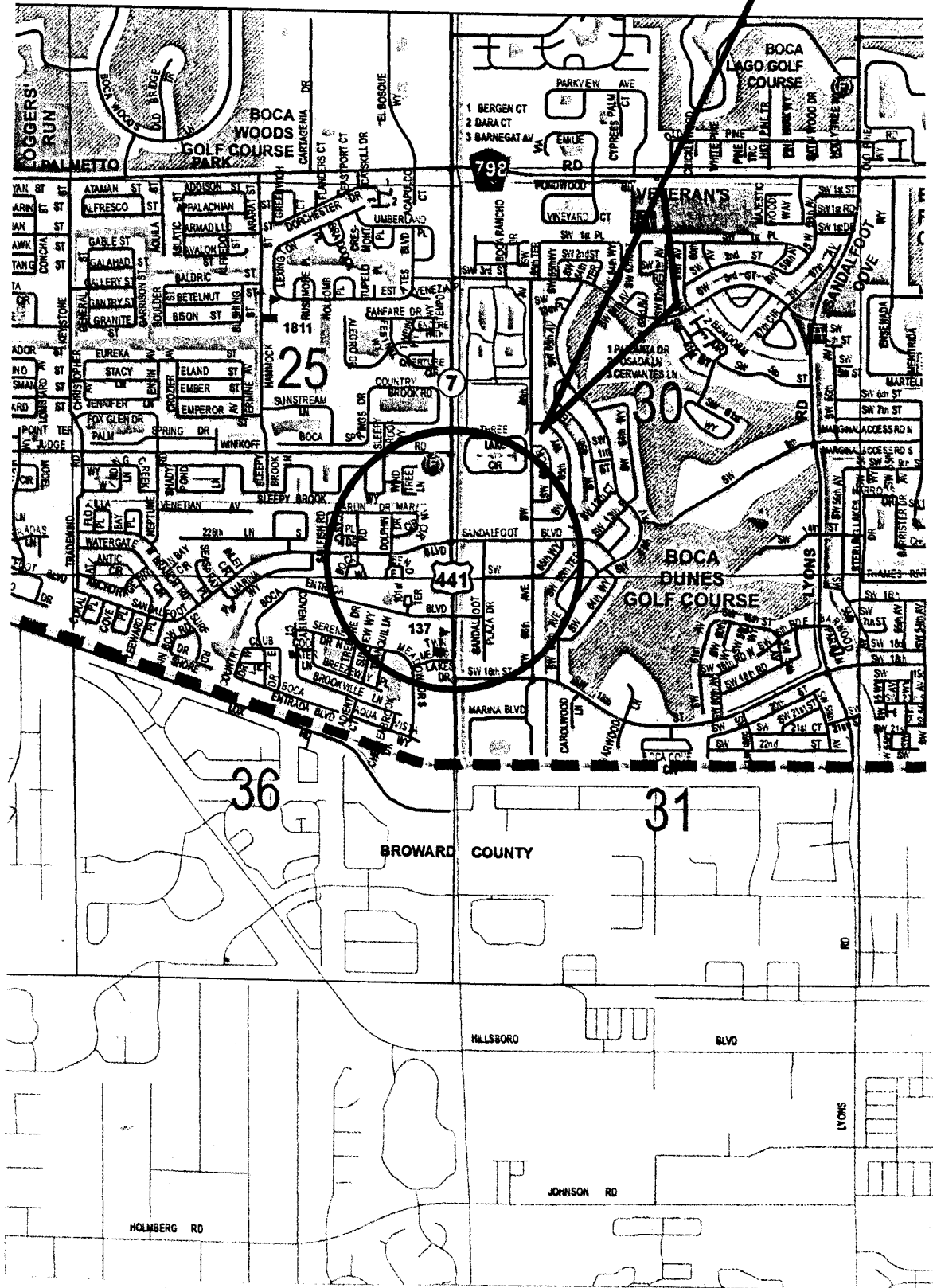


Sandalfoot Boulevard
S.R. 7 to E. of S.R. 7
Palm Beach County Project No. 2013524



LOCATION MAP

ATTACHMENT 2

WORK TASK ORDER TO ANNUAL AGREEMENT BETWEEN

**PALM BEACH COUNTY
AND
ALAN GERWIG & ASSOCIATES, INC.**

FOR PROFESSIONAL ENGINEERING SERVICES ON

**SANDALFOOT BOULEVARD
S.R. 7 TO E. OF S.R. 7**

**PROJECT NO.: 2013524
PALM BEACH COUNTY, FLORIDA**

THIS WORK TASK ORDER TO THE ANNUAL AGREEMENT, made and entered into this day of _____ 2013 by and between Palm Beach County, hereinafter called the **COUNTY**, and Alan Gerwig & Associates, Inc., a Florida Corporation with an address of 12798 W. Forest Hill Boulevard, Suite 204, Wellington, Florida 33414, hereinafter called the **CONSULTANT**.

WITNESSETH

WHEREAS, the **COUNTY** and **CONSULTANT** entered into an Annual Agreement for Structural Engineering Services on a task order basis on February 15, 2011 (R2011-0173).

WHEREAS, the **COUNTY** desires the **CONSULTANT** to perform structural engineering services for Sandalfoot Boulevard from S.R. 7 to E. of S.R. 7, Palm Beach County, Florida (hereinafter called the **PROJECT**); and,

WHEREAS, the **CONSULTANT** agrees to perform the structural engineering services required for preparing design plans and construction bid documents, including related documents for the **PROJECT**; and,

**Re: Sandalfoot Boulevard from S.R. 7 to E. of S.R. 7
Project No.: 2013524**

WHEREAS, the following fee has been negotiated and found to be reasonable compensation for these professional services to be performed by the **CONSULTANT**:

Basic Services in a lump sum fee of \$131,929.85

Reimbursable Expenses capped at \$38,350.50

Optional Services capped at \$17,684.52

Totaling \$187,964.87

NOW, THEREFORE, THIS INDENTURE WITNESSETH: That for and in consideration of the mutual benefits to flow from each to the other, the parties hereto agree as follows:

1. The **CONSULTANT** agrees to provide professional services as described in Exhibit "A" of the Work Task Order known as "SCOPE OF WORK & FEE".
2. The **CONSULTANT** agrees to "CERTIFICATION" statements as described in Exhibit "B" of the Work Task Order.
3. The **CONSULTANT** agrees to Small Business Enterprise (SBE) Participation, described in Exhibit "C" of the Work Task Order.
4. The **CONSULTANT** has provided a sub-consultant Letter of Intent to perform as an SBE as described in Exhibit "D" of the Work Task Order.
5. The **COUNTY** agrees to pay the **CONSULTANT** a fee of One Hundred Eighty-Seven Thousand Nine Hundred Sixty-Four Dollars and Eighty-Seven Cents (\$187,964.87).
6. The **CONSULTANT** agrees to indemnify, defend and hold harmless the **COUNTY** against all claims that may arise as a result of negligence, wrongdoing, misconduct or want of care by the **CONSULTANT**.

Except as hereby amended, changed or modified, all other terms, conditions and obligations of the Agreement dated **February 15, 2011 (R2011-0173)**, shall remain in full force and effect.

Re: Sandalfoot Boulevard from S.R. 7 to E. of S.R. 7
Project No.: 2013524

IN WITNESS WHEREOF, the parties hereto have made and executed this Work Task Order as of the day and year first above written.

OWNER:

Palm Beach County, Florida, a
Political Subdivision of the
State of Florida

BOARD OF COUNTY COMMISSIONERS

BY: _____
Steven L. Abrams, Mayor

ATTEST:
Sharon R. Bock, Clerk & Comptroller
Circuit Court

BY: _____
Deputy Clerk

SEAL

APPROVED AS TO TERMS
AND CONDITIONS:

BY: *Orville A. Fanning*

APPROVED AS TO FORM & LEGAL
SUFFICIENCY:

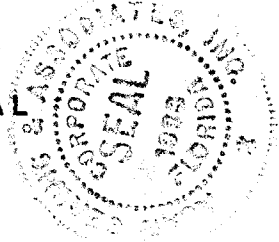
COUNTY ATTORNEY

CONSULTANT:

Alan Gerwig & Associates, Inc.
a Florida Corporation

BY: *[Signature]*
Alan Gerwig, P.E., LEED A.P.
President

CORPORATE SEAL



WITNESS:

BY: *[Signature]*

Simon A. Coleman
(Printed Name)

BY: *April Hughes*

April Hughes
(Printed Name)

EXHIBIT "A"

12798 W. Forest Hill Boulevard
Suite 204
Wellington, FL 33414
Phone: (561) 792-9000
Fax: (561) 792-9901
CA No. 7969

Exhibit "A" Page 1 of 31

Alan Gerwig & Associates, Inc.
Consulting Engineers



July 30, 2013

OK-DWF
DJY

Mr. David Young, P.E.
Special Projects Manager
Roadway Production Division
Palm Beach County Engineering
2300 N. Jog Road
West Palm Beach, FL 33411

RE: Sandalfoot Blvd. – SR 7 to E. of SR 7
Palm Beach County Project No. 2013-524

Dear Mr. Young:

Alan Gerwig & Associates (AGA) ("Consultant") is pleased to submit this letter of agreement ("Agreement") for providing professional engineering services to Palm Beach County, ("Client") for the above referenced project. Our project understanding and proposed scope of services are detailed below.

