# Agenda Item #: 3-C-6

# PALM BEACH COUNTY BOARD OF COUNTY COMMISSIONERS AGENDA ITEM SUMMARY

| Meeting Date:<br>Department:    | February 1, 2011 | [×]<br>[]  | Consent<br>Workshop | [] | Regular<br>Public Hearing |  |  |  |  |  |
|---------------------------------|------------------|--|---------------------|----|---------------------------|--|--|--|--|--|
| Submitted By:<br>Submitted For: | u ,              | Engineering & Public Works Department<br>Roadway Production Division |                     |    |                           |  |  |  |  |  |

## I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: An Agreement in the amount of \$530,297.48 with Arcadis U.S., Inc. for professional services.

**SUMMARY:** Approval of this Agreement will provide the professional services necessary for the preparation of design plans and construction bid documents for Haverhill Road from south of the Lake Worth Drainage District L-14 Canal to Lake Worth Road. Arcadis U.S., Inc. is a Palm Beach County company.

# Districts: 2 and 3 (PK)

**Background and Justification:** On May 5, 2010, the Consultant's Competitive Negotiations Act (CCNA) Selection Committee selected Arcadis U.S., Inc. (Arcadis) and, in accordance with PPM No. CW-O-048, the Board of County Commissioners (Board) was notified of the selection on May 12, 2010. Palm Beach County now desires that Arcadis provide the professional services necessary for the preparation of design plans and construction bid documents for the Haverhill Road from south of the Lake Worth Drainage District L-14 Canal to Lake Worth Road (Project). The Small Business Enterprise (SBE) goal for the Project is 15%. The SBE participation committed for the Project by Arcadis is 40% overall. The fee, as detailed in Exhibit "B" of the attached Agreement, has been negotiated as just and reasonable compensation as follows:

| Basic Services (Lump Sum)             | \$397,421.16        | (Design, Structural,<br>Landscape, Drainage and                       |
|---------------------------------------|---------------------|---|
| Reimbursable Expenses (Not to Exceed) | \$100,823.00        | Environmental Services).<br>(Survey, Geotechnical,<br>Permit Fees and |
| Optional Services (Not to Exceed)     | <u>\$_32,053.32</u> | Reprographics).<br>(Post Design Services,<br>Survey, Geotechnical,    |
| Total:                                | <u>\$530,297.48</u> | Phase I Assessment).  |

After reviewing the attached Agreement and finding it in proper order, staff recommends the Board's approval.

| Attachments:<br>1. Location Map<br>2. Agreement with Ex<br>3. Project Work Sche | whibits and Certificate of Insurance (2) |                        |
|---|--|------------------------|
| Recommended by:   | Division Director                        | 12/15/10 JULLO<br>Date |
| Approved By:  | County Engineer                          | 12/20/10               |
| F:\ROADWAY\CCNA\2010\201  | 0503) Project Mantes AIO 5 A             | Date                   |

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## II. FISCAL IMPACT ANALYSIS

# A. Five Year Summary of Fiscal Impact:

| -0-<br>-0-<br>-0-<br>-0- | 2012<br>-0-<br>-0-<br>-0-<br>-0-<br>-0-<br>-0-<br>-0-   | 2013<br>-0-<br>-0-<br>-0-<br>-0-<br>-0-<br>-0-        | 2014<br><br><br><br><br><br>-0  | 2015<br><br><br><br><br><br><br>   |
|--------------------------|---|---|---|--|
|                          |   |   |   |  |
| udget?<br>Dept           |   |   | No <u></u><br>Dbject <u>650</u>   | 95   |
| Zone 4                   |   |   |   |  |
| nses \$<br>\$            | 100,823.<br>32,053.   | 00<br>32  |   |  |
| \$                       | 53,030.   | 52  |   |  |
| xes \$<br>\$<br>\$       | 26,515.<br>26,515.<br>53,030.<br>795,448.   | 00<br>00<br><u>00</u><br>00                           |   |  |
|                          | \$795,448<br>-0-<br>-0-<br>-0-<br>\$795,448<br>Budget?<br>50 Funds/S<br>Zone 4<br>L-14 Can<br>15es \$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$<br>\$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\frac{\$795,448}{-0} - \frac{0}{-0} - $ | $\frac{\$795,448}{-0}  \frac{-0}{-0}  \frac{-0}{-0} $ |

C. Departmental Fiscal Review: \_\_\_\_\_\_

III. <u>REVIEW COMMENTS</u> A. OFMB Fiscal and/or Contract Dev. and Control Comments: OFMB GRADING GRADING Contract Dev. Contract Dev. This Contract Dev.

B. Approved as to Form and Legal Sufficiency:

Assistant County Attorney

C. Other Department Review:

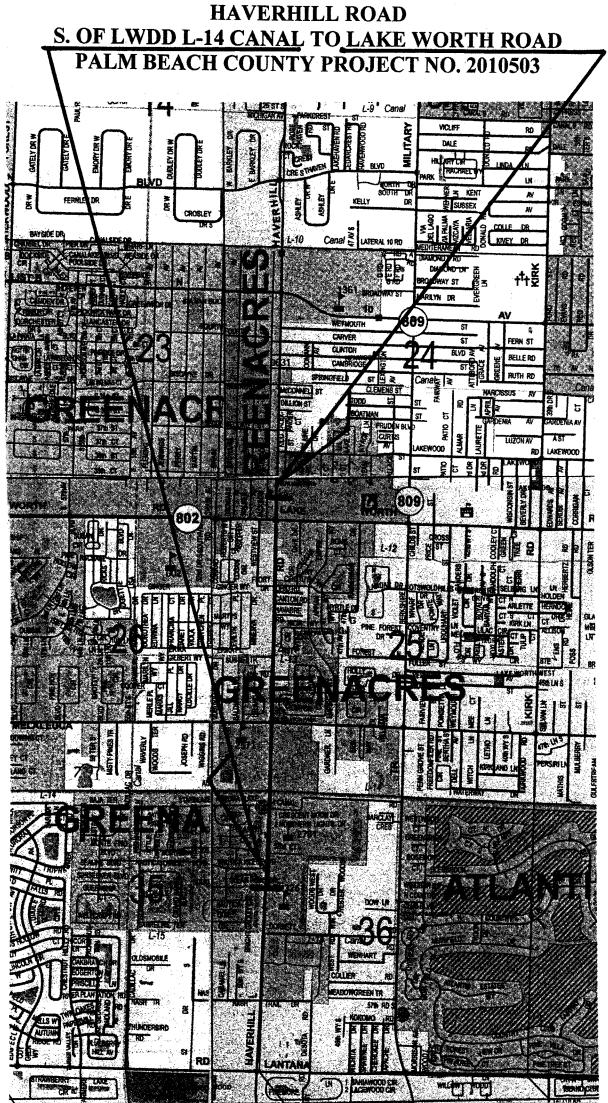
**Department Director** 

# This summary is not to be used as a basis for payment.

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and ntrol ones 1/10/11

This Contract complies with our contract review requirements.



LOCATION SKETCH

#### **ATTACHMENT 2**

#### STANDARD FORM OF AGREEMENT BETWEEN PALM BEACH COUNTY AND CONSULTANT FOR PROFESSIONAL SERVICES

This is an Agreement made as of \_\_\_\_\_\_\_, 2011 between Palm Beach County, Florida (COUNTY) and Arcadis U.S., Inc. (CONSULTANT), an engineering firm having an office and a place of business at 2081 Vista Parkway, West Palm Beach, Florida 33411, and having Federal Tax I.D. #57-0373224. The COUNTY intends to construct a five lane roadway on Haverhill Road from S. of LWDD L-14 Canal to Lake Worth Road, Project No. 2010503 (hereinafter called the PROJECT).

The COUNTY and CONSULTANT in consideration of their mutual covenants herein agree in respect of the performance of professional engineering services by CONSULTANT and the payment for those services by COUNTY as set forth below.

# SECTION 1 - BASIC SERVICES OF CONSULTANT

1.1 General

1.1.1 The **CONSULTANT** shall perform professional design services in connection with the **PROJECT** as hereinafter stated which shall include normal civil engineering services, more particularly described in Exhibit "A" (Scope of Services).

1.1.2 The CONSULTANT shall prepare all plans in accordance with Palm Beach County Thoroughfare Design Procedures, current standards adopted by AASHTO, and the Florida Department of Transportation Manual of Uniform Minimum Standards, and all other applicable professional and technical standards. Plans shall be based on the North American Datum of 1983 (NAD 83) 1990 Adjustment and the North American Vertical Datum of 1988 (NAVD 88). They shall be accurate, legible, complete in design, drawn to scale, and shall be suitable for bidding purposes, unless otherwise stated in Exhibit "A".

1.1.3. The CONSULTANT has, during the selection and negotiation process which has preceded this agreement, represented to the COUNTY that the CONSULTANT is possessed of that level of skill, knowledge, experience and expertise that is commensurate with engineering firms of national repute in the areas of practice required for this project. The CONSULTANT acknowledges that the COUNTY has relied on the CONSULTANT'S representations of skill, knowledge, experience and expertise. By executing this contract, the CONSULTANT agrees that the CONSULTANT will exercise that degree of care, knowledge, skill and ability as other engineering firms possessing the degree of skill, knowledge, experience and expertise which the CONSULTANT has claimed. The CONSULTANT shall perform such duties as may be assigned without neglect. The CONSULTANT accepts the relationship of trust and confidence established by this Agreement, and covenants with the COUNTY to cooperate with the COUNTY and to utilize the CONSULTANT'S skill, efforts and judgment commensurate with engineering firms of national repute in the areas of practice required for this project. The CONSULTANT agrees to perform each assignment in an efficient and economical manner consistent with the COUNTY'S interests and consistent with the COUNTY'S stated objectives and recognized professional engineering standards.

The CONSULTANT further contracts with the COUNTY to furnish its professional skill and judgment with due care in accordance with applicable Federal, State and local laws, codes and regulations as amended and supplemented which are in effect on the date of this Agreement first written. It is specifically understood that the Accessibility provisions of the Americans With Disabilities Act (ADA) shall be complied with and incorporated into the project.

1.1.4 Prior to commencement of design, the CONSULTANT shall become familiar with the needs of COUNTY Microstation standards, obtain any seed or Microstation files, CADD standards, and standard sheets so that Microstation deliverables can be utilized by the COUNTY. CONSULTANT shall submit electronic files (in Microstation compatible format and Adobe PDF format) of the design, survey, and any related data used for the project, with the final document(s) submittal, or when otherwise directed by COUNTY.

1.1.5 The CONSULTANT shall provide to the COUNTY all cost summaries/estimates and "Summary of Pay Items" on disk and/or electronic file (as requested). The CONSULTANT shall apply descriptions to the pay items as called out in the COUNTY'S "Standard Nomenclature" listing, which is available from Roadway Production.

# SECTION 2 - ADDITIONAL SERVICES OF CONSULTANT

2.1 Services Requiring Authorization in Advance

If authorized in writing by the COUNTY'S authorized representative, the CONSULTANT shall furnish or obtain from others Additional Services of the types listed in paragraphs 2.1.1 through 2.1.9 inclusive. These services are not included as part of Basic Services except to the extent provided otherwise in the Fee Summary, Exhibit "B". These will be paid for by the COUNTY, only when specifically authorized and in accordance with Section 5.

2.1.1. Preparation of applications and supporting documents for governmental grants, loans or advances in connection with the **PROJECT**.

2.1.2. Services to make measured drawings of or to investigate existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by the COUNTY.

2.1.3. Services resulting from significant changes in the general scope, extent or character of the **PROJECT** or its design including, but not limited to, changes in size, complexity, the **COUNTY'S** schedule, character of construction or method of financing; and revising previously accepted studies, reports, design documents or contract documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes or orders enacted subsequent to the preparation of such studies, reports or documents, or are due to any other causes beyond the **CONSULTANT'S** control.

2.1.4. Preparing documents for alternate bids requested by the COUNTY for contractor(s) work which is not executed or documents for out-of-sequence work.

2.1.5. Furnishing the services of special consultants for other than the services included in Exhibit "A".

2.1.6. Services during out-of-town travel required of the CONSULTANT other than visits to the site or the COUNTY'S office as required by Section 1.

2.1.7. Assistance in connection with bid protests, rebidding or renegotiating contracts for construction, materials, equipment or services.

2.1.8. Preparing to serve or serving as a consultant or witness for the COUNTY in any litigation or other legal proceeding involving the **PROJECT**.

2.1.9. Additional services in connection with the **PROJECT**, including services which are to be furnished by the **COUNTY** in accordance with Article 3, and services not otherwise provided for in this Agreement.

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# SECTION 3 - COUNTY'S RESPONSIBILITY

The COUNTY shall do the following in a timely manner so as not to delay the services of the CONSULTANT.

3.1. Designate in writing a person to act as the COUNTY'S representative with respect to the services to be rendered under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define the COUNTY policies and decisions with respect to the CONSULTANT'S services for the PROJECT.

3.2. Provide all criteria and full information as to the COUNTY'S requirements for the PROJECT, including design objectives and constraints, space, capacity and performance requirements, flexibility and expendability, and any budgetary limitations; and furnish copies of all design and construction standards which the COUNTY will require to be included in the drawings and specifications.

3.3. Assist the CONSULTANT by placing at the CONSULTANT'S disposal all available information pertinent to the **PROJECT** including previous reports and any other data relative to design or construction of the **PROJECT**.

3.4. Furnish to the **CONSULTANT** the items listed in Exhibit "A".

3.5. Arrange for access to and make all provisions for the **CONSULTANT** to enter upon public and private property as reasonably required for the **CONSULTANT** to perform services under this Agreement.

3.6. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by the CONSULTANT, obtain advice of an attorney, insurance counselor and other consultants as the COUNTY deems appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of the CONSULTANT.

3.7. Furnish approvals and permits from all governmental authorities having jurisdiction over the **PROJECT** and such approvals and consents from others as may be necessary for completion of the **PROJECT**.

3.8. Providing such legal, accounting, independent cost estimating and insurance counseling services as may be required for the **PROJECT**, and such auditing service as **COUNTY** may require to ascertain how or for what purpose any contractor has used the monies paid to him.

3.9. Attend the pre-bid conference, bid opening, preconstruction conferences, construction progress and other job related meetings and substantial completion inspections and final payment inspections.

3.10. Give prompt written notice to the CONSULTANT whenever the COUNTY observes or otherwise becomes aware of any development that affects the scope or timing of the CONSULTANT'S services, or any defect or non-conformance in the work of any contractor.

3.11. Furnish, or direct the **CONSULTANT** to provide, Additional Services as stipulated in paragraph 2.1 of this Agreement or other services as required.

3.12. Bear all costs incident to compliance with the requirements of this Section 3.

## SECTION 4 - PERIODS OF SERVICE

4.1. The COUNTY will issue a written "NOTICE TO PROCEED" to the CONSULTANT within sixty (60) days of contract execution by the COUNTY. The CONSULTANT will immediately commence work on the **PROJECT** and all schedule dates shall be determined from the date of the "NOTICE TO PROCEED". Final completion of all work under this Agreement shall be in accordance with the schedule, or as otherwise approved in writing by the COUNTY.

# SECTION 5 - PAYMENTS TO CONSULTANT

5.1. Methods of Payment for Services and Expenses of the CONSULTANT.

5.1.1. Basic Services: The COUNTY will pay the CONSULTANT the lump sum of \$397,421.16 for completion of the Basic Services set forth in Exhibits "A" and "B".

5.1.2. Additional Services: To the extent that additional services under Section 2 hereof are specifically authorized in writing by the COUNTY'S representative, the COUNTY will pay for such additional services in accordance with the following:

5.1.2.1. Actual Salary costs times a factor of <u>2.97</u> for services rendered by principals and employees assigned to the **PROJECT** plus all reimbursable expenses.

