### WORK AUTHORIZATION NUMBER 02

This Work Authorization is made as of this 1st day of October 2020, under the terms and conditions established in the Agreement for Engineering Services (General Engineering Consultant (GEC) – Road and Bridge Project Management, Design Management, and Construction Management), dated December 17, 2019 (the Agreement), between Williamson County, Texas (County) and HNTB Corporation (Engineer). This Work Authorization is made for the following purpose, consistent with the Project defined in the Agreement:

Provide engineering management services required to initiate and monitor production of contract documents and construction of road and drainage projects for various Williamson County programs and departments, excluding the Williamson County Road Bond Program.

#### Section A. - Scope of Services

A.1. Engineer shall perform the following Services:

See attached Exhibit B

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 County:

Any Services not listed in Exhibit B and/or exceeding the Authorized Fee.

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

See attached Exhibit B.

### Section B. - Schedule

This Work Authorization shall be effective as of the date of the last party's execution below and continue until September 30, 2020. Engineer shall perform the Services and deliver the related Documents (if any) according to the following schedule:

October 1, 2020 – September 30, 2021

#### Section C. - Compensation

C.1. In return for the performance of the foregoing obligations, County shall pay to Engineer the not-to-exceed amount of \$1,273,767.00, payable according to the Rate Schedule and terms of the Agreement.

C.2. Compensation for Additional Services (if any) shall be paid by County to Engineer according to the Rate Schedule and terms of the Agreement.

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

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

See Attached Exhibit A

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

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

Not Applicable

IN WITNESS WHEREOF, the County and Engineer have executed this Work Authorization.

Williamson County, Texas (County)	HNTB Corporation (Engineer)
Ву:	By: Miduelle Dippel
Name:	Name: Michelle Dippel
Title:	Title: Vice President
Date:	Date:9/10/2020

#### EXHIBIT A SCOPE OF SERVICES TO BE PROVIDED BY COUNTY

The services to be provided by COUNTY under the Agreement shall consist of the following items.

- 1. Furnish all reference documents, information and project data for the development of the projects.
- 2. Provide traffic data and available schematic layouts for projects in the bond program.
- 3. Provide design contracts, fee schedules, and project schedules as provided by the project consultants.

## EXHIBIT B

## SERVICES TO BE PROVIDED BY THE CONSULTANT

The services to be performed by the Consultant under this Contract shall consist of providing engineering management services required to initiate and monitor production of contract documents and construction of road and drainage projects for various Williamson County programs and departments, excluding the Williamson County Road Bond Program.

The Consultant will furnish materials required to perform the engineering services below.

#### Program Management

- 1. Amend and update, in coordination with the Commissioners Court and County staff, the Long-Range Transportation Plan.
- 2. Identify specific program activities and update/modify program organizational and management documents, agreements, and process.
- 3. Meet with Commissioners and County staff monthly to identify priority projects.
- 4. Maintain unit cost data to develop cost estimates, cash flow schedules, and implementation schedules for priority projects.
- 5. Prepare Request for Qualifications (RFQ's) for project consultants and other professional services.
- 6. Assist in requesting qualification statements from engineering firms for design services, and from other service providers, as necessary.
- 7. Assist in selecting or pre-qualifying firms for review and consideration by the Commissioners Court for the road and drainage improvement projects and related activities.
- Assist County Public Information Officer (PIO) in presenting the most up-to-date and relevant information for posting on the appropriate County website. Review the County website monthly. Provide updated language and exhibits to the PIO as needed for their use in updating the website.
- 9. Assist the County and Public Involvement consultant in developing public information strategies for the specific transportation project and for each of the road construction components. This would include items such as creation of a full-project multi-media presentation, regular newsletters, targeted project presentations, seminars, town meetings, trade show exhibits, school exhibits, library exhibits, educational materials, website materials, maps, informational pieces keyed to each road project, graphics and other exhibits, as needed.

