Attachment A

SCOPE OF SERVICES

ENGINEERING SERVICES

FOR CR 115

NASSAU COUNTY, FLORIDA

July 25, 2017

A. PROJECT DESCRIPTION

- 1) The intent of this project to widen and resurface 7.8 miles of CR 115 from Bypass Road to Henry Smith Road in order to provide consistent 11' travel lanes in each direction and extend the life of the existing pavement. This scope of services for CR 115 within the project limits includes:
 - a. Bridge Culvert # 740073 over Little Mills Creek (Triple 11'x8' Box Culverts) – Proposed to be replaced
 - b. Bridge # 740095 over Mills Creek (130' long by 32' wide) No improvements anticipated
 - c. Box Culvert (10'x4') No improvements anticipated assuming no structural issues are discovered
 - d. Box Culvert (10'x4') No improvements anticipated assuming no structural issues are discovered
 - e. Four Minor Cross Drain Culverts No improvements anticipated assuming no structural issues are discovered
 - f. Approximately 170 side drain culverts all will be evaluated for condition, flow capacity and/or horizontal/vertical location and reset or replaced if/as necessary
 - g. Approximately 150 driveways All proposed to be modified / paved to 5'
 - h. Twenty One Named Cross Streets All "intersections" proposed to be improved to some extent (either treated as a driveway connection or as a typical intersection)
 - i. Three Guardrail Locations (total length of 4,550 lf) All proposed to be brought up to current standards if/as necessary
- This scope of services includes all engineering services required to develop final construction documents and obtain all required permits to achieve the project intent.
- 3) The scope of this project is based on information included in the Request for Qualifications (RFQ) NC16-030.

- 4) All services provided within the Scope of Services shall be in accordance with Nassau County Ordinance 99-7 Appendix D Roadway and Drainage Standards as well as the "Construction and Maintenance for Streets and Highways", commonly known as the "Florida Green Book".
- 5) The scope of services includes:
 - a. Data Collection
 - b. Engineering Design Analyses
 - c. Plans and Specifications Preparation
 - d. Utility Coordination
 - e. Right of Way Mapping (none anticipated and thus not included herein)
 - f. Environmental Permitting
 - g. Bid Phase Services
 - h. Post Design Services

B. LUMP SUM PROFESSIONAL SERVICES

The Consultant shall provide the following tasks for a single lump sum amount:

- 1) Data Collection –EltonAlan currently has Geotechnical and Survey field data that was collected previously for Nassau County for the southerly portion of the project (Segment 1). Although this scope includes complete data collection for the northerly portion of the project (Section 2), EltonAlan is proposing a cost savings initiative that supplements the existing data with limited new data as follows:
 - a. <u>Geotechnical Engineering</u> EltonAlan shall supplement the existing geotechnical data previously collected in Segment 1 with limited new data and also collect complete geotechnical data for Segment 2 and provide a detailed Geotechnical report for the entire 7.8 mile project as described below:
 - 1. Auger Borings collected to a depth of 6' left and right of the roadway centerline (with encountered ground water levels and unsuitable materials noted with each sample) at a spacing of 300' within Segment 2 (76 locations) and semi-randomly located in order to supplement existing data within Segment 1 (15 locations)
 - 2. Pavement Cores collected along centerline at a spacing of 1000' within Segment 2 (23 locations) and semi-randomly located in order to supplement existing data within Segment 1 (5 locations)
 - 3. SPT Borings collected to a depth of 20' at each end of proposed end walls for all proposed cross drain culvert replacement locations. Encountered ground water levels and unsuitable materials will be noted with each sample. (2 locations total)

