CONTRACT FOR ENGINEERING SERVICES
SUPPLEMENTAL AGREEMENT NO. 3
TO THE PROFESSIONAL SERVICES AGREEMENT

STATE OF TEXAS §
COUNTY OF WILLIAMSON §

THIS SUPPLEMENTAL AGREEMENT to contract for engineering services is by and between Williamson County, Texas, a political subdivision of the State of Texas, *(the "County")* and **Halff Associates, Inc.** *(the "Engineer")* and becomes effective when fully executed by both parties.

WHEREAS, the *County* and the *Engineer* executed a contract on **February 19, 2007**;

WHEREAS, the not-to-exceed fee in Exhibit 1, Section 1, Item the agreement to **$734,844.00**; and,

WHEREAS, the ***"Compensation Cap"*** in Exhibit 1, Section 4, Item 4.3 limits the maximum amount payable under the agreement to **$800,000.00**; and,

WHEREAS, the Hourly Rates in the original Exhibit II are still applicable; and,

WHEREAS, it has become necessary to amend the agreement.

AGREEMENT

NOW, THEREFORE, premises considered, the *County* and the *Engineer* agree that said contract is amended as follows:

I. The not-to-exceed fee in Exhibit 1, Section 1, Item 1. I is hereby increased from **$734,844.00** to **$1,166,370.85**.
II. The Compensation Cap in Exhibit 1, Section 4, Item 4.3 is hereby increased from **$800,000.00** to **$1,220,000.00**.
III. The hourly Rates in the original Exhibit II are still applicable.

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the ***County*** and the ***Engineer*** have executed this supplemental agreement in duplicate,

ENGINEER:
By: Michael A Meya
Signature

Michael A. Meya
Printed Name

Vice President
Title

12/18/08
Date

COUNTY:
By:
Signature

DAN A. GATTIS
Printed Name

County Judge
Title

12-24-08
Date

EXHIBIT II

HOURLY RATES

1. Principle	$190
2. Project Manager	$168
3. Senior Professional Engineer	$135
4. Professional Engineer	$111
5. Engineer in Training	$88
6. PM Planner/Landscape Architect	$155
7. Senior Planner/Landscape Architect	$81
8. Junior Planner/Landscape Architect	$61
9. PM Environmental Scientist	$132
10. Senior Environmental Scientist	$86
11. Junior Environmental Scientist	$67
12. CADD/GIS/Visual Technology	$67
13. Survey Manager	$115
14. Survey Technician	$70
15. Survey/SUE Crew	$118
16. Clerical/Administrative	$42

Project Name: RM 620 Schematic & EA

ATTACHMENT A

WORK AUTHORIZATION NO. 4

This Work Authorization is made pursuant to the terms and conditions of the Agreement entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (***the "County"***) and Halff Associates, Inc. (***the "Engineer"***).

Part1. The ***Engineer*** will provide the following engineering services:

Schematics along RM 620 from SH 45 to Deep Wood Drive and an Environmental Assessment along RM 620 from SH 45 to IH 35, all in Williamson County, Texas.

Part 2. The maximum amount payable for services under this Work Authorization without modification is $553,352.00.

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 December 15, 2010, unless extended by a Supplemental Work Authorization.

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

Project Name: RM 620 Schematic & EA

ATTACHMENT A (con't.)

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

ENGINEER:	COUNTY:
Halff Associates, Inc.	Williamson County, Texas
By: Michael A Meya	By:
Signature	Signature
Michael A. Meya	Dan A. Gattis
Printed Name	Printed Name
Vice President	County Judge
Title	Title
12/18/08	12-24-08
Date	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 - Fee Schedule *(based on approved rates in PSA Exhibit II executed by Commissioners Court action)*

WORK AUTHORIZATION #4

EXHIBIT A

SERVICES PROVIDED BY THE COUNTY

FOR

PRELIMINARY ENGINEERING / ENVIRONMENTAL

RM 620

IN WILLIAMSON COUNTY

FROM SH 45 TO IH 35

This engineering scope includes the following major tasks:

- Schematic Design for RM 620 from SH 45 to Deep Wood Drive as a MAD-6 and for the portion of RM 620 from Deep Wood to IH 35 as a "No-Build" alternative (Tasks 1-6)
- Environmental Assessment for RM 620 from SH 45 to IH 35 (Task 7)

Informational Services by County

The County/TxDOT will make the following available for Engineer access:

- Assist Engineer in obtaining property owner information from Williamson Co. Appraisal District
- Obtain permission from TxDOT to use data gathered and produced during the TxDOT Route Study

Coordination Services by County

- Advertise and publish legal notices for public meetings and hearing
- Preside over Public Meetings/Hearings
- Provide assistant personnel for public meeting/hearing registration
- Assist Engineer in obtaining property rights-of-entry for environmental and ground surveys.
- Post and Maintain project information on the County website.
- Distribute / mail public meeting notices and newsletters
- Review Engineer work progress, schedules, reports, preliminary/detailed plans, environmental documentation, and cost estimates.
- Support project development with stakeholders such as agencies and the private sector.
- Provide Pubic Involvement Firm for tasks detailed in the enclosed scope of services

EXHIBIT B

SERVICES PROVIDED BY ENGINEER

FOR

PRELIMINARY ENGINEERING / ENVIRONMENTAL

RM 620

IN WILLIAMSON COUNTY

FROM SH 45 TO IH 35

Scope of Services provided by Halff Associates, herein referred to as "Engineer" for Williamson County, herein referred to as "County", and involves Preliminary Engineering associated with redesigning the RM 620 Highway within the Cities of Austin and Round Rock, in Williamson County, Texas. Project management services for the County will be provided by the County's "Contract Manager (PSI)", or its "Designated Representative (HNTB Corporation)." The completion of Services is based upon concurrent National Environmental Policy Act (NEPA) processing pursuant to the enclosed schedule.

Engineer will evaluate social, economic, environmental, hydraulic impacts; traffic management and cost-effectiveness of alternatives/alignments; strategies and means necessary to attain local, regional, state and national transportation goals, and financing. Alternative C (MAD-6) from the 2005 Corridor Study and the No-Build alternatives developed in the Feasibility Study will be used in the NEPA process. Two early project scoping meetings (described in Section 2.1) are provided to develop consensus with TxDOT and FHWA for the 'no-build' schematic scenario east of Deep Wood. Development, revision or completion of design schematics east of Deep Wood is excluded, but if they are required due to FHWA, TxDOT, or public comment, or at the County's direction, can be provided by a supplemental agreement.

Services will involve public involvement/outreach and conclude with completion of Federal Highway Administration (FHWA)-approved typical section(s), English-unit Preliminary Design Schematics, and Environmental Assessment (EA) anticipated to provide environmental clearance [Finding of No Significant Impact (FONSI)]. The current CAMPO 2030 *Metropolitan Transportation Plan* will be the MTS regional guidance/conformance measure. Service is based upon enclosed schedule from Notice to Proceed through FONSI with roadway limits for RM 620 from SH 45 to IH 35. Total centerline length is approximately 5 miles.

Engineer will coordinate with the offices of Williamson County, TxDOT, Capital Metro, Cities of Round Rock and Austin, and CAMPO.

TASK 1 - PROJECT MANAGEMENT AND COORDINATION (FC190)

Engineer, in association with the Williamson County Road Bond Manager, herein referred to as "Contract Manager", will be responsible for directing/coordinating all activities associated with redesigning RM 620 ("Project").

Engineer will generate and complete Preliminary Design Schematics for the portion of RM 620 from SH 45 to Deep Wood Drive widened to a MAD-6, and for the portion of RM 620 from Deep Wood to IH 35 as a "no-build" alternative. No improvements to IH 35 are included in this schematic.

All design solutions will be coordinated with, and properly tie into, any other known existing State and/or non-State project(s), either conceptual or ongoing.

1.1 - Management Plan

Contract Manager may request that a Plan be prepared to identify Project aspects including: organization and responsibilities, coordination and communication procedures, Project meetings, document format, report format, technical memorandum format, graphic production standards, quality procedures/plan, and other important operational information pertaining to Engineer/Contract Manager collaboration. Engineer will confirm and incorporate the Services herein as part of the Management Plan.

Deliverable

- Management Plan as directed (up to three copies).

1.2 – Monthly Progress Reports, Invoices, and Billings

Engineer will adhere to Project schedule(s) and prepare Monthly Progress Reports. These Reports will include, but not be limited to:

A. TASKS completed during the reporting period.
B. TASKS/Objectives planned for upcoming periods.
C. Problems encountered and the actions to remedy them.
D. Overall Project status, including a tabulation of TASK percentage complete, management schedule indicating Project development progress, and supporting documentation.

Engineer and sub-consultant invoices will be submitted to the Contract Manager.

Deliverables

- Progress Report (1 copy per Invoice/Billing).
- Invoices (1 copy per Billing).