5.1.2.2. For services rendered by the CONSULTANT'S principals and employees as consultants or witnesses in any litigation, arbitration or other legal or administrative proceeding in accordance with Paragraph 2.1.8. at the rate of **\$800.00** per day or any portion thereof (but compensation for time spent in preparing to appear in any such litigation, arbitration or proceeding will be on the basis provided in Paragraph 5.1.2.1).

5.1.3. Reimbursable Expenses: The COUNTY will pay the CONSULTANT the actual costs of all reimbursable expenses incurred in the provision of these services when authorized in writing by the COUNTY. These expenses will not exceed \$100,823.00 without additional authorization from the COUNTY.

5.1.4 Optional Services: The COUNTY will pay the CONSULTANT for completion of the Optional Services set forth in Exhibits "A" and "B" when the provision of each service is specifically authorized in writing by the COUNTY. These expenses will not exceed \$32,053.32 without additional authorization from the COUNTY.

5.1.5. The terms "Salary Costs" and "Reimbursable Expenses" have the meanings assigned to them in Paragraph 5.4.

5.1.6. Additional services and reimbursable expenses authorizations shall be issued in accordance with Board policy per Resolution Number R-89-633 adopted April 4, 1989.

## 5.2. Payments

5.2.1. Progress payments to the **CONSULTANT** shall be due and payable monthly in proportion to the percentage of engineering services approved and accepted by the **COUNTY** based on said lump sum fee until 90% of the project is completed. There will be no additional payments for Basic Services until all services are completed and accepted by the **COUNTY** (including permits).

5.2.2. Final payment shall be due and payable to the **CONSULTANT** upon satisfactory completion of the services described in this Agreement and approval and acceptance of the plans by the **COUNTY**.

# 5.3. Other Provisions Concerning Payments

5.3.1. If this Agreement is terminated prior to its completion other than due to default on the part of the **CONSULTANT**, the **CONSULTANT** shall be paid for Basic Services called for under Section 1 an amount equal to the percentage complete at the time of termination, times the lump sum fee stated in Section 5. Further, the **CONSULTANT** shall be paid for the completed portion of additional services authorized under Section 2, in accordance with Paragraph 5.1.2.

5.3.2. Records of the CONSULTANT'S Salary Costs pertinent to the CONSULTANT'S compensation under this Agreement will be kept in accordance with generally accepted accounting practices. Copies will be made available to the COUNTY on request prior to final payment for the CONSULTANT'S services.

#### 5.4. **Definitions**

5.4.1. The Salary Costs used as a basis for payment shall mean the actual salaries and wages paid to principals and employees engaged on the **PROJECT**. Time spent on this **PROJECT** by stenographers, typists and clerk skills shall not be charged to the **PROJECT** nor shall any fringe benefits such as social security contributions, unemployment, excise and payroll taxes, workman's compensation, etc., be included in the Salary Costs.

5.4.2. Reimbursable Expenses shall mean the actual expenses of soils testing, printing and similar **PROJECT** related items when authorized by the **COUNTY**.

# SECTION 6 - CONSTRUCTION COST AND OPINIONS OF COST

#### 6.1. **Opinions of Cost**

Since CONSULTANT has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s)' methods of determining prices, or over competitive bidding or market conditions, the CONSULTANT'S opinions of probable construction cost provided for herein are to be made on the basis of the CONSULTANT'S experience and qualifications and represent the CONSULTANT'S best judgment as an experienced and qualified professional engineer, familiar with the construction industry; but the CONSULTANT cannot and does not guarantee that proposals, bids or actual construction costs will not vary from opinions of probable cost prepared by the CONSULTANT. If prior to the Bidding or Negotiating Phase, the COUNTY wishes greater assurance as to construction costs, the COUNTY shall employ an independent cost estimator.

#### SECTION 7 - GENERAL CONSIDERATION

#### 7.1. <u>Termination</u>

This Agreement may be canceled by the CONSULTANT upon thirty (30) days prior written notice to the COUNTY if, through no fault of the CONSULTANT, the COUNTY fails to cure any material default by the COUNTY in its performance of the terms of this Agreement. This Agreement may also be terminated, in whole or in part, by the COUNTY, with or without cause, immediately upon written notice to the CONSULTANT. Unless the CONSULTANT is in breach of this Agreement, the CONSULTANT shall be paid for services rendered to the CONSULTANT or termination by the COUNTY, CONSULTANT agrees to waive and make no claim for lost profits or other consequential damages. After receipt of a Termination Notice and except as otherwise directed by the COUNTY, the CONSULTANT shall:

- A. Stop work on the date and to the extent specified.
- B. Terminate and settle all orders and subcontracts relating to the performance of the terminated work.

C. Transfer all work in process, completed work, and other materials related to the terminated work to the COUNTY.

D. Continue and complete all parts of the work that have not been terminated.

Should a termination for breach later be declared wrongful, said termination shall be considered and treated as a termination without cause.

# 7.2. DISCLOSURE AND OWNERSHIP OF DOCUMENTS

7.2.1. Upon completion and acceptance of the final work, the CONSULTANT shall furnish to the COUNTY the original drawings, field notes and all documents and materials prepared by and for the COUNTY under this Agreement. The CONSULTANT may keep a reproducible set of the original drawings and shall keep all other data collected during the provision of the services. The COUNTY may, at its expense, obtain copies of any data which the CONSULTANT has accumulated in the process of providing the services on this project tasks. Any reuse without written verification or adaptation by the CONSULTANT for the specific purpose intended will be at the COUNTY'S sole risk and without liability or legal exposure to the CONSULTANT.

7.2.2. All written and oral information not in the public domain or not previously known, and all information and data obtained, developed, or supplied by the COUNTY or at its expense will be kept confidential by the CONSULTANT and will not be disclosed to any other party, directly or indirectly, without the COUNTY'S prior written consent unless required by a lawful order. All drawings, maps, sketches, programs, data base, reports and other data developed or purchased under this Agreement at the COUNTY'S expense shall be, and remain, the COUNTY'S property, and may be reproduced and reused at the discretion of the COUNTY.

7.2.3. The COUNTY and the CONSULTANT shall comply with the provisions of Chapter 119, Florida Statutes (Public Records Law).

7.2.4. All covenants, agreements, representations and warranties made herein, or otherwise made in writing by any party pursuant hereto, including but not limited to any representations made herein relating to disclosure or ownership of documents, shall survive the execution and delivery of this Agreement and the consummation of the transactions contemplated hereby.

7.2.5 Notwithstanding any other provision in this Agreement, all documents, records, reports and any other materials produced hereunder shall be subject to disclosure, inspection and audit, pursuant to the Palm Beach County Office of the Inspector General Ordinance 2009-049, as may be amended.

#### 7.3 <u>Reuse of Documents</u>

Notwithstanding any breach of this Agreement by either party nor the status of payment to the CONSULTANT, nor the COUNTY'S exercise of its rights of termination, it is hereby agreed between the parties that copies of any and all property, work product, documentation, reports, computer systems and software, schedules, graphs, outlines, books, manuals, logs, files, deliverables, photographs, videos, tape recordings or data relating to this Project which have been created as a part of the CONSULTANT'S services, or authorized by the COUNTY as a reimbursable expense, whether generated directly by the CONSULTANT, or by or in conjunction or consultation with any other party whether or not a party to this Agreement, whether or not in privity of contract with the COUNTY or CONSULTANT, and wherever located shall be the property of the COUNTY.

#### 7.4. Insurance

**CONSULTANT** shall, at its sole expense, agree to maintain in full force and effect at all times during the life of this Contract, insurance coverages and limits (including endorsements), as described herein. **CONSULTANT** shall agree to provide the **COUNTY** with at least ten (10) day prior notice of any cancellation, non-renewal or material change to the insurance coverages. The requirements contained herein, as well as **COUNTY**'S review or acceptance of insurance maintained by **CONSULTANT** are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by **CONSULTANT** under the contract.

# 7.4.1 Commercial General Liability

**CONSULTANT** shall maintain Commercial General Liability at a limit of liability not less than **\$1,000,000** Each Occurrence. Coverage shall not contain any endorsement excluding Contractual Liability or Cross Liability unless granted in writing by County's Risk Management Department. **CONSULTANT** shall provide this coverage on a primary basis.

#### 7.4.2. Business Automobile Liability

CONSULTANT shall maintain Business Automobile Liability at a limit of liability not less than \$1,000,000 Each Accident for all owned, non-owned and hired automobiles. In the event CONSULTANT doesn't own any automobiles, the Business Auto Liability requirement shall be amended allowing CONSULTANT to agree to maintain only Hired & Non-Owned Auto Liability. This amended requirement may be satisfied by way of endorsement to the Commercial General Liability, or separate Business Auto coverage form. CONSULTANT shall provide this coverage on a primary basis.

# 7.4.3. Worker's Compensation Insurance & Employers Liability

CONSULTANT shall maintain Worker's Compensation & Employers Liability in accordance with Florida Statute Chapter 440. CONSULTANT shall provide this coverage on a primary basis.

#### 7.4.4. Professional Liability

**CONSULTANT** shall maintain Professional Liability, or equivalent Errors & Omissions Liability at a limit of liability not less than \$1,000,000 Each Claim. When a self-insured retention (SIR) or deductible exceeds \$40,000, **COUNTY** reserves the right, but not the obligation, to review and request a copy of **CONSULTANT'S** most recent annual report or audited financial statement. For policies written on a "Claims-Made" basis, **CONSULTANT** shall maintain a Retroactive Date prior to or equal to the effective date of this Contract. The Certificate of Insurance providing evidence of the purchase of this coverage shall clearly indicate whether coverage is provided on an "occurrence" or "claims - made" form. If coverage is provided on a "claims - made" form the Certificate of Insurance must also clearly indicate the "retroactive date" of coverage. In the event the policy is canceled, non-renewed, switched to an Occurrence Form, retroactive date advanced, or any other event triggering the right to purchase a Supplement Extended Reporting Period (SERP) during the life of this Contract, **CONSULTANT** shall purchase a SERP with a minimum reporting period not less than 3 years. **CONSULTANT** shall provide this coverage on a primary basis.

## 7.4.5. Additional Insured

**CONSULTANT** shall endorse the **COUNTY** as an Additional Insured with a CG 2026 Additional Insured -Designated Person or Organization endorsement, or its equivalent, to the Commercial General Liability. The Additional Insured endorsement shall read "<u>Palm Beach County Board of County Commissioners</u>, a <u>Political</u> <u>Subdivision of the State of Florida, its Officers, Employees and Agents</u>." **CONSULTANT** shall provide the Additional Insured endorsements coverage on a primary basis.

# 7.4.6. Waiver of Subrogation

**CONSULTANT** hereby waives any and all rights of Subrogation against the County, its officers, employees and agents for each required policy. When required by the insurer, or should a policy condition not permit an insured to enter into a pre-loss agreement to waive subrogation without an endorsement, then **CONSULTANT** shall agree to notify the insurer and request the policy be endorsed with a Waiver of Transfer of rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy, which a condition to the policy specifically prohibits such an endorsement, or voids coverage should **CONSULTANT** enter into such an agreement on a pre-loss basis.

## 7.4.7. Certificate(s) of Insurance

Prior to execution of this Contract, CONSULTANT shall deliver to the COUNTY a Certificate(s) of Insurance evidencing that all types and amounts of insurance coverages required by this Contract have been obtained and are in full force and effect. Such Certificate(s) of Insurance shall include a minimum ten (10) day endeavor to notify due to cancellation or non-renewal of coverage. The certificate of insurance shall be issued to

> Palm Beach County c/o Department of Engineering & Public Works 2300 N. Jog Road, 3<sup>rd</sup> Floor West Palm Beach, FL 33411-2745

## 7.4.8 Umbrella or Excess Liability

If necessary, **CONSULTANT** may satisfy the minimum limits required above for either Commercial General Liability, Business Auto Liability, and Employer's Liability coverage under Umbrella or Excess Liability. The Umbrella or Excess Liability shall have an Aggregate limit not less than the highest "Each Occurrence" limit for either Commercial General Liability, Business Auto Liability, or Employer's Liability. The **COUNTY** shall be specifically endorsed as an "<u>Additional Insured</u>" on the Umbrella or Excess Liability, unless the Certificate of Insurance notes the Umbrella or Excess Liability provides coverage on a "Follow-Form" basis.

#### 7.4.9 Right to Review

COUNTY, by and through its Risk Management Department, in cooperation with the contracting/monitoring department, reserves the right to review, modify, reject or accept any required policies of insurance, including limits, coverages, or endorsements, herein from time to time throughout the term of this Contract. COUNTY reserves the right, but not the obligation, to review and reject any insurer providing coverage because of its poor financial condition or failure to operate legally.

#### 7.5. Indemnification

CONSULTANT shall indemnify and hold harmless the COUNTY, and its officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the CONSULTANT and other persons employed or utilized by the CONSULTANT in the performance of the contract.

# 7.6. Controlling Law and Venue

This Agreement is to be governed by the laws of the State of Florida. The parties agree that venue for any action which in any way arises out of this Agreement shall only be in a state court of competent jurisdiction located in Palm Beach County, Florida.

# 7.7. Successors and Assigns

7.7.1. The COUNTY and the CONSULTANT each binds itself and the partners, successors, executors, administrators and assigns to the other party and to the partners, successors, executors, administrators and assigns of such other party, in respect to all covenants of this Agreement. Except as above, neither the COUNTY nor the CONSULTANT shall assign, sublet, convey or transfer its interest in this Agreement without the prior written consent or the other. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of the COUNTY, nor shall it be construed as giving any rights or benefits hereunder to anyone other than the COUNTY and the COUNTY.

7.7.2. Neither the COUNTY nor the CONSULTANT shall assign, sublet or transfer any rights under or interest in (including, but without limitation, monies that may become due or monies that are due) this Agreement without the written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent the CONSULTANT from employing such independent professional associates and consultants as the CONSULTANT may deem appropriate to assist in the performance of services hereunder.

7.7.3. Nothing under this Agreement shall be construed to give any rights or benefits in this Agreement to anyone other than the COUNTY and the CONSULTANT, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of the COUNTY and the CONSULTANT and not for the benefit of any other party.

#### 7.8 Subcontracting

The COUNTY reserves the right to accept the use of a subcontractor or to reject the selection of a particular subcontractor and to inspect all facilities of any subcontractors in order to make a determination as to the capability of the subcontractor to perform properly under this Agreement. The CONSULTANT is encouraged to seek small business enterprises for participation in subcontracting opportunities. If a subcontractor fails to perform or make progress, as required by this Agreement, and it is necessary to replace the subcontractor to complete the work in a timely fashion, the CONSULTANT shall promptly do so, subject to acceptance of the new subcontractor by the COUNTY.

In accordance with Palm Beach County Small Business Enterprise (SBE) Ordinance #2002-064, as amended from time to time, the annual goal for SBE participation for Professional Services is 15.0%. The CONSULTANT has committed to 40.00% for this Project.

The CONSULTANT agrees to abide by all provisions of the SBE Ordinance and understands that failure to comply with any of the requirements will be considered a breach of contract.

The CONSULTANT has provided Exhibit "D" (Participation for SBE Consultants) and Exhibit "E" (Letter's of Intent) attached hereto indicating the specific participation.

The CONSULTANT understands that each SBE firm utilized on this Agreement must be certified by Palm Beach County in order to be counted toward the contract goal.

