

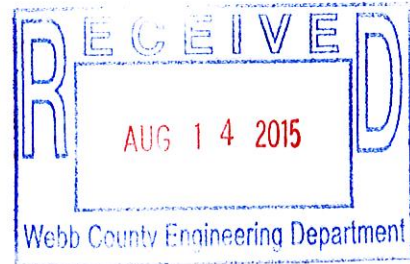
**DANNENBAUM ENGINEERING CORPORATION**

**LAREDO OFFICE:**

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

August 12, 2015

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



**Attn:** *Laura A. Govea*  
*ADA/Emergency Management Coordinator*

**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. 4 to Work Authorization No. 1*

Dear Ms. Govea,

Please find attached herewith: three (3) partially executed copies of Supplemental Work Authorization No. 4 to Work Authorization No. 1 for Engineering Services for the above referenced project, each bearing an original signature. The Contract is being reduced by **\$5,968.86**.

Please execute each of the three (3) copies of Supplemental Work Authorization No. 4 to Work Authorization No. 1 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.

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  
Richard D. Seitz, P.E.  
Nathaniel Olivarez, P.E.  
Cynthia M. Luera

Dannenbaum Engineering Corporation  
Dannenbaum Engineering Corporation  
Dannenbaum Engineering Corporation  
Dannenbaum Engineering Corporation

- Attachments:
1. Three (3) partially executed copies of Supplemental Work Authorization No. 4 to Work Authorization No. 1 for Engineering Services for the above referenced project, each bearing an original signature.
  2. Three copies of:
    - a. Attachment D – Form D-2 Supplemental Work Authorization No. 4 to Work Authorization No. 1 (Dated 8-12-2015)

**DANNENBAUM ENGINEERING CORPORATION**

**LAREDO OFFICE:**

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- b. Exhibit A Main Contract Attachment B “Services to be provided by the County”  
(Revised 08-12-2015)
- c. Exhibit B Revised “Services to be provided by the Engineer”  
(Revised 08-12-2015)
- d. Exhibit C Maximum Amount Payable (Revised 08-12-2015)
- e. Exhibit C-1 Detailed Fee Schedule (Dannenbaum)

**SUPPLEMENTAL WORK AUTHORIZATION NO. 4  
TO  
WORK AUTHORIZATION NO. 1**

**ATTACHMENT D**  
**D-2**  
**SUPPLEMENTAL WORK AUTHORIZATION NO. 4**  
**TO WORK AUTHORIZATION NO. 1**  
**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. 1 are hereby amended as follows:

**PART I.** The Engineer will perform revised engineering design and/or detailing services as set forth in Exhibit B – Services to be Provided by the Engineer (Revised 08/12/15), for the Phase I - Advanced Project Development Services (FC110) more specifically described as follows:


- A. Revision to Loop 20 FC 110 Route and Design Studies; Consists of reducing the Scope and involvement required for Value Engineering study to include engineering staff attending one (1) day value engineering only. This revision results in a change in Exhibit B of the Scope of Services to be provided by the Engineer and a reduction to the Engineer's Fee (Refer to Exhibit C)

**PART II.** The maximum amount payable under this Work Authorization is **\$2,034,667.80** 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 C; Maximum Amount Payable and Exhibit C-1, Detail Fee Schedule both are attached and made a part of this Work Authorization.

Original Work Authorization No. 1 Amount	=	\$	1,917,444.78	
Supplemental Work Authorization No. 1 Amount	=	\$	(1,816,375.25)	\$ 101,069.53
Supplemental Work Authorization No. 2 Amount	=	\$	1,816,375.25	\$ 1,917,444.78
Supplemental Work Authorization No. 3 Amount	=	\$	123,191.88	\$ 2,040,636.66
Supplemental Work Authorization No. 4 Amount	=	\$	(5,968.86)	\$ 2,034,667.80

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. 1 and Supplemental Work Authorization Nos. 1 thru 3 not hereby amended 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)  
 \_\_\_\_\_  
 (Date) 8/12/15

