

PROFESSIONAL SERVICES

29. Approve Amendment #2 to PS-567-00/BJC – Preliminary Engineering and Final Design and Environmental Permitting Services for Bunnell Road with Inwood Consulting Engineers, Inc., Oviedo, FL (\$48,652.75)

PS-567-00/BJC provides for preliminary engineering and final design and environmental permitting services for Bunnell Road including considerations for social and environmental effects. Amendment #2 will increase the Not-To-Exceed amount of the Agreement by \$48,652.75 to cover construction plans for the addition of 1050 feet of sidewalk along the south side of Bunnell Road. The proposed sidewalk will provide the missing link of sidewalk between Bear Lake Road and the sidewalk facility that will be constructed when the Bunnell project is built. The following is a summary of the cost of the contract:

Original Contract Sum	\$ 512,500.00
Amendment #1	\$ 40,000.00
Amendment #2	<u>\$ 48,652.75</u>
Revised Contract Sum	\$ 601,152.75

Funds are available in accounts 077515.560680 and 077523.560680, sub-ledger 00006201. The Public Works Department/Engineering Division and Fiscal Services Department/Purchasing and Contracts Division recommend that the Board approve and authorize the Chairman to execute Amendment #2.

SECOND AMENDMENT TO CONSULTANT SERVICES AGREEMENT (PS-567-00/BJC)
BUNNELL ROAD

THIS SECOND AMENDMENT is made and entered into this _____ day of _____, 20____ and is to that certain Agreement made and entered into on the 8th day of August, 2000, as amended on November 14, 2002, between **INWOOD CONSULTING ENGINEERS, INC.**, whose address is 870 Clark Street, Oviedo, Florida 32765, hereinafter referred to as "CONSULTANT", and **SEMINOLE COUNTY**, a political subdivision of the State of Florida, whose address is Seminole County Services Building, 1101 East First Street, Sanford, Florida 32771, hereinafter referred to as "COUNTY".

W I T N E S S E T H:

WHEREAS, the CONSULTANT and COUNTY entered into the above-referenced Agreement on August 8, 2000, as amended on November 14, 2002 project planning, preliminary engineering and environmental analysis for Bunnell Road from West Towne Parkway to Eden Park Avenue in Seminole County; and

WHEREAS, the parties desire to amend the Agreement so as to enable both parties to continue to enjoy the mutual benefits it provides; and

WHEREAS, Section 23 of the Agreement provides that any amendments shall be valid only when expressed in writing and duly signed by the parties,

NOW, THEREFORE, in consideration of the mutual understandings and agreements contained herein, the parties agree to amend the Agreement as follows:

1. Section 5 of the Agreement is amended to read:

SECTION 5. COMPENSATION. The COUNTY agrees to compensate the CONSULTANT for the professional services called for under this Agreement on either a "Fixed Fee Basis" or on a "Time Basis Method". If a Work Order is issued under a "Time Basis Method," then CONSULTANT shall be compensated in accordance with the rate schedule attached as Exhibit

"C". If a Work Order is issued for a "Fixed Fee Basis", then the applicable Work Order Fixed Fee amount shall include any and all reimbursable expenses. The total compensation paid to the CONSULTANT under the terms of this Agreement, including reimbursable expenses, shall not exceed the sum of SIX HUNDRED ONE THOUSAND ONE HUNDRED FIFTY-TWO AND 75/100 DOLLARS (\$601,152.75).

2. Except as herein modified, all terms and conditions of the Agreement shall remain in full force and effect for the term of the Agreement, as originally set forth in said Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this instrument for the purpose herein expressed.

ATTEST:

INWOOD CONSULTING ENGINEERS, INC.

ANDREW D. DEWITT, P.E.
Vice-President

(CORPORATE SEAL)

By:_____
ALEX B. HULL, P.E.
President

Date:_____

ATTEST:

BOARD OF COUNTY COMMISSIONERS
SEMINOLE COUNTY, FLORIDA

MARYANNE MORSE
Clerk to the Board of
County Commissioners of
Seminole County, Florida.

For the use and reliance
of Seminole County only.

Approved as to form and
legal sufficiency.

By:_____
CARLTON HENLEY, Chairman

Date:_____

As authorized for execution
by the Board of County Commissioners
at their _____, 20____
regular meeting.

County Attorney
AC/lpk
5/23/06
Ps-567 2am



April 18, 2006

SEM-016-05

Mr. David V. Nichols, P.E.
Seminole County Engineering Division
520 West Lake Mary Blvd., Suite 200
Sanford, FL 32773

Re: Bunnell Road Sidewalk Extension

Dear Dave:

Please find attached our Fee Proposal and a Technical Memorandum detailing the scope of work required to construct sidewalk on the south side of Bunnell Road. The services required are listed below in bullet format with a full project description located in the attached Scope of Services.

- Roadway- Design of approximately 1050 feet of sidewalk on the south side of Bunnell Road, west of Eden Park Avenue.
- Survey – Additional survey
- Structures - Design of retaining wall and/or sheet pile wall. (optional)
- Geotechnical - Additional soil borings. (optional)
- Drainage – Coordination with SJRWMD for permitting.
- Environmental – flagging of wetlands.

Should you have any questions or comments, please call.

Very truly yours,

INWOOD CONSULTING ENGINEERS, INC.

A handwritten signature in black ink, appearing to read "Mark Hales".

Mark D. Hales, P.E.
Project Manager

Technical Memorandum

Bunnell Road Sidewalk Extension

Project Description

The proposed project entails the addition of approximately 1050 feet of sidewalk to be constructed on the south side of Bunnell Road. The proposed sidewalk would connect to the existing sidewalk located to the west, and extend to approximately 310 feet west of Eden Park Avenue. Once the Bunnell Road sidewalk project is constructed, this portion of sidewalk would be the final segment needed to complete a continuous sidewalk connection from Bear Lake Road to Eden Park Avenue on the south side of the road.

Design Services

Inwood will provide a final design solution for this project that includes the construction of sidewalk on the south side of Bunnell Road. After the design survey is completed, a preliminary alignment will be drafted and a field visit scheduled to adjust the alignment and confirm topo features. With input from County staff and from a public information meeting if necessary, we will finalize the sidewalk alignment and plans. Phase submittals for County review will be made at 60% and 100% stages with final plans complete approximately 6 months from our notice to proceed.

