

**DANNENBAUM ENGINEERING CORPORATION**  
**LAREDO OFFICE:**  
**8610 McPHERSON, SUITE 130 LAREDO, TEXAS 78040 (956)712-9817 OFFICE (956)712-9857 FAX**

October 21, 2016

Webb County  
1620 Santa Ursula, 2nd Floor  
Laredo, Texas 78040

*Attn: Luis Perez Garcia, P.E.  
Webb County Engineer*

*Ref: Loop 20 Main Lanes and Frontage Roads from Sta. 554+00 to Just North of Loop 20 / US 59  
Overpass (TxDOT CSJ 0086-14-058)(Loop 20 Extension)*

*Subj: Supplemental Work Authorization No. 2 to Work Authorization No. 2*

Dear Mr. Perez Garcia,

The enclosed proposal is based on the original submittal provided by Dannenbaum Engineering Corporation on September 9, 2016 and revised based on comments provided by TxDOT on October 19, 2016 to modify the scope and fee and incorporate comments provided at the project coordination meeting held October 18, 2016. Please find attached herewith: three (3) partially executed copies of Supplemental Work Authorization No. 2 to Work Authorization No. 2 for Engineering Services for the above referenced project, each bearing an original signature. The Contract is being increased by \$127,803.64.

Please execute each of the three (3) copies of Supplemental Work Authorization No. 2 to Work Authorization No. 2 using blue ink. Thereafter, please retain one (1) original for your files, transmit one (1) original to TxDOT, and return one (1) original to our office for our records.

Provided below are the justifications for the man-hours for the disciplines of the work required to modify the schematic and the administration requirements:

DEC - FC – 110 Roadway Design Criteria

- Modify the bridge length to accommodate revised lane configuration – 4 intersections will be modified to include two turn lane and 2 through lanes. Frontage roads to include turnaround 2 turn lanes and 2 through lanes.
- Modify the retaining walls out 12 feet to allow for future widening – plan view location of retaining walls will be updated. Ramps will be evaluated to determine minimal construction in the future. Typical sections will be revised to reflect updated configuration. Cross section will be modified to reflect new typical sections.
- Reconfigure entrance and exit ramp south of Airport – ramps will be redesigned to reflect an exit ramp and entrance ramp south of Airport.
- Increase the Radius of the Mainlane and Frontage Road alignments – Mainlane alignment and South Bound Frontage Road alignment will be modified to include a larger radius
- Change loop 20 to US 59 – All text will be updated to reflect US59.

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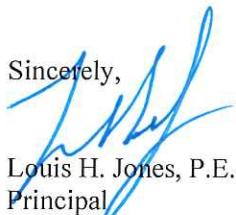
- Evaluate if exiting braided ramp can be switched to an entrance ramp – The Braided ramp configuration will be analyzed to improve weaving distance. Entrance ramp will braid over the exiting ramp.
- Perform Level of Service Analysis for Loop 20 Corridor – Traffic analysis will be perform for the Loop 20 corridor to determine the Level of Service Analysis for the roadway configurations.

DEC - FC – 120 Social, Economic & Environmental Studies & Public Involvement

- The proposed ROW taking in the vicinity of the Lake Casa Blanca International State Park and Casa Blanca Golf Course have been determined to be Section 6(f) Eligible. Due to Right-of-Way constraints in this area the taking of 6(f) property is unavoidable with the proposed design.
- Completion of the environmental documentation proposing the conversion of Section 6(f) property to non 6(f) use. This includes a separate NEPA document for the proposed conversion property.
- Identification of the proposed replacement property and the needed environmental documentation to propose a conversion request to TPWS and the NPS via the LWCF State Liaison Officer.

