

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

July 8, 2015

Webb County Engineering Dept.  
1620 Santa Ursula, 2<sup>nd</sup> Floor  
Laredo, Texas 78040

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

**Ref: Webb County Loop 20 Stimulus Project – International Blvd Set of Plans Only**

**Sub: Supplement Work Authorization No. 8 to Work Authorization No.1**

Dear Mr. Perez-Garcia,

Provided below are the justifications for the man-hours for the disciplines of the work required to modify plans, estimate and specifications for new TxDOT 2014 Specifications Book, and pavement design changes provided by TxDOT:

- Project Management
  1. Preparation of invoices and progress reports.
  2. Managing sub-consultants work.
  3. Prepare 1 submittal for an interim review and prepare 1 final submittal.
- General
  1. Update all callouts to reference and identify with the 2014 items and codes as well as specifications.
  2. Verification of completion will be done before submittals.
  3. All summaries will be updated to the 2014 items and codes, verify if bid items are being used and modified if items no longer exists.
- TCP
  1. Update all callouts to reference and identify with the 2014 items and codes as well as specifications.
  2. Verification of completion will be done before submittals
- TCP Standards
  1. Review and download all correlating 2014 standards
  2. Verification of completion will be done before submittals
- Roadway
  1. Update all P&P callouts to reference and identify with the 2014 items and codes as well as specifications.
  2. Quantify any bid items & codes that have been modified.
  3. Ensure proper calculations and use of modified bid items.
  4. Verification of completion will be done before submittals
- Roadway Standards
  1. Review and download all correlating 2014 standards
  2. Verification of completion will be done before submittals
- Retaining Walls

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1. Update all P&P callouts to reference and identify with the 2014 items and codes as well as specifications.
  2. Quantify modified bit items.
  3. Verification of completion will be done before submittals
- Retaining Wall Standards
    1. Review and download all correlating 2014 standards
    2. Verification of completion will be done before submittals
  - Drainage Details
    1. Update all callouts to reference and identify with the 2014 items and codes as well as specifications.
    2. Redo drainage calculations and modify drainage designs due to 2014 TxDOT Standard inlet designs.
    3. Quantify any bid items & codes that have been modified.
    4. Verification of completion will be done before submittals
  - Drainage Standards
    1. Review and download all correlating 2014 standards
    2. Verification of completion will be done before submittals
  - Utility Layouts
    1. No work to be done.
  - Bridge Layouts
    1. Update all callouts to reference and identify with the 2014 items and codes as well as specifications.
    2. Quantify any bid items & codes that have been modified.
    3. Verification of completion will be done before submittals
  - Bridge Standards
    1. Review and download all correlating 2014 standards
    2. Verification of completion will be done before submittal
  - Illumination Layouts
    1. Update all P&P callouts to reference and identify with the 2014 items and codes as well as specifications.
    2. Quantify modified bit items.
    3. Verification of completion will be done before submittals
  - Illumination Standards
    1. Review and download all correlating 2014 standards
    2. Verification of completion will be done before submittal
  - Signing, Pavement Markings & Delineation Layouts
    1. Update all callouts to reference and identify with the 2014 items and codes as well as specifications.
    2. Quantify any bid items & codes that have been modified.
    3. Verification of completion will be done before submittals
  - Signing, Pavement Markings & Delineation Standards
    1. Review and download all correlating 2014 standards
    2. Verification of completion will be done before submittal
  - SW3P Layouts
    1. Update all callouts to reference and identify with the 2014 items and codes as well as specifications.
    2. Quantify any bid items & codes that have been modified.

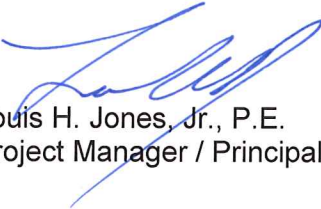
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3. Verification of completion will be done before submittals
- SW3P Standards
    1. Review and download all correlating 2014 standards
    2. Verification of completion will be done before submittal
  - Cross Sections
    1. No work to be done.

The total for Supplemental No. 8 to WA No. 1 for International Boulevard only is \$103, 820.22, which includes \$19,966.48 for changes due to TxDOT's pavement design change, and \$83,853.74 for changes due to 2014 specifications book.

Should you have any questions or require further information this letter or any of the enclosures being transmitted herewith please feel free to contact me at (956) 682-3677.