Drainage Services

Coordination with SJRWMD will be necessary for permitting issues within the project corridor. Inwood will handle all of the necessary permitting for the project.

Throughout the project, there are several side drains and roadside swales. The swales range from shallow depressions to deeper ditches in a few areas. We will perform a drainage analysis and regrade the existing roadside swales where necessary. Pipe desilting may also have to be performed on several side drains located within the project corridor. The proposed sidewalk will be constructed at grade in order to maintain existing drainage patterns.

Surveying Services

Southeastern Surveying will provide surveying services in accordance with Chapter 61G17-6 F.A.C. to include the following:

- Establish horizontal control network based on existing project survey control.
- Establish vertical control network based on existing project survey control.
- Obtain updated topography for the area from the south edge of pavement and south right-of-way line plus an additional 25' for the pond area (approximately 350 feet).
- Revise the previously issued 2d and 3d survey files to incorporate the updated data.

Geotechnical Services (Optional)

Universal Engineering Sciences will perform a total of ten (10) hand auger soil borings advanced to a depths of about 5 feet for the pavement exploration together with five (5) SPT borings

advanced to a depth of 10-feet for the retaining wall. Standard Penetration Tests (SPT) will be performed continuously to the bottom of the borings. Depending upon access for the drill rig, some of the SPT borings may need to be replaced with hand auger borings. They will perform routine laboratory soil classification tests to aid in visual soil classification. They will analyze field and laboratory test data to develop geotechnical recommendations for site preparation and gravity wall foundations. A final geotechnical report will be submitted containing the results of all geotechnical analysis with the following information as a minimum.

- Soil boring logs and classifications
- Existing groundwater levels and estimated seasonal high levels
- Presence or lack of unsuitable soils
- Retaining wall design soil parameters
- Sidewalk pavement design parameters
- Site preparation recommendations
- Other concerns as appropriate

Structural Services (Optional)

Metz & Associates, Inc. will perform the Structural Services for the project. The scope of design services for this project will include the following:

- Preparation of design calculations and structural details for the construction of one (1) retaining wall structure on a straight alignment, approximately 160 feet long, located between a proposed sidewalk and a retention pond. The retaining wall may consist of either a standard FDOT cantilever concrete retaining wall (utilizing index 1400 through 1410 as necessary) or a cantilever steel sheet pile retaining wall with a cast-in-place concrete cap (no anchor system). Either option will include details for standard FDOT safety railing to be mounted on the top of wall. Design or details for utilities and/or drainage structure penetrations through the retaining wall are not included in the scope of services.
- Preparation of quantities and construction cost estimate.
- Attendance at two (2) local design team meetings to discuss progress, coordination, review comments, schedule, ect.
- Submittal of 90%, 100% and final plans and design calculations and one set of PDF files.
- All design requirements will be based on current FDOT and AASHTO criteria, standards & specifications.

Environmental Services

A SJRWMD permit will be necessary for the construction of the sidewalk. Wetland impacts will also have to be addressed within the project corridor primarily with the pond.

Lotspeich & Associates will investigate the Bunnell Road corridor to flag existing wetlands. Once the wetlands are flagged, Lotspeich will coordinate with the necessary agency to gain approval of the location. Once approved, Lotspeich will coordinate with Inwood and Southeastern Surveying to survey the flags.



Metz & Associates, Inc. | Structural Engineers

820 Clark Street
Oviedo, FL 32765
Phone: (407) 366-3800
Fax: (407) 366-3356
www.metzbridges.com

September 23, 2005

Mr. Andy DeWitt, P.E.
Inwood Consulting Engineers, Inc.
870 Clark Street
Oviedo, Florida 32765

RE: Bunnell Road Widening Project
Project No. PS-567-00
Seminole County, Florida
Metz Project No. 05-16

Dear Mr. DeWitt:

We are pleased to submit this proposal for engineering services for the above referenced project. The scope of design services for this project includes the following:

- 1) Preparation of design calculations and structural details for the construction of one (1) retaining wall structure on a straight alignment, approximately 160 feet long, located between a proposed sidewalk and a retention pond. The retaining wall may consist of either a standard FDOT cantilever concrete retaining wall (utilizing index 1400 through 1410 as necessary) or a cantilever steel sheet pile retaining wall with a cast-in-place concrete cap (no anchor system). Either option will include details for standard FDOT safety railing to be mounted on the top of the wall. Design or details for utilities and/or drainage structure penetrations through the retaining wall are not included in the scope of services. Estimated steel corrosion rates will be accounted for during the design process in lieu of coatings or other corrosion protection systems for the steel sheet piling.
- 2) Preparation of quantities and construction cost estimate in FDOT format for each pay item.
- 3) Attendance at up to two (2) local design team meetings to discuss progress, coordination, review comments, schedule, etc.
- 4) Submittal of 90%, 100% and Final plans and design calculations. The final submittal package will include signed and sealed 11" x 17" plans and calculations and one set of PDF files.
- 5) All design requirements will be based on current FDOT and AASHTO criteria, standards and specifications.

To perform the indicated scope of services we will require the following information:

- 1) Site plan with elevations, dimensions and topography.
- 2) Soils data, including allowable maximum bearing pressure, soil unit weight, angle of internal friction, groundwater elevations and soil environmental classification at the retaining wall location.
- 3) Final dimensions, locations, grades, and elevations of all existing features and proposed items including, utilities, roadways, access requirements and other features which could impact the design or layout of the retaining wall.
- 4) Right of way limitations and utility conflicts (if any).

To complete the basic services indicated above, we propose a lump sum fee of \$5,900.00. The lump sum fee includes our local postage, shipping and copying costs and includes up to six (6) manhours to respond to review comments by the owner or owners representatives. Inwood Consulting Engineers, Inc. (Inwood) will be billed on an hourly basis if our services are necessary beyond the additional manhours to provide out of scope services or information. We will inform Inwood prior to proceeding with any out of scope services.

Metz will submit invoices to Inwood by the 1st of each month for work performed during each calendar month. Compensation will be based on the percentage complete through the invoice period.

The scope of services does not include the preparation of supplemental specifications or technical special provisions, design or detailing of custom features such as aesthetic wall surface treatments, unique loading conditions or unique geometric conditions. The scope of services does not include any construction phase services. These services are not include for this project, but will be available on an as needed basis.

