

DANNENBAUM ENGINEERING CORPORATION

LAREDO OFFICE:

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

July 11, 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 Agreement No. 5 to Main Contract*

Dear Mr. Perez Garcia,

Please find attached herewith: three (3) partially executed copies of Supplemental Agreement No. 5 to Main Contract for Engineering Services for the above referenced project, each bearing an original signature. The Contract is being increased by \$109,579.96.

Please execute each of the three (3) copies of Supplemental Agreement No. 5 to Main Contract 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 detention pond analysis:

FC - 164 Project Management

- Original timeline of project was from 9/2/13 to 3/2/15. The original timeline has been modified due to the progress of the project. The new timeline for project begins 3/2/15 to an expected project completion of 12/2/16. An additional 17 months of administration has been requested, excluding time for the 4 month delay on the project. Additional management hours are required for continue progress in the development of the project.

FC - 110 Route and Design

- 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 entrance design alternatives to be provided due to the high volumes of traffic into the state park.

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- 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 – This work will require Dannenbaum to update the Typical sections and the cross sections in order to develop an accurate cost estimate for the project.
- Concrete pavement for Frontage roads – This work will require Dannenbaum to update the Typical sections and the cross sections in order to develop an accurate cost estimate for the project.
- Reduce/Eliminate small strip acquisitions – Will modify with no charge.

FC – 161 Detention Pond Analysis

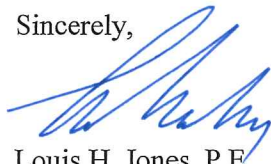
- Will not be included, it is to be included in a future work authorization if required.

FC – 130 Right of Way

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

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

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 Agreement No. 5 to the Main Contract for Engineering Services for the above referenced project, each bearing an original signature.
 2. Three copies of:
 - a. Attachment C Services to be provided by the Engineer (Revised 06-22-2016)
 - b. Attachment E-2 Maximum Amount Payable (Revised 06-22-2016)
 - c. Attachment E-4 Detail Fee Summary (Revised 06-22-2016) (Dannenbaum)

**CONTRACT FOR ENGINEERING SERVICES
SUPPLEMENTAL AGREEMENT NO. 5 to the MAIN CONTRACT**

THIS SUPPLEMENTAL AGREEMENT to The Main Contract for Engineering Services is made by and between the County of Webb, a subdivision of the State of Texas, hereinafter called "County" and Dannenbaum Engineering Corporation, having its principal business address at 8610 McPherson Road, Laredo, Texas 78045 hereinafter called "Engineer," for the purpose of contracting for engineering services.

BACKGROUND

The County and the Engineer executed a Contract on August 2013 for engineering services generally described as preliminary engineering, including the preparation of schematics, environmental documents and right of way parcel maps, to support a possible future design/build project, and if design/build is not chosen as the preferred method of project delivery, then the County may amend the Contract to include the development of PS&E, 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

The Contract was amended by Supplemental Agreements 1, 2, 3 and 4 to reflect revisions to the Scope of Services to be provided by the Engineer. Revised 06/22/2016) for the Phase I-Advanced Project Development Services (FC110).

AGREEMENT

The County and the Engineer agree that the Contract is amended as follows:

ARTICLE 1. SCOPE OF SERVICES.

The original scope of services in the Main Contract is amended by this Supplemental Agreement No. 5 to include:

A. Revision to FC 164 Project Management;

a. Consisting of the following:

- o Original timeline of project was from 9/2/13 to 3/2/15. The original timeline has been modified due to the progress of the project. The new timeline for project begins 3/2/15 to an expected project completion of 12/2/16. An additional 17 months of administration has been requested, excluding time for the 4 month delay on the project. Additional management hours are required for continue progress in the development of the project.

B. Revision to FC 110 Route and Design;

a. Consisting of the following:

- o Ramp reconfiguration – 3 ramp - Reverse order of ramps (off-on instead of on-off).
- o Frontage road turning lane – Make a dual left (shared right lane left and straight) at various intersection. Also, add deceleration right turn lanes.
- o Extend multiuse bike path into park – Will not be included, it is to be included in a future work authorization if required.
- o Realign park entrance – 3 alternatives will be provided on the project.
- o New Bridge over Chacon Creek – Minimal work will be required to update the schematic to include the frontage road bridge over Chacon Creek.
- o 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 – This work will require Dannenbaum to update the Typical sections and the cross sections in order to develop an accurate cost estimate for the project.
- Concrete pavement for Frontage roads – This work will require Dannenbaum to update the Typical sections and the cross sections in order to develop an accurate cost estimate for the project.

