the secondary point of contact for the project
- Attending internal meetings
- Responding to public inquiries regarding the project
- Assisting with community outreach strategy
- Providing assistance with the development of and implementation of the Public Information Plan (PIP) and Emergency Response Plan for the project
- Managing the updates of content and graphics on www.BergstromExpressway.com
- Managing the stakeholder mailing list

- Providing public involvement materials, such as fact sheets and frequently asked questions
- Assisting with the writing and dissemination of construction updates to the public, including but not limited to e-newsletters and social media
- Assisting with emergency/crisis communications as needed
- Providing bilingual communications as needed
- Provide ongoing reports to the Authority regarding the status of work performed and the success of the PIP
- Help coordinate media inquiries
- Support event management efforts with coordination and participation, as needed

Provide assistance as requested from the Director of Community Relations for the management of the Public Involvement Consultant.

#### **B.** Website Management

Manage the project website, www.BergstromExpressway.com, throughout the life of the contract, including maintenance support and analytic reports.

#### C. Public Opinion Surveys

As directed, manage up to three (3) public opinion surveys through the life of the construction; two would be scheduled at certain milestones within the construction time period, and one would be post-construction.

#### D. 24/7 Hotline

Manage the 24/7 hotline, including the procurement of an afterhours answering service and documenting an extensive hotline log.

#### LIST OF ASSUMPTIONS

#### A. Project Scope

The services provided by the GEC as described in this Work Authorization are based upon the Project scope as defined in the D/B Contract scope of work and technical provisions. It is assumed that construction inspection, materials testing, survey, and elements of public involvement services will be provided by other consultants contracted directly with the Mobility Authority

#### **B. Project Schedule**

The services provided by the GEC as described in this Work Authorization are based upon the Project schedule as provided by the D/B Contractor in its proposal. Any change to the project schedule dates as noted below may require a supplement to this Work Authorization.

- Substantial Completion 54 Months (1,644 calendar days) after NTP
- Final Acceptance 120 Calendar days after Substantial Completion
- Project Closeout completed 90 calendar days after Final Acceptance

#### C. Project Vehicles

Vehicles will not be invoiced separately as they are included in the monthly lump sum direct expense. Staff assigned to temporary duty on the Project will be reimbursed for personnel or rental vehicle usage in accordance with Exhibit C.

#### **D.** Staff Labor and Overhead Rates

Hourly rates and overhead rates shown in Attachment B are estimates or averages used for the purpose of establishing the not to exceed budget for this work authorization. The actual rates used will be in accordance with Section 4, Compensation in the Agreement.

# [END OF ATTACHMENT]

# Attachment B Fee Estimate

		ATKINS	SI	UBCONSULTANTS		TOTAL
TOTAL LABOR & OVERHEAD & PROFIT						
TASK 1 - PROJECT MANAGEMENT & PROJECT CONTROLS	\$	12,067,000	\$	1,714,000	\$	13,781,000
TASK 2 - DESIGN OVERSIGHT	\$	6,247,000	\$	2,517,000	\$	8,764,000
TASK 3 - CONSTRUCTION OVERSIGHT	\$	8,416,000	\$	2,824,000	\$	11,240,000
TASK 4 - ENVIRONMENTAL COMPLIANCE	\$	1,930,000	\$	-	\$	1,930,000
TASK 5 - RIGHT OF WAY ACQUISITION	\$	151,000	\$	602,000	\$	753,000
TASK 6 - PUBLIC INVOLVEMENT	\$	1,026,000	\$	242,000	\$	1,268,000
SUB-TOTAL BURDENED LABOR	\$	29,837,000	\$	7,899,000	\$	37,736,000
EXPENSES (DESIGN + CONSTRUCTION)	\$	1,700,000	\$	532,000	\$	2,232,000
	DESIGN/BUILD OVERSIGHT TOTALS					
SUB-TOTAL BURDENED LABOR	\$	29,837,000	\$	7,899,000	\$	37,736,000
SUB-TOTAL EXPENSES	\$	1,700,000	\$	532,000	\$	2,232,000
TOTAL FEE (DESIGN/BUILD OVERSIGHT)	\$	31,537,000	\$	8,431,000	\$	39,968,000