Additional services required for this project may be provided based on an addendum to this agreement or based on our current hourly rates. Additional services will be addressed on a case by case basis.

In recognition of the relative risks, rewards and benefits of the project to both Inwood and Metz, the risks have been allocated so that Inwood agrees, to the fullest extent permitted by law, to limit the total liability of Metz to Inwood and all subcontractors on the project, for any and all injuries, losses, expenses, damages of any nature whatsoever or claim expenses arising out of this agreement, from any cause or causes, so that the total aggregate liability of Metz shall not exceed the amount of \$250,000. Such claims and causes include, but are not limited to, strict liability, negligence, professional errors or omissions, breach of contract or breach of warranty.

Andy DeWitt, P.E.
September 23, 2005
Page 3 of 3

Inwood shall indemnify and hold harmless Metz and all of its personnel from and against any and all claims, damages, losses and expenses (including reasonable attorneys fees) arising out of or resulting from the performance of the services, provided that any such claims, damage, loss or expense is caused in whole or in part by the negligent act or omission and/or strict liability of Inwood, anyone directly or indirectly employed by Inwood (except Metz) or anyone for whose acts any of them may be liable.

Invoices shall be considered past due if not paid within 30 days after the invoice date. If it becomes necessary for Metz to utilize an attorney or collection agency to collect fees due under this agreement, Inwood agrees to bear the cost of collection, including reasonable attorney fees.

This agreement is intended to benefit Inwood and Metz exclusive. Any benefit conferred upon a third party is incidental to this agreement.

We appreciate this opportunity to work with Inwood & Associates. We are prepared to commence work upon receipt of a written notice to proceed.

Very truly yours,

Metz & Associates, Inc.



Daniel M. Metz, P.E.
President

DMM:aab
J:\05-16\PM05-16a pro.wpd

James M. Dunn, II, P.S.M.
Larry R. Eford, P.S.M.
Brian R. Garvey, P.E.
Gary B. Krick, P.S.M.
Myron F. Lucas, P.S.M.
Thomas K. Mead, P.S.M.
Timothy Mosby, P.S.M.



James L. Petersen, P.S.M.
Larry W. Prescott, P.S.M.
William C. Rowe, P.S.M.
Marcia E. Russell, P.S.M.
George E. Snyder, P.S.M.
Roger Lonsway, P.S.M. (Retired)

Land Surveying & Mapping Services • Sub-Surface Utility Designation & Location Services • GPS Asset Inventories • Geographic Information Systems

September 26, 2005

VIA E-MAIL: mhailes@inwoodinc.com

Mr. Mark Hales, P.E.
Inwood Consulting Engineers, Inc.
870 Clark Street
Oviedo, Florida 32765

RE: Request for Proposal - Bunnell Road Sidewalk Design Survey Update

Dear Mr. Hales,

We are pleased to submit our revised Proposal for surveying services on the above referenced project.

SCOPE OF WORK:

Provide Surveying Services in accordance with Chapter 61G17-6 F.A.C. to include the following:

1. Establish horizontal control network based on existing project survey control.
2. Establish vertical control network based on existing project survey control
3. Obtain updated topography for the area from the south edge of pavement and south R/W line plus 25 feet between station 106+50 and 110+00.
4. Revise the previously issued 2d and 3d survey files to incorporate the updated data.

The final product will be four (4) certified prints, and an electronic file on disk for your use.

Our fee for the above referenced work is outlined on the attached fee schedule. A completion schedule will be provided as project commencement nears. Payment is expected within thirty (30) days of invoice.

We look forward to the opportunity to work with you on this project.

Sincerely,

James L. Petersen, P.S.M.
Vice President/Project Manager
JLP:jpl

Page 2

September 26, 2005

Mr. Mark Hales, P.E.

If the above scope, period of service and method of compensation meets with your approval, please execute below and fax to Southeastern Surveying & Mapping Corp. as notice to proceed along with the notice of commencement.

ACCEPTED BY:

Authorized Signature

Printed Name

Date

FEE QUOTATION PROPOSAL

Project Name: Bunnell Road Updated Sidewalk Survey

Date: September 26, 2005

Contract: Inwood / Seminole County

Name of Firm: Southeastern Surveying & Mapping Corporation

ACTIVITY	PLS			SEN TECH			DRAFTSPERSON			2 MAN CREW			3 MAN CREW		
	Man Hrs	Hrly Rate	Fee	Man Hrs	Hrly Rate	Fee	Man Hrs	Hrly Rate	Fee	Man Hrs	Hrly Rate	Fee	Man Hrs	Hrly Rate	Fee
Horizontal & Vertical Control	2	98.25	196.50	2	91.29	182.58		49.10	0.00	8	90.94	727.52		118.44	0.00
Topographic Survey		98.25	0.00	4	91.29	365.16	12	49.10	589.20	8	90.94	727.52		118.44	0.00
		98.25	0.00		91.29	0.00		49.10	0.00		90.94	0.00		118.44	0.00
		98.25	0.00		91.29	0.00		49.10	0.00		90.94	0.00		118.44	0.00
		98.25	0.00		91.29	0.00		49.10	0.00		90.94	0.00		118.44	0.00
		98.25	0.00		91.29	0.00		49.10	0.00		90.94	0.00		118.44	0.00
		98.25	0.00		91.29	0.00		49.10	0.00		90.94	0.00		118.44	0.00
		98.25	0.00		91.29	0.00		49.10	0.00		90.94	0.00		118.44	0.00
		98.25	0.00		91.29	0.00		49.10	0.00		90.94	0.00		118.44	0.00
		98.25	0.00		91.29	0.00		49.10	0.00		90.94	0.00		118.44	0.00

LUMP SUM FEE BREAKDOWN

Professional Surveyor
Senior Technician
Draftsperson
Two-Man Crew
Three-Man Crew

\$ 196.50
\$ 547.74
\$ 589.20
\$ 1,455.04
\$ 0.00

LUMP SUM FEE TOTAL

\$ 2,788.48





UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences
Construction Materials Testing • Threshold Inspection
Private Provider Inspection

OFFICES IN:

- Clermont
- Daytona Beach
- DeBary
- Fort Myers
- Gainesville
- Hollywood
- Jacksonville
- Ocala
- Orlando
- Palm Coast
- Rockledge
- Sarasota
- St. Augustine
- Tampa
- West Palm Beach

September 26, 2005

RECEIVED

SEP 28 2005

Inwood Consulting Engineers
870 Clark Street
Oviedo, Florida 32765

Attention: Mr. Mark Hales, P.E.

