WORK AUTHORIZATION # CM2286-WA04
NASSAU COUNTY
BOARD OF COUNTY COMMISSIONERS
CONTINUING CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES
RFQ/BID NO. NC14-026

Consultant:	Civil Services, Inc.
Contract Number:	CM2286
Contact Name:	Ali A. Najafi, P.E..
Contact Number:	904-309-8593
Email:	anajafi@civilservicesinc.com

CURRENT WORK AUTHORIZATION			
Project Short Title: Widening of Miner Road South for a Right Turn Lane at SR 200/ SR AIA			
		CONTRACT OVERVIEW	
		Total of Previous Authorizations	$140,850.95
Date Submitted	4/24/19	**Adjustments/Change Orders**	$0
Amount	$84,865.79	**This Work Authorization**	$84,865.79
Scheduled Completion		**Current Contract Total**	$225,716.74

This Work Authorization is to the AGREEMENT between Nassau County and the Consultant known as the Continuing Contract for Professional Engineering Services for Nassau County, Florida, dated May 9, 2016. The services to be provided under this Work Authorization are as follows:

ARTICLE 1. Services Described as:

Civil Services, Inc. shall provide professional engineering services for the widening of Miner Road for a right turn lane at SR 200/SR AIA Intersection, pursuant to the scope of services dated March 26, 2019, attached hereto as Attachment "A".

ARTICLE 2. Time Schedule

The estimated time for completion of this work authorization is six (6) months from the issuance of a Notice to Proceed.

ARTICLE 3. Budget

Civil Services, Inc.'s fee for the professional services outlined in the Scope of Services is $84,865.79. See estimate of work effort, attached hereto as Attachment "B"

Article 4. Other Provisions

The Services covered by this Work Authorization will be performed in accordance with the provisions set forth in the AGREEMENT referenced above and any of its attachments or schedules. This Work Authorization will become a part of the referenced AGREEMENT when executed by both parties.

CS-18-203

In presenting this Work Authorization, Consultant agrees that:

Unless detailed herein, all drawings, data, electronic files and other information required for this Work Authorization has been accepted by Consultant. Specifically, all electronic files have been reviewed and accepted for the purposes of this Work assignment. Any additional information, including detailed scope of services are attached.

AGREED TO BY:

BY: _____
Print Name: Christopher E. Morse
Title: President
Date: April 24, 2019

RECOMMENDED AND APPROVED BY NASSAU COUNTY:

Director of Engineering Services: _____
Laura A. Borgesi

Board of County Commissioners, Chair: _____
Justin M. Taylor

Ex-Officio Clerk: (see below)
John Crawford

County Attorney: _____
Michael Mullin

APPROVED by the BOARD OF COUNTY COMMISSIONERS, the 13th day of May, 2019

ACCOUNT NO.:

Attestation: Only to Authenticity as to Chairman's Signature:

_____
John A. Crawford, Ex-Officio Clerk

MES 05.16.19

Civil Services, Inc.
Consulting Engineers

BRIDGE • ROADWAY • CIVIL • WATER RESOURCES

Jacksonville • Atlanta • Riviera Beach • Augusta

Attachment "A"

April 24, 2019

Mr. Robert Companion.
Nassau County Public Works Department
96161 Nassau Place
Yulee, FL 32097

Re: Widening of Miner Road South for a Right Turn Lane at SR 200 / AIA Intersection

Dear Mr. Companion:

Civil Services, Inc. (CSI) is pleased to submit the following proposal for providing professional engineering services for the Miner Road right turn lane widening at SR 200 / AIA at intersection. This Exhibit forms an integral part of the agreement between the Nassau County Public Works Department (hereinafter referred to as the "COUNTY") and Civil Services, Inc. (CSI) (hereinafter referred to as the "CONSULTANT") relative to the transportation facility described as follows:

Description: The purpose of this project is to provide design services for widening of the Miner Road South to have a right turn lane onto SR 200 / AIA in Yulee, Florida.

I. PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of the CONSULTANT and the COUNTY in connection with design services for the above project. It shall be the CONSULTANT'S responsibility to utilize the very best engineering judgment, practices and principles possible during the prosecution of the work commissioned under this contract.

The CONSULTANT shall demonstrate good project management practices while working on this project. These include communication with the COUNTY and Florida Department of Transportation and others as necessary, management of time and resources and documentation.

2394 St. Johns Bluff Road, South • Jacksonville, Florida 32246 • (904) 641-1834 • Fax 645-0057
email: csi@civilservicesinc.com • internet: www.civilservicesinc.com

II. PROJECT OBJECTIVE

The project objective is that CONSULTANT will design and prepare a set of construction plans suitable for bidding purposes.

All of the design is to be conducted in accordance with the latest standard specifications adopted by FDOT Standard Specifications, FDOT Standard Plans and directions provided by the COUNTY.

CSI shall design and prepare a complete set of construction plans suitable for bidding purposes.

A. Design Approach

CSI will thoroughly review the project. The key personnel involved in designing the project will participate in field reviews. Data collection will be done at the very beginning of the project. A thorough field review by members of the design team will be accomplished to become familiar with the project details. The plan sheets anticipated include Key Sheet, Summary of Pay Items, Summary of Quantities, General Notes, Plan Sheets, Drainage Sheets, Traffic Control Plans, Soil Survey Sheet and Signalization Plans.

B. Roadway Design

CSI will develop roadway plans, cost estimates and recommendations for review and approval by the COUNTY and Florida Department of Transportation. CSI will perform any necessary field reviews to obtain dimensions not shown on existing plans. The roadway design shall include but not be limited to the following:

1. General Project Information which includes general plan and details and other miscellaneous details
2. Provide cost estimates.
3. Utilities: Address the impact of existing utilities during the construction phase. Identify all impacted utilities including type, location and contact information for utility coordination.

Survey & Utility Subsurface Engineering: By Cardno, Inc. Please refer to the attached survey and SUE scope of work.
Signalization Design: By Peters & Yaffee, (P&Y)Inc.
Geotechnical Engineering: By CSI-Geo Please refer to the attached geotechnical scope

C. Phase II: 60% Plans

CSI will develop 60% Design Roadway and Signalization Plans for review and approval by COUNTY and Florida Department of Transportation.

Phase III: 90% Plans Submittal:
After the approval of the 60% Plans Submittal and after resolving all the 60% Plans review comments, CSI will submit 90% Plans for review and approval by the County and Florida Department of Transportation.

Phase IV: 100% Plans Submittal:
The 100% Plans will incorporate all 90% review comments (not through ERC system) from FDOT and COUNTY and response to review comments.

D. Traffic Control Plans:
The maintenance of traffic plans to be designed by Civil Services, Inc. Design the appropriate Maintenance of Traffic concept. Prepare the MOT sheet(s) showing all signage and appropriate notations per FDOT Design Standards.

E. Utility Coordination:

The CSI team will provide all utility coordination for the project. The CSI will identify which utilities exist within the corridor by calling Sunshine 811 "design" ticket listing all utility owners within the project limit. CSI will prepare a Utility Conflict Matrix for all utilities which may be impacted by construction activities. CSI will prepare the minutes of the utility meetings. CSI will review the Utility Work Schedules (if project requires it) to make sure that they are compatible with the construction plans.

The following phase submittals shall adhere to the requirements of the FDOT Roadway Plans Preparation Manual for the project:

1. Phase II (60%)
2. Phase III (90%)
3. Phase IV (100%)

4. F. Specifications:

The CSI will provide specifications including upfront bidding instructions, so the project will be ready for the bidding.

Our total engineering fee for the above referenced tasks is Lum Sum of $75,908.25.
Subsurface Utility Engineering fee of $8,957.54 will be based on as needed basis.
A breakdown of fees is shown below. CEI is not included in this fee proposal.