**THE COUNTY**  
 \_\_\_\_\_  
 (Signature)  
 \_\_\_\_\_  
 (Printed Name)  
 \_\_\_\_\_  
 (Title)  
 \_\_\_\_\_  
 (Date)

## LIST OF EXHIBITS

- Exhibit A Services to be provided by the County (Revised 08/12/15)
- Exhibit B Sections of "Services to be provided by the Engineer" (Revised 08/12/15)
- Exhibit C Maximum Amount Payable (Revised 08/12/2015)
- Exhibit C-1 Summary of Detailed Fee Schedule for Phase I, (Revised 08/12/15) (Dannenbaum)

**EXHIBIT A**

**MAIN CONTRACT ATTACHMENT B  
(Revised 08-12-2015)  
SERVICES TO BE PROVIDED BY THE COUNTY**

## SERVICES TO BE PROVIDED BY THE COUNTY

1. The County shall provide prompt review of all submittals; process monthly invoices and review monthly progress reports within ten (10) days of receiving such documents.
2. The County shall contact TxDOT Laredo with three (3) business days of receiving request from Engineer on any required information or documents from TxDOT.
3. The County Engineer will provide the Engineer with all available existing information on the Projects from TxDOT or other available sources.
4. The County through TxDOT will be responsible for preparing; holding and documenting the Value Engineering Study with Engineer's Staff only. Based on One day attendance by Project Manager; Deputy Project Manager and Senior Engineer.

### DESIGN SCHEMATICS

Provide hard copy of the approved schematic developed by Kellogg Brown & Root (KBR) – 1 Large format roll.

Provide hard copy of 90% schematic developed by Parson Brinkerhoff of Americas (PB America) – 1 Large format roll.

VALUE ENGINEERING REPORT – hard copy dated November 2007, Electronic in pdf format contained in CD along with construction plans (as built).

ENVIRONMENTAL DOCUMENT – None available.

### HYDRAULIC STUDIES

PAVEMENT DESIGN REPORT – Provided by TxDOT

PRELIMINARY CONSTRUCTION ESTIMATE- Provided for information only.

DSR PRELIMINARY – Provided for information only.

TRAFFIC STUDY – Provided by TxDOT and/or TTI

TRAFFIC DATA – Provided by TxDOT and/or TTI

### CROSS SECTION FILES

UTILITY DATA – The State does not up-date schematic utility data.

CONSTRUCTION PLANS (All Microstation working files for original plans and As-Built contained on CD)

- Existing Loop 20 from Sta. 554+00 to just North of Loop 20/US 59 Overpass
- Existing plans on any modification to Loop 20 or crossing roadways from Sta. 554+00 to just North of Loop 20/US 59 Overpass

## SURVEYING DATA:

### ALL EXISTING TOPOGRAPHIC SURVEY

Geopak DTM files  
Geopak TIN files  
Geopak DAT files  
Microstation 2d CADD files  
Microstation 3d CADD files  
Existing ROW in 2d Microstation CADD files  
XYZ text files of survey data  
Existing Survey Control Monumentation in PDF Format  
2007 Webb CADD Aerial Mosaic in ECW format @ 1 ft. pixel resolution

#### Note:

The survey data began provided by the State, DOES NOT reflect current site conditions. Topographic survey will required to be updated prior to final schematic development. Se section IV. FIELD SURVEYING AND PHOTOGRAMMETRY for other information needed.

### ALL SURVEY CONTROL

The survey control for this project was set back in 2003  
Please check control points before use  
Note that some of these points may have been disturbed and/or destroyed, therefore the coordinates and elevations shown might not be valid

### ALL HYDRAULIC DATA

County will provide (obtained from TxDOT) all working files of drainage area maps and Windstorm runs for all existing storm sewer lines within project right-of-way in a condition and format that the Engineer can readily verify and for adequacy and accuracy of existing storm sewer systems

### ALL HIGH MAST LIGHTING

County will provide (obtained from TxDOT) all microstation working files associated with the existing high mast lighting within project limits

### ALL GEOTECHNICAL

County will provide (obtained from TxDOT) all existing geotechnical reports associated information within the project limits