The CONSULTANT understands that it is the responsibility of the County Department letting the Agreement and the SBE Office to monitor compliance with the SBE Ordinance requirements. In that regard, the CONSULTANT agrees to furnish progress payment reports, with each billing, to both parties on the progress of the SBE participation for this Agreement. The CONSULTANT further agrees to provide the SBE Office with a copy of the CONSULTANT'S agreement with the SBE subcontractor or any other related documentation upon request.

The CONSULTANT understands the requirements to comply with the tasks and proportionate dollar amounts throughout the term of the Agreement as it relates to the use of SBE firms. Any SBE's which, for any reason, no longer remain associated with the Project shall be replaced by the CONSULTANT with other certified SBE's, unless approval to the contrary is granted by the COUNTY.

The CONSULTANT understands that he/she is prohibited from making any agreements with the SBE in which the SBE promises not to provide subconsultant quotations to other bidders or potential bidders.

The CONSULTANT agrees to maintain all relevant records and information necessary to document compliance with the SBE Ordinances, and will allow the COUNTY to inspect such records.

The CONSULTANT shall certify in writing that all subcontractors, subconsultants and suppliers have been paid for work and materials from previous progress payments received, less any retainage, by the CONSULTANT prior to receipt of any further progress payments. During the term of the Agreement and upon completion of the Agreement, the COUNTY may request documentation to certify payment to subcontractors, subconsultants or suppliers. This provision in no way creates any contractual relationship between any subcontractor, subconsultant, or supplier and the COUNTY or any liability on the COUNTY for the CONSULTANT'S failure to make timely payment to the subcontractor, subconsultant or supplier.

#### 7.9. Personnel

The CONSULTANT represents that it has, or will secure at its own expense, all necessary personnel required to perform the services under this Agreement.

Such personnel shall not be employees of or have any contractual relationship with the COUNTY. All of the services required herein shall be performed by the CONSULTANT or under its supervision, and all personnel engaged in performing the services shall be fully qualified and, if required, authorized or permitted under state and local law to perform such services.

The CONSULTANT warrants that all services shall be performed by competent personnel in accordance with all applicable national, federal, state, and local professional and technical standards.

#### 7.10. Availability of Funds

The COUNTY'S performance and obligation to pay under this Agreement is contingent upon an annual appropriation for its purpose by the Board of County Commissioners.

#### 7.11. Conflict of Interest

The CONSULTANT represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance or services required hereunder, as provided for in Chapter 112, Part III, Florida Statutes. The CONSULTANT further represents that no person having any interest shall be employed for said performance.

The CONSULTANT shall promptly notify the COUNTY'S representative, in writing, by certified mail, of all potential conflicts of interest for any prospective business association, interest or other circumstance which may influence or appear to influence the CONSULTANT'S judgment or quality of services being provided hereunder. Such written notification shall identify the prospective business association, interest or circumstance, the nature of work that the CONSULTANT may undertake and request an opinion of the COUNTY as to whether the association, interest

or circumstance would, in the opinion of the COUNTY, constitute a conflict of interest if entered into by the CONSULTANT.

The COUNTY agrees to notify the CONSULTANT of its opinion by certified mail within thirty (30) days of receipt of notification by the CONSULTANT. If, in the opinion of the COUNTY, the prospective business association, interest or circumstance would not constitute a conflict of interest by the CONSULTANT, the COUNTY shall so state in the notification and the CONSULTANT shall, at its option, enter into said association, interest or circumstance and it shall be deemed not in conflict of interest with respect to services provided to the COUNTY by the CONSULTANT under the terms of this Agreement.

## 7.12. Independent Contractor Relationship

The CONSULTANT and subconsultants are, and shall be, in the performance of all work services and activities under this Agreement, Independent Contractors, and not employees, agents, or servants of the COUNTY. The CONSULTANT does not have the power or authority to bind the COUNTY in any promise, agreement or representation other than specifically provided for in this Agreement. The CONSULTANT shall be responsible to the COUNTY for all the work or services performed by the CONSULTANT or any person or firm engaged as a subcontractor to perform work in fulfillment of this Agreement.

## 7.13. Access and Audits

The CONSULTANT shall maintain adequate records to justify all charges, expenses, and costs incurred in estimating and performing the work for at least three (3) years after completion of this Agreement. The COUNTY shall have access to such books, records, and documents as required in this section for the purpose of inspection or audit during normal business hours, at the CONSULTANT'S place of business.

#### 7.14 Severability

If any term or provision of this Agreement, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, the remainder of this Agreement, or the application of such terms or provisions, to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and every other term and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.

# 7.15 Entirety of Contractual Agreement

The COUNTY and the CONSULTANT agree that this Contract sets forth the entire agreement between the parties, and that there are no promises or understandings other than those stated herein. None of the provisions, terms and conditions contained in this Contract may be added to, modified, superseded or otherwise altered, except by written instrument executed by the parties hereto.

During the term of this Contract, the COUNTY may require professional services that are the same or similar to those described in this agreement. The COUNTY may, at its sole discretion, obtain said services in accordance with the State of Florida Consultants Competitive Negotiation Act. If the COUNTY so elects, it is mutually understood that the relationship between the CONSULTANT and the COUNTY under this Contract shall be considered as neither barring the CONSULTANT from, nor granting special consideration to the CONSULTANT, in participating in the selection process for a consultant to provide such additional services.

#### 7.16 Office of the Inspector General

Palm Beach County has established the Office of the Inspector General, Ordinance R2009-049, as may be amended. The Inspector General's authority includes but is not limited to the power to review past, present and proposed County contracts, transactions, accounts and records, to require the production of records, and audit,

#### Page 11 of 14

investigate, monitor, and inspect the activities of the contractor, its officers, agents, employees, and lobbyists in order to ensure compliance with contract specifications and detect corruption and fraud. All contractors and parties doing business with the County and receiving County funds shall fully cooperate with the Inspector General including receiving access to records relating to Bid or any resulting contract.

# SECTION 8 - SPECIAL PROVISIONS, EXHIBITS AND SCHEDULES

8.1 Federal & State Tax

The CONSULTANT shall be responsible for payment of its own and its share of its employees' payroll, payroll taxes, and benefits with respect to this Agreement.

- 8.2. The following Exhibits are attached to and made a part of this Agreement.
- 8.2.1. Exhibit A: Scope of Services
- 8.2.2. Exhibit B: Fee Summary

8.2.3. Exhibit C: Truth in Negotiation, Prohibition Against Contingent Fees & Public Entity Crimes Statements, Conflict of Interest Disclosure Form, Disclosure of Ownership Interests Form (if applicable).

8.2.4. Exhibit D: Participation for SBE Consultants

8.2.5. Exhibit E: Letters of Intent to Perform as an SBE and/or M/WBE (if applicable).

8.3. This Agreement (consisting of pages 1 to 14, inclusive), together with the Exhibits and Schedules identified above constitute the entire Agreement between the COUNTY and the CONSULTANT and supersedes all prior written or oral understandings. This Agreement and said Exhibits may only be amended, supplemented, modified or canceled by a duly executed written instrument.

# SECTION 9 - CRIMINAL HISTORY RECORDS CHECK

The CONSULTANT shall comply with the provisions of Ordinance 2003-030, the Criminal History Records Check Ordinance ("Ordinance"), if CONSULTANT'S employees or subcontractors are required under this contract to enter a "critical facility" as identified in Resolution R-2003-1274. The CONSULTANT acknowledges and agrees that all employees and subcontractors who are to enter a "critical facility" will be subject to a fingerprint based criminal history records checks, the CONSULTANT shall be solely responsible for the financial, schedule, and staffing implications associated in complying with Ordinance 2003-030.

# SECTION 10 - REGULATIONS; LICENSING REQUIREMENTS

The CONSULTANT shall comply with all laws, ordinances and regulations applicable to the services contemplated herein, to include those applicable to conflict of interest and collusion. CONSULTANT is presumed to be familiar with all federal, state and local laws, ordinances, codes and regulations that may in any way affect the services offered.

# SECTION 11 - ARREARS

The CONSULTANT shall not pledge the COUNTY'S credit or make it a guarantor of payment or surety for any contract, debt, obligation, judgment, lien, or any form of indebtedness. The CONSULTANT further warrants and represents that it has no obligation or indebtedness that would impair its ability to fulfill the terms of this Contract.

# SECTION 12 - NONDISCRIMINATION

The CONSULTANT warrants and represents that all of its employees are treated equally during employment without regard to race, color, religion, disability, sex, age, national origin, ancestry, marital status, familial status, sexual orientation, and gender identity and expression.

# SECTION 13 - AUTHORITY TO PRACTICE

The CONSULTANT hereby represents and warrants that it has and will continue to maintain all licenses and approvals required to conduct its business, and that it will at all times conduct its business activities in a reputable manner. Proof of such licenses and approvals shall be submitted to the COUNTY's representative upon request.

IN WITNESS WHEREOF, the parties have made and executed this Agreement as of the day and year first above written.

#### **OWNER:**

Palm Beach County, Florida BY ITS BOARD OF COMMISSIONERS:

BY: Karen T. Marcus, Chair

SEAL

CONSULTANT: Arcadis U.S. In BY: Robert W. Lawson Vice President

CORPORATE SEAL

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

BY:\_\_

(Deputy Clerk)

ATTEST WITNES BY:

(Print Name)

Henry w. De. bel Sn (Signature)

SUSAN GUNN (Print Name) BY:

Susan Hunn (Signature)

APPROVED AS TO TERMS AND CONDITIONS:

BY;

APPROVED AS TO FORM & LEGAL SUFFICIENCY:

BY:

Assistant County Attorney

F:\ROADWAY\CCNA\2010\2010503\Project\Standard Roadway Agreement.doc

# EXHIBIT "A"

REC'D NOV 0 8 2010

Not to prove

**ARCADIS** 

Infrastructure, environment, facilities

November 8, 2010 -

Palm Beach County Roadway Production Division 2300 N. Jog Road West Palm Beach, Florida 33411

Attn: Mr. Dave Young, P.E.

#### Re: Haverhill Road South of LWDD L-14 Canal to Lake Worth Road P.B.Co. Project No. 2010503

Dear Mr. Young:

We are pleased to submit this proposal for professional services for the preparation of roadway construction plans for the widening of Haverhill Road from south of the LWDD L-14 Canal to Lake Worth Road. Our scope of services for this project will be as follows.

Haverhill Road will be widened to provide for a four lane divided roadway section from approximately 500-feet south of Nautica Lakes Boulevard to Melaleuca Lane. A transition and lane merge will be constructed beginning 500-feet south of Nautica Lakes Boulevard to match into the existing 2 lane divided roadway section. North of Melaleuca Lane, Haverhill road will be widened to a five lane undivided section. ARCADIS will prepare construction plans for the project detailing these proposed improvements.

#### **Typical Section**

The typical sections for Haverhill Road will consist of the following:

- 500' south of Nautica Lakes Blvd to Melaleuca Lane:
  - 100-foot right of way width
  - o two 12-foot travel lanes and a 4-foot paved shoulder in each direction
  - o outside and inside curb and gutter
  - o 22-foot wide raised median
  - o 6-foot concrete sidewalk
  - 11-foot wide border area on both sides of the roadway. A 2' wide sodded utility strip between the sidewalk and curb and gutter will be provided within 1 mile of a school.
- Melaleuca Lane to Lake Worth Road:
  - o 80-foot right of way width
  - two 11-foot travel lanes and a 3-foot paved shoulder in each direction

- o 12-foot wide center two way left turn lane.
- o 4-foot concrete sidewalk with a 2-ffot wide sodded utility strip
- o 9-foot wide border area on both sides of the roadway.
- o outside curb and gutter

#### Intersections

ARCADIS will provide intersection configuration layouts at the Master Plan. The intersection lane configurations will be as follows:

- Melaleuca Lane
  - o South approach
    - Two thru lanes northbound and southbound
    - Single left turn lane
    - Single right turn lane
    - o North Approach
      - Two thru lanes northbound and southbound
      - Single left turn lanes
      - Single right turn lane
    - o East approach
      - Two thru lanes eastbound and westbound
      - Single left turn lane
      - Single right turn lane
    - o West approach
      - Two thru lanes eastbound and westbound
      - Single left turn lane
      - Single right turn lane
- Lake Worth Road
  - o South approach
    - Two thru lanes northbound and southbound
    - Single left turn lane
    - Single right turn lane
  - o North Approach
    - Two thru lanes northbound and southbound
    - Single left turn lane
    - Single right turn lane (dependent upon cost/benefit determination)
  - o East approach
    - Three thru lanes eastbound and westbound
  - Single left turn lane
  - West approach
    - Three thru lanes eastbound and westbound
    - Single left turn lane

#### **Engineering Design**

The design of the project will be performed in accordance with the Palm Beach County Thoroughfare Road Design Standards, the Florida Department of Transportation Plans Preparation Manual, The FDOT Design Standards, and the FDOT Greenbook.

Plans will be submitted at 1"=40' scale on 11"x17" format. Separate plan and profile sheets will be provided.

Construction plans for roadway and drainage improvements, signalization, and signing and pavement marking plans will be prepared. Plans will be in English units. Aerial raster images provided by Palm Beach County will be used as a background for the plans.

Cross sections of the existing conditions and the proposed construction will be prepared. The cross sections shall detail the existing roadway and border area. The cross sections shall extend 25-feet beyond the right of way.

ARCADIS will prepare Plan sheets as indicated in the Palm Beach County Thoroughfare Road Design Standards including:

- Cover Sheet
- Drainage Maps
- Typical Sections
- Summary of Quantities
- Summary of Drainage Structures
- Reference Ties
- General Notes
- Details
- Plan Sheets
- Profile Sheets
- Side Street Plan & Profile Sheets
- Intersection Plateau (Melaleuca Lane)
- Drainage Structure Sheets
- Cross Sections at Driveways
- Cross Sections
- Cross Sections at Side Streets
- Littoral Planting Plans
- Signing and Pavement Marking Plans
- Signalization Plans

ARCADIS will provide necessary utility coordination services including the preparation of utility conflict lists and pothole location lists.

ARCADIS will review the project layout with Palm Tran to confirm the location (if any) of their proposed bus stops. Should Palm Tran desire to site permanent bus stops along the roadway corridor, ARCADIS will incorporate these details into the construction plans.

ARCADIS will review the project with representatives of the City of Green Acres in order to discuss potential pedestrian access improvements within the project limits.

#### **Submittals**

Roadway design submittals shall be as required by the Palm Beach County Thoroughfare Road Design Standards, and will include the following submittal packages:

- Master Plan (typical sections and general roadway alignment)
- 35% design submittal
- 65% design submittal
- 96% design submittal
- 100% design submittal
- Final submittal

#### **Surface Water Management Services**

It is our understanding that the stormwater drainage from the project area located south of the L-14 Canal will be discharged into the existing lake system within the Nautica Lakes site. Water quality treatment and discharge quantity controls will be provided within the lake system within Nautica Lakes provided that available storage capacity exists and the subdivision plat provided for the County to utilize the lakes for drainage purposes.

From the LWDD L:-14 Canal to the LWDD L-13 Canal, and from the LWDD L-13 Canal to Lake Worth Road, stormwater management will be provided in offsite detention ponds. Water quality treatment and runoff attenuation will not be provided in the roadway right of way.

The storm water collection and conveyance system (inlets and pipes) will be sized for a 3 year 1 day storm event. The storm water detention areas will be sized to provide for one lane of open traffic during the peak stage of a 25 year 3 day storm event.