\$ 39,968,000

TOTAL WA#2.5 FEE

# Attachment B Fee - Labor Summary

										Average	
- · · · · · · · · · · · · · · · · · · ·		2015		2016		2017	2018	2019	2020	Total Hourly Overhead	Burdened
Oversight Staff TASK 1 - PROJECT MANAGEMENT & PROJECT CONTROLS	Hours/Week Jul	Aug Sep Oct Nov De	ec Jan Feb Mar Apr	r May Jun Jul Aug Sep	Oct Nov Dec Jan Feb Mar Apr May	n Jul Aug Sep Oct Nov Dec Jan Fe	eb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	Jan Feb Mar Apr May Jun Jul Aug Sep Oct	Nov         Dec         Jan         Feb         Mar         Apr         May         Jun         Jul         Aug         Sep         Oct         Nov         Dec           Image: Sep         Im	C Hours Rate Rate Profit Mult	ultiplier Hourly Rate Total \$
GEC Program Director	120	96 96 120 96 9	96 120 96 96 120	0 96 96 120 96 96	120 96 96 120 96 96 120 96	6 120 96 96 120 96 96 120 9	06         96         120         96         96         120         96         96         120         96	120 96 96 120 96 96 120 120 96 96 96 120 120 96 96	120 96 96 60 40 10	5,846 \$ 105.00 158% 12% 2.	2.89 \$ 303.41 \$ 1,773,723
Project Manager	160				160 160 160 160 160 160 160 160 160		60 160 160 160 160 160 160 160 160 160 1		0 160 160 160 120 80 20 20 20 20		2.51 \$ 238.34 \$ 2,164,091
DB Advisor	40	40 40 40 40 4	40 40 40 40 40	40 40 40 40 40	40 40 40 40 40 40 40 40	0 40 40 40 40 40 40 40 40	10 40 40 40 40 40 40 40 40 40 40 40 40	40 40 40 40 40 40 40 40 40 40 40	40 40 40	2,200 \$ 110.00 158% 12% 2.	2.89 \$ 317.86 \$ 699,283
Administrative Assistant		160 160 160 160 16	60 160 160 160 160	0 160 160 160 160 160	160         160         160         160         160         160         160		60         160	0 160 160 160 160 160 160 160 160 160 16	0 160 160 160 120 80 20		2.51 \$ 80.28 \$ 724,140
DPM/Design-Construction Coordinator	160	160 160 160 160 16	60 160 160 160 160	0 160 160 160 160 160	160         160 <th100< th=""> <th100< th=""> <th100< th=""></th100<></th100<></th100<>	50 160 160 160 160 160 160 160 160 160	60 160 160 160 160 160 160 160 160 160 1	160 160 160 160 160 160 160 160 160 160	160 160 160 120 80 20	9,020 \$ 85.00 124% 12% 2.	2.51 \$ 213.25 \$ 1,923,497
PROJECT CONTROLS Project Controls Manager	160	160 160 160 160 16	60 160 160 160 160	160 160 160 160 160	160 160 160 160 160 160 160 160	50 160 160 160 160 160 160 160 160 160	60 160 160 160 160 160 160 160 160 160 1	0 160 160 160 160 160 160 160 160 160 16		9,020 \$ 68.00 124% 12% 2.	2.51 \$ 170.60 \$ 1,538,798
Document Controls Supervisor	160	160 160 160 160 160 160 160 160 160 160	60 160 160 160 160 160		160         160         160         160         160         160         160         160           160         160         160         160         160         160         160         160		60         160		160         160         160         120         80         20           160         160         120         80         20         100		2.51 \$ 120.42 \$ 1,086,210
Document Controls Specialist		160 160 16	60 160 160 160 160	0 160 160 160 160 160	160 160 160 160 160 160 160 160 160	60 160 160 160 160 160 160 160 160 160	60 160 160 160 160 160 160 160 160 160 1	0 160 160 160 160 160 160 160 160 160 16	0 160 160 160 120 80 20	8,540 \$ 32.00 124% 12% 2.	2.51 \$ 80.28 \$ 685,605
Project Controls Administrator		160 160 16	60 160 160 160 160	0 160 160 160 160 160	160         160         160         160         160         160         160         160	50 160 160 160 160 160 160 160 160 160	60         160         160         160         160         160         160         160         160         160         160	0 160 160 160 160 160 160 160 160 160 16	0 160 160 160 120 80 20	8,540 \$ 35.00 124% 12% 2.	2.51 \$ 87.81 \$ 749,880
CPM Scheduler	160		60 160 160 160 160		160         160         160         160         160         160         160		60         160         160         160         160         160         160         160         160         160         160	0 160 160 160 160 160 160 160 160 160 16			2.51 \$ 200.70 \$ 1,714,012
