



**CENTRAL TEXAS
Regional Mobility Authority**

AGENDA ITEM #5 SUMMARY

Approve a new work authorization with HNTB Corporation for general engineering consultant services related to the MoPac Improvement Project.

Strategic Plan Relevance: Regional Mobility

Department: Engineering

Associated Costs: \$18,430,663

Funding Source: Federal Funds

Board Action Required: Yes

Description of Matter: By action of the Board at their meeting on August 26th, 2009, HNTB was selected to provide General Engineering Consultant (GEC) services to the Mobility Authority. This Work Authorization No. 16 will allow for GEC Support Services related to the oversight of the activities progressed under the Design-Build Contract for the MoPac Improvement Project.

In summary, the services contained in this Work Authorization include project management, design oversight, construction oversight, material acceptance testing, environmental compliance and public involvement.

Reference documentation:

Draft Resolution

Draft Work Authorization No. 16

Contact for further information:

Wesley M. Burford, P.E., Director of Engineering

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

RESOLUTION NO. 13-___

**APPROVING A NEW WORK AUTHORIZATION WITH
HNTB CORPORATION FOR GENERAL ENGINEERING CONSULTANT SERVICES
RELATED TO THE MOPAC IMPROVEMENT PROJECT.**

WHEREAS, HNTB Corporation (“HNTB”) 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, by Resolution No. 10-40 enacted on April 28, 2010, the Board of Directors approved a work authorization for HNTB to provide GEC Project Development Services for the MoPac Improvement Project (the “Project”); and

WHEREAS, the Executive Director and HNTB have discussed and agreed to a proposed new work authorization to continue HNTB’s support of current GEC Project Development Services for the Project; and

WHEREAS, the Executive Director recommends approval of the proposed work authorization attached and incorporated into this resolution as Exhibit 1.

NOW THEREFORE, BE IT RESOLVED that the proposed work authorization is approved; and

BE IT FURTHER RESOLVED that the Executive Director may finalize and execute on behalf of the Mobility Authority the proposed work authorization in the form or substantially the same form attached as Exhibit 1.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 26th day of June, 2013.

Submitted and reviewed by:

Approved:

Andrew Martin
General Counsel for the Central
Texas Regional Mobility Authority

Ray A. Wilkerson
Chairman, Board of Directors
Resolution Number: 13-___
Date Passed: 06/26/2013

EXHIBIT 1 TO RESOLUTION 13-
WORK AUTHORIZATION WITH HNTB CORPORATION

[on the following 20 pages]

APPENDIX D

WORK AUTHORIZATION

WORK AUTHORIZATION NO. 16

This Work Authorization is made as of this ___ day of _____, 2013, under the terms and conditions established in the AGREEMENT FOR GENERAL CONSULTING ENGINEERING SERVICES, dated as of December 23rd, 2009 (the "Agreement"), between the Central Texas Regional Mobility Authority ("Authority") and **HNTB Corporation** ("GEC"). This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

MoPac Improvement Project – Design / Build Oversight

Section A. - Scope of Services

A.1. GEC shall perform the following Services:

Please reference Attachment A – Scope of Work

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.

Please reference Attachment A – Scope of Work

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 – Scope of Work

Section B. - Schedule

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

Unless amended otherwise by mutual agreement between Authority and GEC, the Services defined herein shall expire on December 31, 2014. If the Services defined herein are not complete by December 31, 2014, the Work Authorization will need to be amended to extend the schedule; otherwise, all services will cease.

The fee for this contract is associated with the Design/Build Contract Schedule for the MoPac Improvement Project which includes up to 910 calendar days of D/B oversight for substantial completion plus 120 calendar days for final acceptance plus 60 calendar days for project closeout. It is anticipated that this Work Authorization will need to be extended to complete the Services defined herein.

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 \$18,430,663 based on a Cost Plus fee listed in Attachment B – Fee Estimate. Compensation shall be in accordance with the Agreement.