Design the proposed surface water management system in accordance with the Palm Beach County Roadway Production Division and regulatory agency requirements and as follows:

- Acquire and review all available studies, plans, and permits pertaining to the project, as provided by Palm Beach County Roadway Production Division, and as available at SFWMD and LWDD.
- Review SFWMD permit files, including all existing development in the vicinity of the project.
- Coordination with project team to obtain additional information as needed to supplement available data.
- Conduct field investigations as necessary to facilitate review of existing conditions.
- Perform site evaluations and surface water management hydraulic analyses of existing drainage systems.
- Perform storm sewer analyses for the proposed conditions. Perform pipe sizing calculations based upon water surface elevation data provided by Palm Beach County.
- Design of proposed storm sewer system.
- Prepare a surface water management report for submission to Palm Beach County Roadway Production Department, SFWMD, LWDD and if required USACOE.
- Schedule and attend project coordination and meetings with client, and project team, and regulatory agencies.
- Respond to SFWMD, LWDD, and ERM. requests for additional information including up to two written responses to each agency. Advise client if additional services outside the scope of this proposal are necessary, and assist client in obtaining such services.
- Prepare a Pond Siting Report analyzing alternative locations for the required detention ponds.

#### **Traffic Signals**

ARCADIS will prepare plans for the following traffic signal improvements:

- Replacement of the existing span wire traffic signal at the entrance to Tradewinds Elementary School/Fire Rescue building.
- A new mast arm traffic signal at the intersection of Melaleuca Lane and Haverhill Road.
- As an optional service if requested by the County, modifications to the existing mast arm signals at the intersection of Lake Worth Road and Haverhill Road. The modifications will consist of the relocation of the existing signal heads. The replacement or relocation of the existing mast arms is not anticipated.

Signal improvements will be required at the intersection of Haverhill Road and Nautica Lakes Boulevard. Plans for these signal improvements will be prepared by the County.

#### **Pond Siting Report**

It is anticipated that new storm water drainage ponds will be required to accommodate the proposed improvements between Melaleuca Lane and Lake Worth Road. ARCADIS will prepare a pond siting report in order to identify and evaluate potential sites for the drainage ponds. The pond siting report will investigate locating the required detention pond(s) on any potential sites within the project area.

ARCADIS will perform a Phase I investigation of these sites as part of the pond siting report effort. The Assessment will be comprised of the following specific elements:

- Visual site walk-through reconnaissance of the parcels
- Windshield survey of adjacent properties
- Review of local records of regulatory agencies including the Florida Department of Environmental Protection, South Florida Water Management District, the Palm Beach County Department of Environmental Resources Management (ERM).

The assessment will be conducted in general accordance with the American Society for Testing and Materials (ASTM) E-1527-05 standard and will include a determination of the existence of environmental liens. A Federal and State Environmental Agency data base summary of sites or facilities listed within the specified ASTM-standard distance of the subject property shall be obtained and reviewed. Previous environmental reports, if available, will be reviewed and evaluated. Available aerial photographic maps from the Palm Beach County Property Appraiser's Office and the Palm Beach County Engineering Department shall be reviewed. Historical land use will be interpreted from available aerial photographic maps, interviews, and other available sources.

Site access shall be arranged by ARCADIS. It is mutually agreed upon that the site reconnaissance shall be conducted within one day and any subsequent return trips to the subject property, as a result of access difficulties, are outside this scope of work and shall be invoiced on a time-and-materials basis in accordance with the firm's current fee schedule.

The Assessment will not include; a review of chain-of-ownership or abstract of title; surface-water, groundwater, storm-water, or air sampling, monitoring and analysis; asbestos inspection, sampling, and analysis; or radon sampling and analysis. These services can be provided upon request for an additional fee on a time-and-materials basis in accordance with Consultant's current fee schedule.

Our findings will be summarized in a written report (one report covering both parcels). A verbal notice with recommendations for Phase II ESA activities (if applicable) will be made after the site reconnaissance.

ARCADIS will review any mapping available at ERM delineating contaminated sites and sites of environmental or historical significance along the project corridor. Based upon the results of this research, ARCADIS will review construction issues relative to underground contamination with the Roadway Production Division.

#### Access Management

A large number of residential driveways exist along Haverhill Road between Melaleuca Lane and Lake Worth Road. ARCADIS will review the location and configuration of the access driveways, and will investigate improvements that may be recommended to reduce the likelyhood of vehicles backing out of the driveways and on to Haverhill Road. Access management improvements will be reviewed and addressed during the initial design of the project. ARCADIS will review access management issues with Palm Beach County Traffic Division and address access management modifications as required.

#### **Existing Pavement Condition**

Cracking and deterioration of the existing roadway pavements is noted north of Melaleuca Lane. A pavement coring and testing program may be prepared if requested by the County to analyze the condition of the existing pavements and to determine the structural number and expected life of the pavments.

#### Utilities

ARCADIS will coordinate with utility companies owning facilities along the project corridor in order to determine the presence and location of existing facilities, to minimize the potential for utility conflicts, and to identify the need for and extent of utility relocation efforts. Utility coordination meetings will be held as follows:

- 35% plans/initial coordination meeting
- 65% plans/utility pothole meeting
- 96% plans/final coordination meeting

ARCAIDS will provide 10 copies of the plans for distribution to the utility companies prior to each coordination meeting. A utility conflict matrix and a list of recommended potholes will be prepared and submitted for distribution to the utility companies. ARCADIS will attend the utility coordination meetings and will record and distribute meeting minutes to all attendees.

#### **Right of Way**

It is our understanding that the required right of way exists throughout the majority of the project corridor. Right of way acquisition will be required on the east side of Haverhill road south of Melaleuca Lane and for the stormwater drainage pond sites. Additional right of way may be necessary for any intersection improvements that may be proposed. ARCADIS will prepare sketch and legal descriptions for the required right of way and easement acquisition, if required and requested by Palm Beach County.

#### Survey Services

A field survey of the project site will be performed by Brown and Phillips Inc. A copy of Brown and Phillips detailed proposal is included as part of this proposal. The limits of the survey are from approximately 1070-feet south of Nautica Lakes Boulevard to 1000-feet north of Lake Worth Road. The survey will include:

- The establishment of vertical and horizontal control for the project, with ties to reestablish the control if necessary.
- The establishment of a survey baseline for the project.
- The establishment of existing property corners and right of way lines.
- A topographic survey of the project site. The survey limits will extend for a distance of 25-feet outside of the right of way.
- Cross sectional information will be obtained at 100-foot intervals and at intermediate driveways and sidestreets.
- A plateau grid of the intersections of Melaleuca Lane and Lake Worth Road will be obtained.
- Existing drainage structures and pipes will be as-built.

This field survey information will be utilized for the design of the project.

#### Structural Engineering

The bridge crossing the LWDD L-14 Canal will be widened for this project. The culvert at the LWDD L-13 canal will be extended so that the endwalls are not closer than 22-feet from the proposed edge of pavement.

Bridge Design Associates will prepare plans for the widening of the existing bridge. In addition to the bridge widening plans, Bridge Design Associates will prepare plans for the design of mast arm foundations at Tradewinds School and Melaleuca Lane. Attached to this proposal is a copy of Bridge Design Associates detailed proposal for the project.

## **Geotechnical Engineering**

A subsurface geotechnical engineering program will be performed for the project. The geotechnical engineering services will be provided by Tierra South Florida. A copy of Tierra South Florida's proposal is included as part of this proposal. The scope of services included will consist of:

- Obtaining roadway auger test borings along the project alignment
- Obtaining standard penetration test data at the proposed mast arm locations

- Obtaining standard penetration test data as required for the bridge widening
- Obtaining standard penetration test information for the proposed storm water detention pond(s).
- Performing pavement cores and the preparation of a pavement evaluation on the existing pavement structure.
- Obtaining, on an optional services basis, borehole permeability tests for use in the design of the drainage system

A geotechnical report on the findings will be prepared, and the results of the report and boring logs will be incorporated into the construction plans.

#### **Environmental Consulting Services**

Scheda Ecological Associates will provide Environmental Consulting services for the project. A copy of Scheda Ecological Associates detailed proposal is included as an attachment to this proposal. Included in this work will be assistance in the environmental permitting of the project through the SFWMD and the USACE. Scheda Ecological Associates will delineate in the field the presence or absence of any freshwater wetlands and will review the proposed pond sites for environmentally sensitive features. Scheda will provide coordination and laison with the regulatory agencies as required in order to obtain approval for the project.

#### Permitting

ARCADIS will prepare the following permit application packages for submittal:

Palm Beach County ERM Vegetation Removal Permit and Excavation permit.

FDOT general use permit (for improvements to Lake Worth Road)

# Lake Worth Drainage District

- o Roadway & Drainage
- Bridge widening at the L-14 Canal
- Culvert Extensions at the L-13 Canal

South Florida Water Management District

• ERP Permit

USACE

• Dredge and Fill Permit (If required)

NOTE: This Proposal does not include:

- Utility Relocation Plans
- Landscape Plans or Environment Enhancement Plans
- Traffic Control Plans
- Street lighting plans

A copy of our fee breakdown is attached to this proposal.

Thank you for the opportunity to submit this proposal. If you have any questions, or require additional information, please do not hesitate to contact this office.

Sincerely,

 $\nabla$ 

Henry W. Deibel, Jr., P.E. Associate Vice President

HWD

C: Bill Sears, P.E.

# EXHIBIT "B"

#### ARCADIS ESTIMATE OF WORK EFFORT FOR ENGINEERING Haverhill Road South of LWDD L-14 Canal to Lake Worth Road PALM BEACH COUNTY PROJECT NUMBER 2010503

| Total Contract Cost Computations                       |                |                                 | \$                      | 85,704.42    |
|--|----------------|---------------------------------|-------------------------|--------------|
| Total Activity Salary Costa<br>(a) Overhead Additives: |                |                                 |                         |              |
| (a) Combined OH Percent                                |                |                                 |                         | 165.00%      |
| (a2) Combined OH Cost                                  |                |                                 | S. S.                   | 141,412.29   |
| Subtotal (Salary + Overhead)                           |                |                                 | Š                       | V 227,116.71 |
| (b) Operating Margin Percent                           |                |                                 |                         | 12.00%       |
| (b) Operating Margin Cost                              | 0.1            |                                 | 5                       | 27,254.01    |
|  | Subtotal (Co   | bet Elements of Basic Activitie | •)~ \$ <sup>000</sup> . | > 254,370.72 |
| Traffic Signalization Plans (ARCADIS)                  |                |                                 | S                       | > 34,739,79  |
| Structural Engineering (Bridge Design Associates)      |                |                                 | 5                       | > 82,089.00  |
| Environmental Engineering ( Scheda Ecological A        |                |                                 | . <b>Š</b>              | > 5.370.00   |
| Landscape Plans (Studio Sprout, Inc)                   |                |                                 | Ś.                      | 3,750.00     |
| Drainage Design ( Last Devenport)                      |                |                                 | \$                      | > 17,101.65  |
|  |                | TOTAL LUMP SUM AMOUN            | IT \$                   | > 397,421.10 |
| REIMBURSABLE ITEMS (Limiting Amount)                   |                |                                 |                         |              |
| Land Surveying (Brown & Phillips)                      |                |                                 | <b>\$</b> -             | > 55.073.00  |
| Geotechnical Engineering (Tierra South Florida)        |                |                                 | \$                      | > 31,023.00  |
| Permit Fees (LWDD & SFWMD)                             |                |                                 | \$                      | √ 14,300.00  |
| Environmental Reimbursables (Scheda Ecological Ar      | isociates)     |                                 | \$                      | > 337.00     |
| Landscape Printing (Studio Sprout, Inc)                |                |                                 | \$                      | >> 90.00 ≤   |
|  |                | TOTAL REIMBURSABLE ITEN         | 18 \$                   | > 100,823.00 |
| Optional Services (N.T.E.)                             |                |                                 |                         |              |
| Sketch and Legal Descriptions (Brown & Phillips)(A     | ssume 15 @     | \$500.00 each)                  | \$                      | √ 7,500.00   |
| Mast Arm Utility Pothole Survey (Brown & Phillips)(A   | ssume 40 hrs 3 | -man crew @\$125/hr. 12 hrs Pl  | S                       | ,            |
| @ \$113/hr, 16 hrs survey tech @\$70/hr)               |                | •                               | S                       | 7.478.00     |
| Post Design Services (Roadway)(ARCADIS)                |                |                                 | \$                      | 7,684.80     |
| Post Design Services (Signalization)(ARCADIS)          |                |                                 | \$                      | 3,287.52     |
| Phase 1 Assessment (ARCADIS)                           |                |                                 | \$                      | > 4,000.00   |
| Percolation Tests (Tierra South Florida)               |                |                                 | \$                      | > 2,105.00   |
| TOTAL OPTIONAL SERVICES                                |                |                                 | \$                      | > 32,053.32  |
| TOTAL FEE -  |                |                                 |                         | 530,297,48   |

~ + 2.97% rultiplin

HAVERHILL ROAD with county hours with LDI 11-4-10.xis

#### ARCADIS

# ESTIMATE OF WORK EFFORT FOR ENGINEERING Haverhill Road - South of LWDD L-14 Canal to Late Worth Road PBCo Project 2010503

|  | CHIEF    | ENGINEER   | PROJE     | ÇT EN    | GINEER   | SR. CAD  | 0 01   | ERATOR | AC   | TIVE | TY TOTAL |
|--|----------|------------|-----------|----------|----------|----------|--------|--------|------|------|----------|
| de la companya de la | MAN      | HOURLY     | MAN       | )        | IOURLY   | MAN      | HOURLY |        | MAN  |      |          |
|  | HOURE    | RATE       | HOURS     | <u> </u> | RATE     | HOUNS    |        | RATE   | 1.1  | HO   | URS      |
| Master Plan  | 38.00    | \$ \$ 64.6 | 0 53.00   | 1        | 35.98    | 90.00    | 5      | 23.51  | 1    | V    | 179.00   |
| 35% Plane  | 97.00    | \$ 64.5    | 103.00    | 5        | 36.98    | 249.00   | \$     | 23.51  |      | ٧    | 449.00   |
| 65% Plans  | 165.75   | \$ 64.5    | 0 224.00  | \$       | 35.98    | 404.00   | \$     | 23.51  | - i, | Y    | 793.75   |
| 96% Plans  | 84.50    | \$ 64.9    | 0 141.00  | 5        | 36.98    | 219.00   | 5      | 23.51  |      | ¥.   | 444.50   |
| 100% Plane   | 38.00    | 5 64.9     | 0 9.00    | 13       | 35.98    | 60.00    | \$     | 23.51  |      | Y    | 107.00   |
| Final Plana  | 28.00    | \$ 64.9    | 0 -       | \$       | 35.98    | 23.00    | \$     | 23.51  |      | ¥    | 51.00    |
| UTILITIES  | 38.00    | \$ 64.9    | 0 22.00   | 1        | 35,08    | 4,00     | \$     | 23.51  |      | V 5  | 82.00    |
| PERMITTING   | 65.00    | \$ 64.9    | 0 12.00   | 5        | 35.88    | •        | \$     | 23.51  |      | v    | 77.00    |
| SIGNING & PAVEMENT<br>MARKING PLANS  | 32.50    | S. 64.9    | 0 36.00   |          | 35.98    | 69.50    | \$     | 23.51  |      | Y.   | 138.00   |
| TOTALS   | V 582.75 |            | V 600.00  |          |          | 1,118.60 |        |        |      | 2    | 2,301.25 |
| TOTALS   | V 582.75 |            | IV 600.00 |          | <u> </u> | 1,118.60 |        |        |      | ¥    | 2,301.   |

| Master Plan                         | \$ 2,336,40  | \$ 1,906,94     | \$ 2,115.90 |                     |
|-------------------------------------|--------------|-----------------|-------------|---------------------|
| 35% Plana                           | \$ 6,295.30  | \$ 3,705,94     | \$ 5,853,99 | ·.                  |
| 65% Plans                           | \$ 10,757,18 | \$ 8,059.52     | \$ 9,498.04 |                     |
| 96% Plana                           | \$ 5,484.06  | A 5.073.18      | \$ 5,148.69 |                     |
| 100% Plana                          | \$ 2.466.20  | <b>E</b> 323.82 | \$ 1,410.60 |                     |
| Final Plans                         | \$ 1,817.20  | <b>s</b> -      | \$ 540.73   |                     |
| UTILITIES                           | \$ 2.336.40  | \$ 791.56       | \$ 94.04    | entre an<br>Alterna |
| PERMITTING                          | \$ 4.218.50  | <b>S</b> 431,76 | S S         |                     |
| SIGNING & PAVEMENT<br>MARKING PLANS | \$ 2,109.25  | 1,295,28        | \$ 1,633.95 | $\mathbf{N}$        |
| TOTALS                              | \$ 37.820.48 | ¥ 21,588.00     | ▶ 26,295.94 | \$ V 85,704.42      |

|   |                                     | BY<br>ACTIVITY |    | COST FOR<br>ACTIVITY | HOURLY<br>RATE |             |
|---|-------------------------------------|----------------|----|----------------------|----------------|-------------|
|   | Mester Plan                         | 179.00         | 5  | 6,359.24             | 35.53          |             |
|   | 35% Plane                           | 449.00         | 5  | 15,855.23            | 35.31          | ra ser e    |
|   | 65% Plans                           | 793,75         | \$ | 28,314.74            | 35.67          | 1           |
|   | 98% Plans                           | 444.50         | \$ | 15,705.92            | 35.33          | ĺ.          |
|   | 100% Plans                          | 107.00         | \$ | 4,200.62             | 39.26          | 1           |
|   | Final Plans.                        | 51.00          | \$ | 2.357.93             | 46.23          |             |
| - | UTILITIES                           | 62:00          | 3  | 3.222.00             | 51.97          |             |
|   | SIGNING & PAVEMENT<br>MARKING PLANS | 138.00         | 5  | 5,038,48             | 38.51          |             |
|   | TOTALS                              | 2,224.25       |    | 81,054.16            | \$38.44        | Average per |