- 4. Limerock Bearing Ratio (LBR) Samples spaced at 2500' along centerline within Segment 2 (9 locations) and semi-randomly located in order to supplement existing data within Segment 1 (3 locations)
- 5. Testing and Geotechnical Engineering Analysis Soil samples for laboratory soil testing will be obtained on a frequency of three samples per stratum per mile. Soil samples for pipe corrosion testing will be also be obtained at each culvert crossing. Sufficient testing will be performed on soils recovered from the borings for classification purposes using the AASHTO and the Unified Soil Classification System for organic content, moisture content, waterberg limits, percent fines, corrosion susceptibility, structural characteristics, LBR and estimated seasonal high groundwater elevations. A geotechnical engineer, registered in the State of Florida, will direct the geotechnical exploration and provide engineering analysis and evaluation of the site and subsurface conditions with respect to the planned construction and imposed loading conditions.
- 6. Geotechnical Report The results of the exploration, testing and engineering analysis will be presented in a report containing the following:
 - Soil Data Sheets
 - Laboratory Test Results
 - Design LBR Results
 - Estimated Seasonal High Groundwater Levels
 - Recommendations concerning the suitability of the subsurface soils for support of the planned roadway.
 - Recommendations concerning the suitability of the subsurface soils for support of the planned culverts.
 - Recommendations for the required site preparation and earthwork construction
- b. <u>Survey</u> EltonAlan shall provide complete survey services within the Segment 2 and limited verification data collection within Segment 1 as part of a Base Survey task. A Supplemental Survey task is also included in case additional Segment 1 survey data is subsequently determined to be required as follows:
 - Base Survey:
 - Project Geodetic Control (3 pairs of GPS points)- Segment 2 only
 - Project Vertical Control Complete for Segment 2, verification for Segment 1
 - Alignment Including R-W and Centerline monumentation ties Complete for Segment 2, verification for Segment 1
 - Topo/DTM Survey Cross sections every 100' for Segment 2, test sections every 500' for Segment 1
 - Geotechnical Boring Locations Stake all required (approximately 135) borings within Segments 1 and 2
 - Jurisdictional Wetlands Locations Complete for Segments 1 and 2
 - Utility Designation Locations Complete for Segments 1 and 2Right of Way and Plat Research – Complete for Segments 1 and 2
 - Survey Data File in Micro Station Complete for Segments 1 and 2

- 2. Supplemental Survey:
 - Project Geodetic Control 2 additional pairs of GPS point for Segment 1
 - Project Vertical Control Complete Vertical Control for Segment 1
 - Alignment Including R-W and Centerline monumentation ties Complete for Segment 1
 - Topo/DTM Survey Cross sections every 100' for Segment 1
 Note: No work will commence on the Supplemental Survey Task without prior written approval from the county.
- 2) Roadway Design Analyses and Plans EltonAlan shall provide a roadway design analysis to ensure that all proposed roadway improvements are in accordance with all applicable local and state requirements as described below:
 - a. <u>Roadway Analysis</u> EltonAlan shall provide a roadway analysis including design documentation of the following elements:
 - i. Field Conditions Perform detailed field visits of the project corridor to review all applicable roadway features
 - ii. Design Traffic Volume Perform a traffic analysis in order to determine the design traffic volumes for the
 - iii. Roadway Typical Sections
 - iv. Pavement Sections
 - v. Roadway Horizontal and Vertical Alignment
 - vi. Opinion of Probable Costs and Construction Duration Estimates at 60%, 100% and Final design phases
 - vii. Roadway Design Report containing all calculations, assumptions and supporting documentation for the development of the roadway design elements.
 - b. <u>Construction Plans and Specifications</u> The Consultant will prepare construction plan sheets, notes and details for a complete set of construction documents to convey the intent and scope of the project in accordance with all applicable local and state requirements.
- 3) **Drainage Analysis** EltonAlan shall provide a drainage design analysis to ensure that all proposed drainage improvements are in accordance with all applicable local and state requirements as described below:
 - Field Conditions Perform detailed field visits to review applicable drainage features within and immediately surrounding the project corridor
 - ii. Master Drainage plan (1" = 200') showing existing contours (from County provided LIDAR data) and field verified data for critical areas such as major drainage ways, storm pipes and bridge structures
 - iii. Hydrology Include as a minimum, hydrologic calculations for existing and final design conditions using 25 years SCS methodology
 - iv. Cross Drain Culverts Design replacement culverts for those proposed to be replaced as described in section A of this scope of services in

- order to meet all applicable local and state hydraulic conveyance, roadway overtopping and rate of discharge requirements.
- v. Roadway Ditches Design the roadside ditches and side drain culverts to adequately convey stormwater runoff to each applicable outfall at a rate not to exceed the current "pre-development" discharge rate.
- vi. Drainage Design Report Provide a drainage design report containing all calculations, assumptions and supporting documentation for the development of all drainage design elements.
- 4) Signing and Pavement Marking Analysis EltonAlan shall provide a signing and pavement marking design analysis to ensure that all proposed signing and pavement marking improvements are in accordance with all applicable local, state and MUTCD requirements as applicable. Included in the analysis will be a No Passing Zone Study as well.
- 5) Utility Coordination The Consultant shall be responsible for coordinating all design with the affected utility companies in order to minimize utility conflicts. The consultant shall re-contact these utilities and submit 60% design plans that include all known existing utilities. The consultant shall make a final contact with these utilities to submit 90% plans that show all proposed roadway and drainage improvements. Utility coordination meetings will be held at the 60%, 90% and Final phases of design.
- 6) Environmental Permitting The Consultant will provide all services (data collection, field surveys, coordination, agency meetings, permit and associated exhibit preparation, etc.) necessary to develop and apply for a permit exemption with the St. Johns River Water Management District. Should the project exceed the thresholds of these authorizations, additional services provided under a future scope of services will be required for the preparation and submittal of either a Standard General or Individual permits through those agencies.
- 7) **Bid Phase Services** The Consultant will prepare a bid package including front end documents for the bidding of this project. The consultant will also formally respond to questions during the bidding phase of the project and prepare a recommendation of the lowest qualified bidder based on the county prepared bid tabulations.

