

EXHIBIT "E"

HIDALGO COUNTY Professional Engineering Services Contract # C-12-246-10-16 Work Authorization Form WORK AUTHORIZATION NO. 6

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Article 1 of the Agreement made by and between HIDALGO COUNTY, action herein by and through the Commissioner's Court, hereinafter called the "Owner," and, L&G Consulting Engineers, Inc. d/b/a L&G Engineering, professional engineers of Mercedes, Texas hereinafter called "Engineer".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the Engineer to provide Engineering Services required for Finalizing PS&E, Local Let and Construction Oversight and Re-Evaluation of EA for the Liberty Road project from Mile 3 to FM 2221.

The scope of services to be provided by the Owner is identified in *EXHIBIT "A" - Scope of Services to be provided by the Owner* attached hereto.

The scope of services to be provided by the Engineer is identified in *EXHIBIT "B" - Scope of Services to be provided by the Engineer* attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is \$496,000.00. This amount is based upon the costs outlined in the Estimated Cost Proposal attached hereto as *EXHIBIT "D-1" - Estimated Man-hour Breakdown*.

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article 6 of the Agreement.

PART 4. FUNDING

This Work Authorization No. 6 shall be funded through funding source:

Account No. _____

Requisition Number _____ (MUST BE INCLUDED AFTER CC APPROVAL)

EXHIBIT "E"

PART 5. PERIOD OF SERVICE

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization, as identified on *EXHIBIT "C" - Work Schedule*.

PART 6. RESPONSIBILITIES AND OBLIGATIONS

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

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by Hidalgo County 3, Commissioner Everardo "Ever" Villarreal as to content and detail of this Work Authorization No. 6.

HIDALGO COUNTY

COMMISSIONER PRECINCT NO. 3

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on _____ as indicated below.

THE ENGINEER:

L&G ENGINEERING

By:  Jacinto Garza, P.E.
President

THE OWNER:

HIDALGO COUNTY

By: Richard Cortez,
County Judge

ATTEST:

By: Arturo Guajardo, Jr., County Clerk

LIST OF EXHIBITS

Location Map

Exhibit A – Services to be provided by Owner

Exhibit B – Services to be provided by Engineer

Exhibit C – Work Schedule

Exhibit D-1 – Fee Schedule and Estimated Man-hour Breakdown

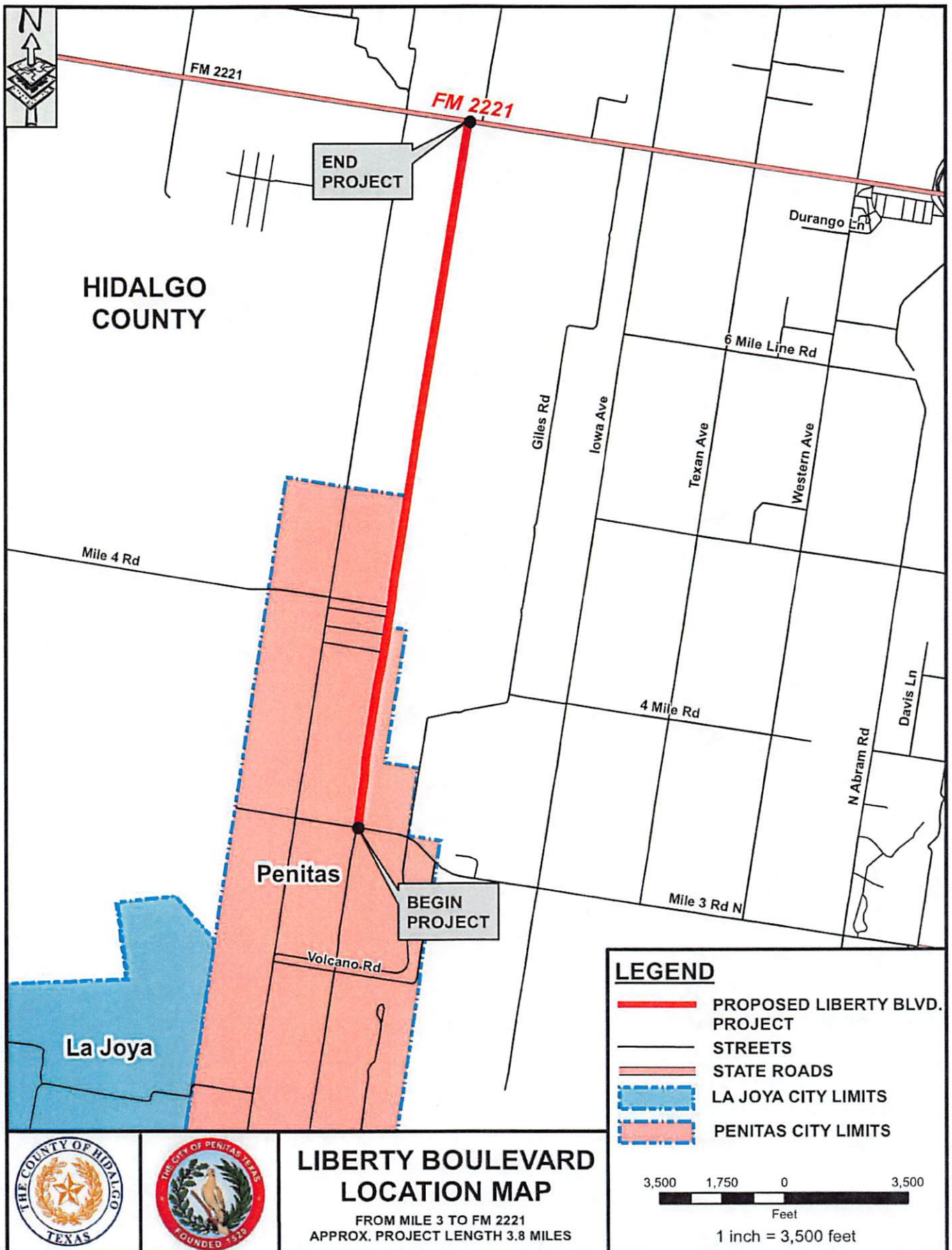


EXHIBIT "A"
SERVICES TO BE PROVIDED BY THE OWNER

1. The COUNTY will issue work authorization to initiate all required services and designate the authorized representative of the coordination of each work authorization.
2. The COUNTY will provide copies of all subdivision plats of record and/or in the subdivision process.
3. The COUNTY will provide the ENGINEER with on-going guidance, timely reviews, and decisions necessary to complete services required by the work authorization in order to permit the ENGINEER to maintain an agreed upon project schedule.
4. The COUNTY will process all acceptable requests for payment in a timely manner.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

SECTION 1-PROJECT DESCRIPTION

The services designated herein as "Services provided by the ENGINEER" shall include the performance of all engineering services for the following described facility:

COUNTY/CITY: CITY OF PENITAS/HIDALGO COUNTY

CONTROL: CSJ: 0921-02-194

PROJECT/DESCRIPTION: Finalize PS&E, Re-Evaluation of EA, Local Let & Construction Oversight

LENGTH: 3.8 MILES

HIGHWAY: LIBERTY ROAD

LIMITS: FROM: Mile 3 to FM 2221

PROJECT CLASSIFICATION

(Place an "X" in only one Project Classification)

- Surface Treatment
- Overlay
- Rehabilitation Existing Road (Scarify & Reshape)
- Convert Non-Freeway to Freeway
- Widen Freeway
- Widen Non-Freeway
- New Location Toll Freeway
- New Location Non-Freeway
- Interchange (New or Reconstruct)
- Bridge Widening or Rehabilitation
- Bridge Replacement
- Upgrade to Standards - Freeway
- Upgrade to Standards - Non-Freeway
- Miscellaneous Studies (Use Function Code 110 for All Tasks)

ENGINEER shall mean L&G Engineering.

