

ATTACHMENT A

WORK AUTHORIZATION NO. 14

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of the Agreement dated December 12, 2006, hereinafter identified as the "Agreement", entered into by and between Williamson County, a political subdivision of the State of Texas ("**County**"), and HNTB Corporation ("**Engineer**").

Part 1. The **Engineer** will provide the following engineering services:

FM 1660 at Landfill Road Intersection Improvements

Part 2. The maximum amount payable for services under this Work Authorization without modification is \$ 95,917.00. A fee schedule used to establish the maximum amount payable is attached hereto as Exhibit D-1. The billing rates and classifications are attached hereto as Exhibit D-2.

Part 3. Payment to the **Engineer** for the services established under this Work Authorization shall be made in accordance with the Agreement.

Part 4. This Work Authorization shall become effective on the date of final acceptance of the parties hereto and shall terminate on March 1, 2011, unless extended by a Supplemental Work Authorization.

Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.


Part 6. This Work Authorization is hereby accepted and acknowledged below.

ENGINEER:

HNTB Corporation

COUNTY:

Williamson County, Texas

By: 
Signature

Richard L. Ridings, P.E.
Printed Name

Vice President
Title

2/22/10
Date

By: _____
Signature

Judge Dan A. Gattis
Printed Name

Williamson County Judge
Title

Date

LIST OF EXHIBITS

- Exhibit A - Services to be Provided by County
- Exhibit B - Services to be Provided by Engineer
- Exhibit C - Work Schedule
- Exhibit D-1 - Fee Schedule
- Exhibit D-2- HNTB rates and Classifications

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**EXHIBIT D-1
HNTB FEE SCHEDULE**

Contract No. 45026
Work Authorization No. 14
FM 1660 at Landfill Road Intersection Improvements

TASK DESCRIPTION	PROJ PRINCIP	ENV DIRECTOR	SR PROJ MNGR	PROJ MNGR	DEP PROJ MNGR	SR CONST SPEC	ENGR IV	ENGR III	TECH/PLNR	SR ENV TECH/PLNR	PROJ ADM	ENR TECH/PLNR	CONST TECH	ENGR II	SR CADD TECH	ADM ASST	TOTAL
HYDRAULIC DATA SHEETS							4	2	4						4		8
ROADWAY SWALE DETAIL SHEETS							4								16		20
CULVERT LAYOUT SHEETS							4							8			12
DITCH CALCULATION SHEETS								4						4			5
SW3P SHEETS								1						2			3
DRAINAGE QUANTITIES								1									
SUBTOTAL LABOR HOURS							20	28						18	20		86
SUBTOTAL LABOR COST	\$	\$	\$	\$	\$	\$	2,180.00	2,632.00	\$	\$	\$	\$	\$	1,440.00	1,880.00	\$	8,232.00
FC 162 - SIGNING AND MARKINGS																	
SMALL SIGN LAYOUT SHEETS								4									12
PAVEMENT MARKING SHEETS								4									12
SUBTOTAL LABOR HOURS								8							16		24
SUBTOTAL LABOR COST	\$	\$	\$	\$	\$	\$		752.00	\$	\$	\$	\$	\$		1,584.00	\$	2,336.00
FC 163 - MISCELLANEOUS (ROADWAY)																	
EXISTING UTILITY LOCATION REVIEW							2	2							24		34
CONSTRUCTION SEQUENCING AND TRAFFIC CONTROL								1							8		9
TITLE SHEET							1	4									5
GENERAL NOTES							1	4									5
SPECIFICATION LIST							1	4									5
INDEX SHEET							2	8						4			18
COST ESTIMATES							2	8						8			10
CONSTRUCTION TIME SCHEDULE								8									27
DESIGN AND PS&E DATA							5	10									
SUBTOTAL LABOR HOURS							12	10							48		119
SUBTOTAL LABOR COST	\$	\$	\$	\$	\$	\$	872.00	3,384.00	\$	\$	\$	\$	\$		4,752.00	\$	12,823.00
FC 190 - PRE-LETTING ACTIVITIES																	
PROJECT MANUAL							4	24									36
PRE-BID MEETING							8	4								2	6
RESPOND TO PRE-LETTING RFIS							8	4									16
PREPARE ADDENDA							8							16		4	32
BID ANALYSIS AND COMPARISON								4									4
RECOMMENDATION OF CONTRACT AWARD							2									1	3
SUBTOTAL LABOR HOURS							20	28							16		97
SUBTOTAL LABOR COST	\$	\$	\$	\$	\$	\$	2,180.00	2,632.00	\$	\$	\$	\$	\$		1,280.00	\$	10,173.00