HAVERHILL ROAD with county hours with LDI 11-4-10.xtm

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#### HIGHWAY TASK LIST

#### ACTIVITY: A. ROADWAY PLANS PACKAGE

#### SUBACTIVITY: 1 - Master Plan

|    | TASK                                  | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT<br>MANAGER | PROJECT | SR. CADD | REMARKS |
|----|---------------------------------------|----------------------|-----------------|------------|------------------|----------------|--------------------|---------|----------|---------|
| 1. | Cover Sheet                           | Sheet                | 1               | 4          | . 1              | 4              | 1.0                |         | 3.0      |         |
| 2  | Typical Sections                      | EA                   | 5               | 5          | 3                | 25             | 5.0                | 8.0     | 12.0     |         |
| 3  | Plan Sheets                           | Sheet                | 15              | 10         | 15               | 150            | 30.0               | 45.0    | 75.0     |         |
|    |                                       |                      |                 |            |                  | 0              |                    |         |          |         |
|    |                                       |                      |                 |            |                  | 0              |                    |         |          |         |
|    | · · · · · · · · · · · · · · · · · · · |                      |                 |            |                  | 0              |                    |         |          | •       |
|    |                                       |                      |                 |            |                  | 0              |                    |         |          |         |
|    |                                       |                      |                 |            |                  | 0              |                    |         |          |         |
|    |                                       |                      |                 |            |                  | 0              |                    |         |          |         |
|    |                                       |                      |                 |            |                  | 0              |                    |         |          |         |
|    |                                       |                      |                 |            |                  |                |                    |         |          |         |
|    | SUBTOTAL THIS SHEET                   |                      |                 |            |                  | > 179          | 36                 | 53      | 90       |         |

HAVERHILL ROAD with county hours with LDI 11-4-10.xis

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#### HIGHWAY TASK LIST

#### ACTIVITY: A. ROADWAY PLANS PACKAGE

#### SUBACTIVITY: 1 - 35% Plans

|   | TASK                             | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT | PROJECT<br>ENGINEER | SR. CADD | REMARKS                          |
|---|----------------------------------|----------------------|-----------------|------------|------------------|----------------|---------|---------------------|----------|----------------------------------|
| Ŀ | Cover Sheet                      | Ea.                  | 1               | t          | 1                | 1              |         |                     | 1.0      |                                  |
| 2 | Typical Sections                 | L.S.                 | 4               | 2          | 3                | 8              | 2.0     |                     | 6.0      |                                  |
| 3 | Plan Sheets                      | Sheet                | 15              | 14         | 15               | 210            | 40.0    | 58.0                |          |                                  |
| 4 | Benchmarks and Sectional Corners | Ea.                  | 2               | 5          | 2                | 10             | 2.0     | 2.0                 | 112.0    |                                  |
| 5 | Preliminary Drainage Maps        | Sheet                | 3               | 17         | 3                | 51             | 10.0    | 15.0                | 6.0      | Plot existing drainage system &  |
| 6 | Preliminary Profiles             | Sheet                | 15              | 4          |                  | 60             | 20.0    | 15.0                | 26.0     | preliminary drainage basin areas |
| 7 | Existing Intersection Profiles   | Sheet                | 2               | 6          | 2                | 12             | 20.0    |                     | 40.0     | ]                                |
| 8 | Existing Cross Sections          | Ea.                  | 89              | 1          | 30               | 89             |         | 4.0                 | 6.0      |                                  |
| 9 | Right of Way Control Sheet       | Ea.                  | 1               | 8          | 1                | 8              | 17.0    | 24.0                | 48.0     | ······                           |
|   |                                  |                      |                 |            |                  | 0              | 4.0     |                     | 4.0      |                                  |
|   |                                  |                      |                 |            |                  | 0              |         |                     |          |                                  |
|   |                                  |                      |                 |            |                  |                |         |                     |          |                                  |
|   | TOTAL SUBACTIVITY 1              |                      |                 |            |                  | 449            | 97.0    | 103.0               | 249.0    |                                  |

HAVERHILL ROAD with county hours with LDI 11-4-10.xis

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#### HIGHWAY TASK LIST

#### ACTIVITY: A. ROADWAY PLANS PACKAGE

#### SUBACTIVITY: 2 - 65% Plans

|    | TASK                              | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT<br>MANAGER | PROJECT | SR. CADD | REMARKS                               |
|----|-----------------------------------|----------------------|-----------------|------------|------------------|----------------|--------------------|---------|----------|---------------------------------------|
| 1. | Cover Sheet                       | Ea                   | 1               | 2          | 1                | 2              |                    |         | 2.0      |                                       |
| 2. | Drainage Maps                     | Sheet                | 3               | 14         | 3                | 42             | 8.0                | 13.0    | 21.0     |                                       |
| 3. | Typical Sections                  | Ea                   | 4               | 1          | 3                | 4              | 1.0                |         | 3.00     |                                       |
| 4. | Summary of Qauntities             | Ea                   | 1               | 8          | 1                | 8              |                    | 2.0     | 6.0      |                                       |
| 5. | Summary of Drainage Structures    | Ea                   | 3               | 6          | 3                | 18             | 4.0                | 5.0     | 9.0      |                                       |
| 6. | Reference Ties                    | Sheet                | 2               | 4          | 2                | 8              | 2.0                |         | 6.0      | · · · · · · · · · · · · · · · · · · · |
| 7. | General Notes                     | Sheet                | 1               | 4          | 1                | 4              |                    | 1.0     | 3.0      |                                       |
| 8. | Details                           | Sheet                | 4               | 6          | 4                | 24             | 4.0                | 8.0     | 12.0     |                                       |
| 9. | Plan Sheets                       | Sheet                | 15              | 16         | 15               | 240            | 48.0               | 72.0    | 120.0    |                                       |
| 10 | Profile Sheets                    | Sheet                | 15              | 6          | 15               | 90             | 21.0               | 24.0    | 45.0     |                                       |
| 11 | Side Street Plan & Profile Sheets | Sheet                | 8               | 6          | 8                | 48             | 10.0               | 14.0    | 24.0     |                                       |
|    |                                   |                      |                 |            |                  |                |                    |         |          |                                       |
|    | SUBTOTAL THIS SHEET               |                      |                 |            |                  | 488            | 98.0               | 139.0   | 251.0    |                                       |

HAVERHILL ROAD with county hours with LDI 11-4-10 xis

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#### HIGHWAY TASK LIST

ACTIVITY: A. ROADWAY PLANS PACKAGE

SUBACTIVITY: 2 - 65% Plans

| TASK                                  | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS                         | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT<br>MANAGER | PROJECT<br>ENGINEER | SR. CADD | REMARKS                               |
|---------------------------------------|----------------------|---|------------|------------------|----------------|--------------------|---------------------|----------|---------------------------------------|
| 12 Intersection Plateau               | Ea.                  | 1                                       | 16         | 1                | 16             | 8.0                |                     | 8.0      |                                       |
| 13 Drainage Structure Sheets          | Sheet                | 10                                      | 8          | 10               | 80             | 16.0               | 24.0                | 40.0     |                                       |
| 14 Driveway Cross Profiles            | Ea.                  | 50                                      | 1          | 8                | 50             | 10.0               | 15.0                | 25.0     |                                       |
| 15 Cross Sections                     | Ea.                  | 89                                      | 1.75       | 30               | 155.75         | 29.8               |                     |          |                                       |
| 16 Side Street Cross Sections         | Ea.                  | 0                                       | 1.70       |                  | 0              | 29.6               | 46.0                | 80.0     | · · · · · · · · · · · · · · · · · · · |
| 17 Cost Estimate                      | LS                   | 1                                       | 4          |                  | 4              | 4.0                |                     |          |                                       |
|                                       |                      | • |            |                  |                | 4.0                |                     |          |                                       |
|                                       |                      |   |            |                  |                |                    |                     |          |                                       |
|                                       |                      |   |            |                  |                |                    |                     |          |                                       |
|                                       |                      |   | ·          |                  |                |                    |                     |          |                                       |
|                                       |                      |   |            |                  |                |                    |                     |          |                                       |
|                                       |                      |   |            |                  |                |                    |                     |          |                                       |
|                                       |                      |   |            |                  |                |                    |                     |          |                                       |
| SUBTOTAL THIS S                       | HEET                 |   |            |                  | 305.75         | 67.75              |                     |          |                                       |
| · · · · · · · · · · · · · · · · · · · |                      |   |            |                  | 393.13         | 01.13              | 85.0                | 153.0    |                                       |
| T                                     | OTAL                 |   |            |                  | 793.75         | 165.75             | 224                 | 404      |                                       |

HAVERHILL ROAD with county hours with LDI 11-4-10.xis

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#### HIGHWAY TASK LIST

ACTIVITY: A. ROADWAY PLANS PACKAGE

SUBACTIVITY: 2 - 96% Plans

| TASK    |                                   | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT<br>MANAGER | PROJECT<br>ENGINEER | SR. CADD | REMARKS                               |
|---------|-----------------------------------|----------------------|-----------------|------------|------------------|----------------|--------------------|---------------------|----------|---------------------------------------|
| 1.      | Cover Sheet                       | Ea                   | 1               | 1          | 1                | 1              |                    |                     | 1.0      |                                       |
| 2.      | Drainage Maps                     | Sheet                | 3               | 14         | 3                | 42             | 9.0                | 12.0                | 21.0     |                                       |
| 3.      | Typical Sections                  | Ea                   | 5               | 0          | 3                | 0              |                    |                     |          |                                       |
| 4.      | Summary of Quantities             | Ea                   | 1               | 6          |                  | 6              | 1.0                | 2.0                 | 3.0      |                                       |
| 5.      | Summary of Drainage Structures    | Ea                   | 3               | 8          | 3                | 24             | 4.0                | 4.0                 | 16.0     |                                       |
| 6.      | Reference Ties                    | Sheet                | 2               | 1          | 2                | 2              |                    |                     | 2.0      |                                       |
| 7.      | General Notes                     | Sheet                | 1               | 2          | 1                | 2              | 1.0                |                     | 1.0      |                                       |
| 8.      | Details                           | Sheet                | 4               | 3          | 4                | 12             | 2.0                | 2.0                 | 8.0      |                                       |
| 9.      | Plan Sheets                       | Sheet                | 15              | 10         | 15               | 150            | 22.0               | 48.0                | 80.0     |                                       |
| 10      | Profile Sheets                    | Sheet                | 15              | 3.467      | 15               | 52             | 10.0               | 16.0                | 26.0     |                                       |
| 11      | Side Street Plan & Profile Sheets | Sheet                | 8               | 2          | 8                | 16             | 4.0                | 4.0                 | 8.0      |                                       |
| 12      | Intersection Plateau              | Ea.                  | 1               | 4          | 1                | 4              | 2.0                |                     | 2.0      |                                       |
| 13      | Drainage Structure Sheets         | Sheet                | 10              | 2.8        | 10               | 28             | 4.0                | 9.0                 | 15.0     | · · · · · · · · · · · · · · · · · · · |
| يرمنونه | SUBTOTAL THIS SHEET               |                      |                 |            |                  | 339            | 59                 | 97                  | 183      |                                       |

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#### HIGHWAY TASK LIST

#### ACTIVITY: A. ROADWAY PLANS PACKAGE

#### SUBACTIVITY: 2 - 96% Plans

|    | TASK                         | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT<br>MANAGER | PROJECT      | SR. CADD | REMARKS |
|----|------------------------------|----------------------|-----------------|------------|------------------|----------------|--------------------|--------------|----------|---------|
| 14 | Driveway Cross Profiles      | Ea.                  | 50              | 0.5        | 8                | 25             | 5.0                | 8.0          | 12.0     |         |
| 15 | Cross Sections               | Ea.                  | 89              | 0.5        | 30               | 44.5           | 8.5                | 12.0         | 24.0     |         |
| 16 | Side Street Cross Sections   | Ea.                  |                 |            |                  | 0              |                    |              |          | ·       |
| 17 | Quantity Computation Booklet | LS                   | 1               | 32         |                  | 32             | 8.0                | 24.0         |          |         |
| 18 | Cost estimate                | LS                   | 1               | 4          |                  | 4              | 4.0                | <del>_</del> |          |         |
|    |                              |                      |                 |            |                  |                |                    |              |          |         |
|    |                              |                      |                 |            |                  | 105.5          | 25.5               | 44.0         | 36.0     |         |
|    |                              |                      |                 |            |                  |                |                    |              |          |         |
|    |                              |                      |                 |            |                  |                |                    |              |          |         |
|    |                              |                      |                 |            |                  |                |                    |              |          | ·       |
|    |                              |                      |                 |            |                  |                |                    |              |          |         |
|    |                              |                      |                 |            |                  |                |                    |              |          |         |
|    | TOTAL                        |                      |                 |            |                  | 444.5          | 84.5               | 141          | 219      |         |

