

HIDALGO COUNTY
Professional Engineering Services
Contract # C-07-051-02-06
Work Authorization Form

WORK AUTHORIZATION NO. 14

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.B. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and, **TEDSI Infrastructure Group** professional engineers of **Mission**, Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to prepare a PS&E package for the design of 31 flashing beacons. The 31 locations were approved under the

The scope of services to be provided by the **Engineer** is identified in *Attachment "A" – Scope of Services to be Provided by the Engineer* attached hereto.

PART 2. LUMP SUM COST

The estimated cost for services under this Work Authorization is **\$ 387,500.00**

PART 3. PAYMENT

Compensation and payment to the **Engineer** for the services established under this Work Authorization shall be made in accordance with Article/Part/Section II, Item G and Article/Part/Section V of the Agreement.

PART 4. FUNDING

This Work Authorization No.14 shall be funded through funding source:
Account No. _____

Requisition Number _____ (MUST BE INCLUDED AFTER CC APPROVAL)

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.

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 Judge J.D. Salinas as to content and detail of this Work Authorization No. # 14.

HIDALGO COUNTY
JUDGE

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on _____ as indicated below and effective as of _____ day of _____, 2009.

THE ENGINEER:
TEDSI INFRASTRUCTURE GROUP

THE OWNER:
HIDALGO COUNTY


By: Eric R. Dietrich, P.E., Project Manager

By: J.D. Salinas, County Judge

ATTEST:

By: Arturo Guajardo, Jr. - County Clerk

ATTACHMENT

ATTACHMENT "A" - Services to be Provided by the Engineer

TEDSI INFRASTRUCTURE GROUP

March 19, 2009

Hon. JD Salinas III – Hidalgo County Judge
County Judge Office
100 E. Cano 2nd Floor
Edinburg, Texas 78540

**RE: Hidalgo County Contract #C-07-051-02-06
Work Authorization # 14
Preparation of PS&E package for the design of 31 Flashing Beacon Assemblies at various
locations within Hidalgo County**

Dear Judge Salinas:

TEDSI Infrastructure Group (TEDSI) is pleased to notify you that the Texas Department of Transportation (TxDOT) recently informed us that all 31 Hidalgo County candidates that were submitted for funding as part of the 2010 HSIP-(HES) and HRRR programs have been approved. Attached you will find the list received from TxDOT.

As explained in our proposal to submit the candidates last year, the programs call for a 10% match from the Hidalgo County. However, the County can also apply for additional reduction of its portion through the Economically Disadvantaged County Program.

It is proposed that this project be performed as part of the existing traffic evergreen contract between TEDSI and Hidalgo County.

TEDSI will perform these services as detailed in the attached “Attachment A” – Scope of Services.

SCHEDULE

This project will require approximately 120 days to complete.

COMPENSATION

The proposed lump sum fees to develop the PS&E design package is: **\$ 387,500.00.**

I can assure you of our personal service, total commitment and timely response towards you on this Project.

If you have any questions or require additional information, please do not hesitate to call.

If it is your desire to proceed with this project, please sign the attached work authorization documents and return for further processing.

Sincerely

TEDSI INFRASTRUCTURE GROUP


Eric R. Dietrich, P.E., P.T.O.E
Project Manager

Attachments: As Stated.

Tel: 956/424-7898 + **TEDSI** + Fax: 956/424-7021

ATTACHMENT "A"
SCOPE OF SERVICES
PS&E PACKAGE FOR THE DESIGN OF 31 FLASHING
BEACON ASSEMBLIES AT VARIOUS LOCATIONS WITHIN
HIDALGO COUNTY

EXHIBIT A - SERVICES TO BE PROVIDED BY THE STATE

- A. TxDOT will provide timely reviews of all submittals (30%, 60%, 90%, and Final) to ensure that the project is not delayed.
- B. TxDOT will Let project.
- C. TxDOT will provide inspection services and supervision during construction.