EXHIBIT D - 2

Contract No. 45026

WILLIAMSON COUNTY CONSULTING SERVICES HNTB RATES & CLASSIFICATIONS

<u>Classification</u>	<u>WA 14 Billing Rate</u>
Project Principal	\$203
Environmental Director	\$187
Sr. Project Manager	\$185
Project Manager	\$140
Sr. Engineer	\$130
Construction Manager	\$140
Business Manager	\$115
Deputy Project Manager	\$120
Sr. Construction Specialist	\$120
Environmental Specialist	\$109
Engineer IV	\$109
Construction Representative	\$100
Sr. CADD Technician	\$99
Sr. Environmental Tech/Planner	\$94
Engineer III	\$94
Project Administrator	\$86
Environmental Tech/Planner	\$85
Engineer II	\$80
Construction Technician	\$70
Engineer I/CADD Technician	\$65
Administrative Assistant	\$63
Expert Witness Testimony	\$240

EXHIBIT A

SERVICES TO BE PROVIDED BY THE COUNTY

The work to be performed by the Engineer under this Billing Rate Contract shall consist of providing engineering services required to develop the PS&E for the FM 1660 and Landfill Road (CR 128) Intersection Improvements.

The County will provide the following services:

1. Assist the Engineer, as necessary, to obtain required data and information, approvals from other local, regional, State and Federal agencies.
2. Review and provide comments on all aspects of the design and PS&E preparation.
3. Provide all required contract documents for Project Manual.
4. Provide decisions in a timely manner.
5. Process payment to Engineer in a timely manner.
6. Assist with right of entry, if required for the Engineer.

EXHIBIT B

SERVICES TO BE PROVIDED BY THE ENGINEER

PROJECT DESCRIPTION

The work to be performed by the Engineer under this Billing Rate Contract shall consist of providing engineering services required to develop the PS&E and associated Bid Phase Services for the FM 1660 and Landfill Road (CR 128) Intersection Improvements. The improvements include widening FM 1660 for the addition of a left turn lane from northbound FM 1660 to Landfill Road; adding a deceleration lane to southbound FM 1660 and an acceleration lane from Landfill Road. The project is approximately 0.50 miles in length.

Plans from the Engineer, and all subproviders, will be developed in accordance with the TxDOT Graphics Standards.

The Engineer will prepare a Programmatic Categorical Exclusion (PCE) related to the proposed improvements at the intersection. This scope assumes that less than 30 acres of new right of way will be acquired as part of this project.

PREPARATION OF A PROGRAMMATIC CATEGORICAL EXCLUSION (FUNCTION CODE 120)

Assuming that the proposed improvements will be paid for with Williamson County funds, the Engineer shall prepare environmental documentation utilizing the appropriate outline in accordance with TxDOT's Environmental Manual, Title 23, Part 771, 772, FHWA's Technical Advisory T6640.8A, TxDOT's 1996 Noise Guidelines, and TxDOT 2006 Air Guidelines. The Engineer will prepare a PCE, and will assist the County in following this document through the TxDOT review process. Tasks included in preparation of the PCE include the following:

Data Collection

The data collection phase and site reconnaissance visits will begin upon notice to proceed. The Engineer will obtain or update periodically publicly available information including:

- Locations of public buildings, schools, churches, parks, etc.