Project Understanding

The current crossing of Sandalfoot Boulevard over the LWDD E-1 Canal on the east side of US 441 consists of two independent bridge structures – one carrying eastbound traffic and one carrying westbound traffic. Both bridges contain two travel lanes with narrow sidewalks on either side; the two bridges are separated by approximately 65 ft. The bridges were constructed circa 1971 and consist of 3 short spans with a deck constructed from precast reinforced concrete slabs. The eastbound lanes of Sandalfoot Boulevard on either side of US 441 are reasonably well aligned. However, due to the separation of the two bridges, there is a significant offset between the alignment of the westbound lanes at the intersection with US 441. It is understood that Palm Beach County (PBC) plans to replace the existing two bridges with a single bridge structure and at the same time significantly reduce the offset in the alignment of Sandalfoot Boulevard at the intersection with US 441.

Basic Scope of Services

AGA will provide design services required to prepare construction documents and specifications for the replacement of the existing Sandalfoot Boulevard Bridges over the LWDD E-1 Canal. Design survey services, geotechnical engineering services and design services for the roadway modifications resulting from the replacement of the bridges will be provided by AGA using specialist sub consultants.

The proposed basic scope of services will include a preliminary alignment study, a design survey, a geotechnical engineering investigation, engineering design and plan preparation, permitting, utility coordination, and the preparation of final plans and specifications for bidding and construction.

Alignment Study

The scope of the alignment study will include the following tasks:

- Prepare a typical roadway/bridge section for the alignment study – the typical section will be based on providing 4 lanes at the intersection of US 441 (1 eastbound lane and 3 westbound lanes – right turn, straight and left turn).
- Prepare up to 3 options for reducing the offset in the alignment of Sandalwood Boulevard through the intersection with US 441 without acquiring additional right-of-way or adversely impacting existing businesses.
- Hold preliminary discussions with Lake Worth Drainage District (LWDD) to determine the clear span and low-member requirements for the bridge and any other requirements for work in the LWDD right-of-way. The low member requirements and the existing grade at the east edge of US 441 will ultimately dictate the structural form of the bridge.
- Preliminary estimates of probable construction cost for the 3 alignment options for comparative purposes.
- Prepare a brief letter report containing details of the work performed and the recommended alignment and corresponding typical bridge section to be adopted for the design of the project.

Design Survey

The design survey for this project will be performed by HSQ Group acting as a sub-consultant to AGA. The survey will locate all above-ground features and provide the existing cross sections in the road right-of-way and canal right-of-way over the following limits:

- 600' east of the east crosswalk at US 441 within the Sandalfoot Boulevard right-of-way.
- 300' west of the west crosswalk at US 441 within the Sandalfoot Boulevard right-of-way.
- 150' south of the eastbound bridge within the LWDD canal right-of-way.
- 50' north of the westbound bridge within the LWDD canal right-of-way.

Full details of the scope of the design survey are attached to this proposal.

Geotechnical Investigation

The geotechnical investigation for this project will be performed by Dunkelberger Engineering & Testing acting as a sub-consultant to AGA. The geotechnical investigation will provide the data and recommendations required for the design of the bridge foundations and abutments and the roadway modifications resulting from the required realignment of Sandalfoot Boulevard. The scope of the geotechnical investigation will contain the following key items:

- Three 75-ft. deep Standard Penetration Test (SPT) borings for the design of the bridge foundations.
- One 30-ft. deep Standard Penetration Test (SPT) boring for the design of the relocated mast arm foundation.
- Two 6-ft. deep auger borings for the roadway modifications.

Full details of the scope of the geotechnical investigation are attached to this proposal.

Engineering Design and Plan Preparation

Bridge Replacement

The proposed Bridge Typical Section will be submitted as part of the alignment study for approval prior to commencement of the bridge design tasks. The typical section will consist of four 12' traffic lanes with shoulders and sidewalks on each side of the bridge and a raised median separator between the eastbound and westbound lanes.

The existing 3-span bridges will be replaced by a single bridge that conforms to the approved option selected from the alignment study. Dry conduits will be provided within the sidewalks to accommodate existing and future utilities. The final details of the conduits will depend on PBC's requirements and the utilities to be accommodated.

The bridge design will be in accordance with the following current AASHTO LRFD and FDOT design specifications.

- AASHTO LRFD Bridge Design Specifications, 2012.
- FDOT Structures Design Guidelines, 2013.
- FDOT Design Standards, 2013.
- FDOT Standard Specifications for Road and Bridge Construction 2013.

The design will include the bridge load rating calculations on the final design.

Bridge barrier end treatments at the four corners of the bridge will be coordinated with Lake Worth Drainage District to accommodate access to the District's right-of-way for maintenance purposes. Guardrail geometry adjacent to the bridge approaches will be coordinated with AGA's roadway sub-consultant, HSQ Group.

The Lake Worth Drainage District requirements for embankment stabilization and canal design section will be incorporated into the bridge plans and will be submitted to the District along with the application for a bridge permit.

Roadway Improvements

Engineering design and plan preparation for the required roadway improvements will be provided by HSQ Group acting as sub-consultant to AGA. Roadway construction plans will be prepared based on the approved roadway alignment and typical section from the alignment study. The plans will address drainage, curb and gutter, sidewalks, signing and pavement markings. The plans will be prepared in accordance with the following standards.

- Palm Beach County Thoroughfare Roadway Design Procedures (February 2006), and T-P-10-001.
- FDOT Design Standards, 2013.
- AASHTO "Geometric Design of Highways and Streets", 2004.
- Florida Greenbook, May 2011.

The roadway plans will include driveway profiles for affected driveways intersecting Sandalfoot Boulevard.

The only drainage design anticipated for this project is the modifications to road-side swales resulting from the realignment of Sandalfoot Boulevard. Calculations will be provided as necessary to demonstrate to the permitting agencies that the capacity of the existing swale system is not adversely affected by the proposed improvements.

A new crosswalk will be added on the north side of the US 441/Sandalfoot Boulevard intersection to provide pedestrians with a crossing of US 441 on the north side of Sandalfoot Boulevard in addition to the existing crossing on the south side.

Pavement marking and signing plans for the proposed improvements will be prepared to Palm Beach County Standards as a separate set of documents.

Traffic Signal Mast Arm Relocation

The existing mast arm for the traffic signals controlling the westbound traffic from Sandalfoot Boulevard will need to be relocated due to the proposed realignment of Sandalfoot Boulevard.

Signalization plans for the modified US 441/Sandalfoot Boulevard intersection will be prepared by PD&E acting as a sub-consultant to AGA. The signalization plans will include the additional crosswalk on the north side of the intersection.

The pole and signal head system will be designed in accordance with FDOT and PBC guidelines. Information from the maintaining agencies will be collected and a field review will be conducted to complete a list of all existing traffic control signal equipment at the intersection for submittal. The inventory will include the existing signal and pedestrian phasing, interconnect media and controller timing data. The power source for the signalized intersection will be coordinated with FPL.

The relocation of the mast arm will include additional structural calculations, plans and details for the design of the foundation of the mast arm, which will be incorporated into the bridge plans and calculations.

Plan Submittals

All plans will be prepared on 11"x17" sheets. The roadway plans will be prepared at a scale of 1"=40' horizontal and 1"=4' vertical.

Plan review submittals will be made at 35%, 65%, 96% and 100%. Preliminary structural calculations will be submitted with the 65% and 96% submittals and final structural calculations will be submitted with the 100% submittal. Plan submittals shall also be made via email to the Project Engineer, Project Manager and Director

Quantities and cost estimates will be provided with the 96% submittal for the project.

Permitting

AGA will apply for the following permits required for the improvements detailed above:

- Lake Worth Drainage District Bridge Permit.
- Lake Worth Drainage District Drainage Permit (or modification of existing permit).
- Letter Modification to South Florida Water Management District Environmental Resource Permit for US 441.
- Letter Modification to South Florida Water Management District Environmental Resource Permit(s) covering Sandalfoot Boulevard.
- Florida Department of Transportation Driveway and Drainage Permits.

- Florida Department of Transportation Permit for Proposed Signal Modifications.
- Palm Beach County Department of Environmental Resources Permit.

AGA will hold pre-application meetings with the permitting agencies to determine the permitting requirements prior to making applications. Once final permitting details and fees have been established, AGA will request checks from PBC for the permit fees. Traffic count data necessary to support design and permitting services will be provided by Palm Beach County.