Should you have any questions or require further information regarding this matter, please contact me at your earliest convenience by telephone at (956) 682-3677 or by email at [louis.jones@dannenbaum.com](mailto:louis.jones@dannenbaum.com)

Sincerely,



Louis H. Jones, P.E.  
Principal

cc:	File No. 4688-01	Dannenbaum Engineering Corporation
	Richard D. Seitz, P.E.	Dannenbaum Engineering Corporation
	Nathaniel Olivarez, P.E.	Dannenbaum Engineering Corporation
	Anthony Garza	Dannenbaum Engineering Corporation
	Cynthia M. Luera	Dannenbaum Engineering Corporation

Attachments:

1.	Three (3) partially executed copies of Supplemental Work Authorization No. 2 to Work Authorization No. 2 for Engineering Services for the above referenced project, each bearing an original signature.
2.	Three copies of: <ul style="list-style-type: none"><li>a. Attachment D      Form D-2 Supplemental Work Authorization No. 2 to Work Authorization No. 2 (Dated 10-20-2016)</li><li>b. Exhibit B      Revised "Services to be provided by the Engineer" (Revised 10-20-2016)</li><li>c. Exhibit C      Maximum Amount Payable (Revised 10-20-2016)</li><li>d. Exhibit C-1      Maximum Amount Payable (Revised 10-20-2016)</li></ul>

**ATTACHMENT D**  
**D-2**  
**SUPPLEMENTAL WORK AUTHORIZATION NO. 2**  
**TO WORK AUTHORIZATION NO. 2**  
**CONTRACT FOR ENGINEERING SERVICES**

**THIS SUPPLEMENTAL WORK AUTHORIZATION** is made pursuant to the terms and conditions of Article 5 of Contract No. Loop 20 hereinafter identified as the "Contract," entered into by and between the County of Webb (County), and Dannenbaum Engineering Corporation (the Engineer).

The following terms and conditions of Work Authorization No. 2 are hereby amended as follows:

**PART I.** The Engineer will perform engineering design and/or detailing services as set forth in Exhibit B –Services to be Provided by the Engineer, for Loop 20 main lanes and frontage roads from Sta. 554+00 to Just North of Loop 20 / US 59 Overpass (TxDOT CSJ 0086-14-058) situated in Webb County, Texas in accordance with the project description attached hereto and made a part of this Work Authorization, more specifically described as follows:

A. For services as detailed in Supplemental Work Authorization No. 2 to Work Authorization No. 2.

**PART II.** The maximum amount payable under this Work Authorization is increasing to **\$750,072.48** from **\$622,268.84** and the method of payment is lump sum as set forth in Attachment E of the Contract. This amount is based upon fees set forth in Attachment E, Fee Schedule, of the Main Contract and the Engineer's estimated Work Authorization costs included in Exhibit D, Summary of Fees of Work Authorization No. 2, previously executed.

Original Work Authorization No. 2 Amount	=	\$ 567,911.98
Supplemental Work Authorization No. 1 Amount	=	\$ 54,356.86
Supplemental Work Authorization No. 2 Amount	=	\$ 127,803.64      \$ 750,072.48

The attached Exhibit D, Detailed Fee Schedule from October 2, 2013 through August 1, 2020, shall replace original Exhibit D in WA No. 2.

This Supplemental Work Authorization shall become effective on the date of final execution of the parties hereto. All other terms and conditions of Work Authorization No. 2 are to remain in full force and effect.

**IN WITNESS WHEREOF**, this Supplemental Work Authorization is executed in duplicate counterparts and hereby accepted and acknowledged below.

**THE ENGINEER**

(Signature)

Louis H. Jones, P.E.

(Printed Name)

Principal

(Title)

10-21-14

(Date)

**LIST OF EXHIBITS**

Exhibit C Fee Schedule summary

**THE COUNTY**

(Signature)

(Printed Name)

(Title)

(Date)

**SUPPLEMENTAL WORK AUTHORIZATION NO. 2**  
**TO**  
**WORK AUTHORIZATION NO. 2**

**EXHIBIT B**

**SERVICES TO BE PROVIDED BY THE ENGINEER**

**(REVISED 10/20/2016)**

**EXHIBIT B**  
**(Revised 10-20-2016)**  
**Services to be Provided by the Engineer**

CSJ: 0086-14-058  
Highway: SL 20  
County: Webb County  
Project No.: CBI 2013 (881)  
Limits: Loop 20 from Sta. 554+00 to Just North of Loop 20 / US 59 Overpass  
Project Length: 7.0 Miles  
Area Office: Laredo Area Office