Contract Manager		160 160 160 16	60 160 160 160 160	0 160 160 160 160 160	160 160 160 160 160 160 160 160 160	50 160 160 160 160 160 160 160 160 160	60 160 160 160 160 160 160 160 160 160 1	0 160 160 160 160 160 160 160 160 160 16		8,220 \$ 35.00 124% 12% 2.	2.51 \$ 87.81 \$ 721,782
TASK 2 - DESIGN OVERSIGHT											
Design Manager	160	160 160 160 160 16	60 160 160 160 160	0 160 160 160 160 160	160 160 160 160 160 160 160 160 160	0 80 80 80 80 80 80 80 80 80 80 80 80 80	80 80 80 80 80 80 80 80 80 80 80 80 80 8	80 80 80 80 80 80 80 80 80 80 80	80 80 80 80 80 80 80	6,560 \$ 85.00 124% 12% 2.	2.51 \$ 213.25 \$ 1,398,907
Roadway Lead	160	160 160 160 160 16	60 160 160 160 160	0 160 160 160 160 160	140 120 80 80 80 80 80 80 80	0 80 80 80	40 40 40 40		40 40 40 40 40 40	3,860 \$ 70.00 124% 12% 2.	2.51 \$ 175.62 \$ 677,878
Structures Lead					140 120 80 80 80 80 80 80 80	0 80 80 80	40 40 40 40		40 40 40 40 40 40		2.51 \$ 175.62 \$ 639,242
Drainage Lead Traffic Lead					120         80         80         80         80         80         80         80         80           140         120         80         80         80         80         80         80         80	0 80 80 80	40         40         40         40           40         40         40         40         40		40         40         40         40         40           40         40         40         40         40		2.51         \$         175.62         \$         663,828           2.51         \$         175.62         \$         639,242
Geotechnical Lead					140         120         80         80         80         80         80         80         80           80	0 80 80 80			40         40         40         40         40           40         40         40         40         40		2.51 \$ 175.62 \$ 639,242 2.89 \$ 202.27 \$ 606,816
Roadway 1					80 80 80 80 80 80 80 80 80 80	0					2.89 \$ 144.48 \$ 346,752
Roadway 2	80	80 80 120 120 12	20 120 120 120 120	0 120 120 120 120 120	80 80 80 80 80 80 80 80 80	0				2,400 \$ 40.00 158% 12% 2.	2.89 \$ 115.58 \$ 277,402
Roadway 3	80			80 80 80 80 80							2.89 \$ 115.58 \$ 221,921
Structures 1					80 80 80 80 80 80 80 80 80						2.89 \$ 144.48 \$ 312,077
Structures 2 Structures 3					80         80         80         80         80         80         80         80         80           80 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.89 \$ 115.58 \$ 249,661 2.89 \$ 115.58 \$ 194,181</td>						2.89 \$ 115.58 \$ 249,661 2.89 \$ 115.58 \$ 194,181
Drainage 1	80				80         80<						2.89         \$         144.48         \$         346,752
Drainage 2	80	80 80 120 120 12	20 120 120 120 120	0 120 120 120 120 120	80 80 80 80 80 80 80 80 80	0				2,400 \$ 40.00 158% 12% 2.	2.89 \$ 115.58 \$ 277,402
Traffic 1		80 80 8	80 80 80 80 80		80 80 80 80 80 80 80 80						2.89 \$ 144.48 \$ 242,726
Geotech 1		80 80 8			80 80 80 80 80 80 80 80 80						2.89 \$ 144.48 \$ 242,726
EIT 1 EIT 2	160	160 160 160 160 160	60 160 160 160 160 60 160 160 160 160	D         160         160         160         160         160           0         160         160         160         160         160			30         80<	80 80 80 80 80 80 80 80 80 80			2.51         \$         87.81         \$         379,331           2.51         \$         87.81         \$         547,922
CAD Tech							30         80<				2.89 \$ 86.69 \$ 388,362
Traffic Counts				160	160	160 160	160 160	160 160		1,280 \$ 30.00 158% 12% 2.	2.89 \$ 86.69 \$ 110,961
TASK 3 - CONSTRUCTION OVERSIGHT	80	80 120 160 160 1	60 160 160 160 160	2 160 160 160 160 160	160         160         160         160         160         160         160         160		60 160 160 160 160 160 160 160 160 160 1			8,820 \$ 90.00 124% 12% 2.	2.51 \$ 225.79 \$ 1,991,485