1.3 - Coordination/Administration

Development and maintenance of effective communication between Engineer, Contract Manager, and other entities is key to achieving successful/expedient Project completion. Engineer will oversee preparation of all documents and manage all Project activities:

A. Coordination. All correspondence and coordination will be handled through, and with the concurrence of, the Contract Manager.
B. Lines of Communication. Communications between the Engineer and the County is via the Contract Manager unless otherwise directed by the Contract Manager or County. Engineer

shall designate one Texas Registered Professional Engineer as the Project (Services) Manager responsible for Project management and all Contract Manager Communications.

C. Administration. Engineer will manage all Project activities (including scheduled/unscheduled meetings), direct Engineer's team/staff correspondence with County, and assist the County in preparing responses to Project-related internal/external inquiries.

D. Project Meetings. Approximately 20 meetings involving Engineer are forecasted with external parties:

1) regional, local, state, and federal agencies/offices (5 meetings);
2) property owner(s) concerning Project issues/concerns/questions (5 meetings);
3) utility owners (2 meetings);
4) railroad companies (1 meeting);
5) other consulting firms (2 meetings); and
6) elected officials, civic groups, etc., as needed or specified by the County (5 meetings).

When time and circumstances allow, Engineer will discuss as necessary any known meeting agendas with the Contract Manager prior to each meeting to ensure that released information is appropriate and correct. Project data collected will not be released to any non-County office and/or the public at-large without Contract Manager approval. Engineer will document all Project-related meetings attended by the Engineer and will forward meeting minutes to the Contract Manager unless meeting minutes are provided by another party. Engineer will maintain an ongoing, functional Catalogue of attendee names, dates, locations, names/telephone numbers/addresses, and all matters discussed.

E. Correspondence. Engineer will submit all written materials, letters, survey forms, etc. used to solicit Project information, and/or collect data, to Contract Manager for review and acceptance before distribution to other parties. Copies of all outgoing correspondence and all incoming correspondence will be provided to Contract Manager on a minimum monthly basis. Correspondence and reports will bear the approved state/federal Project identification number(s) as determined appropriate by Contract Manager. All document processing will be prepared using Microsoft Word, version 2003 or compatible Microsoft Word format. Any computer discs/diskettes utilized will be IBM compatible.

F. Agency Communication. Project communication with other agencies will be processed by the County, unless otherwise instructed by Contract Manager in order to ensure all parties are internally aware of any Project decisions/conclusions.

G. Release of Information. Release of Project-related information to non-County offices must be approved by Contract Manager. Any information released or distributed must be marked "Preliminary – Subject to Change Without Notice" or "DRAFT" or similar disclaimer.

H. Document Printing and Distribution. Engineer will be responsible for printing copies of all draft and final documents, reports, etc. produced for the Project unless otherwise defined by a specific Task described herein. Copies may be double-sided as agreed to by Contract Manager. The County office will be responsible for distribution of draft and final documents (excluding minutes) to agencies and organizations and when responding to public inquiries. The Engineer will provide documents to the County for posting on the County's internet database management system, as requested.

I. Service Completion. Upon Project completion/finalization, Engineer will submit all original Project files, exhibits, etc. to the County. Copies of original Project files will be retained by Engineer for a minimum of three (3) years after submittal of originals to the County.

J. Evaluation. Engineer performance, professionalism, quality of work, etc. may be subject to assessment by the County.

Deliverables
- All incoming correspondence (1copy).
- All outgoing correspondence (1 copy).
- Coordination (meeting) Catalogue (internal use only).
- Original (Project) files (1copy).

1.4 - Control/Scheduling

Engineer will prepare a detailed, colorized (11" x 17", if possible) graphic Project Schedule indicating Tasks/Subtasks, critical dates, milestones, deliverables, and agency reviews (timeframe) requirements. Project schedule will be in a format depicting the order and interdependence of the Tasks, Subtasks, milestones, and the deliverables specified herein. Progress will be reviewed monthly and should reviews indicate a substantial, justifiable change in progress, the schedule will be reviewed via Contract Manager - Engineer collaboration and updated as necessary.

Engineer will also prepare a less detailed, colorized (8 1/2" x 11"), graphic Project schedule with major Project milestones identified. This schedule should be dimensioned such that it is Microsoft PowerPoint-adaptable, readily reproducible, and understandable to the lay public.

Deliverables
- Reproducible, colorized/detailed Project Schedule (up to 8 copies per update).
- Reproducible, colorized/less detailed, Project Schedule (copied/presented as necessary for public distribution/information purposes).

1.5 - Subconsultant Management

Engineer will engage subconsultant(s) via contact(s), monitor and manage subconsultant activities (staff and schedule), and review and recommend payment of subconsultant invoices/billings. Subconsultant Progress Reports, invoices, and billings will be incorporated into Subtask 1.2.

Deliverables
- Subconsultant Contracts (2 copies with related attachments).
- Subconsultant Progress Reports (1 copy per invoice).
- Subconsultant Invoices (1 copy).

1.6 - Quality Assurance/Quality Control

Engineer is expected to conduct internal and comprehensive quality assurance/quality control reviews throughout Project development in order to appraise design, technical and business performance and provide real-time direction and objective solutions.

TASK 2 - PUBLIC/AGENCY INVOLVEMENT (FC 120)

Engineer will coordinate with Contract Manager and implement public/agency involvement. Services will include coordination and public awareness of Open Houses/Public Meetings/Hearing and Staff Work Group meetings in establishing a proactive process for public, agencies and interested parties input and thereby facilitating NEPA. Engineer will work closely with local

governments, particularly groups and organizations administered by, and affiliated with, City and County offices.

2.1 – Project Scoping Meeting

Engineer will attend and present at two (2) project scoping meetings. Purpose of meetings is to develop concurrence with project approach related to a 'no-build' scenario east of Deep Wood and will entail:

A. One (1) County Meeting: Discuss project history and approach for meeting with TxDOT and FHWA. Discuss what presentation materials will be presented and develop justifications for project approach.
B. One (1) TxDOT & FHWA Meeting: Present PowerPoint presentation with boards for the RM 620 EA & Schematic project approach. Purpose of meeting is to discuss 'no-build' scenario east of Deep Wood and to gain consensus with both TxDOT and FHWA on approach. Preparation of meeting is expected to require some traffic analysis and roadway geometry development (west of Deep Wood only) to provide justification for a 'no-build' scenario. This scope of services assumes that consensus will be achieved and the project will move forward with an EA from SH 45 to IH 35 and a Schematic from SH 45 to Deep Wood. If either TxDOT for FHWA requires a Schematic with 'build' scenarios east of Deep Wood, they can be provided as a Supplemental.

2.2 – Staff Work Group

Engineer will assist Contract Manager in establishing a Staff Work Group (SWG) composed of representatives from Cities, counties, agencies, etc. which have a role in funding, permitting, and/or planning/implementing any proposed transportation improvements within the Project study area. This SWG will offer design and processing decisions and guide project technical development, receive and assess reports, comment on Project schedule, coordinate with respective offices, and provide major project activity oversight. Membership and attendance will be structured to allow representatives to freely participate, particularly when Project milestones and issues warrant input and/or concurrence and will entail:

A. Assisting in alternative development and evaluation.
B. Reviewing Project activities and findings.
C. Coordinating agency activities associated with Project.

The SWG will specifically require the following Engineer services:

A. Assist the County in preparing for, establishing, and conducting, up to 4 bi-monthly SWG meetings. Engineer will notify members of the same in a manner preferred by member consensus. It is expected that the County's Public Relations firm will prepare the Meeting Agenda and establish SWG meeting location sites.
B. Engineer will prepare informational materials, including exhibits, renderings, and handouts for each meeting, as necessary. Exhibits and facts describing each Project alternative/alignment will be based upon previously developed information.
C. Engineer will identify/discuss key issues and factors to be considered further and relay the same to each member as preferred by member consensus. It is expected that the County's Public Relations firm will prepare all Meeting Minutes.

Deliverables

- SWG meeting handouts, exhibits, etc. (up to 50 copies per meeting).

2.3 – Community Work Group

A Community Work Group (CWG) is integral to Project development. These evening meetings will offer input and opinions on Project development issues. The CWG will convene to receive and assess reports on progress and development, comment and provide input on alternatives/alignments, as well as receive updated information on any Project-related activity. Membership and attendance will be structured to allow for members to voluntarily participate at appropriate times when Project milestones/issues warrant input/feedback. As such, Engineer will assist Contract Manager in establishing a CWG and provide the following:

A. Assist the County in preparing for, establishing, and conducting, up to 2 CWG meetings. It is expected that the County's Public Relations firm will prepare and distribute the Agendas/Notices and establish CWG meeting location sites.
B. Prepare informational materials as necessary, including exhibits, renderings, and handouts, for each meeting. Exhibits and texts describing scenarios/alternatives will be based upon information developed to date and likely include Engineer-generated Microsoft PowerPoint presentations. If PowerPoint programs are utilized, non-colorized hardcopies of the same presentation (slides) will be included with meeting handouts.
C. Engineer will identify key issues and factors discussed by identified individuals to be considered further and relay the same to each member as preferred by member consensus. It is expected that the County's Public Relations firm will prepare all Meeting Minutes.