C. Revision to FC 161 Detention Pond Analysis:

a. Consisting of the following:

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

D. Revision to FC 130 Right of Way

a. Consisting of the following:

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

ARTICLE 2. CONTRACT PERIOD.

This Supplemental Agreement No. 5 to the Main Contract becomes effective when fully executed by all parties hereto and it shall terminate at the close of business on **August 1, 2020** unless the contract period is: (1) modified by written supplemental agreement prior to the date of termination as set forth in Attachment A, General Provisions, Article 6, Supplemental Agreements; (2) extended due to a work suspension as provided for in Attachment A, Article 3, Paragraph C; or (3) otherwise terminated in accordance with Attachment A, General Provisions, Article 15, Termination. Any work performed or cost incurred before or after the contract period shall be ineligible for reimbursement.

ARTICLE 3. COMPENSATION.

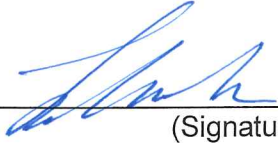
Maximum Amount Payable. The current Maximum Amount Payment under the Main Contract of \$2,532,147.16 is hereby modified by this Supplemental Agreement No. 5 to \$2,641,727.12 an increase of \$109,579.96 as detailed in Attachment E-2 for Summary of Detailed Fee Schedule for Phase I and II, revised (06/22/2016) and Attachment E-4 for Summary of Detailed Fee Schedule for Phase I, revised (06/22/2016).

All other provisions of the Main Contract are unchanged and remain in full force and effect.

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

THE ENGINEER

THE COUNTY



(Signature)

Louis H. Jones, Jr

(Printed Name)

Principal

(Title)

2/11/16

(Date)

(Signature)

(Printed Name)

(Title)

(Date)

LIST OF ATTACHMENTS:

- Attachment C Services To Be Provided By the Engineer (Rev 06-22-2016)
- Attachment E-2, Summary of Detailed Fee Schedule for Phase I and II, (Rev 06-22-2016)
- Attachment E-4, Summary of Detailed Fee Schedule for Phase I, (Rev 06-22-2016) (Dannenbaum)

ATTACHMENT C
(Revised 06-22-2016)
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)

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.
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- Reduce/Eliminate small strip acquisitions – Will modify with no charge.

Task: Detention Pond Analysis (FC: 161)

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

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

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.

Task: Right-of-Way (Detention Pond) (FC: 130)

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

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

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.

ATTACHMENT E-2 (Revised 06/22/2016)
 SUMMARY OF DETAILED FEE SCHEDULE - PHASES I, AND II SUPPORTING LUMP SUM CALCULATIONS

Contract No. 24-948P5043
 PHASES SUMMARY

MAXIMUM AMOUNT PAYABLE
LOOP 20 STIMULUS PROJECT (CSJ: 0086-14-058)
PHASES I & II - SUMMARY

Provide 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), Develop Utility Special Services and Right of Way Acquisition Services (Parcel Maps) for the Extension of Loop 20 from Approximately STA 554+00 to just North of the Loop 20 / US 59 Overpass.

PHASE SUMMARY

\$2,610,155.82

PHASE	PRIME		DBE		DBE		DBE		DBE		DBE		DBE		NON-DBE		NON-DBE		NON-DBE		TOTAL HOURS AND FEE	
	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee
PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES	8399	\$ 1,118,448.99	1394	\$ 207,294.30	810	\$ 218,414.94	573	\$ 55,695.81	94	\$ 10,171.58	0	\$ -	1054	\$ 162,131.00	0	\$ -	1346	\$ 167,410.51	769	\$ 101,069.53	14,439	\$ 2,040,636.66
Supplemental No. 4																						
Basic Services	-50	-\$5,968.86	0	\$ -																		
Supplemental No. 4 - Total	-50	-\$5,968.86	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	-50	-5,968.86
Supplemental No. 5																						
Basic Services	923	\$109,579.96																				
Supplemental No. 5 - Total	923	\$109,579.96	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	923	109,579.96
PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES - TOTAL	9141	\$ 1,222,060.09	1394	\$ 207,294.30	810	\$ 218,414.94	573	\$ 55,695.81	94	\$ 10,171.58	0	\$ -	1054	\$ 162,131.00	0	\$ -	1346	\$ 167,410.51	769	\$ 101,069.53	15,181	\$ 2,144,247.76
PHASE II - RIGHT OF WAY SERVICES	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ 149,282.00	0	\$ -	0	\$ -	1354	\$ 156,733.09	1346	\$ 159,892.97	2,700	\$ 465,908.06
Grand Total	9141	\$ 1,222,060.09	1394	\$ 207,294.30	810	\$ 218,414.94	573	\$ 55,695.81	94	\$ 10,171.58	0	\$ 149,282.00	1054	\$ 162,131.00	0	\$ -	2700	\$ 324,143.60	2115	\$ 260,962.50	17881	\$ 2,610,155.82
Percent Participation	51.12%	46.82%	7.80%	\$ 0.08	4.53%	\$ 0.08	3.20%	\$ 0.02	0.53%	\$ 0.00	0.00%	\$ 0.06	5.89%	\$ 0.06	0.00%	\$ -	15.10%	\$ 0.12	11.83%	\$ 0.10	100%	\$ 1.00