HAVERHILL ROAD with county hours with LDI 11-4-10.xis

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#### HIGHWAY TASK LIST

ACTIVITY: A. ROADWAY PLANS PACKAGE

SUBACTIVITY: 2 - 100% Plans

|    | TASK                              | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT<br>MANAGER | PROJECT<br>ENGINEER | SR. CADD | REMARKS                               |
|----|-----------------------------------|----------------------|-----------------|------------|------------------|----------------|--------------------|---------------------|----------|---------------------------------------|
| 1. | Cover Sheet                       | Ea                   | 1               |            | - 1              | 0              |                    |                     |          |                                       |
| 2. | Drainage Maps                     | Sheet                | 3               | 3          | 3                | 9              | 2.0                |                     | 7.0      |                                       |
| 3. | Typical Sections                  | Ea                   | 5               |            |                  | 0              |                    |                     |          |                                       |
| 4. | Summary of Qauntities             | Ea                   | 1               | 6          |                  | 6              | 2.0                |                     | 4.0      |                                       |
| 5. | Summary of Drainage Structures    | Ea                   | 3               | 2          | 3                | 6              | 2.0                |                     | 4.0      |                                       |
| 6. | Reference Ties                    | Sheet                | 2               |            | 2                | 0              |                    |                     |          |                                       |
| 7. | General Notes                     | Sheet                | 1               | 2          | 1                | 2              | 1.0                |                     | 1.0      | · · · · · · · · · · · · · · · · · · · |
| 8. | Details                           | Sheet                | 4               | 1.5        | 4                | 6              | 2.0                |                     | 4.0      |                                       |
| 9. | Plan Sheets                       | Sheet                | 15              | 1.5        | 15               | 22.5           | 8.0                | 2.5                 | 12.0     |                                       |
| 10 | Profile Sheets                    | Sheet                | 15              | 1.5        | 15               | 22.5           | 8.0                | 2.5                 | 12.0     |                                       |
| 11 | Side Street Plan & Profile Sheets | Sheet                | 8               |            | 8                | 0              |                    |                     |          |                                       |
| 12 | Intersection Plateau              | Ea.                  | 1               |            | 1                | 0              |                    |                     |          |                                       |
| 13 | Drainage Structure Sheets         | Sheet                | 10              | 1          | 10               | 10             | 2.0                |                     | 8.0      |                                       |
|    |                                   |                      |                 |            |                  |                |                    |                     |          | · · · · · · · · · · · · · · · · · · · |
|    | SUBTOTAL THIS SHEET               |                      |                 |            |                  | 84             | 27                 | 5                   | 52       |                                       |
|    |                                   |                      |                 |            |                  |                |                    |                     |          |                                       |

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#### HIGHWAY TASK LIST

## ACTIVITY: A. ROADWAY PLANS PACKAGE

#### SUBACTIVITY: 2 - 100% Plans

|    | TASK                                   | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT<br>MANAGER | PROJECT<br>ENGINEER | SR. CADD | REMARKS |
|----|--|----------------------|-----------------|------------|------------------|----------------|--------------------|---------------------|----------|---------|
| 14 | Driveway Cross Sections                | Ea.                  | 50              | o          | 8                | 0              |                    |                     |          |         |
| 15 | Cross Sections                         | Ea.                  | 89              | 0.5        | 30               | 15             | 3.0                | 4.0                 | 8.0      |         |
| 16 | Side Street Cross Sections             | Ea.                  |                 |            |                  | 0              |                    | +.0                 | 0.0      |         |
| 17 | Quantity Computation Booklet           | LS                   | 1               | 6          |                  | 6              | 6.0                |                     |          |         |
| 18 | Cost estimate                          | LS                   | 1               | 2          | j                | 2              | 2.0                |                     |          |         |
|    |  |                      |                 |            |                  |                |                    |                     |          | · ·     |
|    | SUBTOTAL THIS SHEET                    |                      |                 |            |                  | 23             | 11.0               | 4.0                 | 8.0      |         |
|    |  |                      |                 |            |                  |                |                    |                     |          |         |
|    |  |                      |                 |            |                  |                |                    |                     |          |         |
|    |  |                      | ,               |            |                  |                |                    |                     |          |         |
|    |  |                      |                 |            |                  |                |                    |                     |          |         |
|    |  |                      |                 |            |                  |                |                    |                     |          |         |
|    | TOTAL                                  |                      |                 |            |                  | 107            | 38.0               | 9.0                 | 60.0     |         |
|    |  |                      |                 |            |                  |                |                    |                     |          |         |
|    |  |                      |                 |            |                  |                |                    |                     |          |         |
|    | ······································ |                      | <u>_</u>        | <u>-</u>   | L                | L              | <u>l</u> _         |                     |          |         |

HAVERHILL ROAD with county hours with LDI 11-4-10.xls

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#### HIGHWAY TASK LIST

ACTIVITY: A. ROADWAY PLANS PACKAGE

SUBACTIVITY: 2 - Final Plans

|    | TASK                              | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT<br>MANAGER | PROJECT | SR. CADD | REMARKS |
|----|-----------------------------------|----------------------|-----------------|------------|------------------|----------------|--------------------|---------|----------|---------|
| 1. | Cover Sheet                       | Ea                   |                 |            |                  | 0              |                    |         |          |         |
| 2. | Drainage Maps                     | Sheet                |                 |            |                  | 0              |                    |         |          |         |
| 3. | Typical Sections                  | Ea                   | 5               |            |                  | 0              |                    |         |          |         |
| 4. | Summary of Quantities             | Ea                   | 1               | 6          | 1                | 6              | 2.0                |         | 4.0      |         |
| 5. | Summary of Drainage Structures    | Ea                   | 3               | 1          | 3                | 3              | 1.0                |         | 2.0      |         |
| 6. | Reference Ties                    | Sheet                |                 |            |                  | Ó              |                    |         |          |         |
| 7. | General Notes                     | Sheet                | 1               |            |                  | 0              |                    |         |          |         |
| 8. | Details                           | Sheet                | 4               |            |                  | 0              |                    |         |          |         |
| 9. | Plan Sheets                       | Sheet                | 15              | 1          | 15               | 15             | 8.0                |         | 7.0      | ·       |
| 10 | Profile Sheets                    | Sheet                | 15              | 1          | 15               | 15             | 7.0                |         | 8.0      |         |
| 11 | Side Street Plan & Profile Sheets | Sheet                |                 |            |                  | 0              |                    |         |          |         |
| 12 | Intersection Plateau              | Ea.                  |                 |            |                  | 0              |                    |         |          |         |
| 13 | Drainage Structure Sheets         | Sheet                | 10              |            |                  | 0              |                    |         |          | •       |
|    |                                   |                      |                 |            |                  |                |                    |         |          |         |
|    | SUBTOTAL THIS SHEET               |                      |                 |            |                  | 39             | 18                 | 0       | 21       | · ·     |
|    |                                   |                      |                 |            |                  |                |                    |         |          |         |

HAVERHILL ROAD with county hours with LDI 11-4-10.xis

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#### HIGHWAY TASK LIST

ACTIVITY: A. ROADWAY PLANS PACKAGE

SUBACTIVITY: 2 - Final Plans

|    | TASK                         | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT                             | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT<br>MANAGER | PROJECT<br>ENGINEER | SR. CADD | REMARKS                                |
|----|------------------------------|----------------------|-----------------|--|------------------|----------------|--------------------|---------------------|----------|--|
| 14 | Driveway Profiles            | Ea.                  | 50              |  |                  | 0              |                    |                     |          |  |
| 15 | Cross Sections               | LS                   | 4               | 1                                      |                  | 4              | 2.0                |                     | 2.0      |  |
| 16 | Side Street Cross Sections   | Ea.                  | 24              |  | 8                | 0              |                    |                     | -        | ······································ |
| 17 | Quantity Computation Booklet | LS                   | 1               | 6                                      |                  | 6              | 6.0                | <u> </u>            |          |  |
| 18 | Cost estimate                | LS                   | 1               | 2                                      |                  | 2              | 2.0                |                     |          |  |
|    |                              |                      |                 |  |                  |                |                    |                     |          | · · · · · · · · · · · · · · · · · · ·  |
|    | SUBTOTAL THIS SHEET          |                      |                 |  |                  | 12             | 10.0               | 0.0                 | 2.0      |  |
|    |                              |                      |                 |  |                  |                |                    |                     |          |  |
|    |                              |                      |                 |  |                  |                |                    | •                   |          |  |
|    |                              |                      |                 |  |                  |                |                    |                     |          |  |
|    |                              |                      |                 |  |                  |                |                    |                     |          |  |
|    |                              |                      |                 |  |                  |                |                    |                     |          |  |
|    | TOTAL                        |                      |                 |  |                  | 51             | 28.0               | 0.0                 | 23.0     |  |
|    |                              |                      |                 |  |                  |                |                    |                     |          |  |
|    |                              |                      |                 |  |                  |                |                    |                     |          |  |
|    |                              |                      |                 | ······································ | <b>_</b>         | L              |                    |                     | <u></u>  |  |

HAVERHILL ROAD with county hours with LDI 11-4-10.xis

HIGHWAY PAGE 11 OF 13

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#### HIGHWAY TASK LIST

#### ACTIVITY: A. ROADWAY PLANS PACKAGE

#### SUBACTIVITY: 2 - Utility Coordination

|    | TASK                                 | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT<br>MANAGER | PROJECT<br>ENGINEER | SR. CADD | REMARKS                               |
|----|--------------------------------------|----------------------|-----------------|------------|------------------|----------------|--------------------|---------------------|----------|---------------------------------------|
| 1  | Initial Contact Plans                | Ea                   | 1               | 8          |                  | 8              | 4                  |                     | 4        |                                       |
| 2  | Pothole Meeting                      | Ea                   | 2               | 6          |                  | 12             | 4                  | 8                   |          |                                       |
| 4. | Review Pothole Data and adjust plans | LS                   | 1               | 20         |                  | 20             | 10.0               | 10.0                |          |                                       |
|    | Final Utility Meeting                | Ea.                  | 1               | 8          |                  | 8              | 4.0                | 4.0                 |          | · · · · · · · · · · · · · · · · · · · |
| 6  | Pre Work Meeting                     | Ea.                  | 2               | 2          |                  | 4              | 4.0                |                     |          |                                       |
| 7  | Utility Conflict Matrix              | Ea                   | 3               | 2          |                  | 6              | 6.0                |                     |          |                                       |
|    | SUBTOTAL THIS SHEET                  |                      |                 |            |                  | 58             | 32                 | 22                  | 4        |                                       |
|    |                                      |                      |                 |            |                  |                |                    |                     |          |                                       |
| 6. | Quality Control                      | 0%                   |                 |            |                  | 0              |                    |                     |          |                                       |
| 7. | Supervision                          | 0%                   |                 |            |                  | 0              |                    |                     |          |                                       |
| 8. | Utility Meetings                     | Ea.                  | 4               | 1          |                  | 4              | 4.0                |                     |          |                                       |
|    | TOTAL                                |                      |                 |            |                  | 62             | 36                 | 22                  | 4        |                                       |

HAVERHILL ROAD with county hours with LDI 11-4-10 xis

HIGHWAY PAGE 12 OF 13

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#### HIGHWAY TASK LIST

#### ACTIVITY: A. ROADWAY PLANS PACKAGE

## SUBACTIVITY: 5 - ENV. SERVICES / PERMITS

|     | TASK                              | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL<br>HOURS | PROJECT<br>MANAGER | PROJECT<br>ENGINEER | SR. CADD | REMARKS  |
|-----|-----------------------------------|----------------------|-----------------|------------|------------------|----------------|--------------------|---------------------|----------|--|
| 1.  | FDOT Drainage Review              | L.S.                 | 1               | 2          |                  | 2              | 2.0                |                     |          | I CIMARAS                                      |
| 2.  | Tree Permit                       | L.S.                 | 1               | 3          |                  | 3              | 3.0                |                     |          |  |
| 3.  | FDOT Permit                       | L.S.                 | 1               | 20         |                  | 20             | 8.0                | 12.0                |          |  |
| 4.  | Address FDOT/SFWMD/LWDD Comments  | L. <b>S</b> .        | 1               | 14         |                  | 14             | 14.0               |                     |          |  |
| 5.  | Drainage Calculations             | L.S.                 | 1               |            |                  | 0              |                    |                     |          | Flood Routings and Pipe<br>Hydraulics (By LDI) |
| 6.  | Pond Siting Report                | LS                   | 1               | 32         |                  | 32             | 32.0               |                     |          |  |
| 7.  | SFWMD ERP Permit Application      | LS                   | 1               |            |                  | 0              |                    |                     |          | By LDI   |
| 8.  | LWDD Permit Application           | LS                   | 1               |            |                  | 0              |                    |                     |          | By LDI   |
| 9.  | ERM Excavation Permit Application | LS                   | 1               | 6          |                  | 6              | 6.0                |                     |          |  |
| 10. |                                   |                      |                 |            |                  | 0              |                    |                     |          |  |
| 11  |                                   |                      |                 |            |                  | 0              |                    |                     |          |  |
|     | TOTAL THIS SHEET                  |                      |                 |            | Ì                | $\sim_{\pi}$   | 65                 | 12                  | 0        |  |

HAVERHILL ROAD with county hours with LDI 11-4-10.xis

Haverhill Road South of LWDD L-14 Canal to Lake Worth Road 2010503

HIGHWAY PAGE 13 OF 13

#### HIGHWAY TASK LIST

## ACTIVITY: B. SIGNING & PAVEMENT MARKINGS

## SUBACTIVITY: NONE

| TASK                              | BASIS OF<br>ESTIMATE | NO. OF<br>UNITS | HOURS/UNIT | NO. OF<br>SHEETS | TOTAL HOURS | PROJECT<br>MANAGER | PROJECT | SR. CADD | BEMARKO. |
|-----------------------------------|----------------------|-----------------|------------|------------------|-------------|--------------------|---------|----------|----------|
| 1. Key Sheet                      | Sheet                | 1               | 1          | 1                | 1           |                    |         | 4        | REMARKS  |
| 2. General Notes                  | Sheet                | 1               | 1          | 1                | 1           | 0.5                |         | 1        |          |
| 3. Tabulation of Quantities       | Sheet                | 1               | 16         |                  | 16          | 8                  |         | 0.5      |          |
| 4. Plan Sheets                    | Sheet                | 15              | 8          | 15               | 120         | 24                 |         | 8        |          |
| 5. Revise Overhead Sign Details   | EA                   |                 |            |                  | 0           | 24                 | 36      | 60       |          |
| 6. Add Station Callouts to Plans  | Sheet                |                 |            |                  | 0           |                    |         |          |          |
| 7. Special Marking Details        | EA                   |                 |            |                  |             |                    |         |          |          |
| 8. Sign Details                   | Sheet                |                 |            |                  |             |                    |         |          |          |
| 9. Metal / Concrete Pole Details  | EA                   |                 |            |                  | 0           |                    |         |          |          |
| 10. Service Point Details         | EA                   |                 |            |                  | 0           |                    |         |          |          |
| 11. C.E.S. / Summary of Pay Items | L.S.                 |                 |            |                  | 0           |                    |         |          |          |
| 12. Special Provisions            | L.S.                 |                 |            |                  | 0           |                    |         |          |          |
| TOTAL                             | L.U.                 |                 |            |                  | 0           | 32.5               | 36      | 69.5     |          |

HAVERHILL ROAD with county hours with LDI 11-4-10.xis

#### ARCADIS ESTIMATE OF WORK EFFORT FOR ENGINEERING Haverhill Road TRAFFIC SIGNAL DESIGN

| Total Contract Cost Computations Total Activity Salary Costs | \$<br>11,704.78          |
|--|--------------------------|
| (a) Overhead Additives:                                      |                          |
| (a1) Combined OH Percent<br>(a2) Combined OH Cost            | 165.00%                  |
| (az) Combined OH Cost<br>Subtotal (Salary + Overhead)        | \$<br>19,312.89          |
| (b) Operating Margin Percent                                 | \$<br>31,017.67          |
| (b) Operating Margin Cost                                    | \$<br>12.00%<br>3,722.12 |
| Subtotal (Salary Related Cost)                               | \$<br>34,739.79          |
| Subtotal (Cost Elements of Basic Activities)                 | \$<br>34,739.79          |

TOTAL BASIC SERVICES \$

> 34,739.79

REIMBURSABLE ITEMS (Limiting Amount)