Deliverables
- CWG Meeting handouts (up to 50 copies per meeting).

2.4 - Public Meetings and Hearings

Engineer will plan, coordinate, participate in, and assist Contract Manager in executing one (1) combined Open House and Public Meeting near the beginning of the study and one (1) Public Hearing near the end of the study, all located at a site within the study area. The County's Public Relation firm will identify the logistics with selecting the site with the Contract Manager and subsequently secure/reserve such site.

Engineer will assist Contract Manager / County in determining area media publications. Contract Manager / County will publish/advertise all legal notices for public meetings and hearing, and distribute individual notices of the same according to the Project Mailing List. It is the responsibility of the County's Public Relations firm to assist Contract Manager / County in preparing sign-in sheets, comment sheets, and other materials for each Open House/Public Meeting/Hearing as necessary, as well as provide informed and outgoing personnel to support each Open House/Public Meeting/Hearing.

County's Public Relations firm will compile comments received at each Open House/Public Meeting/Hearing and document the same in the form of a compact, Bound Report for each Open House/Public Meeting/Hearing which will include comment cards, letters, attendance sheets, summary of verbal and written comments and responses to those comments, etc. such that an evidential record of each is documented. This will include photographs or copies of informational displays/displayed schematics, handouts, questionnaires, etc. distributed at each Public Meeting/Hearing; comment cards, letters, and attendance sheets, and any non-transcript verbal input. Hardcopy documentation will be supplemented by one (1) computer disc containing the complete Public Meeting/Hearing Microsoft PowerPoint presentation.

It will be the responsibility of the County's Public Relations firm to engage a court reporter to

provide a transcript of each Open House/Public Meeting/Hearing.

All public involvement procedures shall be in accordance with 43 Texas Administrative Code (TAC) 11.80-11.90, Code of Federal Regulations Title 23, Part 771 and TxDOT Environmental Manual.

A. First Open House/Public Meeting Series
Public Meeting purpose is to introduce Project/design team, review history/prior studies, purpose and need, goals, Project organization/processing; public involvement process/work groups; receive input/comments on all Project-related topics/aspects; schedules; and explore Project concerns, issues, and priorities. Engineer will present the project scope of work, concepts developed during the initial feasibility study, alternative analysis to be documented in the NEPA document, and the alternative recommend by the County for implementation for development in the preliminary design schematics; any updates, evaluations, and progress to date; summary of any social, economic, environmental, and geometric impacts whereby any public comment and suggestions on the same is allowed and invited to aid in eventual schematic completion, assuming public/community/political issues and suggested revisions can be addressed in a routine manner.

B. Open House/Public Hearing Series
Upon the approval of the EA and Preliminary Design Schematic (for Public Hearing processing) by both TxDOT-Austin and the FHWA, the Engineer will plan, coordinate, participate in, and execute a Public Hearing, preceded by an (4 hour maximum) Open House. This Open House/Public Hearing will present the findings of the EA, alternatives considered, and the preferred Alternative and include, but not be limited to, a summary of Project processing, history, impacts, etc.; discussion and exhibits pertaining to the schematics and EA followed by opportunity for public comment on the same.

C. Engineer will prepare informational displays/exhibits/renderings and other technical materials for distribution and/or display at each Open House/Public Meeting/Hearing and at various other Project-related engagements. The multiple displays, renderings, and photo enhancements may include alternatives/alignments, site-specific perspectives, including those stressed for consideration by the Project's stakeholders/Work Groups. Engineer will provide exhibits clearly displaying areas of concern. Engineer is expected to utilize the Microsoft PowerPoint software program for presentations and distribute non-colorized hardcopies (slides) of the same in addition to other necessary handouts. All computer-based deliverables will be compatible with existing County and TxDOT software.

Deliverables
- Technical handouts for each Open House/Public Meeting/Hearing (up to 300 hardcopies per Public Meeting/Hearing).
- Exhibits/displays for Open Houses/Public Meetings/Hearing (up to 30 exclusive displays).

2.5 - Project Mailing List

Engineer will assist County's Public Relations firm in developing/maintaining a Project Mailing List database of names and addresses to be used in distributing the Project notices, newsletters, information, etc. This mailing list will initially be based on any applicable names, addresses, and contact listings as previously compiled during the Project's Feasibility Study stage and TxDOT's preliminary route study, as well as the names and addresses, including those of adjacent property owners identified during the right-of-way Inventory. Persons attending the Open Houses and Public

Meetings/Hearing, community representatives, and any interested individuals will be added to the list by County's Public Relations firm.

Mailing List database will be categorized as necessary and may entail: 1) general public; 2) adjacent property owners; 3) local government officials and staff; 4) State and Federal government officials and agency/staff; 5) community coalition representatives; special interest associations/committees; and 6) media. The mailing list will be computerized with sorting and automated (mailing) labeling capability, and will be regularly updated by County's Public Relations firm.

Deliverable

- Project Mailing List database - Microsoft Excel computer software format (1 hardcopy and 1 computer disc as requested for each update, estimated at 2 updates).

2.6 – Presentations

All scheduled presentations/meetings with local organizations such as Chambers of Commerce, CAMPO, CAP Metro, City Councils, Williamson County Commissioners Court, civic/neighborhood groups, etc. will be the responsibility of both Contract Manager and Engineer. Engineer will provide appropriate personnel/support and Project items/exhibits/handouts, and also assist Contract Manager, as necessary, in preparation for, documenting, and participating in, the presentations. Estimated at 5 presentations.

TASK 3 - ASSEMBLY AND REVIEW OF DATA (FC 110)

3.1 – Collection of Data, Reports, and Maps

The determination of data requirements, availability, and sources will be coordinated, as necessary, with the Contract Manager. Once the data needs and sources are identified, Engineer and Consultant will contact the appropriate agencies and organizations to obtain the data. Engineer will utilize as much data from past corridor studies (County and State) as possible and may include, but not limited to, items such as:

A. Environmental, Social, and Economic Data within the Project study area
   1. Current socio-economic forecasts to be obtained, including zoning and zoning changes; census data including income, race, employment, income level, poverty level, etc.; building/housing occupancies; locations of large employers.
   2. Currently available information on existing/planned land use.
   3. Locations of schools, places of worship, and cemeteries.
   4. Locations of cultural, architectural, and historic resources.
   5. Locations of Section 4(f) and 6(f) properties.
   6. Wetlands inventory maps.
   7. Geographic files on wildlife habitat/migration patterns.
   8. Geographic data files on contamination and hazardous material sites.
   9. Available geographic data files on soil and geology.
   10. Geographic files on bottomland hardwoods and riparian woodland.
   11. Planned improvements for the RM620 corridor from local cities, Counties, US Army Corps of Engineers (USACOE), Texas Tollway Authority (TTA), and/or other local governing/permitting offices.

B. Transportation System Data
   1. Existing facility operations from TxDOT, the Texas Transportation Institute (TTI), and

affected cities, including current facility configurations, traffic volumes, vehicle occupancy, transit usage, alternative mode use, and travel times.

2. Updated transit operations and transportation study information from CAP METRO, existing and proposed (including ridership, routes, fares, etc.).
3. Updated Transportation Plans from TxDOT, CAP METRO, CAMPO, TTA, CTRMA and local governments, including committed improvements and travel forecasts.
4. Updated Transit Service and Facility Planning from CAP METRO including revised Service Plan and Rail service and station/park and ride locations.
5. Pertinent data on existing and planned (major) utilities and railroad facilities.

C. Obtain previous corridor studies, reports, and/or plans conducted by other agencies and groups.

3.2 - Review of Data

Engineer and Consultant will review the data collected from Subtask 3.1 and perform the following as.necessary:

A. Integrate additional data into the Project study file and evaluate TASKS/Subtasks with supporting documentation.

B. Develop/confirm additional field data, following review and discussion of the same with Contract Manager. For purposes of defining scope and level of study effort, these (possible) new field studies are currently limited to windshield surveys to verify field data not available from aerial photogrammetry, such as land uses, geometric constraints, business identification, and existing utilities/landmarks. Estimated at 20 miles of vehicle travel.

3.3 - Study Goals and Objectives

With the data collected from Subtask 3.1, input from local agencies and communities, Project meetings, and/or any other study addressing transportation involving the Project corridor and/or its roadway facilities, Engineer will proceed with Project Development such that the Project's Purpose and Need is established and confirmed for further Project (schematic and environmental document) development. The Purpose and Need should take into account the existing and projected travel volumes for the area, ability of existing facilities to meet the demand, existing safety, environmental, social, and economic concerns.

TASK 4 – FIELD SURVEYING (FC 150)

Engineer will utilize information and files for topography, right-of-way, and subsurface utility engineering associated with the TxDOT corridor study.