Reference: Cost Proposal for Geotechnical Exploration
Sidewalk and Retaining Wall
South Side of Bunnell Road
Seminole County, Florida
UES Proposal No. 426442

Dear Mr. Hales:

Universal Engineering Sciences is pleased to submit our proposal for geotechnical engineering services on this project. Our understanding of this project, with our proposed scope of services and costs, is presented in the following paragraphs.

PROJECT DESCRIPTION

We have been asked to provide a proposal for exploration into the soil conditions beneath the proposed sidewalk and retaining wall along the south side of Bunnell Road between approximate Stations 100+00 and 110+20 in Seminole County, Florida. You have provided us with a drawing indicating the extent of the new sidewalk and the location of the retaining wall. The retaining wall will run between the new sidewalk and the pond to the south. The estimated height of the wall will be less than 5-feet.

SCOPE OF SERVICES

Universal Engineering Sciences will perform a total of ten (10) hand auger soil borings advanced to a depth of about 5 feet for the pavement exploration together with five (5) SPT borings advanced to a depth of 10-feet for the retaining wall. Standard Penetration Tests (SPT) will be performed continuously to the bottom of the borings. Depending upon access for the drill rig, some of the SPT borings may need to be replaced with hand auger borings.

Our field representative will visually classify the soil samples at each test interval and place them in clean bags, which are labeled for future identification. Groundwater levels will be obtained in the boring upon initial encounter and later when the water table has stabilized.

At the completion of the exploratory work, the borings will be backfilled with the soil cuttings.

Page 1 of 3 Pages

3532 Maggie Blvd. • Orlando, FL 32811 • (407) 423-0504 • Fax (407) 423-3106



The soil samples will be transported to our Orlando laboratory for better classification testing than can be performed by field methods, and to determine the pertinent engineering properties for foundation design and site preparation recommendations. At the completion of the field and laboratory testing services, our project engineer will prepare a report under the direction of a registered professional engineer who specializes in geotechnical engineering consulting.

The final geotechnical report will contain the following information at a minimum:

- Soil boring logs and classifications
- Existing groundwater levels and estimated seasonal high levels
- Presence or lack of unsuitable soils
- Retaining wall design soil parameters
- Sidewalk pavement design parameters
- Site Preparation Recommendations
- Other concerns as appropriate

Our geotechnical work will not cover environmental site assessment (ESA) and will not address the potential for surface expression of deep geological conditions, such as sinkhole development related to karst activity. We also recommend elevation surveying be performed on the borehole locations by a registered professional surveyor to extend the usefulness of the geotechnical information with regards to seasonal high groundwater levels.

COST AND TERMS

Presented on Exhibit I, attached, are our costs for performing the previously described services. We will not exceed our budget unless the soils encountered are significantly different from those anticipated, or the site is not accessible to our proposed truck-mounted drilling rig. In either event you will be notified prior to any increase in costs.

Further we have assumed that there is no hazardous materials contamination at the site and no major utility lines crossing the subject site. In the event they exist, please inform us so that we may make arrangement for taking adequate precautions and locating the utilities on the site, prior to the drilling operations.

Enclosed you will find our General Contract Conditions with a copy of our Work Authorization/Proposal Acceptance Form. If you wish us to proceed, please have the party responsible for payment sign the appropriate space on the Work Authorization/Proposal Acceptance Form and return it to us.

Inwood Consulting Engineers
UES Proposal No. 426442



REQUESTED INFORMATION

Upon your approval of our proposal, please provide us the following information for our planning purposes:

- ☐ Design wall foundation loadings
- ☐ Final site elevations

CLOSURE

We can begin this work within 3 days after notification to proceed and will complete this project in less than 3 weeks after that. Should you have any questions concerning this information please call. We thank you for the opportunity to provide our services look forward to working with you on this project.

Sincerely,
UNIVERSAL ENGINEERING SCIENCES, INC.

A handwritten signature in black ink, appearing to read 'DW', followed by a horizontal line.

David Wilshaw, M.S. (Eng)
Assistant Manager - Geotechnical Engineering

A handwritten signature in black ink, appearing to read 'KH', followed by a horizontal line.

Kal Hussein, M.S., P.E.
Director of Transportation

DW/SSR:ia

Enclosures: Cost Proposal (Exhibit I)
Work Authorization/Proposal Acceptance Form
General Contract Conditions

EXHIBIT I
Cost Proposal for Geotechnical Exploration
New Sidewalk and Retaining Wall
South Side of Bunnell Road
Seminole County, Florida
UES Proposal No. 426442

TASK	QUANTITY	UNIT	UNIT COST	TOTAL COST
PROFESSIONAL SERVICES				
Senior Project Engineer	15	hours	\$115.00	\$1,725.00
Technical Secretary	5	hours	\$40.00	\$200.00
Drafting	6	hours	\$50.00	\$300.00
Principal Consultant	3	hour	\$160.00	\$480.00
SUBTOTAL				\$2,705.00
SUPPORT SERVICES				
Hand Auger Borings, 0 to 6-feet	50	feet	\$10.00	\$500.00
Mobilization/Demobilization - Truck Mount Drilling Rig	1	l.s.	\$400.00	\$400.00
5 - 10' deep SPT Borings	50	feet	\$11.00	\$550.00
Senior Engineering Technician	3	hours	\$45.00	\$135.00
Visual Exam. / Stratify soils	100	feet	\$1.20	\$120.00
SUBTOTAL				\$1,705.00
LABORATORY TESTING				
Wash No. 200 Sieve Determinations	15	each	\$25.00	\$375.00
SUBTOTAL				\$375.00
GRAND TOTAL				\$4,785.00



EXHIBIT NOTES:

Additional services, consultations, or meetings if requested, will be invoiced at Universal Engineering Sciences' standard rates.

This fee estimate includes six (6) copies of the final report. Additional copies can be provided at a cost of \$0.25 per page, \$1.00 per plan sheet, with a minimum of \$25.00 per copy plus mailing costs.