- 10. Meet with Texas Department of Transportation (TxDOT) representatives quarterly or as new on-system projects are kicked off, to review TxDOT's proposed improvement program for Williamson County and identify projects the County can facilitate and expedite. Prepare documentation for developing Advance Funding Agreements and Local On-System Agreements between Williamson County and TxDOT for "partnering" projects.
- 11. Update as necessary the standardized professional service agreement (PSA) and construction contracts for program activities.
- 12. Assist County staff and the County Commissioners with appearances and presentations to elected officials, government bodies, Capital Area Metropolitan Planning Organization (CAMPO), service organizations, chambers of commerce, neighborhood groups, school groups, various citizen groups, church groups, etc.
- 13. Provide ongoing monitoring and processing responses to Federal (US DOT and USFWS), State (TxDOT and TCEQ), and local (CAMPO) rulemaking, programs, funding and policy directives. Specifically, the team will focus on proposals that could affect project development and timely delivery of 2019 Road Bond projects. The team will also pursue all new funding opportunities from US DOT and CAMPO and assist the County in preparing grant applications and providing information for project/program calls.
- 14. Coordinate and assist the Environmental Permitting consultants in updating the comprehensive mitigation program for County projects, as needed.
- 15. Assist in preparation of Interlocal Agreements with Cities partnering with the County to jointly fund and construct projects. Monitor City activities, schedules, and invoices as necessary.
- 16. Assist in preparation of Development Agreements with Developers partnering with the County to jointly fund and construct projects. Monitor Developer activities, schedules, and invoices as necessary.
- 17. Provide expert witness assistance in Right of Way (ROW) acquisition cases and other technical assistance, as requested, in legal matters relating to the program activities.
- 18. Implement and maintain ProjectWise based project database to facilitate project management and coordination of design and construction efforts. Electronic filing system to include program management materials, planning documents, design documents, right-of-way documents, bid documents, and construction documents.
- 19. Implement and maintain GIS based ROW database to monitor ROW acquisition status and facilitate timely acquisition of ROW for construction projects.
- 20. Attend meetings, participate in phone calls, prepare correspondence, send and respond to emails related to the projects.
- 21. Prepare and issue project documentation throughout the duration of the project.

# Design & Planning Phase Oversight

- 1. Attend meetings with Commissioners, County Staff, TxDOT, local government officials, project engineers and other County consultants as needed.
- 2. Assist the ROW acquisition team in the coordination of acquisitions services and the timely acquisition of ROW for roadway projects. Provide preliminary cost estimates and a priority acquisition schedule.
- 3. Manage and oversee the Utility Coordination (UC) consultant activities, including:
  - Provide UC consultant with project list, location maps, and implementation schedule.
  - Facilitate coordination between the UC consultant and design consultants.
  - Review reasonableness of utility conflict strip maps.
  - Facilitate coordination between the UC consultant and local governments. Assist in preparation of Interlocal Agreements with Cities and other government entities regarding the relocation of their utility facilities.
  - Review and process utility agreements submitted by the UC consultant.
  - Monitor anticipated relocation schedules to further the timely relocation of utilities for construction projects.
  - Review and process utility invoices submitted by the UC consultant.
- 4. Manage and oversee preliminary engineering, planning, and final engineering design activities and preparation of construction documents including:
  - Prepare draft scope of work for each road project.
  - Review final scope of work submitted for each road project.
  - Review reasonableness of engineering fee estimate for each project.
  - Assist Client in negotiation of contracts with selected firms.
  - Conduct kick-off meeting with project firm/team.
  - Review QA/QC plans submitted by design firms for conformance with County requirements.
  - Perform design and constructability reviews and provide one set of comments per submittal, including constructability reviews, in accordance with the Program Procedures Manual.
  - Provide design services for Road Bond projects when requested by County.
  - Coordinate environmental activities with design engineers, including project permitting, route/alignment issues, and right-of-way acquisition.
  - Review invoices, as requested.
  - Conduct a maximum of six (6) progress meetings per project and conduct in-house audits of project consultant activities on a monthly basis.
  - Oversee submission of plans to local governments, TxDOT, Texas Turnpike Authority (TTA), and Texas Commission on Environmental Quality (TCEQ), as required.
  - Provide project close-out, including obtaining and filing final design files received from design engineer once project construction is completed.
- 5. Manage and oversee the Environmental consultant activities, including:
  - Facilitate coordination between the Environmental consultant and design consultant.
  - Coordinate with Environmental consultant to obtain geological assessment, biological assessment, and endangered species habitat assessment for each project. Provide reviews in accordance with the Program Procedures Manual.