SURVEYOR shall mean N/A.

STATE shall mean Texas Department of Transportation.

LPA shall mean Local Public Agency Hidalgo County.

SURVERYOR shall mean N/A.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

**SECTION 4 - SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES
AND PUBLIC INVOLVEMENT**

(Function Code 120)

Services
Provided By:
ENGINEER LPA

- | | | |
|--|---|---|
| <p>1. Environmental Reports</p> <p>All Environmental Reports shall be in accordance with 43 Texas Administrative Code (TAC) 2.40-2.51, Code of Federal Regulations, Title 23, Part 771 and Highway Design Operations and Procedures Manual, Part II-B.</p> <p>a. Environmental Assessments</p> <p>(1) An Environmental Assessment shall be prepared, anticipating a Categorical Exclusion.</p> <p>(2) An Environmental Assessment shall be prepared in accordance with 23 USC 327 and the 2014 TxDOT-FHWA Memorandum of Understanding, anticipating a Finding of No Significant Impact.</p> <p>(3) A Re-Evaluation of the FONSI shall be prepared.</p> <p>b. Environmental Impact Statement</p> <p>(1) A Draft Environmental Impact Statement shall be prepared. After appropriate interagency and public reviews within time limits prescribed by the Code of Federal Regulations, Title 23, Part 771 and 43 Texas Administrative Code 2.40-2.51, a Final Environmental Impact Statement shall be prepared.</p> <p>(2) A Section 4(f) Statement (Department of Transportation Act) shall be provided by the ENGINEER. The format and content of the statement is found in FHWA Technical Advisory T6640.8A.</p> | <p><u>NO</u> <u>NO</u></p> <p><u>NO</u> <u>NO</u></p> <p><u>YES</u> <u>NO</u></p> <p><u>NO</u> <u>NO</u></p> <p><u>NO</u> <u>NO</u></p> | <p>2. Public Involvement</p> <p>All public involvement procedures shall be in accordance with 43 Texas Administrative Code (TAC) 2.40-2.51, Code of Federal Regulations Title 23, Part 771 and Highway Design Operations and Procedures Manual, Part II-B.</p> <p>a. A public involvement meeting(s) and public hearing shall be scheduled, coordinated and conducted.</p> <p>b. Technical assistance for one public meeting and one public hearing, preparation of, and maintenance of contact lists, minutes of meeting(s), exhibit preparation, and other tasks outlined by the LPA, shall be provided.</p> <p>c. A meeting with affected property owners shall be conducted as necessary.</p> |
| <p>3. Technical Reports</p> <p>All technical reports shall be prepared in accordance with TxDOT's environmental rules and guidelines.</p> <p>a. Air Quality Analysis</p> <p>An air quality analysis shall be prepared in accordance with the STATE'S Air Quality Guidelines. The air quality analysis shall be provided as a Technical Report and a summary of the air quality results included in the administratively complete document for the project.</p> <p>b. Biological Technical Report</p> <p>The previously approved Species Analysis Form shall be updated as per the Memorandum of Understanding (MOU) with the Texas Parks and Wildlife Department (TPWD) and shall be prepared in accordance with the STATE'S Biological Guidelines.</p> <p>c. Wetland Permits</p> <p>Two permit applications shall be prepared and all work efforts and deliverables shall be in accordance with the current TxDOT and the U.S. Army Corps of Engineers policies and procedures. Permits shall include all of the necessary maps and exhibits.</p> | <p><u>NO</u> <u>NO</u></p> <p><u>YES</u> <u>NO</u></p> | |

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services Provided By:		
<u>ENGINEER LPA</u>		
<u>NO</u>	<u>NO</u>	(1) Historic Structure Studies A records search, project coordination request, and reconnaissance survey shall be performed, and documentation prepared regarding identification efforts, National Register eligibility and potential impacts to historic properties in accordance with the state's historic structure requirements.
<u>NO</u>	<u>NO</u>	(2) Archeological Studies File searches, project coordination request, an archeological reconnaissance, and an archeological survey shall be conducted to determine if known archeological sites are present or have been designated State Archeological Landmarks; and to identify the need (if any) to perform additional archeological investigations.
<u>NO</u>	<u>NO</u>	d. Community Impact Analysis A community impact analysis shall be prepared in accordance with the STATE'S Community Impact Guidelines.
<u>NO</u>	<u>NO</u>	e. Hazardous Materials The consultant shall perform an Initial Site Assessment (ISA) for hazardous materials impact in accordance with the American Society for Testing and Materials (ASTM) 1528.93 (Transaction Screen Process) and a Hazardous Materials Technical Report, as needed.
<u>NO</u>	<u>NO</u>	f. Indirect and Cumulative Impacts Analysis An indirect and cumulative impacts analysis shall be prepared in accordance with the STATE's guidelines.
<u>NO</u>	<u>NO</u>	g. Noise Analysis A noise analysis shall be prepared, including predicted noise levels and the consideration and evaluation of noise mitigation, in accordance with the STATE'S Noise Guidelines. The noise analysis shall be provided as a Technical Report and a summary of the noise analysis results shall be included in the administratively complete document.
<u>NO</u>	<u>NO</u>	4. Environmental Scoping The ENGINEER shall initiate the environmental scoping process with TxDOT. An environmental scoping document and risk assessment will be completed in coordination with TxDOT.
<u>NO</u>	<u>NO</u>	5. General Guidelines for Preparation of Environmental Documents <ul style="list-style-type: none"> a. All technical reports will be submitted electronically to TxDOT through their FTP site. b. The draft administratively complete document will be submitted to TxDOT electronically through their FTP site. c. The administratively complete document will be prepared in accordance with the content and format of FHWA Technical Advisory T6640.8A and the TxDOT Administrative Code 43 TAC §2.44. d. The administratively complete document will be submitted to TxDOT electronically through their FTP site. e. Upon completion and approval of the administratively and technically complete document, the Engineer will provide one (1) hard copy to the Client. All copies to TxDOT will be digital. f. Exhibits in the environmental document shall be color copies and text shall be black and white.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

FINALIZE

ROADWAY DESIGN CONTROLS

AS NEEDED

(Function Code 160)

Services

Provided By:

ENGINEER COUNTY

YES
N/A

N/A
N/A

1. Geometric Design

- a. Horizontal and Vertical Alignment (from field data of existing ROW)
- b. Schematic Layout
 - (1) The location of interchanges, main lanes, grade separations, frontage roads and ramps.
 - (2) Develop vertical and horizontal alignment of main lanes, ramps and cross roads at proposed interchanges or grade separations. Frontage road alignment data need not be shown on the schematic; however, it should be developed in sufficient detail to determine ROW needs. The degree of horizontal curves and vertical curve data, including "K" values, shall also be shown for ease of checking.
 - (3) For freeways, show the location and text of the proposed main lane guide signs. Lane lines and/or arrows indicating the number of lanes shall also be shown.
 - (4) A complete explanation of the sequence and methods of stage construction, if proposed, including the initial and ultimate proposed treatment of crossovers and ramps.
 - (5) The tentative ROW limits.
 - (a) Provide a roadway Design System (RDS) or (GEOPAK) computer tape of the preliminary earthwork to verify ROW requirements.
 - (b) Provide a graphics file containing the approved schematic.
 - (6) The geometric (pavement cross slopes, lane and shoulder widths, slope rates for fills and cuts) of the typical sections of proposed highway main lanes, ramps, frontage roads, and cross roads.
 - (7) The current and projected traffic volumes as provided by the TxDOT (20 year traffic projection, unless otherwise determined by the District Engineer).
 - (8) The control of access lines if Interstate or designated under House Bill 179.
 - (9) Direction of traffic flow on all roadways.
 - (10) Location and width of median openings for highway without access control.
 - (11) The geometric of speed change (acceleration, deceleration, climbing) lanes.

