City of Jacksonville, Florida

Lenny Curry, Mayor

Department of Public Works
Engineering & Construction Management Division
214 N. Hogan Street, 10th Floor
Jacksonville, FL 32202
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ONE CITY. ONE JACKSONVILLE.

January 7, 2019

01/11/19 09:51:03
Procurement Division

TO: Gregory W. Pease, Chairman
Professional Services Evaluation Committee

THRU: John P. Pappas, P.E.
Director

FROM: William J. Joyce, P.E.
Director of Operations

R. Duane Kent, P.E.
Public Works Project Manager

SUBJECT: P-11-18 Professional Design Services for Preparation of DCP & RFP for Hart Expressway Modifications
Contract 10425-01 Amendment 2
PWCP32ERD549-069505-PW0262-02

This amendment is to prepare construction details and plans required to obtain a construction permit for the proposed eastern ramp and drainage basin from the Florida Department of Transportation (FDOT) and St. Johns River Water Management District (SJRWMD). The Engineering Division has negotiated with the consultant to provide these services resulting in the attached Scope of Services, Exhibit E and Fee Summary, Exhibit F. JSEB firms to be utilized to meet the 15% Participation Percentage Plan for this contract are detailed on a separate attachment.

Accordingly, this is to recommend that Contract Number 10425-01, originally executed August 21, 2018 between the City and STV, Incorporated for Professional Design Services for Preparation of DCP & RFP for Hart Expressway Modifications, be amended to incorporate the attached Scope of Services, Exhibit E and Fee Summary, Exhibit F, to increase the lump sum amount for Design Services by $610,372.20 to a new lump sum amount of $1,815,341.41 and to increase the not to exceed limit for Survey by $45,197.30 to a new limit of $345,530.91 and Geotechnical by $58,399.50 to a new limit of $183,978.82, thereby increasing the maximum indebtedness by $713,969.00 to a new maximum of $2,365,161.18. All other terms and conditions are as provided in the RFP and the City's standard contract language.

WJJ/lw

Attachment: Exhibits E & F
JSEB Participation

cc: Lori West, Contract Specialist

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AMENDMENT #2 SCOPE OF SERVICES
PROFESSIONAL DESIGN SERVICES FOR PREPARATION OF DCP & RFP FOR HART EXPRESSWAY MODIFICATIONS

1.0 PURPOSE:

The purpose of this amendment is for STV Incorporated (CONSULTANT) to:

- Prepare construction details and plans required to obtain a construction permit for the proposed eastern ramp and drainage basin from the Florida Department of Transportation (FDOT) and the St. Johns River Water Management District (SJRWMD).
- Revise and complete documents for NEPA evaluation and approval.

2.1 OBJECTIVE:

To accomplish this purpose, the CONSULTANT shall provide the following professional engineering services to support City of Jacksonville (COJ):

1. Roadway & Drainage Engineering
2. Structures Engineering
3. Signing & Pavement Marking
4. Lighting Engineering
5. Signalization Engineering
6. Traffic Analysis
7. Geotechnical Engineering
8. Design Survey
9. Subsurface Utility Engineering (SUE)
10. Contamination Evaluation and Screening Report (CSER) Level II
11. Revise Cultural Resource & Archaeological Survey (CRAS)

2.1 **Schedule**:

Unchanged from Master Agreement

2.2 **Submittals**:

The CONSULTANT shall furnish the following deliverables

1. DRAFT Plans/Report/Calculations Submittal at 100% completion level to FDOT & SJRWMD
2. FINAL Plans/Report/Calculations Submittal at 100% completion level to FDOT & SJRWMD
3. CSER Level II (DRAFT & FINAL)

4. Revised CRAS
5. Traffic Technical Memo

2.3 **Provisions for Work:**

All maps, plans, reports, and designs are to be prepared with English values in accordance with the current FDOT R/W Mapping guidance.

3.1 WORK TASKS, SERVICES, AND DELIVERABLES:

The work to accomplish the project purpose will be controlled via the previously submitted project schedule. These include activities to be performed by the CONSULTANT, COJ, FDOT, and/or other sub consultants are detailed below.

PROFESSIONAL SERVICES

ROADWAY & DRAINAGE ENGINEERING

- 100% level design for east drainage basin

STRUCTURES ENGINEERING

- 100% level design for east bridge ramp
- 100% level design for east ramp retaining walls

SIGNING & PAVEMENT MARKING

- 100% level design for the proposed Gator Bowl Boulevard/Bay Street/East Hart Ramp intersection
- 100% level design for guide sign panels within FDOT owned project corridor
- 100% level design for signs required to be changed due to SR 228 route changes

LIGHTING ENGINEERING

- 100% level design within FDOT owned project corridor

SIGNALIZATION ENGINEERING

- 100% level design for signals controlling the proposed Gator Bowl Boulevard/Bay Street/East Hart Ramp intersection

TRAFFIC ANALYSIS

- Revise traffic memo
- Provide procurement review services

GEOTECHNICAL ENGINEERING

- Perform geotechnical investigations in the proposed Gator Bowl Boulevard/Bay Street/East Hart Ramp intersection

- Produce geotechnical recommendations in the proposed Gator Bowl Boulevard/Bay Street/East Hart Ramp intersection
- Soil borings for signal mast arms

DESIGN SURVEY

- Stake soil borings
- Obtain guide sign panel sizes
- Survey two west ponds

SUE

- Clear mast arm foundations

CULTURAL RESOURCE & ARCHAEOLOGICAL SURVEY

- Add Adams Street and Monroe Street to the CRAS for R/W Transfer

CULTURAL RESOURCE & ARCHAEOLOGICAL SURVEY

- Add Adams Street and Monroe Street to the CRAS for R/W Transfer

DELIVERABLES

1. 100% Plans for East Drainage Basin including:
    a. Roadway & Drainage
    b. Structures
    c. Signing & Pavement Marking
    d. Lighting
2. 100% Reports/Calculations for East Drainage Basin including
    a. Drainage Calculations
    b. Lighting Calculations
    c. Geotechnical report and recommendations
    d. Signal Layout and Timing roll plot
3. Traffic Operational Model
4. DRAFT/FINAL Technical Traffic Memo

OTHER SERVICES

1. Permit coordination meetings with
    a. FDOT Offices
    b. SJRWMD
2. Respond to:
    a. FDOT Comments

b. SJRWMD RFI's

3. Apply for construction ready permits for the east drainage basin from:
   a. FDOT
   b. SJRWMD

4.1 PROJECT REQUIREMENTS:

4.2 Liaison Office

Unchanged from Master Agreement.

4.3 Progress Reporting

Unchanged from Master Agreement.

4.4 Quality Control

Unchanged from Master Agreement.

4.5 Professional Endorsement

Unchanged from Master Agreement

4.6 Computer Animation

Unchanged from Master Agreement.

4.7 Coordination with other Consultants

Unchanged from Master Agreement.

4.8 Optional Services

Unchanged from Master Agreement.

4.9 Services Not Included

Unchanged from Master Agreement.

CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL	
1. Project Hart Bridge Modification D-B DCP/RFP Amendment #2	2. Proposal Number P-11-18
3. Name of Consultant STV Incorporated	4. Date of Proposal 1/7/2019

PART II - LABOR RELATED COSTS

5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Project Manager	$63.87	320	$20,438.40	
Principal	$98.04	22	$2,156.88	
Chief Engineer	$76.12	197	$14,995.64	
Senior engineer	$58.20	425	$24,735.00	
Design Engineer	$41.33	525	$21,698.25	
Designer	$40.66	275	$11,181.50	
CADD/Computer Tech	$26.93	390	$10,502.70	
Engineering Intern	$29.49	401	$11,825.49	
Clerical	$20.45	43	$879.35	
TOTAL DIRECT LABOR		2,598	Hours	$118,413.21
6. Overhead (Combined Fringe Benefit & Administrative)			175.00%	$207,223.12
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$325,636.33
8. PROFIT: Labor Related Costs (Item 7)			x 10%	$32,563.63

PART III - OTHER COSTS

9. Miscellaneous Direct Costs		
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$0.00
10. SUBCONTRACTS (Lump Sum)		
ERS (Environmental)	$ -	
Terrracon (Contamination)	$ 40,668.47	
Peters & Yaffee (Signals/Signing/Marking)	$ 78,581.70	
Pond (Landscape)	$ -	
SEARCH (Archaeology)	$ 7,249.45	
CSI Geo (Geotechnical)	$ 51,340.75	
Arcadis US (Traffic Analysis)	$ 74,331.87	
DRMP (Survey/SUE/Mapping)	$ -	
SUB-CONTRACT SUB-TOTAL		$ 252,172.24
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$610,372.20
11. REIMBURSABLE COSTS (Limiting Amount)		
CSI Geo (Geotechnical)	$ 58,399.50	
DRMP (Survey/SUE)	$ 45,197.30	
Cardno (Utility Coordination)	$ -	
SUB-TOTAL REIMBURSABLES		$103,596.80

PART IV - SUMMARY

TOTAL AMOUNT OF AMENDMENT #2 (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$713,969.00**
12. PRIOR CONTRACT AMOUNT (Through Amendment # 1)	$1,651,192.18
AMENDED AMOUNT OF CONTRACT	**$2,365,161.18**

EBO FORM 1
SCHEDULE OF SUBCONTRACTOR/SUBCONSULTANT PARTICIPATION

Name of Proposer: **STV Incorporated**

Project Title: **Hart Bridge Modification D-B DCP/RFP**

Proposal Number: **P-11-18** Total Base Proposal Amount (if applicable): **$713,969.00**

***Please list all JSEBs first**

Full Company Name	JSEB Category (African-American, Women, Asian, Native American, Non-MBE or Hispanic)	Type of Work to be Performed	Total Contract Value or Percentage
CSI Geo, Inc.	African-American	Geotechnical Investigations	**$109,740.25**
Environmental Resource Solutions Inc.	Woman	Environmental Investigations	**$0.00**
Meskel & Associates Engineering	Woman	Contamination Screening	**$0.00**
Peters & Yaffee	African-American	Signal/Signing/Marking	**$78,581.70**
Cardno	Non-MBE	Utility Coordination	**$0.00**
DRMP Inc.	Non-MBE	Topo Survey & SUE	**$45,197.30**
POND Incorporated	Non-MBE	Landscape Architecture	**$0.00**
SEARCH Inc.	Non-MBE	Cultural Resource Evaluation	**$7,249.45**
ARCADIS US Inc.	Non-MBE	Traffic Analysis	**$74,331.87**
Terracon Consulting Engineers & Scientists	Non-MBE	Contamination Screening	**$40,668.47**

Attach additional list of subcontractors/sub-consultants as needed

CONSULTANT/SUBCONTRACTOR/SUPPLIER TOTAL VALUES	
African-American Participation Total	**$188,321.95 (26%)**
Hispanic-American Participation Total	
Native-American Participation Total	
Asian-American Participation Total	
Woman Participation Total	**$0.00 (0%)**
Non-MBE Participation Total	**$525,647.05 (74%)**

The undersigned will enter into a formal Agreement with the JSEB Suppliers/Consultants/Subcontractors identified herein for work listed in this schedule conditioned upon execution of a contract with the City of Jacksonville. Under penalties of perjury I declare that I have read the foregoing conditions and instructions and the facts are true to the best of my knowledge and beliefs.

Signature of Proposer: J. Keith Jackson Title: STV Project Manager Date: January 7, 2019

Print Name: J. Keith Jackson, P.E.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Hart Bridge Mod D-B DCP & RFP
COJ RFP Number P-11-18
STV Project Number 40-19574

Consultant Name: STV Incorporated
Date: November 9, 2018
Estimator: JKJ/TTH/BW

Staff Classification	Total Staff Hours From "SH Summary -	Project Manager	Principal	Chief Engineer	Senior Engineer	Design Engineer	Designer	CADD Operator	Engineering Intern	Clerical				SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$63.87	$98.04	$76.12	$58.20	$41.33	$40.66	$26.93	$29.49	$20.45						
3. Project General and Project Common Tasks	173	130	0	0	0	0	0	0	0	43	0	0	0	173	$9,182	$53.08
4. Roadway Analysis	306	31	6	24	31	61	61	46	46	0	0	0	0	306	$13,796	$45.08
5. Roadway Plans	166	17	3	13	17	33	33	25	25	0	0	0	0	166	$7,475	$45.03
6a. Drainage Analysis	103	10	2	8	10	21	21	15	15	0	0	0	0	102	$4,594	$45.04
6b. Drainage Plans	69	7	1	6	7	14	14	10	10	0	0	0	0	69	$3,121	$45.24
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	93	9	0	5	9	19	19	19	14	0	0	0	0	94	$3,962	$42.14
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	257	13	0	39	129	51	0	13	13	0	0	0	0	258	$14,148	$54.84
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	494	25	0	35	99	124	0	99	114	0	0	0	0	496	$21,176	$42.69
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
17. Structures - Retaining Walls	300	15	0	21	60	75	0	60	69	0	0	0	0	300	$12,799	$42.66
18. Structures - Miscellaneous	148	15	0	7	15	30	30	30	22	0	0	0	0	149	$6,280	$42.15
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
23. Lighting Analysis	333	33	7	27	33	67	67	50	50	0	0	0	0	334	$15,084	$45.16
24. Lighting Plans	152	15	3	12	15	30	30	23	23	0	0	0	0	151	$6,796	$45.01
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
Total Staff Hours	2,594	320	22	197	425	525	275	390	401	43	0	0	0	2,598		
Total Staff Cost		$20,438.40	$2,156.88	$14,995.64	$24,735.00	$21,698.25	$11,181.50	$10,502.70	$11,825.49	$879.35	$0.00	$0.00	$0.00		**$118,413.21**	**$45.58**

Check = $118,413.21

SALARY RELATED COSTS:			$118,413.21
OVERHEAD:		175%	$207,223.12
PROFIT:		10%	$32,563.63
SUBTOTAL ESTIMATED FEE:			**$358,199.96**
Subconsultant:	**ARCADIS**		$74,331.87
Subconsultant:	Cardno		$0.00
Subconsultant:	**CSI Geo**		$109,740.25
Subconsultant:	**DRMP**		$45,197.30
Subconsultant	ERS		$0.00
Subconsultant	MAE		$0.00
Subconsultant:	**Peters & Yaffee**		$78,581.70
Subconsultant	POND		$0.00
Subconsultant:	**SEARCH**		$7,249.45
Subconsultant:	**Terracon**		$40,668.47
GRAND TOTAL ESTIMATED FEE:			**$713,969.00**

Project Activity 3: General Tasks

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing	Print Name	Signature / Date

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					
3.1.1	Community Awareness Plan	LS	1	0	0	N/A
3.1.2	Notifications	LS	1	0	0	N/A
3.1.3	Prepare Mailing Lists	LS	1	0	0	N/A
3.1.4	Median Modification Letters	LS	1	0	0	N/A
3.1.5	Driveway Modification Letters	LS	1	0	0	N/A
3.1.6	Newsletters	LS	1	0	0	N/A
3.1.7	Renderings and Fly Throughs	LS	1	0	0	N/A
3.1.8	PowerPoint Presentation	LS	1	0	0	N/A
3.1.9	Public Meeting Preparations	LS	1	0	0	N/A
3.1.10	Public Meeting Attendance/Followup	LS	1	0	0	N/A
3.1.11	Other Agency Meetings	LS	1	0	0	N/A
3.1.12	Web Site	LS	1	0	0	N/A
				3.1 Public Involvement Subtotal	**0**	
3.2	Joint Project Agreements	EA	0	0	0	N/A
3.3	Specifications Package Preparation	LS	1	0	0	N/A
3.4	Contract Maintenance and EDMS	LS	1	8	8	Arcadis Sub Contract coordination
3.5	Value Engineering (Multi-Discipline Team) Review	LS	1	0	0	N/A
3.6	Prime Consultant Project Manager Meetings	LS	1	69	69	See listing below
3.7	Plans Update	LS	1	0	0	

Project Activity 3: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.8	Post Design Services	LS	1	0	0	
3.9	Digital Delivery	LS	1	0	0	N/A
3.10	Risk Assessment Workshop	LS	1	0	0	N/A
3.11	Railroad, Transit, and/or Airport Coordination	LS	1	0	0	N/A
3.12	Landscape and Existing Vegetation Coordination	LS	1	0	0	N/A
3.13	Other Project General Tasks	LS	1	96	96	R/W Transfer Agreement assistance (40 hours); LAP Office Coordination for Agreement (16 hours); FDOT Permit Coordination to prepare application and answer RFI's (40 hours)
	3. Project Common and Project General Tasks Total				**173**	