Construction Manager Office Engineer	80	80 120 160 160 16	60 160 160 160 160 160		160         160 <td></td> <td>60         160</td> <td></td> <td>160 160 160 120 80 20</td> <td></td> <td>2.51 \$ 225.79 \$ 1,991,485 2.51 \$ 125.44 \$ 1,106,381</td>		60         160		160 160 160 120 80 20		2.51 \$ 225.79 \$ 1,991,485 2.51 \$ 125.44 \$ 1,106,381
Records Keeper	160	160 160 160 160 16	60 160 160 160 160	0 160 160 160 160 160	160 160 160 160 160 160 160 160 160	50 160 160 160 160 160 160 160 160 160	60 160 160 160 160 160 160 160 160 160 1	0 160 160 160 160 160 160 160 160 160 16	0 160 160 160 120 80 80 80 80 80		2.51 \$ 100.35 \$ 935,281
Construction Engineer	80	80 120 160 160 16	60 160 160 160 160	0 160 160 160 160 160	160 160 160 160 160 160 160 160 160	60 160 160 160 160 160 160 160 160 160	60 160 160 160 160 160 160 160 160 160 1	0 160 160 160 160 160 160 160 160 160 16	0 160 160 160 120 80 20	8,820 \$ 50.00 124% 12% 2.	2.51 \$ 125.44 \$ 1,106,381
Construction Engineer		80 80 120 16	60 160 160 160 160		160         160         160         160         160         160         160		60         160         160         160         160         160         160         160         160         160         160	0 160 160 160 160 160 160 160 160 160 16			2.51 \$ 125.44 \$ 1,046,170
Construction Engineer			80 80 120 160	0 160 160 160 160 160	160 160 160 160 160 160 160 160 160 160	50 160 160 160 160 160 160 160 160 160	60 160 160 160 160 160 160 160 160 160 1	0 160 160 160 160 160 160 160 160 160 16		7,540 \$ 50.00 124% 12% 2.	2.51 \$ 125.44 \$ 945,818
Tolls Systems											
Tolls Systems Coordinator			80 80 80 80	80 80 80 80 80	80 80 80 80 80 80 80 80	0 80 80 80 80 80 80 80 80 80	80 80 80 80 80 80 80 80 80 80 80 80 80	80 80 80 80 80 80 80 80 80 80 80	80 80 80 80 80 80 80	4,160 \$ 60.00 158% 12% 2.	2.89 \$ 173.38 \$ 721,244
Tolls Inspector 1							80 80 80 80 80 80 80	80 80 80	80 80 80 80 80 80 80	1,200 \$ 60.00 158% 12% 2.	2.89 \$ 173.38 \$ 208,051
Utilities Utilities Manager	160	160 160 160 160 16	60 160 160 160 160	160 160 160 160 160		50 160 160 160 160 160 160 160 160	60 160 160 160 160 160 160 160 160 160 1	1 160 160 160 160 160 160 160 160 160 16		8,560 \$ 80.00 124% 12% 2.	2.51 \$ 200.70 \$ 1,718,026
Utilities Inspector	100						60 160 160 160 160 160 160 160 160 160 1				2.51 \$ 100.35 \$ 730,563
Utilities Coordinator							60 160 160 160 160 160 160 160 160 160 1				2.51 \$ 100.35 \$ 730,563
TASK 4 - ENVIRONMENTAL COMPLIANCE			00 420 422 422								
NEPA/Env Compliance Manager SW3P Inspector							20         120		60 60 20	5,860         \$         66.00         124%         12%         2.           4,640         \$         30.00         124%         12%         2.	
Senior HazMat Scientist	80	80 80 80 80 8			160         160         160         160         160         160         160         80         80					2,880 \$ 50.00 158% 12% 2.	
HazMat Scientist					80 80 80 80 80 80 80 80						2.89 \$ 101.14 \$ 194,181
TASK 5 - RIGHT OF WAY ACQUISITION											
ROW Manager					40         40         40         40         40         40         40         40           20         20         20         20         20         20         20         20         20					1,500 \$ 40.00 124% 12% 2.	
Sheets & Crossfield Jackson Walker					20         20<		+++++++++++++++++++++++++++++++++++++++				2.51         \$ 501.76         \$ 301,056           2.51         \$ 501.76         \$ 301,056
TASK 6 - PUBLIC INVOLVEMENT											
Public Involvement Manager	20						20         20<			1,100 \$ 60.00 158% 12% 2.	
Public Involvement Specialist							60         160			8,320 \$ 40.00 124% 12% 2.	
Monkee Boy WPA Opinion Research		40 40 4	40 40 40 40 40	40         40         40         40         40           80         80         80         80         80		<u>u 40 40 40 40 40 40 40 40 40 40 40 40 40 </u>	40         40<			2,080         \$         30.00         158%         12%         2.           720         \$         30.00         158%         12%         2.	
	. I									<u> </u>	TOTAL \$ 37,735,893