N/A

N/A

2. General Guidelines for Project Development

- a. Prior to preparing detailed plans for a proposed project, a preliminary schematic layout shall be prepared which indicates the general geometric features and location requirements peculiar to the project. An uncontrolled aerial mosaic will be provided for this use. Four copies of the schematic layout shall be submitted through the district to the Design Division for approval and subsequent coordination with the Federal Highway Administration (FHWA) where applicable. The layout shall be submitted for two-lane arterial highway projects on new locations and for all multi-lane highway projects. **No geometric design is to be performed until the COUNTY has given the engineer written approval of the preliminary schematic layout.**
- b. All geometric design shall be in conformance with the State's Design Division, Operations and Procedures Manual, except where variances are permitted in writing by the STATE.
- c. The schematic layout shall include basic information which is necessary for the proper review and evaluation including the items listed above in the checklist for schematic layout.
- d. Handling of traffic during construction shall be a consideration in the development of preliminary designs.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services
 Provided By:
ENGINEER COUNTY

- | | | |
|------------|------------|--|
| <u>N/A</u> | <u>N/A</u> | 2. General Guidelines for Project Development (<i>continued</i>)
e. Upon approval of the schematic layout by Design Division (FHWA on Federal-aid projects), it shall be the basis for an exhibit at any required public hearing prior to final development of the project. If there are any changes to the schematic after the Design Division and FHWA approval and before the public hearing, four copies of the revised schematic, as displayed at the hearing, shall be submitted either prior to or accompanying the public hearing data. If there are no changes in the schematic as displayed at the hearing, only photographs of the schematic and other displays shall be submitted with the public hearing data.
f. For all freeway construction projects, these schematics shall show the location and text of the proposed main lane guide signs. A schematic layout shall be submitted through the district to the Traffic Operations Division, Traffic Safety Section for approval and subsequent coordination with the FHWA. All signing shall be in conformance with the Texas MUTCD.
g. On complex projects, informal contact through the district with the Design Division and FHWA personnel is encouraged with regard to development of preliminary design prior to official schematic submission.
h. The engineer shall furnish a project tape that is compatible with the STATE's computer system, a project listing, and a cross section plot showing the original design sections containing the earthwork input and original cross sections for the project. Accuracy of the earthwork design is of utmost importance since it is the basis for contractor payments and construction staking. |
| <u>N/A</u> | <u>N/A</u> | 3. Exhibit for Airway/Highway Clearance Permits |
| <u>YES</u> | <u>N/A</u> | 4. Grading Design
a. Refine the horizontal and vertical alignment of main lanes, frontage roads, ramps, cross roads and direct connectors based upon the approved schematic layout. Determine vertical clearances at grade separations and overpasses, taking into account the appropriate super elevation rate.
b. Typical Sections
c. Design Cross Sections
d. Determine Cut and Fill Quantities
e. Slope Stability Analysis
f. Embankment Foundation Stability Analysis
g. Embankment Settlement Analysis |
| <u>YES</u> | <u>N/A</u> | 5. Pavement Design |
| <u>YES</u> | <u>N/A</u> | a. Prior to initiating detailed plan preparations for a project, a preliminary investigation shall be made to determine the approximate section and pavement type to be used for the pavement structure. The Flexible Pavement Design Manual for flexible pavement, "Appendix F" of the Design Division, Operations and Procedures Manual, and the current AASHTO Guide for the Design of Pavement Structures, may be used for this purpose.
b. The typical section shall also reflect proposed geometric including pavement cross slopes, lane and shoulder widths, and slope rates whenever this data have not been previously shown on a schematic submission.
c. Embankment and Subgrade
(1) Soil Core Holes (Show cost estimate with Function Code 110)
(a) Along center line
(b) Along center line of each roadway |
| <u>N/A</u> | <u>N/A</u> | |
| <u>N/A</u> | <u>N/A</u> | |

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

SECTION 12 - CONSTRUCTION PHASE SERVICES

(Function Code 320)

Services
Provided By:
ENGINEER LPA

YES NO **CONSTRUCTION MANAGEMENT SERVICES:**

The ENGINEER will provide engineering, geotechnical testing and support services for and during the construction of the Project or portions of the Project approved by the LPA. Specific (basic and special) services for CONSTRUCTION MANAGEMENT AND SUPPORT by the ENGINEER will include the following:

Construction Bidding: 25% of the Work Authorization task

YES NO 1) The ENGINEER will furnish the LPA the necessary copies of approved plans, specifications, notices to bidders, and proposals as prepared under PS&E.

YES NO 2) The ENGINEER will assist the LPA on the tabulation of bids, recommendations to the Owner as to the proper action on all bid proposals received, and the preparation of formal contract documents for the award of each construction contract.

Construction Contract Administration and Management: 75% of the Work Authorization task

YES NO 3) In general, the ENGINEER will provide the management and engineering support/data required for consultation and advisement to the LPA and act as the LPA's representative as provided in the General Condition of the Construction Contract.

NO NO 4) The ENGINEER will coordinate and conduct a pre-construction conference

YES NO 5) Defects and Deficiencies. The ENGINEER will use his best efforts to protect the LPA against defects and deficiencies in the work of the Contractor. The ENGINEER will promptly notify the LPA of any such defect or deficiency, and take all steps possible to require the Contractor to correct the defect or deficiency.

NO NO 6) Contractor Payment. The ENGINEER will review quantities as submitted by the Contractor and will coordinate with the LPA for the preparation of the monthly and final estimates for payment to the Contractor.

7) The ENGINEER will provide Project site inspection of the authorized construction contract as follows:

YES NO a) Project Engineer. The ENGINEER will provide monthly visits by the Project Engineer or a competent representative of the ENGINEER to the site of construction for the purpose of monitoring the Contractor's progress and conformance to the construction contract plans and specifications.

NO NO b) Resident Engineer and/or Construction Inspector(s). The ENGINEER will furnish the services of a Resident Engineer and/or Construction Inspector(s) for on the site inspection construction to monitor/inspect the Contractor's daily progress and conformance to TxDOT's PS&E specifications.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services
Provided By:
ENGINEER LPA

Environmental Permit Compliance and Construction Monitoring

N/A N/A 8) Periodic field visits shall be conducted at the construction site during the construction of the culvert at the drainage crossings and the drainage ditch to ensure compliance of the General Conditions of NWP throughout the duration of construction and document and photograph field visits. An administrative record of the environmental permit compliance activities during construction for final submittal to USACE upon construction completion will be completed and submitted to USACE. Once construction is completed, Engineer shall assist the LPA with the compliance certification which provides the USACE a signed certification documenting completion of construction activity and will submit the necessary paperwork to USACE.

The pre-construction meeting shall be attended. The General Contractor shall be provided with the General Conditions of the Nationwide Permits (NWP). The General Conditions of the NWP at the pre-construction meeting shall be reviewed with the Contractor.