EXHIBIT B

- Aerial/Infrared photography, if available.
- National Wetland Inventory Maps.
- County Soil Survey Maps.
- TCEQ & EPA Hazardous Materials Database Information.
- FEMA 100-year floodplains.
- Vegetation Information.
- Threatened and Endangered Species Information.

Environmental Project Description

The Engineer will prepare a description of the existing facility, a description of the proposed action, and a description of the existing environment. The purpose and need for the project will also be developed and presented.

Impacts

The Engineer will address any impacts of the proposed action on the existing environment. Resources addressed include historical and archeological resources, wildlife, vegetation, and endangered species, displacements, land use analysis, socioeconomic and environmental justice impacts, jurisdictional waters, water quality, wetlands, permits, floodplains, parkland, hazardous materials, aesthetics, construction impacts, air and noise, and items of special nature and conclusion.

Historic Resources Survey

The Engineer will conduct surveys, research and documentation of historic buildings, structures, and objects within the Area of Potential Effect (APE) for each project. The historic structures survey will follow the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation and will include:

- Research Design for approval by TxDOT;
- Field inspection;
- Documentation of the survey results;
 - For buildings and other structures, objects and districts, the documentation will include the following for the area of survey, within the APE on either side of the right of way, for any property over 45 years old:

EXHIBIT B

- A map showing the location of the property in relation to the proposed project area.
 - Date of construction.
 - Clear photographic prints, including at least one front elevation and one oblique view of each property surveyed, and area or streetscape views in potential districts.
 - Research on historical associations.
-
- Identification of cultural resources that may be eligible for listing or are listed in the National Register of Historic Places, including historic and prehistoric archeological sites, buildings and other structures, objects, districts, traditional cultural properties, and cultural or historic landscapes located during the survey.
 - Recommendations regarding National Register eligibility of identified cultural resources;
 - Recommendations and descriptions on findings of potential effect; and
 - Project effects on potentially eligible cultural resources.

Public Involvement Activities

The Engineer will conduct up to five (5) meetings with affected property owners for the purpose of presenting proposed design changes and resultant effects on access. The Engineer will prepare a summary of each meeting and submit to TxDOT and Williamson County. If requested by TxDOT or Williamson County, the Engineer can coordinate a Public Meeting, however a supplemental agreement will be required.

Document Preparation

The Engineer will prepare the PCE document per TxDOT guidance and will submit to the County and TxDOT for review. Per new TxDOT policy, it is anticipated that TxDOT Austin District will require one round of revisions to the PCE. The Engineer will address up to one round of comments from TxDOT Austin District. It is anticipated that TxDOT ENV will not review the PCE. Additional rounds of comments will require a supplemental agreement.

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The Engineer will address minor design changes which occur prior to document submittal. Document preparation includes preparation of exhibits to support descriptions and conclusions in the document.

PROJECT MANAGEMENT/ADMINISTRATION (FUNCTION CODE 145)

Project Management and Coordination

The Engineer shall manage all activities associated with the project. Establishment of project schedules and channels of communication will be included in this task. The Engineer shall secure resources necessary to produce the project deliverables and meet the project schedule. All communications associated with the project will be directly channeled through the Engineer for distribution to the project team as appropriate. The Engineer shall designate one Texas Registered Professional Engineer, Ronald L. Tabor, P.E., as Project Manager to be responsible throughout the project for project management and all communications, including billing.

The Engineer will be required to meet with the designated County Project Manager, TxDOT Project Manager, and other TxDOT or Williamson County representatives, as necessary to report on progress and to ensure all components of the project are proceeding in compliance with the scope of services and according to the project schedule. The purpose of these meetings is to evaluate the project status, determine necessary adjustments to the project work plan and schedule, plan upcoming events and to discuss and resolve project technical issues. The Engineer will prepare minutes of each meeting and circulate to all attendees.