Utility Coordination

It is understood that PBC will manage the coordination of the existing utilities with the various utility providers. AGA will assist PBC with this task by plotting the existing utility information supplied by the utility providers on the plans following the 35% submittal. AGA and its sub-consultant will attend up to a maximum of 3 utility coordination meetings to address and resolve any utility conflicts.

The design and permitting of any utilities that need to be relocated as a result of the bridge replacement and associated work is not part of the scope of this project.

Post Design Services

Post Design services will be provided by AGA and HSQ, Inc. in support of the Construction Coordination Department as requested that include but are not limited to shop drawing review, requests for clarification from contractors, field observations. The fees are estimated and is an allowance that will be billed on an hourly basis.

Basic Services Fees:

Prime Consultant Fee:

Misc. Tasks and Drawings	✓ \$9,414.00
Alignment Study	✓ \$4,539.00
35% Plans Submittal	✓ \$15,309.50
65% Plans Submittal	✓ \$30,823.00
96% Plans Submittal	✓ \$12,616.00
100% Plans Submittal	✓ \$2,120.00
Mast Arm Foundation	✓ \$3,764.00
Permit Application Process	✓ \$8,024.00

Sub Consultant Fee:

HSQ – Roadway Improvement	✓ \$34,747.23
PDE – Traffic Signals	✓ \$10,573.12

Basic Services Total ✓ **\$131,929.85**

Reimbursable Fees

HSQ – Surveying	✓	\$12,688.00
DET – Geotechnical Engineering	✓	\$12,517.50
Reprographics	✓	\$2,445.00
Permit Fees*		<u>\$10,700.00</u>
Reimbursable Grand Total	✓	\$38,350.50

* Permit fees associated with LWDD, SFWMD, FDOT and PBC ERM

Optional Services Fees:

Post Design Services (AGA)	✓	\$8,360.00
Post Design Services (HSQ)	✓	\$5,819.98
Geotechnical Engineering (DET)	✓	<u>\$3,504.54</u>
Optional Services Total	✓	\$17,684.52

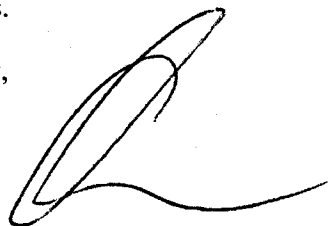
Project Deliverables

For each plan submittal, four (4) sets of plans and two sets of calculations will be provided. The report from the geotechnical investigation and the design survey will be included with the 35% submittal.

Following the review and approval of the 100% submittal, final plans will be submitted in hard copy and electronically in pdf format. Three hard copies of the final plans will be provided, including one set signed and sealed.

We appreciate the opportunity to provide these services to you. Please contact me if you have any questions.

Sincerely,



Alan Gerwig, P.E., LEED A.P.
President

FINANCIAL MANAGEMENT PLAN

Project Sandalford Blvd
 Project No. _____
 PM _____

REV. Date 27-Aug-13

Task Outline	TOTALS	Total Hours	Estimated Labor									
			Chief Eng	Snr. Eng	Snr. Proj Eng	Proj. Man	Proj Eng	Engineer	Engineer Int	Eng Tech	Designer	Designer
Miscellaneous Tasks and Drawings												
Overall Project Layout	\$2,710.00	24		6	8							10
Field Reviews	\$1,124.00	8		4	4							
Project Coord., Technical Mtgs, QC	\$5,580.00	45		5	30							10
Misc Task Subtotal	\$9,414.00											
Alignment Study												
Prepare Bridge Alignment Alternates	\$1,785.00	17		2	6							9
Coordinate with LWDD	\$1,096.00	8			8							
Construction Cost Estimates	\$548.00	4			4							
Prepare Letter Report	\$1,110.00	8		2	6							
Subtotal Alignment	\$4,539.00											
35% Plan Submittal												
General Layout Design and Plans												
Cover Sheet	\$424.00	4			2							2
Key Sheet	\$574.00	6			2							4
Bridge Geometry incl. Typical Section	\$1,870.00	14			10							4
General Notes	\$972.00	8			6							2
General Plan & Elevation	\$3,392.00	32			16							16
Incorporate Soil Boring Log	\$143.50	1.5			0.5							1
End Bent Geometry	\$1,696.00	16			8							8
End Bent Plan & Elevation	\$1,174.00	14			2							12
Foundation Layout	\$998.00	10			4							6
Superstructure Plan	\$1,722.00	18			6							12
Superstructure Section	\$998.00	10			4							6
LWDD Canal Design Section	\$1,546.00	14			8							6
Subtotal 35% Plans	\$15,309.50											
65% Plan Submittal												
Address Comments												
Address Comments	\$822.00	6			6							
General Notes	\$623.00	5			4							1
Standard Index Sheets	\$212.00	2			1							1
General Plan & Elevation	\$1,696.00	16			8							8
Approach Slab Plan and Details	\$1,546.00	14			8							6
End Bent Analysis & Design	\$5,780.00	44			40							4
End Bent Plan, Elevation and Details	\$3,992.00	40			16							24
Finished Grades	\$2,642.00	22			16							6
Super Structure Plan	\$1,696.00	16			8							8
Super Structure Section and Details	\$2,668.00	24			14							10
Prestressed Slab Unit Design	\$6,726.00	50			48							2
Prestressed Deck Slab Plans and Details	\$2,420.00	24			10							14
Subtotal 65% Plans	\$30,823.00											
96% Plan Submittal												
Address Comments												
Address Comments	\$822.00	6			6							
General Notes including Est. of Quan. Table	\$3,118.00	30			14							16
General Plan & Elevation	\$424.00	4			2							2
Miscellaneous Common Details	\$424.00	4			2							2
End Bent Plan, Elevation and Details	\$1,272.00	12			6							6
Finished Grades	\$548.00	4			4							
Super Structure Plan	\$424.00	4			2							2
Super Structure Section and Details	\$574.00	6			2							4
Prestressed Deck Slab Plans and Details	\$724.00	8			2							6
Bill of Reinforcing	\$2,642.00	22			16							6

Exhibit "A" Page 8 of 31

Load Rating		\$1,644.00	12			12															
Subtotal 96% Plans	✓ \$12,618.00																				
100% Plan Submittal																					
Address 96% comments and finalize plans	✓ \$2,120.00		20			10														10	
Post Design Services	✓ \$8,360.00		60		20	40															
Mast Arm Fdn Design																					
Structural Analysis	\$2,466.00		18			18															
Foundation plan preparation	\$1,298.00		14			4														10	
Subtotal	✓ \$3,764.00																				
Permits																					
Lake Worth Drainage District Bridge Permit	\$1,246.00		10			8														2	
Lake Worth Drainage District Drainage Permit	\$1,246.00		10			8														2	
SFWMD Letter Mod Drainage Permit 3rd S	\$1,246.00		10			8														2	
SFWMD Letter Mod Drainage Permit SR441	\$1,246.00		10			8														2	
FDOT Drainage and Driveway Permit	\$1,794.00		14			12														2	
PBC ERP	\$1,246.00		10			8														2	
Subtotal Permitting	✓ \$8,024.00																				
TOTALS																					
TOTAL HOURS	✓ 812.5		0	✓ 39.00000	✓ 505.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268	
BILLING RATE		✓ \$183.00	✓ \$144.00	✓ \$137.00	✓ \$105.00	✓ \$94.00	✓ \$87.00	✓ \$72.00	✓ \$75.00	✓ \$75.00	✓ \$75.00	✓ \$75.00	✓ \$75.00	✓ \$75.00	✓ \$75.00	✓ \$75.00	✓ \$75.00	✓ \$75.00	✓ \$75.00	✓ \$75.00	0
TOTAL DOLLARS	✓ \$94,969.50	\$0.00	✓ \$5,818.00	✓ \$69,253.50	\$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	✓ \$0.00	0
Subcontractors																					
Subcontractors			Cost	Notes																	
Surveyor																					
Geotechnical Engineer																					
Landscape Architect																					
Total Subcontracts			\$ -																		
Reimbursable Charges			\$1,150.00	Summary																	
Supplies, Printing, Copies, Etc.				Total Hours <u>812.5</u> Total Labor Dollars <u>\$94,969.50</u> Material Dollars <u>\$1,150.00</u> Miscellaneous Dollars <u>\$0.00</u> Subcontractors <u>\$0.00</u> Total Project <u>\$96,119.50</u>																	
Miscellaneous Dollars			\$ -																		
Travel, Lodging, Meals, Mileage, Etc.																					
Distribution																					
() Accounting							() Project Notebook							() Other _____							

Reimbursable Charges				
Item	Quantity	Unit	Unit Cost	Total
Printing/Copies	8.5"x11"	500 page	\$0.10	✓ \$50
	11"x17"	2000 page	\$0.25	✓ \$500
Electronic Media	CD's	6 ea	\$25.00	✓ \$150
				\$0
Curier Services		8 ea	\$45.00	✓ \$360
Overnight Shipping		6 ea	\$15.00	✓ \$90
Total				✓ \$1,150.00

✓ 3.0 multiplier

SANDALFOOT BLVD

SCOPE OF SERVICES

PROJECT LIMITS

HSQ Group, Inc., will provide professional engineering and surveying services required in connection with the proposed roadway construction and improvements of Sandalfoot Blvd as follows:

- Sandalfoot, 600' east and 300' west of US 441 right of way lines.
- US 441, 300' north of Sandalfoot Blvd, 100' south of Sandalfoot Blvd.