The Authority and the GEC agree that the budget amounts contained in Attachment B-Fee Estimate for the GEC are estimates and that these individual figures may be redistributed and/or adjusted as necessary over the duration of this Work Authorization. The GEC may alter the compensation distribution between tasks or work assignments to be consistent with the Services actually rendered within the total Work Authorization amount. The GEC shall not exceed the maximum amount payable without prior written permission by the Authority.

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 or a Supplement to this 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:

N/A

Section E. - Other Provisions

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

N/A

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**

By: _____

Name: Mike Heiligenstein

Title: Executive Director

Date: _____

GEC:

HNTB Corporation

By: _____

Name: Richard L. Ridings, P.E.

Title: Vice President

Date: _____

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**ATTACHMENT A – SCOPE OF WORK****WORK AUTHORIZATION NO. 16****SERVICES TO BE PROVIDED BY THE
GENERAL ENGINEERING CONSULTANT (GEC)****General**

The services to be performed by the GEC will include, but not be limited to, project management services necessary to oversee the design and construction of the MoPac Improvement Project (hereinafter referred to as the 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(s) (hereinafter referred to as the D/B Contractor).

The GEC will be the single point of contact between the Mobility Authority and D/B Contractor, acting as an extension of Mobility Authority staff by providing technical and professional personnel to perform the duties and responsibilities assigned under the terms of this Agreement. The GEC shall not control or direct 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 Mobility Authority staff and coordinated with TxDOT and City of Austin 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 as defined in the D/B Contract.

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 level of Project staffing. Activities included in this task:

1.1. Project Management Plan (PMP)

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

- Project Administration
- Design Quality Management Plan

- Construction Quality Management Plan
- Maintenance Management Plan
- Comprehensive Environmental Protection Program
- Public Information and Communications
- Safety
- Communications Management
- Cost Management
- Schedule Management

1.2. Project Administration

- Review and report on the D/B Contractor's submittals of records and reports including:
 - Weekly payroll
 - Statement of wage compliance
 - Requests for payment of materials on hand
 - DBE compliance
 - Reports and records as required for the Project by TxDOT and/or FHWA and/or City of Austin and/or UPRR and/or Capital Metro
- Report Project progress and issues in a timely manner
- Review, monitor, and report on D/B Contractor's Project Schedule
- Maintain accurate records of the cost involved in potential change order work. These records will include labor and equipment times and materials installed (temporary or permanent)
- 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 LGPP requirements, EEO Affirmative Action, DBE, OJT positions and number if hours, and payroll and subcontracts.
- Provide compliance oversight of third party agreements and development permits that are to be completed and executed by the D/B Contractor, including:
 - Dewatering permits
 - NPDES permits
 - Demolition permits
 - Noise permits
 - Corps of Engineer permits
 - Utility agreements
 - UPRR / Capital Metro agreements

1.3. 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 Partnering Meetings to be held shortly after notice to proceed has been given to the D/B Contractor.

1.4. Sub-Consultants

- Coordinate, contract and provide oversight for any required sub-consultants to the GEC.

1.5. Program Reporting

- Prepare and issue monthly status 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 and sub-consultants, and the D/B Contractor
- Track, monitor, and prepare reports on DBE utilization for the D/B Contractor's program and GEC team.
- Provide Quarterly Project Reports and status update presentations to the Mobility Authority Board, and other agencies as requested.

1.6. 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 Schedules.
- 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 and schedule revisions and Updates, and Recovery Schedules. Evaluate time impacts and report recommendations to the Mobility Authority.

1.7. 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.

1.8. Dispute / Claims Support

The GEC will provide consultation and assistance to the Mobility Authority and their General Counsel 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 recommendation to the Mobility Authority on the D/B Contractor's claim package submittal.
- Participate as needed in preparation and presentation to the Dispute Resolution Board.