C. LIMITING AMOUNT PROFESSIONAL SERVICES

The Consultant shall provide the following services based on unit rates and estimated staffhours as described below:

8) **Post Design Services -** The Consultant will provide services necessary to assist the County during the construction phase of this project. The consultant will respond to contractor requests for information, review and approve shop drawings, attend meetings as necessary and revise plans as necessary.

D. Project Deliverables

The Consultant shall provide the following deliverables:

- 1) Signed and Sealed Survey
- 2) Preliminary and Final Geotechnical Report
- 3) Utility Clearance Certifications (@ 100%)
- 4) Environmental Permits (@ 90%)
- 5) Construction Duration and Cost Estimates (30%, 60%, 100% and Final)
- 6) Construction Plans and Specifications (30%, 60%, 100% and Final)
- 7) Bid Documents (Final)

E. Project Schedule

The Consultant shall provide the services included herein within a total of nine months from NTP.

					EL	TONALAN ES			100		RT AND FEE					ATTACHMENT "B"
						CR	115 Wid	dening ar Project I		-	7.8					Contract No. CM2448
		Staff Hour Totals				ct Manager / Sr. Engineer	Staffhour Di			Distribution Sr. Designer		CADD Tech / Admin				
Tasks		Raw Hourly Rates Audited FDOT OH Rate: 182,00%				\$60.00	\$55.00 \$100.10			\$40.00 \$72.80		\$18.00 \$32.76		-		
	Audite					\$109.20										
	Profit Rate: 10.00%				\$16.92 \$186.12		\$15.51 \$170.61			\$11.28 \$124.08		\$5.08 \$ 55.84				
	Loaded Labor Rates								Cost Totals							
	Qty.	Unit	Hour per U		Hours	Cost	Hours	Co	st	lours	Cost	Hours	Cost	Co	Cost	Comments
ump Sum Tasks:												-				
ASK 1 - DATA COLLECTION SERVICES																
Survey Base Task							A A A A A A A A A A A A A A A A A A A		оттите принцип подеция подзаваний мессана			THE CONTRACT AND THE CO		\$ 71	1,250.00	Includes alignment/centerline/ROW monumentation entire 7.8 miles, complete Topo/DTM for northerly 4. miles plus test Topo/DTM data collection for southerl 3.5 miles to verify existing survey
Survey Supplemental Task						Service and participation of the service of the ser	do established operations and construction of the construction of			1:		dest (des seus des des des des des des des des des de		\$ 19	9,000.00	Includes additional geodetic control, vertical control, alignment and TOPO/DTM to complete the southerly portion of the project if/as needed (supplemental sur data collection will only proceed upon authorization from Nassau County)
Geotechnical							Personal de de desta de la composito de la com			1		тол по объемент на предоставления по		\$ 45	5,938.70	Includes geotechnical report for entire 7.8 miles, complete geotechnical investigation for northerly 4.3 miles plus test cores to verify the the data included in the existing geotechnical investigation for the southe 3.5 miles.
Environmental - Wetland Delineation and Protected Species Assessment							Continuos continuo co		***************************************			And the second s		\$ 5	,720.00	Includes field data collection for entire project and agency reviews
Data Collection	Subtotal						account of the state of the sta							\$ 141	,908.70	
ASK 2- ROADWAY DESIGN ANALYSIS AND PL	ANS			153 1		7. 4										
Field Review / Site Visit	2	visits x	8	= 16	8	\$ 1,488.96	0	\$	-	8	\$ 992.64	0	\$ -	\$ 2	481.60	4 Hour Trips (incl travel) x two people)
Traffic Analysis		analysis x		= 24	6	\$ 1,116.72	0	\$		16	\$ 1,985.28	2	\$ 111.68			Develop design traffic volumes
Pavement Design	2 0	designs x	4	= 8	2	\$ 372.24	0	\$	-	6	\$ 744.48	0	\$ -	\$ 1	,116.72	In conjunction with geotec analysis
Typical Section Design	1	design x	40	= 40	10	\$ 1,861.20	0	\$	-	26	\$ 3,226.08	4	\$ 223.36	\$ 5	,310.64	Includes cross slope correction and superelevation analyses at locations where warranted
Roadway Design Analysis	7.8	miles x	160	= 1248	312	\$ 58,069.44	0	\$	-	B12	\$100,752.96	124	\$ 6,924.16	\$ 165	,746.56	Initial design, plus revisions/updates @ 90% and Fir
Traffic Control Plan Design Analysis	7.8	miles x	14	= 110	28	\$ 5,211.36	0	\$	-	72	\$ 8,933.76	10	\$ 558.40	\$ 14	,703.52	40 hours for MOT concept development, and 8 hour per mile.
Roadway Plans Preparation																per friite,
Key Sheet	1 ;	sheets x	8	= 8	2	\$ 372.24	0	\$	-	6	\$ 744.48	0	\$ -	\$ 1	,116.72	
Summary of Pay Items	1 :	sheets x	16	= 16	4	\$ 744.48	0	\$	-	11	\$ 1,364.88	1	\$ 55.84	\$ 2	,165.20	Initial development @ 60%, updates @ 90% and Fir
Typical Sections	2 :	sheets x	12	= 24	6	\$ 1,116.72	0	\$	-	16	\$ 1,985.28	2	\$ 111.68	\$ 3	,213.68	CADD work only (Preferred T.S. Developed Previously)
General Notes	1 :	sheets x	12	= 12	3	\$ 558.36	0	\$	-	8	\$ 992.64	1	\$ 55.84	\$ 1	,606.84	
Summary of Quantities Sheets	45 \$	sheets x	4	180	45	\$ 8,375.40	0	\$	-	117	\$ 14,517.36	18	\$ 1,005.12			Initial development @ 60%, updates @ 90% and Fin This item is for CADD work only. Actual computations included in "Quantities" task