% PARTICIPATION		
DEC	\$ 1,222,060.09	46.82%
All Subs	\$ 1,388,095.73	53.18%
TOTAL	\$ 2,610,155.82	100.00%

% PARTICIPATION		
NON-DBE	\$ 585,106.10	22.42%
DBE	\$ 802,989.63	30.76%
TOTAL	\$ 1,388,095.73	53.18%

**ATTACHMENT E-4
(Revised 06/22/2016)**

**DETAILED FEE SCHEDULE
FOR
SUPPLEMENTAL AGREEMENT NO. 5 TO MAIN CONTRACT
(DANNENBAUM ENGINEERING CORPORATION)**

ATTACHMENT E-4

DETAILED FEE SCHEDULE FOR SUPPLEMENTAL AGREEMENT NO. 5 TO MAIN CONTRACT

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
ADVANCED PROJECT DEVELOPMENT										
ADVANCE PROJECT DEVELOPMENT										
FC 164 - PROJECT MANAGEMENT (FC 102 TO FC 164) (ADVANCED PROJECT DEVELOPMENT SERVICES (ADDITIONAL 21 MONTHS))										
PREPARE CLIENT MANAGEMENT/MANAGE WORK AUTHORIZATIONS INCLUDING RECORD KEEPING/FILING (ADVANCED PROJECT DEVELOPMENT)	2	9	0	0	0	0	0	13	24	3,624.06
SCHEDULE & ATTEND WORK AUTHORIZATION DEVELOPMENT MEETINGS	7	7	6	0	0	0	0	12	32	6,079.68
COORDINATION/PREPARE SUB WORK AUTHORIZATIONS/MANAGE SUBCONSULTANTS	6	10	11	0	0	11	0	22	60	9,409.40
PREPARATION OF INVOICES AND PROGRESS REPORTS (ADDITIONAL 21 EA)	9	32	0	0	16	0	0	32	89	14,695.53
SCHEDULE, ATTEND AND PREPARE MINUTES (ADDITIONAL MEETINGS HELD)	3	7	7	0	0	0	0	7	24	4,669.01
MONITOR SUB-PROVIDER'S SCHEDULES ON MONTHLY BASIS (ADDITIONAL 21 MONTHS)	2	16	4	0	16	8	0	9	55	8,885.55
PREPARE & ASSEMBLE PRELIMINARY COST ESTIMATES (ADDITIONAL ESTIMATES DEVELOPED)	2	2	4	0	14	7	8	1	38	5,358.15
SUB-TOTAL - FC 164 - PROJECT MANAGEMENT	31	83	32	0	46	26	8	96	322	52,721.38
TOTAL ADVANCE PROJECT DEVELOPMENT MANHOURS (DANNENBAUM)	31	83	32	0	46	26	8	96	322	52,721.38
BASIC SERVICES										
BASIC SERVICES (DANNENBAUM)										
FC 110 - ROUTE AND DESIGN STUDIES										
RAMP RECONFIGURATION-3 RAMPS	2	0	14	0	26	28	30	0	100	12,736.32
FRONTAGE ROAD TURNING LANES	2	0	4	0	24	30	36	0	96	10,931.06
EXTEND MULTIUSE BIKE PATH INTO PARK (NOT INCLUDED)(FUTURE W.A. IF REQUIRED)	0	0	0	0	0	0	0	0		
REALIGN PARK ENTRANCE-3 ALTERNATIVES	1	0	3	0	12	20	24	0	60	6,724.87
NEW BRIDGE OVER CHACON CREEK	1	0	1	0	2	2	0	0	6	1,030.89
WETLAND FOR DETENTION/TREATMENT FACILITY (NOT INCLUDED)(FUTURE W.A. IF REQUIRED)	0	0	0	0	0	0	0	0		
STORMWATER DETENTION BEWTEEN MAIN LANE AND FRONTAGE ROAD (NOT INCLUDED)(FUTURE W.A. IF REQUIRED)	0	0	0	0	0	0	0	0		