- Review and provide comments on Regional Habitat Conservation Plan (RHCP) applications for construction projects. Submit RHCP applications on behalf of Williamson County.
- 6. Manage the geotechnical investigations, develop contracts for geotechnical firms as needed, and review and disseminate results from the geotechnical investigations. Provide and/or review pavement design for all county road projects.
- 7. Manage and oversee survey firm activities, including:
  - Prepare or review survey scope of work for on-call or project specific work authorizations.
  - Coordinate with surveyor to obtain field notes for proposed ROW acquisitions.
  - Review draft field notes for accuracy and coordinate with ROW attorney for title search.
  - Coordinate with surveyor to perform miscellaneous tasks, such as staking existing or proposed ROW line, providing aerial or drone photography, or performing topographic survey.
- 8. Provide constructability reviews for each project, including:
  - Review reasonableness and constructability of construction documents at milestone submittals, during both planning and design phases. Documents to be reviewed may include schematics/plans, survey data, as-built records, existing and proposed ROW maps, adjacent project plans, geotechnical investigations/reports, environmental reports, ROW/easement agreements, utility information, and pavement reports.
  - Perform site visit to confirm the quality of existing site condition information provided in the construction documents.
  - Review proposed construction phasing and verify that the project and its phases are constructible based on the information provided in the traffic control sheets, and that traffic movements for the entire project limits have been addressed.
  - Review detours and traffic control to verify milling, level-up, pavement, signage, markings, etc. have been quantified and are included in the construction quantities.
  - Review geotechnical recommendations and confirm the recommendations have been incorporated into the design, and do not conflict with the information provided in the earthwork and structural specifications.
  - Review limits of construction to confirm that all proposed work is contained within the limits of the ROW or easements.
  - Review reasonableness of engineering fee estimate for each project.
  - Provide value engineering services for projects outside of scope and budget, as necessary.
- 9. Provide bid phase services, including:
  - Coordinate the preparation of the final bid documents.
  - Coordinate with Commissioner and Purchasing staff to set advertising and bidding schedule.
  - Prepare contract advertisement and project summary for placement on Court agenda for approval to advertise.
  - Facilitate the pre-bid conference.
  - Prepare/distribute meeting minutes and sign-in sheet to attendees.
  - Assist County and design engineer with answering contractor questions during advertisement period.
  - Coordinate the preparation and distribution of addenda. Review and approve addenda

prior to distribution to plan holders.

- Coordinate with TxDOT as necessary to verify the prequalification and bidding capacity of contractors requesting bid proposal documents for projects on state highway system or utilizing federal funding, including reimbursements.
- Attend the bid opening and review bids for completeness and compliance with the Invitation for Bids.
- Review design engineer's bid analysis and recommendation. Perform independent bid analysis, review bidder references, and review bidder qualifications.
- Coordinate with Commissioner regarding bidder reference results and recommendation of contract award.
- Prepare recommendation of contract award to the successful bidder, for placement on Court agenda for approval.

## **Construction & Warranty Phase Oversight**

- 1. Manage and oversee the construction of the projects, including:
  - Coordinate the preparation and execution of the construction contract documents.
  - Prepare and distribute Notice of Award to contractor.
  - Prepare and submit Notice of Intent to TCEQ and others, as required.
  - Coordinate distribution of Water Pollution and Abatement Plan or Contributing Zone Plan to contractor and construction observer.
  - Facilitate the pre-construction conference and prepare/distribute meeting minutes to attendees.
  - Perform pre-construction site visit and video existing conditions within the project limits for documentation purposes.
  - Prepare and distribute County TCEQ Site Notice to contractor for posting on construction project site billboard, as required.
  - Prepare and distribute the Notice to Proceed to contractor.
  - Coordinate the selection of an on-call testing firm for QA testing on behalf of the County and negotiate Work Authorizations as needed.
  - Review and evaluate contractor's construction schedule monthly.
  - Receive and process/approve construction submittals. Submittals approved by HNTB will be reviewed and returned to Contractor within fourteen (14) days of receipt.
  - Receive and review/document subcontractor agreements.
  - Perform construction observation and documentation and provide on-site staff on an as-needed basis to oversee construction of the projects.
  - Attend weekly construction progress meetings.
  - Prepare and issue construction update reports, weekly, bi-weekly, and/or monthly, depending on specific project requirements.
  - Photograph ongoing construction activities daily through construction of projects.
  - Prepare monthly construction update presentation for the Court.
  - Prepare and issue traffic control notifications to affected entities.
  - Perform and document traffic control inspections.
  - Perform and document SW3P inspections. Ensure contractor is complying with requirements of the Water Pollution and Abatement Plan or Contributing Zone Plan if applicable.
  - Receive and review QC test results for compliance with the specifications.
  - Schedule oversight (QA) testing on behalf of the County. Oversee the independent

testing firms.