**Proposed Improvements**

The proposed Loop 20 from Sta. 554+00 to Just North of Loop 20 / US 59 Overpass will consist of six mainlanes with shoulders and two lane frontage roads on each side eight (8) lane main lanes and no frontage roads from US 59 Hwy to Airport Drive and six (6) lane main lanes and three (3) lane frontage roads from Airport Drive to International Road for the advanced project planning Phase I and Phase II (Schematic / Environmental / Right of Way), and the Phase III – PS&E phase, may be performed at a later date, with Amendment to the Contract, which will consist of designing four mainlanes with shoulders and two lane frontage road each side eight (8) lane main lanes and no frontage roads from US 59 Hwy to Airport Drive and six (6) lane main lanes and three (3) lane frontage roads from Airport Drive to International Road with overpasses over Shiloh Road; Del Mar Road; University Drive; Jacaman Road and Laredo International Airport Road, including corresponding underground storm sewers; cross culverts; signage and traffic signals at frontage roads.

Sidewalks no both sides of the proposed Loop 20 Freeway from the Loop 20 / US 59 overpass to the Loop 20/ International Boulevard overpass.

Hike and Bike Trail along one side of the proposed Loop 20 Freeway from the Loop 20 / US 59 overpass to the Loop 20/ International Boulevard overpass.

**PHASE I- ADVANCED PROJECT DEVELOPMENT SERVICES**

**I. FEASIBILITY STUDIES**

**II. ROUTE AND DESIGN STUDIES**

Task: Roadway Design Criteria (FC: 110)

The Engineer shall revise the roadway design criteria to include sidewalks on both sides of Loop 20.

The Engineer shall revise the roadway design criteria to include small signs. The signs are to be designed in accordance with TxDOT "Sign Crew Field Book" and AASHTO "Guide for the Development of Bicycle Facilities (2012)

Contract No. **CSJ: 0086-14-058**  
**Supplemental Work Authorization No. 2 to Work Authorization No. 2**

The Engineer shall revise the roadway design criteria to include a hike and bike trail on one side of Loop 20. Hike and bike trails is to be designed in accordance with AASHTO "Guide for the Development of Bicycle Facilities (2012). Details are to be added illustrating sidewalk and hike and bike crossings of driveways.

**Task: Design Schematic (FC: 110)**

- b. Prepare a schematic plan and profile drawing ( $1''=50'H$ ,  $1'' = 10'V$ ) on a continuous color plot paper roll. The Schematic will include hike and bike trail, small signs, the ultimate edge of pavement, proposed hike and bike trail profile, existing utility crossings, proposed culvert crossings, proposed bridges, proposed R.O.W., existing cross streets, proposed driveways, proposed outfall channels, proposed channelized intersections, ultimate interchange configurations, signing, and pavement markings.

**Task: Value Engineering Studies (FC 110)**

- a. TxDOT will be responsible for preparing; holding and documenting Value Engineering Study with Engineer's Staff attending one(1) day.

**Supplemental Work Authorization No. 1 to Work Authorization No. 2**

- Ramp reconfiguration – 3 ramp - Reverse order of ramps (off-on instead of on-off).
- Frontage road turning lane – Make a dual left (shared right lane left and straight) at various intersection. Also, add deceleration right turn lanes.
- Extend multiuse bike path into park – Will not be included, it is to be included in a future work authorization if required.
- Realign park entrance – 3 alternatives will be provided on the project.
- New Bridge over Chacon Creek – Minimal work will be required to update the schematic to include the frontage road bridge over Chacon Creek.
- Wetland for detention/treatment facility – Will not be included, it is to be included in a future work authorization if required.
- Storm water detention between main lane and frontage road – Will not be included, it is to be included in a future work authorization if required.
- Concrete pavement for Main lanes – Estimate Only
- Concrete pavement for Frontage roads – Estimate Only.
- Reduce/Eliminate small strip acquisitions – Will modify with no charge..