4.1 – Misc. Surveying

Engineer will perform appropriate surveying (as necessary, limited to 5 working days of field survey work) for various purposes such as hydraulic design/modeling or other topographic needs (Subtask 6.5).

TASK 5 – REGIONAL COORDINATION & TRAVEL FORECASTS (FC 110)

The purpose of this TASK is the systematic development of the Project as it relates regionally and in conformance with the CAMPO and its related regional responsibilities and oversights, such as air quality conformity and input during public encounters.

Maximum use will be made of previously prepared, CAMPO-produced traffic models and traffic modeling results addressing RM620. It is expected that the majority of traffic projections for proposed design years 2017 and 2030 will be provided to the Engineer by the County's traffic engineer. Engineer, with the support of County, TxDOT, and CAMPO, will refine the model from the County's traffic engineer and coordinate with other agencies as needed to refine proposed design year traffic projections for both the no-build and build conditions necessary for both environmental analyses and traffic levels of service analysis. Engineer will provide geometric data for roadway layouts (from previous studies) to determine traffic demand and generate traffic volumes.

Engineer-produced traffic analyses will include a Level of Service analysis (LOS) for the section from SH 45 to IH 35 southbound frontage road. Engineer will use geometric data for roadway layouts (from previous studies) to analyze traffic operations. The no-build and build alternatives will be modeled for corridor performance measures as necessary for NEPA documentation.

TASK 6 - DESIGN SCHEMATIC (FC 110)

Engineer will prepare a detailed, colorized (shaded roadway) Design Schematic for the locally-preferred alternative design for RM 620 from SH 45 to Deep Wood Dr. as a MAD6, and for the portion of RM 620 from Deep Wood to IH 35 as a "no-build" alternative. No improvements to IH 35 are included in this schematic. The Design shall be in conformance with TxDOT (Design Division) *Roadway Design Manual* except where variances are permitted in writing by TxDOT and/or the FHWA. The schematic layout shall include the basic information necessary for proper review, evaluation, and ultimate approval. Ultimate management of traffic during the construction of the Project shall be taken into consideration during Design Schematic development.

Upon approval of the Design Schematic by both the TxDOT Design Division and the FHWA, it shall thereby be the basis for an exhibit at the Open House/Public Hearing.

6.1 - Traffic Analyses

Engineer will perform a detailed LOS analysis using the Project's official, forecasted design-year traffic volumes and utilizing HCS and/or SYNCHRO as necessary. Based upon design adequacy as directly related to the Traffic Analysis, Engineer will continue to refine, and finalize the Design Schematic. This LOS shall be performed over the area from SH 45 to IH 35.

6.2 - Geometric Design

TASK 6 Design Schematic generation will include and/or involve the following:

A. Horizontal and Vertical Alignment at a scale of 1"=100' or 1"=200' (horizontal) and 1"=10' or 1"=20' (vertical). Engineer may utilize hardcopy dimension heights of 18 inches.
B. Design Schematic will comply with TxDOT-Austin District Design Standards which include:

1. Locations of intersections, travel lanes, and cross-streets.

2. Developed vertical and horizontal alignments of main travel lanes, and cross-streets. The degree of horizontal and vertical curve data, including "K" values and travel lane lines/arrows shall also be shown.
3. Explanation of the sequence and methods of stage construction, thereby preliminarily indicating Project constructability/phasing.
4. Existing and proposed right-of-way (ROW) limits.
5. Geometrics (pavement cross-slopes, lane and shoulder widths, slope rates for cuts/fills) of the typical sections for the proposed main travel lanes, and cross-streets. Cross-section geometrics at approximately 100-foot intervals to determine proposed ROW limits.
6. Current and projected traffic volumes.
7. Direction of traffic flow (via travel lane arrows) on all roadways/typical sections.
8. Location and width of median openings and turn-lanes for non-access control roadways.
9. Geometrics of speed change (acceleration, deceleration, auxiliary, climbing) travel lanes.
10. Preliminary cost estimates.

If Design Schematic revisions are determined necessary pursuant to Design Division and FHWA review and prior to the Public Hearing, 4 copies of each Schematic revision shall be prepared and re-submitted by Engineer for re-approval (2 separate revisions should be expected). Subsequent to the Public Hearing, 4 copies of a schematic revision shall be prepared and re-submitted by Engineer for re-approval (1 separate revision should be expected). One master copy of the re-approved (post-Public Hearing) shall be prepared.

Deliverables

- Design Schematic hardcopies submitted as outlined above in 30%, 60%, 90% and Final submittals.
- Additional Design Schematics for city/town/county/agency review and random inquiries (estimated at 10 hardcopies).
- Hardcopy and computer disc input/output Design Schematic files compatible with TxDOT Microstation/GEOPAK software and equipment detailing the preliminary earthwork and final proposed typical cross-sections which verify the ROW requirement. (1 hardcopy if necessary, 1 disc).
- LOS Analysis (1 hardcopy, 1 disc).

6.3 - Design Concept Conference

A Design Criteria Form will be completed by Engineer subsequent to a multi-agency Design Concept Conference (i.e. Pre-design Meeting) organized by Engineer.

Deliverable

- Design Criteria Form (12 hardcopies).

6.4 – Design Exception Questionnaire

Engineer will prepare as warranted a Questionnaire per TxDOT guidance. Engineer should anticipate supplying any justification facts, summaries, etc. in the event the Engineer's geometric design should require Design Waivers.

Deliverable

- Design Exception Questionnaire (4 hardcopies per submittal, assume 3 revision submittals).

6.5 – Hydraulic Design

Engineer will perform a preliminary hydraulic modeling/analysis for hydraulic-related issues within the RM 620 corridor. This will be necessary for proper vertical design of the roadway, for any applicable and anticipated hydraulic structures, and for right-of-way needs to provide for storm water quality control structures.

6.6 – Value Engineering

A Value Engineering (VE) analysis is excluded from this scope of work.

6.7 – Construction Phasing

Engineer will prepare various options (up to 3) for possible construction phasing west of Deep Wood with associated cost estimates to enable the County to determine future construction phases. Phases will be developed from the proposed schematic.

TASK 7 – SOCIAL, ECONOMIC, AND ENVIRONMENTAL STUDIES (FC 120)

Engineer will prepare an Environmental Assessment (EA). A Finding of No Significant Impact (FONSI) is anticipated. All environmental data and analyses shall be in accordance with both 43 Texas Administrative Code and the content and format of FHWA Technical Advisory T6640.8A. Exhibits within, or pertaining to, the EA shall be limited to 11" x 17" sheets when possible.

Deliverables

- Input and output files of the noise and air quality analysis on both hardcopy and a computer disc which is compatible with TxDOT software and equipment (1 hardcopy, 1 disc).
- Preliminary Draft Environmental Assessment (2 hardcopies for Williamson County review).
- Draft Environmental Assessment as for TxDOT-Austin District review (assume 2 hardcopies)
- Draft Environmental Assessment (assume 15 for TxDOT-Environmental Affairs Division review); Draft Environmental Assessment as approved by TxDOT-Division for FHWA review purposes (assume 5 hardcopies); Draft Environmental Assessment as approved by TxDOT-Division and FHWA for Public Hearing purposes (assume 5 hardcopies).
- Final Environmental Assessment with post-Public Hearing documentation/addenda (assume 10 hardcopies).

7.1 - Environmental Assessment Format

Engineer will obtain the most current TxDOT-Austin District EA Outline/format. Major topics concerning the processing of the EA are listed in Subtask 7.2; however, Engineer will need to assess the impacts of numerous other issues including, but not limited to, the following: land use; social impacts; relocation and ROW requirements; economic development, as applicable; environmental justice; joint development; air quality; noise; permits; water quality; wetlands; jurisdictional waters; floodplains; visual impacts; construction impacts; prime and unique farmlands; 4(f) and 6(f) properties and open space; recreational uses; waterway modification; wildlife; threatened and endangered species; historic and archeological impacts/preservation; and hazardous material/waste sites.