All reports will be shipped via first class mail on project completion. Shipping via overnight delivery service will be provided at the client's request at cost plus 15%.

This fee proposal will remain effective for 60 days. If you should require more than 60 days to formally authorize us to proceed, we request that you permit us to update our proposal to account for any changes in costs.

We have made a good faith effort to work with you to develop a work scope and fee estimate. Because of the possibility of unknown, discovered, underground conditions and/or the need for additional services that neither you nor we can currently foresee, we recommend that you budget a contingency equal to 15% of the total fee estimate. We will not use the contingency amount without first notifying you.

The Client will be responsible for all applicable taxes.



UNIVERSAL ENGINEERING SCIENCES, INC.

Work Authorization / Proposal Acceptance Form

Universal Engineering Sciences, Inc. (UES) is pleased to provide the services described below. The purpose of this document is to describe the terms under which the services will be provided and to obtain formal authorization.

PROJECT NAME: Geotechnical Exploration - Sidewalk and Retaining Wall

PROJECT LOCATION: South Side Bunnell Road, Seminole County, Florida

CLIENT NAME: Inwood Consulting Engineers Attn: Mark Hales, P.E.

Phone: 407-971-8850

CLIENT ADDRESS: 870 Clark Street, Oviedo, Florida 32765

Fax: 407-971-8955

I. Scope of Services and Understanding of Project (See attached proposal or as indicated below)

UES Proposal No. 426442

Exhibit I -

Geotechnical Exploration **\$4,785.00**

II. Contract Documents. The following documents form part of this Agreement and are incorporated herein by referral:

A. UES General Conditions. B. UES Proposal Dated: September 26, 2005

C. Plans, reports, specifications and other documents provided by the Client prior to this Agreement date.

D. Other exhibits marked and described as follows: Exhibit I

In the event of any inconsistency or conflict among the Contract Documents, the provision in the Contract Document first listed above shall govern.

III. Authority to proceed and for payment. (To be completed by Client)

If the invoice is to be mailed for approval to someone other than the account charged, please indicate below:

Firm: _____ Social Security Number or
Federal Identification No.: _____

Address: _____ City/ST: _____ Zip: _____

Attention: _____ Title: _____

IN WITNESS WHEREOF, the parties have caused this agreement to be executed by their duly authorized representatives

CLIENT _____ UNIVERSAL ENGINEERING SCIENCES, INC.

BY (Signature) _____ BY (Signature) 

TYPED NAME _____ TYPED NAME Kal Hussein M.S. P.E.

TITLE _____ TITLE Director of Transportation

DATE _____ DATE September 26, 2005

Return executed copy Universal Engineering Sciences

3532 Maggie Boulevard, Orlando, FL 32811

UNIVERSAL ENGINEERING SCIENCES, INC.
GENERAL CONDITIONS

SECTION 1: RESPONSIBILITIES

- 1.1 Universal Engineering Sciences, Inc., heretofore referred to as the "Consultant," has the responsibility for providing the services described under the "Scope of Services" section. The work is to be performed according to accepted standards of care and is to be completed in a timely manner.
- 1.2 The "Client" or a duly authorized representative, is responsible for providing the Consultant with a clear understanding of the project nature and scope. The Client shall supply the Consultant with sufficient and adequate information, including, but not limited to, maps, site plans, reports, surveys and designs, to allow the Consultant to properly complete the specified services. The Client shall also communicate changes in the nature and scope of the project as soon as possible during performance of the work so that the changes can be incorporated into the work product.

SECTION 2: STANDARD OF CARE

- 2.1 Services performed by the Consultant under this Agreement are expected by the Client to be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the Consultant's profession practicing contemporaneously under similar conditions in the locality of the project. No other warranty, expressed or implied, is made.
- 2.2 The Client recognizes that subsurface conditions may vary from those observed at locations where borings, surveys, or other explorations are made, and that site conditions may change with time. Data, interpretations, and recommendations by the Consultant will be based solely on information available to the Consultant at the time of service. The Consultant is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed.

SECTION 3: SITE ACCESS AND SITE CONDITIONS

- 3.1 Client will grant or obtain free access to the site for all equipment and personnel necessary for the Consultant to perform the work set forth in this Agreement. The Client will notify any and all possessors of the project site that Client has granted Consultant free access to the site. The Consultant will take reasonable precautions to minimize damage to the site, but it is understood by Client that, in the normal course of work, some damage may occur, and the correction of such damage is not part of this Agreement unless so specified in the Proposal.
- 3.2 The Client is responsible for the accuracy of locations for all subterranean structures and utilities. The Consultant will take reasonable precautions to avoid known subterranean structures, and the Client waives any claim against Consultant, and agrees to defend, indemnify, and hold Consultant harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, Client agrees to compensate Consultant for any time spent or expenses incurred by Consultant in defense of any such claim with compensation to be based upon Consultant's prevailing fee schedule and expense reimbursement policy.

SECTION 4: SAMPLE OWNERSHIP AND DISPOSAL

- 4.1 Soil or water samples obtained from the project during performance of the work shall remain the property of the Client.
- 4.2 The Consultant will dispose of or return to Client all remaining soils and rock samples 60 days after submission of report covering those samples. Further storage or transfer of samples can be made at Client's expense upon Client's prior written request.
- 4.3 Samples which are contaminated by petroleum products or other chemical waste will be returned to Client for treatment or disposal, consistent with all appropriate federal, state, or local regulations.

SECTION 5: BILLING AND PAYMENT

- 5.1 Consultant will submit invoices to Client monthly or upon completion of services. Invoices will show charges for different personnel and expense classifications.
- 5.2 Payment is due 30 days after presentation of invoice and is past due 31 days from invoice date. Client agrees to pay a finance charge of one and one-half percent (1- 1/2 %) per month, or the maximum rate allowed by law, on past due accounts.
- 5.3 If the Consultant incurs any expenses to collect overdue billings on invoices, the sums paid by the Consultant for reasonable attorneys' fees, court costs, Consultant's time, Consultant's expenses, and interest will be due and owing by the Client.