Sincerely,



Louis H. Jones, Jr., P.E.  
Project Manager / Principal

Enclosure(s)

Exhibit D – Fee Estimates (2 each)

cc: Dannenbaum File No. 4571-01  
Ms. Ana Duncan Laredo District TP&P – TxDOT  
Mr. Richard D. Seitz, P.E. Dannenbaum Engineering Company – Laredo, LLC  
Mr. Eric Davila, P.E. Dannenbaum Engineering Company – Laredo, LLC  
Mr. Anthony Garza Dannenbaum Engineering Company – Laredo, LLC

**DANNENBAUM ENGINEERING CORPORATION**  
**WEBB COUNTY LOOP 20 STIMULUS PROJECT**  
**SUPPLEMENTAL WORK AUTHORIZATION NO. 8 (SWA #8) TO WORK AUTHORIZATION NO. 1 (WA #1)**  
**CONSISTING OF: (A) MODIFY INTERNATIONAL BLVD PLAN SET TO 2014 STANDARDS, MANUALS AND SPECIFICATIONS**  
**DANNENBAUM ENGINEERING CORPORATION**  
**FEE SUMMARY**

BASIC SERVICES DESCRIPTION	Principal	PM	Senior Engineer-Civil	Senior Engineer-Bridge	Engineer	Senior Designer	CADD Operator/Tech	Clerical	Total Labor Hrs.	Remarks	Cost Per Task
<b>FC-164 - PROJECT MANAGEMENT (FC 160 TO FC 190)</b>											
PROJECT MANAGEMENT			2						4		\$ 573.30
COORDINATION/PREPARE SUB CONTRACTS/MANAGE SUBCONSULTANTS			1		2				3		\$ 418.74
PREPARATION OF INVOICES AND PROGRESS REPORTS		1			3			3	7		\$ 801.23
PREPARE PROJECT SCHEDULE (UPDATE MONTHLY)		1						3	4		\$ 404.96
MONITOR SUB-PROVIDER'S SCHEDULES ON MONTHLY BASIS		1			1			3	6		\$ 691.61
PREPARE & ASSEMBLE PRELIMINARY COST ESTIMATE		1			16				17		\$ 2,323.64
CC/CA - 90% SUBMITTAL (1 SUBMITTAL)			3	2					5		\$ 803.72
CC/CA - 100% SUBMITTAL (1 SUBMITTAL)			3	3					6		\$ 973.74
ORGANIZE AND DOWNLOAD ELECTRONIC FILE DELIVERABLES			3	3					6		\$ 973.74
<b>SUB-TOTAL - FC 164 - PROJECT MANAGEMENT (FC 160 TO FC 190)</b>	<b>0</b>	<b>4</b>	<b>31</b>	<b>26</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>94</b>		<b>\$ 13,807.42</b>
<b>GENERAL</b>											
TITLE SHEET											
INDEX OF SHEETS					1				4		\$ 382.47
PROJECT LAYOUT					1				4		\$ 382.47
EXISTING TYPICAL SECTIONS					1				4		\$ 382.47
PROPOSED TYPICAL SECTIONS											
SUMMARY OF REMOVAL			1		3				24		\$ 2,220.03
SUMMARY OF ROADWAY					1				4		\$ 382.47
SUMMARY OF EARTHWORK					1				4		\$ 382.47
SUMMARY OF RETAINING WALLS					1				4		\$ 382.47
SUMMARY OF DRAINAGE					1				4		\$ 382.47
SUMMARY OF BRIDGE				1	1				4		\$ 382.47
SUMMARY OF ILLUMINATION					1				5		\$ 552.49
SUMMARY OF SIGNING AND PVMT MRKGS					1				4		\$ 382.47
SUMMARY OF SW3P					1				4		\$ 382.47
<b>SUB-TOTAL SHEETS - GENERAL</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>15</b>	<b>0</b>	<b>56</b>	<b>0</b>	<b>73</b>		<b>\$ 6,979.69</b>
<b>FC-163 - TRAFFIC CONTROL PLAN</b>											
GENERAL NOTES & SEQUENCE OF CONSTRUCTION			1		7				10		\$ 1,246.11
PHASE I LAYOUTS			1		4				12		\$ 1,267.14
PHASE II STAGE I LAYOUT			1		4				12		\$ 1,267.14
PHASE II STAGE II LAYOUT			1		4				12		\$ 1,267.14
OVERALL TCP DETOUR PLAN			1		4				23		\$ 2,185.20
DETOUR PLAN INTERNATIONAL BLVD			1		2				6		\$ 668.12
<b>SUB-TOTAL SHEETS - FC 163 - TRAFFIC CONTROL PLAN</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>69</b>		<b>\$ 7,303.83</b>
<b>FC 163 - TRAFFIC CONTROL STANDARDS</b>											
BC (1) THRU BC (12)			1		1				8		\$ 787.41
TCP (1 - 1)			1		1				3		\$ 370.11
TCP (1 - 2)			1		1				3		\$ 370.11
TCP (1 - 5)			1		1				3		\$ 370.11
TCP (2 - 1)			1		1				3		\$ 370.11
TCP (2 - 4)			1		1				3		\$ 370.11
TCP (2 - 6)			1		1				3		\$ 370.11
TCP (6 - 2)			1		1				3		\$ 370.11
TCP (6 - 4)			1		1				3		\$ 370.11
WZ (TD)			1		1				3		\$ 370.11
WZ (UL)			1		1				3		\$ 370.11
WZ (DERD)			1		1				3		\$ 370.11
WZ (BTS - 1) THRU WZ (BTS - 2)			1		1				3		\$ 370.11
WZ (BRK)			1		1				4		\$ 453.57
<b>SUB-TOTAL SHEETS - FC 163 - TRAFFIC CONTROL STANDARDS</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>48</b>		<b>\$ 5,682.30</b>

