DANNENBAUM ENGINEERING CORPORATION LAREDO OFFICE:

8610 McPherson, Suite 130 Laredo, Texas 78040 (956)712-9817 Office (956)712-9857 Fax

June 26, 2017

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

Attn: Luis Perez Garcia, P.E.

Webb County Engineer

Ref: Supplemental Agreement No. 7 to Main Contract - (TxDOT CSJ 0086-14-058) is Adding

Engineering Services/Fee for reduction of Frontage Road.

Subj: Supplemental Agreement No. 7 to Main Contract

Dear Mr. Perez Garcia,

Please find attached herewith: three (3) partially executed copies of Supplemental Agreement No. 7 to Main Contract for Engineering Services for the above referenced project, each bearing an original signature. This Supplemental No. 7 is adding Supplemental Work Authorization No. 4 to Work Authorization No. 2 for additional Advanced Planning Services for TxDOT CSJ: 0086-14-058. This Supplemental Agreement No. 7 to the Main Contract is being increased by Supplemental Work Authorization No. 4 to Work Authorization No. 2 for PS&E (TxDOT CSJ: 0086-14-058) of \$74,347.69 increasing the total Main Contract to \$2,817,972.74.

Please execute each of the three (3) copies of Supplemental Agreement No. 7 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 in Attachment E-2 in this Supplemental No. 7 to Main Contract are the justifications for the man-hours for the disciplines of the work required to provide services for the development of Proposed Supplemental Work Authorization No. 4 to Work Authorization No. 2 reduction of frontage road.

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 or Anthony Garza (956) 639-2404 or by email at Anthony.garza@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
Notherial Olivera, P.E.

Dannenbaum Engineering Corporation

Nathaniel Olivarez, P.E. Dannenbaum Engineering Corporation

DANNENBAUM ENGINEERING CORPORATION LAREDO OFFICE:

8610 McPherson, Suite 130 Laredo, Texas 78040 (956)712-9817 Office (956)712-9857 Fax

Cynthia M. Luera

Dannenbaum Engineering Corporation

Letter Inclusions: 1. Three (3) partially executed copies of Supplemental Agreement No. 7 to the Main Contract for Engineering Services for the above referenced project, each bearing an original signature.

CONTRACT FOR ENGINEERING SERVICES SUPPLEMENTAL AGREEMENT NO. 7 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 addition of Engineering Services/Fee for reduction of Frontage Road.

The Contract was amended by Supplemental Agreements 1, 2, 3, 4, 5, and 6 to reflect revisions to the Scope of Services to be provided by the Engineer. (Last revision was on 11/1/2016) 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. 7 to include:

ARTICLE 2. CONTRACT PERIOD.

This Supplemental Agreement No. 7 to the Main Contract becomes effective when fully executed by all parties hereto and it shall terminate at the close of business on <u>August 1, 2020</u> 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 Payable under the Main Contract including Supplemental 1 thru 6 of Main Contract is \$2,743,625.05 is hereby modified by this Supplemental Agreement No. 7 to Main Contract to \$2,817,972.74 an increase of \$74,347.69 which includes \$74,347.69 for Supplemental Work Authorization No. 4 to Work Authorization No. 2 as outlined in Attachment E-2. These attachments are made a part of this Supplemental No. 7 to the Main Contract.

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

SUPPLEMENTAL AGREEMENT NO. 7 to the MAIN CONTRACT

(Signature) (Signature)

Louis H. Jones, P.E
(Printed Name) (Printed Name)

Principal
(Title) (Title)

June 26, 2017
(Date) (Date)

LIST OF ATTACHMENTS:

Attachment B	Services To Be Provided By the County (Rev 06-22-2017) (Added by CSJ: 0086-14-058)
Attachment C	Services To Be Provided By the Engineer (Rev 06-22-2017) For Supplemental Work
	Authorization No. 4 to Work Authorization No. 2; (CSJ: 0086-14-058)
Attachment E	Summary of Fee Schedule for Phase I (Advanced Project Development Services) Supporting
	Lump Sum Calculations (Added by CSJ: 0086-14-058)
Attachment E-2	Detailed Fee Schedule For Adding Engineering Services/Fee for reduction of
	Frontage Road (Added by CSJ: 0086-014-058

ATTACHMENT B

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) – 1Large format roll.

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

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

ENVIRONMENTAL DOCUMENT – None available.

HYDRAULIC STUDIES

PAVEMENT DESIGN REPORT - Provided by TxDOT

PRELIMINARY CONSTRUCTION ESTIMATE- Provided for information only.

<u>DSR PRELIMINARY</u> – 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-Builts contained on CD)

- Existing Loop 20 from Sta. 257+85.56 to just North of Loop 20/US 59 Overpass Sta. 115+85.40
- Existing plans on any modification to Loop 20 or crossing roadways from Sta. 115+85.40 to just North of Loop 20/US 59 Overpass (Sta. 115+85.40)

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 Mosicac 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. See 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
- 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

ATTACHMENT C

(Revised 06-22-2017)

Additional 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

Page 1 of 5

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.