**Supplemental Work Authorization No. 2 to Work Authorization No. 2**

- Modify the bridge length to accommodate revised lane configuration – 4 intersections will be modified to include two turn lane and 2 through lanes. Frontage roads to include turnaround 2 turn lanes and 2 through lanes.
- Modify the retaining walls out 12 feet to allow for future widening – plan view location of retaining walls will be updated. Ramps will be evaluated to determine minimal construction in the future. Typical sections will be revised to reflect updated configuration. Cross section will be modified to reflect new typical sections.

Contract No. CSJ: 0086-14-058  
Supplemental Work Authorization No. 2 to Work Authorization No. 2

- Reconfigure entrance and exit ramp south of Airport – ramps will be redesigned to reflect an exit ramp and entrance ramp south of Airport.
- Increase the Radius of the Mainlane and Frontage Road alignments – Mainlane alignment and South Bound Frontage Road alignment will be modified to include a larger radius
- Change loop 20 to US 59 – All text will be updated to reflect US59.
- Evaluate if exiting braided ramp can be switched to an entrance ramp – The Braided ramp configuration will be analyzed to improve weaving distance. Entrance ramp will braid over the exiting ramp.
- Perform Level of Service Analysis for Loop 20 Corridor – Traffic analysis will be performed for the Loop 20 corridor to determine the Level of Service Analysis for the roadway configurations.

**Task: Detention Pond Analysis (FC: 161)**

**Supplemental Work Authorization No. 2 to Work Authorization No. 2**

- Will not be included, it is to be included in a future work authorization if required

### III. SOCIAL, ECONOMICAL, AND PUBLIC INVOLVEMENT

#### Task: Environmental - (Section 6(f) Coordination) (FC: 120)

#### Supplemental Work Authorization No. 2 to Work Authorization No. 2

- Completion of the environmental documentation proposing the conversion of Section 6(f) property to non 6(f) use.
- Identification of the proposed replacement property and the needed environmental documentation to propose a conversion request to TPWS and the NPS via the LWCF State Liaison Officer.
- Prepare a separate NEPA document for the proposed Section 6(f) conversion property.
- Coordinate with local officials and TxDOT to complete the 6(f) process.
- The Engineer shall obtain ownership data for all impacted property owners and County shall obtain right of entry from all property owners prior to commencing any work for 6(f) related environmental services.

### DELIVERABLES

#### D. DELIVERABLES

1. Section 6(f) NEPA document for the parkland replacement property. Deliverables shall contain all data acquired during the environmental service. All deliverables shall be written to be understood by the public and must be in accordance with the State's Online Environmental Manual, current Standards of Uniformity (SOU), current guidelines, policies and procedures.
2. Two (2) copies of the updated Schematic.
3. Electronic files shall be furnished to the State on a CD or DVD Recordable media

### SCOPE AND FEE SCHEDULE ASSUMPTIONS

#### F. ASSUMPTIONS:

8. Assumes 2 coordination meetings with the client / TxDOT to address comments prior to the public meeting.
9. Assumes Right of Entry to be handled by the Client.
10. Assumes a 6-month duration for Section 6(f) coordination.
11. Assumes Client will provide replacement property location and provide survey and appraisal for 6(f) replacement property.