SECTION 6: OWNERSHIP OF DOCUMENTS

- 6.1 All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by the Consultant, as instruments of service, shall remain the property of the Consultant.
- 6.2 Client agrees that all reports and other work furnished to the Client or his agents, which is not paid for, will be returned upon demand and will not be used by the Client for any purpose.
- 6.3 The Consultant will retain all pertinent records relating to the services performed for a period of five years following submission of the report, during which period the records will be made available to the Client at all reasonable times.

SECTION 7: DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS

- 7.1 Client warrants that a reasonable effort has been made to inform Consultant of known or suspected hazardous materials on or near the project site.
- 7.2 Under this agreement, the term hazardous materials includes hazardous materials (40 CFR 172.01), hazardous wastes (40 CFR 261.2), hazardous substances (40 CFR 300.6), petroleum products, polychlorinated biphenyls, and asbestos.



LOTSPEICH AND ASSOCIATES, INC.

2711 W. Fairbanks Avenue

Winter Park, Florida 32789

L&A Project No: 2005-258.00

16-Apr-06

L&A File Name: 2005-258-MNHR-revised-16D06.XLS

PROJECT DESCRIPTION:

PRIME CONSULTANT:

SEMINOLE COUNTY CONTRACT:

Bunnell Road Sidewalk Design

Inwood Consulting Engineers, Inc.

PS-5165-04/AJR

SUMMARY FEE SHEET

Description		Senior Env. Specialist		Project Env. Specialist		Drafting / Graphics		Sr. Project Coordinator		Clerical/Technical Admin.		TOTAL	
		Rate/Hr: \$27.33		Rate/Hr: \$18.71		Rate/Hr: \$14.45		Rate/Hr: \$18.96		Rate/Hr: \$12.80			
		Man Hrs	Cost by Pos & Act	Man Hrs	Cost by Pos & Act	Man Hrs	Cost by Pos & Act	Man Hrs	Cost by Pos & Act	Man Hrs	Cost by Pos & Act	Manhrs. by Act	Salary Cost by Act
1.1	Preliminary Ecological Assessment												
1.1.1	Research Published & Available Documents	1	\$27.33	2	\$37.42	3	\$43.35	1	\$18.96	1	\$12.80	8	\$139.86
1.1.2	Request Wildlife Database Searches	0	\$0.00	0	\$0.00	1	\$14.45	2	\$37.92	0	\$0.00	3	\$52.37
1.1.3	Review Site Conditions/Field Delineate Wetlands	6	\$163.98	6	\$112.26	0	\$0.00	0	\$0.00	0	\$0.00	12	\$276.24
1.1.4	Coordinate with Surveyors	1	\$27.33	0	\$0.00	1	\$14.45	0	\$0.00	0	\$0.00	2	\$41.78
1.2	Report/Permit Coordination												
1.2.1	Prepare Ecological Assessment Report	3	\$81.99	6	\$112.26	3	\$43.35	2	\$37.92	3	\$38.40	17	\$313.92
1.2.2	Assist in Preparation of ERP Application	1	\$27.33	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	1	\$27.33
1.2.3	Wetlands or Listed Species Coordination	0	\$0.00	2	\$37.42	0	\$0.00	0	\$0.00	0	\$0.00	2	\$37.42
1.2.4	Respond to RAIs	2	\$54.66	4	\$74.84	2	\$28.90	1	\$18.96	2	\$25.60	11	\$202.96
1.2.5	Coordination Meetings with Project Team	3	\$81.99	0	\$0.00	0	\$0.00	1	\$18.96	0	\$0.00	4	\$100.95
1.2.6	Review Final Permit Conditions	1	\$27.33	0	\$0.00	0	\$0.00	0	\$0.00	1	\$12.80	2	\$40.13
Total Man Hrs	Total Salary [(MHxHR)]	18	\$491.94	20	\$374.20	10	\$144.50	7	\$132.72	7	\$89.60	62	\$1,232.96

NOTE:

A=LIMITING AMOUNT

S=LUMP SUM

TOTAL ACTIVITY SALARY COSTS		\$1,232.96
(a) OVERHEAD ACTIVITIES		
ADMIN. GENERAL & FRINGE COMBINED	142.00%	\$1,750.80
SUBTOTAL (LA)		\$2,983.76
(b) FIXED FEE OPERATING MARGIN (LS)	14.00%	\$417.73
SUBTOTAL		\$3,401.49
(c) MISCELLANEOUS OUT-OF-POCKET EXPENSES (LS)		\$179.79
(d) FACILITIES CAPITAL COST OF MONEY (LA)	N/A	\$0.00
TOTAL - MAXIMUM LIMITING AMOUNT		\$3,581.28



LOTSPEICH AND ASSOCIATES, INC.

2711 W. Fairbanks Avenue

Winter Park, Florida 32789

L&A Project No: 2005-258.00

16-Apr-06

L&A File Name:/2005-258-MNHR-revised-16D06.XLS

Bunnell Road Sidewalk Design
Seminole County

RATES FOR MISCELLANEOUS & REIMBURSABLE EXPENSES

<u>Description</u>	<u>Quantity</u>	<u>Rates</u>	<u>Total</u>	
Reproduction:				
MyIars	1	\$7.80	\$7.80	
Blueline Prints	4	\$0.78	\$3.12	
Film				
Kodak Film/200 Speed/24 Exposure	1	\$4.89	\$4.89	
Film Processing/24 Exposure Roll	1	\$7.98	\$7.98	
Color Copies	50	\$0.95	\$47.50	
Supplies:				
Aerials	1	\$4.00	\$4.00	
FNAI Database Search	0	\$75.00	\$0.00	
Mileage:	100	\$0.45	\$44.50	
Cell Phone:	Per Month	3	\$5.00	\$15.00
Courier/Express Mail:	Per Piece	3	\$15.00	\$45.00
				\$179.79

Bunnell Road Sidewalk Extension

FINAL ENGINEERING DIRECT EXPENSES
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Description: Revisions to Construction Plans
 Prepared By: Mark Hales
 Date: September 28, 2005

MISC. & OUT-OF-POCKET EXPENSES

ITEM	UNITS	No. OF UNITS	COST / UNIT	TOTAL COST	COMMENTS
Copies (8.5x11 and 11x17)	Each	375	\$0.25	\$93.75	
Approx 25 pages per set					
Mileage to Project	Mile	87	\$0.40	\$34.80	3 Site Visits
29 Miles round Trip					
Permitting					
Standard General permit	Each	1	\$1,000.00	\$1,000.00	
Postage	Each	75	\$0.39	\$29.25	
TOTAL				\$1,157.80	