EXHIBIT D

**DANNENBAUM ENGINEERING CORPORATION**  
**WEBB COUNTY LOOP 20 STIMULUS PROJECT**  
**SUPPLEMENTAL WORK AUTHORIZATION NO. 8 (SWA #8) TO WORK AUTHORIZATION NO. 1 (WA #1)**  
**CONSISTING OF: (A) MODIFY INTERNATIONAL BLVD PLAN SET TO 2014 STANDARDS, MANUALS AND SPECIFICATIONS**  
**DANNENBAUM ENGINEERING CORPORATION**  
**FEE SUMMARY**

BASIC SERVICES DESCRIPTION	Principal	PM	Senior Engineer-Civil	Senior Engineer-Bridge	Engineer	Senior Designer	CADD Operator/Tech	Clerical	Total Labor Hrs.	Remarks	Cost Per Task
<b>FC-160 - ROADWAY DETAILS</b>											
MAINLANES GEOMETRICS DATA SHEET											
RAMPS GEOMETRICS DATA SHEETS											
SURVEY CONTROL INDEX SHEET											
HORIZONTAL ALIGNMENT PLAN											
MAINLANES SUPERELEVATION PROFILE											
REMOVAL LAYOUTS											
MAINLANES PLAN AND PROFILE					2	4	10		16		\$ 1,525.38
RAMPS PLAN AND PROFILE					8	8	16		32		\$ 3,245.28
INTERNATIONAL INTERSECTION LAYOUT					2	4	10		16		\$ 1,525.38
MISCELLANEOUS DETAILS					1	4	8		13		\$ 1,226.37
					1	4	8		13		\$ 1,226.37
<b>SUB-TOTAL SHEETS - FC 160 - ROADWAY DETAILS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>24</b>	<b>52</b>	<b>0</b>	<b>90</b>		<b>\$ 8,748.78</b>
<b>FC 160 - ROADWAY STANDARDS</b>											
GF (31)			1		1		1		3		\$ 370.11
GF (31) DAT			1		1		1		3		\$ 370.11
GF (31) TR			1		1		1		3		\$ 370.11
GF (31) MS			1		1		1		3		\$ 370.11
QUAD (N)			1		1		1		3		\$ 370.11
REACT (N)			1		1		1		3		\$ 370.11
SGT (7) 31			1		1		1		3		\$ 370.11
SGT (8) 31			1		1		1		3		\$ 370.11
BED			1		1		1		3		\$ 370.11
CSB (1)			1		1		1		3		\$ 370.11
			1		1		1		3		\$ 370.11
<b>SUB-TOTAL SHEETS - FC 160 - ROADWAY STANDARDS</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>30</b>		<b>\$ 3,701.10</b>
<b>FC 163 - RETAINING WALL DETAILS</b>											
RETAINING WALL BORING LOGS											
RETAINING WALL GEOMETRIC DATA SUMMARY											
RETAINING WALL PLAN & PROFILE											
MSE WALL UNDERCUT AND REPLACE DETAIL					3	6	15		24		\$ 2,288.07
RW (MSE)DD											
<b>SUB-TOTAL SHEETS - FC 163 - RETAINING WALL STANDARDS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>15</b>	<b>0</b>	<b>24</b>		<b>\$ 2,288.07</b>
<b>FC 161 - DRAINAGE DETAILS</b>											
RW (MSE) MOD					1		1		2		\$ 215.55
RW (TRF)					1		1		2		\$ 215.55
RW (EM)					1		1		2		\$ 215.55
					3	0	3	0	6		\$ 646.65
<b>SUB-TOTAL SHEETS - FC 163 - RETAINING WALL STANDARDS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>6</b>		<b>\$ 646.65</b>
<b>FC 161 - DRAINAGE DETAILS</b>											
LARGE DRAINAGE AREA BOUNDARIES											
DRAINAGE PLAN											
STORM SEWER PIPE COMPUTATIONS											
RUNOFF COMPUTATIONS											
INLET COMPUTATIONS											
STORM SEWER PLAN AND PROFILE			1		5	26	40		72		\$ 6,926.31
CULVERT CALCULATIONS											
CULVERT LAYOUTS											
			1		2	2	4		9		\$ 965.68
<b>SUB-TOTAL SHEETS - FC 161 - DRAINAGE DETAILS</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>28</b>	<b>44</b>	<b>0</b>	<b>81</b>		<b>\$ 7,892.19</b>
<b>FC 161 - DRAINAGE STANDARDS</b>											
IL-H-G			1		1	4	4		10		\$ 1,047.09
SCP-5			1		1	2	2		6		\$ 666.87
SCP-6			1		1	2	2		6		\$ 666.87
SCP-6			1		1	2	2		6		\$ 666.87
SCP-MD			1		1	2	2		6		\$ 666.87
SW-0			1		1	2	2		6		\$ 666.87
SETB-PD			1		1	2	2		6		\$ 666.87
			1		7	16	16	0	46		\$ 5,048.31
<b>SUB-TOTAL SHEETS - FC 161 - DRAINAGE STANDARDS</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>16</b>	<b>16</b>	<b>0</b>	<b>46</b>		<b>\$ 5,048.31</b>