3.6 - List of Project Manager Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments
Roadway Analysis	EA	2	6.5	13	FDOT Permitting (4 hours) and JSO Game Day Ingress/Egress (9 hours). Average of 6.5 hours
Drainage	EA	6	2	12	Attendance only - see Drainage Sheet for details
Utilities	EA	0	0	0	N/A
Environmental	EA	0	0	0	N/A
Structures	EA	2	6	12	Bridge and Wall Meeting with FDOT Design and Bridge Maitenance
Signing & Pavement Marking	EA	1	3	3	Guide Sign Review Meeting with COJ Traffic (Chris LeDew)
Signalization	EA	0	0	0	N/A
Lighting	EA	0	0	0	N/A
Landscape Architecture	EA	0	0	0	N/A
Survey	EA	0	0	0	N/A
Photogrammetry	EA	0	0	0	N/A
ROW & Mapping	EA	1	3	3	Meeting with COJ R/W Office (Danny Wheeler)
Terrestrial Mobile LiDAR	EA	0	0	0	N/A
Architecture	EA	0	0	0	N/A
Noise Barriers	EA	0	0	0	N/A
ITS Analysis	EA	0	0	0	N/A
Geotechnical	EA	2	3	6	Coordination Meetings with CSI-Geo/FDOT Materials Office for geotechnical report
Progress Meetings	EA	10	2	20	With Sam Mousa, John Pappas, Jim Knight
DRAFT & FINAL RFP/DCP Reviews & NEPA Document Reviews	EA	0	0	0	N/A
Field Reviews	EA	0	0	0	N/A
Total Project Manager Meetings		24		69	Total PM Meeting Hours carries to Task 3.6 above

Project Activity 4: Roadway Analysis

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing	Print Name	Signature / Date

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	1	0	0	N/A
4.2	Pavement Type Selection Report	LS	1	0	0	N/A
4.3	Pavement Design Package	LS	1	0	0	N/A
4.4	Cross-Slope Correction	LS	1	0	0	N/A
4.5	Horizontal /Vertical Master Design Files	LS	1	160	160	8 hours per intersection requiring special profiling. 3 additional intersections in new concept; 24 hours total 8 hours per median opening. 4 additional median openings in new concept; 32 hours total. M&R/Overbuild details for existing Bay Street (16 hours). Bay Street Curb profiling (8 hours). Criteria Change due to LAP Agreement. project is Class B project requiring FDM (FDOT) Criteria. All elements designed per the Greenbook and City Standards must be redesigned (80 hours)
4.6	Access Management	LS	1	0	0	N/A
4.7	Roundabout Evaluation	LS	1	0	0	N/A
4.8	Roundabout Final Design Analysis	LS	1	0	0	N/A
4.9	Cross Section Design Files	LS	1	0	0	N/A
4.10	Traffic Control Analysis	LS	1	0	0	N/A
4.11	Master TCP Design Files	LS	1	0	0	N/A
4.12	Selective Clearing and Grubbing	LS	1	0	0	N/A
4.13	Tree Dispostion Plan	LS	1	0	0	N/A
4.14	Design Variations and Exceptions	LS	1	72	72	Shoulder Width and Median Width Design Variation for FDOT section (36 hours each)
4.15	Design Report	LS	1	0	0	N/A
4.16	Quantities	LS	1	0	0	N/A
4.17	Cost Estimate	LS	1	0	0	N/A
4.18	Technical Special Provisions and Modified Special Provisions	LS	1	0	0	N/A
4.19	Other Roadway Analyses	LS	1	0	0	N/A
				Roadway Analysis Technical Subtotal	**232**	

Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.20	Field Reviews	LS	1	0	0	N/A
4.21	Monitor Existing Structures	LS	1	0	0	N/A
4.22	Technical Meetings	LS	1	34	34	Meetings are listed below
4.23	Quality Assurance/Quality Control	LS	%	7%	16	
4.24	Independent Peer Review	LS	%	0%	0	
4.25	Supervision	LS	%	5%	12	
				Roadway Analysis Nontechnical Subtotal	**62**	
4.26	Coordination	LS	%	4%	12	
				4. Roadway Analysis Total	**306**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Typical Section	EA	0	0	0	no	0
Pavement	EA	0	0	0	no	0
Access Management	EA	0	0	0	no	0
15% Line and Grade	EA	0	0	0	no	0
Driveways	EA	0	0	0	no	0
Local Governments (cities, counties, MPO) - Site Visit with JSO - 2 staff from 9AM to 5PM to sketch out game day plan	EA	1	18	18	yes	1
Work Zone Traffic Control	EA	0	0	0	no	0
Meeting with FDOT Permitting	EA	1	6	6	yes	1
Additional Meetings (with Stakeholders)	EA	0	0	0	no	0
Subtotal Technical Meetings				**24**	**Subtotal Project Manager Meetings**	2
Progress Meetings (if required by FDOT)	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	1	10	10	*Answer FDOT Permit Application Comments*	- -
Total Meetings				**34**	**Total Project Manager Meetings (carries to Tab 3)**	**2**

Carries to 4.17

Carries to Tab 3

Project Activity 5: Roadway Plans

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing		Print Name	Signature / Date

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.1	Key Sheet		Sheet	0	0	0	N/A
5.2	Summary of Pay Items Including Quantity Input		Sheet	0	0	0	N/A
5.3	Typical Section Sheets						
5.3.1	Typical Sections		EA	0	0	0	N/A
5.3.2	Typical Section Details		EA	0	0	0	N/A
5.4	General Notes/Pay Item Notes		Sheet	0	0	0	N/A
5.5	Summary of Quantities Sheets		Sheet	0	0	0	N/A
5.6	Project Layout		Sheet	0	0	0	N/A
5.7	Plan/Profile Sheet		Sheet	0	0	0	N/A
5.8	Profile Sheet	40	Sheet	0	0	0	N/A
5.9	Plan Sheet	40	Sheet	0	0	0	N/A
5.10	Special Profile	40	Sheet	2	6	12	WB/NB Right turn off ramp; raised curb on Bay Street
5.11	Back-of-Sidewalk Profile Sheet		Sheet	0	0	0	N/A
5.12	Interchange Layout Sheet		Sheet	0	0	0	N/A
5.13	Ramp Terminal Details (Plan View)		Sheet	0	0	0	N/A
5.14	Intersection Layout Details		Sheet	3	12	36	Layout for Interections at East Ramp/Gator Bowl/Bay Street/Talleyrand Ave. this will also detail the median openings.
5.15	Special Details		EA	9	96	96	R/W Transfer Exhibits for FDOT (4 at 8 hours each). JSO Game Day Ingress/Egress Plan (16 hours each for 2 roll plots); M&R/Overbuild details for Bay Street (16 hours for 2 sheets); Ground improvement details (2 sheets at 8 hours per sheet)
5.16	Cross-Section Pattern Sheet(s)		Sheet	0	0	0	N/A

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.17	Roadway Soil Survey Sheet(s)		Sheet	0	0	0	N/A
5.18	Cross Sections		EA	20	0.25	5	Muck delineation
5.19	Temporary Traffic Control Plan Sheets		Sheet	0	0	0	N/A
5.20	Temporary Traffic Control Cross Section Sheets		EA	0	0	0	N/A
5.21	Temporary Traffic Control Detail Sheets		Sheet	0	0	0	N/A
5.22	Utility Adjustment Sheets		Sheet	0	0	0	N/A
5.23	Selective Clearing and Grubbing Sheet(s)						
5.23.1	Selective Clearing and Grubbing		Sheet	0	0	0	N/A
5.23.2	Selective Clearing and Grubbing Details		Sheet	0	0	0	N/A
5.24	Tree Disposition Sheet(s)						
5.24.1	Tree Disposition Plan Sheet(s)		Sheet	0	0	0	N/A
5.24.2	Tree Disposition Plan Tables and Schedules		Sheet	0	0	0	N/A
5.25	Project Network Control Sheet(s)		Sheet	0	0	0	N/A
5.26	Preliminary Engineering Report for NEPA		LS	0	0	0	N/A
5.27	Utility Verification Sheet(s) (SUE Data)		Sheet	0	0	0	N/A
					Roadway Plans Technical Subtotal	**149**	
5.28	Quality Assurance/Quality Control		LS	%	7%	10	
5.29	Supervision		LS	%	5%	7	
					5. Roadway Plans Total	**166**	

Project Activity 6a: Drainage Analysis

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing	Print Name	Signature / Date

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.1	Drainage Map Hydrology	Per Map	0	0	0	N/A
6a.2	Base Clearance Calculations	Per Location	0	0	0	N/A
6a.3	Pond Siting Analysis and Report	Per Basin	0	0	0	N/A
6a.4	Design of Cross Drains	EA	0	0	0	N/A
6a.5	Design of Ditches	Per Ditch Mile	0	0	0	N/A
6a.6	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	0	0	0	N/A
6a.7	Design of Stormwater Management Facility (Roadside Treatment Swales and Linear Ponds)	Per Cell	0	0	0	N/A
6a.8	Design of Floodplain Compensation	Per Floodplain Basin	0	0	0	N/A
6a.9	Design of Storm Drains	EA	10	3	30	Additional inlets for non-typical intersection area of Gator Bowl Blvd and Commodore Point Expressway
6a.10	Optional Culvert Material	EA	10	0.25	3	This task is related to task 6a.10
6a.11	French Drain Systems	Per Cell	0	0	0	N/A
6a.11.a	Existing French Drain Systems	Per Cell	0	0	0	N/A
6a.12	Drainage Wells	EA	0	0	0	N/A
6a.13	Drainage Design Documentation Report	LS	1	0	0	N/A
6a.14	Bridge Hydraulic Report	EA	0	0	0	N/A

Project Activity 6a: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.15	Temporary Drainage Analysis	LS	1	0	0	N/A
6a.16	Cost Estimate	LS	1	0	0	N/A
6a.17	Technical Special Provisions and Modified Special Provisions	LS	1	0	0	N/A
6a.18	Hydroplaning Analysis	LS	1	0	0	N/A
6a.19	Existing Permit Analysis	LS	1	24	24	Complex existing system spanning multiple past projects over a long time period, more than normal permit data gathering
6a.20	Other Drainage Analysis	LS	1	0	0	N/A
				Drainage Analysis Technical Subtotal	**57**	
6a.21	Field Reviews	LS	1	0	0	
6a.22	Technical Meetings	LS	1	36	36	Meetings are listed below
6a.23	Environmental Look-Around (ELA) Meeting	LS	1	0	0	
6a.24	Quality Assurance/Quality Control	LS	%	7%	4	
6a.25	Independent Peer Review	LS	%	0%	0	
6a.26	Supervision	LS	%	5%	3	
				Drainage Analysis Nontechnical Subtotal	**43**	
6a.27	Coordination	LS	%	3%	3	
				6a. Drainage Analysis Total	**103**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments	PM Attendance at Meeting Required?	Number
Base Clearance Water Elevation	EA	0	0	0			0
Pond Siting	EA	0	0	0			0
Agency - SJRWMD	EA	3	6	18	2 hour prep, 2 hour meeting, 2 hours for meeting minutes	yes	3
Local Governments (cities, counties)	EA	3	6	18	2 hour prep, 2 hour meeting, 2 hours for meeting minutes	yes	3
FDOT Drainage	EA	0	0	0			0
Other Meetings	EA	0	0	0			0
Subtotal Technical Meetings				**36**			**6**
Progress Meetings (if required by FDOT)	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*		- -
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*		- -
Total Meetings				**36**	**Total Project Manager Meetings (carries to Tab 3)**		**6**

Carries to 6.19

Carries to Tab 3

6b. Drainage Plans

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing	Print Name	Signature / Date

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
6b.1	Drainage Map (Including Interchanges)		Sheet	0	0	0	
6b.2	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	
6b.3	Summary of Drainage Structures		Sheet	1	32	32	A maximum of 32 structures per sheet.
6b.4	Optional Pipe/Culvert Material		Sheet	0	0	0	
6b.5	Drainage Structure Sheet(s) (Per Structure)		EA	10	3	30	This task is related to task 6a.10
6b.6	Miscellaneous Drainage Detail Sheets		Sheet	0	0	0	
6b.7	Lateral Ditch Plan/Profile		Sheet	0	0	0	
6b.8	Lateral Ditch Cross Sections		EA	0	0	0	
6b.9	Retention/Detention Ponds Detail Sheet(s)		Sheet	0	0	0	
6b.10	Retention Pond Cross Sections		EA	0	0	0	
6b.11	Erosion Control Plan Sheet(s)		Sheet	0	0	0	
6b.12	SWPPP Sheet(s)		Sheet	0	0	0	
					Drainage Plans Technical Subtotal	**62**	
6b.13	Quality Assurance/Quality Control		LS	%	7%	4	
6b.14	Supervision		LS	%	5%	3	
					6. Drainage Plans Total	**69**	

Project Activity 8: Environmental Permits

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing	Print Name	Signature / Date

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Permits, Compliances and Clearances					
8.1	Preliminary Project Research	LS	1	0	0	
	Permits					
8.2	**Field Work**					
8.2.1	Pond Site Alternatives	per pond site	0	0	0	
8.2.2	Establish Wetland Jurisdictional Lines and Assessments	LS	1	0	0	
8.2.3	Species Surveys	LS	1	0	0	
8.2.4	Archeological Surveys	LS	1	0	0	
8.3	Agency Verification of Wetland Data	LS	1	0	0	
8.4	**Complete And Submit All Required Permit Applications**					
8.4.1	Complete and Submit All Required Wetland Permit Applications	LS	1	80	80	Complicated permit considering historical permits, revisions and modifications. Higher than normal WMD scrutiny and requirements.
8.4.2	Complete and Submit All Required Species Permit Applications	LS	1	0	0	
8.5	Prepare Dredge and Fill Sketches (as needed)	LS	1	0	0	
8.6	Prepare USCG Permit Sketches	LS	1	0	0	
8.7	Prepare Water Management District Right-of-Way Occupancy Permit	LS	1	0	0	
8.8	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	1	0	0	
8.9	Prepare Tree Permit Information	LS	1	0	0	
8.10	Mitigation Design	LS	1	0	0	
8.11	Mitigation Coordination and Meetings	LS	1	0	0	
8.12	Other Environmental Permits	LS	1	0	0	

Project Activity 8: Environmental Permits

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Clearances/Reevaluations					
8.13	**Technical support to Department for Environmental Clearances and Reevaluations (use when consultant provides technical support only)**					
8.13.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.13.2	Archaeological and Historical Features	LS	1	0	0	
8.13.3	Wetland Impact Analysis	LS	1	0	0	
8.13.4	Essential Fish Habitat	LS	1	0	0	
8.13.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.13.6	Section 7 or Section 10 Consultation	LS	1	0	0	
8.14	**Preparation of Environmental Clearances and Reevaluations (use when consultant prepares all documents associated with reevaluation)**					
8.14.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.14.2	Archaeological and Historical Features	LS	1	0	0	
8.14.3	Wetland Impact Analysis	LS	1	0	0	
8.14.4	Essential Fish Habitat	LS	1	0	0	
8.14.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.14.6	Section 7 or Section 10 Consultation	LS	1	0	0	
8.15	Contamination Impact Analysis	LS	1	0	0	
8.16	Asbestos Survey	LS	1	0	0	

Project Activity 8: Environmental Permits

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Permits, Compliance, and Clearances/Reevaluations Technical Subtotal				**80**	
8.17	Technical Meetings	LS	1	0	0	Meetings are listed below
8.18	Quality Assurance/Quality Control	LS	%	7%	6	
8.19	Supervision	LS	%	5%	4	
	Environmental Permits, Compliance and Clearances Nontechnical Subtotal				**10**	
8.20	Coordination	LS	%	3%	3	
	8. Environmental Permits, Compliance and Clearances Total				**93**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
WMD	EA	0	0	0		0
NMFS	EA	0	0	0		0
USACE	EA	0	0	0		0
USCG	EA	0	0	0		0
USFWS	EA	0	0	0		0
FFWCC	EA	0	0	0		0
FDOT	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**0**	**Subtotal Project Manager Meetings**	0
Progress Meetings (if required by FDOT)	EA	0	0	0	*PM attendance at Progress Meetings.is manually entered on General Task 3*	- -
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**0**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing	Print Name	Signature / Date

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	Design and Production Staffhours				Comments
			No. of Units	Hours per Unit	No. of Sheets	Total	
	General Drawings						
9.1	Key Sheet and Index of Drawings	Sheet	2	4	2	8	**East End** - Prepare final plans for single span concrete bridge and associated walls in order to obtain FDOT permit. Original scope included concept plans only. Prepare separate Key Sheet for final plans set. Prepare Signature Sheet for final plans set.
9.2	Project Layout	Sheet	0	0	0	0	
9.3	General Notes and Bid Item Notes	Sheet	1	12	1	12	Prepare separate General Notes sheet for final plans set.
9.4	Miscellaneous Common Details	Sheet	0	0	0	0	Existing bridge removal details included in original scope.
9.5	Incorporate Report of Core Borings	Sheet	2	1	2	2	Additional sheets for wall borings.
9.6	Design Standards - Bridges	LS	1	2		2	
9.7	Existing Bridge Plans	LS	1	0		0	Included in original scope.
9.8	Assemble Plan Summary Boxes and Quantities	LS	1	16		16	
9.9	Cost Estimate	LS	1	8		8	Additional final cost estimate for east bridge.
9.1	Technical Special Provisions and Modified Special Provisions	LS	0	0		0	None anticipated.
	Structures - Summary and Miscellaneous Tasks and Drawings				5	48	