Miscellaneous Technical Activities:

YES NO 9) Shop Drawings. The ENGINEER will review and check design related (Not Stds) shop or working drawings furnished by the Contractor.

NO NO 10) Control of Materials & Equipment. The ENGINEER will provide inspection of all materials and equipment furnished/used by the Contractor as follows:

NO NO a) Review and record all laboratory, shop and mill tests of materials and equipment for compliance with the construction contract specifications.

NO NO b) Observe and/or perform Project record testing and/or independent assurance testing as outlined in the construction contract specifications.

NO NO 11) Change Orders. When applicable the ENGINEER will prepare the engineering data, including plan sheet drawings, specifications, and estimates, for the preparation of construction contract change orders, which may be required due to actual field conditions encountered or new requirements directed by the LPA.

NO NO 12) As Built Drawings. The ENGINEER will develop as built drawings to depict the work as actually constructed. The LPA will be furnished five (5) set of prints.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services
Provided By:
ENGINEER LPA

N/A N/A **CONSTRUCTION MATERIAL TESTING:**

The ENGINEER will provide the LPA with construction material testing services for the Project. The services to be provided include sampling and testing of all construction materials as required by the project plans and specifications. All sampling frequencies and test procedures will be performed in general accordance with the Texas Department of Transportation TEX methods (or ASTM methods as required) as outlined in the Guide Schedule for Sampling and Testing (11/07). The construction material testing includes, but is not limited to the following:

- (a) Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges/Misc.) to determine compliance of these materials with project plans and specifications.
- (b) Field density testing of soils and base materials to ensure proper compaction as required by project plans and specifications.
- (c) Field sampling and testing of fresh concrete, and laboratory testing of hardened concrete to determine compliance with project plans and specifications.
- (d) Field compaction testing of asphalt to ensure proper compaction during lay down operations.
- (e) Field inspection, sampling and laboratory testing of asphalt materials to determine their material properties and their compliance with project plans and specifications.
- (f) The ENGINEER will be responsible for concrete batching as well as the asphalt testing at the plants to insure delivery of acceptable material to the job site.
- (g) Any additional laboratory testing as required/requested by the LPA and the project plans and specifications.
- (h) Providing accurate and timely reports to the LPA and all/other recipients as designated by the LPA.
- (i) The ENGINEER will verify the concrete and asphalt designs to assure it is in accordance with TxDOT specifications to be developed by the contractor.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services
Provided By:
ENGINEER LPA

YES NO

PROJECT LOCAL LETTING - The following is a list of work associated with locally letting the project. See attached **Texas Department of Transportation "Local Government Project Development & Delivery Check list"** (Pages 1-16).



Local Government Project Development & Delivery Checklist

Project CSJ#: _____
 Local Government: _____

Project Info: _____
 TxDOT District: _____

Item	Description	Not Applicable	Plans or Project Manual Page No.	Task Completion Verified By LG (insert name below):	LG Date Verified	Task Completion Verified By TxDOT (insert name below):	TxDOT Date Verified
2	Project Initiation						
2.2.4	LG Project Oversight						
1	Oversight Level Special Approval, Part A is completed by LG and provided to TxDOT.						
2	Oversight Level Special Approval, Part B is completed by TxDOT, including confirmation of the LG's most recent Overall Risk Score and date.						
2.3.3	Responsible Person in Charge (RPIC)						
1	Documentation of District RPIC assignment.						
2	Documentation of LG RPIC assignment.						
2.3.4	Qualified Person						
1	Documentation of LG Qualified person.						
2.3.5	Initial Project Coordination						
1	Documentation of Initial Project Meeting - minutes and roster.						
2	Appropriate project designation and agency information in TxDOTCONNECT resources tab.						
2.4	Advance Funding Agreement (AFA)						
1	LG DUNS # and Zip Code +4 provided to TxDOT district.						
2	District verifies DUNS # and forwards DUNS # and Zip Code +4 to FIN-LM.						
3	AFA map of project matches PS&E layout.						
4	Project budget and description matches TxDOT finance information (TxDOTCONNECT).						
5	Engineering design guidelines for geometrics are specified (e.g. AASHTO, TxDOT, ADAAG, etc.).						
6	Clear statement of project development responsibilities between TxDOT and LG (ROW mapping and acquisition, utility relocation, environmental, design, construction).						
7	Statement of applicability of LGPP and need for "Qualified Person."						
8	Statement of latest allowable letting date (if responsibility of LG) or risk of having funding withdrawn.						
9	Statement of milestones LG must accomplish including dates to allow project to be added to TxDOT's 24-month letting						
10	On MPO agreements, statement that CMAQ funds (if applicable) may be withdrawn if not committed to project that advances within a specified year.						
11	Document signed and dated by appropriate signing authority for LG and TxDOT.						
12	Statement indicating if there is any retainage withheld from LG on interim reimbursements.						
13	All amendments to AFA meet above requirements.						
2.5	State Letter of Authority (SLOA)						
1	SLOA for PE on file prior to commencing work.						
2	If federal aid, FPAA on file prior to commencing work.						
2.6	Project Accounting						
1	Appropriate invoicing frequency from LG.						
2	Appropriate review and approval of invoicing.						
3	Non-Construction Projects						
3.2	Professional Services Procurement						
1	TxDOT pre-approval of LG written procurement process.						
	a. Preparation of Scope (size & complexity of project).						
	b. Evaluation factors for ranking/selection of consultant.						
	c. Use of selection committee, if any, and details regarding evaluation and selection.						
	d. Request for Qualifications (RFQ) or Statement of Qualifications (SOQ) from prospective consultants including DBE and other federal referenced requirements.						
	e. Request for Proposal (RFP) from prospective consultants.						
	f. Conflict of interest identification, disclosure & resolution.						
	g. Evaluation for debarment actions or suspension actions.						
	h. Discussion of disposition of submitted RFQ, SOQ and/or RFP that will not be used and public disclosure requirements.						



Local Government Project Development & Delivery Checklist

Project CSJ#: _____
Local Government: _____

Project Info: _____
TxDOT District: _____

Table with 8 columns: Item, Description, Not Applicable, Plans or Project Manual Page No., Task Completion Verified By LG (Insert name below), LG Date Verified, Task Completion Verified By TxDOT (Insert name below), TxDOT Date Verified. Rows include evaluation process, contract preparation, negotiation, and various project milestones.



Local Government Project Development & Delivery Checklist

Project CSJ#: _____
Local Government: _____

Project Info: _____
TxDOT District: _____

Table with 8 columns: Item, Description, Not Applicable, Plans or Project Manual Page No., Task Completion Verified By LG (insert name below), LG Date Verified, Task Completion Verified By TxDOT (insert name below), TxDOT Date Verified. Rows include evaluation processes, contract negotiations, design guidelines, and environmental compliance.



Local Government Project Development & Delivery Checklist

Project CSJ#: _____

Project Info: _____

Local Government: _____

TxDOT District: _____

Item	Description	Not Applicable	Plans or Project Manual Page No.	Task Completion Verified By LG (insert name below):	LG Date Verified	Task Completion Verified By TxDOT (insert name below):	TxDOT Date Verified
3	LG ensures all environmental studies, reports, documents and public involvement are performed and/or obtained to satisfy the requirements of the project scope.						
4	LG ensures the project receives NEPA clearance.						