Document Format and Contents

The document shall discuss alternatives previously considered during the Williamson County Feasibility Study and TxDOT Route Study for the proposed project, plus the no-build alternative. The general EA outline to be followed is listed below:

DESCRIPTION OF THE PROPOSED ACTION

- Description of Proposal (includes project limits, proposed improvements)
- Purpose and Need
- Right of Way Requirements and Utility Adjustments
- Project Cost Estimate
- Local Government Support

DESCRIPTION OF THE EXISTING FACILITY

- Existing Facility
- Surrounding Terrain and Land Use
- Traffic Projections

ALTERNATIVES

- No Action
- Build Alternatives (previously identified)

POTENTIAL, SOCIAL, ECONOMIC AND ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION

- Regional and Community Growth
- Socio-Economic Discussion
- Public Facilities and Services
- Community Cohesion
- Impact on 4(f) Properties
- Lakes, Rivers and Streams
- Jurisdictional Waters
- Water Quality
- Threatened/Endangered Species and Wildlife Habitat
- Historical and Archaeological Sites
- Aesthetic Considerations
- Prime, Unique and Special Farmland Impacts
- Air Quality Assessment
    - Congestion Management System
- Noise Assessment
- Hazardous Waste/Substance
- Items of Special Nature

INDIRECT AND CUMULATIVE IMPACTS

MITIGATION MEASURES

DETERMINATION OF ASSESSMENT

7.2 – Special Studies

Investigations conducted during the County's feasibility study or TxDOT's route study will provide the basis for the Environmental Document. However several special studies are incomplete or have not been initiated. These studies are described as follows:

a. Cultural Resources Investigation

Engineer will use existing information and perform supplementary historical resources surveys/investigations such that TxDOT can proceed to complete the Federal, Section 106 process and fulfill the requirements of the Texas Antiquities Code, as needed. The Engineer recently completed historical investigations within the RM 620 corridor. These historical investigations will be utilized to fulfill regulatory requirements for identification, when possible. One historic property, determined eligible for the National Register of Historic Places, the Quick House is located along the RM 620 corridor. If impacted, this property would be protected by Section 4(f) of the DOT Act. Therefore, efforts to have a *de minimus* effect determination would be required (as described below) if right of way is needed. Archeological surveys have not been conducted; however, only limited surveys are anticipated as the project is mostly in a low-probability area for containing preserved prehistoric sites. The performance of surveys, reporting, and documentation to satisfy THC requirements for determining whether archeological sites are present in the project area, and whether test excavations or a higher level of archeological work is needed will be conducted by the engineer, according to Texas Historical Commission standards; however, the Engineer's professional archeologist will work with the commission to minimize the need for this survey.

b. Noise Analysis

A noise analysis shall be prepared by the Engineer using the FHWA's Traffic Noise Model (TNM). The analyses will include existing noise levels, predicted noise levels, the consideration and evaluation of noise mitigation, and noise contours for undeveloped lands, in accordance with the State's *Noise Guidelines.* A summary of the noise analysis shall be included in the environmental document for the project. A noise wall feasibility analysis will be performed only on the final recommended alternative. The conduct of Noise Wall Workshops is excluded from this scope of work.

c. Air Quality Analysis

An air quality analysis shall be prepared using the current CALINE/MOBILE models, or any other recently TxDOT-approved air-modeling program. A summary of the air quality analysis shall be prepared for, and included within the EA.

The Engineer shall perform computer modeling of estimated time of completion (ETC) and future design year peak-hour carbon monoxide concentrations at project right-of-way lines using computer models, traffic data, and project plan maps provided by the State. The Engineer shall perform computer modeling with State supplied software to compare the current and future year peak-hour carbon monoxide concentrations to the National Ambient Air Quality Standards. This modeling shall compare modeled carbon monoxide levels to the one hour and eight hour carbon monoxide National Ambient Air Quality Standards. Since daily vehicle traffic on RM 620 is less than 140,000 vehicles per day (2007=46,000), a qualitative Mobile Source Air Toxics (MSAT) analysis will be performed.

The Engineer's report on air quality shall include documentation of the results and methods used in modeling and air quality background information. Modeling documentation shall include traffic volumes used in modeling; computer models used; current and future year carbon monoxide concentrations; and percentages of the National Ambient Air Quality Standards for current and future year.

Air quality background information shall include: a paragraph discussing the attainment

status of county or counties where project is located. This shall follow the State's recommended text. A paragraph discussing the National Ambient Air Quality Standards will be prepared.

The Engineer shall provide the following additional information for nonattainment counties: (1) A statement providing details on the nonattainment pollutants and nonattainment classification of county or counties, (2) A statement indicating the project has been included in the current conforming metropolitan transportation plan (MTP) and (3) A discussion of congestion management systems for county or counties and a list of committed projects to reduce traffic congestion in county.

d. Ecological Investigations

Ecological investigations, including habitat determination, wetland determination, and surveys for protected bird species for the project have been conducted by Williamson County and for the State; however, surveys for protected cave invertebrates are not complete for the entire project area. The Engineer will use the County's recommended consultant, SWCA, Inc. to conduct required cave invertebrate surveys and coordinate with the U.S. Fish and Wildlife Service. Any mitigation plans and mitigative actions would be a supplemental to this agreement. However these activities would be summarized and included in the Environmental Assessment.

Additionally, Impacts to Jurisdictional Waters of the United States will be determined and incorporated into the environmental document; and, the Engineer will update and refine the analysis/characterization of habitat and habitat impacts for the study area. If the Engineer encounters protected species or habitat for protected species, the Engineer shall notify the County immediately.

e. Section 4(f) Evaluations

If public lands, park lands, recreational lands or potentially eligible historic structures or archeological sites worthy of in-place preservation are impacted, Section 4(f) Statement(s), Department of Transportation Act applies. However, recent SAFETEA-LU legislation allows an exemption from the Section 4(f) requirements if a project will have a "*de minimis*" use of parkland. The "*de minimus*" exemption also applies to historic properties as long as the project does not affect or does not adversely affect the property. Section 4(f) would be satisfied if impacts are determined to be "*de minimis*"

The Engineer shall conduct a Section 4(f) ASSESSMENT which includes 1) the identification of all property types listed in FHWA (23 C.F.R. 771.127 (a) and 23 C.F.R. 771.135 (49 USC 303)4(f) in the study area in accordance with 49 USC 303; 2) documentation of measures taken to minimize harm; 3) concurrence of agency(ies) with jurisdiction; and 4) incorporation of said efforts into the environmental document. A Section 4(f) STATEMENT is outside the scope of this project, so a supplemental agreement between the County and Engineer would be developed should the County desire to proceed with the Section 4(f) Statement.

f. Hazardous Materials

The Engineer shall perform an initial site assessment for potential hazardous materials impacts. The initial site assessment shall determine the potential for encountering hazardous materials in the study area, including possible environmental liability, increased handling requirements and costs, and construction worker safety. The assessment shall be in accordance with the applicable sections of the State's current "Hazardous Materials in

Project Development Guidance" and in general accordance with the American Society for Testing and Materials (ASTM) Environmental Site Assessment standard practices (ASTM E 1528) or equivalent [i.e., satisfies "due diligence" and "appropriate inquiry" requirements under the Comprehensive Environmental Response and Compensation Liability Act (42 USC 9601(35)(B)).

The following items are excluded from the proposed scope of services offered under this proposal:

1. Attending Value Engineering sessions.
2. Preparing and submitting the notice of intent (NOI) for SW3P activities to the appropriate agencies.
3. Performing public involvement (beyond tasks identified above).
4. Exposing and tying existing underground utilities/facilities (beyond tasks identified above).
5. Researching private drainage systems and incorporating same into proposed drainage facilities design.
6. Developing alternate facilities designs (i.e. steel superstructure and concrete superstructure for bridges, etc.).
7. Performing pavement corings to verify existing pavement thicknesses. Performing forensic pavement analyses.
8. Performing traffic impact studies (beyond tasks identified above).
9. Designing landscaping and irrigation/sprinkler facilities.
10. Designing hardscape (enhanced flatwork) facilities.
11. Designing noise abatement facilities.
12. Developing wetland, tree, etc. mitigation plans/designs.
13. Designing pavement structure drainage systems.
14. Designing storm water pump stations.
15. Coordinating design with FEMA. Preparing LOMR/CLOMR.
16. Designing public and/or franchised utility adjustments or systems.
17. Preparing and submitting quantity calculation backup/records.
18. Confirming and resetting project control monumentation if disturbed by others (i.e. utility companies, mowing operations, etc.).
19. Providing right-of-way acquisition services (i.e. property valuations, damages assessments, condemnation assistance/services, negotiations, relocation assistance, property management, serving as right-of-way agent, etc.).
20. Design of improvements/modifications to private facilities (i.e. sprinkler systems, security systems, parking facilities, temporary perimeter fences, etc.) to accommodate the proposed improvements.
21. Developing additional alternatives than previous studies; developing, revising or completing schematics for "build" alternatives east of Deep Wood Drive.
22. Iterating design tasks, or portions thereof, after a design issue consensus has been reached or due to receipt of instructions or information contrary to previous directives and information or due to revisions in design criteria.
23. Providing survey boundary services for right-of-way acquisition or easements.

ANY ADDITIONAL SERVICES REQUIRED BEYOND THOSE SPECIFICALLY IDENTIFIED IN THIS PROPOSAL ARE BEYOND THE SCOPE OF SERVICES TO BE PROVIDED UNDER THIS PROPOSAL. ANY REQUIRED ADDITIONAL SERVICES WILL BE SEPARATELY IDENTIFIED AND NEGOTIATED AND SUCH ADDITIONAL SCOPE AND COMMENSURATE FEE WILL BE EXECUTED/AUTHORIZED UNDER A SUPPLEMENTAL AGREEMENT TO THIS PROPOSAL/CONTRACT.