BREAKDOWN OF PROPOSED FEES

TASK		FEE
I.	**Roadway Design** (Civil Services, Inc.)	**$ 46,118.89**
II.	**Survey & SUE Services** (Cardno, Inc.)	**$ 13,276.56**
III.	**Signalization Design** (Peters & Yaffee, Inc.)	**$13,131.80**
IV.	**Geotechnical Engineering** (CSI-Geo)	**$3,381.00**
Total Lum Sum Fee:		**$75,908.25**
Total Limiting Amount Fee:		**$8,957.54**
Total Lum Sum & Limiting Amount:		**$84,862.79**

Upon your review and concurrence, please sign and return one copy of this proposal for our record.

Sincerely,
CIVIL SERVICES, INC.

Christopher Morse, P.E.
President

Approved:
NASSAU COUNTY PUBLIC WORKS DEPARTMENT

Robert Companion
Nassau County Public Works

SCOPE OF SERVICES
Surveying
&
Subsurface Utility Engineering

SCOPE:

The goal of this project it to provide a right turn lane from Miner Road onto SR 200. Cardno is task to provide the Surveying and Subsurface Utility Engineering necessary for Civil Services Inc. (CSI) to provide the design of the right turn lane.

The following tasks will be conducted by Cardno:

- *Establish horizontal project control on Florida State Plane Coordinates Florida East Zone tied to the FDOT SR 200 project FPID 210712-4.*
- *Establish vertical project control on NAVR 88 datum tied to the FDOT SR 200 project FPID 210712-4.*
- *Establish an alignment on Miner road throughout project limits based on centerline of existing pavement and tied to existing Right of way of Minor Road and SR 200 alignment. Stake the alignment on Miner Road only at the beginning and ending stations, PC, PT and non-curve PI.*
- *Reference beginning and ending stations, PC, PT and Non Curve PI. References will be 2 point in each Direction set at arbitrary distances from Centerline (**does not** include preparing Reference sheet for Engineer)*
- *Provide 3D TOPO/DTM through project limits being right of way to right of way on Miner Road and out 10 feet beginning at the edge of pavement of east bound SR 200 and running down Miner road for a distance of 600 feet.*
- *Provide ASCE Quality Level "B "Designating (Horizontal marking of subsurface utility mains) within project limits.*
- *Provide Survey of the ASCE Quality Level "B" Designating results.*

OPTIONAL SERVICES:

- *Provide up to 16 ASCE Quality Level "A" Locating (VVH Test Holes) on potential utility Conflicts with the proposed design. Based on two mobilizations to complete the 16 VVH.*
- *Provide Survey of the ASCE Quality Level "A" Locating results.*

Schedule:

The above outlined surveying and subsurface utility engineering will be completed within 3 weeks (weather permitting) of receiving a written notice to proceed (NTP) with terms and conditions acceptable to Cardno.

CSIGeo
Geotechnical · CMT · CEI

GEOTECHNICAL SCOPE OF WORK
Miner Road Right Turn Lane at SR 200
Yulee, Florida

PROPOSED GEOTECHNICAL EXPLORATION

Field Exploration - The proposed exploration will consist of geotechnical studies and the collection of subsurface data as follows:

Right Turn Lane- Auger borings will be performed to depth of 5.0 feet on one hundred feet spacing along the proposes right turn lane. Soil samples for laboratory soil testing will be obtained on a frequency of three samples per stratum per mile. Work will also include review of the encountered ground water levels and estimation of the seasonal high ground water levels.

Soil samples will be classified, containerized, and marked in the field and returned to the laboratory for visual inspection and classification by the geotechnical engineer using the AASHTO and Soil Classification System.

Laboratory Testing - Routine laboratory testing will be conducted on representative soil samples to determine classification. Laboratory classification and index soil tests will be performed as necessary on selected soil samples obtained from the exploration. Specific tests to be performed are Organic Content, Moisture Content, Atterberg Limits, Percent Fines, and Gradation Tests.