**EXHIBIT C**

**MAXIMUM AMOUNT PAYABLE**

**SUMMARY OF FEE SCHEDULE FOR PHASE I (ADVANCED PROJECT DEVELOPMENT SERVICES) SUPPORTING LUMP SUM CALCULATIONS**

Contract No. SWA No. 1 to WA NO. 2  
PHASE II

**EXHIBIT C**

**DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 1 TO WORK AUTHORIZATION NO. 2**

LOOP 20 STIMULUS PROJECT (CSJ: 0086-14-058)

ADVANCED PROJECT DEVELOPMENT SERVICES

*Respond to TxDOT comments / design changes and develop 6(f) Environmental Documents*

*for Extension of Loop 20 from Approximately STA 554+00 to just North of the Loop 20 / US 59 Overpass.*

**SUPPLEMENTAL WA NO. 2 TO WA NO 2**

**PHASE I SUMMARY**

ADVANCED PROJECT DEVELOPMENT SERVICES SUMMARY BY FUNCTION CODES										Total Phase I Services = \$127,803.64	
		PRIME			DBE			DBE			NON-DBE
Function Codes	Dannenbaum Engineering Corporation	Arredondo, LLC	Arias & Associates, Inc.	Aerial Data Services, Inc.	Ammaterra Environmental, Inc.	RODS, SUE, Inc.	Howland Engineering & Surveying Co.				Non-DBE
FC 110 Route and Design Studies	\$ 44,504.07	Hrs Fee	Hrs Fee	Hrs Fee	Hrs Fee	Hrs Fee	Hrs Fee				Non-DBE
FC 120 Social, Economic and Environmental Studies and Public Involvement	\$ 79,120.83										
Direct Expenses	\$ 4,178.64										
Total	0 \$ 127,803.64	0 \$ -	0 \$ -	0 \$ -	0 \$ -	0 \$ -	0 \$ -	0 \$ -	0 \$ -	0 \$ -	
Percent Participation	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
										% PARTICIPATION =	
NON-DBE	\$ 127,803.64	-	100.00%								
DBE	\$ -	-	0.00%								
TOTAL	\$ 127,803.64	-	100.00%								

**EXHIBIT C-1**

**DETAILED FEE SCHEDULE**  
**FOR**  
**SUPPLEMENTAL WORK AUTHORIZATION NO. 2 TO WORK AUTHORIZATION NO. 2**  
**(DANNENBAUM ENGINEERING CORPORATION)**

## EXHIBIT C-1

DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 1 TO WORK AUTHORIZATION NO. 2									
LOOP 20 STIMULUS PROJECT (CSJ: 0088-14-058)									
ADVANCED PROJECT DEVELOPMENT SERVICES									
<i>Respond to TxDOT comments, design changes and develop final Environmental Documents Extension of Loop 20 from 20' approximately STA 54-00 to just North of the Loop 20/US 59 Overpass.</i>									
<i>for</i>									
<b>DANNENBAUM ENGINEERING CORPORATION</b>									
		Principal or Project Manager	Dputy Project Manager	Senior Engineer (Civil)	Senior Engineer (Bridges)	Engineer	Senior Designer	CAD Operator or CAD Tech. I	Clerical
									Total Labor Hours
									Task Cost
<b>BASIC SERVICES (DANNENBAUM)</b>									
FC 110 -ROUTE AND DESIGN STUDIES									
MODIFY THE BRIDGE LENGTH TO ACCOMODATE REVISED LANE CONFIGURATION	1	0	2	0	0	16	16	0	43
MODIFY THE RETAINING WALLS OUT BE 12 FT TO ALLOW FOR FUTURE WIDENING	1	0	1	0	0	20	40	0	70
RECONFIGURE ENTRANCE & EXIT RAMP SOUTH OF AIRPORT	1	0	1	0	4	8	16	0	30
INCREASE THE RADIUS OF THE MAINLANE AND FRONTAGE ROAD ALIGNMENTS	1	0	1	0	12	20	24	0	58
CHANGE LOOP 20 TO US 59	1	0	0	0	0	0	8	0	9
EVALUATE IF EXITING BRAIDED RAMP CAN BE SWITCH TO AN ENTRANCE RAMP	1	0	1	0	8	8	0	0	18
LEVEL OF SERVICE ANALYSIS FOR LOOP 20 CORRIDOR FROM US 59 TO INTERNATIONAL	3	6	16	0	32	40	48	16	161
SUB-TOTAL - FC 110 -ROUTE AND DESIGN STUDIES	9	6	22	0	72	112	152	16	369
TOTAL BASIC SERVICES MANHOURS (DANNENBAUM)	9	6	22	0	72	112	152	16	369
HOURS SUB-TOTALS									369
LABOR RATE PER HOUR									
DIRECT LABOR COSTS									
TOTAL BASIC SERVICES FEE (DANNENBAUM)	\$ 327.93	\$ 236.07	\$ 225.50	\$ 132.09	\$ 106.64	\$ 63.44	\$ 64.69		
\$ 2,951.37	\$ 1,416.42	\$ 4,961.00	\$ 30.00	\$ 9,510.48	\$ 11,943.58	\$ 12,652.88	\$ 1,038.24	CHECK	
2,451.37	1,416.42	4,961.00	0.00	9,510.48	11,943.58	12,652.88	1,038.24	44,524.07	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEES)	6.45%	3.18%	11.15%	0.00%	21.37%	26.64%	23.50%	10.00%	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MANHOURS)	2.31%	1.54%	5.66%	0.00%	19.85%	28.79%	38.07%	4.11%	100.00%
DIRECT EXPENSES:									
Mileage (2 RT)	\$ 0.50/miles	748							\$ 386.96
Hotel	\$ 82.00/each	2							\$ 164.00
Per Diem	\$ 51.00/day	2							102.00
<b>TOTAL DIRECT EXPENSES</b>									\$ 654.96
<b>TOTAL BASIC SERVICES (ROADWAY AND DRAINAGE + DANNENBAUM DIRECT EXPENSES)</b>									\$ 45,155.07