- Coordinate with adjacent property owners, other agencies, and affected entities regarding construction schedule and impacts, or as needed.
- Assist the County in documentation of the DBE program.
- Prepare and process/respond to Requests for Information (RFIs) when necessary. Coordinate with the engineer of record as necessary.
- Prepare Change Orders when necessary. This may include negotiation of change order scope/prices and adjustments to contract time. Coordinate with Engineer of Record for plan and/or quantity revisions, as necessary. Prepare documentation detailing the reason for each Change Order and justification for new items, price adjustments, or time extensions. Discuss proposed Change Orders with the appropriate County Commissioner during development, submit proposed Change Order to the Court for approval, and facilitate and track further Change Order processing to completion.
- Maintain program summary of proposed and executed changes orders for active and completed construction projects.
- Maintain construction records, including project diaries, daily reports, pay folders, SW3P inspection records, and TCP inspection records, as needed. Construction records for projects on the TxDOT system, or containing state/federal funds, will comply with TxDOT Local Government Project Procedures requirements.
- Review and recommend for approval monthly construction pay applications. Review requested quantities for payment and compare to documented construction progress during the pay period, confirm that contract quantities/prices and Change Orders are accurately included, confirm paid to date and retainage amounts, confirm that contract time utilized is recorded appropriately, review Material on Hand invoices, review DBE monthly reports if required, and confirm that partial lien waivers are included for both contractor and subcontractors.
- Coordinate with contractor regarding status of construction invoice payments. Correspond with subcontractors and material suppliers, as needed, regarding any outstanding payments from prime contractor.
- Coordinate with bond holders as necessary in the event of default by the prime contractor.
- Review contractor punchlist and request for substantial completion. Coordinate a project walk through and prepare a punchlist on behalf of the County. Compile punchlist on behalf of County and any other stakeholders (city, TxDOT, etc.).
- Prepare and distribute Notice of Substantial Completion to contractor, along with punchlist of items required to complete the project.
- 2. Coordinate, schedule, and attend ground breaking and ribbon cutting ceremonies. Review and edit press releases for accuracy.
- 3. Update County Staff and County Commissioners on project status and issues. As needed, meet individually with County Staff and County Commissioners to discuss project status and issues in greater detail.
- 4. Manage and oversee construction phase engineering design efforts and any necessary plan revisions. Provide QA reviews of construction phase design documents. Reviews may include quantity confirmation, constructability review, review of specifications specified, coordination with the existing construction documents, etc.

- 5. Prepare construction phase invoices for County submittal to TxDOT, developers, Cities, or other local entities for reimbursement of expenditures on jointly funded projects, as needed.
- 6. Coordinate with utility relocation/coordination team regarding construction phase utility relocations and conflicts.
- 7. Coordinate with the ROW acquisition team regarding construction phase acquisitions. Review ROW contracts to ensure ROW obligations are met during construction.
- 8. Coordinate and meet with County Road and Bridge, Purchasing, and Audit departments, and other County representatives as needed.
- 9. Coordinate with State agencies (TxDOT, TTA, TCEQ) and local governments to facilitate construction of the projects with respect to facilities owned by these agencies, an/or to expedite the review and approval process of proposed change orders by these agencies.
- 10. Provide support to the County as requested in the event of a third-party claim.
- 11. Manage and oversee construction project close-out and warranty period, including:
  - Perform post-construction site visit to verify completion of the punchlist and video conditions within the project limits for documentation purposes.
  - Upon completion of the punchlist, prepare and distribute Certificate of Completion to contractor.
  - Negotiate and respond to contractor claims on behalf of the County, as needed. This
    may include review of contractor provided claim documentation, review of project
    records, meetings with County staff, County Commissioners, or program management
    personnel to discuss claim/response, negotiation meetings with contractor, and
    preparation/and distribution of correspondence.
  - Obtain final record drawings from Contractor and review for accuracy. Maintain a pdf file containing final record drawings for each project.
  - Prepare and process final balancing Change Order to reconcile quantities adjusted due to field conditions.
  - Review and approve final pay application and retainage release.
  - Receive warranty bond from contractor and perform quarterly warranty inspections during the warranty period.
  - Upon receipt of all required closeout documentation, prepare and distribute Certificate of Acceptance to the contractor.
  - Prepare quarterly warranty reports and distribute to contractor. Coordinate with contractor regarding completion of required warranty work and prepare/issue notice to contractor upon successful completion of warranty period.
  - Scan all contract files and compile an electronic record of contract documents. Provide project closeout package to County in electronic format, including final record drawings received from Contractor, after project construction is accepted and the files are closed.