ATTACHMENT E-4

DETAILED FEE SCHEDULE FOR SUPPLEMENTAL AGREEMENT NO. 5 TO MAIN CONTRACT

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
CONCRETE PAVEMENT FOR MAINLANES										
UPDATE CROSS SECTIONS FOR UPDATED ESTIMATE	1	0	4	0	8	16	24	0	53	5,995.45
UPDATE TYPICAL SECTIONS FOR UPDATED ESTIMATE	1	0	2	0	4	8	16	0	31	3,495.45
UPDATE ESTIMATE	1	3	4	0	4	4	4	0	20	3,226.82
CONCRETE PAVEMENT FOR FRONTAGE ROADS										
UPDATE CROSS SECTIONS FOR UPDATED ESTIMATE	1	0	4	0	8	16	24	0	53	5,995.45
UPDATE TYPICAL SECTIONS FOR UPDATED ESTIMATE	1	0	2	0	4	8	16	0	31	3,495.45
UPDATE ESTIMATE	1	3	4	0	4	4	4	0	20	3,226.82
REDUCE/ ELIMINATE SMALL STRIP ACQUISITIONS (WILL MODIFY WITH NO CHARGE)	0	0	0	0	0	0	0	0		
SUB-TOTAL - FC 110 - ROUTE AND DESIGN STUDIES	12	6	42	0	96	136	178	0	470	56,858.58
TOTAL BASIC SERVICES MANHOURS (DANNENBAUM)	12	6	42	0	96	136	178	0	470	56,858.58
HOURS SUB-TOTALS	12	6	42	0	96	136	178	0	470	
LABOR RATE PER HOUR	\$ 327.93	\$ 236.07	\$ 225.50	\$ 225.50	\$ 132.09	\$ 106.64	\$ 83.44	\$ 64.89		
DIRECT LABOR COSTS	\$3,935.16	\$1,416.42	\$9,471.00	\$0.00	\$12,680.64	\$14,503.04	\$14,852.32	\$ -	CHECK	
TOTAL BASIC SERVICES FEE (DANNENBAUM)	3,935.16	1,416.42	9,471.00	0.00	12,680.64	14,503.04	14,852.32	0.00	56,858.58	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEE)	6.92%	2.49%	16.66%	0.00%	22.30%	25.51%	26.12%	0.00%	100.00%	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MANHOURS)	2.55%	1.28%	8.94%	0.00%	20.43%	28.94%	37.87%	0.00%	100.00%	
FC-161-DETENTION POND ANALYSIS (NOT INCLUDED) (FUTURE W.A. IF REQUIRED)									\$ -	
FC 130 - RIGHT OF WAY (DETENTION POND)(NOT INCLUDED) (FUTURE W.A. IF REQUIRED)									\$ -	
									\$ -	\$ -
TOTAL BASIC SERVICES (ROADWAY AND DRAINAGE + DANNENBAUM DIRECT EXPENSES)										109,579.96