Task: Soil Core Hole Drilling (FC: 110)

(1) For: a.) Pavement, b.) Retaining Walls, c.) Miscellaneous Structures, or d.)Bridges, (1) No core drilling is to be accomplished until the state has given the engineer written approval.

Provide Soil Core Hole Drilling.

The Engineer shall perform the following items under this task:

• Perform the geotechnical drilling and engineering services for the bridge structures located at intersections shown below:

Shiloh Drive
Del Mar Blvd
University Blvd
Jacaman Rd
Laredo International Airport Entrance

- Establish in consultation with Webb County and the State, the locations of the test holes utilizing tape and right angle measurements from existing benchmarks (does not include surveying of boring locations).
- Drill two bridge borings utilizing auger drilling techniques to a maximum depth of 70 ft below existing grades or until five consecutive TCP test results of 100 blows for less than 4 in. are recorded, whichever is shallower; perform Texas Cone Penetrometer (TCP) tests at 2.5 ft. intervals for the first 10 ft. and at 5 ft. intervals.
- Collect one grab sample in the stream bank/bottom for scour analysis gradation testing.
- Visually classify the soil samples during drilling operations.
- Perform gradation testing on the scour sample.
- Provide a written engineering report to include the results of our classification and TCP testing in WinCore format boring logs, as well as pier capacity curve and the results of the gradation tests.
- Provide field sampling and laboratory analysis, according to the State's Standards, to produce Pier Capacity Charts to be used in the bridge foundation design. Provide boring logs to be shown on bridge layouts and in conformance with the State's criteria.

- Provide field sampling and laboratory analysis to produce recommendations on retaining wall design. Provide global stability analysis for the retaining walls.
- Provide slope stability analysis at fill locations

The Engineer shall provide all traffic control, labor and equipment for the Traffic Control Plan (TCP) while performing services under this work authorization. The Engineer shall comply with the regulations of the most recent edition of the "Texas Manual on Uniform Traffic Control Devices". The Engineer must submit the TCP to the respective Area Office to obtain approval from the Traffic Control Safety Review Committee concerning the proposed method of handling traffic prior to the commencement of geotechnical work.

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.
- 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.

Supplemental Work Authorization No. 4 to Work Authorization No. 2

- Attend Coordination meeting (2 Meetings)
- Attend Hydrology meeting (2 Meetings)
- Modify the south bound frontage road design from US 59 to Airport Boulevard.
- Revise Hydraulic Report due to South Bound Frontage Road Modifications
- Revise Level of Service analysis study due to the south bound frontage road modifications from US 59 to Airport Boulevard.

III. SOCIAL, ECONOMICAL, AND PUBLIC INVOLVEMENT

<u>Task: Environmental - (Section 6(f) Coordination) (FC: 120)</u> 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.

Supplemental Work Authorization No. 4 to Work Authorization No. 2

- Coordinate with WEBB County
- Revised Exhibits/ Site Plan/ Boundary Map
- Update 6 (f) Environmental Assessment

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

Supplemental Work Authorization No. 3 to Work Authorization No. 2

 Perform an additional eight (8) additional geotechnical soil borings as part of the geotechnical soil exploration along the project.

- o Two (2) Bridge
- o Two (2) Retaining Wall
- o Four (4) Bridge
- The engineer has established, in consultation with Webb County and the State, the locations of the test holes utilizing tape and right angle measurements from existing benchmarks as per the layout submitted by the engineer. Written approval via email was provided by the County and State on September 14, 2016.
- This increases the total number of borings from sixty-three (64) to seventy-one (72).

DELIVERABLES

D. DELIVERABLES

- 1. Geotechnical report that includes data from the additional eight (8) borings approved by the county and the state.
- 2. Electronic files shall be furnished to the State on a CD or DVD Recordable media

SCOPE AND FEE SCHEDULE ASSUMPTIONS

F. ASSUMPTIONS:

Assumes Right of Entry to be handled by the Client.

ATTACHMENT E

For Supplemental Work Authorization No. 4 to Work Authorization No. 2 (Revised 06/26/2017)

Summary of Fee Schedule for Phase I (Advanced Project Development Services)
Supporting Lump Sum Calculations (Added by CSJ: 0086-14-058)

SUMMARY OF FEE SCHEDULE FOR PHASE I (ADVANCED PROJECT DEVELOPMENT SERVICES) SUPPORTING LUMP SUM CALCULATIONS (Revised 06/26/17)

Contract No. SWA No. 4 to WA NO. 2 PHASE II

DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 4 TO WORK AUTHORIZATION NO. 2