EXHIBIT B - SERVICES TO BE PROVIDED BY THE ENGINEER

The traffic engineering services described herein and to be provided by TEDSI Infrastructure Group (TEDSI) are associated with the development of Plans, Specifications, and Estimate (PS&E) for the design of Flashing Beacon Assemblies for 31 intersections at various locations within Hidalgo County. Span wire Overhead Flashing Beacon Assemblies will be installed at 29 intersections and Solar Powered Road Side Mounted flashing beacon assemblies will be installed at the approaches of 2 intersections. The scope of work and associated fees for the proposed traffic engineering services are based on the following items:

- 1. TEDSI shall design and prepare complete plans, specifications and estimate on this project for all items as identified herein.
- 2. All design work shall be done in English units system. All TxDOT standard detail drawings required for this project shall be in English units. TEDSI will select and furnish all TxDOT standards required for this project.
- 3. TEDSI shall perform and submit all work on this project in Intergraph CADD drawings in a levelized, Microstation format consistent with District CADD standards.
- 4. This project shall be designed in accordance to the 2004 Texas Standard Specifications.
- 5. TEDSI will manage surveying subconsultant, Dos Lands Surveying, LLC (DLS) and obtain the required topographic surveys within the timeframe required to ensure the project is completed on time.

TASK 1.0 FC 150: SURVEYING

TEDSI shall utilize the services of DLS to obtain the required topography surveys for each intersection. Topographic surveys will be performed for twenty nine (29) intersections (one of them double) and will generally extend approximately 50 fifty feet past existing ROW on each street approach as shown in Figure 1.

DLS will establish two (2) control points at each intersection utilizing GPS data. DLS will investigate and establish apparent right-of-way at each location. The existing utilities will be collected and shown on the plans. Vertical Clearances will be obtained for each overhead utility. Underground utilities will be located after the local companies have painted their location at the intersections. All visible improvements will be collected and shown on plans such as culverts, poles, driveways, curb, sidewalks, existing illumination poles, etc.

DLS will provide TEDSI the mapping of these intersections immediately upon completion.

• *Field Survey and data collection.*

Topography – Topography layouts will be prepared to illustrate existing conditions and will generally include the following items.

- Topography – (English)
- Existing culvert structures
- Existing drainage structures
- Existing utilities (underground and overhead utilities)
- Existing safety lighting at each intersection
- Existing driveway openings
- Existing curb, sidewalk & driveways
- Existing Right of Way

TASK 2.0 FC 162: TRAFFIC SIGNAL DESIGN (PS&E)




TEDSI shall prepare plans and detailed drawings for Overhead Flashing Beacon Assemblies at the following twenty nine (29) intersections:

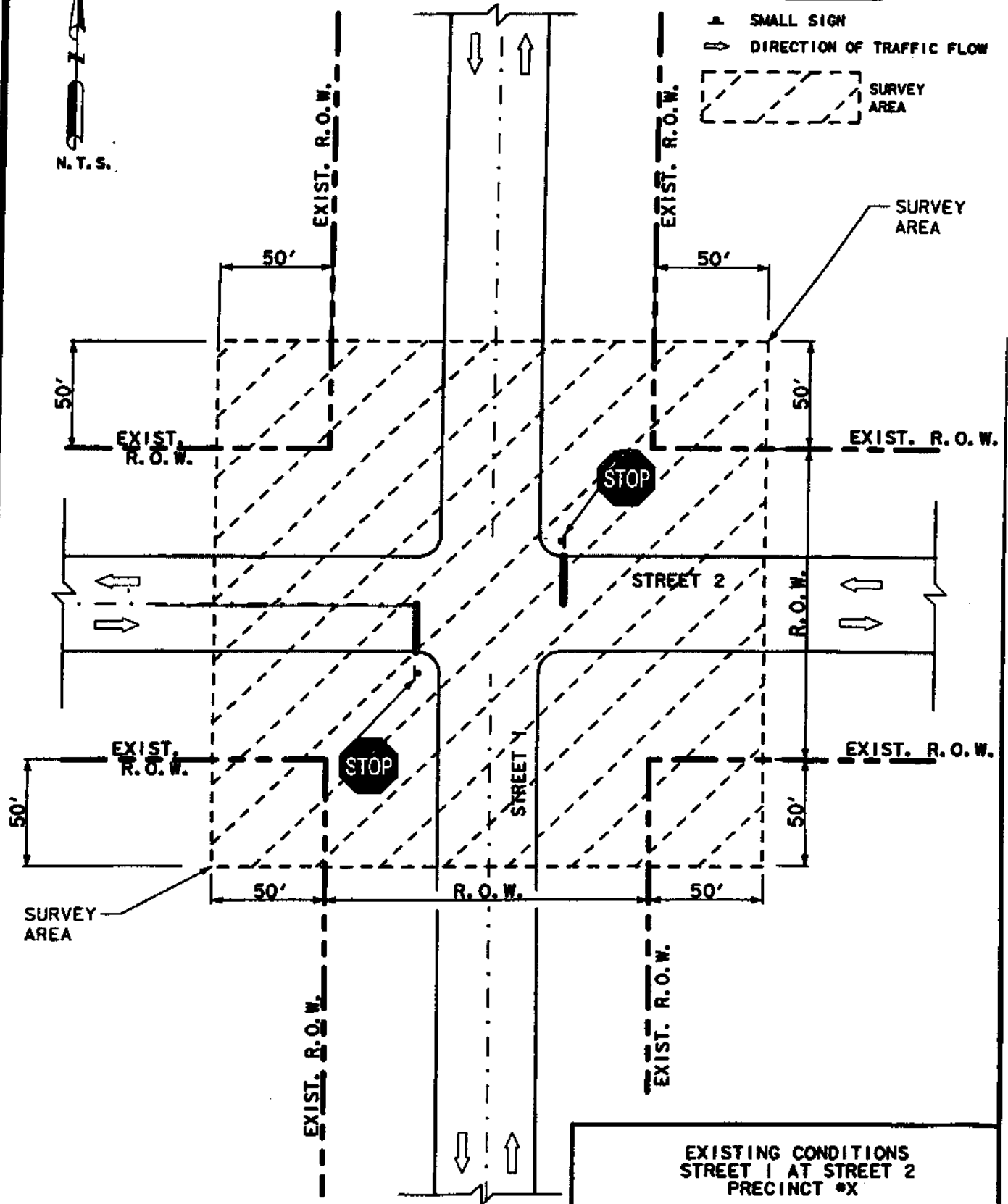
Intersection

1. MILE 2 W & MILE 12 1/2 N
2. MILE 6 W & MILE 11 N
3. MILE 6 1/2 W & QUINTERO
4. MILE 10 N & MILE 4 1/2 W
5. MILE 10 N & VICTORIA
6. MILE 4 N & MILE 1 1/2 E
7. MILE 5 1/2 W & LANTANA
8. CESAR CHAVEZ & ELDORA



LEGEND

-  SMALL SIGN
-  DIRECTION OF TRAFFIC FLOW
-  SURVEY AREA



**EXISTING CONDITIONS
STREET 1 AT STREET 2
PRECINCT *X**

**EXTEND SURVEY
50 FEET PAST EXIST. R. O. W.**

FIGURE 1

9. CESAR CHAVEZ & EARLING
10. TOWER & SIOUX
11. CESAR CHAVEZ & MINNESOTA
12. BRYAN & 8 MILE N
13. ABRAM & 5 MILE N
14. TOWER & CANTON
15. HOEHN & MILE 17 1/2 N
16. TERRY & MILE 17 N
17. MILE 17 N & TOWER
18. DOOLITTLE & CR DAVIS
19. TOWER & TEXAS
20. TRENTON & LOPEZ (Double Assembly due to offset)
21. CESAR CHAV & ALBERTA
22. HOEHN & ROGERS
23. DOOLITTLE & RAMSEYER
24. CESAR CHAV & MILE 17 N
25. VAL VERDE & MILE 20 N
26. LIPSEY & SKINNER
27. TRENTON & TWIN
28. TOWER & ALBERTA
29. TOWER & CURRY

TEDSI shall prepare plans and detailed drawings for Solar Powered Roadside Flashing Beacon Assemblies at the following two (2) intersections:

1. MILE 11 N & MILE 4 W
2. MILE 4 W & MILE 12 N

Traffic Signalization shall be designed in conformance with TxDOT requirements, including any appropriate Americans with Disabilities Act (ADA) design considerations. TEDSI's plan layouts shall be prepared in English units on 1"= 50' half scale single-banked drawings for traffic signals. Traffic signal plans shall generally consist of the following drawings for each intersection:

- **Plan Layouts** (to specify proposed signal improvements, including signal heads, electrical schedules, etc.)
- **Traffic Signal General Notes** (to provide guidance in constructing the proposed traffic signal).
- **Traffic Signal Basis of Estimate** (for all materials required at each intersection).
- **Standard Detail Drawings** (for traffic signal installation).
- **Cost Estimate** (provide spec data for this specific project and provide preliminary construction cost estimate).
- **Electrical Service Data & Summary** (for electrical service pole and disconnect information).