The engineering work on this project may be inspected by the County and TxDOT at any time in the offices of HNTB Corporation at 301 Congress Avenue, Suite 600, Austin, Texas, 78701. Other fieldwork and miscellaneous specialized subcontract work will be performed on site or at our Subconsultants' offices.

General Administration

Perform general administration duties required to maintain the project. These duties include:

EXHIBIT B

- **Coordination with subconsultants:** Prepare and execute contracts with subconsultants, monitor subconsultant activities (staff and schedule), and review and recommend approval of subconsultant invoices. Subconsultant progress reports and invoices will be incorporated into the monthly progress report and invoices.
- **Preparation of monthly progress reports and invoices:** Invoices for work completed during the period will be submitted monthly for the Engineer and subconsultants. The invoice content and format will be in accordance with the specified County criteria. Monthly progress reports will include:
 - Activities during the reporting period.
 - Activities planned for the following months.
 - Project action item and project schedule maintenance.
 - Overall status of project.
 - Pending issues that need short-term attention.
 - Record keeping and file management.
 - Data management and file transfers for required elements of the project.
 - Files will be posted to Internet database management system as requested.
 - All plans, including electronic files, shall be turned over to the State and County at project's completion/contract close-out

SURVEY (FUNCTION CODE 150)

PROJECT SURVEY CONTROL

The Engineer will provide the following services:

- Engineer will recover and/or establish and utilize established control (projects in vicinity). The values will be relative to NAD 83 Texas State Plane Coordinates, Central Zone 4203 (scaled to surface values). Vertical Datum will be GPS Orthometric heights and projected through the length of the project.

ON-THE-GROUND TOPOGRAPHIC SURVEY SERVICES

The Engineer will provide the following services:

EXHIBIT B

- Engineer will collect sufficient spot elevations and grade breaks that will include an area within the existing ROW. The data will consist of: visible utilities, drainage features, and any improvements within the defined area. The basic cross section of data will have ditch tops, bottoms, edges of pavement, striping, and super elevations at approximately 50 foot intervals.
- Engineer will generate a 1 foot contour interval DTM file of the project area.
- Engineer will research, reconstruct, and include the existing ROW schematic per the record information and field recovery of markers thereof.
- Survey Deliverables- Engineer will deliver a 2D Microstation V8 dgn file with planimetrics, survey control and approximate ROW lines; 3D Microstation V8 (dtm) file, TIN file, ascii text file containing the survey data points, a GPK (geopak file) and field book copies.

RIGHT OF WAY (ROW) MAPPING

Engineer will provide the following ROW mapping services:

- Engineer will prepare metes and bounds descriptions with accompanying survey plats for up to 3 parcels along the west side of the project out of the County properties north and south of Landfill Road. This task will be prepared to TxDOT standards according to the Right-of-Way Manuals Volumes I and II. The acquisition packages will include a numbered parcel plat and metes and bounds description for each affected tract.

ROADWAY DESIGN CONTROLS (FUNCTION CODE 160)

The Engineer will:

- Provide Subtask Management and Coordination of Roadway Design efforts related to the project.
- Design horizontal and vertical alignments for FM 1660, Landfill Road and pavement transitions.
- No additional right of way is anticipated at this time. If additional right of way is required, a supplemental agreement will be required for this additional service.

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The Engineer will develop:

- Project Layout sheets.
- Existing Typical Section sheets for FM 1660 and Landfill Road.
- Proposed Typical Sections for FM 1660 and Landfill Road.
- Horizontal Alignment Data, Survey Control and Benchmark Data sheets.
- Roadway Plan and Profile Sheets for FM 1660 and Landfill Road.
- Roadway Detail Sheets for FM 1660 and Landfill Road intersection.
- Miscellaneous Roadway Detail sheets.
- Design Cross Sections and determine Earthwork Volumes utilizing Geopak.
- Roadway Quantity Summaries and Cost Estimates.
- Roadway Standard sheets.