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

ADVANCED PROJECT DEVELOPMENT SERVICES

Adding Engineering Services/Fee for reduction of Frontage Road

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

SUPPLEMENTAL WA NO. 4 TO WA NO 2

PHASE I SUMMARY

ADVANCED PROJECT DEVELOPMENT SERVICES SUMMARY BY FUNCTION CODES Total Phase I Services = \$74,347.6											\$74,347.69					
	PRIME		DBE		DBE		DBE		DBE		DBE		NON-DBE		NON-DBE	
Function Codes	Dannenbaum Engineering Corporation			Arredondo, Zepeda&Brunz, LLC Arias & Associates, Inc.		Aerial Data Services, Inc.		Ammaterra Environmental, Inc.		RODS, SUE, Inc.		Howland Engineering & Surveying Co.		Gilpin Engineering Company		
	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee	Hrs	Fee
FC 110 Route and Design Studies	542	\$ 65,782.56														
FC 120 Social, Economic and Environmental Studies and Public Involvement	68	\$ 7,909.13														
Direct Expenses		\$ 656.00														
Total	610	\$ 74,347.69	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%			

% PARTICIPATION =

NON-DBE	\$	74,347.69	100.00%
DBE	\$	-	0.00%
TOTAL	¢	74 247 60	100 000/

ATTACHMENT E-2

For Supplemental Work Authorization No. 4 to Work Authorization No. 2 (Revised 06/26/2017)

Detailed Fee Schedule For Adding Engineering Services/Fee for reduction of Frontage Road (Added by CSJ: 0086-014-058)

DETAILED FEE SCHEDULE FOR SUPPLEMENTAL WORK AUTHORIZATION NO. 4 TO WORK AUTHORIZATION NO. 2

LOOP 20 STIMULUS PROJECT (CSJ: 0086-14-058)
ADVANCED PROJECT DEVELOPMENT SERVICES
Adding Engineering Services/Fee for reduction of Frontage Road

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		Depty Project r Manager	Senior Engineer (Civil)	Env. Engineer		Senior Designer	CAD Operator/ CADD Tech. I/ GIS Tech	Clerical	TotaL Labor Hours	Task Cost	
BASIC SERVICES											
BASIC SERVICES (DANNENBAUM)											
FC 110 - ROUTE AND DESIGN STUDIES											
ATTEND COORDINATION MEETING (2 MEETINGS)			14		14				28	\$	5,006.26
ATTEND HYDROLOGY MEETING (2 MEETINGS)			14		14				28	\$	5,006.26
MODIFY THE SOUTH BOUND FRONTAGE ROAD DESIGN FROM US 59 TO AIRPORT BLVD	1	1	14		28	60	48	2	154	\$	17,952.82
REVISE HYDRAULIC REPORT DUE TO SOUTH BOUND FRONTAGE ROAD MODIFICATIONS	1	1	20		32	80	96	4	234	\$	26,101.88
REVISE LEVEL OF SERVICE ANALYSIS STUDY DUE TO SOUTH BOUND FRONTAGE ROAD MODIFICAITONS	1	1	10		14	48	20	4	98	\$	11,715.34
SUB-TOTAL - FC 110 - ROUTE AND DESIGN STUDIES	3	3	72	0	102	188	164	10	542	\$	65,782.56
FC 120 - SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT											
COORDINATE WITH WEBB COUNTY	1		1	16					18	\$	2,831.35
REVISE EXHIBITS/ SITE PLAN/ BOUNDARY MAP				8			16	1	25	\$	2,538.89
UPDATE 6(F) ENVIRONMENTAL ASSESMENT				8			16	1	25	\$	2,538.89
SUB-TOTAL - FC 120 - RSOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT	1	0	1	32	0	0	32	2	68	\$	7,909.13
TOTAL BASIC SERVICES MANHOURS (DANNENBAUM)	4	3	73	32	102	188	196	12	610	\$	73,691.69
HOURS SUB-TOTALS	4	3	73	32	102	188	196 \$ 83.44	12 \$ 64.89	610		
LABOR RATE PER HOUR DIRECT LABOR COSTS	\$ 327.93 \$1,311.72	\$ 236.07 \$708.21	\$ 225.50 \$16,461.50	\$ 142.37 \$4,555.84	\$ 132.09 \$13,473.18	\$ 106.64 \$20,048.32	\$ 83.44 \$16,354.24	\$ 64.89 \$ 778.68	CHECK		
TOTAL BASIC SERVICES FEE (DANNENBAUM)	1,311.72	708.21	16,461.50	4,555.84	13,473.18	20,048.32	16,354.24	778.68	73,691.69		
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PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON FEE)	1.78%	0.96%	22.34%	6.18%	18.28%	27.21%	22.19%	1.06%	100.00%		
PERCENT LABOR UTILIZATION FOR TOTAL PROJECT (BASED ON MANHOURS)	0.66%	0.49%	11.97%	5.25%	16.72%	30.82%	32.13%	1.97%	100.00%		
DIRECT EXPENSES:	Rate	Unit	Amount								
Mileage (2 RT)	\$ 0.52	miles								\$	-
Hotel	\$ 82.00	each	8							\$	656.00
Per Diem	\$ 51.00	day								\$	-
TOTAL DIRECT EXPENSES										\$	656.00
TOTAL BASIC SERVICES (ROADWAY AND DRAINAGE + DANNENBAUM DIRECT EXPENSES)		TOTAL BASIC SERVICES (ROADWAY AND DRAINAGE + DANNENBAUM DIRECT EXPENSES)									74,347.69