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Task No.	Task	Total	Task 10	Task 11	Task 12	Task 13	Task 14	Task 15	Task 16	Task 17	Task 18
10-16	West End - Bridge No. 724XXX	0	0	0	0	0	0	0	0		
10-16	East End - Bridge No. 720114	494	0	0	0	494	0	0	0		
10-16	Bridge 3	0									
10-16	Bridge 4	0									
10-16	Bridge 5	0									
10-16	Bridge 6	0									
10-16	Bridge 7	0									
10-16	Bridge 8	0									
10-16	Bridge 9	0									
10-16	Bridge 10	0									
17	Retaining Walls	300								300	
18	Miscellaneous Structures	148									148
	Structures Technical Subtotal	942	0	0	0	494	0	0	0	300	148

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Task No.	Task	Units	No. of Units	Hours per Unit	Total	Comments
9.11	Field Reviews	LS	1	0	0	
9.12	Technical Meetings	LS	1	26	26	Meetings are listed below
9.13	Quality Assurance/Quality Control	LS	%	7%	69	
9.14	Independent Peer Review	LS	1	0	0	
9.15	Supervision	LS	%	5%	50	
	Structures Nontechnical Subtotal				145	
9.16	Coordination	LS	1	64	64	32 hrs. Roadway + 8 hrs. Utilities + 8 hrs. FDOT Bridge Maintenance + 16 hrs. Geotechnical + 4 hrs. Aesthetics + 8 hours geotechnical
	9. Structures - Summary and Miscellaneous Tasks and Drawings				257	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
BDR Coordination/Review	EA	1	4	4	yes	1
90/100% Comment Review	EA	1	4	4	yes	1
Aesthetics Coordination	EA	0	0	0		0
Regulatory Agency	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Utility Companies	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**8**		**2**
Progress Meetings	EA	6	3	18	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**26**	**Total Project Manager Meetings (carries to Tab 3)**	**2**

Carries to 9.11

Carries to Tab 3

Project Activity 13: Structures- Medium Span Concrete

Estimator:
Bridge Identifier (Number or Name):

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing	Print Name	Signature / Date

NOTE: Signature Block is optional, per District preference

For East Bridge

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	General Layout Design and Plans						
13.1	Overall Bridge Final Geometry	LS	1	16		16	Replace existing Span 92; Span 93 to remain. Curved superstructure geometry. Update preliminary.
13.2	Expansion/Contraction Analysis	EA Unit	2	4		8	One existing span, one proposed span.
13.3	General Plan and Elevation	Sheet	1	16	1	16	Additional effort to prepare final GP&E.
13.4	Construction Staging	Sheet	0	0	0	0	N/A
13.5	Approach Slab Plan and Details	Sheet	1	8	1	8	
13.6	Miscellaneous Details	Sheet	1	6	1	6	Load Rating Summary Sheet
	End Bent Design and Plans						
13.7	End Bent Geometry	EA End Bent	1	6		6	Final End Bent geometry.
13.8	Wingwall Design and Geometry	EA End Bent	0	0		0	N/A
13.9	End Bent Structural Design	EA Design	1	20		20	
13.10	End Bent Plan and Elevation	Sheet	1	8	1	8	Additional effort to prepare final Plan and Elevation.
13.11	End Bent Details	Sheet	1	16	1	16	End Bent Section, Pedestal Details, Pedestal Elevations, Backwall Joint Detail.

Project Activity 13: Structures- Medium Span Concrete

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Intermediate Bent Design and Plans						
13.12	Bent Geometry	EA Bent	0	0		0	N/A
13.13	Bent Stability Analysis	EA Design	0	0		0	N/A
13.14	Bent Structural Design	EA Design	0	0		0	N/A
13.15	Bent Plan and Elevation	Sheet	0	0	0	0	N/A
13.16	Bent Details	Sheet	0	0	0	0	N/A
	Pier Design and Plans						
13.17	Pier Geometry	EA Pier	1	6		6	Revise existing pier beam seats elevations.
13.18	Pier Stability Analysis	EA Design	0	0		0	N/A
13.19	Pier Structural Design	EA Design	0	0		0	N/A - Loading comparison included in original scope.
13.20	Pier Plan and Elevation	Sheet	1	20	1	20	Plan & Elevation, Cap Section.
13.21	Pier Details	Sheet	1	16	1	16	Pedestal Details, Pedestal Elevations.
	Miscellaneous Substructure Design and Plans						
13.22	Foundation Layout	Sheet	1	4	1	4	Additional effort for final Foundation Layout.
	Superstructure Deck Design and Plans						
13.23	Finish Grade Elevation (FGE) Calculation	LS	1	16		16	
13.24	Finish Grade Elevations	Sheet	1	16	1	16	Plan & Section, 2 Tables (1 App. Slab, 1 Span)
13.25	Bridge Deck Design	EA Section	1	12		12	
13.26	Bridge Deck Reinforcing and Concrete Quantities	EA Unit	1	16		16	
13.27	Diaphragm Design	EA Section	1	12		12	Assume AASHTO Type II Beams with Diaphragms

Project Activity 13: Structures- Medium Span Concrete

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
13.28	Superstructure Plan	Sheet	1	28	1	28	
13.29	Superstructure Section	Sheet	1	20	1	20	
13.30	Miscellaneous Superstructure Details	Sheet	2	32	2	64	Diaphragm Details, Expansion Joint Data Table, SIP Form Details, Expansion Joint Details at existing bridge deck, Barrier Transition Details for shoulder and median barrier.
	Reinforcing Bar Lists						
13.31	Preparation of Reinforcing Bar List	Sheet	1	12	1	12	1 App. Slab + 1 End Bent + 1 Pier Pedestals + 1 Deck Slab = 4 Tables
	Continuous Concrete Girder Design						
13.32	Section Properties	LS	0	0		0	N/A
13.33	Material Properties	LS	0	0		0	N/A
13.34	Construction Sequence	EA Unit	0	0		0	N/A
13.35	Tendon Layouts	EA Unit	0	0		0	N/A
13.36	Live Load Analysis	EA Unit	0	0		0	N/A
13.37	Temperature Gradient	EA Unit	0	0		0	N/A
13.38	Time Dependent Analysis	EA Unit	0	0		0	N/A
13.39	Stress Summary	EA Unit	0	0		0	N/A
13.40	Ultimate Moments	EA Unit	0	0		0	N/A
13.41	Ultimate Shear	EA Unit	0	0		0	N/A
13.42	Construction Loading	EA Unit	0	0		0	N/A
13.43	Framing Plan	Sheet	0	0	0	0	N/A

Project Activity 13: Structures- Medium Span Concrete

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
13.44	Girder Elevation, including Grouting Plan and Vent Locations	Sheet	0	0	0	0	N/A
13.45	Girder Details	Sheet	0	0	0	0	N/A
13.46	Erection Sequence	Sheet	0	0	0	0	N/A
13.47	Splice Details	Sheet	0	0	0	0	N/A
13.48	Girder Deflections and Camber	Sheet	0	0	0	0	N/A
	Simple Span Concrete Design						
13.49	Prestressed Beam	EA Design	3	8		24	1 Interior + 2 Exterior (curved deck).
13.50	Prestressed Beam Schedules	Sheet	1	32	1	32	Individual beam lengths due to curvature.
13.51	Framing Plan	Sheet	1	20	1	20	
	Beam Stability						
13.52	Beam/girder stability	EA Unit	1	12		12	N/A
	Bearing						
13.53	Bearing pad and bearing plate design	Type/ Span	1	12		12	Custom elastomeric bearing pad design due to narrow existing pier cap.
13.54	Bearing pad and bearing plate details	Sheet	1	12	1	12	Custom elastomeric bearing pad details.
	Load Rating						
13.55	Load Ratings	Per Beam	3	12	1	36	N/A - See Task 10
	13. Structures - Medium Span Concrete Bridge Total				**18**	**494**	

Project Activity 17: Retaining Walls

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing	Print Name	Signature / Date

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	General Requirements						
17.1	Key Sheet	Sheet	1	16	1	16	U-Shaped MSE Wall Retained End Bents. Final Wall Plans for East Bridge. (Concept Plans for East and West Bridge included in original scope.) East Bridge - Approx. 700' long along north side, 800' long along south side. Additional Key Sheet for final plans.
17.2	Horizontal Wall Geometry	Per Wall	3	4		12	Additional effort for more complex geometry of final concept.
	Permanent Proprietary Walls						
17.3	Vertical Wall Geometry	Per Wall	3	16		48	East walls only. 12 hrs. front of EB + 2 x 12 hrs. curved and tapered side walls = 36 hrs.
17.4	Semi-Standard Drawings	Sheet	1	12	1	12	
17.5	Wall Plan and Elevations (Control Drawings)	Sheet	4	12	5	48	Assume 1 Sheet for West walls (Plan only) and 3 Sheets for East walls. Additional effort for final plans for East walls.
17.6	Details	Sheet	1	20	1	20	MSE wall details.
	Temporary Proprietary Walls						
17.7	Vertical Wall Geometry	Per Wall	0	0		0	N/A
17.8	Semi-Standard Drawings	Sheet	0	0	0	0	N/A
17.9	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	N/A
17.10	Details	Sheet	0	0	0	0	N/A
	Cast-in-Place Retaining Walls						
17.11	Design	EA Design	0	0		0	N/A
17.12	Vertical Wall Geometry	EA Wall	0	0		0	N/A
17.13	General Notes	Sheet	0	0	0	0	N/A
17.14	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	N/A
17.15	Sections and Details	Sheet	0	0	0	0	N/A
17.16	Reinforcing Bar List	Sheet	0	0	0	0	N/A

Project Activity 17: Retaining Walls

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Other Retaining Walls and Bulkheads						
17.17	Design	EA Design	1	40		40	Permanent sheet pile wall between MSE wall and pond at east end, south side. Assume 500' long. Assume anchored sheet pile due to surcharge loading from filled section.
17.18	Vertical Wall Geometry	EA Wall	1	12		12	Permanent wall
17.19	General Notes, Tables and Misc. Details	Sheet	1	12	1	12	Includes Data Tables.
17.20	Wall Plan and Elevations	Sheet	2	24	2	48	
17.21	Details	Sheet	1	32	1	32	Tie-back details, cap details
	17. Structures - Retaining Walls Total				**12**	**300**	

Project Activity 18: Miscellaneous Structures

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Concrete Box Culvert						
18.1	Concrete Box Culverts	EA	0	0		0	
18.2	Concrete Box Culverts Extensions	EA Extension	0	0		0	
18.3	Concrete Box Culvert Data Table Plan Sheets	Sheet	0	0	0	0	
18.4	Concrete Box Culvert Special Details Plan Sheets	Sheet	0	0	0	0	
	Strain Poles						
18.5	Steel Strain Poles	Initial Config	0	0		0	
		EA Add'l Config	0	0		0	
18.6	Concrete Strain Poles	Initial Config	0	0		0	
		EA Add'l Config	0	0		0	
18.7	Strain Pole Data Table Plan Sheets	Sheet	0	0	0	0	
18.8	Strain Pole Special Details Plan Sheets	Sheet	0	0	0	0	
	Mast Arms						
18.9	Mast Arms	EA Design	6	12		72	Assume 6 standard Mast Arms.
18.10	Mast Arms Data Table Plan Sheets	Sheet	1	6	1	6	
18.11	Mast Arm Special Details Plan Sheets	Sheet	0	0	0	0	N/A
	Overhead/Cantilever Sign Structures						
18.12	Cantilever Sign Structures	EA Design	0	0		0	
18.13	Overhead Span Sign Structures	EA Design	1	16		16	One retaining wall mounted span sign structure.
18.14	Special (Long Span) Overhead Span Sign Structures	EA Design	0	0		0	
18.15	Monotube Overhead Sign Structure	EA Design	0	0		0	
18.16	Bridge Mounted Signs (Attached to Superstr.)	EA Design	0	0		0	
18.17	Overhead and Cantilever Sign Structures Data Table Plan Sheets	Sheet	1	6	1	6	
18.18	Overhead and Cantilever Sign Structures Special Details Plan Sheets	Sheet	1	24	1	24	Wall mounted cantilever sign support details.
	High Mast Lighting						
18.19	Non-Standard High Mast Lighting Structures	EA Design	0	0		0	
18.20	High Mast Lighting Special Details Plan Sheets	Sheet	0	0	0	0	
	Noise Barrier Walls (Ground Mount)						
18.21	Horizontal Wall Geometry	EA Wall	0	0		0	
18.22	Vertical Wall Geometry	EA Wall	0	0		0	
18.23	Summary of Quantities - Aesthetic Requirements	Sheet	0	0	0	0	
18.24	Control Drawings	Sheet	0	0	0	0	
18.25	Design of Noise Barrier Walls Covered by Standards	EA Design	0	0		0	
18.26	Design of Noise Barrier Walls Not Covered by Standards	EA Design	0	0		0	
18.27	Aesthetic Details	LS	1	0		0	
	Special Structures						

Project Activity 18: Miscellaneous Structures

18.28	Fender System	LS	1	0		0	
18.29	Fender System Access	LS	1	0		0	
18.30	Special Structures	LS	1	0		0	
18.31	Other Structures	LS	1	24		24	Design of wall mounted cantilever sign support details.
	Ancillary Structures Report						
18.32	Condition Evaluation of Signal and Sign Structures, and High Mast Light Poles	EA structure	0	0	0	0	
18.33	Condition Evaluation of Signal and Sign Structures, and High Mast Light Poles (No As built or Design Plans Available)	EA structure	0	0	0	0	
18.34	Analytical Evaluation of Signal and Sign Structures, and High Mast Light Poles	EA structure	0	0	0	0	
18.35	Ancillary Structures Report	LS	1	0		0	
		18. Structures - Miscellaneous Total			**3**	**148**	

Project Activity 23: Lighting Analysis

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	1	0	0	
23.2	Lighting Design Analysis Report	LS	1	80	80	Provide a preliminary lighting design analysis report including all lighting calculations, pole locations and product data sheets, etc.
23.3	Aeronautical Evaluation	LS	1	60	60	Prepare and Aeronautical Analysis Report
23.4	Voltage Drop Calculations	EA	0	24	0	Perform voltage drop calculation for each intersection (Qyt. 5)
23.5	FDEP Coordination and Report	LS	1	0	0	
23.6	Reference and Master Design Files	LS	1	80	80	Lighting Design file to include design elements
23.7	Temporary Lighting	LS	1	0	0	Prepare temporary lighting plans - 5 intersections
23.8	Design Documentation	LS	1	8	8	Provide design documentation for each intersection
23.9	Quantities	LS	1	8	8	
23.10	Cost Estimate	LS	1	0	0	
23.11	Technical Special Provisions and Modified Special Provisions	LS	1	8	8	
23.12	Other Lighting Analysis	LS	1	8	8	
				Lighting Analysis Technical Subtotal	**252**	
23.13	Field Reviews	LS	2	8	16	Perform a field investigation at each intersection
23.14	Technical Meetings	LS	1	16	16	
23.15	Quality Assurance/Quality Control	LS	%	7%	18	
23.16	Independent Peer Review	LS	%	0%	0	
23.17	Supervision	LS	%	6%	15	
				Lighting Analysis Nontechnical Subtotal	**65**	
23.18	Coordination	LS	%	5%	16	
				23. Lighting Analysis Total	**333**	

Project Activity 23: Lighting Analysis

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
FDOT Lighting Design	EA	0	0	0		0
FDOT Traffic Design	EA	0	0	0		0
Power Company (service point coordination)	EA	1	6	6		0
Maintaining Agency (cities, counties)	EA	1	6	6		0
Airport authority	EA	1	4	4		0
FDEP Lighting (coast areas)	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**16**	**Subtotal Project Manager Meetings**	0
Progress Meetings (if required by FDOT)	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**16**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 23.14