WORK AUTHORIZATION #4

Consultant/Engineer will provide all equipment, material, labor and supplies (except as shown on EXHIBIT A) necessary to accomplish the Project Tasks.

The work will be performed in accordance with, but not limited to, the following manuals and standards:

1. Standard Specifications for Construction of Highways, Streets, and Bridges, 2004 - TxDOT.
2. Bridges and Structures Operation and Planning Manual - TxDOT.
3. Bridges and Structures Hydraulic Manual - TxDOT.
4. Bridges and Structures Design Examples - TxDOT.
5. Standard Specifications for Highway Bridges - AASHTO.
6. TxDOT Roadway Design Manual.
7. TxDOT Environmental Manual.
8. A Policy on Geometric Design of Highways and Streets, 2004 AASHTO.
9. Highway Capacity Manual Special Report 209 - Texas Research Board (TRB)
10. Technical Advisory T6640.8A - FHWA.
11. Noise Guidelines - TxDOT.
12. Air Quality Guidelines - TxDOT.
13. Texas Manual on Uniform Traffic Control Devices - TxDOT.
14. Standard Highway Sign Designs for Texas - TxDOT.
15. Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals - AASHTO.
16. Utility Accommodation Policy - TxDOT.
17. Utility Manual - TxDOT.
18. Code of Federal Regulations, Title 23 - "Highway" - Federal Register.
19. Administrative Order No. 5-89 - Signing, Sealing and Dating of Engineering Documents. - TxDOT.
20. Administrative Circular No. 26-91 - Minimum Signing, Sealing and Dating Procedures for Department Engineering Documents - TxDOT.
21. Guide for the Development of Bicycle Facilities, 2002 - AASHTO.
22. Guide for the Design of High Occupancy Vehicle Facilities, 2001 - AASHTO.
23. Code of Federal Regulations, Title 49 - "Transportation" - Federal Register.
24. Right-of-Way Manual - TxDOT.
25. U.S. Army Corps of Engineers Wetland Delineation Manual of 1987.
26. Williamson County Road Bond Program Design Criteria, latest edition.

NOTES: (1) All designs shall be in accordance with the above references, except where variances are permitted in writing by the State or FHWA.

(2) Engineer is responsible for purchasing all reference items/manuals required to complete Project TASKS/Subtasks.

WORK AUTHORIZATION #4

Engineer/Consultant will perform the services to be provided under this agreement out of Engineer's/Consultant's office(s) as listed below:

Service	Office Location
Engineer	Halff Associates, Inc.

Work effort will be managed out of the Austin office located at:

4030 West Braker Lane, Suite 450
Austin, TX 78759

EXHIBIT C

SCHEDULE OF SERVICES PROVIDED BY ENGINEER

FOR

PRELIMINARY ENGINEERING / ENVIRONMENTAL

RM 620

IN WILLIAMSON COUNTY

FROM SH 45 TO IH 35

The following general work outline was developed to achieve NEPA clearance.*

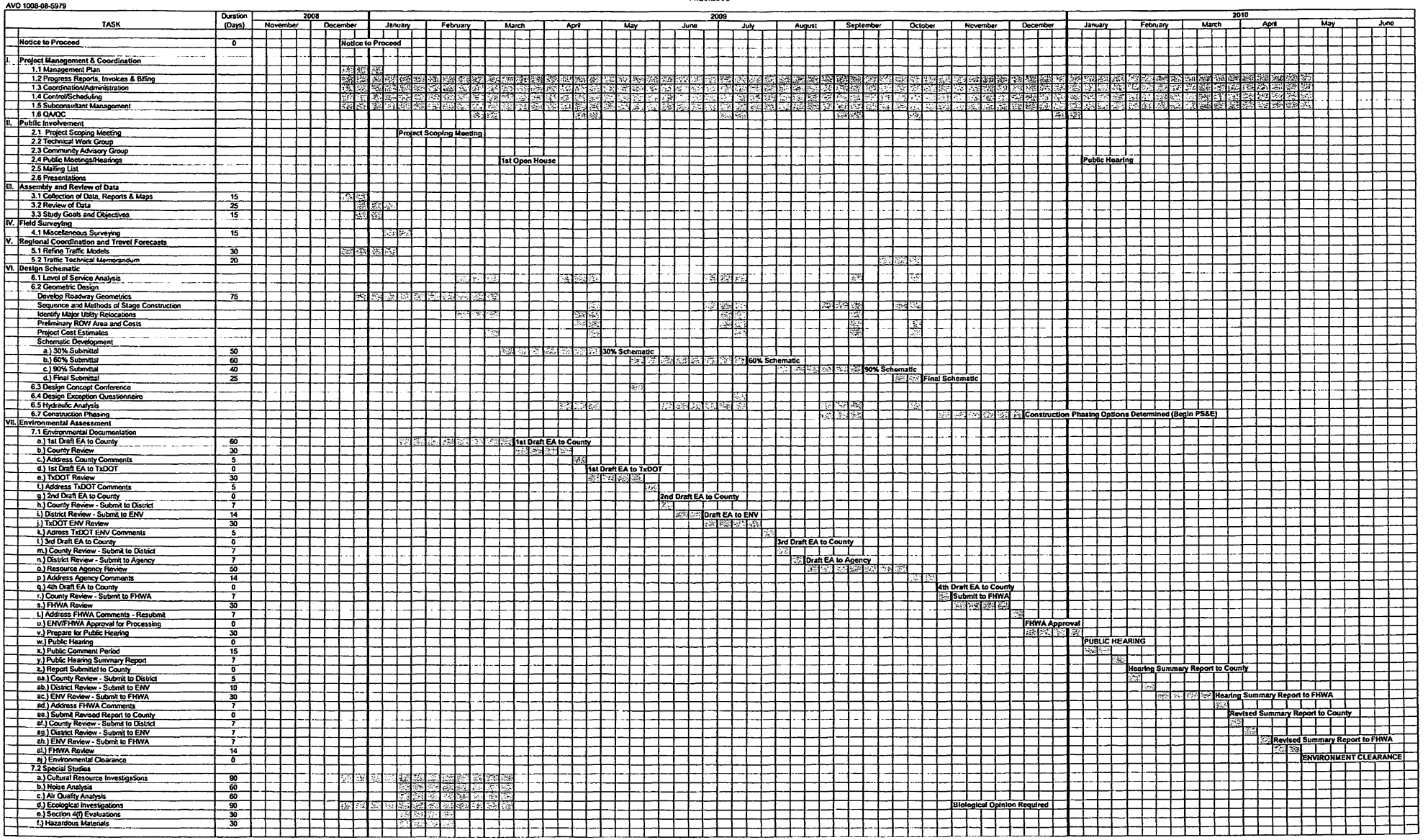
♦ Contract Execution/ Notice to Proceed	December 2008
♦ Project Scoping Meeting – 'No-Build' Concurrence	January 2008
♦ Data Assembly/Collection	January 2008
♦ First Public Meeting Series	March 2009
♦ Submittal of Environmental Assessment for FHWA approval	October 2009
♦ Submit Preliminary Design Schematics for FHWA approval	October 2009
♦ Re-submit Revised Preliminary Des. Schematics for FHWA approval	December 2009*
♦ Public Hearing	January 2010*
♦ Re-submit Revised, Post-Public Hearing Schematic/EA to FHWA	March 2010*
♦ Finding of No Significant Impact (FONSI)	May 2010*

* All dates are estimated and Subject to Change. Duration of reviews is outside the control of the Engineer and may exceed those estimated in this schedule, depending upon review agency workload.

SCHEDULE - RM 620 EA & SCHEMATIC
EA: From SH 45 to IH 35; Schematic: From Sh 45 to Deep Wood
11/25/2008