Local Government Project Development & Delivery Checklist

Project CSJ#: _____
Local Government: _____

Project Info: _____
TxDOT District: _____

Table with 8 columns: Item, Description, Not Applicable, Plans or Project Manual Page No., Task Completion Verified By LG (insert name below), LG Date Verified, Task Completion Verified By TxDOT (insert name below), TxDOT Date Verified. Rows include sections for Environmental Compliance, Right-of-Way and Utilities, Utility Accommodation, and Plans, Specifications and Estimates.



Local Government Project Development & Delivery Checklist

Project CSJ#: _____

Project Info: _____

Local Government: _____

TxDOT District: _____

Table with 8 columns: Item, Description, Not Applicable, Plans or Project Manual Page No., Task Completion Verified By LG (insert name below), LG Date Verified, Task Completion Verified By TxDOT (insert name below), TxDOT Date Verified. Rows include sections for Design - Traffic, Design - Bridges and Structures, Design - Building Facilities, Bid Document Preparation, Bonding, Buy America, Child Support Documentation, Claims, Contract Time, and Debarment Certification.



Local Government Project Development & Delivery Checklist

Project CSJ#: _____
Local Government: _____

Project Info: _____
TxDOT District: _____

Table with 8 columns: Item, Description, Not Applicable, Plans or Project Manual Page No., Task Completion Verified By LG (insert name below), LG Date Verified, Task Completion Verified By TxDOT (insert name below), TxDOT Date Verified. Rows include items 7.6.10 through 7.6.25 covering topics like Designated Material Sources, Differing Site Conditions, Disadvantaged Business Enterprises, Title VI and Nondiscrimination Program, Equipment Rental Rates, Form FHWA 1273, Liquidated Damages, Lobbying Certification, Local Hiring Preference, Non-Resident Bidder and Texas Preference, Material State or Local Preference, Materials, Method of Construction, Non-Collusion Statement, Non-Discrimination Against Persons with Disabilities, and Non-Responsive Bid.



Local Government Project Development & Delivery Checklist

Project CSJ#: _____

Project Info: _____

Local Government: _____

TxDOT District: _____

Item	Description	Not Applicable	Plans or Project Manual Page No.	Task Completion Verified By LG (insert name below):	LG Date Verified	Task Completion Verified By TxDOT (insert name below):	TxDOT Date Verified
1	On design-bid-build, LG adopts Article 2.7L of TxDOT Standard Specification (Non-Responsive Proposals) or submits alternate for TxDOT approval.						



Local Government Project Development & Delivery Checklist

Project CSJ#: _____
Local Government: _____

Project Info: _____
TxDOT District: _____

Table with 8 columns: Item, Description, Not Applicable, Plans or Project Manual Page No., Task Completion Verified By LG (insert name below), LG Date Verified, Task Completion Verified By TxDOT (insert name below), TxDOT Date Verified. Rows include sections like Non-Segregated Facilities, Patented/Proprietary Products, Prequalification, Prevailing Minimum Wage, Prison Produced Materials, Publicly-Owned Equipment, Railroad Insurance Provision, Retainage, Safety: Accident Prevention (OSHA), Subcontracting, Termination or Default of Contract, Title VI and Nondiscrimination Program, Trench Safety, Warranties and Warranty Clauses, Letting and Award, and Letter of Authority.



Local Government Project Development & Delivery Checklist

Project CSJ#: _____
 Local Government: _____

Project Info: _____
 TxDOT District: _____

Item	Description	Not Applicable	Plans or Project Manual Page No.	Task Completion Verified By LG (insert name below):	LG Date Verified	Task Completion Verified By TxDOT (insert name below):	TxDOT Date Verified
2	Federal Project Authorization Agreement (FPAA) request created by FIN-LM.						
3	Signed FPAA received. Confirm FPAA matches AFA on funding amount and percentages.						
4	FHWA approves Letter of Authority on federal-oversight projects.						
5	District issues State Letter of Authority.						
6	Signed Plans Title Sheet and copies of LOA and FPAA sent by District to LG giving authorization to advertise.						
8.2.3	Advertising						
1	TxDOT (or FHWA, if it has oversight) authorization prior to advertisement.						
2	Documentation supporting minimum 3 weeks (21 days) in advance of bid opening.						
3	Documentation that advertisement informed potential bidders of place and time bids are to be opened and read.						
4	Documentation supporting newspaper advertisements started after LOA and at least 3 weeks prior to bid opening and ran consecutive weeks.						
8.2.4	Distribution of Bid Documents						
1	Verify approved bid documents were available at least 3 weeks prior to bid opening.						
2	LG ensures plans and specifications are not furnished to federal suspended or debarred bidders or TxDOT debarred bidders.						
8.2.5	Addenda						
1	TxDOT (or FHWA, if it has oversight) approval of all addenda prior to release to bidders.						
2	Assurance all addenda made available to all bidders.						
3	Bidders must acknowledge receipt of all addenda in their bids.						
8.2.6	Bid Opening and Tabulation						
1	Verify all bids were sealed and filed with the LG and opened in a public meeting; bidders were not prohibited from attending the public meeting; and all bids were opened and publicly read in the presence of the meeting attendees at time and location listed in advertisement.						
2	Verify all unit prices are provided and mathematical extensions are correct in bid tabulations.						
3	Verify bidder provided documentation of railroad insurance, if applicable.						
4	Receive lobbying certification form from bidder.						
5	Verify Child Support Statement certification and Business Ownership form (list of names and Social Security numbers of all individuals owning 25% or more of company) are included in bid. If not, bid is non-responsive.						
8.2.7	Bid Analysis						
1	LG checks to verify contractor is not debarred as part of the bid tabulation process.						
2	LG ensures all bidders submit a non-collusion statement. If bidder fails to submit statement, its bid may not be opened, read and considered for contract award. Retain statement for all bidders.						
3	Check submitted bids or proposal for compliance with reasons that make a proposal non-responsive. Do not consider non-responsive bids for award.						
4	LG verifies all addenda have been acknowledged.						
5	If bid list is changed by addenda, LG verifies that correct bid list is submitted.						
6	If bid list is changed by addenda, LG verifies the engineer's final estimate is correct for comparison.						
7	LG verifies all required forms are submitted and all required pages are signed.						
8	Prepare a written analysis and evaluation of bids.						
9	Determination of lowest responsible/responsive bidder.						
8.3	Contract Award						
8.3.2	Concurrence in Award						
1	Request for TxDOT Concurrence Letter submitted to TxDOT for processing.						
2	Submit the following information to the district for concurrence:						
	a. Letter of recommendation from the LG and engineer.						
	b. Bid analysis and tabulation with all bids and engineer's estimate.						
	c. Documentation of minimum 21-day advertising period.						
	d. Verification the contractor is not currently debarred from receiving federal- or state-funded contracts.						



Local Government Project Development & Delivery Checklist

Project CSJ#: _____
Local Government: _____

Project Info: _____
TxDOT District: _____

Table with 8 columns: Item, Description, Not Applicable, Plans or Project Manual Page No., Task Completion Verified By LG (insert name below), LG Date Verified, Task Completion Verified By TxDOT (insert name below), TxDOT Date Verified. Rows include items 3, 4, 5, 9 Construction, 9.2 Contract Administration, 9.2.2 Contract Execution, 9.2.3 Project Coordination Meeting, 9.2.4 Pre-Construction Meeting, 9.2.5 Notice to Proceed (NTP), 9.2.6 Environmental Concerns, 9.2.7 Inspection, 9.2.8 Supervision and Staffing, 9.2.9 Specification Compliance, 9.2.10 Quality Assurance Plan, 9.2.11 Records, 9.2.12 Subcontracting.