Carries to Tab 3

24. Lighting Plans

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
24.1	Key Sheet		Sheet	1	8	1	8	
24.2	Summary of Pay Items Including Designer Interface (TRNS•Port) Input		Sheet	1	8	1	8	
24.3	Tabulation of Quantities		Sheet	1	8	1	8	
24.4	General Notes/Pay Item Notes		Sheet	1	8	1	8	
24.5	Pole Data, Legend and Criteria		Sheet	1	10	1	10	
24.6	Service Point Details		Sheet	2	12	2	24	
24.7	Project Layout		Sheet	5	8	5	40	
24.8	Plan Sheet		Sheet	5	4	5	20	
24.9	Special Details		Sheet	1	12	1	12	
24.10	Temporary Lighting Data and Details		Sheet	0	0	0	0	
24.11	Traffic Control Plan Sheets		Sheet	0	0	0	0	
24.12	Interim Standards		LS	1	0		0	
					Lighting Plans Technical Subtotal	**18**	**138**	
24.13	Quality Assurance/Quality Control		LS	%	5%		7	
24.14	Supervision		LS	%	5%		7	
					24. Lighting Plans Total	**18**	**152**	

CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL	
1. Project Hart Bridge Modification D-B DCP/RFP Amendment #2	2. Proposal Number P-11-18
3. Name of Consultant Terracon Consultants, Inc.	4. Date of Proposal 1/7/2018

PART II - LABOR RELATED COSTS

5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Senior Scientist	$51.98	24	$1,247.52	
Senior Project Manager	$47.00	66	$3,102.00	
Field Geologist	$26.80	25	$670.00	
Senior Geologist	$64.90	4	$259.60	
CAD Manager	$33.17	6	$199.02	
TOTAL DIRECT LABOR		125	Hours	$5,478.14
6. Overhead (Combined Fringe Benefit & Administrative)			175.00%	$9,586.75
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$15,064.89
8. PROFIT: Labor Related Costs (Item 7)			x 10%	$1,506.49

PART III - OTHER COSTS

9. Miscellaneous Direct Costs Laboratory and Drilling	$24,097.10	
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$24,097.10
10. SUBCONTRACTS (Lump Sum)		
SUB-CONTRACT SUB-TOTAL		
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$40,668.47
11. REIMBURSABLE COSTS (Limiting Amount)	$	
SUB-TOTAL REIMBURSABLES		

PART IV - SUMMARY

TOTAL AMOUNT OF AMENDMENT #2 (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$40,668.47**

Terracon

January 7, 2019

Mr. Keith Jackson
STV, Inc.
5200 Belfort Road, Suite 400
Jacksonville, Florida 32256

Telephone: 904.445.0106
E-mail: keith.jackson@stvinc.com

Re: Proposal for Impact to Construction Assessment
Hart Expressway Modifications
City of Jacksonville Project Number P-11-18
Lafayette Street to Festival Park Avenue
Jacksonville, Florida 32202
Terracon Proposal No. PEQ197003

Dear Mr. Jackson:

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this proposal to STV, Inc. (client) to conduct an Impact to Construct Assessment (ICA) at the above-referenced project site. The purpose of this ICA is to assess potential environmental impacts along the project extent of the proposed Hart Bridge Expressway modification, which extends from approximately Lafayette Street to Festival Park Avenue in Jacksonville, Florida. A draft Level 1 Contamination Screening Evaluation Report (CSER), dated November 15, 2018, was completed by Meskel and Associates Engineering (MAE) and provided to Terracon by the client. The client requested Terracon's ICA scope be based on the findings of the draft MAE CSER.

We have also attached an AGREEMENT FOR SERVICES that is incorporated into this proposal for your review and signature to authorize us to do this work. Refer to the attached proposal detail for assumptions and limitations. This proposal is valid for 60 days.

We appreciate the opportunity to provide this proposal and look forward to working with you on this project. If this proposal meets with your approval, please sign the attached AGREEMENT FOR SERVICES and return a copy to our Jacksonville, Florida office. Project initiation may be expedited by emailing a signed copy to the undersigned.

If you should have any questions or comments regarding this proposal, please contact Kyle Hayes at 904-549-7371.

Sincerely,
Terracon

Kyle E. Hayes
Environmental Department Manager

Tom E. Lewis
Senior Associate

Attachments: Proposal Detail
Exhibit 1 – COJ Concept Map with Proposed Sampling Locations
AGREEMENT FOR SERVICES

1.0 PROJECT INFORMATION

The project site is located in Jacksonville, Duval County, Florida and includes the proposed removal of a section of the Hart Bridge Expressway viaduct and roadway construction / improvements on Bay Street, from approximately Lafayette Street to Festival Park Avenue. MAE prepared a draft CSER, dated November 15, 2018, for the project site, which identified several potentially contaminated sites along the project extent which could impede the project. The client requested Terracon base our scope of work for the ICA on the findings documented in the draft MAE CSER and a Florida Department of Transportation (FDOT) CSER comment e-mail, dated December 19, 2018, which provided comments on the MAE CSER. Based on a review of these documents, it appears a total of seven adjoining or nearby sites were identified and categorized with a medium or high contamination risk, with a recommendation to conduct a Level II Assessment or ICA. The project extent is provided on Exhibit 1 (modified City of Jacksonville Hart Expressway Modifications Concept Map). (hereinafter, the site).

2.0 SCOPE OF SERVICES

The proposed scope of services is to assess potential environmental impacts that may be present along the proposed project extent, associated with seven identified sites categorized by MAE as a medium or high contamination risk. Please note that the scope of services for this proposal is based solely on the MAE draft CSER and FDOT comment e-mail provided by the client.

2.1 Objectives

The objective of the proposed LSI is to assess the presence of constituents of concern (COCs) that may be present along the project extent in connection with seven identified sites at concentrations above Florida Department of Environmental Protection (FDEP) soil and groundwater cleanup target levels (SCTLs and GCTLs) to prepare for future subsurface construction activities.

2.2 Impact to Construction Assessment

Each of the seven sites is presented in the following sections with the scope defined independently for each. A description of the soil boring advancement and temporary monitoring well installation practices/methods is provided in Sections 2.4 and 2.5.

2.2.1 Site 8,9 – Bay Street Bridge at Hogan Creek

The MAE file review indicated metals impacted soils were identified and excavated from the east bank of Hogan Creek during creek widening efforts, documented in a Source Removal Report dated March 20, 2013 (COM_298609). Excavated soil was characterized as hazardous, based on lead Toxicity Characteristic Leachate Procedure (TCLP) results. Monitoring wells installed on the east bank, sampled from 2012 to 2017 show no impacts to groundwater. MAE classified Site 8,9 as a High Contamination Risk site.

Terracon recommends advancing a series of four soil borings, HG-1 through HG-4, (two on the north and two on the south sides of East Bay Street) to an estimated maximum depth of six feet below ground surface (bgs) east of the Bay Street Bridge. Refer to the attached **Exhibit 1** for the proposed soil boring locations. The proposed sampling locations may be modified in the field to account for utility clearance, access limitations, and/or site conditions. The client will be notified of any significant modifications to the sampling locations.

One soil sample will be collected for laboratory analysis from each soil boring within the top four feet bgs. The soil samples will be collected in laboratory-prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to the selected analytical laboratory for analysis within a standard 7 to 10-day turn-around time following receipt of the samples by the laboratory.

The samples obtained from each of the four boring locations will be analyzed for RCRA 8 Metals by EPA Methods 6010B/7471.

2.2.2 Site 20 – City of Jacksonville Shipyards

The MAE file review indicates the site has widespread benzo(a)pyrene equivalents and metals impacts (COM_10363). One area of petroleum impacted soil and groundwater was identified on the site, however it was documented as isolated and approximately 200-feet south of the project area. The MAE CSER divided this site into two sub-sites, however the FDOT comment e-mail indicated the site may need to be evaluated as a "whole" site. MAE classified Site 20 as a High Contamination Risk site. Terracon has chosen to evaluate the extent of the northern property boundary associated with Site 20.

Terracon recommends advancing a series of seven soil borings (SH-1 through SH-7) to an estimated maximum depth of eight feet bgs along the northern property boundary and in proximity to proposed roadways. Refer to the attached **Exhibit 1** for the proposed soil boring locations. The proposed sampling locations may be modified in the field to account for utility

clearance, access limitations, and/or site conditions. The client will be notified of any significant modifications to the sampling locations.

One soil sample will be collected for laboratory analysis from each soil boring from the zone exhibiting the highest organic vapor analyzer (OVA) photoionization detector (PID) reading or the interval of most-likely environmental impact as determined in the field by the sampling professional. PID readings will be collected at one-foot depth intervals to one-foot below the water table. The soil samples will be collected in laboratory-prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to the selected analytical laboratory for analysis within a standard 7 to 10-day turn-around time following receipt of the samples by the laboratory.

The samples obtained from each of the seven soil boring locations will be analyzed for volatile organic compounds (VOCs) by EPA Method 8260, polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270, Total Recoverable Petroleum Hydrocarbons (TRPH) by the FL-PRO Method, and RCRA 8 Metals by EPA Methods 6010B/7471.

A temporary monitoring well will be installed at each of the seven soil boring locations to evaluate potential COC impacts to groundwater. Samples obtained from each temporary monitoring well will be collected in laboratory-prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to the selected analytical laboratory for analysis within a standard 7 to 10-day turn-around time following receipt of the samples by the laboratory.

The samples obtained from each of the seven temporary monitoring wells will be analyzed for VOCs by EPA Method 8260, PAHs by EPA Method 8270, TRPH by the FL-PRO Method, and RCRA 8 Metals by EPA Methods 6010B/7471.

2.2.3 Site 10, 16 – Jacksonville Alltel Stadium Parking (Lot J)

The MAE file review indicates the site was historically used as a bulk petroleum storage tank facility with documented petroleum impacts to soil (FAC ID No: 9700819). The site assessment activities did not identify groundwater impacts. The site is currently closed following FDEP issuance of a Conditional Site Rehabilitation Completion Order (SRCO) based on source removal of impacted soil along the southern site boundary and on the engineering and installation of a subsurface slurry wall measuring approximately 500-feet by 500-feet which surrounds the remaining impacted on-site soil. The slurry wall (western edge) was damaged during construction activities in 2016 and repaired in 2017. MAE classified Site 10, 16 as a Medium Contamination Risk Site.

Terracon recommends advancing a series of four soil borings (LJ-1 through LJ-4) to an estimated maximum depth of eight feet bgs along the southern property boundary. Refer to the attached **Exhibit 1** for the proposed soil boring locations. The proposed sampling locations may be modified in the field to account for utility clearance, access limitations, and/or site conditions. The client will be notified of any significant modifications to the sampling locations.

One soil sample will be collected for laboratory analysis from each soil boring from the zone exhibiting the highest PID reading or the interval of most-likely environmental impact as determined in the field by the sampling professional. PID readings will be collected at one-foot depth intervals to one-foot below the water table. The soil samples will be collected in laboratory-prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to the selected analytical laboratory for analysis within a standard 7 to 10-day turn-around time following receipt of the samples by the laboratory.

The samples obtained from each of the four soil boring locations will be analyzed for VOCs by EPA Method 8260, PAHs by EPA Method 8270, and TRPH by the FL-PRO Method.

A temporary monitoring well will be installed at each of the four soil boring locations to evaluate potential COC impacts to groundwater based on the potential for slurry wall failure. Samples obtained from each temporary monitoring well will be collected in laboratory-prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to the selected analytical laboratory for analysis within a standard 7 to 10-day turn-around time following receipt of the samples by the laboratory.

The samples obtained from each of the four temporary monitoring wells will be analyzed for VOCs by EPA Method 8260, PAHs by EPA Method 8270, and TRPH by the FL-PRO Method.

2.2.4 Site 14 – Metropolitan Park Dump

The MAE file review indicates the site was historically the Metropolitan Park Dump (SWF/LF COM_137063). A 1986 Site Screening Report indicates lead, mercury, volatile organic compounds, and pesticide impacts in groundwater and pesticide and volatile organic compounds in soil associated with the facility. Additional assessment data was not located for the facility. MAE classified Site 14 as a Medium Contamination Risk Site. Note, there were two facilities designated by MAE as Site 14, however per the FDOT comment e-mail, one facility has been separated and is considered a Low Contamination Risk Site.

Terracon recommends advancing a series of five soil borings (MP-1 through MP-5) to an estimated maximum depth of eight feet bgs along the northern property boundary. Refer to

the attached **Exhibit 1** for the proposed soil boring locations. The proposed sampling locations may be modified in the field to account for utility clearance, access limitations, and/or site conditions. The client will be notified of any significant modifications to the sampling locations.

One soil sample will be collected for laboratory analysis from each soil boring from the zone exhibiting the highest PID reading or the interval of most-likely environmental impact as determined in the field by the sampling professional. PID readings will be collected at one-foot depth intervals to one-foot below the water table. The soil samples will be collected in laboratory-prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to the selected analytical laboratory for analysis within a standard 7 to 10-day turn-around time following receipt of the samples by the laboratory.

The samples obtained from each of the five soil boring locations will be analyzed for VOCs by EPA Method 8260, PAHs by EPA Method 8270, TRPH by the FL-PRO Method, RCRA 8 Metals and mercury by EPA Methods 6010B/7471, and organochlorine pesticides by EPA Method 8081.

A temporary monitoring well will be installed at each of the five soil boring locations to evaluate potential COC impacts to groundwater. Samples obtained from each temporary monitoring well will be collected in laboratory-prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to the selected analytical laboratory for analysis within a standard 7 to 10-day turn-around time following receipt of the samples by the laboratory.

The samples obtained from each of the five temporary monitoring wells will be analyzed for VOCs by EPA Method 8260, PAHs by EPA Method 8270, TRPH by the FL-PRO Method, RCRA 8 Metals and mercury by EPA Methods 6010B/7471, and organochlorine pesticides by EPA Method 8081.

2.2.5 Site 12, 32 – Benjamin Moore & Company & Site 13 – WR Grace & Co.

The MAE file review indicates Site 12, 32 is listed as a Toxic Release Inventory Site (TRIS) due to a release of zinc compounds into the air and is listed as having reported hazardous waste generator violations in 1984, 1986, and 1988, each returned to compliance (TRIS: 32202BNJMN1436E). Site 13 (FAC ID No: 8629670) is listed as formerly containing registered storage tanks, including a 10,000-gallon diesel aboveground storage tank (AST) and two USTs (one 1,000-gallon leaded gasoline and one 1,000-gallon gasoline tank). Each of the tanks are listed as removed. No additional files are available on record with the FDEP for Site 13. Currently Site 12, 32 and Site 13 are part of the parking area associated with TIAA Bank

Field, referenced as Parking Lot D. MAE classified Site 12, 32 and Site 13 as Medium Contamination Risk Sites.

Terracon recommends advancing a series of four soil borings (LD-1 through LD-4) to an estimated maximum depth of eight feet bgs along the southeastern property boundary. Refer to the attached **Exhibit 1** for the proposed soil boring locations. The proposed sampling locations may be modified in the field to account for utility clearance, access limitations, and/or site conditions. The client will be notified of any significant modifications to the sampling locations.

One soil sample will be collected for laboratory analysis from each soil boring from the zone exhibiting the highest PID reading or the interval of most-likely environmental impact as determined in the field by the sampling professional. PID readings will be collected at one-foot depth intervals to one-foot below the water table. The soil samples will be collected in laboratory-prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to the selected analytical laboratory for analysis within a standard 7 to 10-day turn-around time following receipt of the samples by the laboratory.

The samples obtained from each of the four soil boring locations will be analyzed for VOCs by EPA Method 8260, PAHs by EPA Method 8270, RCRA 8 Metals, zinc, and lead by EPA Methods 6010B/7471, and TRPH by the FL-PRO Method.

A temporary monitoring well will be installed at each of the four soil boring locations to evaluate potential COC impacts to groundwater. Samples obtained from each temporary monitoring well will be collected in laboratory-prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to the selected analytical laboratory for analysis within a standard 7 to 10-day turn-around time following receipt of the samples by the laboratory.

The samples obtained from each of the four temporary monitoring wells will be analyzed for VOCs by EPA Method 8260, PAHs by EPA Method 8270, RCRA 8 Metals, zinc, and lead by EPA Methods 6010B/7471, and TRPH by the FL-PRO Method.

2.2.6 Site 19 – Alexander Brest Trust

The MAE file review indicates Site 19 has historically been leased to various parties for maritime industrial use. The site is listed as a Leaky Underground Storage Tank Site (LUST) and has received state funded assessment and remediation for soil and groundwater impacts through the Abandoned Tank Restoration Program (ATRP) (FAC ID Nos: 8506828 & 8838305). Additional petroleum storage historically occurred on the northeast portion of the

site, approximately 300-feet northeast of the project extents. Based on the cleanup activity and minimal on-site groundwater impacts, as well as distance from the project area, MAE classified the site as a Low Contamination Risk site. However, the FDOT comment e-mail indicated that due to the "long history of industrial use" the site should be classified as a Medium Contamination Risk site.