DRAINAGE (FUNCTION CODE 161)

The Engineer will:

- Provide Subtask Management and Coordination of Drainage Design efforts related to the project.
- Determine basis of flow by performing hydrologic studies, including drainage area maps, discharge determination and stage-discharge determination.
- Perform hydraulic drainage data, including hydraulic computations for culverts and channels (if applicable). Prepare Hydraulic Data Sheets to include in the plans.
- Provide drainage design for swales and drainage structures to accommodate the surface drainage along the project limits. All designs will be prepared in conformance with TxDOT standards. Prepare roadway swale detail sheets as required.
- Prepare a SW3P plan for the project location in accordance with current US EPA requirements and local criteria. Prepare SW3P plans and details as required.
- Layout, design, and detail drainage features. Design may include new culverts, improvements to existing and outfall channels. Prepare Drainage Plan and Profile sheets and miscellaneous details of proposed drainage facilities.
- Calculate drainage quantities and prepare a summary of drainage quantities sheets.

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- Identify and insert required drainage standards.

SIGNING AND MARKINGS (FUNCTION CODE 162)

Signing

The Engineer will provide:

- Overall Subtask Management and Coordination of the Signing design and plan preparation efforts.
- Existing Sign Removal Layouts.
- Small Sign Layouts.
- Miscellaneous Sign Details as required.
- Summary of Small Signs.
- Signing standards.

Pavement Markings

The Engineer will provide:

- Overall Subtask Management and Coordination of the Pavement Marking design and plan preparation efforts.
- Summary of Pavement Markings Quantities sheet.
- Pavement Marking and Delineation Layouts. Layout will show the project centerline stationing and proposed markings, delineators and object markers. Layouts will include a summary of existing markings to be removed.
- Pavement marking standards.

MISCELLANEOUS (ROADWAY) (FUNCTION CODE 163)

Utilities

The Engineer will:

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- Provide Subtask Management and Coordination for the Utility coordination activities associated with the design of the project. Coordination efforts will include TxDOT, Williamson County, utility companies, and other function code tasks.
- Review proposed highway design data for potential conflicts with existing utilities based on the information provided by utility companies and field observation.
- Coordinate with TxDOT, Williamson County and the appropriate utilities to address solutions to utility conflicts.

NOTE: No utility conflicts are anticipated at this time. Subsurface utility exploration efforts and utility relocation plans are not included in this scope of work. Any utility relocation plans to be completed by the Engineer that may be necessary for the project shall be completed under a separate Work Authorization.

Construction Sequencing and Traffic Control Plan

The Engineer will:

- Provide overall Subtask Management and Coordination of the Traffic Control design effort, and coordinate activities with other function code tasks.
- Prepare traffic control plans (TCP) for each phase necessary for the construction of the FM 1660 and Landfill Road intersection. The TCP shall show the detailed construction sequences and the necessary phases, complete with barricades, signing, striping, delineation, detours, temporary traffic signals and their adjustments. Each phase of the TCP shall show the location of the traffic flow indicated by directional arrows.
- Prepare quantity estimates for each traffic control bid item. These quantities will be estimated for each sheet and totaled by phase.
- Determine the project construction sequence and design a traffic control plan based upon the Texas Manual on Uniform Traffic Control Devices (TxMUTCD) and the latest Austin District traffic control design requirements.

NOTE: Typical sections showing the traffic lanes, construction pavement markings, delineators, barriers, buffer zone for barrels and CTB, pavement drop-off and construction detail shall be shown on each sheet. Construction signing shall be

EXHIBIT B

represented pictorially and designated with the appropriate identification number as shown in the TxMUTCD.

- Prepare temporary detour sheets as necessary.
- Prepare miscellaneous TCP details sheets as necessary.
- Provide Barricade and Construction standards and other appropriate standard drawings.