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**DANNENBAUM ENGINEERING CORPORATION**  
**FEE SUMMARY**

BASIC SERVICES DESCRIPTION	Principal	PM	Senior Engineer-Civil	Senior Engineer-Bridge	Engineer	Senior Designer	CADD Operator/Tech	Clerical	Total Labor Hrs.	Remarks	Cost Per Task
<b>FC 170 - BRIDGES</b>											
WBML BRIDGE LAYOUT AT INTERNATIONAL BLVD				1			1		2		\$ 253.48
WBML BRIDGE TYPICAL SECTION				1			1		2		\$ 253.48
BORING LOGS AT INTERNATIONAL BLVD											
WBML BRIDGE ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS				1			1		2		\$ 253.48
WBML BRIDGE ABUTMENT 1											
WBML BRIDGE ABUTMENT 4											
WBML BRIDGE BENTS 2 & 3											
WBML BRIDGE ARCHITECTURAL DETAILS											
WBML BRIDGE 288' PRESTRESSED CONCRETE GIRDER UNIT				1			1		2		\$ 253.48
EBML BRIDGE LAYOUT AT INTERNATIONAL BLVD				1			1		2		\$ 253.48
EBML BRIDGE TYPICAL SECTION				1			1		2		\$ 253.48
EBML BRIDGE ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS				1			1		2		\$ 253.48
EBML BRIDGE 288' PRESTRESSED CONCRETE GIRDER UNIT				1			1		2		\$ 253.48
<b>SUB-TOTAL SHEETS - FC 170 - BRIDGES</b>	0	0	0	6	0	0	6	0	12		\$ 1,520.88
<b>FC 170 - BRIDGES</b>											
IGND				1			1		2		\$ 253.48
IGD				1			1		2		\$ 253.48
IGEB				1			1		2		\$ 253.48
FD				1			1		2		\$ 253.48
ODSR				1			1		2		\$ 253.48
MEBR (C)				1			1		2		\$ 253.48
IGTS				1			1		2		\$ 253.48
IGMS				1			1		2		\$ 253.48
POP				1			1		2		\$ 253.48
POP-FAB				1			1		2		\$ 253.48
PWDF				1			1		2		\$ 253.48
SE/LA				1			1		2		\$ 253.48
SSTR				1			1		2		\$ 253.48
CSAB				1			1		2		\$ 253.48
EAS-A				1			1		2		\$ 253.48
BMCS				1			1		2		\$ 253.48
CRR				1			1		2		\$ 253.48
<b>SUB-TOTAL SHEETS - FC 170 - BRIDGES</b>	0	0	0	17	0	0	17	0	34		\$ 4,309.16
<b>FC 162 - ILLUMINATION STANDARDS</b>											
ED (1) THRU ED (6)											
RID (IF)											
HMID (1) THRU HMID (9)											
HMIF (1) THRU HMIF (2)											
HMIF (1) THRU HMIF (2)											
<b>SUB-TOTAL SHEETS - FC 162 - ILLUMINATION STANDARDS</b>	0	0	0	0	20	0	20	0	40		\$ 4,311.00
<b>FC 162 - SIGNS, PAVMT MRKGS &amp; DELINEATION</b>											
SIGNING & PAVEMENT MARKING LAYOUTS											
<b>SUB-TOTAL SHEETS - FC 162 - SIGNS, PAVMT MRKGS &amp; DELINEATION</b>	0	0	0	0	0	2	6	0	8		\$ 714.06
<b>SUB-TOTAL SHEETS - FC 162 - SIGNS, PAVMT MRKGS &amp; DELINEATION</b>	0	0	0	0	0	2	6	0	8		\$ 714.06