Terracon recommends advancing a series of three soil borings (AB-1 through AB-3) along the southern and northern property boundaries (site is bisected by East Bay Street). Refer to the attached **Exhibit 1** for the proposed soil boring locations. The proposed sampling locations may be modified in the field to account for utility clearance, access limitations, and/or site conditions. The client will be notified of any significant modifications to the sampling locations. One soil sample will be collected for laboratory analysis from each soil boring from the zone exhibiting the highest PID reading or the interval of most-likely environmental impact as determined in the field by the sampling professional. PID readings will be collected at one-foot depth intervals to one-foot below the water table. The soil samples will be collected in laboratory-prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to the selected analytical laboratory for analysis within a standard 7 to 10-day turn-around time following receipt of the samples by the laboratory.

The samples obtained from each of the three soil boring locations will be analyzed for VOCs by EPA Method 8260, PAHs by EPA Method 8270, TRPH by the FL-PRO Method, and RCRA 8 Metals by EPA Methods 6010B/7471.

A temporary monitoring well will be installed at each of the three soil boring locations to evaluate potential COC impacts to groundwater. Samples obtained from each temporary monitoring well will be collected in laboratory-prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to the selected analytical laboratory for analysis within a standard 7 to 10-day turn-around time following receipt of the samples by the laboratory.

The samples obtained from each of the three temporary monitoring wells will be analyzed for VOCs by EPA Method 8260, PAHs by EPA Method 8270, TRPH by the FL-PRO Method, and RCRA 8 Metals by EPA Methods 6010B/7471.

2.3 Utility Locate

A public utility locate service ticket, Sunshine 811, will be initiated and utilized to have right-of-way utilities marked/located prior to the initiation of field work.

2.4 Soil Borings

The soil borings will be advanced using a drilling rig equipped with direct-push technology (DPT) and Macro-Core® soil samplers fitted with 4-foot-long acetate liners. These subcontract drilling services will be supervised by a licensed driller. Soil samples will be collected continuously using DPT to document lithology, color, and relative moisture content. In addition, the soil samples will be field screened using sensory methods and an organic vapor analyzer (OVA) equipped with a photoionization detector (PID) to detect the presence of VOCs at one-foot depth intervals to approximately one-foot below the water table.

Drilling equipment will be cleaned using a high-pressure washer prior to beginning the project and before beginning each boring. Non-dedicated sampling equipment will be cleaned using a detergent wash and potable water rinse prior to commencement of the project and between collection of each sample. Following completion of sampling activities, borings will be closed in place in accordance with applicable FDEP regulations and guidelines.

2.5 Temporary Monitoring Wells

At 23 soil boring locations, temporary groundwater monitoring wells will be installed to evaluate on-site groundwater within the assessment areas, constructed as follows:

- Installation of one ten-foot length of one-inch diameter, 0.010-inch machine-slotted polyvinyl chloride (PVC) well screen with a threaded bottom cap;
- Installation of one-inch diameter, threaded, flush-joint PVC riser pipe to surface;
- Addition of pre-sieved 20/40-grade silica sand for annular sand pack around the well screen from the bottom of the boring to approximately 2 feet above the top of the well screen; and
- If the wells are not sampled on the day of installation, placement of a minimum of 2 feet of hydrated bentonite pellets above the sand pack.

The temporary monitoring wells will be developed by surging and removing groundwater until fluids appear relatively free of fine-grained sediment. Drill cuttings will be spread in the vicinity of the borings. Development groundwater and equipment cleaning water will be spread on an adjacent impervious surface.

Each temporary monitoring well will be purged of a minimum of three well casing volumes of groundwater, until the monitoring well formation fails to recharge (i.e., well runs dry), or until consistent values are obtained for select geochemical parameters when low-flow sampling. Subsequent to sufficient recharge or parameter stabilization, one groundwater sample will be collected from each temporary monitoring well utilizing a new, disposable, polypropylene

bailer or low-flow sampling equipment. Upon completion of sample collection, each temporary monitoring well will be properly abandoned in accordance with applicable FDEP and Saint Johns River Water Management District (SJRWMD) guidelines.

2.6 Preparation of ICA Report

Following site activities and receipt of the laboratory analytical results, a report will be prepared that will include the following:

- Documentation of field activities;
- Site plan showing pertinent site features;
- Soil boring logs;
- Analytical laboratory results;
- Data evaluation and presentation of findings; and,
- Recommendations concerning further action, if necessary.

The final written report will reflect results, findings, and recommendations, and, as such, will take precedence over any verbal reports that Terracon personnel may have provided. The analysis, comments and recommendations presented in the final written report will be based on the information collected as discussed in this proposal.

3.0 SCHEDULE AND FEE

It is estimated that the ICA report will be submitted to client **within 30 business days** following receipt of authorization to proceed. The actual project schedule will be based on the availability of environmental drillers and other subcontractors. If schedule delays are anticipated based on subcontractor availability, weather, and/or encountered site conditions, the client will be contacted to discuss changes in the schedule. Standard analytical laboratory turnaround is seven business days. If you would like expedited laboratory turnaround, contact us for the options and associated fees.

The Scope of Services outlined in this proposal will be conducted for a lump sum fee of **$40,700.00**. If, as a result of these services, additional services are required that are outside the scope of this proposal, you will be contacted to discuss associated costs. Client authorization will be obtained prior to commencement of additional services outside the scope of this proposal.

Transportation and disposal of removed soil cuttings or other investigation-derived waste (IDW) materials are not included in the scope of services or estimated fee. Terracon does not anticipate generating drums of soil, groundwater, and/or equipment cleaning water during the

ICA activities. It is anticipated that soil cuttings will be placed back into the soil boring holes and equipment cleaning water will be spread on an adjacent impervious surface. Terracon would be pleased to provide a separate proposal for IDW transportation and disposal if requested by the client and once a final volume and classification of waste are determined. Client or its authorized agent will be responsible for signing the waste manifest, as required, or authorizing Terracon to sign on its behalf.

4.0 CONDITIONS

If soil, groundwater, or other environmental releases are discovered during the ICA, the owner, operator, or similar responsible party may have release reporting obligations under applicable state law or regulations.

The scope of services and estimated fee were based on the assumptions and limitations noted below.

Assumptions

- Client will provide to Terracon, prior to mobilization, legal right of entry to the sites (and other areas if required) to conduct the scope of services.
- Client holds necessary permits to conduct drilling and investigation activities within the project area.
- Client will notify Terracon, prior to mobilization, of any restrictions, special site access requirements, or known potentially hazardous conditions at the site (e.g., hazardous materials or processes, specialized protective equipment requirements, unsound structural conditions, etc.)
- Field services will be performed in U.S. EPA Level D attire. Client will be responsible for additional costs should an upgrade to personal protective equipment be required do to conditions encountered at site.
- Public utilities will be located using applicable state, regional, and/or local utility locate services or one-call centers. Knowledge of location of utilities on private land that are not located by these public services will be the responsibility of the client and/or property owner/operator to provide to Terracon.
- Services can be performed during normal business hours (Monday through Friday, 7:00 am to 7:00 pm).
- Traffic control services are not required.
- The site is readily accessible by truck.

If any of these assumptions or conditions are not accurate or change during the project, the stated fee is subject to change.

Limitations

Terracon's services will be performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographic area during the same period. Terracon makes no warranties, express or implied, regarding its services, findings, conclusions or recommendations. Please note that Terracon does not warrant the services of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These LSI services will be performed in accordance with the scope of services agreed with you, our client, as set forth in this proposal.

Certain indicators of subsurface impacts may be inaccessible, nondetectable, or not present during these services, and we cannot represent that the site contains no hazardous substances, petroleum products, or other latent conditions beyond those identified during this ICA. Subsurface conditions are subject to spatial and temporal variability. Our findings, conclusions, and recommendations will be based solely upon data obtained at the time and within the scope of these services.

Reliance

The ICA report will be prepared for the exclusive use and reliance of STV Inc. (client). Reliance by any other party is prohibited without the written authorization of the client and Terracon. Reliance on the ICA by the client and all authorized parties will be subject to the terms, conditions, and limitations stated in the Agreement for Services, sections of this proposal incorporated therein, the Reliance Agreement, and the ICA report. The defined contractual limitation of liability is the aggregate limit of Terracon's liability to the client and all relying parties.

Terracon

Reference Number: PEQ197003

AGREEMENT FOR SERVICES

This **AGREEMENT** is between STV, Inc. ("Client") and Terracon Consultants, Inc. ("Consultant") for Services to be provided by Consultant for Client on the STV, Hart EXPY Mod, ICA project ("Project"), as described in Consultant's Proposal dated 01/02/2019 ("Proposal"), including but not limited to the Project Information section, unless the Project is otherwise described in Exhibit A to this Agreement (which section or Exhibit is incorporated into this Agreement).

1. **Scope of Services.** The scope of Consultant's services is described in the Proposal, including but not limited to the Scope of Services section ("Services"), unless Services are otherwise described in Exhibit B to this Agreement (which section or exhibit is incorporated into this Agreement). Portions of the Services may be subcontracted. Consultant's Services do not include the investigation or detection of, nor do recommendations in Consultant's reports address the presence or prevention of biological pollutants (e.g., mold, fungi, bacteria, viruses, or their byproducts) or occupant safety issues, such as vulnerability to natural disasters, terrorism, or violence. If Services include purchase of software, Client will execute a separate software license agreement. Consultant's findings, opinions, and recommendations are based solely upon data and information obtained by and furnished to Consultant at the time of the Services.
2. **Acceptance/ Termination.** Client agrees that execution of this Agreement is a material element of the consideration Consultant requires to execute the Services, and if Services are initiated by Consultant prior to execution of this Agreement as an accommodation for Client at Client's request, both parties shall consider that commencement of Services constitutes formal acceptance of all terms and conditions of this Agreement. Additional terms and conditions may be added or changed only by written amendment to this Agreement signed by both parties. In the event Client uses a purchase order or other form to administer this Agreement, the use of such form shall be for convenience purposes only and any additional or conflicting terms it contains are stricken. This Agreement shall not be assigned by either party without prior written consent of the other party. Either party may terminate this Agreement or the Services upon written notice to the other. In such case, Consultant shall be paid costs incurred and fees earned to the date of termination plus reasonable costs of closing the Project.
3. **Change Orders.** Client may request changes to the scope of Services by altering or adding to the Services to be performed. If Client so requests, Consultant will return to Client a statement (or supplemental proposal) of the change setting forth an adjustment to the Services and fees for the requested changes. Following Client's review, Client shall provide written acceptance. If Client does not follow these procedures, but instead directs, authorizes, or permits Consultant to perform changed or additional work, the Services are changed accordingly and Consultant will be paid for this work according to the fees stated or its current fee schedule. If project conditions change materially from those observed at the site or described to Consultant at the time of proposal, Consultant is entitled to a change order equitably adjusting its Services and fee.
4. **Compensation and Terms of Payment.** Client shall pay compensation for the Services performed at the fees stated in the Proposal, including but not limited to the Compensation section, unless fees are otherwise stated in Exhibit C to this Agreement (which section or Exhibit is incorporated into this Agreement). If not stated in either, fees will be according to Consultant's current fee schedule. Fee schedules are valid for the calendar year in which they are issued. Fees do not include sales tax. Client will pay applicable sales tax as required by law. Consultant may invoice Client at least monthly and payment is due upon receipt of invoice. Client shall notify Consultant in writing, at the address below, within 15 days of the date of the invoice if Client objects to any portion of the charges on the invoice, and shall promptly pay the undisputed portion. Client shall pay a finance fee of 1.5% per month, but not exceeding the maximum rate allowed by law, for all unpaid amounts 30 days or older. Client agrees to pay all collection-related costs that Consultant incurs, including attorney fees. Consultant may suspend Services for lack of timely payment. It is the responsibility of Client to determine whether federal, state, or local prevailing wage requirements apply and to notify Consultant if prevailing wages apply. If it is later determined that prevailing wages apply, and Consultant was not previously notified by Client, Client agrees to pay the prevailing wage from that point forward, as well as a retroactive payment adjustment to bring previously paid amounts in line with prevailing wages. Client also agrees to defend, indemnify, and hold harmless Consultant from any alleged violations made by any governmental agency regulating prevailing wage activity for failing to pay prevailing wages, including the payment of any fines or penalties.
5. **Third Party Reliance.** This Agreement and the Services provided are for Consultant and Client's sole benefit and exclusive use with no third party beneficiaries intended. Reliance upon the Services and any work product is limited to Client, and is not intended for third parties other than those who have executed Consultant's reliance agreement, subject to the prior approval of Consultant and Client.
6. **LIMITATION OF LIABILITY. CLIENT AND CONSULTANT HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING CONSULTANT'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE ASSOCIATED RISKS. TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF CONSULTANT (AND ITS RELATED CORPORATIONS AND EMPLOYEES) TO CLIENT AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE GREATER OF $50,000 OR CONSULTANT'S FEE, FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF CONSULTANT'S SERVICES OR THIS AGREEMENT. PRIOR TO ACCEPTANCE OF THIS AGREEMENT AND UPON WRITTEN REQUEST FROM CLIENT, CONSULTANT MAY NEGOTIATE A HIGHER LIMITATION FOR ADDITIONAL CONSIDERATION IN THE FORM OF A SURCHARGE TO BE ADDED TO THE AMOUNT STATED IN THE COMPENSATION SECTION OF THE PROPOSAL. THIS LIMITATION SHALL APPLY REGARDLESS OF AVAILABLE PROFESSIONAL LIABILITY INSURANCE COVERAGE, CAUSE(S), OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY. THIS LIMITATION SHALL NOT APPLY TO THE EXTENT THE DAMAGE IS PAID UNDER CONSULTANT'S COMMERCIAL GENERAL LIABILITY POLICY.**
7. **Indemnity/Statute of Limitations.** Consultant and Client shall indemnify and hold harmless the other and their respective employees from and against legal liability for claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are legally determined to be caused by their negligent acts, errors, or omissions. In the event such claims, losses, damages, or expenses are legally determined to be caused by the joint or concurrent negligence of Consultant and Client, they shall be borne by each party in proportion to its own negligence under comparative fault principles. Neither party shall have a duty to defend the other party, and no duty to defend is hereby created by this indemnity provision and such duty is explicitly waived under this Agreement. Causes of action arising out of Consultant's Services or this Agreement regardless of cause(s) or the theory of liability, including negligence, indemnity or other recovery shall be deemed to have accrued and the applicable statute of limitations shall commence to run not later than the date of Consultant's substantial completion of Services on the project.
8. **Warranty.** Consultant will perform the Services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. **EXCEPT FOR THE STANDARD OF CARE PREVIOUSLY STATED, CONSULTANT MAKES NO WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, RELATING TO CONSULTANT'S SERVICES AND CONSULTANT DISCLAIMS ANY IMPLIED WARRANTIES OR WARRANTIES IMPOSED BY LAW, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**
9. **Insurance.** Consultant represents that it now carries, and will continue to carry: (i) workers' compensation insurance in accordance with the laws of the states having jurisdiction over Consultant's employees who are engaged in the Services, and employer's liability insurance ($1,000,000); (ii) commercial general liability insurance ($1,000,000 occ / $2,000,000 agg); (iii) automobile liability insurance ($1,000,000 B.I. and P.D. combined single

limit); and (iv) professional liability insurance ($1,000,000 claim / agg). Certificates of insurance will be provided upon request. Client and Consultant shall waive subrogation against the other party on all general liability and property coverage.