NOTE: Temporary lighting during the construction sequencing is not anticipated in this project. If temporary lighting is required, it will be considered additional services.

Miscellaneous

The Engineer will provide:

- Title sheet for the plan set.
- TxDOT Form 1002.
- General notes for the construction documents.
- List of governing specifications.
- Index of sheets.
- Cost estimates will be prepared using a spreadsheet format and will be updated at approximately 60%, 90%, and 100% completion of the design.
- Quality Control/Quality Assurance for all design and plan production activities.

PRE-LETTING ACTIVITIES (FUNCTION CODE 190)

Bid Phase Services

The Engineer will:

- Provide Project Manual with all required TxDOT and Williamson County contract documents as deemed appropriate by Williamson County.
- Attend the pre-bid meeting and the bid opening.
- Respond to pre-letting Requests for Information and clarifications as requested by bidders.

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- Prepare Addenda as needed to clarify or correct plans or contract documents as needed.
- Provide bid analysis and comparison.
- Provide Recommendation of Contract Award.

PROJECT DELIVERABLES

Deliverables will consist of the following and will include posting to ProjectWise:

- Four (4) paper copies of the 60% PS&E and 90% PS&E submittals;
- Four (4) bound paper copies of the Project Manual at the 90% and 100% PS&E submittals;
- Four (4) bound paper copies of the Project Manual after the bid award;
- Four (4) paper copies of the final plans and one (1) mylar copy of the Title Sheet;
- Electronic and four (4) paper copies of cross sections and *.xsr output.
- An electronic copy of the final design files in Microstation and .pdf format. The project QLD deliverables consist of two (2) sets of plan sheets and two (2) sets of electronic files in MicroStation US feet (2D) DGN format and all available utility records scanned and placed on CD-ROM.
- Four (4) bound copies of the Right of Way Plans
- One (1) mylar copy of the Right of Way Plans

It is anticipated that TxDOT Austin District will require up to two rounds of revisions to the PCE.

- The Engineer will address up to two (2) rounds of comments from TxDOT Austin District.
- The Engineer will provide up to four (4) copies of the PCE following each round of comments (a total of 8 copies).

It is anticipated that TxDOT ENV may require up to three (3) rounds of revisions to the PCE.

- The Engineer will address up to three (3) rounds of comments from TxDOT ENV.
- The Engineer will provide up to eleven (11) copies of the PCE following each round of comments (a total of 33 copies).
- The Engineer will address any final comments from TxDOT ENV and prepare eleven (11) copies of the Final PCE.
- The Engineer will also provide an electronic version of the PCE and any necessary supporting documentation on a CD for the State's files. Two iterations of the Historic Resources report will be prepared. The first iteration will include 6 copies of the Historic Resources report for TxDOT-District review and comment. The second iteration will

EXHIBIT B

include 6 copies of the final Historic Resources report for TxDOT ENV and Williamson County.

EXCLUSIONS

The following tasks are not included in this work authorization and would be scoped and detailed at a later date, as necessary:

- Archeological coordination involving National Register Testing and/or Data Recovery-level excavation or mitigation or Section 106 Coordination;
- Karst investigations;
- Traffic noise analysis;
- Section 7 USFWS Consultation or the preparation of a Biological Assessment;
- Preparation and coordination for Section 4(f) or Section 6(f) approval;
- Hazardous materials Phase II Environmental Site Assessment;
- Construction monitoring;
- Indirect and Cumulative Impacts Analysis;
- Additional documentation services requested as a result of a change in environmental regulations or TxDOT documentation standards from those in practice and acceptable at the time of approval of this Work Authorization;
- Work associated with outfalls outside the project ROW.
- Public Meetings or a Public Hearing.
- Subsurface utility exploration (SUE) services.
- Illumination design or plans.
- Geotechnical or pavement design services.
- Traffic studies.
- Warrant studies.
- Utility relocation design or plans.
- Temporary lighting.
- Services after the award of the construction contract.