PROJECT DESCRIPTION

Services shall include preparation of complete roadway construction plans. It also includes drainage, curb and gutter, sidewalk, signing and pavement markings, assistant in permitting, and design survey. Plans will be prepared in accordance with the following standards:

- Palm Beach County, Thoroughfare Roadway Design Procedures (February 2006), and T-P-10-001.
- FDOT Design Standard dated 2013.
- AASHTO "Geometrics Design of Highway and Streets", dated 2004.
- Florida Greenbook, May 2011.

BASIC SERVICES

1 Alignment Study

Services will include the preparation of three different alignments for Sandalfoot at US 441. The alignments will be prepared to minimize the offset thru the intersection as practical as possible without acquiring additional right of way or impacting existing businesses. A maximum of 2 degrees deflection thru the intersection will be used. Each alignment option will be associated with a cost estimate.

2 Plans Preparation.

Roadway plans will be prepared in accordance with the approved alignment and Typical Section, and will incorporate all review comments.

Construction plans will be prepared on 11" x 17" at 1"=40' scale for the horizontal and 1"=4' for the vertical.

Plan submittals will be at (35%, 65%, 96%, 100% and final). Plan submittals shall also be made via email to the Project Engineer, Project Manager, and Director.

Plans will be prepared based on "Palm Beach County Thoroughfare Road Design Procedures".

3 Permitting assistance

HSQ will prepare needed supporting documents and provide them to AGA to apply for the anticipated permits for this project as follows:

- South Florida Water Management District
- Lake Worth Drainage District
- Florida Department of Transportation.

4 **Utilities coordination**

HSQ Group, Inc. will assist Palm Beach County in the utility coordination effort. We will attend a maximum of three utility coordination meetings and plot utility information on plans for inclusion in the construction plan package.

5 **Driveways**

Driveway profiles will be prepared for affected driveways intersecting Sandalfoot Blvd.

1.7 **Drainage Design**

No drainage design is anticipated for this project except the modification to the swales. Calculations will be provided as needed to prove to FDOT that the swale capacity was not affected due to the improvement along with needed construction plans and details.

1.8 **Pavement Marking and Signing Plans**

Pavement marking and Signing Plans will be prepared to conform to the proposed roadway improvements in accordance with Palm Beach County Standards. These plans will be prepared as a separate set of documents with quantities.

2.5 Surveying Services

Basic Services

1. Review title search supplied by Palm Beach County prior to commencement of field topo to establish right-of-way width, and compile all plats and deeds into a map.
2. Collect benchmark and control data.
3. Set control points tied to State plane at 600-foot intervals.
4. Run a closed level loop and set Benchmarks at 600-foot intervals outside the limits of construction. Survey to be prepared based on the **NAVD 1988 datum**.
5. Locate subdivision corners, section corners and any other existing control monuments that will assist in the establishment of the location of the right-of-way lines for this project.
6. Locate above ground features and features in the canal i.e. pipes etc.
7. Cross-section the project at 50' intervals extending 25 feet outside the right of way as follows:
 - 7.1 From the east crosswalks at US 441 and going east for 600'
 - 7.2 From the west crosswalks at US 441 and west for 300'
8. Acquire cross sections of E-1 canal per LWDD requirements and as follows:
 - 8.1 The face of the existing bridges
 - 8.2 At the middle between the existing bridges
 - 8.3 Three sections south of the eastbound bridge at 50' intervals.
 - 8.4 One section north of the westbound bridge, at 50' intervals.
9. Perform a detailed survey of the existing bridges over the E-1 Canal.
10. Detail drainage structures within the right of way.
11. Locate all trees, signal poles, signal control cabinets, utility poles, guardrails, bus stop etc. within right of way.
12. Set the baseline and references.
13. Out of pocket expenses – copies, plotting, and reproduction.

Survey Deliverables

- 1- Two signed and sealed 11" X 17" copies of the Specific Purpose Survey and a copy of the CADD file.
- 2- One copy of the topographic file, drainage file, utility file, right of way file, and point file in a Microstation digital CADD format.
- 3- One copy of the ASCII file of all elevations in terms of x,y,z, description.

Exhibit "A" Page 13 of 31

- 4- Four signed and sealed copies of the cross sections for the E-1 Canal at 1"=10' both horizontal and vertical.
- 5- Create DTM drawing.



HSQ GROUP, INC.
Engineers • Planners • Surveyors

Sandalfoot Blvd

Summary of fee proposal
County project number

ACTIVITY	SENIOR ENGINEER		PROJECT MANAGER		PROJECT ENGINEER		ENGINEER INTERN		CADD TECHNICIAN		Total	Total
	STAFF HOURS	HR. RATE	STAFF HOURS	HR. RATE	STAFF HOURS	HR. RATE	STAFF HOURS	HR. RATE	STAFF HOURS	HR. RATE	STAFF HRS. ACTIVITY	COST BY ACTIVITY
1-Roadway Design Analysis	2.80	\$ 49.00	11.20	\$ 48.00	22.40	\$ 37.00	19.60	\$ 27.00	0.00	\$ 23.00	✓ 56.00	\$ 2,032.80
2-Drainage Analysis	0.60	\$ 49.00	1.36	\$ 48.00	1.60	\$ 37.00	0.44	\$ 27.00	0.00	\$ 23.00	✓ 4.00	\$ 165.76
3-Roadway Plans	17.40	\$ 49.00	34.80	\$ 48.00	43.50	\$ 37.00	60.90	\$ 27.00	17.40	\$ 23.00	✓ 174.00	\$ 6,177.00
4-Drainage Plans	1.20	\$ 49.00	2.40	\$ 48.00	3.00	\$ 37.00	4.20	\$ 27.00	1.20	\$ 23.00	✓ 12.00	\$ 426.00
5-Utilities	0.00	\$ 49.00	0.00	\$ 48.00	6.00	\$ 37.00	0.00	\$ 27.00	0.00	\$ 23.00	✓ 6.00	\$ 222.00
6-Permits	2.40	\$ 49.00	2.40	\$ 48.00	13.20	\$ 37.00	4.80	\$ 27.00	1.20	\$ 23.00	✓ 24.00	\$ 878.40
7-Signing & Pavement Marking	0.54	\$ 49.00	5.40	\$ 48.00	16.20	\$ 37.00	15.66	\$ 27.00	16.20	\$ 23.00	✓ 54.00	\$ 1,680.48
TOTAL Basic Services	✓ 24.94 \$1,222.06		✓ 57.56	\$2,762.88	✓ 105.90	\$3,919.30	✓ 105.60	\$2,551.20	✓ 36.00	\$928.00	✓ 330.00	\$ 11,582.44
* Post Design Services	20.00	\$ 49.00	20.00	\$ 48.00							✓ 40.00	\$ 1,940.00
		\$980.00		\$960.00								

HSQ FEE CALCULATIONS

Type of services	Cost by activity	Overhead multiplier	Overhead cost	Subtotal (cost by activity + overhead cost)	Profit (%)	subtotal profit	TOTAL	Multiplier
Design Basic services	\$ 11,582.44	168%	✓ 19,458.50	\$ 31,040.94	11.94%	\$ 3,706.29	\$ 34,747.23	✓ 3.00
Optional Services	\$ 1,940.00	168%	✓ 3,259.20	\$ 5,199.20	11.94%	\$ 620.78	\$ 5,819.98	3.00
Surveying services							\$ 12,688.00	
Reimbursables							\$ 1,295.00	
TOTAL							\$ 54,550.21	

I - ROADWAY DESIGN ANALYSIS

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1- Geometrics / project layout and alternates	LS	1	24		24		three alternates
2- Prepare report (letter form)	LS	1	8		8		
3- Quantity Computation Book & Updates, including signing and marking	LS	1	8		8		
4- Construction cost estimate	LS	2	4		8		
5- Field reviews	EA	1	4		4		
6-Progress meetings with the county	EA	2	2		4		
TOTAL					✓ 56		

2 - DRAINAGE ANALYSIS

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1. Evaluation of impact on swale within FDOT ROW	LS	1	4		4		this is needed for the drainage connection permit
TOTAL					✓ 4		