TEDSI will also include drawings depicting all existing and proposed permanent pavement markings at each of the intersections to be signalized. TEDSI shall design permanent signing and marking in accordance with the *2006 Texas Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways*. Plan layouts shall be prepared in English units on 1" = 50' half scale double-banked drawings. All striping material shall be specified as thermoplastic, and buttons graphically depicted independent of thermoplastic stripe. Permanent signing and striping design shall consist of the following drawings for each intersection:

- **Signing and Marking Layouts** (to identify all existing signs to remain, signs to be removed or relocated, all proposed signs and all proposed marking).
- **Intersection Marking Details** (for all special marking as required at the intersections in the project).
- **Pavement Marking Basis of Estimate** (for all marking devices and materials).
- **Small Sign Summary** (to identify all proposed small signs and mounting materials).
- **Small Signs to be Removed Summary** (to identify all small signs to be removed and/or relocated).
- **Standard Detail Drawings** (for permanent signing and marking).
- **Specification Data & Cost Estimate** (provide preliminary and Engineer's Probable construction cost estimate for each intersection.)

TEDSI will make the following project submittals for this Traffic Signal PS&E Project:

TEDSI will meet with TxDOT to discuss traffic signal preferences and design approach prior to completion of a 30% plan submittal.

1. ***30% Review Plan Submittal*** – TEDSI will provide two (2) copies of the following components that will comprise a 30% completion level:
 - a. ***Title Sheet*** with project location map, traffic signal agreement(s) shown on the right-hand side of sheet, a preliminary list of standards on the index of sheets.
 - b. ***Consolidated Summary*** indicating the bid items that have been identified and will be used.
 - c. ***Existing Condition Layouts*** - All utilities lines will be identified and shown to scale on the roadway. The layouts will include legend as provided by District Traffic Section.
 - d. ***Plan Layouts*** will include the north arrow, scale, centerline/alignment lines, stationing and matchline sheet numbers, existing conditions, conduit runs (either bore or trench), ground boxes and controllers using TxDOT legend.

The legend will appear on each sheet. The title block will include appropriate project number information and CSJ.

2. **60% Review Plan Submittal** – TEDSI will provide two (2) copies of the following components that will comprise a 60% completion level:
 - a. Plan layouts with all comments from the 30% review, fully addressed.
 - b. Title Sheet with project location map, all standards and plan sheets identified on Index of Sheets.
 - c. Consolidated Summary showing bid items in ascending numerical order. This sheet will indicate Electrical Service Data Table with applicable information filled in.
 - d. Plan layouts will contain estimated quantity boxes with appropriate bid code descriptions, conduit runs clearly labeled, and filled-in conduit run tables.
 - e. A preliminary construction cost estimate will be provided.
 - f. First draft of special specifications will be provided.
 - g. First draft of general notes.
 - h. Copies of calculations for foundation designs and service pole requirements will be included.
3. **90% Review Submittal** – TEDSI will provide two (2) copies of the following components that will comprise a 90% completion level:
 - a. Plans will be mostly completed and ready for review of quantities. All data tables, consolidated summaries and plan sheet estimated quantities will be complete and filled in.
 - b. *General Notes, Special Specifications and construction cost estimate* will be provided for review. Upon approval TxDOT will upload to DCIS.
4. **Pre-Final Review Submittal** – TEDSI will provide two (2) copies of completed design drawings for review and comment by the TxDOT Pharr District.
 - a. 11" x 17" Design Drawings
 - b. General Notes
 - c. Special Specifications
5. **100% Submittal**
 - a. TEDSI will provide five (5) copies of final 11"x17" set of plans.
 - b. TEDSI will provide one (1) copy of general notes.
 - c. TEDSI will provide one (1) copy of Special Specs and marked-up copy of changes of any Special Specs that have been modified.
 - d. TEDSI will provide two (2) copies of certification sheets.

- e. TEDSI will provide one (1) set of 11"x17" mylar plan drawings.
- f. TEDSI will provide one (1) CD containing an electronic copy of all .DGN files.

6. Construction Services

- a. Construction services are not included in TEDSI's scope of services.