## **SCOPE AND FEE SCHEDULE ASSUMPTIONS**

1. Public meeting/public hearing court reporter to be provided by the County
2. The txDOT Laredo District has a VRS network
3. The project surveyors can utilize VRS in a two rover configuration
4. Highway Capacity Analysis and preparation of design report will be done by TTI
5. Preparation of Interstate Access Justification Report will be done by TTI
6. Txdot/County will provide all design working files in Microstation format for all plans of existing roadways. Txdot/County will provide all electronic files of computer runs (actual working data) of Winstorm for existing drainage
7. Pavement design is to be done by TxDOT



**EXHIBIT B**

**SERVICES TO BE PROVIDED BY THE ENGINEER**

**(REVISED 8/12/2015)**

**EXHIBIT B**  
(Revised 08-12-2015)  
**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)

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.

### **IV. FIELD SURVEYING AND PHOTOGRAMMETRY**

#### **FIELD SURVEY**

#### **Task: Establish Ground Control (FC: 150)**

1. Set all monuments and complete GPS obstruction field sketches, to reach descriptions and reference swing ties. Also, update, if necessary, all information on existing control to be used on this survey. Monuments will consist of aluminum disks "Berntsen Driven-In Survey Monuments" that are to be driven into the ground until "refusal" or to a depth of fifteen feet (whichever is reached first). The station ID is to be stamped on the disk.

### **PHASE V. RIGHT OF WAY SERVICES**

#### **Task: Ownership Data and Permission for Right of Entry (FC: 130)**

The Engineer shall obtain ownership data for all impacted property owners within the project limits and shall obtain right of entry from all property owners prior to commencing any work for surveying and/or right of way services. Number of parcel has increased from 50 parcels identified in "SCOPE AND FEE SCHEDULE ASSUMPTIONS", Paragraph F.8 to over 200 parcels.

### **DELIVERABLES**

#### ***D. RIGHT OF WAY DELIVERABLES***

1. Right of Entry letters. Number of parcel has increased from 50 parcels identified in "SCOPE AND FEE SCHEDULE ASSUMPTIONS", Paragraph F.8 to over 200 parcels.

## SCOPE AND FEE SCHEDULE ASSUMPTIONS

### F. RIGHT OF WAY:

8. For Right of Way Mapping, 50 parcels have been assumed. Parcel count above 50 will be considered scope change and will require additional fee. **Number of parcel has increased from 50 parcels to over 200 parcels.**

**EXHIBIT C**

**MAXIMUM AMOUNT PAYABLE**

**EXHIBIT C**  
**MAXIMUM AMOUNT PAYABLE**  
**SUPPLEMENTAL WORK AUTHORIZATION NO. 4 TO WORK AUTHORIZATION NO. 1**  
**LOOP 20 STIMULUS PROJECT (CSJ: 0086-14-058)**  
**PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES**

*Develop Separate Schematic, Environmental Assessment, Public Involvement, Value Engineering, Drainage Studies, Culvert Sizing and Surveying Topo/Aerial Flight, Utility Investigations (Quality Level A, B, C & D)*  
*for*  
*Extension of Loop 20 from Approximately STA 554+00 to just North of the Loop 20 / US 59 Overpass.*