3 - ROADWAY PLANS

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1. Key Map	Sheet	1	4	1	4		
2. Typical Sections	Sheet	1	6	1	6		
3. Summary of Quantities	Sheet	1	8	1	8		
4. Plan views	Sheet	3	20	3	60		
5. Profile views	Sheet	3	18	3	54		
6. Misc. Detail sheets	Sheet	1	6	1	6		
7. Genral Notes & pay items notes	Sheet	1	6	1	6		
8. Cross-Sections	EA	10	2	5	20		
9. Driveway profiles	EA	5	2	2	10		
TOTAL				18	✓ 174		

4 - DRAINAGE PLANS

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1. Drainage structures	EA	4	2	1	8		
2. Swale plans/details	LS	1	4	1	4		
TOTAL				2	12		

5 - UTILITIES

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1- Attend utilities coordination meetings	EA	3	2		6		
TOTAL					6		

6 - PERMITS

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1. Prepare permit packages	LS	1	8		8		prepare No Notice Letter to SFWMD, permit package to LWDD
	LS	1	16		16		FDOT drainage and driveway connection permit packages/respond to RFI
							AGA will process the permits for all permitting agencies
TOTAL					24		

7 - SIGNING & PAVEMENT MARKING

TASK	BASIS OF ESTIMATE	NO. OF UNITS	HOURS/ UNIT	NO OF SHEETS	TOTAL HOURS	CADD HOURS	REMARKS
1. Key Sheet	Sheet	1	4	1	4		
3. Tabulation of Quantities	Sheet	1	8	1	8		
5. Plan sheets single panel	sheets	3	14	3	42		
TOTAL				5	54		

Summary of Reimbursable charges
Sandalford Blvd

Reproduction and printing

Item	Description	Quantity	Unit	Unit price	Total	Notes for original estimates
Photo copies / prints (8 1/2" x 11" black / white)	Corrospondances	300	page	\$ 0.10	\$ ✓ 30.00	
	Quantity computation books	8	Each	\$ 10.00	\$ ✓ 80.00	Each booklet , 2 submittals 4 copies each
(11" x 17" black and white)	Utility submittals	1600	page	\$ 0.25	\$ ✓ 400.00	4 submittals, 4 copies each submittal for 5 utilities, 20 sheets each
	Plans for permits, Inc. FDOT	800	page	\$ 0.25	\$ ✓ 200.00	4 copies, 2 submittals, 10 sheets each
	County review	500	page	\$ 0.25	\$ ✓ 125.00	4 copies, 5 submittals, 25 sheets each
Design reports	Alignment study	8	Each	\$ 15	\$ ✓ 120.00	2 submittals, 4 copies each (w/ color prints)
Hand delivery / pick ups	Deliveries	4	Each	\$ 50	\$ ✓ 200.00	
Postage / FEDEX	Each	4	Each	\$ 10	\$ ✓ 40.00	
CD's	Each	10	Each	\$ 10	\$ ✓ 100.00	
Subtotal					✓ \$ 1,295.00	

HSQ GROUP, INC.

Engineers • Planners • Surveyors

Item No.	Work Task	Estimated Work Hours			Estimated Task Cost
		Two-Man Field Crew (\$105/Hr.)	Professional Land Surveyor (\$98/Hr.)	CADD Technician (\$51/Hr.)	
1	Review Title Search Documents		3		\$294.00
2	Create base map		1	16	\$914.00
3	Collect Control Data		2		\$196.00
4	Set Control Points and Tie to State Plane Coordinate System	8	2		\$1,036.00
5	Perform Bench Run	6	2		\$826.00
6	Locate Local Control	4	1		\$518.00
7	Locate Above-Ground Features/TOPO	24	2		\$2,716.00
8	Collect Cross-Sections (20 xsec)	8	1		\$938.00
9	Detail Existing Drainage Facilities	4	1		\$518.00
10	Obtain 9 cross section for canal E-1	10	1		\$1,148.00
11	Process Data and Create CADD Drawing / DTM		4	16	\$1,208.00
12	Set the Baseline of Survey & ref pc's pt's and Pi	6	1	2	\$830.00
13	bridge survey (2 bridges)	8	1	2	\$1,040.00
14	Prepare canal cross sections for permitting purposes (7 xsec)		1	8	\$506.00
		\$8,190.00	\$2,254.80	\$2,244.00	
	Estimated Total Costs				\$12,688.00

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DUNKELBERGER
engineering & testing, inc.
www.dunkelberger-engineering.com

- Fort Lauderdale
- Port Saint Lucie
- Sarasota
- West Palm Beach

Alan Gerwig & Associates, Inc.
12798 West Forest Hill Boulevard, Ste 204
Wellington, FL 33414

January 25, 2013
Project No.: WPB-11-8133
BG 21.9

Attention: Mr. Alan Gerwig, P.E.

Subject: **Revised Proposal, Geotechnical Engineering Services**
Sandalfoot Boulevard Bridge Replacement
Palm Beach County (West Boca Raton), Florida

Mr. Gerwig:

INTRODUCTION

Pursuant to your January 23, 2013 request, Dunkelberger Engineering & Testing, Inc. (Dunkelberger) is pleased to submit this revised proposal for geotechnical engineering services for the proposed Sandalfoot Boulevard Bridge replacement project that is planned for the existing bridge just east of State Road 7 in West Boca Raton (Palm Beach County), Florida. This proposal provides a scope of work and implementation schedule. Compensation for our services is also discussed. Unit rates used to develop this proposal are consistent with our current continuing services contract with Palm Beach County.

We understand that current plans are to replace the existing Sandalfoot Boulevard Bridge over the E-1 Canal. The travel lanes for Sandalfoot Boulevard will also be slightly re-aligned. Subsurface information in the form of stratigraphy, groundwater level, anticipated driven pile capacities, lateral earth pressure criteria and environmental (corrosivity) classification are needed at this time for the bridge and roadway design process.

The project site is accessible for conventional truck mounted drilling equipment. However, owing to limited space, the exploratory work will need to be completed in the existing roadway. For this reason, we have included an allowance for maintenance of traffic so that the work may be accomplished safely, and with limited impacts to local traffic.

The project may also include the design and construction of a new mast arm for signalization controlling the west-bound travel lanes of Sandalfoot Boulevard. For this reason, this proposal includes optional work related to the mast arm foundation.

SCOPE OF WORK

The subsurface study will entail five tasks:

1. Exploration of the subsurface conditions at the Sandalfoot Boulevard Bridge site using three 75-foot deep Standard Penetration Test (SPT) borings. Samples of the subsurface materials will be obtained at frequent vertical intervals using procedures prescribed in ASTM D 1586 (the Standard Penetration Test). The borings will be sealed with neat cement grout and cold patch asphalt upon their completion. An additional auger profile boring will be drilled near the center of the proposed travel lanes, east of the bridge. This boring will be advanced using a solid stem auger to a depth of 6 feet below surface grade.

Sandalfoot Boulevard Bridge Replacement Project
Project No. WPB-11-8133 BG 21.9
Revised - 1, January 25, 2013

Page 2

2. Review of the data from the borings and classification of the subsurface components in accordance with the Unified Soil Classification System (ASTM D 2487) and appropriate geologic nomenclature. Representative samples will be tested for grain size distribution to aid in the classification process. One water sample will be tested for the corrosion parameters of pH, Resistivity, sulfates and chlorides.
3. Preparation of a CADD generated boring location plan and subsurface profiles for the borings.
4. Preparation and submittal of a report which presents the factual information obtained and geotechnical engineering design criteria, namely:
 - environmental classification of the canal water
 - driven pile depth-capacity curves for both borings
 - lateral load vs deflection and moment estimates for piling
 - soil moist and saturated unit weights, cohesion, friction angles for computation of lateral earth pressures adjacent to bridge abutments
 - an estimate of the Modulus of Resilience for subgrade soils
 - related construction recommendations
5. Explore the subsurface conditions and provide foundation engineering design criteria for the optional Mast Arm. This will involve drilling a single SPT boring to 30 feet deep and providing a CADD generated sheet that includes the subsurface profile and the geotechnical engineering design criteria (i.e. moist and buoyant unit weights, friction angles, cohesion, and lateral earth pressure parameters). We anticipate that this work will be completed as a separate mobilization and report submittal.

SCHEDULE, COMPENSATION AND OTHER TERMS

We are prepared to initiate our work within five days after receiving your written notification to proceed. For this project, we do not anticipate the need for a Right-of-Way use permit with the Florida Department of Transportation. After the mandatory utility locate request and waiting period (48 hours), we expect to complete the field work over a three day period, barring wet weather related delays. Engineering data evaluation and report preparation will require about two weeks. Thus the overall time frame for our work will be 3 to 4 weeks. Three copies of the report will be transmitted to you at the completion of the work. We can provide you with pile vertical capacities within two days after the borings are drilled. The optional work will be completed under a separate mobilization, and that work is anticipated to require three weeks to complete.