AVO 1008-08-5979

TASK	Duration (Days)
Notice to Proceed	0
I. Project Management & Coordination	
1.1 Management Plan	
1.2 Progress Reports, Invoices & Billing	
1.3 Coordination/Administration	
1.4 Control/Scheduling	
1.5 Subconsultant Management	
1.6 QA/QC	
II. Public Involvement	
2.1 Project Scoping Meeting	
2.2 Technical Work Group	
2.3 Community Advisory Group	
2.4 Public Meetings/Hearings	
2.5 Mailing List	
2.6 Presentations	
III. Assembly and Review of Data	
3.1 Collection of Data, Reports & Maps	15
3.2 Review of Data	25
3.3 Study Goals and Objectives	15
IV. Field Surveying	
4.1 Miscellaneous Surveying	15
V. Regional Coordination and Travel Forecasts	
5.1 Refine Traffic Models	30
5.2 Traffic Technical Memorandum	20
VI. Design Schematic	
6.1 Level of Service Analysis	
6.2 Geometric Design	
Develop Roadway Geometrics	75
Sequence and Methods of Stage Construction	
Identify Major Utility Relocations	
Preliminary ROW Area and Costs	
Project Cost Estimates	
Schematic Development	
a.) 30% Submittal	50
b.) 60% Submittal	60
c.) 90% Submittal	40
d.) Final Submittal	25
6.3 Design Concept Conference	
6.4 Design Exception Questionnaire	
6.5 Hydraulic Analysis	
6.7 Construction Phasing	
VII. Environmental Assessment	
7.1 Environmental Documentation	
a.) 1st Draft EA to County	60
b.) County Review	30
c.) Address County Comments	5
d.) 1st Draft EA to TxDOT	0
e.) TxDOT Review	30
f.) Address TxDOT Comments	5
g.) 2nd Draft EA to County	0
h.) County Review - Submit to District	7
i.) District Review - Submit to ENV	14
j.) TxDOT ENV Review	30
k.) Adress TxDOT ENV Comments	5
l.) 3rd Draft EA to County	0
m.) County Review - Submit to District	7
n.) District Review - Submit to Agency	7
o.) Resource Agency Review	50
p.) Address Agency Comments	14
q.) 4th Draft EA to County	0
r.) County Review - Submit to FHWA	7
s.) FHWA Review	30
t.) Address FHWA Comments - Resubmit	7
u.) ENV/FHWA Approval for Processing	0
v.) Prepare for Public Hearing	30
w.) Public Hearing	0
x.) Public Comment Period	15
y.) Public Hearing Summary Report	7
z.) Report Submittal to County	0
aa.) County Review - Submit to District	5
ab.) District Review - Submit to ENV	10
ac.) ENV Review - Submit to FHWA	30
ad.) Address FHWA Comments	7
ae.) Submit Revised Report to County	0
af.) County Review - Submit to District	7
ag.) District Review - Submit to ENV	7
ah.) ENV Review - Submit to FHWA	7
ai.) FHWA Review	14
aj.) Environmental Clearance	0
7.2 Special Studies	
a.) Cultural Resource Investigations	90
b.) Noise Analysis	60
c.) Air Quality Analysis	60
d.) Ecological Investigations	90
e.) Section 4(f) Evaluations	30
f.) Hazardous Materials	30



WORK AUTHORIZATION #4
EXHIBIT D
RM 620 PRELIMINARY ENGINEERING / ENVIRONMENTAL

Date: 12/18/2008

AVO 22853

TXDOT FUNC. CODE	TASK/DESCRIPTION	PRINCIPAL	STUDY MNGR	SR. ENG ENV. / PLANNER	PE	E.I.T.	PLANNER / L. ARCH	ENV SCIENTIST	CADD / GIS / VIS/TECH	SURVEY CREW	CLERICAL / ADMIN	TOTAL MAN-HOURS	LABOR CHARGES (DIRECT)	PRINTING, PLOTTING	DELIV, TRAVEL & MISC	SUB CONSULT'S	TOTAL COST FOR TASK (INCL MULT'S)
100	TASK 1 - PROJECT MANAGEMENT AND COORDINATION																
100	1.1 MANAGEMENT PLAN	2	9	9							4	24	$3,275	$200	$100		$3,575
100	1.2 PROGRESS REPORTS, INVOICES & BILLINGS (24 MO.)	4	24	8							48	84	$7,888	$200	$100		$8,188
100	1.3 COORDINATION/ADMINISTRATION (20 MEETINGS)	8	40	40					10		12	110	$14,814	$200	$100	$6,363	$21,477
	MEETING PREP	8	8	4					10		4	34	$4,242				$4,242
	MEETING		24	24								48	$7,272	$100	$100		$7,472
	MINUTES		8	8							4	20	$2,592				$2,592
	MONTHLY CORRESP., DOCUMENT CONTROL			4							4	8	$708	$100			$808
100	1.4 CONTROL/SCHEDULING		16	8							8	32	$4,104	$100	$50		$4,254
	4 UPDATES																
100	1.5 SUBCONSULTANT MANAGEMENT	4	12	4								20	$3,316	$100	$50		$3,466
100	1.6 QA / QC	4	14	14								32	$5,002	$100	$50		$5,152
	SUBTOTAL HOURS/COSTS	22	115	83					10		72	302	$38,399	$900	$450	$6,363	$46,112
120	TASK 2 - PUBLIC /AGENCY INVOLVEMENT																
120	2.1 PROJECT SCOPING MEETINGS (2 MEETINGS)	8	20	20	20	20		8	4			100	$12,516	$400	$50		$12,966
	COUNTY	4	4	4	4	4			4			24	$3,036	$400			$3,436
	TXDOT & FHWA (W/ PREPARATION)	4	16	16	16	16		8				76	$9,480		$50		$9,530
120	2.2 TECHNICAL WORK GROUP (4 MEETINGS)		28	18	24	22			8		4	104	$12,438	$500	$50		$12,988
	MEETING PREP/AGENDA		12	16	12	12			8		4	64	$7,268	$400			$7,668
	MEETING		12		12	8						32	$4,052		$50		$4,102
	MEETING MINUTES		4	2		2						8	$1,118	$100			$1,218
120	2.3 COMMUNITY ADVISORY GROUP (2 MEETINGS)		26	6	16	18			4		12	82	$9,310	$350	$50		$9,710
	MEETING PREP/AGENDA		10	4	4	8			4		4	34	$3,804	$300			$4,104
	MEETING		12		12	8						32	$4,052		$50		$4,102
	MEETING MINUTES		4	2		2					8	16	$1,454	$50			$1,504
120	2.4 PUBLIC MEETINGS/HEARING (2 MEETINGS)	4	42	54	32	48		32	20		16	250	$27,730	$700	$50		$28,480
	MEETING PREP/AGENDA - 2 MEETINGS	4	22	22	20	20		20	20		8	136	$14,802	$600			$15,402
	2 MEETINGS OR OPEN HOUSES		16	16	12	12		12			4	72	$8,436		$50		$8,486
	MEETING 'OPEN HOUSE DOCUMENTATION		2	8		8					4	22	$2,288				$2,288
	MEETING SUMMARY		2	8		8					2	20	$2,204	$100			$2,304
120	2.5 MAILING LIST		2	2		16			16		8	44	$3,422	$1,000			$4,422
	DEVELOP DATABASE		2	2		8			8		4	24	$2,014	$500			$2,514
	UPDATE MAILING LIST					8			8		4	20	$1,408	$500			$1,908
120	2.6 PRESENTATIONS (TOTAL 5)	8	18	14					8		4	52	$7,138	$200	$200		$7,538
	PREPARATION	4	8	4					8		4	28	$3,348	$100	$200		$3,648
	PRESENTATIONS	4	10	10								24	$3,790	$100			$3,890
	SUBTOTAL HOURS/COSTS	20	136	114	92	124		40	60		46	632	$72,554	$3,150	$400		$76,104
110	TASK 3 - ASSEMBLY AND REVIEW OF DATA																
110	3.1 COLLECTION OF DATA, REPORTS AND MAPS		6	2	8	16		8	20		10	70	$6,022	$400	$200		$6,622
	ENVIRONMENTAL, SOCIAL, ECONOMIC		2					4	4		2	12	$1,032	$100	$50		$1,182
	TRANSPORTATION SYSTEM		2			4					4	10	$856	$100	$50		$1,006
	H&H ANALYSIS				8							8	$888		$50		$938
	PREVIOUS REPORTS		2			4					4	10	$856	$100	$50		$1,006
	OBTAIN & COMPILE ADJACENT LANDOWNER INFORMATION					8			8			16	$1,240	$100			$1,340
	UPDATE GIS CONSTRAINT MAP			2				4	8			14	$1,150				$1,150
110	3.2 REVIEW OF DATA	2	12	12				4	16		4	50	$5,600		$100		$5,700
	INTEGRATE DATA INTO FILE SYSTEM		4	4					8		4	20	$1,916				$1,916
	DEVELOP ADDITIONAL FIELD DATA	2	8	8				4	8			30	$3,684		$100		$3,784
110	3.3 STUDY GOALS AND OBJECTIVES		4	8				8			8	28	$2,776	$100	$50		$2,926
	ESTABLISH GOAL & OBJECTIVES		2	4				4			4	14	$1,388	$100	$50		$1,538
	DEFINE PURPOSE AND NEED STATEMENT		2	4				4			4	14					
	SUBTOTAL HOURS/COSTS	2	22	22	8	16		20	36		22	148	$14,398	$500	$350		$15,248
150	TASK 4 - FIELD SURVEYING AND PHOTOGRAMMETRY																
150	4.1 MISC. SURVEYING (1 WEEK BUDGET)		2		4				24	40	4	74	$7,276	$200	$50		$7,526
	OFFICE PROCESSING OF DATA		2		4				24		4	34	$2,556	$100	$50		$2,706
	SPOT-CHECK SURVEY OF TDPO									40		40	$4,720	$100			$4,820
	SUBTOTAL HOURS/COSTS		2		4				24	40	4	74	$7,276	$200	$50	$ -	$7,526
110	TASK 5 - REGIONAL COORD. & TRAVEL FORECASTS																
110	5.1 REFINE TRAVEL DEMAND MODEL		4		4							8	$1,116			$25,839	$26,954
110	5.2 TRAFFIC MODELING TECH. DOCUMENTATION		8		8							16	$2,232	$100		$5,939	$8,271
	SUBTOTAL HOURS/COSTS		12		12							24	$3,348	$100		$ 31,776	$35,224