## EXHIBIT C-1

DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 2 TO WORK AUTHORIZATION NO. 2  
LOOP 20 STIMULUS PROJECT (CSJ: 0085-14358)

ADVANCED PROJECT DEVELOPMENT SERVICES

Respond to TxDOT comments / design changes and develop 6(f) Environmental Documents

*for*  
*Extension of Loop 20 from Approximately STA 554+00 to just North of the Loop 20 / US 59 Overpass.*

SPECIAL SERVICES (FC 120) ENVIRONMENTAL SERVICES		Dannerbaum Engineering Corporation		Project Engineer (IV)	Project Engineer (IV)	Civil Engineer	Env. Scientist	Scientist (Haz. Material Review)	Eng. Tech / GIS /CADD Technician	Total LABOR HOURS	Task Cost		
<b>III. SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT</b>													
<b>FC 120 - SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT</b>													
Project Coordination and Project Scope											\$ -		
Consult with PWD to determine the Office(s) with Jurisdiction											\$ 2,905.56		
Coordinate with Webb County to Identify Replacement Property											\$ 711.56		
Coordinate with Webb County to Perform an Appraisal on the Subject Property and Replacement Property											\$ 1,977.28		
Develop Location Map for Subject Property and Replacement Property											\$ 1,353.24		
Develop a Site Plan, Location, and Boundary Map											\$ 2,706.48		
Prepare a Cover Letter addressing the Conversion											\$ 1,824.91		
Develop the 6(f) Environmental Assessment (Includes TxDOT Coordination for Each Task)											\$ -		
Natural Characteristics											\$ 854.22		
Geological / Soils											\$ 1,629.64		
Air Quality											\$ 1,344.90		
Water Quality											\$ 284.74		
Land Use											\$ 1,914.38		
Transportation											\$ 2		
Biology / TEE / Unique Wildlife											\$ 8		
Other Env. Resources (haz, ect)											\$ 2		
Document Mitigation for Unavoidable Adverse Impacts											\$ 40		
Describe Alternatives											\$ 20		
Develop a Public Notice for 6(f)											\$ 24		
Coordinate TIC Review - in conjunction with TFWD											\$ 8		
Coordinate a Signed Amendment to the 6(f) Agreement and report to TFWD											\$ 16		
Coordinate a Certificate of Land Dedication and report to TFWD											\$ 8		
Coordinate a Recorded Deed and report to TFWD											\$ 16		
Coordinate the Placement of Signage at the Replacement Property and report to TFWD											\$ 8		
Prepare 6(f) Documentation for the Public Hearing											\$ 8		
Attend the 6(f) Public Hearing - by Webb County											\$ 4		
Project Management											\$ 12		
Attend Coordination Meeting with Webb County (2x + travel)											\$ 24		
Attend Coordination Meeting with Webb County & TxDOT (2x + travel)											\$ 24		
Review and respond to TxDOT Comments (2x)											\$ 4		
Review and respond to TFWD Comments (2x)											\$ 16		
subtotal											\$ 4		
TOTAL FC 120 - SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT											\$ 1,930.00		
HOURS SUB-TOTALS											\$ 68		
LABOR RATE PER HOUR											\$ 19.00		
DIRECT LABOR COSTS											\$ (585.00)		
TOTAL											\$ 67,49		
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEE)											\$ 1,282.31		
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MAN-HOURS)											\$ 79,120.93		
											\$ 1,282.31		
											\$ 100.00%		
											\$ 100.00%		
											\$ 100.00%		
											\$ 79,120.93		