Roadway and Bridge Study

Based upon our general knowledge of the subsurface conditions of the site area and an understanding of the project, we are willing to provide the services outlined as Items 1 through 4 previously for a fixed fee of \$12,517.50, as itemized as follows. The rates shown below are consistent with our current continuing services contract with Palm Beach County. Our fee for the optional work is shown in a subsequent section of this proposal.

DUNKELBERGER

Sandalfoot Boulevard Bridge Replacement Project
 Project No. WPB-11-8133 BG 21.9
 Revised - 1, January 25, 2013

A. Start Up	
• Stake Boring & Utility Clearance: 6 hours @ \$75.22 per hour.....	\$ 451.32
B. Subsurface Exploration	
• Drill Rig Mobilization: Lump Sum.....	\$ 350.00
• Traffic Control: 2 days @ \$800 per day	\$ 1,600.00
• SPT Borings (0 to 50' deep): 150 feet @ \$12/foot	\$ 1,800.00
• SPT Borings (50 to 100' deep): 75 feet @ \$14/foot.....	\$ 1,050.00
• Grout Seal Borehole (0 to 50' deep) : 150 feet @ \$4/foot.....	\$ 600.00
• Grout Seal Borehole (50 to 100' deep): 75 feet @ \$5/foot.....	\$ 375.00
• Auger Boring (1 to 6' deep): 6 feet @ \$9/foot.....	\$ 54.00
• Field Engineer: 24 hours @ \$75.22 per hour	\$ 1,805.28
• Full Grain Size: 4 @ \$65.00 each.....	\$ 260.00
• D O T Corrosivity: 1 @ \$150.00 each.....	\$ 150.00
C. Geotechnical Engineering & Report	
• Senior Geotechnical Engineer: 6 hours @ \$124.77/hour	\$ 748.62
• Engineer, P.E.: 32 hours @ \$84.64/hour	\$ 2,708.48
• Engineering Technician: 4 hours @ \$45.62/hour	\$ 182.48
• Drafter/CADD: 6 hours @ \$63.72/hour	\$ 382.32
Total	\$ 12,517.50

Optional Work (Mast Arm Boring)

Our fee for the optional work related to the Mast Arm foundation is summarized below.

A. Start Up	
• Stake Boring & Utility Clearance: 4 hours @ \$75.22 per hour.....	\$ 300.88
B. Subsurface Exploration	
• Drill Rig Mobilization: Lump Sum.....	\$ 350.00
• Traffic Control: 1 day @ \$800 per day	\$ 800.00
• SPT Borings (0 to 50' deep): 30 feet @ \$12/foot	\$ 360.00
• Grout Seal Borehole (0 to 50' deep) : 30 feet @ \$4/foot	\$ 120.00
• Field Engineer: 4 hours @ \$75.22 per hour	\$ 300.88
C. Geotechnical Engineering & Report	
• Senior Geotechnical Engineer: 2 hours @ \$124.77/hour	\$ 249.54
• Engineer, P.E.: 8 hours @ \$84.64/hour.....	\$ 677.12
• Engineering Technician: 2 hours @ \$45.62/hour	\$ 91.24
• Drafter/CADD: 4 hours @ \$63.72/hour	\$ 254.88
Total	\$ 3,504.54

The combined total for the roadway, bridge and mast arm geotechnical work is therefore \$16,022.04.

3.0 multiplier

Sandalfoot Boulevard Bridge Replacement Project
Project No. WPB-11-8133 BG 21.9
Revised - 1, January 25, 2013

Other terms and conditions pertaining to the engagement of our services are discussed in the attached General Conditions. The General Conditions are hereby incorporated into and made a part of this proposal. Thank you for considering Dunkelberger for this assignment. If the proposal is satisfactory, kindly sign and return, intact, the acceptance copy furnished for this purpose. Should the proposal contents require any clarification or amplification, please feel free to contact us.

Very truly yours,

DUNKELBERGER ENGINEERING & TESTING, INC.



Kevin E. Aubry, P.E.
Geotechnical Services Manager

Attachment: General Conditions

Accepted this _____ day of _____, 2013.

Company

Signature

Name and Title

US-441 (SR-7) at Sandalfoot Blvd

Signalization Plans

1. Purpose

The general objective is for the CONSULTANT to prepare a set of signalization plans to accommodate the proposed improvements at the following intersection as depicted the attached sketch:

1. US-441 (SR-7) at Sandalfoot Blvd

The existing mast arm signal at Sandalfoot Blvd will be modified to accommodate the improvements at Sandalfoot Blvd.

The CONSULTANT shall prepare contract plan sheets, notes, and details to include the following: Key Sheet, Tabulation of Quantities sheet(s), General Note sheet(s), Signalization Plan sheet(s), Mast Arms Pole detail(s), and special detail(s).

The CONSULTANT shall plot existing and proposed topography, existing utilities (above and below ground), storm drains, right of way, and proposed improvements. In addition the CONSULTANT shall prepare quantities and pole schedules (including any design calculations). The existing and proposed geometry along with existing utilities will be provided by the prime consultant in electronic format. The consultant will develop the signal plans based on these files.

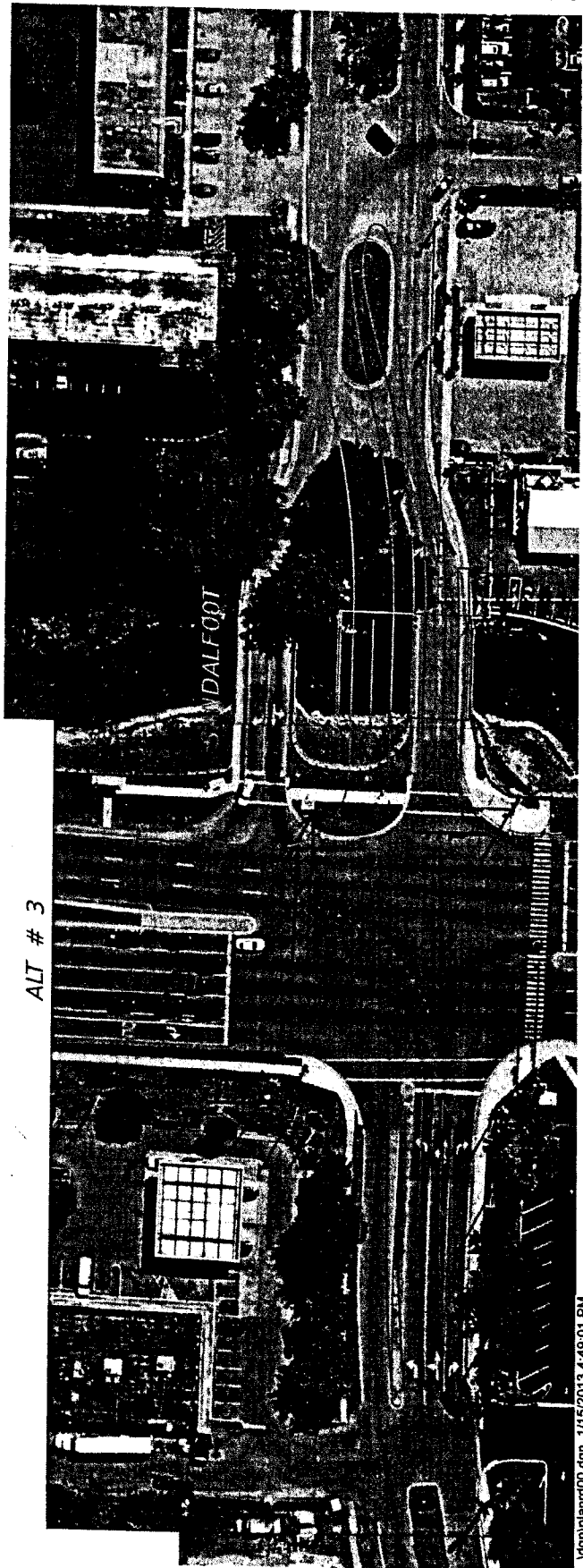
Geotechnical information will be provided by the prime consultant and any additional structural analysis will be conducted by the prime consultant.

2. Scope of Work

The CONSULTANT shall design the pole and signal head system in accordance with FDOT and PALM BEACH COUNTY guidelines.

The CONSULTANT shall collect information from the maintaining agencies and conduct a field review to complete a list of all existing traffic signal equipment at the locations listed for submittal. The inventory shall include the Existing signal and pedestrian phasing, Interconnect media and Controller timing data.

The CONSULTANT shall coordinate power source with FPL for the signalized intersection. The consultant will coordinate in obtaining the permit from FDOT with the prime consultant.