TOTAL REIMBURSABLE ITEMS \$

**OPTIONAL SERVICES** 

TOTAL OPTIONAL SERVICES \$

LUMP SUM = \$ 34,739.79

Haverhill Road Signals revised 092810.xls

# ARCADIS ESTIMATE OF WORK EFFORT FOR ENGINEERING Haverhill Road TRAFFIC SIGNAL DESIGN

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| MAN         HOURLY         MAN         HOURLY         MAN         DESIGNER         ACTIVITY TOTAL           SIGNAL ANALYSIS         95.0         \$         46.14         110.0         \$         31.30         \$         27.30         205.0           DRAINAGE ANALYSIS         \$         46.14         \$         31.30         \$         27.30         205.0           DRAINAGE ANALYSIS         \$         46.14         \$         31.30         \$         27.30            UTILITIES         \$         46.14         \$         31.30         \$         27.30            PERMITTING         \$         46.14         \$         31.30         \$         27.30            SIGNAL PLANS         \$         \$         \$         \$         31.30         \$         27.30 <td< th=""><th></th><th></th><th>PROJE</th><th>CT N</th><th>MANAGER</th><th>PRO</th><th>FC</th><th>TEMO</th><th>INCER</th><th></th><th></th><th></th><th></th><th></th></td<>  |   |                   | PROJE                                    | CT N     | MANAGER  | PRO     | FC | TEMO     | INCER          |          |            |       |                     |         |
|---|---|-------------------|--|----------|----------|---------|----|----------|----------------|----------|------------|-------|---------------------|---------|
| HOURS         RATE         RATE         HOURS         RATE         HOURS         RATE         HOURS         RATE         RATE         HOURS         RATE         RATE <thrate< th=""> <thrate< th=""> <thrate< th="" th<=""><th></th><th></th><th>MAN</th><th>T</th><th></th><th></th><th>Ť</th><th></th><th></th><th></th><th>ESIG</th><th></th><th>ACTIVIT</th><th>Y TOTAL</th></thrate<></thrate<></thrate<>   |   |                   | MAN                                      | T        |          |         | Ť  |          |                |          | ESIG       |       | ACTIVIT             | Y TOTAL |
| SIGNAL ANALYSIS         95.0         \$         46.14         110.0         \$         31.30         \$         27.30         205.0           DRAIMAGE ANALYSIS         \$         46.14         \$         31.30         \$         27.30         205.0           DRAIMAGE ANALYSIS         \$         46.14         \$         31.30         \$         27.30         .           UTILITIES         \$         46.14         \$         31.30         \$         27.30         .           UTILITIES         \$         46.14         \$         31.30         \$         27.30         .           UTILITIES         \$         46.14         \$         31.30         \$         27.30         .           SIGINAL PLANS         42.0         \$         46.14         \$         31.30         \$         27.30         .           SIGINAL PLANS         \$         44.14         \$         31.30         \$         27.30         .         .           SIGINAL PLANS         \$         \$         \$         \$         .         \$         .         .         .         .         .         .         .         .         .         .         .         . <t< th=""><th></th><th></th><th>HOURS</th><th>T</th><th>RATE</th><th></th><th>+</th><th></th><th></th><th></th><th>┿</th><th></th><th></th><th></th></t<>  |   |                   | HOURS                                    | T        | RATE     |         | +  |          |                |          | ┿          |       |                     |         |
| DRAIMAGE ANALYSIS     3     46.14     \$     31.30     \$     27.30       Intervention     \$     46.14     \$     31.30     \$     27.30       UTILITIES     \$     46.14     \$     31.30     \$     27.30       PERMITTING     \$     46.14     \$     31.30     \$     27.30       PERMITTING     \$     46.14     \$     31.30     \$     27.30       SIGNING & PAVEMENT     \$     46.14     \$     31.30     \$     27.30       MARKING PLANS     \$     46.14     \$     31.30     \$     27.30       MARKING PLANS     \$     46.14     \$     31.30     \$     27.30       MARKING PLANS     \$     43.33.30     \$     34.43.00     \$       TOTALS     \$     4.383.30     \$     3.443.00     \$       DESIGN ANALYSIS     \$     \$     \$     \$     \$       UTILITIES     \$     \$     \$     \$     \$       UTILITIES     \$     \$     \$     \$     \$       DESIGN ANALYSIS     \$     \$     \$     \$     \$       UTILITIES     \$     \$     \$     \$     \$       SIGNING & PAVEMENT     \$  |   | SIGNAL ANALYSIS   | 95.                                      | 2 5      | 46.14    | 110.    | 0  |          |                |          | 1.         |       |                     |         |
| ROADWAY PLANS       \$ <ul> <li>\$                  46.14</li> <li>\$                  31.30</li> <li>\$                  27.30</li> <li>Construction</li> <li>Constron</li> <li>Hourety</li></ul>  |   | DRAINAGE ANALYSI  | 8  | 5        | 46.14    |         | Τ. | \$       | 21.20          |          |            |       | <u></u>             | 205.0   |
| UTILITIES         \$ 46.14         \$ 31.30         \$ 27.30            PERMITTING         \$ 46.14         \$ 31.30         \$ 27.30              \$ 27.30              \$ 27.30               \$ 27.30  |   | ROADWAY PLANS     |  | s        | 46.14    | 1       | -  |          |                | <u> </u> | 18         |       |                     |         |
| PERMITTING         \$ 46.14         \$ 31.30         \$ 27.30           SIGNAL PLANS         42.0         \$ 46.14         62.0         \$ 31.30         \$ 27.30           SIGNAL PLANS         42.0         \$ 46.14         62.0         \$ 31.30         \$ 27.30            SIGNAL PLANS         \$ 46.14         62.0         \$ 31.30         \$ 27.30            MARKING PLANS         \$ 46.14         \$ 31.30         \$ 27.30             TOTALS         \$ 137.0         \$ 27.30               DESIGN ANALYSIS         \$ 46.14         \$ 31.30         \$ 27.30              DESIGN ANALYSIS         \$ 137.0         \$ 172.0         \$ 27.30             DESIGN ANALYSIS         \$         \$         \$              UTILITIES         \$         \$         \$         \$             JUTILITIES         \$         \$         \$         \$         \$            SIGNING & PAVEMENT         \$         \$         \$         \$         <   |   | UTILITIES         |  | 5        |          |         | _  |          |                |          | +          |       |                     | -       |
| Signal Plans       42.0       3       46.14       62.0       31.30       3       27.30         Signing & Pavement<br>Marking Plans       3       48.14       3       31.30       \$       27.30       104.0         Totals       137.0       348.14       \$       31.30       \$       27.30       104.0         Totals       137.0       172.0       31.30       \$       27.30       309.0         DESIGN analysis       \$       137.0       172.0       31.30       \$       27.30       309.0         DESIGN analysis       \$       \$       31.30       \$       \$       31.30       \$       27.30       309.0         DESIGN analysis       \$       \$       \$       \$       \$       \$       31.30       \$       \$       309.0         DESIGN Analysis       \$   |   | PERMITTING        |  | 5        | 48 14    | T       |    |          |                | · · ·    | + -        | 27.30 |                     | -       |
| Signing & Pavement<br>Marking PLans         \$ 46.14         \$ 31.30         \$ 27.30         104.0           Marking PLans         \$ 137.0         \$ 137.0         \$ 172.0         \$ 27.30         \$ 309.0           DESIGN ANALYSIS         \$ 137.0         \$ 3,443.00         \$ 27.30         \$ 309.0           DESIGN ANALYSIS         \$ 3,443.00         \$ 27.30         \$ 309.0           DESIGN ANALYSIS         \$ 3,443.00         \$ 27.30         \$ 309.0           DESIGN ANALYSIS         \$ 3.443.00         \$ 27.30         \$ 309.0           DESIGN ANALYSIS         \$ 3.443.00         \$ 27.30         \$ 309.0           DERAINAGE ANALYSIS         \$ 3.443.00         \$ 27.30         \$ 309.0           DESIGN ANALYSIS         \$ 3.443.00         \$ 27.30         \$ 309.0           UTILITIES         \$ 1.37.0         \$ 3.443.00         \$ 27.30           UTILITIES         \$ 3.443.00         \$ 3.443.00         \$ 3.3.443.00           UTILITIES         \$ 3.3.443.00         \$ 3.3.443.00         \$ 3.3.443.00           Signing & PaveMeent         \$ 3.3.443.00         \$ 3.3.443.00         \$ 3.3.443.00           Signing & PaveMeent         \$ 3.3.443.00         \$ 3.3.443.00         \$ 3.3.443.00           Marking PLANS         \$ 3.3.443.00         <  | 1 |                   | 42.0                                     |          |          |         |    |          |                | <u> </u> | <u></u>    | 27.30 | <u> </u>            |         |
| TOTALS         V 137.0         V 172.0         31.30         \$ 27.30         309.0           DESIGN ANALYSIS         \$ 4,383.30         \$ 3,443.00         \$         \$         \$         309.0           DRAINAGE ANALYSIS         \$   |   |                   |  | T        |          | 1       |    | 5        | 31.30          | <u> </u> | 5          | 27.30 |                     | 104.0   |
| DESIGN ANALYSIS       \$ 4,383.30       \$ 3,443.00       \$ -         DRAINAGE ANALYSIS       \$ -       \$ -       \$ -       \$ -         DRAINAGE ANALYSIS       \$ -       \$ -       \$ -       \$ -       \$ -         DRAINAGE ANALYSIS       \$ -       \$ -       \$ -       \$ -       \$ -       \$ -         DRAINAGE ANALYSIS       \$ -       \$ -       \$ -       \$ -       \$ -       \$ -       \$ -         UTILITIES       \$ -       \$ -       \$ -       \$ -       \$ -       \$ -       \$ -         PERMITTING       \$ -       \$ -       \$ -       \$ -       \$ -       \$ -       \$ -         SIGNAL PLANS       \$ -       \$ -       \$ -       \$ -       \$ -       \$ -       \$ -         SIGNING & PAVEMENT       \$ -       \$ -       \$ -       \$ -       \$ -       \$ -       \$ -         MARKING PLANS       \$ - </td <td></td> <td></td> <td>1 1370</td> <td></td> <td>46.14</td> <td></td> <td></td> <td><u> </u></td> <td>31.30</td> <td>•</td> <td>5</td> <td>27.30</td> <td></td> <td></td>   |   |                   | 1 1370                                   |          | 46.14    |         |    | <u> </u> | 31.30          | •        | 5          | 27.30 |                     |         |
| DESIGN ANALYSIS         \$         4,383.30         \$         3,443.00         \$         - <th< td=""><td></td><td></td><td>1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1</td><td></td><td></td><td>• 172.0</td><td>1</td><td></td><td></td><td>-</td><td></td><td></td><td><math>\overline{\nabla}</math></td><td>309.0</td></th<>  |   |                   | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 |          |          | • 172.0 | 1  |          |                | -        |            |       | $\overline{\nabla}$ | 309.0   |
| DRAINAGE ANALYSIS     \$     3,443.00     \$       DRAINAGE ANALYSIS     \$     \$     \$     \$       ROADWAY PLANS     \$     \$     \$     \$       UTILITIES     \$     \$     \$     \$       PERMITTING     \$     \$     \$     \$       PERMITTING     \$     \$     \$     \$       SIGNAL PLANS     \$     \$     \$     \$       SIGNING & PAVEMENT     \$     \$     \$     \$       MARKING PLANS     \$     \$     \$     \$       TOTALS     \$     \$     \$     \$       MARKING PLANS     \$     \$     \$     \$       TOTALS     \$     \$     \$     \$       DESIGN ANALYSIS     \$     \$     \$     \$       DESIGN ANALYSIS     \$     \$     \$     \$       UTILITIES     \$     \$     #DIV/01       PERMITTING     \$     \$     #DIV/01   |   | DEBIONIANIA       | T  | T .      |          |         | ~  |          |                |          |            |       |                     |         |
| DRAINAGE ANALYSIS         \$  |   | UESIGN ANALYSIS   |  | 15       | 4,383.30 |         | 5  |          | 3.443.00       |          | e          |       |                     |         |
| ROADWAY PLANS       \$       <  |   | DRAINAGE ANALYSIS |  | s        | -        |         |    |          |                |          | - <b>-</b> |       |                     |         |
| UTILITIES           | E | ROADWAY PLANS     |  | e        |          |         | +  |          | — <del>-</del> |          | Tata       |       |                     |         |
| PERMITTING         S         S         S           SIGNAL PLANS         S         1,937.88         S         S         S           SIGNAL PLANS         S         1,937.88         S         1,940.60         S           SIGNING & PAVEMENT<br>MARKING PLANS         S         S         S         S         S           TOTALS         Image: Strain S |   |                   | 1  | <u> </u> |          |         | +  |          |                |          | \$         | -     |                     |         |
| Signal plans         \$ <t< td=""><td>ſ</td><td></td><td><u> </u></td><td>3</td><td></td><td></td><td>15</td><td></td><td><u> </u></td><td></td><td>\$</td><td></td><td></td><td></td></t<>   | ſ |                   | <u> </u>                                 | 3        |          |         | 15 |          | <u> </u>       |          | \$         |       |                     |         |
| SIGNAL PLANS     \$     1,937.88     \$     1,940.60     \$       SIGNING & PAVEMENT<br>MARKING PLANS     \$     \$     \$     \$     \$       TOTALS     \$     \$     \$     \$     \$       TOTALS     \$     \$     \$     \$     \$       MARKING PLANS     \$     \$     \$     \$     \$       TOTALS     \$     \$     \$     \$     \$       MARKING PLANS     \$     \$     \$     \$     \$       DESIGN ANALYSIS     205.0     \$     7,826.30     38,18       DRAINAGE ANALYSIS     \$     \$     #DIV/01       UTILITIES     \$     \$     #DIV/01  | ł | PERMITTING        |  | \$       |          |         | 5  |          |                |          |            |       |                     |         |
| MARKING PLANS         \$         <  |   | SIGNAL PLANS      |  | 5        | 1,937.88 |         |    | V.       |                |          | <u>}_</u>  |       |                     |         |
| TOTALS         \$ <td>L</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>10-10-00</td> <td></td> <td>2</td> <td></td> <td></td> <td></td>  | L |                   |  |          |          |         |    |          | 10-10-00       |          | 2          |       |                     |         |
| BY         COST FOR         HOURLY           ACTIVITY         ACTIVITY         RATE           DESIGN ANALYSIS         205.0         \$ 7,826.30         38.18           DRAINAGE ANALYSIS         \$ -         #DIV/01           UTILITIES         \$ -         #DIV/01   | ŀ |                   |  | ٤_       | · · · ·  |         | \$ |          | - 1            |          | \$         |       |                     |         |
| BY<br>ACTIVITY     COST FOR<br>ACTIVITY     HOURLY<br>RATE       DESIGN ANALYSIS     205.0     \$ 7,826.30     38.18       DRAINAGE ANALYSIS     \$ -     #DIV/01       ROADWAY PLANS     \$ -     #DIV/01       UTILITIES     \$ -     #DIV/01   | • | TOTALS            |  | *        | 6,321.18 |         | -  | J 5,     | 383.60         |          |            |       | V 11 1              | 04.70   |
| ACTIVITY ACTIVITY RATE<br>DESIGN ANALYSIS 205.0 \$ 7,826.30 38.18<br>DRAINAGE ANALYSIS - \$ - #DIV/01<br>ROADWAY PLANS - \$ - #DIV/01<br>UTILITIES - \$ - #DIV/01<br>PERBUTTING   |   |                   |  | _        |          |         |    |          |                |          | ÷          |       | - 11,1              | 04.78   |
| DESIGN ANALYSIS         205.0         \$         7,826.30         38.18           DRAINAGE ANALYSIS         \$         -         #DIV/01           ROADWAY PLANS         \$         -         #DIV/01           UTILITIES         \$         -         #DIV/01  |   |                   |  | C        | OST FOR  | HOURLY  |    |          |                |          |            |       |                     |         |
| DRAINAGE ANALYSIS         \$         -         #DIV/01           ROADWAY PLANS         \$         -         #DIV/01           UTILITIES         -         \$         -         #DIV/01  | - |                   | ACTIVITY                                 | A        | CTIVITY  | RATE    |    |          |                |          |            |       |                     |         |
| DRAINAGE ANALYSIS         \$         -         #DIV/01           ROADWAY PLANS         \$         -         #DIV/01           UTILITIES         -         \$         -         #DIV/01  | L |                   |  |          |          |         |    |          |                |          |            |       |                     |         |
| ROADWAY PLANS     \$     -     #DIV/01       UTILITIES     -     \$     -     #DIV/01       PERMITING     -     \$     -     #DIV/01  | F | DESIGN ANALYSIS   | 205.0                                    | \$       | 7,826.30 | 38.18   |    |          |                |          |            |       |                     |         |
| ROADWAY PLANS     \$     -     #DIV/01       UTILITIES     -     \$     -     #DIV/01       PERMITING     -     \$     -     #DIV/01  |   |                   |  | _        |          |         |    |          |                |          |            |       |                     |         |
| UTILITIES - \$ - #DIV/01  | F |                   |  |          |          | #DIV/01 |    |          |                |          |            |       |                     |         |
| PERMITTING AUTOM  | ⊢ |                   | ·  | \$       |          | #DIV/01 |    |          |                |          |            |       |                     |         |
| PERMITTING  | ⊢ |                   | · · ·                                    | \$       |          | #D1V/01 |    |          |                |          |            |       |                     |         |
|   | ⊢ | PERMITTING        | <u> </u>                                 | \$       | . [      | #DIV/01 |    |          |                |          |            |       |                     |         |