ELTONALAN ESTIMATE OF WORK EFFORT AND FEE

CR 115 Widening and Resurfacing

										Project Lengt			8				
					inten	Staffhour Distribution											
	Staff Hour Totals					Project Manager / Sr. Engineer		Sr. Engineer		S			CADD Tech / Admin				
				Hourly R		WWW.MANAGON.O.	\$60.00			\$55.00		\$40	0.00		\$18.00		
	Aud	lited FDOT	OH Rate	e: 182.0	0%		\$109.20	i .	-	\$100.10		\$72	2.80		\$32.76		
		Pr	ofit Rate	e: 10.00	0%		\$16.92			<u>\$15.51</u>	***************************************	\$1	1.28	l	\$5.08		
			Loaded	Labor R	ates		\$186.12			\$170.61		\$12	24.08		\$55.84	Cost Totals	
Tasks	Qty.	Unit	Hou per U	Marie D. Commercial Co		Hours	С	ost	Hours	Cost	Hours	3	Cost	Hours	Cost	Cost	
Project Layout	4	sheets x	8	= 3:	2	8	\$ 1.	.488.96	0	\$ -	21	\$	2,605.68	3	\$ 167.52	\$ 4,262,16	Comments
Roadway Plan and Profiles	75	sheets x		= 30		75		,959.00	0	\$ -	195		24,195.60	30		\$ 39.829.80	
Intersection Detail Sheets	5	sheets x	16	= 80	-	20		722.40	0	\$ -	52	\$		8	\$ 446.72		in the state of th
Soil Survey Sheet	1	sheets x		= 2		1		186,12	0	\$ -	2	\$	-,	-1	\$ (55.84)		
Cross Sections	140	sheets x	1.5	= 21	0	53		,864.36	0	\$ -	137		16,998.96	20	\$ 1,116.80	\$ 27,980.12	2 Property (1997) 10 Property (1997) 10 Property (1997)
Erosion Control Details & Plans	75	sheets x	1	= 75	5	19		,536.28	0	\$ -	49		6,079.92	7		\$ 10,007.08	Escalar control management all banks at the
Traffic Control Typicals and Notes	7	sheets x	8	= 56	6	14	\$ 2,	,605.68	0	\$ -	37	\$	4,590.96	5	\$ 279.20	\$ 7,475.84	
Special Details	3	sheets x	12	= 36	6	9	\$ 1,	675.08	0	\$ -	24	\$		3	\$ 167.52	\$ 4,820.52	
Roadway Design Documentation Report	1	each x	60	= 60	0	15	\$ 2,	791.80	0	\$ -	39	\$		6	\$ 335.04		
Quantities	7.8	miles x	24	= 18	8	47	\$ 8,	747.64	0	\$ -	123	\$	15,261.84	18	\$ 1,005.12		
Cost & Contract Time Estimate	3	each x	12	= 36	3	9	\$ 1,	675.08	0	\$ -	24		2,977.92	3		\$ 4,820.52	1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Technical Specifications	1	each x	24	= 24	4	6	\$ 1,	116.72	0	\$ -	16	\$		2	\$ 111.68	\$ 3,213,68	
Roadway Technical Hours Sub-Tota	I			278	35												
Project Administration / Coordination	3%	х	2785	= 84	4	42	\$ 7,	817.04	0	\$ -	0	\$	-	42	\$ 2,345.28	\$ 10,162.32	Includes coordination / meetings with Nassau County our subs and other stakeholders if/as necessary
QA/QC	5%	х	2785	= 14	0	0	\$	1-	140	\$ 23,885.40	0	\$	-	0	\$ -	\$ 23,885.40	Independent QA/QC performed by subconsultant
Roadway	Total			30	009											\$ 405,010.76	
ASK 3 - DRAINAGE ANALYSIS AND PLANS																for the second	
Field Review / Site Visit	2	each x	8	= 16		8	\$ 1,	488.96	0	\$ -	8	\$	992.64	0	\$ -	\$ 2,481.60	4 Hour Trips (incl travel) x two people)
Drainage Basin Hydrology Analysis	1	each x	80	= 80		20		722.40	0	\$ -	52	\$	6,452.16	8	\$ 446.72		
Design of Cross Drains	1	each x	24	= 24	1	6	\$ 1,	116.72	0	\$ -	16	\$	1,985.28	2	\$ 111.68	\$ 3,213.68	
Design of Roadway Ditches	15.6	miles x	12	= 18	8	47	\$ 8,	747.64	0	\$ -	123	\$	15,261.84	18	\$ 1,005.12	\$ 25,014.60	12 hrs per ditch mile including the design over 150 si street and/or driveway side drain culverts
Box Culvert Structural Design Analysis	0	each x	0	0		0	\$	-	0	\$ -	0	\$	-	0	\$ -	\$ -	Sand cement endwalls for one - triple box culvert and thus no structural analysis anticipated
Drainage Plans Preparation						0	\$	-	0	\$ -	0	\$		0	\$ -	\$ -	
Drainage Maps	14	maps x	16	= 224	_	56		422.72	0	\$ -	146		18,115.68	22		\$ 29,766.88	
Special Drainage Detail Sheets	1	each x	16	= 16		4	2.5	744.48	0	\$ -	11	\$	-,,	1	1	\$ 2,165.20	Detailed grading around box culvert replacement
Summary of Drainage Structures Sheets	2	each x	16	= 32		8		488.96	0	\$ -	21	\$		3	\$ 167.52	\$ 4,262.16	
Ret/Det Pond Detail Sheets	0	each x		0		0	\$	-	0	\$ -	0	\$		0	\$ -	\$ -	None anticipated
Drainage Design Documentation Report	1	each x	60	= <u>60</u>		15	\$ 2,	791.80	0	\$ -	39	\$	4,839.12	6	\$ 335.04	\$ 7,965.96	
	L			640	U						-						
Drainage Technical Hours Sub-Total Project Administration / Coordination	3%	x	640	= 20		10	\$ 1,8	861.20	0	\$ -	0	\$	-	10	\$ 558.40	\$ 2,419.60	Includes coordination / meetings with Nassau County our subs and other stakeholders if/as necessary
Drainage Technical Hours Sub-Total	3% 5%	x	640	= 20			\$ 1,8 \$	861.20		\$ - \$ 5,459,52	0	\$	-	10	\$ 558.40 \$ -	\$ 2,419.60 \$ 5,459.52	Includes coordination / meetings with Nassau County, our subs and other stakeholders if/as necessary Independent QA/QC performed by subconsultant