ALT # 3

ESTIMATE OF WORK EFFORT

Intersection: Sandalfoot Blvd at SR-7
 Intersection ID No:
 Palm Beach County Project: Sandalfoot Blvd Bridge Replacement
 Project No: 2013-524

Signalization Plans

Consultant: Progressive Design & Engineering
 NTP:
 Date: 3/28/13
 Estimator: WFM

Staff Classification	Total Staff Hours From "SH Summary Firm"	Project Manager	Senior Engineer												SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General Tasks	-	0	0												0	\$0.00	#DIV/0!
4. Roadway Analysis	-	0	0												0	\$0.00	#DIV/0!
5. Roadway Plans	-	0	0												0	\$0.00	#DIV/0!
6. Drainage Analysis	-	0	0												0	\$0.00	#DIV/0!
7. Utilities	-	0	0												0	\$0.00	#DIV/0!
8. Environmental Permits	-	0	0												0	\$0.00	#DIV/0!
9. Structure Summary	-	0	0												0	\$0.00	#DIV/0!
10. Structures - BDR	-	0	0												0	\$0.00	#DIV/0!
11. Structures - Temporary Bridge	-	0	0												0	\$0.00	#DIV/0!
12. Structures - Short Span Concrete	-	0	0												0	\$0.00	#DIV/0!
13. Structures - Medium Span Concrete	-	0	0												0	\$0.00	#DIV/0!
14. Structures - Structural Steel	-	0	0												0	\$0.00	#DIV/0!
15. Structures - Segmental Concrete	-	0	0												0	\$0.00	#DIV/0!
16. Structures - Movable Span	-	0	0												0	\$0.00	#DIV/0!
17. Structures - Retaining Walls	-	0	0												0	\$0.00	#DIV/0!
18. Structures - Miscellaneous	-	0	0												0	\$0.00	#DIV/0!
19. Signing & Marking Analysis	-	0	0												0	\$0.00	#DIV/0!
20. Signing & Marking Plans	-	0	0												0	\$0.00	#DIV/0!
21. Signalization Analysis	36	6	30												0	\$0.00	#DIV/0!
22. Signalization Plans	32	6	26												36	\$5,588.16	\$155.23
23. Lighting Analysis	-	0	0												32	\$4,984.96	\$155.78
24. Lighting Plans	-	0	0												0	\$0.00	#DIV/0!
25. Landscape Architecture Analysis	-	0	0												0	\$0.00	#DIV/0!
26. Landscape Architecture Plans	-	0	0												0	\$0.00	#DIV/0!
27. Survey	-	0	0												0	\$0.00	#DIV/0!
28. Photogrammetry	-	0	0												0	\$0.00	#DIV/0!
29. Mapping	-	0	0												0	\$0.00	#DIV/0!
30. Geotechnical	-	0	0												0	\$0.00	#DIV/0!
31. Architecture Development	-	0	0												0	\$0.00	#DIV/0!
Total Staff Hours	68	12	56												68		
Total Staff Cost		\$2,128.32	\$8,444.80														\$10,573.12

Check = \$10,573.12	
Total PD&E Fee:	\$10,573.12
Geotechnical Fee	\$0.00
Grand Total Fee	\$10,573.12

- 3.0 multiplier

Exhibit "A" Page 27 of 31

Project Activity 21: Signalization Analysis

Progressive Design & Engineering

Sandalfoot Blvd at SR-7

0

Task No.	Task	Units	No. of	Hours/Units	Total Hours	Comments
21.1	Traffic Data Collection	LS	0	0	0	
21.2	Intersection Data Collection	PI	0	0	0	
21.3	Utilities Coordination	LS	0	0	0	Includes obtaining utilities information
21.4	System Timings	LS	0	0	0	
21.5	Reference and Master Signalization Design File	PI	1	16	16	
21.6	Reference and Master Interconnect Communication Design File	LS	0	0	0	
21.7	Overhead Street Name Sign Design	EA	0	0	0	
21.8	Pole Elevation Analysis	LS	0	0	0	
21.9	Traffic Signal Operation Report	LS	0	0	0	
21.10	Quantities	LS	1	6	6	
21.11	Cost Estimate	LS	0	0	0	
21.12	Technical Special Provisions	LS	0	0	0	
Signalization Analysis Technical Subtotal					22	
21.13	Field Reviews	LS	1	8	8	Design Field review
21.14	Technical Meetings	LS	1	6	6	Meetings with PBC
21.15	Quality Assurance/Quality Control	LS	%	2%	0	
21.16	Independent Peer Review	LS	%	0%	0	
21.17	Supervision	LS	%	0%	0	
Signalization Analysis Nontechnical Subtotal					14	
21.18	Coordination	LS	1	0	0	
19. Signalization Analysis Total					36	

Exhibit "A" Page 28 of 31

Project Activity 22: Signalization Plans

Progressive Design & Engineering

Sandalfoot Blvd at SR-7

0

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	
22.2	Summary of Pay Items		Sheet	0	0	0	0	
22.3	Tabulation of Quantities		Sheet	1	4	1	4	
22.4	General Notes/Pay Item notes		Sheet	1	4	1	4	
22.5	Plan Sheet		Sheet	1	11	1	11	
22.6	Interconnect Plans		Sheet	0	0	0	0	
22.7	Traffic Monitoring Site		EA	0	0	0	0	
22.8	Guide Sign Work Sheet		EA	0	0	0	0	
22.9	Special Details		Sheet	0	0	0	0	
22.10	Special Service Point Details		EA	0	0	0	0	
22.11	Mast Arm Details Sheet		PI	1	8	1	8	
22.12	Strain Pole Schedule		PI	0	0	0	0	
22.13	TCP Signal (Temporary)		EA	0	0	0	0	
22.14	Temporary Detection Sheet		PI	0	0	0	0	
22.15	Utility Conflict Sheet		Sheet	0	0	0	0	
22.16	Interim Standards		LS	0	0	0	0	
Signalization Plans Technical Subtotal						5	31	
22.17	Quality Assurance/Quality Control		LS	%	2%		1	
22.18	Supervision		LS	%	0%		0	
22. Signalization Plans Total						5	32	

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5/17/2013

Exhibit "A" Page 30 of 31

Progressive Design Engineering, Inc.

**Sandalfoot Blvd & SW 3rd Street Bridge Replacements
Palm Beach County Projects 2013-524 & 525**

Current Wage Rates

Title	Rate
Chief Engineer	\$59.12
Senior Engineer	\$50.27

Proposed Labor Rates

Escalated Hourly Rates based on Actual Salaries

Title	Proposed	
	Hourly Rate (Unloaded)	Hourly Rate (Loaded)
Chief Engineer	\$59.12	\$177.36
Senior Engineer	\$50.27	\$150.80

Multiplier

Title	Rate
Overhead	181.14%
Operating Margin	12.00%
Expenses	6.86%
Overhead Rate	200.00%
Overhead Multiplier	3.0000

5/17/2013

Exhibit "A" Page 31 of 31

Progressive Design Engineering, Inc.

**Sandalfoot Blvd & SW 3rd Street Bridge Replacements
Palm Beach County Projects 2013-524 & 525**

Average Rates (Based on Estimated Percent of Work)

TITLE/NAME	WAGE RATE	PERCENT	COST/HOUR
Chief Engineer			
Wael Majdalawi, PE	\$59.12	100%	\$59.12
	Average	100%	\$59.12
Senior Engineer:			
Gary Robeson, PE	\$47.30	50%	\$23.65
Rudy Hoyos, PE	\$53.23	50%	\$26.62
	Average	100%	\$50.27

Palm Beach County
Engineering & Public Works Roadway Production

Exhibit "C" Page 1 of 3

PARTICIPATION FOR MWBE/SBE CONSULTANTS
Contract

Project Name: Sandalfoot Boulevard from S.R. 7 to E. of S.R. 7	Project Number: 2013524
Prime Vendor: Alan Gerwig & Associates, Inc.	Resolution Number:
Telephone: (561) 792-9000	Resolution Date:
Contact: Alan Gerwig	Department: Engineering & Public Works

MINORITY SUBCONTRACTORS

Minority Sub-Consultant	Type of Work Performed	Contract Dollar Amount for Sub-Consultant				
		Black	Hispanic	Women	Other	White Male
Alan Gerwig & Associates, Inc. 12798 W FOREST HILL BLVD, STE 2 WELLINGTON, FL 33414 (561) 792-9000	MWBE	0.00	0.00	0.00	0.00	
	SBE	0.00	0.00	0.00	0.00	86,609.50
Alan Gerwig & Associates, Inc. 12798 W FOREST HILL BLVD, STE 2 WELLINGTON, FL 33414 (561) 792-9000	MWBE	0.00	0.00	0.00	0.00	
	SBE	0.00	0.00	0.00	0.00	1,150.00
HSQ Group, Inc. 1489 W PALMETTO PARK RD STE 3 BOCA RATON, FL 33486 (561) 392-0221	MWBE	0.00	0.00	0.00	0.00	
	SBE	0.00	0.00	0.00	34,747.23	0.00
HSQ Group, Inc. 1489 W PALMETTO PARK RD STE 3 BOCA RATON, FL 33486 (561) 392-0221	MWBE	0.00	0.00	0.00	0.00	
	SBE	0.00	0.00	0.00	12,688.00	0.00
HSQ Group, Inc. 1489 W PALMETTO PARK RD STE 3 BOCA RATON, FL 33486 (561) 392-0221	MWBE	0.00	0.00	0.00	0.00	
	SBE	0.00	0.00	0.00	1,295.00	0.00
Progressive Design & Engineering, Inc. 10891 LA REINA RD STE 100 DELRAY BEACH, FL 33446 (561) 498-2304	MWBE	0.00	0.00	0.00	0.00	
	SBE	0.00	0.00	10,573.12	0.00	0.00
Alan Gerwig & Associates, Inc. 12798 W FOREST HILL BLVD, STE 2 WELLINGTON, FL 33414 (561) 792-9000	MWBE	0.00	0.00	0.00	0.00	
	SBE	0.00	0.00	0.00	0.00	10,700.00
HSQ Group, Inc. 1489 W PALMETTO PARK RD STE 3 BOCA RATON, FL 33486 (561) 392-0221	MWBE	0.00	0.00	0.00	0.00	
	SBE	0.00	0.00	0.00	5,819.98	0.00