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<b>FC 162 - SIGNS, P/MT MKRGS &amp; DELINEATION STANDARDS</b>											
SOSS											\$ 215.55
D & OM (1)					1		1		2		\$ 215.55
D & OM (2) THRU D & OM (5)					1		1		2		\$ 215.55
D & OM (VIA)					4		4		8		\$ 862.20
FPM (1) THRU FPM (4)					1		1		2		\$ 215.55
PM (1) THRU PM (4)					4		4		8		\$ 862.20
SMD (2-1) THRU SMD (2-4)					4		4		8		\$ 862.20
SMD (2-6)					4		4		8		\$ 862.20
SMD (GEN)					1		1		2		\$ 215.55
SMD (SLIP-1) THRU SMD (SLIP-3)					1		1		2		\$ 215.55
SMD (TWT)					3		3		6		\$ 646.65
SMD (FRP)					1		1		2		\$ 215.55
SMD (TY G)					1		1		2		\$ 215.55
TSR (1) THRU TSR (6)					5		5		10		\$ 1,077.75
<b>SUB-TOTAL SHEETS - FC 162 - SIGNS, P/MT MKRGS &amp; DELINEATION STANDARDS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>64</b>		<b>\$ 6,897.60</b>
<b>FC 163 - SW3P LAYOUTS</b>											
STORM POLLUTION PREVENTION PLAN NARRATIVE											
STORM WATER POLLUTION PREVENTION PLAN LAYOUTS											
ENVIRONMENTAL PERMITS ISSUES AND COMMITMENTS				5					20		\$ 2,102.00
REVEGETATION NOTES AND SPECIFICATIONS											
<b>SUB-TOTAL SHEETS - FC 163 - SW3P LAYOUTS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>20</b>		<b>\$ 2,102.00</b>
<b>TOTAL SHEETS - DANNENBAUM BASIC SERVICES</b>											
<b>TOTAL HOURS - DANNENBAUM BASIC SERVICES</b>	<b>0</b>	<b>4</b>	<b>71</b>	<b>55</b>	<b>172</b>	<b>76</b>	<b>352</b>	<b>9</b>	<b>739</b>	<b>739</b>	<b>\$ 2,102.00</b>
LABOR RATE PER HOUR	\$ 227.02	\$ 210.20	\$ 154.56	\$ 170.02	\$ 132.09	\$ 106.65	\$ 83.46	\$ 64.92			
DIRECT LABOR COSTS	\$ -	\$ 840.80	\$ 10,973.76	\$ 9,351.10	\$ 22,719.48	\$ 8,105.40	\$ 29,377.92	\$ 584.28	\$ 81,952.74	CHECK	
<b>TOTAL COST</b>	<b>\$ -</b>	<b>\$ 840.80</b>	<b>\$ 10,973.76</b>	<b>\$ 9,351.10</b>	<b>\$ 22,719.48</b>	<b>\$ 8,105.40</b>	<b>\$ 29,377.92</b>	<b>\$ 584.28</b>	<b>\$ 81,952.74</b>	<b>\$ 81,952.74</b>	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEE)	0.00%	1.03%	13.39%	11.41%	27.72%	9.89%	35.85%	0.71%	100.00%		
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MANHOURS)	0.00%	0.54%	9.61%	7.44%	23.27%	10.28%	47.63%	1.22%	100.00%		
<b>DANNENBAUM (MODIFY TO 2014 SPECIFICATIONS - TOTAL ENGINEERING FEE)</b>											
											<b>\$ 81,952.74</b>
<b>DANNENBAUM (MODIFY PAVEMENT DESIGN - TOTAL ENGINEERING FEE)</b>											
											<b>\$ 19,966.48</b>
<b>DANNENBAUM (ENGINEERING PHASE - DIRECT EXPENSES)</b>											
REPRO -30 SHEETS X \$5.00 /SHEET (MYLAR)X 6 SETS											\$ 900.00
REPRO -30 SHEETS X \$1.00 /SHEET (CHECK PLOTS & REVIEW SETS) X 6 SETS											\$ 180.00
CAR RENTAL - \$65 /TRIP X 4 TRIP											\$ 89.00
PER DIEM - \$100 /NIGHT STAY X 2 PERSON X 1 NIGHT (\$75 hotel/\$25 meals)											\$ 100.00
DELIVERY SERVICES - \$12 /PACKAGE X 5 PACKAGES											\$ 60.00
MILEAGE 4 TRIP X 286 MI /TRIP @ \$0.50 per mile											\$ 572.00
<b>DANNENBAUM (TOTAL - DIRECT EXPENSES FEE)</b>											<b>\$ 1,901.00</b>
<b>TOTAL ENGINEERING</b>											<b>\$ 103,820.22</b>