1.9. Project Meetings & Documentation

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

- Project Progress Meetings – Weekly
- Project Review Meetings – Monthly
- Issue Resolution Meetings – As Needed
- Mobility Authority Construction Status Update Meetings – Monthly
- Mobility Authority Dashboard 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 the D/B Contractor's Project meetings, including but not limited to:

Partnering

- One-day facilitated Management Partnering Workshop; including TxDOT (After award)
- One-day Full Team Partnering Workshop
- Monthly Strategy Meetings
- Quarterly Partnering Workshop

Design Phase

- Roadway, Structures, Drainage, Utilities, Rail, Environmental Compliance – Weekly
- Maintenance of Traffic – Weekly
- Signals, ITS, Illumination, Geotechnical – Bi-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
- Rail - 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

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

1.10. 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 database and 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.

1.11. 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, material test data, schedules, audits, related technical data, and issues associated with the Project.

1.12. Data Backups

Perform backup of Project database on a daily basis.

1.13. Document Distribution

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

1.14. Trust Indenture Obligations

- If required, perform all duties and services, render opinions, and issue certificates specified for the GEC in the Trust Agreement(s) necessary for securing the revenue bonds issued by the CTRMA to finance the Project.
- Prepare Quarterly Reports with an Executive Summary that provides a comprehensive summary of the monthly reports and the overall Project progress.

1.15. Response to Open Records Requests

Perform retrieval of documents as a result of Open Records Requests.

1.16. Mail Services

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

2. DESIGN OVERSIGHT (Code 13730)

The GEC will provide professional services associated with design oversight that are required to oversee compliance of the design of the Project 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 this task, the GEC shall not direct, manage, or control the D/B Contractor's or SI's design work activities. Design oversight by the GEC will not relieve the D/B Contractor 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:

2.1. Design Criteria

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

2.2. 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 part of the 30% plan review. Variances from the basic configuration will be tracked and resolved through the review and partnering process. The Mobility Authority may identify opportunities for changes to the schematic to accommodate Project goals.

These opportunities will be coordinated with the GEC, the D/B Contractor, the Mobility Authority, TxDOT, and FHWA.

2.3. 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.

The GEC will also assist in the oversight associated with the SI's development of the dynamic pricing algorithm and compliance with requirements and specifications.

2.4. Production Schedule

The GEC will coordinate with the D/B Contractor to provide GEC staffing levels to accommodate the D/B Contractor's 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 review schedules.

2.5. Work Group Meetings

This task includes participation in 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.

2.6. Design Reviews

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

- Audit records for general 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
- 100% Plans

Other design review may include:

- Early Release for 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.

2.7. 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

3. CONSTRUCTION OVERSIGHT (Code 13620)

The GEC will provide professional services associated with construction oversight including the construction engineering and inspection 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, including field inspections, testing, and oversight reviews, 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 the 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 Contractor-provided 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 Contractor.

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:

3.1. Construction Oversight Inspections

- Perform and report construction inspections.
- Review and report final documentation of schedule of values in support of D/B Contractor's draw requests.
- Maintain diaries and logs for a comprehensive record of the D/B Contractor's progress.

- Provide a digital photo and/or video log of the Project area during construction, with heavy emphasis on areas with potential claim items/issues and on areas of real/potential public controversy.

3.2. Traffic Control

- 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 regarding 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 / shoulder / ramp/ cross-street rental and/or Liquidated Damages fees

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

- Review and facilitate responses 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.

3.4. Shop Drawing / Submittals Processing and Management

- Review shop drawings, erection drawings, working drawings, samples, material and product certifications, and catalog cuts and brochure submittal for general conformance with the design plans and specifications submitted by the D/B Contractor. Check that the Engineer(s) of Record have provided required approvals. The Engineer(s) 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.

3.5. D/B Contractor Draw Requests

- Review completeness of the D/B Contractor's submittal in accordance with the requirements of the D/B Contract, including:
 - 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
- Material on hand invoices
- Lane / shoulder / ramp / cross street rental and/or Liquidated Damages 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.

3.6. Toll Collection System

The GEC will provide oversight, coordination, support, and assistance in the integration, testing, deployment and approval of the toll collection system.