Bunnell Road Sidewalk Extension - From approx. 1275' east of Bear Lake Road to approx. 310' west of Eden Park Avenue (one side)

Task	Activity	Schedule		Planner		Project Manager		Senior Engineer		Project Engineer		Designer		Checker		TOTAL	
		Start	End	Hours	Rate	Hours	Rate	Hours	Rate	Hours	Rate	Hours	Rate	Hours	Rate	Salary Cost	Avg. Rate
Notice to Proceed	Review Letter, Call Subcontractors	5/1/2008	5/1/2008	0	\$156.75	1	\$113.39	0	\$105.56	0	\$80.82	0	\$73.08	0	\$50.75	0	\$113.39
Contract Administration	Project Setup, accounting	5/2/2008	5/2/2008	0	\$156.75	1	\$113.39	0	\$105.56	0	\$80.82	0	\$73.08	0	\$50.75	1	\$113.39
Right of Way Identification	Included Under Survey	5/6/2008	5/6/2008	0	\$156.75	0	\$113.39	2	\$105.56	0	\$80.82	0	\$73.08	4	\$50.75	2	\$156.75
Newsletter # 1	Informational Newsletter, Project Scope and Limits	5/15/2008	5/15/2008	0	\$156.75	0	\$113.39	2	\$105.56	0	\$80.82	0	\$73.08	4	\$50.75	8	\$904.02
Develop 5% Plans	Plan Sheets (3) 1"=40' Sheets will show right of way and road names, for use on Field Visit # 1 for notes and markings	5/22/2008	6/2/2008	0	\$156.75	0	\$113.39	0	\$105.56	4	\$80.82	8	\$73.08	8	\$50.75	0	\$44.85
Topographic Survey	Included Under Survey	5/6/2008	5/15/2008	0	\$156.75	0	\$113.39	4	\$105.56	4	\$80.82	0	\$73.08	0	\$50.75	0	\$44.85
Field Visit	Check preliminary design against actual field conditions and adjust the design as necessary	6/5/2008	6/5/2008	0	\$156.75	0	\$113.39	4	\$105.56	4	\$80.82	0	\$73.08	0	\$50.75	0	\$44.85
Geotechnical	Soil Borings Analysis & Report (Included under Geotechnical)	6/5/2008	6/23/2008	0	\$156.75	4	\$113.39	0	\$105.56	4	\$80.82	0	\$73.08	0	\$50.75	8	\$774.72
Develop 80% Plans	Preliminary Alignment Design	6/16/2008	7/1/2008	0	\$156.75	4	\$113.39	0	\$105.56	4	\$80.82	0	\$73.08	0	\$50.75	8	\$774.72
	Key Sheet	6/16/2008	7/1/2008	0	\$156.75	0	\$113.39	0	\$105.56	1	\$80.82	1	\$73.08	1	\$50.75	0	\$44.85
	General Notes / Project Layout	6/16/2008	7/1/2008	0	\$156.75	1	\$113.39	1	\$105.56	2	\$80.82	0	\$73.08	4	\$50.75	0	\$44.85
	TYPICAL Sections:	6/16/2008	7/1/2008	0	\$156.75	1	\$113.39	8	\$105.56	1	\$80.82	2	\$73.08	2	\$50.75	0	\$44.85
	Plan Sheets (3) 1"=40'	6/16/2008	7/1/2008	0	\$156.75	4	\$113.39	4	\$105.56	8	\$80.82	8	\$73.08	16	\$50.75	0	\$44.85
	Drainage Design & Analysis	6/16/2008	7/1/2008	0	\$156.75	2	\$113.39	2	\$105.56	32	\$80.82	8	\$73.08	4	\$50.75	0	\$44.85
Permitting	Schedule Pre-App Meeting With SJVMD	7/10/2008	7/10/2008	0	\$156.75	0	\$113.39	8	\$105.56	4	\$80.82	4	\$73.08	0	\$50.75	0	\$44.85
Innovative OC	Included All Changes to the plans	7/10/2008	7/14/2008	0	\$156.75	0	\$113.39	2	\$105.56	0	\$80.82	2	\$73.08	4	\$50.75	0	\$44.85
Utility Coordination # 1	80% Set to Utilities Computer with Letter	7/11/2008	7/21/2008	0	\$156.75	0	\$113.39	2	\$105.56	0	\$80.82	0	\$73.08	2	\$50.75	2	\$44.85
80% Submittal	Deliver 80% Plans to the County	7/11/2008	7/21/2008	0	\$156.75	0	\$113.39	0	\$105.56	0	\$80.82	0	\$73.08	1	\$50.75	0	\$44.85
County Review	Two (2) Week Review Period	7/21/2008	8/4/2008	0	\$156.75	0	\$113.39	2	\$105.56	2	\$80.82	4	\$73.08	2	\$50.75	0	\$44.85
Drainage Report	80% Set to SJVMD (30 Day Review)	8/1/2008	8/14/2008	0	\$156.75	0	\$113.39	2	\$105.56	16	\$80.82	8	\$73.08	4	\$50.75	2	\$44.85
Submit Permit Application	Permit R.A.J. (30 Days to Respond)	8/14/2008	9/14/2008	0	\$156.75	0	\$113.39	0	\$105.56	16	\$80.82	8	\$73.08	4	\$50.75	2	\$44.85
Permitting	Meet with Staff to Discuss 80% Comments	8/14/2008	8/25/2008	0	\$156.75	2	\$113.39	0	\$105.56	8	\$80.82	0	\$73.08	2	\$50.75	1	\$44.85
80% Progress Meeting	Address 80% Comments	8/14/2008	8/25/2008	0	\$156.75	1	\$113.39	0	\$105.56	2	\$80.82	0	\$73.08	0	\$50.75	0	\$44.85
	Key Sheet	8/14/2008	8/25/2008	0	\$156.75	0	\$113.39	0	\$105.56	0	\$80.82	0	\$73.08	0	\$50.75	1	\$44.85
	General Notes / Project Layout	8/14/2008	8/25/2008	0	\$156.75	0	\$113.39	2	\$105.56	2	\$80.82	0	\$73.08	1	\$50.75	0	\$44.85
	TYPICAL Sections:	8/14/2008	8/25/2008	0	\$156.75	0	\$113.39	0	\$105.56	2	\$80.82	2	\$73.08	2	\$50.75	0	\$44.85