**PHASE I SUMMARY (SUPPLEMENTAL WORK AUTHORIZATION NO. 4 TO WORK AUTHORIZATION NO. 1)**

**PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES SUMMARY BY FUNCTION CODES**

Function Codes	PRIME		DBE		DBE		DBE		DBE		DBE		NON-DBE		NON-DBE		NON-DBE		TOTALS			
	Dannenbaum Engineering Corporation		Arredondo, Zepeda&Brunz, LLC		Arias & Associates, Inc.		Aerial Data Services, Inc.		Ammaterra Environmental, Inc.		RODS, SUE, Inc.		Arredondo, Zepeda&Brunz, LLC ENVIRONMENTAL		ARCADIS US, Inc.		Howland Engineering & Surveying Co.		Gilpin Engineering Company		Hrs	Fee
FC 102 Feasibility Studies																					0	\$ -
<b>FC 110 Route and Design Studies</b>	<b>-50</b>	<b>-\$5,968.86</b>			0	\$ -															<b>-50</b>	<b>-\$5,968.86</b>
FC 120 Social, Economic and Environmental Studies and Public Involvement	0	\$ -							0	\$ -			0	\$ -	0	\$ -					0	\$ -
FC 130 Right of Way Data																0	\$ -				0	\$ -
FC 150 Field Surveying							0	\$ -								0	\$ -	0	\$ -		0	\$ -
FC 160 Roadway Design Controls																						\$ -
FC 161 Drainage	0	\$ -	0	\$ -																	0	\$ -
FC 162 Signing, Pavement Markings, Signalization																					0	\$ -
FC 163 Miscellaneous (Roadway)																					0	\$ -
FC 164 Managing Advanced Planning Services and Overall QA/QC Services	0	\$ -																			0	\$ -
FC 165 Traffic Management Systems																					0	\$ -
FC 170 Bridge Design																					0	\$ -
<b>Total</b>	<b>-50</b>	<b>-\$5,968.86</b>	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	<b>-50</b>	<b>-\$5,968.86</b>
Percent Participation	0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%		0.00%	

**PHASE I SUMMARY (WORK AUTHORIZATION NO. 1) TOTAL TO DATE**

PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES SUMMARY BY FUNCTION CODES																			Total Phase I Services =		\$2,034,667.80			
Function Codes	PRIME		DBE		DBE		DBE		DBE		DBE		NON-DBE		NON-DBE		NON-DBE		TOTALS					
	Dannenbaum Engineering Corporation		Arredondo, Zepeda&Brunz, LLC		Arias & Associates, Inc.		Aerial Data Services, Inc.		Ammaterra Environmental, Inc.		RODS, SUE, Inc.		Arredondo, Zepeda&Brunz, LLC ENVIRONMENTAL		ARCADIS US, Inc.		Howland Engineering & Surveying Co.		Gilpin Engineering Company		Hrs	Fee		
FC 102 Feasibility Studies	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
<b>FC 110 Route and Design Studies</b>	<b>4721</b>	<b>\$ 542,336.26</b>	0	\$ -	810	\$ 218,414.94	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	<b>5531</b>	<b>\$ 760,751.20</b>		
FC 120 Social, Economic and Environmental Studies and Public Involvement	902	\$ 155,325.77	0	\$ -	0	\$ -	0	\$ -	94	\$ 10,171.58	0	\$ -	1054	\$ 162,131.00	0	\$ -	0	\$ -	0	\$ -	2050	\$ 327,628.35		
FC 130 Right of Way Data	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	242	\$ 21,263.26	0	\$ -	242	\$ 21,263.26		
FC 150 Field Surveying	0	\$ -	0	\$ -	0	\$ -	573	\$ 55,695.81	0	\$ -	0	\$ -	0	\$ -	0	\$ -	1104	\$ 146,147.25	769	\$ 101,069.53	2446	\$ 302,912.59		
FC 160 Roadway Design Controls	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -		
FC 161 Drainage	2116	\$ 312,614.48	1394	\$ 207,294.30	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	3510	\$ 519,908.78		
FC 162 Signing, Pavement Markings, Signalization	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -		
FC 163 Miscellaneous (Roadway)	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -		
FC 164 Managing Advanced Planning Services and Overall QA/QC Services	610	\$ 102,203.62	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	610	\$ 102,203.62		
FC 165 Traffic Management Systems	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -		
FC 170 Bridge Design	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -		
<b>Total to Date</b>	<b>8349</b>	<b>\$ 1,112,480.13</b>	<b>1394</b>	<b>\$ 207,294.30</b>	<b>810</b>	<b>\$ 218,414.94</b>	<b>573</b>	<b>\$ 55,695.81</b>	<b>94</b>	<b>\$ 10,171.58</b>	<b>0</b>	<b>\$ -</b>	<b>1054</b>	<b>\$ 162,131.00</b>	<b>0</b>	<b>\$ -</b>	<b>1346</b>	<b>\$ 167,410.51</b>	<b>769</b>	<b>\$ 101,069.53</b>	<b>14389</b>	<b>\$ 2,034,667.80</b>		
Percent Participation To Date	54.68%		10.19%		10.73%		2.74%		0.50%		0.00%		7.97%		0.00%		8.23%		4.97%		100.00%			