10. **CONSEQUENTIAL DAMAGES. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR LOSS OF PROFITS OR REVENUE; LOSS OF USE OR OPPORTUNITY; LOSS OF GOOD WILL; COST OF SUBSTITUTE FACILITIES, GOODS, OR SERVICES; COST OF CAPITAL; OR FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES.**
11. **Dispute Resolution.** Client shall not be entitled to assert a Claim against Consultant based on any theory of professional negligence unless and until Client has obtained the written opinion from a registered, independent, and reputable engineer, architect, or geologist that Consultant has violated the standard of care applicable to Consultant's performance of the Services. Client shall provide this opinion to Consultant and the parties shall endeavor to resolve the dispute within 30 days, after which Client may pursue its remedies at law. This Agreement shall be governed by and construed according to Kansas law.
12. **Subsurface Explorations.** Subsurface conditions throughout the site may vary from those depicted on logs of discrete borings, test pits, or other exploratory services. Client understands Consultant's layout of boring and test locations is approximate and that Consultant may deviate a reasonable distance from those locations. Consultant will take reasonable precautions to reduce damage to the site when performing Services; however, Client accepts that invasive services such as drilling or sampling may damage or alter the site. Site restoration is not provided unless specifically included in the Services.
13. **Testing and Observations.** Client understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. Consultant will provide test results and opinions based on tests and field observations only for the work tested. Client understands that testing and observation are not continuous or exhaustive, and are conducted to reduce - not eliminate - project risk. Client shall cause all tests and inspections of the site, materials, and Services performed by Consultant to be timely and properly scheduled in order for the Services to be performed in accordance with the plans, specifications, contract documents, and Consultant's recommendations. No claims for loss or damage or injury shall be brought against Consultant by Client or any third party unless all tests and inspections have been so performed and Consultant's recommendations have been followed. Unless otherwise stated in the Proposal, Client assumes sole responsibility for determining whether the quantity and the nature of Services ordered by Client is adequate and sufficient for Client's intended purpose. Client is responsible (even if delegated to contractor) for requesting services, and notifying and scheduling Consultant so Consultant can perform these Services. Consultant is not responsible for damages caused by Services not performed due to a failure to request or schedule Consultant's Services. Consultant shall not be responsible for the quality and completeness of Client's contractor's work or their adherence to the project documents, and Consultant's performance of testing and observation services shall not relieve Client's contractor in any way from its responsibility for defects discovered in its work, or create a warranty or guarantee. Consultant will not supervise or direct the work performed by Client's contractor or its subcontractors and is not responsible for their means and methods. The extension of unit prices with quantities to establish a total estimated cost does not guarantee a maximum cost to complete the Services. The quantities, when given, are estimates based on contract documents and schedules made available at the time of the Proposal. Since schedule, performance, production, and charges are directed and/or controlled by others, any quantity extensions must be considered as estimated and not a guarantee of maximum cost.
14. **Sample Disposition, Affected Materials, and Indemnity.** Samples are consumed in testing or disposed of upon completion of the testing procedures (unless stated otherwise in the Services). Client shall furnish or cause to be furnished to Consultant all documents and information known or available to Client that relate to the identity, location, quantity, nature, or characteristic of any hazardous waste, toxic, radioactive, or contaminated materials ("Affected Materials") at or near the site, and shall immediately transmit new, updated, or revised information as it becomes available. Client agrees that Consultant is not responsible for the disposition of Affected Materials unless specifically provided in the Services, and that Client is responsible for directing such disposition. In no event shall Consultant be required to sign a hazardous waste manifest or take title to any Affected Materials. Client shall have the obligation to make all spill or release notifications to appropriate governmental agencies. The Client agrees that Consultant neither created nor contributed to the creation or existence of any Affected Materials conditions at the site and Consultant shall not be responsible for any claims, losses, or damages allegedly arising out of Consultant's performance of Services hereunder, or for any claims against Consultant as a generator, disposer, or arranger of Affected Materials under federal, state, or local law or ordinance.
15. **Ownership of Documents.** Work product, such as reports, logs, data, notes, or calculations, prepared by Consultant shall remain Consultant's property. Proprietary concepts, systems, and ideas developed during performance of the Services shall remain the sole property of Consultant. Files shall be maintained in general accordance with Consultant's document retention policies and practices.
16. **Utilities.** Client shall provide the location and/or arrange for the marking of private utilities and subterranean structures. Consultant shall take reasonable precautions to avoid damage or injury to subterranean structures or utilities. Consultant shall not be responsible for damage to subterranean structures or utilities that are not called to Consultant's attention, are not correctly marked, including by a utility locate service, or are incorrectly shown on the plans furnished to Consultant.
17. **Site Access and Safety.** Client shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the Services and will execute any necessary site access agreement. Consultant will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any other parties, including Client, Client's contractors, subcontractors, or other parties present at the site.

PURSUANT TO SECTION 558.0035 OF FLORIDA STATUTES, AN INDIVIDUAL EMPLOYEE OR AGENT OF CONSULTANT MAY NOT BE HELD INDIVIDUALLY LIABLE.

Consultant:	**Terracon Consultants, Inc.**	Client:	**STV, Inc.**
By:	Date: **1/7/2019**	By:	Date:
Name/Title:	**Kyle E. Hayes / Environmental Department Manager I**	Name/Title:	**J. Keith Jackson, P.E. /**
Address:	**9655 Florida Mining Blvd W, Ste 509**	Address:	**5200 Belfort Rd Ste 400**
	Jacksonville, FL 32257-2042		**Jacksonville, FL 32256-6054**
Phone:	**(904) 900-6494** Fax: **(904) 268-5255**	Phone:	Fax:
Email:	**Kyle.Hayes@terracon.com**	Email:	**keith.jackson@stvinc.com**

CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL	
1. Project Hart Bridge Modification D-B DCP/RFP Amendment #2	2. Proposal Number P-11-18
3. Name of Consultant Peters and Yaffee, Inc.	4. Date of Proposal 12/3/2018

PART II - LABOR RELATED COSTS				
5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Principal	$83.86	30	$2,515.80	
Project Manager	$67.20	60	$4,032.00	
Senior Engineer	$66.11	92	$6,082.12	
Project Engineer	$42.40	122	$5,172.80	
Engineering Intern	$30.13	152	$4,579.76	
Designer	$26.20	92	$2,410.40	
Designer -Associate	$17.99	49	$881.51	
Secretary/Clerical	$23.31	13	$303.03	
TOTAL DIRECT LABOR		610	Hours	$25,977.42
6. Overhead (Combined Fringe Benefit & Administrative)			175.00%	$45,460.49
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$71,437.91
8. PROFIT: Labor Related Costs (Item 7)			x 10%	$7,143.79

PART III - OTHER COSTS		
9. Miscellaneous Direct Costs	$0.00 $0.00	
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$0.00
10. SUBCONTRACTS (Lump Sum)		
SUB-CONTRACT SUB-TOTAL		$0.00
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$78,581.70
11. REIMBURSABLE COSTS (Limiting Amount)		
SUB-TOTAL REIMBURSABLES		$0.00

PART IV - SUMMARY	
TOTAL AMOUNT OF AMENDMENT #2 (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$78,581.70**

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Harts Bridge Modification D-B DCP/RFP
County: Duval
FPN: P-11--18
FAP No.: 1/0/1900

Consultant Name: Peters and Yaffee, Inc.
Consultant No.:
Date: ########
Estimator: Russell Yaffee, PE, PTOE

Staff Classification	Total Staff Hours From "SH Summary Firm"	Principal	Project Manager	Senior Engineer	Project Engineer	Engineering Intern	Designer	Designer Associate	Secretary /Clerical	Staff Classi-fication 9	Staff Classi-fication 10	Staff Classi-fication 11	Staff Classi-fication 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$83.86	$67.20	$66.11	$42.40	$30.13	$26.20	$17.99	$23.31	$0.00	$0.00	$0.00	$0.00			
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
19. Signing & Pavement Marking Analysis	244	12	24	37	49	61	37	20	5	0	0	0	0	245	$10,426	$42.56
20. Signing & Pavement Marking Plans	138	7	14	21	28	35	21	11	3	0	0	0	0	140	$5,976	$42.69
21. Signalization Analysis	181	9	18	27	36	45	27	14	4	0	0	0	0	180	$7,684	$42.69
22. Signalization Plans	44	2	4	7	9	11	7	4	1	0	0	0	0	45	$1,891	$42.02
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
Total Staff Hours	607	30	60	92	122	152	92	49	13	0	0	0	0	610		
Total Staff Cost		$2,515.80	$4,032.00	$6,082.12	$5,172.80	$4,579.76	$2,410.40	$881.51	$303.03	$0.00	$0.00	$0.00	$0.00		**$25,977.42**	**$42.59**

Check = $25,977.42

TOTAL DIRECT LABOR:		$25,977.42
OVERHEAD:	175%	$45,460.49
SUBTOTAL: Labor + Overhead		$71,437.91
PROFIT:	10%	$7,143.79
MISCELLANEOUS DIRECT COSTS:		$0.00
TOTAL LUMP SUM AMOUNT:		**$78,581.70**

Project Activity 19: Signing and Pavement Marking Analysis

Estimator:

Harts Bridge Modification D-B DCP/RFP
P-11--18

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
19.1	Traffic Data Analysis	LS	1	0	0	n/a (covered in original fee)
19.2	No Passing Zone Study	LS	1	0	0	n/a
19.3	Reference and Master Design File	LS	1	127	127	(original fee was 98 hrs) Additional work is approximately 3,500 (0.66 miles) of Pavement Marking - Full Design. Additional 30 hours setup plus 50 hrs per mile + 3 signals at 8 hrs per signal (30 + (.66 x 50) + 24) = 103 hrs (also add the design of the rerouting of SR 228 through downtown - add 24 hrs) = 103 + 24 = 127 hrs
19.4	Multi-Post Sign Support Calculations	EA	2	8	16	Assume 2 MP Signs (2 Signs x 4 Hrs) = 8 hrs
19.5	Sign Panel Design Analysis	EA	0	0	0	n/a (covered in original fee)
19.6	Sign Lighting/Electrical Calculations	EA	1	0	0	n/a
19.7	Quantities	LS	1	36	36	(9 Plan Sheets Assumed) 9 sheets x 4 hrs = 36 hrs
19.8	Cost Estimate	LS	1	8	8	2 Cost Estimates x 4 hrs = 8 hrs
19.9	Technical Special Provisions and Modified Special Provisions	LS	1	0	0	n/a
19.10	Other Signing and Pavement Marking	LS	1	0	0	n/a
	Signing and Pavement Marking Analysis Technical Subtotal				**187**	
19.11	Field Reviews	LS	1	16	16	1 Field Review x 2 people x 8 hrs (Exsiting Signage)
19.12	Technical Meetings	LS	1	16	16	Meetings are listed below
19.13	Quality Assurance/Quality Control	LS	%	5%	9	
19.14	Independent Peer Review	LS	%	0%	0	
19.15	Supervision	LS	%	5%	9	
	Signing and Pavement Marking Analysis Nontechnical Subtotal				**50**	
19.16	Coordination	LS	%	3%	7	
	19. Signing and Pavement Marking Analysis Total				**244**	

Project Activity 19: Signing and Pavement Marking Analysis

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments		
	Technical Meetings	**Units**	**No of Units**	**Hours/ Unit**	**Total Hours**	**Comments**	**PM Attendance at Meeting Required?**	**Number**
	Sign Panel Design	EA	2	4	8	Meeting with COJ, FDOT, Stadium Rep, Etc		0
	Queue Length Analysis	EA	0	0	0			0
	Local Governments (cities, counties)	EA	0	0	0			0
	Other Meetings	EA	2	4	8			0
	Subtotal Technical Meetings				**16**		**Subtotal Project Manager Meetings**	0
	Progress Meetings (if required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3		- -
	Phase Review Meetings	EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3		- -
	Total Meetings				**16**		**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 19.12

Carries to Tab 3

Project Activity 20: Signing and Pavement Marking Plans

Estimator:

Harts Bridge Modification D-B DCP/RFP
P-11--18

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
20.1	Key Sheet		Sheet	1	0	1	0	1 KS Required
20.2	Summary of Pay Items Including TRNS•Port Input		LS	1	0		0	n/a
20.3	Tabulation of Quantities		Sheet	2	9	2	18	2 TOQ Sheets Required (12 hrs + 6 hrs)
20.4	General Notes/Pay Item Notes		Sheet	1	4	1	4	1 GN Sheet Required
20.5	Project Layout		Sheet	0	0	0	0	n/a
20.6	Plan Sheet		Sheet	9	4	9	36	9 Plan Sheets
20.7	Typical Details		EA	0	0		0	n/a
20.8	Guide Sign Worksheet(s)		EA	0	0	0	0	n/a (covered in original Fee)
20.9	Traffic Monitoring Site		EA	0	0		0	n/a
20.10	Cross Sections		EA	6	11.3	6	68	3 Existing Structures on Bridge, 1 New Structure West of Bridge (WB), 1 New Structure on Bay Street (EB) and 1 New Structure on Gator Bowl Blvd. (SB) and 2 Multi Post Signs. (6 Overhead x 10 hrs + 2 Multi Post x 4 hrs) = 68 hrs
20.11	Special Service Point Details		EA	0	0		0	n/a
20.12	Special Details		LS	1	0		0	n/a
20.13	Interim Standards		LS	1	0		0	n/a
	Signing and Pavement Marking Plans Technical Subtotal					**19**	**126**	
20.14	Quality Assurance/Quality Control		LS	%	5%		6	
20.15	Supervision		LS	%	5%		6	
	20. Signing and Pavement Marking Plans Total					**19**	**138**	

Project Activity 21: Signalization Analysis

Estimator:

Harts Bridge Modification D-B DCP/RFP

P-11--18

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
21.1	Traffic Data Collection	LS	1	0	0	n/a
21.2	Traffic Data Analysis	PI	3	6	18	Includes determining signal operation plan, intersection geometry, local signal timings, pre-emption phasing and timings, forecasting traffic, intersection analysis run, etc. per intersection. (3 Signals - Bay Steet East at Gator Bowl Blvd., Bay Steet East at Gator Bowl Blvd. and Gator Bowl Blvd. at Metro Park Entrance)
21.3	Signal Warrant Study	LS	1	0	0	n/a
21.4	System Timings	LS	1	4	4	Includes analyzing counts to determine proper coordination timing plans including splits, force offs, offsets and preparation of Time Space Diagrams (4 Hrs)
21.5	Reference and Master Signalization Design File	PI	3	32	96	All efforts required per intersection for establishing the signal master design file to include reference files of topo, r/w, roadway, pavement markings, utilities files, etc. Includes the design and layout of proposed signal poles, signal heads, loops, pedestrian signals, conduit, pull boxes, service points, etc. Also includes proposed call outs, pay item numbers, loop detector chart, controller timing chart, signal/ pedestrian head details, sign details, controller notes, signal operating plan, etc (Signal Plans will be developed to a preliminary design phase and not 100% Plans)(3 Signals x 32 hrs = 96 Hrs)
21.6	Reference and Master Interconnect Communication Design File	LS	1	0	0	n/a
21.7	Overhead Street Name Sign Design	EA	0	0	0	n/a
21.8	Pole Elevation Analysis	LS	1	4	4	Includes effort to determine pole elevations at proposed pole locations (2 hours for the first intersection and 1 hour for each additional intersection). 4 hrs
21.9	Traffic Signal Operation Report	LS	1	0	0	n/a
21.10	Quantities	LS	1	16	16	Includes all work required to determine the quantities for each signalized intersection, traffic monitoring site and interconnect run (8 hours for the first signalized intersection and 4 hours for each additional signalized intersection). 16 hrs
21.11	Cost Estimate	LS	1	0	0	2 Cost Estimates x 4 hrs = 8 hrs
21.12	Technical Special Provisions and Modified Special Provisions	LS	0	0	0	n/a
21.13	Other Signalization Analysis	LS	1	0	0	n/a
	Signalization Analysis Technical Subtotal				**138**	
21.14	Field Reviews	LS	1	12	12	2 Field Review x 2 people x 3 hrs
21.15	Technical Meetings	LS	1	12	12	Meetings are listed below

Project Activity 21: Signalization Analysis

21.16	Quality Assurance/Quality Control	LS	%	5%	7	
21.17	Independent Peer Review	LS	%	0%	0	
21.18	Supervision	LS	%	5%	7	
	Signalization Analysis Nontechnical Subtotal				**38**	

Project Activity 21: Signalization Analysis

21.19	Coordination	LS	%	3%	5	
				21. Signalization Analysis Total	181	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments	PM Attendance at Meeting Required?	Number
FDOT Traffic Operations	EA	0	0	0			0
FDOT Traffic Design	EA	1	4	4			0
Power Company (service point coordination)	EA	1	4	4			0
Maintaining Agency (cities, counties)	EA	1	4	4			0
Railroads	EA	0	0	0			0
Other Meetings	EA	0	0	0			0
Subtotal Technical Meetings				12		**Subtotal Project Manager Meetings**	0
Progress Meetings (if required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3		- -
Phase Review Meetings	EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3		- -
Total Meetings				12		**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 21.15

Carries to Tab 3

Project Activity 22: Signalization Plans

Estimator:

Harts Bridge Modification D-B DCP/RFP
P-11--18

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
22.1	Key Sheet		Sheet	1	4	1	4	1 KS Required
22.2	Summary of Pay Items Including Designer Interface (TRNS•Port) Input		Sheet	0	0	0	0	n/a
22.3	Tabulation of Quantities		Sheet	1	8	1	8	1 TOQ Sheets Required
22.4	General Notes/Pay Item Notes		Sheet	1	4	1	4	1 GN Sheet Required
22.5	Plan Sheet		Sheet	3	4	3	12	3 Plan Sheets Required
22.6	Interconnect Plans		Sheet	0	0	0	0	n/a
22.7	Traffic Monitoring Site		EA	0	0		0	n/a
22.8	Guide Sign Worksheet		EA	0	0		0	n/a
22.9	Special Details		Sheet	0	0	0	0	n/a
22.10	Special Service Point Details		EA	0	0		0	n/a
22.11	Mast Arm/Monotube Tabulation Sheet		PI	3	4		12	3 Intersections
22.12	Strain Pole Schedule		PI	0	0		0	n/a
22.13	TCP Signal (Temporary)		EA	0	0		0	n/a
22.14	Temporary Detection Sheet		PI	0	0		0	n/a
22.15	Utility Conflict Sheet		Sheet	0	0	0	0	n/a
22.16	Interim Standards		LS	1	0		0	n/a
					Signalization Plans Technical Subtotal	**6**	**40**	
22.17	Quality Assurance/Quality Control		LS	%	5%		2	
22.18	Supervision		LS	%	5%		2	
					22. Signalization Plans Total	**6**	**44**	

CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL	
1. Project Hart Bridge Modification D-B DCP/RFP Amendment #2	2. Proposal Number P-11-18
3. Name of Consultant Southeastern Archaeological Research, Inc. (dba SEARCH)	4. Date of Proposal 12/3/2018

PART II - LABOR RELATED COSTS

5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Project Manager	$53.43	6	$320.58	
Chief Archaeologist	$42.68	0	$0.00	
Senior Scientist	$35.63	40	$1,425.20	
Scientist	$34.14	4	$136.56	
Senior Archaeologist	$35.20	0	$0.00	
Archaeologist	$22.47	0	$0.00	
GIS Specialist	$23.86	20	$477.20	
Secretary/Clerical	$27.81	2	$55.62	
TOTAL DIRECT LABOR		72	Hours	$2,415.16
6. Overhead (Combined Fringe Benefit & Administrative)			114.54%	$2,766.32
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$5,181.48
8. PROFIT: Labor Related Costs (Item 7)				$0.00

PART III - OTHER COSTS

9. Miscellaneous Direct Costs	57.31%	$1,384.13
	0.315%	$7.60
	28%	$676.24
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$2,067.97
10. SUBCONTRACTS (Lump Sum)		
SUB-CONTRACT SUB-TOTAL		$0.00
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$7,249.45
11. REIMBURSABLE COSTS (Limiting Amount)		
SUB-TOTAL REIMBURSABLES		$0.00

PART IV - SUMMARY

TOTAL AMOUNT OF AMENDMENT #6 (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$7,249.45**

PROJECT MODIFICATION # 1

SEARCH Project # 180183

Date: 11/6/18

Project Title

Cultural Resource Assessment Survey for the Hart Expressway Modifications, City of Jacksonville, Duval County, Florida

Modification Description

SEARCH is currently under contract to provide a cultural resources assessment survey in support of the Hart Expressway Modifications in the City of Jacksonville, Duval County, Florida. The current modification is submitted to account for the addition of two areas of right-of-way transfers that were not included in the original project scope. These areas include the Commodore Point Expressway western ramps to Liberty and Washington Streets and segments of Monroe and Adams Streets.

The Area of Potential Effects (APE) for this additional work will be limited to the right-of-way to be transferred. Historic resources adjacent to the right-of-way to be transferred will therefore not be recorded or evaluated; only resources within the right-of-way itself will be documented for the right-of-way transfer segments.

Modification Staffhours and Cost

72 hours / $7,249.45

CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL	
1. Project Hart Bridge Modification D-B DCP/RFP Amendment #2	2. Proposal Number P-11-18
3. Name of Consultant Arcadis Inc.	4. Date of Proposal 12/18/2018

PART II - LABOR RELATED COSTS

5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Project Manager	$60.10	87	$5,228.70	
Principal	$87.83	29	$2,547.07	
Senior Engineer	$67.35	87	$5,859.45	
Project Engineer	$47.58	145	$6,899.10	
Engineering Intern	$27.06	75	$2,029.50	
CADD Technician	$21.71	58	$1,259.18	
Sr Designer	$36.05	69	$2,487.45	
Secretary/ Clerical	$25.69	28	$719.32	
TOTAL DIRECT LABOR		578	Hours	$27,029.77
6. Overhead (Combined Fringe Benefit & Administrative)			150.00%	$40,544.66
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$67,574.43
8. PROFIT: Labor Related Costs (Item 7)			x 10%	$6,757.44

PART III - OTHER COSTS

9. Miscellaneous Direct Costs	$0.00 $0.00	
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$0.00
10. SUBCONTRACTS (Lump Sum)		
SUB-CONTRACT SUB-TOTAL		$0.00
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$74,331.87
11. REIMBURSABLE COSTS (Limiting Amount)	$	
SUB-TOTAL REIMBURSABLES		$0.00

PART IV - SUMMARY

TOTAL AMOUNT OF AMENDMENT #2 (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$74,331.87**

Attachement "A"
Task Work Order – Scope of Services
Hart Bridge Modification D-B DCP/RFP
Proposal No. P-11-18

Proposal No.: P-11-18
CITY Project Manager: Duane Kent
FDOT Project Manager: Jeff Daugharty
Task Order Authorized Amount: $74,331.87

The City of Jacksonville (hereinafter referred to as CITY) has retained ARCADIS U.S., Inc. (hereinafter referred to as the CONSULTANT) to amend the traffic technical memorandum to evaluate the performance of the updated concept for the SR 228 Hart Bridge access ramps to and from Liberty Street and provide procurement support to review traffic models that accompany any ATC from Design-Build (D-B) teams.

This Task Work Order will be for the completion of an Update of the Technical Memorandum summarizing the performance of the updated concept to incorporate into the Project Engineering Report (PER) for National Environmental Policy Act (NEPA) approval.

Data Needs from Others

Design Concept
SR 228 Hart Bridge access ramps to and from Liberty Street

Traffic Data Collection
Existing mainline and ramp Directional Design Hour Volumes (DDHV) and Turning Movement Counts (TMC)

Open Year (2020) and Design Year (2040) DDHV and TMC information and established traffic factors from Traffic Technical Memorandum (October 2017)

Traffic Operational Analysis
Preliminary SYNCHRO traffic models: Existing AM and PM models, Opening Year No-Build and Build AM and PM models, and Design Year No-Build and Build AM and PM models from Traffic Technical Memorandum (October 2017) and any other recent analysis models available

Scope of Work

The following tasks will be accomplished under the terms of this Task Work Order. All work is to be accomplished in accordance with the CITYs policies, guidelines, procedures and rules that may be supplemented by Federal Guidelines and manuals and other documents as appropriate.

Traffic Technical Memorandum Amendment

Task 1 – Traffic Volume Development

CONSULTANT will verify the provided Existing Year DDHV are reasonable. CONSULTANT will develop Opening Year (2025) and Design Year (2045) DDHV from a reasonable local growth rate applied to Existing Year DDHV and develop Average Annual Daily Traffic (AADT). The following steps will be used to develop the traffic volumes for the study area:

1) FDOT Traffic Information (FTI) or other local, relevant traffic studies will be utilized to obtain historic traffic volume trends including AADT and traffic factors to establish a reasonable local growth rate
2) The established growth rate will be applied to Existing Year DDHVs to obtain Opening Year (2025) and Design Year (2045) DDHVs.
3) AADT will be developed for Existing Year, Opening Year (2025), and Design Year (2045) by applying the K- and D-factors to the established DDHV.
4) All future DDHVs and AADTs will be checked for reasonableness with FTI or other local, relevant studies in the area.

Task 2 – SYNCHRO Model Refinement

CONSULTANT will refine provided SYNCHRO models with the updated concept for the AM and PM peak hours along the SR 228 Hart Bridge study area for Existing, Opening Year (2025), and Design Year (2045). The following steps will be used to refine the study area SYNCHRO model:

1) Utilize the preliminary SYNCHRO models developed for the SR 228 Hart Bridge study area. The Existing and No-Build models will be used for the baseline comparison.
2) Obtain latest design concept from STV to make the additional modifications necessary for the Build models.
3) All updates to the concept will be coded within the SR 228 Hart Bridge study area.
4) Traffic volumes and factors for all Existing, No-Build and Build models will be verified and updated accordingly.
5) Signal timings will be optimized for all Opening Year (2025) and Design Year (2045) models to include adequate pedestrian crossing intervals.

Task 3 –Traffic Operational Analysis

To analyze and document the operational benefits of the concept improvements along the SR 228 Hart Bridge study area, it is essential to conduct SYNCHRO and SIMTRAFFIC traffic operational analysis. The following traffic operational analysis will be utilized:

1) SYNCHRO 10 – Optimized signal timing information, intersection traffic operations
2) SIMTRAFFIC 10 – Overall system traffic operations and visualization

The following traffic operational analysis models will be run, and results will be obtained as part of this task:

- Opening Year (2025) and Design Year (2045) No-Build Conditions - AM and PM peak hour models – SYNCHRO and SIMTRAFFIC analysis
- Opening Year (2025) and Design Year (2045) Build Conditions with concept refinements - AM and PM peak hour models –SYNCHRO and SIMTRAFFIC analysis

If deemed necessary through coordination with the CITY, HCS analysis will be conducted for key mainline and ramp merge and diverge locations:

- Opening Year (2025) and Design Year (2045) No-Build Conditions - AM and PM peak hour models – HCS analysis
- Opening Year (2025) and Design Year (2045) Build Conditions with concept refinements - AM and PM peak hour models –HCS analysis

It is anticipated that only one Build Alternative will be analyzed for this project. The operational analysis of the Build Alternative will be performed only after the concept is deemed final.

Task 4 – Technical Memorandum

A technical memo summarizing the traffic operations of the No-Build and Build Alternative will be completed. AM and PM peak hour intersection and system-wide evaluations comparing (latent demand, total system-wide delay, volume and travel time) Measures of Effectiveness (MOEs) between the Build and No-Build models will be presented in the Technical Memorandum.

Procurement Support

Task 1 – Review ATCs and Provide Input

The CONSULTANT will provide feedback and review of traffic models that accompany D-B team ATCs.

1) Review up to 16 ATC modifications (4 teams presenting up to 4 ATCs involving traffic)
2) Summarize review comments in a short memorandum

Task 2 – Review Letter of Intent (LOI) and Technical Proposal

The CONSULTANT will provide feedback and review of any traffic operations-related design modifications that accompany D-B team LOI and Technical Proposals.

1) Review LOI and Technical Proposals by the D-B teams and provide feedback to STV in an email

Task 3 – Attending ATC Meeting

The CONSULTANT will attend necessary meetings to provide feedback and review of any traffic concepts.

1) Review 4 ATC meetings, 1 page-turn meeting, and 1 Q&A meeting per each D-B team

Project Management/Meetings/General Oversight

It is estimated that up to two (2) meetings/teleconferences may be held with the CITY and others to review the findings from the study.

The CONSULTANT will participate in any additional meetings as requested and authorized by the CITY Project Manager.

This task also includes effort for internal, external project management, oversight, administration and for coordination with FDOT and others involved with the project.

QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

CONSULTANT will perform QA/QC on documents prior to submittal to CITY

DELIVERABLES

The following deliverables will be submitted to the CITY:

1) A Technical Memorandum will be prepared and submitted to the CITY and the Florida Department of Transportation (FDOT) District 2 for review. Comments received from the CITY and FDOT will be addressed and a Final Technical Memorandum will be prepared.

All data/files used in the development of the deliverables (traffic models, traffic volume data etc.) may be requested by the CITY upon completion of these tasks.

SCHEDULE

The following schedule will be maintained for the delivery of this Task Work Order:

1) Volume and traffic operational model development will be submitted to CITY and FDOT to review within **four (4) weeks** from Notice to Proceed (NTP).
2) Draft Technical Memo will be submitted to CITY and FDOT for review within **eight (8) weeks** from NTP.

ESTIMATE OF EFFORT AND FEE

The estimated effort and fee for the scope of services above is attached as Exhibit A.

If unforeseen circumstances arise and the hours allotted below are not enough to complete the task, the CONSULTANT shall immediately cease work and notify the CITY Project Manager.

Technical Report - SR 228 Hart Bridge

Task List	Consultant				Total Hours
Technical Memorandum Task - 1 - Volume Development		Hours	No. of Models/ Scenarios	Days	
Evaluate Existing Year volume information	ARCADIS	8	1	1	8
Evaluation of FTI, NERPM Model, and other relevant traffic studies	ARCADIS	8	2	1	16
Develop Future Year DDHVs and AADTs (Opening & Design Years)	ARCADIS	8	6	0.5	24
Develop Future Year Volume Diagrams (Opening & Design Years)	ARCADIS	8	4	1	32
					80
Technical Memorandum Task - 2 -SYNCHRO Model Refinement		Hours	No. of Models	Days	
Update Existing Conditions Models (AM and PM Peaks)	ARCADIS	8	2	2	32
Update No-Build Models (Opening & Design Years + AM and PM Peaks)	ARCADIS	8	4	1	32
Update Build Models (Opening & Design Years + AM and PM Peaks)	ARCADIS	8	4	2	64
					128
Technical Memorandum Task - 3 - Traffic Operational Analysis		Hours	No. of Models	Days	
All Existing Conditions Models - Run Model and Obtain MOEs	ARCADIS	8	2	0.25	4
All No-Build Models - Run Model and Obtain MOEs	ARCADIS	8	4	0.25	8
All Build Models (Opening & Design Years + AM and PM Peaks)	ARCADIS	8	4	1	32
HCS Analysis (if required)	ARCADIS	8	10	0.25	20
Preparation of Tables (AM and PM peaks)	ARCADIS	8	2	1	16
Preparation of Figures (AM and PM peaks)	ARCADIS	8	2	1	16
					96
Technical Memorandum Task - 4 - Technical Report		Hours	Reports	Days	
Draft Traffic Operational Analysis Technical Report	ARCADIS	8	1	4	32
Responses to FDOT comments	ARCADIS	8	1	1	8
Final Traffic Operational Analysis Technical Report	ARCADIS	8	1	2	16
					56
Procurement Support Task - 1 - Review ATCs		Hours	ATCs	Days	
Review ATCs	ARCADIS	4	16	1	64
Short Summary Memorandum	ARCADIS	2	16	1	32
					96

Procurement Support Task - 2 - Review LOI and Technical Proposal		Hours	Teams	Days	
Review LOI and Technical Proposals of D-B Teams	ARCADIS	8	4	1	32
Short Summary email	ARCADIS	1	4	0.5	2
					34
Procurement Support Task - 3 - ATC Meetings		Hours	Teams	Days	
Attend ATC Meetings	ARCADIS	2	4	1	8
Attend Page-Turning Meeting	ARCADIS	2	4	1	8
Attend Q&A Meeting	ARCADIS	2	4	1	8
					24
Meeting/General Oversight		Hours	Persons	Meeting/ Months	
Meetings	ARCADIS	3	2	2	12
General Oversight/Project Management and Coordination	ARCADIS	4	2	3	24
					36
Total					550
QA/QC		Percent			
QA/QC - 5% of Total	ARCADIS	5%			28
Grand Total					578

CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL	
1. Project Hart Bridge Modification D-B DCP/RFP Amendment #2	2. Proposal Number P-11-18
3. Name of Consultant CSI Geo Inc.	4. Date of Proposal 11/28/2018

PART II - LABOR RELATED COSTS

5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Project Manager	$67.23	35	$2,353.05	
Project Engineer	$43.35	89	$3,858.15	
Staff Engineer	$43.32	133	$5,761.56	
CADD/Computer Tech	$32.51	89	$2,893.39	
Geotechnical Technician	$25.50	62	$1,581.00	
Clerical	$15.00	35	$525.00	
TOTAL DIRECT LABOR		443	Hours	$16,972.15
6. Overhead (Combined Fringe Benefit & Administrative)			175.00%	$29,701.26
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$46,673.41
8. PROFIT: Labor Related Costs (Item 7)			x 10%	$4,667.34

PART III - OTHER COSTS

9. Miscellaneous Direct Costs	$0.00 $0.00	
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$0.00
10. SUBCONTRACTS (Lump Sum)		
SUB-CONTRACT SUB-TOTAL		$0.00
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$51,340.75
11. REIMBURSABLE COSTS (Limiting Amount) Geotechnical Investigation	$ 58,399.50	
SUB-TOTAL REIMBURSABLES		$58,399.50

PART IV - SUMMARY

TOTAL AMOUNT OF AMENDMENT #2 (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$109,740.25**

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Hart Bridge Modification D-B DCP/RFP
County: Duval
FPN: 0
FAP No.: 1/0/1900

Consultant Name: CSI Geo, Inc.
Consultant No.: enter consultants proj. number
Date: 12-11-18
Estimator: Bruce Khosrozadeh

Staff Classification	Total Staff Hours From "SH Summary Firm"	Project Manager	Project Engineer	Staff Engineer	CADD/Computer Technician	Geotechnical Technician	Secretary/Clerical	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$67.23	$43.35	$43.32	$32.51	$25.50	$15.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00			
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
35. Geotechnical	443	35	89	133	89	62	35	0	0	0	0	0	0	443	$16,972	$38.31
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
Total Staff Hours	443	35	89	133	89	62	35	0	0	0	0	0	0	443		
Total Staff Cost		$2,353.05	$3,858.15	$5,761.56	$2,893.39	$1,581.00	$525.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		**$16,972.15**	**$38.31**

Check = $16,972.15

TOTAL DIRECT LABOR:					$16,972.15
OVERHEAD:		175%			$29,701.26
SUBTOTAL: Labor + Overhead					$46,673.41
PROFIT: Labor Related Costs:		10%			$4,667.34
TOTAL:					$51,340.75
Geotechnical Investigation					$58,399.50
GRAND TOTAL ESTIMATED FEE:					**$109,740.25**

Notes:
1. This sheet to be used by Subconsultant to calculate its fee.