Local Government Project Development & Delivery Checklist

Project CSJ#: _____

Project Info: _____

Local Government: _____

TxDOT District: _____

Item	Description	Not Applicable	Plans or Project Manual Page No.	Task Completion Verified By LG (insert name below):	LG Date Verified	Task Completion Verified By TxDOT (insert name below):	TxDOT Date Verified
1	LG must approve requests for subcontractors in writing, and provide TxDOT subcontractor approval log.						
2	LG must ensure subcontractors are not debarred.						
3	LG must monitor the 30% (or 25% if state funded) prime contractor self-performance requirement.						
4	LG must obtain and review all subcontract agreements for required provisions, including the physical incorporation of form FHWA 1273.						



Local Government Project Development & Delivery Checklist

Project CSJ#: _____
 Local Government: _____

Project Info: _____
 TxDOT District: _____

Item	Description	Not Applicable	Plans or Project Manual Page No.	Task Completion Verified By LG (insert name below):	LG Date Verified	Task Completion Verified By TxDOT (insert name below):	TxDOT Date Verified
9.2.14	Progress Payments						
1	Appropriate invoicing frequency (monthly) from LG during construction.						
2	Appropriate support documentation provided with reimbursement requests.						
3	Contractor paid by LG within 30 days.						
4	LG received Prompt Payment certification monthly from the Contractor.						
9.2.15	Retainage						
1	If retainage is not kept, adopts TxDOT spec Article 9L (9.6L Progress Payments) including FHWA-approved special provision and includes in bid documents, request for proposals or concessionaire agreement.						
2	Verify that if retainage is kept, incremental final acceptance of subcontracted work is made.						
9.2.16	Contract Time						
1	LG must ensure all days are charged and/or credited in accordance with the time charge method in the contract documents.						
2	LG must provide a monthly Contract Time Statement.						
3	LG must obtain a Scheduler designation from the Contractor, and receive regular progress schedule updates (monthly).						
9.2.17	Time Extensions						
1	LG must obtain TxDOT approval for all time extensions requested from the contractor prior to approval. Time extensions must be supported by a contractor developed TIA.						
9.2.18	Termination or Default of Contract						
1	LG shall consult with and receive the concurrence of TxDOT prior to termination of a contract.						
9.2.19	Claims						
1	LG must keep TxDOT involved and receive approval of claims if it anticipates requesting participation of settlement costs.						
9.3	Application of Contract Elements During Construction						
9.3.2	Change Orders						
1	TxDOT reviews and concurs in all changes to the contract.						
2	The LG assures the total contract price does not vary by more than +/- 25% without contractor consent.						
9.3.22	Convict (Inmate) Labor						
1	LG must ensure no convict labor is utilized on the project.						
9.3.4	Differing Site Conditions						
1	Differing site conditions must be handled in accordance with provisions included in the contract documents.						
9.3.5	Disadvantaged Business Enterprises (DBEs), Historically Underutilized Businesses (HUBs), and Small Business						
1	LG obtains contractor's DBE liaison officer information.						
2	LG must ensure DBEs are certified under the TUCP; maintain a screenshot of search results in project records.						
3	LG must receive and monitor monthly DBE reporting provided by Contractor; forward monthly reporting to TxDOT.						
4	LG must conduct CUF reviews on all DBE subcontractors.						
9.3.6	Equal Employment Opportunity (EEO)						
1	LG obtains contractor's designated EEO Officer information.						
2	In accordance with 23 CFR Part 230 and 49 CFR Part 127.3, LG ensures all federal-aid construction contractors and subcontractors with contracts of \$10,000 or greater do not discriminate and will take affirmative action to assure equal employment opportunity for all persons attendant to the contract. To assure nondiscrimination, LG must have done the following:						
	a. All contractors and subcontractors accepted the following as their operating EEO policy verbatim: "It is the policy of the Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color or national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."						
	b. All contractors and subcontractors designated and identified an EEO officer.						
	c. All contractor and subcontractor personnel authorized to hire, supervise, promote and discharge employees must be fully						



Local Government Project Development & Delivery Checklist

Project CSJ#: _____
Local Government: _____

Project Info: _____
TxDOT District: _____

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Local Government Project Development & Delivery Checklist

Project CSJ#: _____

Project Info: _____

Local Government: _____

TxDOT District: _____

Item	Description	Not Applicable	Plans or Project Manual Page No.	Task Completion Verified By LG (insert name below):	LG Date Verified	Task Completion Verified By TxDOT (insert name below):	TxDOT Date Verified
2	If SOC states additional funds are due from LG, payment must be made by due date in the request letter.						
10.2.4	<u>Audit</u>						
1	LG makes project records available for audit in accordance with AFA.						
10.2.5	<u>Document Retention</u>						
1	LG must retain project records for minimum of the period established in the AFA.						



Local Government Project Development & Delivery Checklist

Project CSJ#: _____
Local Government: _____

Project Info: _____
TxDOT District: _____

Table with 8 columns: Item, Description, Not Applicable, Plans or Project Manual Page No., Task Completion Verified By LG (insert name below), LG Date Verified, Task Completion Verified By TxDOT (insert name below), TxDOT Date Verified. Rows include items 10.2.6, 10.3, 10.3.3, 10.3.4, 10.3.5, and 10.3.6.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Document and Information Exchange

Data, Plan Sheets, General Notes and/or Specifications provided to the LPA shall be furnished on 8GB USB flash drives. Each 8 GB flash drive shall have a file titled Table of Contents. The Table of Contents shall indicate the locations of files within the directory structure of the documentation.

General Notes and specifications shall be provided in MS Office 2007 format. Plan sheets shall be provided in Microstation DGN or GEOPAK GPK format. PDF copies of plan sheets shall also be provided.

Two copies of the documentation shall be provided to the LPA.

If required, the ENGINEER shall provide to the LPA, a CD that contains all the plan sheets for the project. The graphics tape shall be compatible with the LPA's computer system.

CD Tape Required (YES or NO): YES

Proposal Time

The time indicated in the proposal and the contract shall include time necessary for reviews, approval, etc.

Office Location

The ENGINEER will perform the services to be provided under this agreement out of their office or offices listed below:

<u>Service</u>	<u>Office Location</u>
PS&E Development	Mission Office
Local Let Bid Documentation	Mission Office
Construction Management	Mission Office

The work effort will be managed out of the _____ Mercedes _____
(City)
office located at 2100 West Expressway 83 _____,
(Address)
Mercedes _____, Texas _____.
(City) (State)

EXHIBIT “B”
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX A - PLAN SHEET SEQUENCE PROCEDURE

1. Title Sheet
Detailed Index of Sheets
2. Typical Sections
3. General Notes and Specifications Data
4. Estimate and Quantity Sheets
5. Storm Water Pollution Prevention Plan (SW3P) Sheets
6. Traffic Control Plans
 - a. Sequence of Construction Layouts
 - b. Detour Plan/Profile/Typical Sections/Quantities
7. Roadway Layouts
 - a. Roadway Plan/Profile Sheets
 - b. Intersection Plan/Profile Sheets
 - c. Intersection Layouts
 - d. Alignment Layouts/Data
 - e. Ramp Layouts/Profiles
 - f. Connection Roads/U-turns Layouts/Profile
8. Roadway Details
 - a. Concrete Pavement Details/Standards
 - b. Concrete Pavement Terminal Anchorage Details/Standards
 - c. Bridge Approach Details/Standards
 - d. Bridge Terminal Anchorage Details/Standards
 - e. Roadway/Median Barrier Details/Standards
 - f. Curb Details
 - g. Driveway Details/Typical Sections/Standards
9. Signing Layouts and Marking Layouts
10. Traffic Signal Layouts
11. Lighting Layouts
12. Illumination Detail Standards (HMID, HMIF, HMIP, RID)
13. Utility Layouts/Profiles
14. Drainage Area Maps and Hydraulic Data
 - a. General Drainage Area Maps
 - b. Stage-Discharge Curves
 - c. Main Cross-Drainage Culvert/Bridge Hydraulic Data
 - d. Drainage Area Maps/Culverts/Storm Sewer
 - e. Hydraulic Data/Culverts/Inlets/Storm Sewer/Pumps
15. Detailed Drainage Plans
 - a. Drainage Plan/Profile Sheets (Storm Sewer Plan/Profile Sheets)
 - b. Channel Plan/Profiles/Typical Sections
 - c. Box Culvert Plan/Profile
 - d. Pipe Sewer/Culvert Cross Sections