3.7. Utility and Rail Oversight

The GEC will provide oversight, coordination, support, and assistance for utility related activities. GEC support activities do not relieve the D/B Contractor of sole responsibility for performance of all utility-related activities. Specific activities include:

- 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; the GEC is not responsible for actual location of utilities.
- Participate in meetings as necessary to support effective management of the utility and rail 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 related to schedules, utility identification, design changes, conflict resolution, and negotiation with utility and rail 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 Rail agreements including plans and estimates.
- Review claims of unidentified utilities submitted by the D/B Contractor.

- Monitor payments from the D/B Contractor to utility owners for utility adjustments and rail owners for flagging operations.
- Provide utility construction monitoring and verification.
- Monitor and report utility adjustment status.

3.8. Survey Support

- Perform miscellaneous spot checks as needed during the duration of the Project.

3.9. 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, specification, standard construction details, and construction plans prepared by the Engineer(s) of Record.
- Seek clarifications from the Engineer(s) of Record when necessary on the intent reflected in the design plans and specifications. The Engineer(s) of Record will remain responsible for design related services.

3.10. Mobility Authority Construction Coordination Support

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

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

3.11. 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 Notification of Completion to the Mobility Authority.

3.12. Record Drawings

If necessary, the GEC will support the effort of the D/B Contractor to compile and provide the Mobility Authority with Record Plans. The GEC will develop and implement a process for periodic review of Record Drawing development status by the D/B Contractor throughout the project duration. The GEC is not responsible for any errors or omission in the information provided by the D/B Contractor.

4. MATERIAL ACCEPTANCE TESTING (Code 13620)

The GEC will provide Quality Acceptance testing of materials incorporated into the project, coordinate materials testing operations, and review Material Test Reports. Material Testing procedures will include:

4.1. Quality Acceptance

- Provide a Qualification Program for materials utilized by the project for the construction of the Project in accordance with the Quality Acceptance Program (QAP).
- Approve the D/B Contractor's procedures and requirements for handling, storage, shipping, and preservation of materials incorporated into the work; including Corrective Action procedures for test or inspection failures, malfunctions or deficiencies.
- Submit construction Quality Acceptance Material Certification letter monthly to the Mobility Authority.
- All material test results will be reviewed by the Construction Manager or Resident Engineer.

4.2. Verification

- Develop and implement a testing plan in compliance with TxDOT's Guide Schedule of Sampling and Testing for the Project.
- Perform the testing of construction materials utilized on the Project.
- Prepare and manage Non-Compliance Reports (NCRs) for failing tests as appropriate.
- Prepare control charts for applicable test values.
- Provide materials advice as deemed necessary.
- Maintain a material testing database.
- Review mill and shop inspection and laboratory tests and field test of construction materials performed by the testing engineer and the off-site materials testing agency.

4.3. Independent Assurance Program

- Implement the Independent Assurance (IA) Program which evaluates all sampling and testing procedures, personnel, and equipment used as part of an acceptance decision.
- Maintain documentation of all qualified individuals who perform required tests for acceptance of materials.
- Verify that laboratories are qualified to perform testing.
- Compose an annual report that will be submitted to TxDOT summarizing the results of the systems approach IA Program.

5. ENVIRONMENTAL COMPLIANCE (Code 13620)

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 and approve the D/B Contractor's HAZMAT Plan.
- Monitor the D/B Contractor's compliance with the SWPPP plans and permit requirements.
- Review letter to Affected Property Owners and meet with concerned citizens to discuss environmental issues, as required.
- Review Archeological and Historic Property 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.
- Issue Non-Compliance Reports (NCRs) for instances which fall below permit requirements.
- 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.

6. PUBLIC INVOLVEMENT (Code 13750)

The GEC will provide staff as needed to support the Mobility Authority with the administration, management, and coordination of the overall Project public involvement efforts.

6.1. Public Information and Project Updates

The GEC will support public outreach concerning Project information and construction updates, including:

- Work with the Mobility Authority and the D/B Contractor to develop and implement the Community Relations Program.
- Respond to public inquiries regarding the Project, specifically with the use of an e-mail hotline address.