# Attachment B Fee - Expense Summary

Design/Build Expenses	
Description	Monthly Amount
Expenses - includes mileage, travel, leased vehicles, vehicle supplies, field/safety equipment, training,	<u>montiny randunt</u>
cell phones, cameras, network/technology, internet service, phone service, desk phones, wiring,	
computers, e-builder licenses, Earthcam, miscellaneous supplies, ADA consulting and other expenses	
for field office as well as office supplies, print charges, deliveries, etc. for design office	\$38,483

#### GENERAL MEETING OF THE BOARD OF DIRECTORS OF THE CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

# **RESOLUTION NO. 15-\_\_\_**

# APPROVING A WORK AUTHORIZATION FOR ATKINS NORTH AMERICA, INC., TO PROVIDE GENERAL ENGINEERING CONSULTING AND OVERSIGHT SERVICES FOR THE BERGSTROM EXPRESSWAY (183 SOUTH) PROJECT.

WHEREAS, Atkins North America, Inc., ("Atkins") serves as a general engineering consultant to the Mobility Authority under the Agreement for General Consulting Civil Engineering Services effective January 1, 2010 (the "GEC Agreement"); and

WHEREAS, Atkins currently provides general engineering consulting and oversight services to the Mobility Authority for the Bergstrom Expressway (183 South) project (the "Project"); and

WHEREAS, the Executive Director and Atkins have discussed and agreed to a proposed supplement to the work authorization for Atkins to continue providing general engineering consulting and oversight services for the Project; and

WHEREAS, the Executive Director recommends approval of the proposed supplement to the work authorization in the form or substantially in the same form provided to the Board as agenda backup information.

NOW THEREFORE, BE IT RESOLVED that the proposed supplement to the work authorization with Atkins North America, Inc. is hereby approved; and

BE IT FURTHER RESOLVED that the Executive Director may finalize and execute for the Mobility Authority the proposed supplement to the work authorization, in the form or substantially in the same form provided to the Board as agenda backup information.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 1<sup>st</sup> day of July, 2015.

Submitted and reviewed by:

Approved:

Andrew Martin, General Counsel

Ray A. Wilkerson Chairman, Board of Directors