ELTONALAN ESTIMATE OF WORK EFFORT AND FEE CR 115 Widening and Resurfacing Project Length (miles): 7.8 Staffhour Distribution Project Manager / Sr. **Staff Hour Totals** Engineer Sr. Engineer Sr. Designer CADD Tech / Admin Raw Hourly Rates \$60.00 \$55,00 \$40.00 \$18.00 Audited FDOT OH Rate: 182.00% \$109.20 \$100,10 \$72.80 \$32.76 Profit Rate: 10.00% \$16.92 \$15.51 \$11.28 \$5.08 Loaded Labor Rates \$186.12 \$170.61 \$124.08 \$55.84 **Cost Totals** Hours Total Hours Cost Hours Cost Hours Cost Hours Cost Cost ner Unit Hours Tasks Comments TASK 4 - SIGNING AND PAVEMENT MARKING ANALYSIS AND PLANS Field Review / Site Visit = 8 744.48 4 n \$ -4 \$ 496.32 1,240.80 4 Hour Trips (incl travel) x two people) SAPM Analysis 7.8 miles x 12 = 94 24 \$ 4,466.88 0 \$ 62 \$ 7,692,96 8 \$ 446.72 \$ 12,606,56 No Passing Zone Study 7.8 miles x 6 = 47 12 2,233.44 \$ 0 \$ 31 \$ 3.846.48 \$ 223.36 \$ 6,303.28 8 hrs per mile for data collection, analysis and report SAPM Plans 0 0 \$ 0 \$ 0 \$ \$ Key Sheet each x = 4 186.12 0 \$ 3 \$ 372.24 0 558.36 \$ \$ Tabulation of Quantities 12 each x = 12 3 558.36 0 \$ \$ 8 992.64 55.84 \$ \$ 1,606.84 General Notes each x 12 = 12 3 558.36 0 \$ 8 \$ 992.64 \$ 55.84 \$ 1,606,84 Plan Sheets 2 each x 12 = 24 6 \$ 1.116.72 0 \$ 16 \$ 1,985.28 2 \$ 111.68 3,213,68 Typical Striping Plans Special Details 5 each x 8 = 40 10 \$ 1,861,20 0 \$ 26 \$ 3,226.08 4 223.36 5,310.64 Intersection Details SPM Technical Hours Sub-Total 241 Includes coordination / meetings with Nassau County, Project Administration / Coordination 3% 241 = X 8 \$ 744.48 0 0 \$ \$ 223.36 our subs and other stakeholders if/as necessary QA/QC 5% 241 = 13 X 0 \$ 13 \$ 2,217.93 0 0 \$ 2,217.93 Independent QA/QC performed by subconsultant Signing / Pavement Marking Total 262 35,632,77 TASK 5 - Utility Coordination Alltell, FPL, Quest, Comcast, Williams, Okeefenokee, Utility Contacts (Letters) each x 11 2 22 = \$ 0 \$ \$ 1,228.48 1,228.48 Windstream, MCI, AT&T, Southern Gas, Level 3 Utility Relocation Plans 30 sheets x = 60 \$ 2,791.80 0 \$ 39 \$ 4,839.12 6 \$ 335.04 7,965.96 100 Scale Utility Coordination / followup Includes utility plans research and coordinating with 11 each x = 22 \$ 2,047,32 0 \$ -11 \$ 1,364.88 0 \$ 3.412.20 "Sunshine One Call" Utility Certification 11 each x = 11 \$ 2,047.32 0 \$ 0 \$ 0 \$ 2,047.32 Utility CoordinationTotal 115 14,653.96 \$ TASK 6 - ENVIRONMENTAL PERMITTING SJRWMD Permitting (wetlands only) each x 24 = 24\$ 1,116.72 0 \$ 16 \$ 1.985.28 \$ 111.68 2 3,213.68 | Wetlands (no protected species permitting anticipated) USACOE Permitting 24 each x = 24 6 \$ 1,116.72 0 \$ \$ 111.68 16 \$ 1,985.28 2 3.213.68 Wetlands Stormwater Permitting (Documentation / each x 40 40 10 \$ 1,861.20 \$ 26 \$ 3,226.08 \$ 223.36 application for exemption) 5,310.64 Permit Meetings 4 2 Mtgs Each with SJRWMD, USACOE @ 4 Hrs each each x 4 = 16 \$ 1,488.96 \$ 0 \$ 992.64 0 \$ 2,481.60 incl 2 attendees, preparation and minutes **Permitting Total** 104 14,219.60 \$7,619.60 TASK 7 - BID PHASE SERVICES Development of Final Bid Package each x 16 = 16 744.48 11 \$ 1,364.88 55.84 \$ 2.165.20 Contractor inquiry response, pre-bid mtg each x 24 = 24 \$ 1,116.72 16 \$ 1,985,28 2 \$ 111.68 3.213.68 attendance, bid review and recommendation \$ **Bid Phase Services Total** 40 5,378.88 TOTAL LUMP SUM AMOUNT (Tasks 1-7 above) \$ 710,175.15 Total Lump Sum Amount

		ELTONALAN ES	STIMATE OF WORI	K EFFORT AND FE	E ,		
		CR 1	115 Widening and Res	surfacing h (miles): 7 8			
			Staffhour I	Distribution			
	Staff Hour Totals	Project Manager / Sr. Engineer	Sr. Engineer	Sr. Designer	CADD Tech / Admin		
	Raw Hourly Rates	\$60.00	\$55.00	\$40.00	\$18.00		
	Audited FDOT OH Rate: 182,00%	\$109.20	\$100.10	\$72.80	\$32.76		
	Profit Rate: 10.00%	<u>\$16.92</u>	<u>\$15.51</u>	<u>\$11.28</u>	\$5.08		
	Loaded Labor Rates		\$170.61	\$124.08	\$55.84	Cost Totals	
Tasks	Qty. Unit Hours Total per Unit Hours	Hours Cost	Hours Cost	Hours Cost	Hours Cost	Cost	Comments
imiting Amount Tasks:							Comments
TASK 8 - POST DESIGN SERVICES							
Post Design Services		20 \$ 3,722.40	0 \$ -	8 \$ 992.64	8 \$ 446.72	\$ 5,161.76	
				TOTAL LIMITING AN	OUNT (Task 8 above)	\$ 5,161.76	Total Limiting Amount
			тс	TAL CONTRACT AMOL	JNT (Tasks 1-8 above)	\$ 715,336.91	Total Contract Amount

GENERAL INFORMATION AND MINIMUM INSURANCE REQUIREMENTS

COMMERCIAL GENERAL LIABILITY INSURANCE

The Contractor shall purchase and maintain at the Contractor's expense Commercial General Liability insurance coverage (ISO or comparable Occurrence Form) for the life of this Contract. Modified Occurrence or Claims Made forms are not acceptable.