ATTACHMENT E-4

DETAILED FEE SCHEDULE FOR SUPPLEMENTAL AGREEMENT NO. 5 TO MAIN CONTRACT

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

PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES

Provide 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

SPECIAL SERVICES (FC 161) HYDROLOGIC TASK DESCRIPTION	Principal/PM	DEPUTY PM	Senior Engineer- Civil	Senior Engineer- Bridge	Engineer	Senior Designer	CADD Operator/ Tech	Clerical	Total Labor Hrs.	Remarks	Task Cost
FC 161 - DRAINAGE											
DETENTION POND ANALYSIS											
RESEARCH & EVALUATE DETENTION STORAGE LOCATIONS	0		0		0	0	0		0		\$ -
SIZE DETENTION POND STORAGE AND OUTLET SIZES	0		0		0	0	0		0		\$ -
QA/QC (STORAGE LOCATIONS & DETENTION POND STORAGE)	0		0						0		\$ -
SUBMIT FOR REVIEW AND COMMENTS	0		0		0	0			0		\$ -
ADDRESS COMMENTS AND SUBMIT FINAL DESIGN	0		0		0	0	0		0		\$ -
SUB-TOTAL - FC 161 - DRAINAGE	0	0	0	0	0	0	0	0	0		\$ -
TOTAL DIRECT EXPENSES (FROM BELOW)											\$0.00
TOTAL - FC 161 - DRAINAGE INCLUDING DIRECT EXPENSES											\$ -
TOTAL ENGINEERING (SUBCONSULTANT) - SPECIAL SERVICES (FROM BELOW)											\$ -
TOTAL FC 161 - DRAINAGE											\$ -
HOURS SUB-TOTALS	0	0	0	0	0	0	0	0			
LABOR RATE PER HOUR	\$ 327.93	\$ 236.07	\$ 225.50	\$ 225.50	\$ 132.09	\$ 106.64	\$ 83.44	\$ 64.89			
DIRECT LABOR COSTS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
TOTAL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEE)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	CHECK
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MANHOURS)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	\$ -
DIRECT EXPENSES											
REPRO -400 SHEETS X \$0.20 / PAPER SHEET x 10 Sets											\$ -
REPRO -200 8 1/2" x 11" COLOR COPIES X \$1.00 / PAPER SHEET x 10 Sets											\$ -
PER DIEM - \$121 /NIGHT STAY X 2 PERSON X 4 NIGHT (\$85 hotel/\$36 meals)											\$ -
DELIVERY SERVICES - \$50 / PACKAGE X 4 PACKAGES											\$ -
MILEAGE 4 TRIP x 286 MI / TRIP @ \$0.565/mile											\$ -
TOTAL DIRECT EXPENSES											\$ -

ATTACHMENT E-4

DETAILED FEE SCHEDULE FOR SUPPLEMENTAL AGREEMENT NO. 5 TO MAIN CONTRACT
 LOOP 20 STIMULUS PROJECT (CSJ: 0086-14-058)
 PHASE I - ADVANCED PROJECT DEVELOPMENT SERVICES

*Provide 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

SPECIAL SERVICES (FC 130) ROW SERVICES TASK DESCRIPTION	Principal Manager	Surveying PM	Surveying Supervisor	Field Crew (3- man)	EIT	CADD Designer	Admin Asst	Total Labor Hrs.	Task Cost
ROW SERVICES									
FC 130 - RIGHT-OF-WAY (DETENTION POND)									
PARCEL ABSTRACT	0	0	0			0		0	\$ -
DEVELOP WORKING SKETCHES		0	0			0		0	\$ -
COORDINATE WITH LAND OWNER	0	0	0					0	\$ -
LOCATE AND TIE CORNERS		0	0	0		0		0	\$ -
RESOLVE BOUNDARIES		0				0		0	\$ -
PREPARE ROW MAP		0	0			0		0	\$ -
PREPARE PARCELS AND METES AND BOUNDS		0	0					0	\$ -
STAKE PARCEL TAKINGS		0	0	0				0	\$ -
SUB-TOTAL - ROW SERVICES	0	0	0	0	0	0	0	0	\$ -
TOTALS - RIGHT OF WAY	0	0	0	0	0	0	0	0	\$ -
HOURS SUB-TOTALS	0	0	0	0	0	0	0	0	
LABOR RATE PER HOUR	\$ 200.04	\$ 156.78	\$ 93.75	\$ 148.98	\$ 76.29	\$ 80.04	\$ 43.26		
DIRECT LABOR COSTS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
TOTAL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEE)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MANHOURS)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
DIRECT EXPENSES									
DELIVERY SERVICES - \$50 / PACKAGE X 10 PACKAGES									\$ -
MILEAGE (APPROX 1,000 MI @ \$0.565/mile)									\$ -
TRAFFIC CONTROL									\$ -
TOTAL DIRECT EXPENSES									\$ -
GRAND TOTAL - RIGHT-OF-WAY	(LABOR, CADD & DIRECT EXPENSE)								\$ -

ASSUMPTION:
 1. 1 PARCEL PER DETENTION POND
 2. 10 DETENTION PONDS
 3. RIGHT OF ENTRIES STILL VALID