6.2. Public Outreach Support

Coordinate various public outreach meetings and events, as requested by the Mobility Authority, including:

- Assist with strategy development
- Mediation/facilitation
- Small meetings and one-on-ones with stakeholders.

- Environmental Assessment Re-Evaluation Meetings and Coordination – including identification of issues and key stakeholders; providing strategy; facilitating meetings (5); and developing follow up documentation.
- Assist with planning and outreach for Community Leaders
- Project tours for visitors and other delegations.

6.3. Media Outreach Support

Assist the Mobility Authority, as requested, with the following public and media outreach tasks:

- Provide native mobile app services for iPhone and Android devices.
- Provide mobile website project services.
- Provide ongoing Mobility Authority's Project website maintenance and website marketing.
- Provide content for updates on the Mobility Authority's Project website.
- Provide updates to 3D video simulations previously developed during the MoPac Improvement Project development phase to incorporate revisions to the project schematic based on the D/B Contractor's design.
- Issuance of the D/B Contractor's public notices of traffic phase changes and local road detours and closures through the TxDOT District Office.
- Respond to media inquiries.
- Respond to Open Records requests.

7. ADDITIONAL SERVICES

7.1. General

The services listed above are anticipated to cover the range of activities for the oversight of the design and construction of the Project. However, change can occur at any time during the project term and may involve changed scope, schedule or staffing. Changes to the scope and/or schedule of the work, whether at the request of the Mobility Authority or resulting from changes to the project initiated by the D/B Contractor, may require additional services outside of this scope, or the provision of identified services for an additional period of time.

7.2. Change Management Plan

Changes to the Project subsequent to the execution of the Work Authorization may have an impact on the Project's scope, schedule, fee/budget, and/or risk exposure. To more efficiently handle these changes the GEC will implement a Change Management Plan. The purpose of this plan is to standardize the process used for the handling and documentation of all project changes which impact scope, schedule, fee/budget and/or risk exposure. The goal of the plan is to respond proactively to the Project requirements while reducing impacts to the Project schedule and risks to all parties.

The GEC will develop a Change Management Plan for the specific requirements of the Project. A draft of the plan will be submitted to the Mobility Authority subsequent to the execution of this Work Authorization. In general, the plan will cover contractual obligations of parties, schedule management, change tracking and reporting, and documentation.

8. LIST OF ASSUMPTIONS**8.1. 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.

8.2. 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 29 months (882 calendar days) after NTP
- Final Acceptance 120 calendar days after Substantial Completion
- Project Closeout completed 60 calendar days after Final Acceptance

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Attachment B Fee Estimate

	HNTB	DBE SUB	NON-DBE SUB	Percentage of Oversight Fee
Total Labor & Overhead & Profit				
Project Management Oversight	\$2,679,270	\$0	\$2,679,270	14.54%
Design Oversight	\$1,311,450	\$205,766	\$1,517,216	8.23%
Toll Facilities	\$361,149	\$0	\$393,318	2.13%
Project Controls	\$1,468,682	\$843,484	\$2,985,506	16.20%
Public Involvement	\$370,159	\$0	\$370,159	2.01%
Construction Oversight	\$4,971,295	\$4,140,418	\$9,485,193	51.46%
Sub-Total Burdened Labor	\$11,162,006	\$5,189,668	\$17,430,663	94.57%
Expenses (Design + Construction)				
	\$652,600	\$207,400	\$1,000,000	6.86%
Design/Build Oversight Totals				
Sub-Total Burdened Labor	\$11,162,006	\$5,189,668	\$17,430,663	
Sub-Total Expenses	\$652,600	\$207,400	\$1,000,000	
Total Fee (Design/Build Oversight)	\$11,814,606	\$5,397,068	\$18,430,663	100.00%

Total WA#16 Fee \$ 18,430,663

Attachment B Fee - Expense Summary

DB Expenses	
Expenses - includes 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, earth cam, miscellaneous supplies, ADA consulting and other expenses for field office as well as office supplies, print charges, deliveries, etc. for design office	Monthly Amount
	\$28,571