	Plan Sheets (3) 1"=40'	8/14/2008	8/25/2008	0	\$156.75	1	\$113.39	3	\$105.56	4	\$80.82	4	\$73.08	4	\$50.75	0	\$44.85
	Maintenance of Traffic Sheet Including Notes	8/14/2008	8/25/2008	0	\$156.75	1	\$113.39	2	\$105.56	2	\$80.82	4	\$73.08	2	\$50.75	0	\$44.85
	Speed Study Sheet	8/14/2008	8/25/2008	0	\$156.75	0	\$113.39	2	\$105.56	4	\$80.82	2	\$73.08	4	\$50.75	0	\$44.85
	Drainage Design & Analysis	8/14/2008	8/25/2008	0	\$156.75	0	\$113.39	0	\$105.56	4	\$80.82	4	\$73.08	8	\$50.75	0	\$44.85
Innovative OC	Includes All Changes to the plans	8/28/2008	9/1/2008	0	\$156.75	1	\$113.39	3	\$105.56	4	\$80.82	3	\$73.08	4	\$50.75	0	\$44.85
Qualities	Calculate and summarize a Summary of Quantities Sheet	8/14/2008	8/25/2008	0	\$156.75	0	\$113.39	2	\$105.56	2	\$80.82	8	\$73.08	8	\$50.75	0	\$44.85
Utility Coordination # 2	80% Set to Utilities Companies with Letter	8/14/2008	8/25/2008	0	\$156.75	0	\$113.39	2	\$105.56	0	\$80.82	0	\$73.08	2	\$50.75	2	\$44.85
80% Submittal	Deliver 80% Plans to the County	8/14/2008	8/25/2008	0	\$156.75	0	\$113.39	0	\$105.56	0	\$80.82	0	\$73.08	1	\$50.75	0	\$44.85
County Review	Two (2) Week Review Period	8/25/2008	9/1/2008	0	\$156.75	0	\$113.39	0	\$105.56	8	\$80.82	0	\$73.08	1	\$50.75	0	\$44.85
80% Progress Meeting	Meet with Staff to Discuss 80% Comments	8/25/2008	9/1/2008	0	\$156.75	2	\$113.39	0	\$105.56	2	\$80.82	0	\$73.08	0	\$50.75	0	\$44.85
100% Plans	Address 80% Comments, Finalize Plans	8/28/2008	9/1/2008	0	\$156.75	3	\$113.39	0	\$105.56	4	\$80.82	4	\$73.08	4	\$50.75	1	\$44.85
Innovative OC	Includes All Changes to the plans	10/1/2008	10/12/2008	0	\$156.75	0	\$113.39	4	\$105.56	0	\$80.82	4	\$73.08	4	\$50.75	0	\$44.85
100% Submittal	Deliver 100% Plans to the County	10/1/2008	10/12/2008	0	\$156.75	0	\$113.39	0	\$105.56	0	\$80.82	0	\$73.08	1	\$50.75	0	\$44.85
County Review	Two (2) Week Review Period	10/1/2008	10/12/2008	0	\$156.75	0	\$113.39	0	\$105.56	0	\$80.82	0	\$73.08	1	\$50.75	0	\$44.85
100% Progress Meeting	Meet with Staff to Discuss 100% Comments	10/20/2008	10/20/2008	0	\$156.75	2	\$113.39	0	\$105.56	2	\$80.82	0	\$73.08	0	\$50.75	0	\$44.85
Final Plans	Address 100% Comments, Finalize Plans	10/20/2008	11/13/2008	0	\$156.75	2	\$113.39	0	\$105.56	2	\$80.82	2	\$73.08	2	\$50.75	1	\$44.85
FINAL Submittal	Deliver FINAL Plans to the County	11/14/2008	11/14/2008	0	\$156.75	0	\$113.39	0	\$105.56	0	\$80.82	0	\$73.08	1	\$50.75	0	\$44.85
% Utilization				0.0%	\$0.00	8.8%	\$2,289.31	14.2%	\$1,844.73	30.0%	\$10,561.32	18.7%	\$4,284.48	28.1%	\$5,785.59	437	\$23,138.88
Total Contract Fee Computation:																	\$45,451.44
(a) Total Activity Salary Costs (Includes Operating Margin)																	\$33,138.88
(b) Direct Expenses (Out-of-Pocket)																	\$1,567.80
(c) Southeastern Surveying (Survey)																	\$2,786.48
(d) Universal Engineering Sciences (Geotechnical) (Optional)																	\$1,785.00
(e) Lotz & Assoc. (Environmental)																	\$3,561.29
(f) Metz & Associates (Structures) (Optional)																	\$8,000.00
TOTAL LUMP SUM FEE (Not Including Optional Public Involvement)																	\$45,451.44
Activity	Description	Schedule		Planner		Project Manager		Senior Engineer		Project Engineer		Designer		Checker		TOTAL	
		Start	End	Hours	Rate	Hours	Rate	Hours	Rate	Hours	Rate	Hours	Rate	Hours	Rate	Salary Cost	Avg. Rate
Optional Public Involvement	Newsletter Involves Public to Information Meeting	3/1/2008	3/1/2008	0	\$156.75	0	\$113.39	4	\$105.56	0	\$80.82	0	\$73.08	8	\$50.75	12	\$816.84
Public Information Meeting	Involves the preparation of large scale graphics and electronic presentation, advertisement and securing a venue	4/2/2008	4/2/2008	0	\$156.75	4	\$113.39	8	\$105.56	4	\$80.82	8	\$73.08	8	\$50.75	32	\$2,811.16
% Utilization				0.0%	\$0.00	6.1%	\$2,289.31	27.3%	\$1,844.73	6.1%	\$1,844.73	18.2%	\$4,284.48	4.5%	\$1,133.88	44	\$3,427.80
(g) Optional Public Involvement Salary Costs																	\$3,427.80
TOTAL LUMP SUM FEE (Including Optional Public Involvement)																	\$48,879.24