Engineering/Support Services - 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. The results of the exploration will be presented in a report containing the following:

- A brief discussion of the planned construction.
- A graphical representation of the subsurface conditions encountered as well as the existing on-site conditions, such as topography, surface vegetation, encountered and seasonal high water tables, etc., as they relate to the planned construction.
- A report of tests sheet that summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standards.
- An appendix that contains stratified soil boring profiles, and laboratory test data sheets.
- Written discussion of the subsurface conditions encountered.
- Evaluation of the subsurface soils and recommendations concerning the suitability of the subsurface soils for support of the planned right turn lane.
- Recommendations for the required site preparation and earthwork construction.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Miner Road / Nassau County - CSI GEC Contract
County: Nassau
A/E Contract No.:
Statement of Work No.:

Consultant Name: Cardno
Consultant No:
Date: 3/21/2019
Estimator:

Staff Classification	Total Staff Hours From "SH Summary - Firm"	SUR Chief Surveyor	SUR Senior Project Surveyor	SUR Project Surveyor	SUR Survey /GIS/SUE Analyst 3 (Senior)	Secretary Clerical	Senior Utility Coordinator	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
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!
6. Drainage Analysis	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)	40	2	6	16	8	8	0	0	0	0	0	0	0	40	$4,043	$101.06
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. Geotechnical	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!
Total Staff Hours	40	2	6	16	8	8	0	0	0	0	0	0	0	40		
Total Staff Cost		$359.50	$1,071.00	$1,392.80	$646.88	$572.32	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		$4,042.50	$101.06
														Check =	$4,042.50	

Notes:
1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.

2. Crew days are based on 11 hour days

SALARY RELATED COSTS:				**$4,042.50**
OVERHEAD				$0.00
OPERATING MARGIN				$0.00
FCCM (Facilities Capital Cost Money)				$0.00
EXPENSES.				$0.00
SURVEY EFFORT	**3.00**	**Total Crew Days**		
2 Person Survey Crew	33.00	Hours	148.44 / hour	$4,898.52
		Total Survey Effort		**$4,898.52**
DESIGNATING EFFORT	**2.00**	**Total Crew Days**		
2 Person Designating Crew	22.00	Hours	/ hour	$4,335.54
		Total Designating Effort		**$4,335.54**
LOCATING EFFORT	**0.00**	**Total Crew Days**		
3 Person Locating Crew	0.00	Hours	hour	$0.00
Designating Truck	0.00	Hours	hour	$0.00
		Total Locating Effort		**$0.00**
Maintenance of Traffic	0	Hours	hour	$0.00
Subconsultant Sub 2				
SUBTOTAL ESTIMATED FEE:				**$13,276.58**
Geotechnical Field and Lab Testing				
SUBTOTAL ESTIMATED FEE:				**$13,276.56**
GRAND TOTAL ESTIMATED FEE:				**$13,276.56**

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Miner Road - Nassau County - CSI GEC Contract
County: Nassau
A/E Contract No
Statement of Work No

Consultant Name: Cardno
Consultant No.
Date: 3/21/2019
Estimator:

Staff Classification	Total Staff Hours From SH Summary - Form	SUR Chief Surveyor	SUR Senior Project Surveyor	SUR Project Surveyor	SUR Survey /GIS/SUE Analyst 3 (Senior)	Secretary Clerical	Senior Utility Coordinator	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
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!
6. Drainage Analysis	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)	17	0	1	4	8	4	0	0	0	0	0	0	0	17	$1,460	$85.87
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. Geotechnical	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!
Total Staff Hours	17	0	1	4	8	4	0	0	0	0	0	0	0	17		
Total Staff Cost		$0.00	$178.50	$348.20	$646.88	$286.16	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		$1,459.74	$85.87
														Check	$1,459.74	

Notes:
1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.
2. Crew days are based on 10 hour days