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX A - PLAN SHEET SEQUENCE PROCEDURE (Continued)

16. Drainage Structural Details/Standards
 - a. Inlet Details/Standards
 - b. Manhole Details/Standards
 - c. Junction Box Details/Standards
 - d. Safety End Treatment Details/Standards
 - e. Box Culvert Details/Standards
 - f. Culvert Wingwall Details/Standards
 - g. Excavation-Backfill Diaphragms
 - h. Riprap Details/Standards
 - i. Temporary Pollution and Erosion Control Details

17. Pumphouse Layouts

18. Pumphouse Details

19. Pumphouse Standard Details

20. Bridge Layouts/Profile/Typical Sections*

21. Bridge Details*
 - a. Summary of Bridge Quantities
 - b. Abutments
 - c. Interior Bents
 - d. Spans
 - e. Special details for the specific bridge

22. Bridge Standard Details*

23. Bridge Railing Standards

24. Retaining Wall Layouts/Profiles**

25. Retaining Wall Details**

26. Retaining Wall Standard Details**

27. Guard Fence/Standards and Signal Pole Standards

28. Signal/Electrical Details/Standards and Signal Pole Standards

29. Signing/Markers/Striping Details/Standards

30. Barricade/Construction/Beacon Standards

31. Miscellaneous Standards
 - a. Chain Link Fence Standards
 - b. Bridge End Detail/Standards
 - c. Roadway Clearance Details/Standards
 - e. Attenuator Standards

NOTE: Variations of these plan sheet sequence guidelines may be permitted if approved in writing by the LPA.

EXHIBIT "B"

SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX B - PLAN PREPARATION PROCEDURES

1. Title Sheet
The ENGINEER shall be responsible for completing the title sheet as required and formatted by the STATE and as discussed in Part V of the Highway Design, Operations and Procedures Manual. Refer to Section K - Plans, 1 - Title Sheets, page 5-24, for the procedure to be used regarding all plans prepared by the ENGINEER.
2. Project Layout
The project layout shall clearly depict the entire project as it is proposed and will usually be drawn at a scale of 1 inch=100 feet or 1 inch=200 feet, depending on the size of the project.
3. Typical Sections
See Part IV of the Highway Design, Operations and Procedures Manual.
4. Sequence of Work Sheets (Traffic Control Plan)
Clarity and completeness should be the rule to follow in preparing these sheets, with particular attention given to location of construction signs and barricades, lane widths, protection of drop offs, etc. For a reference guide use the Texas Department of Transportation, Texas Manual on Uniform Traffic Control Devices. Usual scale of 1 inch=100 feet and/or 1 inch=50 feet for special locations. A narrative sequence shall be included in the special provisions for the project. Staging of structural elements shall be considered. Provisions for drainage shall be considered, included and indicated during all stages of construction operations.
5. Removal Item Sheets
These sheets indicate removal of existing facilities necessary to the proposed construction. (1 inch=40 feet) (use same scale as plan/profile sheets).
6. Summary Sheets
Summary Sheets are required to indicate type, quantity and/or location of work for individual items of the proposed project.
7. Alignment Layout Sheets
These sheets indicate the horizontal alignment with curve data and coordinates usually tabulated thereon. On some projects, depending on size, this information may be included on the plan profile sheets. Usual scale (1 inch=100 feet) or (1 inch=40 feet).
8. Plan Profile Sheet
Clarity and completeness should be the rule to follow in preparation of these sheets. Usual scale (1 inch=40 feet or 1 inch=50 feet) or (1 inch=20 feet), depending on project complexity.
9. Drainage Area Maps
Usual scale (1 inch=100 feet) and/or (1 inch=200 feet) supplemented by large scale area maps as necessary.
10. Drainage Plan Profile Sheets
These sheets may be required on some projects to clearly depict location of inlets, storm sewer lines, and profile of storm sewer lines and laterals. Usual scale (1 inch=40 feet or 1 inch=50 feet) or (1 inch=20 feet). Storm sewer design does include redesign of storm sewers imposed by utility constraints developing after initial reviews by the STATE and consequential redesign and adjustments.
11. Runoff, Inlet, Storm Sewer and Culvert Sheets
Use standard sheets.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX B - PLAN PREPARATION PROCEDURES (Continued)

12. Culvert Cross Sections and Details
District standard reproducible sheets can be furnished (one each) to the ENGINEER for modification of special designs.
13. Manhole and Inlet Details
District standard reproducible sheets can be furnished (one each) to the ENGINEER.
14. Miscellaneous Detail
Curb, Sidewalk, Driveways, etc.
15. Intersection Details
16. Marking Layouts and/or Details
Layouts of the entire project with markings depicted thereon. Usual scale 1:500 (1 inch=40 feet or 1 inch=50 feet). On some projects typical details might suffice.
17. Structural Details
Bridge layout sheets shall have the same horizontal and vertical scale. Usually (1 inch = 10 feet) (1 inch = 20 feet). Sections of existing and proposed structures usually have a scale of (1 inch = 5 feet). Elements of the bridge (abutments, bents, slabs, etc.) shall be detailed to a (1/2 inch = 1 foot) or (1/4 inch equals 1 foot) architect scale to provide clear legible drawings when reduced. Letters shall be a minimum size of 4 millimeters (5/32 inch) height for hand lettering and 140 for lettering by computer-aided design and drafting (CADD).
18. Overhead Sign Bridge Layouts
A maximum of four structures may be shown on each layout sheet. The reference to the appropriate overhead sign bridge (OSB) standard and the following requirements shall be shown on the layout:
 - (1) Drilled shaft size and length
 - (2) Soil strength used for design {indicate basis and boring(s) used}
 - (3) Design height
 - (4) Tower height
 - (5) Leg spacings and
 - (6) Design wind speed.