The Limits of this insurance shall not be less than the following limits:

Each Occurrence Limit	\$1,000,000
Personal & Advertising Injury Limit	\$1,000,000
Fire Damage Limit (any one fire)	\$ 300,000
Medical Expense Limit (any one person)	\$ 10,000
Products & Completed Operations Aggregate Limit	\$2,000,000
General Aggregate Limit (other than Products &	
Completed Operations) Applies Per Project	\$2,000,000

General liability coverage shall continue to apply to "bodily injury" and to "property damage" occurring after all work on the Site of the covered operations to be performed by or on behalf of the additional insureds has been completed and shall continue after that portion of "your work" out of which the injury or damage arises has been put to its intended use.

WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE

The Contractor shall purchase and maintain at the Contractor's expense Workers' Compensation and Employer's Liability insurance coverage for the life of this Contract.

The Limits of this insurance shall not be less than the following limits:

<u>Part One</u> – Workers' Compensation Insurance – Unlimited

Statutory Benefits as provided in the Florida Statutes and

Part Two - Employer's Liability Insurance

Bodily Injury By Accident Bodily Injury By Disease Bodily Injury By Disease \$500,000 Each Accident \$500,000 Policy Limit

\$500,000 Folloy Emilt \$500,000 Each Employee

AUTOMOBILE LIABILITY INSURANCE

The Contractor shall purchase and maintain at the Contractor's expense Automobile Liability insurance coverage for the life of this Contract.

The Limits of this insurance shall not be less than the following limits:

Combined Single Limit - Each Accident

\$1,000,000

Covered Automobiles shall include any auto owned or operated by the insured Contractor, insured Subsubcontractor including autos which are leased, hired, rented or borrowed, including autos owned by their employees which are used in connection with the business of the respective Contractor or Sub-subcontractor.

UMBRELLA INSURANCE

The Contractor shall purchase and maintain at the Contractor's expense Umbrella Liability (Umbrella Form) insurance coverage for the life of this Contract.

The Limits of this insurance shall not be less than the following limits:

Each Occurrence Limit Aggregate Limit

\$1,000,000 \$1,000,000

^{*}If leased employees are used, policy must include an Alternate Employer's Endorsement

PROFESSIONAL LIABILITY (ERRORS & OMISSIONS)

This additional coverage will be required for all projects involving consultants, engineering services, architectural or design/build projects, independent testing firms and similar exposures.

The Contractor shall purchase and maintain at the Contractor's expense Professional Liability insurance coverage for the life of this Contract.

If the contract includes a requirement for Professional Liability or Errors and Omissions insurance, the minimum amount of such insurance shall be as follows:

Each Occurrence/Annual Aggregate
Project Specific OR
Each Occurrence/Annual Aggregate

\$1,000,000

\$1,000,000 / \$3,000,000

Design Professional Liability coverage will be provided on an Occurrence Form or a Claims Made Form with a retroactive date to at least the first date of this Agreement. If provided on a Claims Made Form, the coverages must respond to all claims reported within three years following the period for which coverage is required and which would have been covered had the coverage been on an occurrence basis.

ENVIRONMENTAL LIABILITY INSURANCE

This additional coverage will be required by any Contractor performing environmental and/or other investigations involving excavation, drilling, or other site disturbance activities.

The Contractor shall purchase and maintain at the Contractor's expense Environmental Liability insurance (Contractors Pollution Liability) coverage for the life of this Contract.

The Limits of insurance shall not be less than the following limits:

\$1,000,000 Each Loss/Aggregate

Such Coverage will include bodily injury, sickness, and disease, mental anguish or shock sustained by any person, including death; property damage including physical injury to destruction of tangible property including resulting loss of use thereof, cleanup costs, and the loss of use of tangible property that has not been physically injured or destroyed; defense including costs charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages; coverage for losses caused by pollution conditions that arises from the operations of the contractor including transportation.

BUILDERS RISK OR INSTALLATION FLOATER

This additional coverage will be required if the contract includes construction of or additions to above-ground buildings or structures, or installation of machinery or equipment.