## EXHIBIT C-1

<b>DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 2 TO WORK AUTHORIZATION NO. 2</b> <b>LOOP 20 STIMULUS PROJECT (CSJ: 0085-14458)</b> <b>ADVANCED PROJECT DEVELOPMENT SERVICES</b> <i>Respond to TxDOT comments / design changes and develop 6(f) Environmental Documents</i> <i>Extension of Loop 20 from Approximately STA 452+40 to just North of the Loop 20 / US 59 Overpass.</i> <i>for</i> <b>Dannerbaum Engineering Corporation</b>									
<b>SPECIAL SERVICES (FC 120) ENVIRONMENTAL SERVICES</b>									
Task Description									
<b>DIRECT EXPENSES:</b>									
Mileage (8 RT)	Rate	Unit	Amount						
Air Travel	\$ 60.00	miles	2,784						\$ 1,447.68
Hotel	\$ 82.00	Each							\$ -
Per Diem	\$ 51.00	day	8						\$ 656.00
Rental Car	\$ 65.00	day							\$ -
Fuel (or Rental Car)	\$ 3.75	gallons							\$ -
Oversize Carrier Cost (Letter Size)	\$ 22.00	each	10						\$ 220.00
Hazardous Materials Report	\$ 1,200.00	each	1						\$ 1,200.00
<b>TOTAL DIRECT EXPENSES</b>									\$ 3,523.68
<b>ASSUMPTIONS:</b>									<b>\$ 82,644.61</b>
Environmental Services to Be Performed as summarized in the summary of hours and in this section									
Services not provided include: <b>NONE or NOT INCLUDED</b> . Dannerbaum will develop tasks as described in the summary of hours and in this section									
<p>(Column right of entry to perform environmental services Webb County          Develop letters or other materials or seeking right of entry Webb County          Compile and maintain mailing list Webb County          Develop public involvement plan Webb County with DEC Assistance          Public Involvement activities: Webb County</p> <p><i>Prepare an environmental impact statement and proposed replacement plan/entry</i></p> <p><i>Prepare an 4(f) evaluation for TxDOT</i></p> <p>Webb County will conduct the 6(f) Public Hearing with assistance from Dannerbaum</p> <p><i>Prepare Location Map</i></p> <p>Cover Letter shall include: Acre to be E, W (residential, commercial, agricultural/vegetation - species, dominant plants, vegetation, Topography, Natural water features on site, Soils, Wildlife habitat, Existing site development (extent of impervious cover, structures, etc.), Utilities available on site, Overhead utility lines on site, Any history of contamination, Any rights-of-way or easements, Located in a flood plain or wetland, Map delineating the floodplain/wetland area, Current property ownership, Identification of valuable or vulnerable natural resources, ecological processes, or rare, threatened, or endangered species of vegetation or wildlife. This documentation will be prepared to both the converted and replacement properties.</p> <p><i>Webb County shall prepare the Copy of the Reconnoiter Deed(s)</i></p> <p><i>TxDOT will provide the completed Loop 20 Environmental Assessment</i></p> <p><i>TxDOT will provide the completed Historic and Archaeological Survey (or use in the 6(f) coordination) - for converted property only</i></p> <p><i>TxDOT will complete the 4(f) coordination</i></p> <p>Public contact          Perform indirect and cumulative impact studies          Perform Environmental Justice analysis          Identify considerations impacting pedestrians and bicycles          Perform air quality analysis to include quantitative MSA analysis</p>									
Special Provisions:									
Management and Coordination									
<p>Environmental Document development project duration schedule assumed to be no longer than 6 months. Draft and Pre-Final or Final Environmental Document will be submitted within 6 months.</p> <p>Additional time will require supplemental to further develop or finalize environmental document.</p> <p><i>Literature Review and Secondary Data Collection</i></p> <p>Data collection to consist of one site visit for 3 days to collect data (includes meetings with TxDOT project file, ). It is assumed that the prime consultant will provide a list of adjacent property owners, obtain and provide ROE for all Natural Resources</p> <p><i>Transportation Project Environmental Survey</i> (TPE) non-concurrent property only. This scope of work does not include USACE 404 permitting. It is assumed that permitting under the Nationwide Permit 14 will be completed by TxDOT. This scope of work does not include presence absence surveys for threatened and endangered species at the request of resource agency consultations. This scope of work does not include a hydrologic model or map revision (LWR) from one Federal Emergency management Agency. This scope of work does not include a pre-existing bird survey prior to construction. This scope of work does not include the development of a storm water pollution prevention plan (SWPPP).</p> <p><i>Cultural Resources</i></p> <p>It is assumed the completed Cultural Resources document will be completed by TxDOT</p> <p><i>Public involvement:</i></p> <p>The consultant will prepare P material for Webb County.</p> <p><i>Air Quality:</i></p>									