SALARY RELATED COSTS:			$1,459.74
OVERHEAD			$0.00
OPERATING MARGIN			$0.00
FCCM (Facilities Capital Cost Money)			$0.00
EXPENSES:			$0.00
SURVEY EFFORT	**0.50**	**Total Crew Days**	
2 Person Survey Crew	5.00	Hours @ hour	$742.20
		Total Survey Effort	**$742.20**
DESIGNATING EFFORT	**0.00**	**Total Crew Days**	
2 Person Designating Crew	0.00	Hours @ hour	$0.00
		Total Designating Effort	**$0.00**
LOCATING EFFORT	**2.00**	**Total Crew Days**	
3 Person Locating Crew	20.00	Hours @ hour	$6,215.60
Designating Truck	20.00	Hours @ hour	$540.00
		Total Locating Effort	**$6,755.60**
Maintenance of Traffic	0	Hours @ hour	$0.00
Subconsultant Sub 2			
SUBTOTAL ESTIMATED FEE:			**$8,957.54**
Geotechnical Field and Lab Testing			
SUBTOTAL ESTIMATED FEE:			**$8,957.54**
GRAND TOTAL ESTIMATED FEE:			**$8,957.54**

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Miner Road At SR 200 Right Turn Lane
County: Nassau
FPN: 0
FAP No.: 1/0/1900

Consultant Name: Peters and Yatlee, Inc.
Consultant No.: enter consultants proj number
Date: 3/21/2019
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary Firm"	Principal	Sr. Engineer	Engineer	Engineering Intern	Designer	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
		$214.29	$182.89	$113.27	$76.23	$69.91	$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	62	12	12	12	12	12	0	0	0	0	0	0	0	60	$7,879	$131.32
22. Signalization Plans	38	8	8	8	8	8	0	0	0	0	0	0	0	40	$5,253	$131.32
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	100	20	20	20	20	20	0	0	0	0	0	0	0	100		
Total Staff Cost		$4,285.80	$3,657.80	$2,265.40	$1,524.60	$1,398.20	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		$13,131.80	$131.32

Check = $13,131.80

SALARY RELATED COSTS:					$13,131.80
OVERHEAD:					$0.00
OPERATING MARGIN:					$0.00
FCCM (Facilities Capital Cost Money):					$0.00
EXPENSES:					$0.00
SUBTOTAL ESTIMATED FEE:					**$13,131.80**
Survey (Field)	0	4-person crew	$ -	/ day	$0.00
Geotechnical Field and Lab Testing					$0.00
SUBTOTAL ESTIMATED FEE:					**$13,131.80**
Optional Services					$0.00
GRAND TOTAL ESTIMATED FEE:					**$13,131.80**

Notes:

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

CSIGeo
Geotechnical · CMT · CEI

GEOTECHNICAL COST ESTIMATE
Miner Road Right Turn Lane at SR 200
Yulee, Florida

2394 St. Johns Bluff Road, S
Suite 200
Jacksonville, Florida 32246
tell (904) 641-1993
fax (904) 645-0057

Item Description	Unit	Number of Units	Cost / Unit	Estimated Cost
Field Investigation				
Mobilization/Demobilization - Truck	ea.	1	$550.00 /ea.	$550.00
6 Auger Borings @ 5' ea.	ft.	30	$10.50 /ft.	$315.00
Boring Layout/Utility Clearance/Coordination	hr.	6	$120.00 /hr.	$720.00
Subtotal:				**$1,585.00**
Laboratory Testing				
Organic Content	ea.	3	$37.00 /ea.	$111.00
Natural Moisture Content	ea.	3	$21.00 /ea.	$63.00
Single Sieve Grain Analysis	ea.	3	$39.00 /ea.	$117.00
Grain Size Analysis	ea.	3	$67.00 /ea.	$201.00
Atterberg Limits	ea.	2	$99.00 /ea.	$198.00
Subtotal:				**$690.00**
Engineering/Support Services				
Senior Geotechnical Engineer	hr.	1	$170.00 /hr.	$170.00
Geotechnical Engineer	hr.	2	$155.00 /hr.	$310.00
Geotechnical Staff Engineer	hr.	3	$120.00 /hr.	$360.00
CADD	hr.	2	$108.00 /hr.	$216.00
Clerical	hr.	1	$50.00 /hr.	$50.00
Subtotal:				**$1,106.00**
TOTAL (Estimated):				**$3,381.00**