The minimum amount of insurance shall be 100% of the completed value of such addition(s), building(s), or structure(s), or the installed replacement cost of value.

Contractor shall require each of his Subcontractors to likewise purchase and maintain at their expense Commercial General Liability insurance, Workers' Compensation and Employer's Liability coverage, Automobile Liability insurance, Umbrella Liability Professional Liability, Environmental Liability, Builders Risk or Installation Floater (as applicable) insurance coverage meeting the same limit and requirements as the Contractors insurance.

Certificates of Insurance acceptable to Nassau County Board of County Commissioners for the Contractor's insurance must be received within five (5) days of Notification of Selection and at time of signing Agreement.

Certificates of Insurance and the insurance policies required for this Agreement shall contain an endorsement that coverage afforded under the policies will not be cancelled or allowed to expire until at least thirty (30) days prior written notice has been given to Nassau County Board of County Commissioners.

Certificates of Insurance and the insurance policies required for this Agreement will include a provision that policies, except Workers' Compensation and Professional Liability, are primary and noncontributory to any insurance maintained by the Contractor.

Nassau County Board of County Commissioners must be named as an Additional Insured and endorsed onto the Commercial General Liability (CGL), Auto Liability and Umbrella Liability policy (ies). A copy of the endorsement(s) must be supplied to Nassau County Board of County Commissioners ten (10) days following the execution of the agreement or prior to the first date of services, whichever comes first.

CGL policy Additional Insured Endorsement must include Ongoing and Completed Operations (Form CG2010 11 84 **OR** Form CG2010 04 13 <u>and GC2037 04 13</u> edition or equivalent). Other Additional Insured forms might be acceptable but only if modified to delete the word "ongoing" and insert the sentence "Operations include ongoing and completed operations".

CGL policy shall not be endorsed with Exclusion - Damage to Work performed by Subcontractors on Your Behalf (CG2294 or CG2295)

CGL policy shall not be endorsed with Contractual Liability Limitation Endorsement (CG2139) or Amendment of Insured Contract Definition (CG 2426)

CGL policy shall not be endorsed with Exclusion - Damage to Premises Rented to you (CG 2145) CGL policy shall include broad form contractual liability coverage for the Contractors covenants to and indemnification of the Authority under this Contract

Certificates of Insurance and the insurance policies required for this Agreement shall contain a provision under General Liability, Auto Liability and Workers' Compensation to include a Waiver of Subrogation clause in favor of Nassau County Board of County Commissioners.

All Certificates of Insurance shall be dated and shall show the name of the insured Contractor, the specific job by name and job number, the name of the insurer, the policy number assigned its effective date and its termination date and a list of any exclusionary endorsements.

All Insurers must be authorized to transact insurance business in the State of Florida as provided by Florida Statute 624.09(1) and the most recent Rating Classification/Financial Category of the insurer as published in the latest edition of "Best's Key Rating Guide" (Property-Casualty) must be at least A- or above.

All of the above referenced Insurance coverage is required to remain in force for the duration of this Agreement and for the duration of the warranty period. Accordingly, at the time of submission of final application for payment, Contractor shall submit an additional Certificate of Insurance evidencing continuation of such coverage.

If the Contractor fails to procure, maintain or pay for the required insurance, Nassau County Board of County Commissioners shall have the right (but not the obligation) to secure same in the name of and for the account of Contractor, in which event, Contractor shall pay the cost thereof and shall furnish upon demand, all information that may be required to procure such insurance. Nassau County Board of County Commissioners shall have the right to back-charge contractor for the cost of procuring such insurance. The failure of Nassau County Board of County Commissioners to demand certificates of insurance and endorsements evidencing the required insurance or to identify any deficiency in contractors coverage based on the evidence of insurance provided by the contractor shall not be construed as a waiver by Nassau County Board of County Commissioners of contractor's obligation to procure, maintain and pay for required insurance.

The insurance requirements set forth herein shall in no way limit Contractors liability arising out of the work performed under the Agreement or related activities. The inclusions, coverage and limits set forth herein are minimum inclusion, coverage and limits. The required minimum policy limits set forth shall not be construed as a limitation of Contractor's right under any policy with higher limits, and no policy maintained by the Contractor shall be construed as limiting the type, quality or quantity of insurance coverage that Contractor should maintain. Contractor shall be responsible for determining appropriate inclusions, coverage and limits, which may be in excess of the minimum requirements set forth herein.

If the insurance of any Contractor or any subcontractor contains deductible(s), penalty(ies) or self-insured retention(s), the Contractor or Subcontractor whose insurance contains such provision(s) shall be solely responsible for payment of such deductible(s), penalty(ies) or self-insured retention(s).

The failure of Contractor to fully and strictly comply at all times with the insurance requirements set forth herein shall be deemed a material breach of the Agreement.