**DANNENBAUM ENGINEERING CORPORATION  
 WEBB COUNTY LOOP 20 STIMULUS PROJECT  
 SUPPLEMENTAL WORK AUTHORIZATION NO. 8 (SWA #8) TO WORK AUTHORIZATION NO. 1 (WA #1)  
 CONSISTING OF: (A) MODIFY PROPOSED PAVEMENT DESIGN  
 DANNENBAUM ENGINEERING CORPORATION  
 FEE SUMMARY**

BASIC SERVICES DESCRIPTION	Principal	PM	Senior Engineer-Civil	Senior Engineer-Bridge	Engineer	Senior Designer	CADD Operator/Tech	Clerical	Total Labor Hrs.	Remarks	Cost Per Task
<b>GENERAL</b>											
EXISTING TYPICAL SECTIONS											
PROPOSED TYPICAL SECTIONS			1		3		28		32		\$ 2,867.71
SUMMARY OF ROADWAY					2	3	3		8		\$ 834.51
<b>SUB-TOTAL SHEETS - GENERAL</b>	0	0	1	0	5	3	31	0	40		\$ 3,722.22
<b>FC 160 - ROADWAY DETAILS</b>											
MAINLANES PLAN AND PROFILE					10	22	32		64		\$ 6,337.92
RAMPS PLAN AND PROFILE					2	4	10		16		\$ 1,525.38
<b>SUB-TOTAL SHEETS - FC 160 - ROADWAY DETAILS</b>	0	0	0	0	12	26	42	0	80		\$ 7,863.30
<b>FC 160 - CROSS SECTIONS</b>											
REVISE CROSS SECTIONS		2			14	26	40		82		\$ 8,380.96
<b>SUB-TOTAL SHEETS - FC 160 - CROSS SECTIONS</b>	0	2	0	0	14	26	40	0	82		\$ 8,380.96
<b>TOTAL SHEETS - DANNENBAUM BASIC SERVICES</b>	0	2	1	0	31	55	113	0	202		
TOTAL HOURS - DANNENBAUM BASIC SERVICES	\$ 227.02	\$ 210.20	\$ 154.56	\$ 170.02	\$ 132.09	\$ 106.65	\$ 83.46	\$ 64.92			
LABOR RATE PER HOUR	\$ -	\$ 420.40	\$ 154.56	\$ -	\$ 4,094.79	\$ 5,865.75	\$ 9,430.98	\$ -	\$ 19,966.48		
DIRECT LABOR COSTS	\$ -	\$ 420.40	\$ 154.56	\$ -	\$ 4,094.79	\$ 5,865.75	\$ 9,430.98	\$ -	\$ 19,966.48	CHECK	\$ 19,966.48
<b>TOTAL COST</b>											
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEE)	0.00%	2.11%	0.77%	0.00%	20.51%	29.38%	47.23%	0.00%	100.00%		
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MANHOURS)	0.00%	0.99%	0.50%	0.00%	15.35%	27.23%	55.94%	0.00%	100.00%		
<b>DANNENBAUM (TOTAL ENGINEERING PHASE - BASIC SERVICES FEE)</b>											\$ 19,966.48
<b>TOTAL ENGINEERING</b>											\$ 19,966.48