Palm Beach County
Engineering & Public Works Roadway Production

PARTICIPATION FOR MWBE/SBE CONSULTANTS
Contract

Exhibit "C" Page 2 of 3

Alan Gerwig & Associates, Inc. 12798 W FOREST HILL BLVD, STE 2 WELLINGTON, FL 33414 (561) 792-9000	MWBE	0.00	0.00	0.00	0.00	
	SBE	0.00	0.00	0.00	0.00	8,360.00
Total Contract Authorizaton \$187,964.87	Total MWBE	0.00	0.00	0.00	0.00	
	Percentage	0.00%	0.00%	0.00%	0.00%	
	Total SBE	0.00	0.00	10,573.12	54,550.21	106,819.50
	Percentage	0.00%	0.00%	5.63%	29.02%	56.83%



CERTIFICATE OF LIABILITY INSURANCE

ALANGER-01

ANGIEY

DATE (MM/DD/YYYY)

8/21/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Collinsworth, Alter, Fowler & French, LLC 8000 Governors Square Blvd Suite 301 Miami Lakes, FL 33016		CONTACT NAME: Zoraida Gonzalez PHONE (A/C, No, Ext): (305) 822-7800 E-MAIL ADDRESS: zgonzalez@caffllc.com		FAX (A/C, No): (305) 362-2443
INSURED Alan Gerwig & Assoc. Inc. 12798 W. Forest Hill Blvd. Ste. 204 Wellington, FL 33414		INSURER(S) AFFORDING COVERAGE		NAIC #
		INSURER A: Hartford Casualty		
		INSURER B: First Mercury Ins. Company		10657
		INSURER C:		
		INSURER D:		
		INSURER E:		
		INSURER F:		

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC	X	21SBARM9558	12/9/2012	12/9/2013	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMPIOP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS		21SBARM9558	12/9/2012	12/9/2013	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB DED <input checked="" type="checkbox"/> RETENTION \$ 10,000 <input checked="" type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR		21SBARM9558	12/9/2012	12/9/2013	EACH OCCURRENCE \$ 1,000,000 AGGREGATE \$ 1,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/> N/A				WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
B	Professional Liab.		FMFE101967	8/25/2013	8/25/2014	Each Claim 1,000,000
B	Claims-Made Basis		FMFE101967	8/25/2013	8/25/2014	Annual Aggregate 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 Professional Liability Retroactive Date 08/25/1998; Professional Liability Deductible \$20,000 Each Claim

Those usual to the Insured's Operations. Palm Beach County Board of County Commissioners, a Political Subdivision of the State of Florida, its Officers, Employees, and Agents, are named Additional Insured on the General Liability Coverage, excluding Professional Services.
 Project Name: For all projects with Palm Beach County

CERTIFICATE HOLDER**CANCELLATION**

Palm Beach County Board of County Commissioners
 c/o Engineering & Public Works Department
 Palm Beach County
 2300 N Jog Rd Ste 3W-33
 West Palm Beach, FL 33411

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

12798 W. Forest Hill Boulevard
Suite 204
Wellington, FL 33414
Phone: (561) 792-9000
Fax: (561) 792-9901
www.aga-engineering.com
CA No. 7969

Alan Gerwig & Associates, Inc.
Consulting Engineers



REC'D JUL 27 2012

July 26, 2012

JaeAnn Dean, Consultant Contract Management Specialist
Roadway Production Division / CCNA Section
2300 N. Jog Road, Suite 3W-33
West Palm Beach, FL 33411-2745

RE: AGA Statement of No Corporately Owned Automobiles

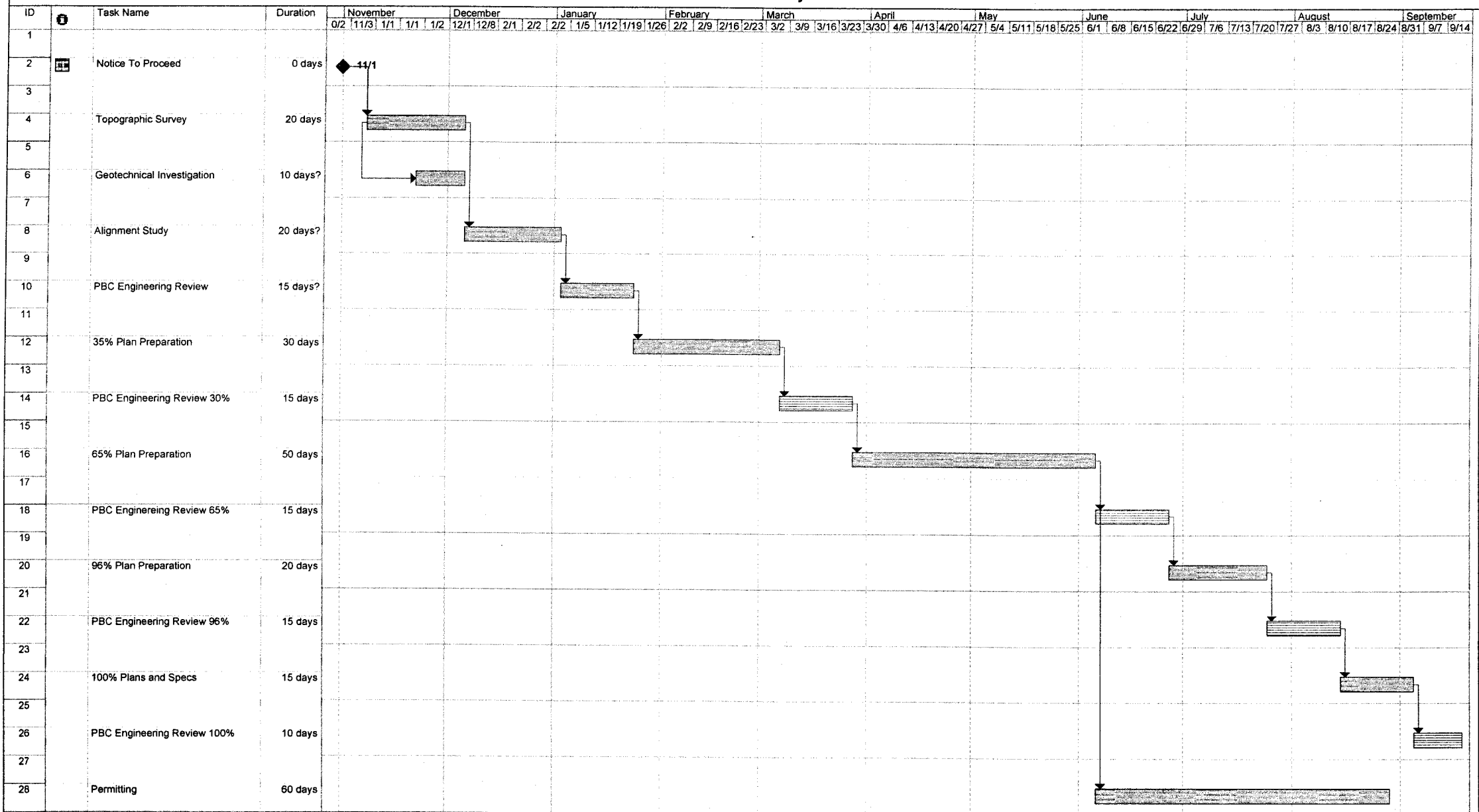
Ms. Dean:

This letter is to declare that Alan Gerwig & Associates, Inc. does not own any automobiles.

Sincerely,

Alan Gerwig, P.E., LEED A.P.
President

Sandalfoot Blvd. Project Plan



Project: Project11
Date: Tue 9/10/13

Task [Task Bar] Progress [Solid Bar] Summary [Double Bar] External Tasks [Dotted Bar] Deadline [Down Arrow]
 Split [Dashed Bar] Milestone [Diamond] Project Summary [Thick Double Bar] External Milestone [Diamond]

Attachment 3