% PRIME PARTICIPATION		
DEC	\$ 1,112,480.13	54.68%
SUBS	\$ 922,187.67	45.32%
<b>TOTAL</b>	<b>\$ 2,034,667.80</b>	<b>100.00%</b>

% CONSULTANT PARTICIPATION		
NON-DBE	\$ 2,202,078.31	108.23%
DBE	\$ 653,707.63	32.13%
<b>TOTAL</b>	<b>\$ 2,855,785.94</b>	<b>140.36%</b>

**EXHIBIT C-1**

**DETAILED FEE SCHEDULE  
FOR  
SUPPLEMENTAL WORK AUTHORIZATION NO. 4 TO WORK AUTHORIZATION NO. 1  
(DANNENBAUM ENGINEERING CORPORATION)**

# EXHIBIT C-1

## DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 4 TO WORK AUTHORIZATION NO. 1

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

PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES

*Develop Separate Schematic, Environmental Assessment, Public Involvement, Value Engineering, Drainage Studies, Culvert Sizing and Surveying Topo/Aerial Flight, Utility Investigations (Quality Level A, B, C & D)*

*for*

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

### DANNENBAUM ENGINEERING CORPORATION

TASK DESCRIPTION	Principal or Project Manager	Depty Project Manager	Senior Engineer (Civil)	Senior Engineer (Bridge)	Engineer	Senior Designer	CAD Operator or CADD Tech. I	Clerical	Total Labor Hours	Task Cost
<b>BASIC SERVICES</b>										
BASIC SERVICES (DANNENBAUM)										
FC 110 - ROUTE AND DESIGN STUDIES										
CONDUCT ONE (1) VALUE ENGINEERING STUDY (1 DAY)	-2	-2	-2	0	-10	-10	-24	0	-50	-5,968.86
SUB-TOTAL - FC 110 - ROUTE AND DESIGN STUDIES	-2	-2	-2	0	-10	-10	-24	0	-50	-5,968.86
<b>TOTAL BASIC SERVICES MANHOURS (DANNENBAUM)</b>	-2	-2	-2	0	-10	-10	-24	0	-50	-5,968.86
<b>HOURS SUB-TOTALS</b>	-2	-2	-2	0	-10	-10	-24	0	-50	
LABOR RATE PER HOUR	\$ 327.93	\$ 236.07	\$ 225.50	\$ 225.50	\$ 132.09	\$ 106.64	\$ 83.44	\$ 64.89		
DIRECT LABOR COSTS	-\$655.86	-\$472.14	-\$451.00	\$0.00	-\$1,320.90	-\$1,066.40	-\$2,002.56	\$ -	CHECK	
<b>TOTAL BASIC SERVICES FEE (DANNENBAUM)</b>	-655.86	-472.14	-451.00	0.00	-1,320.90	-1,066.40	-2,002.56	0.00	-5,968.86	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEE)	10.99%	7.91%	7.56%	0.00%	22.13%	17.87%	33.55%	0.00%	100.00%	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MANHOURS)	4.00%	4.00%	4.00%	0.00%	20.00%	20.00%	48.00%	0.00%	100.00%	
									\$ -	\$ -
<b>TOTAL COMBINED BASIC SERVICES AND DIRECT EXPENSES (DANNENBAUM)</b>										-5,968.86
<b>TOTAL BASIC SERVICES (COMBINED DANNENBAUM AND CONSULTANTS + DANNENBAUM DIRECT EXPENSES)</b>										-5,968.86
									\$ -	
									\$ -	\$ -
<b>GRAND TOTAL - PHASE I (COMBINED BASIC AND SPECIAL SERVICES TOTAL)</b>										<b>-5,968.86</b>