The wind speed design map need not be included in the project plans. Designation of tower member size and anchor bolt size shall not be shown. For OSBs which require special design, the design shall be in accordance with the AASHTO sign specifications (see Item 22 of References on page 49) and to the same loading requirements as for normal standard structures. Structures (special or standard) which will have changeable message signs shall be analyzed by the ENGINEER.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX C - GENERAL PLAN CHECKLIST

Services
 Provided By:
ENGINEER LPA

___	___	Title Sheet
___	___	Project Layout
___	___	Sequence of Work
___	___	Detour Layouts & Profiles
___	___	Construction Pavement Markings
___	___	Signing & Barricades
___	___	Construction Sign & Beacons
___	___	Typical Sections
___	___	Shaping & Finishing Sections
___	___	Slopes Adjacent to Shoulders
___	___	Estimate & Quantities
___	___	General Notes & Specification Data
___	___	Grading Summary
___	___	Miscellaneous Summaries (See following "SUMMARIES" heading)
___	___	Horizontal Curve Data & Alignment Layouts
___	___	Drainage Summaries
___	___	Structure Summaries
___	___	Erosion Control Summary & Details
___	___	Plan/Profile Sheets
___	___	Erosion Control Summary & Details
___	___	Pavement Contours
___	___	Superelevation Transition (If Required)
___	___	Grading Contours
___	___	Guard Fence Layouts
___	___	Storm Water Pollution Prevention Plans (SW3P)
___	___	Drainage Area Maps
___	___	Hydraulic Data
___	___	Drainage Sheets
___	___	Bridge Hydrology Sheets
___	___	Inlet & Manhole Details
___	___	Utility Support Details
___	___	Culvert Cross Sections & Details
___	___	Special Culvert Designs
___	___	Special Drainage Details
___	___	Chain Link Fence Locations
___	___	Ramp Details Sheet
___	___	Removal Item Sheet - Including detours (Shown in detour summary, No payment for removal; subsidiary to construction detours)
___	___	Pavement Details
___	___	Pavement Standard Modification for Concrete Shoulder
___	___	Concrete Pavement Continuously Reinforced (CPCR)
___	___	Concrete Pavement Contraction Design (CPCD)
___	___	Concrete Pavement Details - Jointed Reinforced (Steel Bars) (CPJR)
___	___	Bridge Approach Slab Details
___	___	Vehicle Attenuator Details
___	___	Miscellaneous Details
___	___	Wheelchair Ramps
___	___	Pavement Marking Details
___	___	Modified Standards
___	___	List of Standards
___	___	Permanent Signing Plans & Quantities

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX C - GENERAL PLAN CHECKLIST (continued)

Services
 Provided By:
ENGINEER LPA

- | | | |
|-----|-----|---|
| ___ | ___ | Permanent Lighting Plans, Quantities & Standards |
| ___ | ___ | Bridge Layout(s) |
| ___ | ___ | Bridge Details |
| ___ | ___ | Retaining Wall Layout(s) |
| ___ | ___ | Retaining Wall Details |
| ___ | ___ | Pumphouse Details |
| ___ | ___ | Underdrain Details (Retaining Walls) |
| ___ | ___ | Culvert Standards |
| ___ | ___ | Soil Profile |
| ___ | ___ | Temporary Traffic Signals |
| ___ | ___ | Design Cross Sections |
| ___ | ___ | Estimate |
| ___ | ___ | List of Standard Specification, Special Provisions & Special Specifications |
| ___ | ___ | Detour Special Provisions (If Required) |
| ___ | ___ | Construction Time Estimate |
| ___ | ___ | Critical Path Method (CPM) |
| ___ | ___ | Unit Price Documentation |

Miscellaneous

- | | | |
|-----|-----|-----------------------------|
| ___ | ___ | Conduit Requirements |
| ___ | ___ | Traffic signal Requirements |

Summaries (ALL BELOW YES FOR ENGINEER AND NO FOR LPA UNLESS NOTED OTHERWISE)

- | | | |
|-----|-----|---|
| ___ | ___ | Salvaging and Placing Topsoil |
| ___ | ___ | Prepare ROW |
| ___ | ___ | Remove Old Structures |
| ___ | ___ | Scarify Existing Pavement |
| ___ | ___ | Remove Old Concrete Curb of Curb and Gutter (C&G) |
| ___ | ___ | Remove Old Concrete Pavement |
| ___ | ___ | Remove Old Concrete Riprap |
| ___ | ___ | Remove Metal Beam Guard Fence |
| ___ | ___ | Galvanized steel Beam Guard Fence (12Ga) (GSBGF) |
| ___ | ___ | Temporary Guard Fence (TEMPGF) |
| ___ | ___ | Summary of Concrete Flumes |
| ___ | ___ | Curbs |
| ___ | ___ | Adjust Manholes & Inlets |
| ___ | ___ | Underdrains |
| ___ | ___ | Base and Pavement |
| ___ | ___ | Large Structure |
| ___ | ___ | Concrete Riprap (RR8 & RR9) |
| ___ | ___ | Temporary Portable Concrete Barrier (PCBR) |
| ___ | ___ | Concrete Traffic Barrier |
| ___ | ___ | Vehicle Attenuator |
| ___ | ___ | Guard Rail Energy Absorbing Terminal (Great System) |
| ___ | ___ | Pavement Markings & Blast Cleaning (Thermoplastic) |
| ___ | ___ | Retaining Walls |
| ___ | ___ | Large Structure Summaries |
| ___ | ___ | Small Structure Summaries |

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX C - GENERAL PLAN CHECKLIST *(continued)*

Services
Provided By:
ENGINEER LPA

Summaries **(ALL BELOW YES FOR ENGINEER AND NO FOR LPA UNLESS NOTED OTHERWISE)**

- | | | |
|---|---|---|
| — | — | Earthwork (Roadway & Channel) & Channel Details |
| — | — | Culverts |
| — | — | Detours |
| — | — | Seeding or Mulch Sod - Quantity Only |
| — | — | Inlet & Manholes |
| — | — | Sidewalks |
| — | — | Construction Pavement Markings |
| — | — | Driveways |
| — | — | Concrete Median |
| — | — | Storm Sewers |
| — | — | Head Walls & Safety End Treatments |
| — | — | Curb Openings |
| — | — | Manholes |
| — | — | Chain Link Fence, Remove & Replace Chain Link Fence |
| — | — | Remove & Relay Reinforced Concrete Pipe (RCP) or Pipe Sewer |

EXHIBIT D-1
PROJECT FEE SCHEDULE AND
ESTIMATED MANHOUR BREAKDOWN

LIBERTY ROAD PROJECT
(from Mile 3 to FM 2221)

		MANHOURS											TOTAL HOURS	Sub-Contract Amounts / ROW COST	TOTAL LINE ITEM COST	*ROUNDED TOTAL LINE ITEM COST
		Senior Project Manager	Senior Engineer	Project Engineer	Senior Environmental Scientist /Specialist	Design Engineer	EIT	Senior Engineer Tech	Environmental Scientist /Specialist	Engineer Tech	CADD Operator	Admin / Clerical	TOTAL HOURS	Sub-Contract Amounts / ROW COST	TOTAL LINE ITEM COST	*ROUNDED TOTAL LINE ITEM COST
CONTRACT RATE		212.06	176.72	126.65	163.23	111.92	76.58	93.28	81.62	70.69	64.13	58.3				
WORK AUTHORIZATION NO. 6 - Section II (From: Mile 3 to FM 2221) - Finalize PS&E, Re-Evaluation of EA, Local Let & Construction Oversight																
Function Code	Description of Work															
120	Complete a Re-Evaluation of EA	15			161				174			23	373		\$ 45,003.71	\$ 45,000.00
160	Finalize PS&E	60	285			460	226			209	190	20	1450		\$ 160,003.99	\$ 160,000.00
164	Develop Local Let Bid Package	80	225	260				123				15	703		\$ 102,003.74	\$ 102,000.00
320	Eng Consultant Construction Management (18 months)	96	435	651								160	1342		\$ 189,008.11	\$ 189,000.00
SUB-TOTAL		236	945	911	0	460	226	123	0	209	190	195	3495		\$ 496,019.55	\$ 496,000.00

Subtotal Man-hour Fee with Sub-Consultant Costs: \$ 496,019.55

*** Total Project Fee: \$ 496,000.00**

*Rounded Figure