35. Geotechnical

Estimator:

Hart Bridge Modification D-B DCP/RFP

0

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
	Roadway					
35.1	Document Collection and Review	LS	1	4	4	The project is a design-build project, however we understand that there is a section at the east end of the project that will be treated like a traditional design-bid-build project and will require geotechnical design recommendations. Geotechnical recommendations for roadway design will be required beginning near Daily's Place Amphitheatre near station 279+00 and going east to the end project limits. Therefore, the project will require a typical Design Build criteria package and geotechnical report which does not need design recommendations as well as a separate geotechnical report that includes design recommendations for the roadway design at the east end of the project. Field and laboratory testing has already been included for roadway under the original fees. Staff Hours for Design Recommendations for the requested area at the east end of the project will be based on the following field quantities for roadway evaluation and recommendations: 27 Auger Borings = 273 feet 10 SPT = 227 feet Total = 37 Borings = 500 feet
35.2	Develop Detailed Boring Location Plan	LS	0	4	0	
35.3	Stake Borings/Utility Clearance	Boring	0	0.5	0	
35.4	Muck Probing	Crew Day	0	0	0	
35.5	Coordinate and Develop MOT Plans for Field Investigation	EA	0	4	0	
35.6	Drilling Access Permits	Location	0	4	0	
35.7	Property Clearances	EA	0	4	0	
35.8	Groundwater Monitoring	EA	0	0	0	
35.9	LBR Sampling	EA	0	8	0	
35.10	Coordination of Field Work	100 lf of boring	0	1	0	
35.11	Soil and Rock Classification - Roadway	100 lf of boring	0	1	0	
35.12	Design LBR	LS	0	2	0	
35.13	Laboratory Data	100 lf of boring	0	1	0	
35.14	Seasonal High Water Table	Boring	0	0.1	0	
35.15	Parameters for Water Retention Areas	EA	0	1	0	
35.16	Delineate Limits of Unsuitable Material	Cross-section	1	20	20	
35.17	Electronic Files for Cross-Sections	100 lf of boring	5	1	5	500
35.18	Embankment Settlement and Stability	Embankment Boring	1	6	6	Evaluation of High Fill Embankments between ~ Sta. 286+00 to 288+00, and along S-Curve Ramp RT offset, 6 cross sections

35. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.19	Monitor Existing Structures	LS	1	10	10	
35.20	Stormwater Volume Recovery and/or Background Seepage Analysis	EA	0	0	0	
35.21	Geotechnical Recommendations	LS	1	40	40	Ground Improvement options will need to be explored based on encountered soil conditions
35.22	Pavement Condition Survey and Pavement Evaluation Report	LS	0	0	0	
35.23	Preliminary Roadway Report	LS	1	25	25	Includes geotechnical analysis and recommendations, as well as any suggestions for handling any potential problems
35.24	Final Report	EA	1	25	25	Includes geotechnical analysis and recommendations, as well as any suggestions for handling any potential problems
35.25	Auger Boring Drafting	100 lf boring	0	3	0	
35.26	SPT Boring Drafting	100 lf boring	0	4	0	
				Roadway Geotechnical Subtotal	**135**	
	Structures					
35.27	Develop Detailed Boring Location Plan	LS	1	6	6	The project is a design-build project, however we understand that there is a section at the east end of the project that will be treated like a traditional design-bid-build project and will require geotechnical design recommendations. Therefore, the project will require a typical Design Build criteria package and geotechnical report which does not need design recommendations as well as a separate geotechnical report that includes design recommendations for structures at the east end of the project. As such, signed and sealed plans, calculations, and reports for this section will be required. The structures on the east end of the project includes two MSE walls, two gravity walls, one permanent sheetpile wall (possibly with tiebacks), one new bridge abutment, and 6 new mast arm structures. Field exploration was previously performed for the bridge abutment and MSE Walls. Due to design changes additional exploration will be required for these structural improvements. Staff Hours for Design Recommendations for the requested area at the east end of the project will be based on the following field quantities: Initial Exploration: MSE Walls – 10 SPT Borings = 340' New Exploration: Bridge Abutment - 1 SPT Boring = 125' Sheetpile Walls;5 SPT Borings = 210' Retaining Walls and Embankment Fill;19 SPT Borings = 775' Mast Arm Structures;6 SPT Borings = 310' Total (East End Only) Initial Exploration; 10 SPT Borings =340' New Exploration; 31 SPT Borings = 1,420' Total; 41 SPT Borings = 1,760'
35.28	Stake Borings/Utility Clearance	Boring	31	0.5	16	31
35.29	Coordinate and Develop MOT Plans for Field Investigation	EA	1	4	4	
35.30	Drilling Access Permits	Location	0	4	0	
35.31	Property Clearances	EA	0	8	0	
35.32	Collection of Corrosion Samples	EA	0	2	0	
35.33	Coordination of Field Work	100 lf of boring	14.2	1	14	1420
35.34	Soil and Rock Classification - Structures	100 lf of boring	14.2	1	14	
35.35	Tabulation of Laboratory Data	100 lf of boring	14.2	1	14	
35.36	Estimate Design Groundwater Level for Structures	EA	31	0.2	6	
35.37	Selection of Foundation Alternatives (BDR)	Bridge boring	1	3	3	Analysis for the bridge abutment at the east end of the project

35. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.38	Detailed Analysis of Selected Foundation Alternate(s)	Bridge boring	1	3	3	Analysis for the bridge abutment at the east end of the project
35.39	Bridge Construction and Testing Recommendations	Bridge boring	1	2	2	Analysis for the bridge abutment at the east end of the project
35.40	Lateral Load Analysis (Optional)	Bridge boring	0	5	0	None Needed
35.41	Walls	Wall Boring	21	2	42	Analysis for the MSE Walls and gravity walls at the east end of the project
35.42	Sheet Pile Wall Analysis (Optional)	Wall Boring	5	2	10	Provide soil parameters for the sheetpile walls for analysis by structural engineer
35.43	Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations	Boring	0	1	0	Field Exploration will be performed for new mast arms but no soil parameters or analysis will be performed. The results of the field exploration will be presented in the design build report.
35.44	Box Culvert Analysis	EA	0	4	0	NA
35.45	Preliminary Report	EA	1	35	35	Includes geotechnical analysis and recommendations, as well as any suggestions for handling any potential problems
35.46	Final Report	EA	1	25	25	Includes geotechnical analysis and recommendations, as well as any suggestions for handling any potential problems
35.47	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA	1	25	25	Includes geotechnical analysis and recommendations, as well as any suggestions for handling any potential problems
35.48	SPT Boring Drafting	100 lf of boring	2.1	4	8	1420
35.49	Other Geotechnical	LS	0	20	0	
				Structural Geotechnical Subtotal	**227**	
				Geotechnical Technical Subtotal	**362**	
35.50	Technical Special Provisions and Modified Special Provisions	EA	1	40	40	
35.51	Field Reviews	LS	0	4	0	
35.52	Technical Meetings	LS	1	6	6	Meetings listed below
35.53	Quality Assurance/Quality Control	LS	%	3%	11	
35.54	Supervision	LS	%	3%	11	
				Geotechnical Nontechnical Subtotal	**68**	
35.55	Coordination	LS	%	3%	13	
				35. Geotechnical Total	**443**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	0	0	0			0
Boring Layout Approval	EA	0	2	0			0
Attend in BDR Review Meeting	EA	0	0	0			0
30/60/90% Submittal Review	EA	0	2	0			0
Other Meetings	EA	3	2	6			0
Subtotal Technical Meetings				**6**		**Subtotal Project Manager Meetings**	**0**
Progress Meetings (if required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3		- -
Phase Review Meetings	EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3		- -
Total Meetings				**6**		**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 33.18

Carries to Tab 3

CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL	
1. Project Hart Bridge Modification D-B DCP/RFP Amendment #2	2. Proposal Number P-11-18
3. Name of Consultant DRMP, Inc.	4. Date of Proposal 12/14/2018

PART II - LABOR RELATED COSTS

5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Senior (PSM)	$60.58	5	$302.90	
Project (PSM)	$48.08	31	$1,490.48	
Survey Tech	$36.06	64	$2,307.84	
Secretary/Clerical	$22.54	3	$67.62	
3-Man Survey Crew	$55.34	157	$8,688.38	
2-Man Survey Crew	$50.91	0	$0.00	
3-Man SUE Crew	$74.55	48	$3,578.16	
TOTAL DIRECT LABOR		308	Hours	$16,435.38
6. Overhead (Combined Fringe Benefit & Administrative)			150.00%	$24,653.07
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$41,088.45
8. PROFIT: Labor Related Costs (Item 7)			x 10%	$4,108.85

PART III - OTHER COSTS

9. Miscellaneous Direct Costs	$0.00 $0.00	
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$0.00
10. SUBCONTRACTS (Lump Sum)		
SUB-CONTRACT SUB-TOTAL		$0.00
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$0.00
11. REIMBURSABLE COSTS (Limiting Amount)		
SUB-TOTAL REIMBURSABLES		$45,197.30

PART IV - SUMMARY

TOTAL AMOUNT OF AMENDMENT #2 (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$45,197.30**

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: COJ - Hart Expressway From Hogans Creek Crossing to Hart Bridge
County: Duval
FPN: N/A
FAP No.: N/A

Consultant Name: DRMP, Inc.
Consultant No.: enter consultants proj. number
Date: 12/14/2018
Estimator: Glenn J. Lusink, PSM

Staff Classification	Total Staff Hours From "SH Summary - Firm"	Project Manager	Senior Surveyor & Mapper	Surveyor & Mapper	Survey Technician	Secretarial / Clerical	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$166.60	$166.60	$132.22	$99.17	$66.22	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00			
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
4. Roadway Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
5. Roadway Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
27. Survey (Field & Office Support)	102	0	5	31	64	3	0	0	0	0	0	0	0	103	$11,477	$111.43
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
Total Staff Hours	102	0	5	31	64	3	0	0	0	0	0	0	0	103		
Total Staff Cost		$0.00	$832.98	$4,098.82	$6,346.88	$198.66	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		**$11,477.34**	**$111.43**

Check = $11,477.34

Survey Field Days by Subconsultant
3 - Person Crew:

SALARY RELATED COSTS:					$11,477.34
OVERHEAD:		0%			$0.00
OPERATING MARGIN:		0%			$0.00
FCCM (Facilities Capital Cost Money):		0.00%			$0.00
EXPENSES:		0.00%			$0.00
Survey (Field - if by Prime)	15.69	3-man crew days @	$ 1,521.65	/ day	$23,879.96
SUE Services	0.00	3-man crew days @	$ 1,400.00	/ day	$0.00
SUE Services	4.80	3-man crew days @	$ 2,050.00	/ day	$9,840.00
SUBTOTAL ESTIMATED FEE:					**$45,197.30**
Geotechnical Field and Lab Testing					$0.00
SUBTOTAL ESTIMATED FEE:					**$45,197.30**
Optional Services					$0.00
GRAND TOTAL ESTIMATED FEE:					**$45,197.30**

Notes:
1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.
2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

Representing	Print Name	Signature / Date
FDOT District	D2 - COJ	
Consultant Name	Glenn J. Lusink, PSM	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.1	Horizontal Project Control (HPC)									
	2-Lane Roadway	Mile			0.00		0.00		0.00	NA
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.2	Vertical PC / Bench Line									
	2-Lane Roadway	Mile			0.00		0.00		0.00	NA
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.3	Alignment and Existing R/W Lines									NA
		Mile			0.00		0.00		0.00	
27.4	Aerial Targets			Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	N/A
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
27.5	Reference Points	"A"		Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	NA
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
	Reference Points	"B"		Units/Day						N/A
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.6	Topography/DTM (3D)									N/A
		Mile			0.00		0.00		0.00	
27.7	Planimetric (2D)									N/A
		Mile			0.00		0.00		0.00	
27.8	Roadway Cross-Sections/Profiles									N/A
		Mile			0.00		0.00		0.00	
27.9	Side Street Surveys									N/A
		Mile			0.00		0.00		0.00	
27.10	Underground Utilities									Provide SUE Mast Arm Clearance Holes for six (6) new mast arm foundations. Fee based on clearing one (1) foundation per 8 hour day.
	Designates	Mile/Site			0.00		0.00		0.00	
	Locates	Point	6	0.8	4.80	1.25	6.00	3.00	14.40	
	Survey		30%	4.80	1.44	1.25	1.80	3.00	4.32	
27.11	Outfall Survey									N/A
		Mile			0.00		0.00		0.00	
27.12	Drainage Survey			Units/Day						N/A
		EA			0.00		0.00		0.00	
27.13	Bridge Survey									N/A
	Minor / Major	EA			0.00		0.00		0.00	
27.14	Channel Survey									N/A
		EA			0.00		0.00		0.00	

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.15	Pond Site Survey									Provide survey of two City of Jacksonville ponds north of Gator Boulevard, within COJ Parcels 130572-0150, 130590-000 and 130598-000. Survey will include top, toe, pond bottom.
		EA	2.00	2.00	4.00	1.25	5.00	4.00	16.00	
27.16	Mitigation Survey									N/A
		Mile			0.00		0.00		0.00	
27.17	Jurisdiction Line Survey									N/A
		Mile			0.00		0.00		0.00	
27.18	Geotechnical Support			Units/Day						Provide Geotech Support for 120 borings, stake and collect location and ground elevation.
		EA	120	20	6.00	1.00	6.00	3.00	18.00	
27.19	Sectional / Grant Survey									N/A
		Corner			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.20	Subdivision Location									N/A
		Block			0.00		0.00		0.00	
27.21	Maintained R/W									N/A
		Mile			0.00		0.00		0.00	
27.22	Boundary Survey									N/A
		EA			0.00		0.00		0.00	
27.23	Water Boundary Survey									N/A
		EA			0.00		0.00		0.00	
27.24	R/W Staking / R/W Line									N/A
		EA			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	N/A
27.25	R/W Monumentation									N/A
		Point			0.00		0.00		0.00	
27.26	Line Cutting									N/A
		Mile			0.00					
27.27	Work Zone Safety									MOT as required
			0.125	16.24	2.03					
27.28	Miscellaneous Surveys									Measure signs per Exhibit provided. 18 require field survey. 8 require lidar extraction. 1 hour field time budgeted for field measure. 1 hour tech timebudgeted for Lidar extraction.
			18.00	0.125	2.25	1.00	2.25	8.00	18.00	
Survey Subtotal				**Crew Days**	**21**	**Field Support Hours**	**21**	**Office Support Hours**	**71**	

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.29	Supplemental Surveys									THE % FOR SUPPLEMENTAL WILL BE DETERMINED AT NEGOTIATIONS. THIS ITEM CAN ONLY BE USED IF AUTHORIZED IN WRITING BY THE DISTRICT SURVEYOR
				21	0		0		0	
27.30	Document Research	Units								Research Plats and Deeds to establish R/W Lines as needed
									0	
27.31	Field Reviews	Units								
									0	
27.32	Technical Meetings	LS								
									0	
27.33	Quality Assurance / Quality Control	LS								
								5%	4	
27.34	Supervision	LS								
								5%	5	
27.35	Coordination	LS								
								3%	2	
			27. Survey Total	Crew Days	21	Field Support Hours	21	Office Support Hours	81	

SPLS =
PLS =
Office Support =
Total Hours = 102

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	2	2	4		0
Baseline Approval Review	EA	2	2	4		0
Network Control Review	EA	0	0	0		0
Vertical Control Review	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Final Submittal Review	EA	0	0	0		0
Other Meetings	EA	2	2	4		0
Subtotal Technical Meetings				**12**	**Subtotal PM Meetings**	**0**
Progress Meetings (if required by FDOT)	EA	0	0	0	**	- -
Phase Review Meetings	EA	0	0	0	**	- -
Total Meetings				**12**	**Total PM Mtgs (carries to Tab 3)**	**0**
				Carries to 27.32		Carries to Tab 3

Note:
Survey crew days are based on a 3 Man (10 hour day)

**** Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3**