## EXHIBIT C-1

SPECIAL SERVICES (FC 120) ENVIRONMENTAL SERVICES TASK DESCRIPTION								Dannerbaum Engineering Corporation			
	Project Engineer (IV)	Project Engineer (IV)	Civil Engineer	Env. Scientist	Scientist (Haz. Review)	Eng. Tech / GIS /CADD Technician	Administration/ Clerical	Total LABOR HOURS	Task Cost		
Take field measurements of existing noise levels (NOT INCLUDED)											
Perform hazardous materials studies for converted property only (Recommemorative Survey (NOT INCLUDED))											
Intensive Survey (NOT INCLUDED)											
Perform visual impact studies (NOT INCLUDED)											
Perform construction impact studies (NOT INCLUDED)											
Perform Section 4(f) evaluations											
Perform wetland delineations (NONE)											
Socioeconomics											
Only windshield surveys will be conducted. No door-to-door, mailer, or phone surveys will be conducted to obtain information from residence or business owners.											
Environmental Decision Document:											
The Sub consultant shall prepare a draft environmental decision document for review by TPWD and a final environmental decision document for approval by TPWD for (f) Coordination. The decision document will succinctly summarize the prime aspects of the project that influence the environmental decision.											
Deliverables:											
The Sub consultant shall conduct an internal quality assurance and quality control review on each deliverable before it is submitted to the County/State for review. After the draft deliverables are submitted and reviewed by TxDOT, Webb County, and TPWD, the Sub consultant shall revise and resubmit the deliverables to address all comments received.											
Environmental Decision Document:											
The Sub consultant shall prepare a draft environmental decision document for review by TxDOT and a final environmental decision document for approval by TxDOT, Webb County, and TPWD. The Sub consultant shall revise and resubmit the deliverables to address all comments received.											
Deliverables:											
The Sub consultant shall conduct an internal quality assurance and quality control review on each deliverable before it is submitted to the County/State for review. After the draft deliverables are submitted and reviewed by TxDOT, Webb County, and TPWD, the Sub consultant shall revise and resubmit the deliverables to address all comments received.											