WORK AUTHORIZATION #4
EXHIBIT D
RM 620 PRELIMINARY ENGINEERING / ENVIRONMENTAL

Date 12/18/2008

AVO 22853

TXDOT FUNC. CODE	TASK/DESCRIPTION	PRINCIPAL	STUDY MNGR	SR ENG ENV. / PLANNER	PE	E.I.T.	PLANNER / L. ARCH	ENV SCIENTIST	CADD / GIS / VIS/TECH	SURVEY CREW	CLERICAL / ADMIN	TOTAL MAN-HOURS	LABOR CHARGES (DIRECT)	PRINTING, PLOTTING	DELIV, TRAVEL & MISC	SUB CONSULTS	TOTAL COST FOR TASK (INCL MULTS)
110	TASK 6 - DESIGN SCHEMATIC																
110	6.1 LEVEL OF SERVICE ANALYSIS	2	6		12	20						40	$4,480			$15,471	$19,951
110	6.2 GEOMETRIC DESIGN	14	114	64	160	338			184		44	918	$92,132	$1,200	$100		$93,432
	DEVELOP ROADWAY GEOMETRICS	2	20	10	24	80			40		8	184	$17,810				$17,810
	LAYOUT RETAINING WALLS		2	2	4	8			16			32	$2,826				$2,826
	ID SEQUENCE & METHODS OF STAGE CONSTRUCTION		12	12	32	24			16		8	104	$10,708	$200			$10,908
	IDENTIFY PROPOSED MAJOR UTILITY RELOCATIONS	2	8		8	12			16			46	$4,740	$200			$4,940
	PRELIM ROW AREA/COST FOR ACQUISITIONS	2	8		8	16			16		4	54	$5,260				$5,260
	DEVELOP PROJECT COST ESTIMATE	2	12		12	32					8	66	$6,880	$200			$7,080
	CROSS SECTIONS		4		20	42						66	$6,588	$200			$6,788
	PLAN SUBMITTAL (30%, 60%, 90%)	4	24	24	24	44			40		8	168	$17,584	$200	$100		$17,884
	FINAL SCHEMATIC PREPARATION	2	24	16	28	80			40		8	198	$19,736	$200			$19,936
110	6.3 DESIGN CONCEPT CONFERENCE	2	8	10	10	8			4		4	46	$5,324	$200	$100		$5,624
110	6.4 DESIGN EXCEPTION QUESTIONNAIRE	2	16		24						4	46	$5,900	$200			$6,100
110	6.5 HYDRAULIC ANALYSIS	2	24		40	40			24		4	134	$14,148	$200			$14,348
	DEVELOP DRAINAGE AREA MAP		2		8	16			6		1	33	$3,076				$3,076
	INDENTIFY EXISTING CULVERTS AND STORM SEWER		4		8	16			6		1	35	$3,412				$3,412
	CALCULATE PRELIMINARY DISCHARGES & CULVERT SIZ	1	10		16	4			6		1	38	$4,442				$4,442
	IDENTIFY PRELIM SIZES FOR STORM WATER STRUCTURE	1	8		8	4			6		1	28	$3,218	$200			$3,418
110	6.7 CONSTRUCTION PHASING		22		48	104			40		4	218	$21,024	$200			$21,224
	PHASING ALTERNATIVES (3 MAXIMUM)		20		40	80			40		2	182	$17,604	$200			$17,804
	COST ESTIMATES		2		8	24					2	36	$3,420				$3,420
	SUBTOTAL HOURS/COSTS	22	190	74	294	510			252		60	1402	$143,008	$2,000	$200	$15,471	$160,679
120	TASK 7 - ENVIRONMENTAL ASSESSMENT	8	118	244				720	84		96	1270	$125,864	$500	$500	$85,595	$212,459
120	7.1 ENVIRONMENTAL DOCUMENTATION	8	44	124				320	40		80	616	$59,212	$500	$500		$60,212
120	7.2a CULTURAL RESOURCE INVESTIGATIONS		16	40				80	16		8	160	$16,376				$16,376
120	7.2b NOISE ANALYSIS		16	24				120	24			184	$17,856				$17,856
120	7.2c AIR QUALITY ANALYSIS		8	16				40				64	$6,944				$6,944
120	7.2d ECOLOGICAL INVESTIGATIONS		16	16				48				80	$8,976			$85,595	$94,571
120	7.2e SECTION 4(F) EVALUATIONS		16	24				80	2		8	130	$13,278				$13,278
120	7.2f HAZARDOUS MATERIALS INVESTIGATION		2					32	2			36	$3,222				$3,222
	SUBTOTAL HOURS/COSTS	8	118	244				720	84		96	1270	$125,864	$500	$500	$85,595	$212,459
	FEE SUMMARY																
190	TASK 1 - PROJECT MANAGEMENT AND COORDINATION	22	115	83					10		72	302	$38,399	$900	$450	$6,363	$46,112
120	TASK 2 - PUBLIC /AGENCY INVOLVEMENT	20	136	114	92	124		40	60		46	632	$72,554	$3,150	$400		$76,104
110	TASK 3 - ASSEMBLY AND REVIEW OF DATA	2	22	22	8	16		20	36		22	148	$14,398	$500	$350		$15,248
150	TASK 4 - FIELD SURVEYING & PHOTOGRAMMETRY		2		4				24	40	4	74	$7,278	$200	$50		$7,526
110	TASK 5 - TRAVEL FORECASTS		12		12							24	$3,348	$100		$31,776	$35,224
110	TASK 6 - DESIGN SCHEMATIC	22	190	74	294	510			252		60	1402	$143,008	$2,000	$200	$15,471	$160,679
120	TASK 7 - ENVIRONMENTAL ASSESSMENT	8	118	244				720	84		96	1270	$125,864	$500	$500	$85,595	$212,459
	TOTAL HOURS	74	596	537	410	660		780	468	40	300	3862					
	BASE HOURLY RATES ($)	$190.00	$168.00	$135.00	$111.00	$88.00	$155.00	$86.00	$87.00	$118.00	$42.00						$553,352
	BASE SALARIES & REIMB'S TOTAL	$14,060	$99,960	$72,495	$45,510	$57,200		$67,080	$31,222	$4,720	$12,600		$404,847	$7,350	$1,950	$139,205	$553,352
	TOTAL BY CATEGORY	3%	25%	18%	11%	14%		17%	8%	1%	3%		$404,847	$7,350	$1,950	$139,205	$553,352
	TOTAL FEE												$404,847	$7,350	$1,950	$139,205	$553,352

Project Name: RM 620

ATTACHMENT A
SUPPLEMENTAL NO. 3 TO
WORK AUTHORIZATION NO. 1

This Work Authorization is made pursuant to the terms and conditions of the Agreement entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (*the "County"*) and Halff Associates, Inc. (*the "Engineer"*).

Part1. The ***Engineer*** will provide the following engineering services:

This supplemental provided to close out Work Authorization and move remaining money from Work Authorization #1 to Work Authorization #4.

Part 2. The maximum amount payable for services under this Work Authorization without modification is $565,919.51.

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 N/A, unless extended by a Supplemental Work Authorization.

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

ATTACHMENT A (con't.)

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

ENGINEER:	COUNTY:
Halff Associates, Inc.	Williamson County, Texas
By: Michael A Mya	By:
Signature	Signature
Michael A. Mya	Dan A. Gattis
Printed Name	Printed Name
Vice President	County Judge
Title	Title
12/3/08	12-24-08
Date	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 - Fee Schedule *(based on approved rates in PSA Exhibit II executed by Commissioners Court action)*

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MM 12/3/08

Project Name: RM 620

ATTACHMENT A
SUPPLEMENTAL NO. 1 TO
WORK AUTHORIZATION NO. 3

This Work Authorization is made pursuant to the terms and conditions of the Agreement entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (*the "County"*) and Halff Associates, Inc. (*the "Engineer"*).

Part1. The ***Engineer*** will provide the following engineering services:

This supplemental provided to close out Work Authorization and move remaining money from Work Authorization #3 to Work Authorization #4.

Part 2. The maximum amount payable for services under this Work Authorization without modification is $28,291.34.

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 N/A, unless extended by a Supplemental Work Authorization.

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

ATTACHMENT A (con't.)

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

ENGINEER:	COUNTY:
Halff Associates, Inc.	Williamson County, Texas
By: Michael A Maya	By:
Signature	Signature
Michael A. Maya	Dan A. Gattis
Printed Name	Printed Name
Vice President	County Judge
Title	Title
12/3/08	12-24-08
Date	Date

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