Williamson County Road and Bridge General Engineering Consultant EXHIBIT D FEE SCHEDULE Contract No. 77139 Work Authorization No. 2

	Pri	ncipal	Sr. F Adı	roject visor	Project	Advisor	Sr. Project Manager	Projec Manag	ot D Ier	Deputy Project Manager	Sr. Engineer	Project Engineer		vironmental Specialist	Environmental Planner	GIS Analyst	Sr. Public Involvemer Representat	nt	Sr. Urban Planner	Urban Planne	r RO	W Agent	Sr. Construction Manager	Construction Manager
October 1, 2020 - September 30, 2021		241		-		75	665		537	202	585	10	01	44	127	114		31	31	31	1	31	202	202
WORK AUTHORIZATION TOTALS		241		-		75	665		537	202	585	10	01	44	127	114	1	31	31	31	1	31	202	202
BILLING RATES	\$	360	\$	325	\$	284	\$ 274	\$	222 \$	\$ 200 \$	\$ 200	\$ 17	70 \$	198	\$ 115	\$ 120	)\$1	17 \$	196	\$ 112	2\$	144	\$ 188	\$ 165
TOTAL HNTB LABOR	\$	86,760	\$	-	\$	21,300	\$ 182,210	\$ 119	9,214 \$	\$ 40,400 \$	\$ 117,000	\$ 17,17	70 \$	8,712	\$ 14,605	\$ 13,680	) \$ 3,6	27 \$	6,076	\$ 3,472	2 \$	4,464	\$ 37,976	\$ 33,330
HNTB Fee October 1, 2020 - September 30, 2021 SUBTOTAL Gray Engineering Fee October 1, 2020 - September 30, 2021 SUBTOTAL																								

JOB TOTALS

Williamson County Road and Bridge General Engineering Consultant EXHIBIT D FEE SCHEDULE Contract No. 77139 Work Authorization No. 2

	Construction Represe			construction Construction presentative Representativ III II			Sr. Developer	Developer II		Developer		Sr. Business Manager		Sr. Project Analyst	Project Analyst		Quality Manager		Sr. Project Controls		Project Controls		Scheduler		T	TOTALS
October 1, 2020 - September 30, 2021		202		404	:	202	31		31		31		13	-		114		57		202		431		13		4,950
WORK AUTHORIZATION TOTALS		202		404	:	202	31		31		31		13	-		114		57		202		431		13		4,950
BILLING RATES	\$	155	\$	135	\$	25	\$ 172	\$	150	\$	112	\$	198	\$ 140	\$	96	\$	160	\$	144	\$	90	\$	158		
TOTAL HNTB LABOR	\$	31,310	\$	54,540	\$ 25,3	250	\$ 5,332	\$	4,650	\$	3,472	\$	2,574	\$-	\$	10,944	\$	9,120	\$	29,088	\$	38,790	\$	2,054	\$	927,120
														Total					enses					consultant		TOTAL
														Hours			Prin	it/Repro		Travel		Labor		Fees		FEE
HNTB Fee October 1, 2020 - September 30, 2021 SUBTOTAL														4,950 <b>4,950</b>			\$	10,000	\$	10,000	\$	927,120			\$ \$	947,120 <b>947,120</b>
Gray Engineering Fee October 1, 2020 - September 30, 2021 SUBTOTAL														2,366 <b>2,366</b>			\$	2,500	\$	2,500			\$	321,647	\$ \$	326,647 <b>326,647</b>
JOB TOTALS														7,316			\$	12,500	\$	12,500	\$	927,120	\$	321,647	\$	1,273,767