#DIV/01

#DIV/01

\$37.88

Average per hour

37.29

3,878.48

SIGNAL PLANS

SIGNING & PAVEMENT MARKING PLANS

TOTALS

104.0 \$

309.0 11,704.78

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Haverhill Road Signals.xls

#### HIGHWAY PAGE 1 OF 4

#### HIGHWAY TASK LIST

ACTIVITY: A. ROADWAY PLANS PACKAGE

# SUBACTIVITY: 1 - SIGNALIZATION PLANS

| TASK<br>NO. | TASK   |       | NO. OF | HOURS/ |       |   |
|-------------|--|-------|--------|--------|-------|---|
|             |  | UNITS | UNITS  | UNITS  | HOURS | COMMENTS  |
| 1           | Traffic Data Collection  | LS    | 0      | 0      | 0     | Assume date provided                                    |
| 2           | Intersection Field Data Collection                             | PI    | 3      | 2      | 6     |   |
| 3           | Utilities Coordination   | LS    | 1      | 8      | 8     | Includes coordination with FP<br>for power source loc'n |
| 4           | System Timings   | LS    | 0      | 0      | 0     | no timings, will be provided by<br>PBC (092810)         |
| _5          | Reference and Master Signalization Design File                 | PI    | 1      | 80     | 80    | 2 full int plus mod 1                                   |
| 6           | Reference and Master Interconnect Communication<br>Design File | LS    | 1      | 12     | 12    | 2 ton art plus mod 1                                    |
| 7           | Overhead Street Name Design                                    | EA    | 12     | 1      | 12    |   |
| 8           | Pole Elevation/Structural Analysis                             | EA    | 8      | 4      | 32    | marked down from 12 to 8<br>(092810)                    |
| 9           | Traffic Signal Operation Report                                | LS    | 0      | 0      | 0     | (002010)  |
| 10          | Quantities   | LS    | 1      | 12     | 12    |   |
| 11          | Cost Estimate  | LS    | 3      | 2      | 6     |   |
| 12          | Technical Special Provisions                                   | LS    | 0      | 0      | 0     |   |
|             | Signalization Analysis Technical Subtotal                      |       |        |        | 168   |   |

Haverhill Road Signals.xls

#### HIGHWAY PAGE 2 OF 4

#### HIGHWAY TASK LIST

## ACTIVITY: A. ROADWAY PLANS PACKAGE

## SUBACTIVITY: 1 - SIGNALIZATION PLANS

| TASK          |  |       |        |                 |                |                              |
|---------------|--|-------|--------|-----------------|----------------|------------------------------|
| NO.           | TASK   | UNITS | NO. OF | HOURS/<br>UNITS | TOTAL<br>HOURS | COMMENTS                     |
| 13            | Field Reviews                                | LS    | 3      | 2               | 6              |                              |
| 14            | Technical Meetings                           | LS    | 3      | 1               | 3              | does not include post-design |
| 15            | Quality Assurance/Quality Control            | LS    | 0      | 0               | 0              |                              |
| 16            | Independent Peer Review                      | LS    | 0      | 0               | 0              |                              |
| 17            | Supervision                                  | LS    | 0      | 0               | 0              |                              |
|               | Signalization Analysis Nontechnical Subtotal |       |        |                 | 9              |                              |
| 18            | Coordination/FDOT/Permitting                 | LS    | 1      | 28              | 28             | Lake Worth Road              |
| يسبية المسلية | Signalization Analysis Total                 |       |        |                 | 205            |                              |

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HIGHWAY PAGE 3 OF 4

#### HIGHWAY TASK LIST

## ACTIVITY: A. ROADWAY PLANS PACKAGE

SUBACTIVITY: 2 - SIGNALIZATION PLANS

|             | SUBTOTAL THIS S               | IEET  |                 |                 |                  | 84          |                        |
|-------------|-------------------------------|-------|-----------------|-----------------|------------------|-------------|------------------------|
| 2 S         | itrain Pole Schedule          | PI    | 0               | 0               | 0                | 0           | and and a fre          |
| 11 N        | Aast Arm Details Sheet        | PI    | 2               | 6               | 2                | 12          | mast arm tab and s-170 |
|             | Special Service Point Details | EA    | 0               | 0               | 0                | 00          |                        |
| <u>9.</u>   | Special Details               | Sheet | 0               | 0               | 0                | 0           |                        |
| <u>8. (</u> | Guide Sign Work Sheet         | EA    | 3               | 4               | 3                | 12          | 1                      |
| 7.          | Traffic Monitoring Site       | EA    | 0               | 0               | 0                | 0           |                        |
| 6.          | Interconnect Plans            | Sheet | 0               | 0               | 0                | 0           |                        |
| 5.          | Plan Sheet                    | Sheet | 6               | 8               | 6                | 48          |                        |
| 4.          | General Notes/Pay Item Notes  | Sheet | 1               | 4               | 1                | 4           |                        |
| 3.          | Tabulation of Quantities      | Sheet | 1               | 6               | 1                | 6           |                        |
| 2.          | Summary of Pay Items          | Sheet | 0               | 0               | 0                | 0           |                        |
| 1.          | Key Sheet                     | Sheet | 1               | 2               | 1                | 2           | COMMENTS               |
| NO.         | TASK                          | UNITS | NO. OF<br>UNITS | HOURS/<br>UNITS | NO. OF<br>SHEETS | TOTAL HOURS | COMMENTS               |

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Haverhill Road Signals.xls

HIGHWAY PAGE 4 OF 4

## HIGHWAY TASK LIST

ACTIVITY: A. ROADWAY PLANS PACKAGE

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SUBACTIVITY: 2 - SIGNALIZATION PLANS

| TASK<br>NO. | TASK                                   | UNITS  | NO. OF<br>UNITS | HOURS/<br>UNITS | NO. OF<br>SHEETS | TOTAL HOURS | COMMENTS |
|-------------|--|--------|-----------------|-----------------|------------------|-------------|----------|
| 13          | TCP Signal (Temporary)                 | EA     | 0               | 0               | 0                | 0           | COMMENTS |
| 14          | Tempotary Detection Sheet              | PI     | 0               | 0               | . 0              | 0           |          |
| 5           | Utility Conflict Sheets                | Sheets | 0               | 0               | 0                |             |          |
| 6           | Interim Standards                      | LS     | 0               |                 | 0                | 0           |          |
|             | Signalization Plans Technical Subtotal |        |                 |                 |                  | 84          |          |
| 7           | Quality Assurance/Quality Control      |        | 0               | 0               | 0                |             |          |
| 8 8         | Supervision                            |        | 1               | 20              | 0                | 20          |          |
|             | Signalization Plans Total              |        |                 |                 |                  | 20          |          |

Haverhill Road Signals.xis

# Haverhill Road

# South of LWDD L-14 Canal to Lake Worth Road

# PBCo. Project No. 2010503

# Permit Fees

# Lake Worth Drainage District

Roadway

| 1 Discharge Control Structure                        | \$3,000.00        |
|--|-------------------|
| 3 additional discharge control structures @\$1,800.0 | 0 each \$5,400.00 |
| Bridge widening                                      | \$1,200.00        |
| Culvert extension                                    | \$1,200.00        |
| Total  | ∕ \$10,800.00     |

# South Florida Water Management District

**Standard General Permit** 

\$3,500.00

**Total Estimated Permit Fees** 

\$14,300.00

Permit Fees to be paid for by ARCADIS and reimbursed by Palm Beach County.

# Haverhill Road

# South of LWDD L-14 Canal to Lake Worth Road

# PBCo. Project No. 2010503

# Post Design Services (Optional Services)

Post design services will include engineering services provided by ARCADIS as requested by the County during the construction phase of the project. The post design services for both the roadway construction and the traffic signal construction will include but not be limited to the following items:

- Attendance at the pre-construction meeting
- Review of shop drawings and contractors submittals
- Review and the preparation of responses to the contractors requests for information
- Attendance at construction progress meetings and field meetings.
- Review of contractors change order requests, requests for substitutions, and other miscellaneous questions.

The following is the estimated allowance for the post design services:

Roadway 40 hours Chief Engineer @ \$192.12/hr = \$7,684.80

Traffic Signal 24 hours Professional Engineer @ 136.98/hr = \$3,287.52

Phase 1 Site Assessment (Optional Services) (Lump Sum) =  $\rightarrow$  \$4,000.00



BRIAN C. RHEAULT, P.E. President

September 23, 2010

Arcadis-US, Inc. 2081 Vista Parkway West Palm Beach, Florida 33411

ATTENTION: Hank Deibel, P.E.

**REGARDING:** 

Haverhill Road Bridge over L-14 Canal / Mast Arm Foundation Design L-13 Culvert Extension Revised Proposal

Dear Hank:

Based on our scope meeting with Paim Beach County, we have developed a proposal to accomplish the tasks outlined in the meeting.

The attached Exhibit "A" outlines the various tasks and manhours for each task. Permit fees are the responsibility of the owner. A general description for the services follows:

Bridge over L-14 Canal

The existing bridge will be widened to the east. The new section will accommodate 24'-0" of travel lanes, a 4'-0" bike lane and a 6'-0" sidewalk on the east side. A portion of the proposed 24'-0" median which will accommodate a turn lane and traffic separator will also be placed on the new portion of the bridge.

Minimal demolition to the existing bridge will be required. Modification of the existing east end of the end bents and removal of the existing traffic barrier will be required.

Revetment on the northeast canal bank will be required and designed per Lake Worth Drainage District requirements.

In addition to the design, a load rating analysis will be performed per F.D.O.T. requirements to place the bridge in the bi-annual inspection program.

Phasing diagrams will be developed to minimize the disruption to existing traffic on the bridge.

Haverhill Road Bridge over L-14 Canal Page 2

# L-13 Box Culvert Extension

Our scope will include the design and detailing of the headwall and slope protection to allow the existing culverts to be extended east and west to provide the proper clear zone recovery area for a drop-off hazard.

# Mast Arm Foundations

Our services will include the design and foundation analysis for four (4) new mast arms located near the Tradewinds School and Melaleuca Lane. The design will consider two head configurations for each mast arm. Additional configurations will be considered additional services to this contract.

In addition to our basic scope, we will perform analysis for two (2) different head configurations for the existing traffic signals at the northwest and southeast corners of the Lake Worth Road intersection.

If you have any questions, please give me a call.

Respectfully,

BRIDGE DESIGN ASSOCIATES, INC.

Brian C. Rheault, P.E. President

BCR:kedS:\2010-Jobs\Proposals\Haverhill Road\Correspondence\proposal 09-23-10.wpd

# BRIDGE DESIGN ASSOCIATES, INC.

# HAVERHILL ROAD BRIDGE OVER L-14 CANAL September 23, 2010 HOURLY BREAKDOWN OF SERVICES EXHIBIT "A"

| · ACTIVITY  | CHIEF<br>ENGINEER<br>\$195.00 | SENIOR<br>ENGINEER | ENGINEER<br>INTERN | CADD    | TOTAL<br>HOURS<br>BY<br>ACTIVIT | LABOR<br>COST<br>BY<br>ACTIVITY       |
|---|-------------------------------|--------------------|--------------------|---------|---------------------------------|---------------------------------------|
|   | \$130.00                      | \$150.00           | <b>\$75.00</b>     | \$93.00 |                                 |                                       |
|   | COOR                          | DINATION           |                    |         |                                 | L                                     |
| Meeting with surveyor & roadway to  |                               |                    |                    |         | T                               |                                       |
| review project current site conditions<br>Utility Coordination                              | 2.0                           |                    |                    |         | 2.0                             | \$390.00                              |
|   | 4.0                           |                    |                    |         | 4.0                             | \$780.00                              |
| Meeting with PBC Staff / Informational meeting<br>Subtotal Coordination                     | 2.0                           |                    |                    |         | 2.0                             | \$390.00                              |
| Subicital Coordination  |                               |                    |                    |         |                                 | \$1,560.00                            |
|   |                               |                    |                    |         |                                 | 10.100.00                             |
| General Notes / Construction Notes  |                               | ISION              |                    |         |                                 | · · · · · · · · · · · · · · · · · · · |
| Review Solts data analysis for pile capacities  | 20                            | 4.0                |                    |         | × 6.0                           | × \$990.00                            |
| (end and interior bents)  |                               |                    |                    |         |                                 |                                       |
|   | 4.0                           | 20.0               |                    |         | 24.0                            | \$3,780.00                            |
| Design sheet ple wall system for end bent<br>Design end bent pile cap                       |                               | 16.0               |                    |         | 16.0                            | \$2,400.00                            |
| Design intermediate pile cap  |                               | 8.0                |                    |         | N8.0                            | ► \$1,200.00                          |
| Design runermediate par dap   | 2.0                           | 8.0                |                    |         | 10.0                            | \$1,590.00                            |
| Design superstructure deck stab spans 1 & 3   | 4.0                           | 38.0               |                    |         | 40.0                            | ¥ \$6,180.00                          |
| Design superstructure deck stab span 2  | 4.0                           | 36.0               |                    |         | V40.0                           | \$6,180.00                            |
| Design closure pours all spans  |                               | 6.0                |                    |         | 6.0                             | > \$900.00                            |
| Design post tension system  |                               | 6.0                |                    |         | N 6.0                           | \$900.00                              |
| Design barrier system & guardrall attachments   |                               |                    |                    |         |                                 | 4400.00                               |
| & coordination with rotedway design   | 20                            | 6.0                | 1                  |         | N 80                            | \$1,290.00                            |
| Load Raling Analysis  | 4,0                           | 12.0               |                    |         | 16.0                            | \$2,580.00                            |
| Design slope protection<br>Subtotal Design  |                               | 8.0                |                    |         |                                 | \$1,200.00                            |
| Subicial Design   |                               |                    |                    |         |                                 | \$29,190.00                           |
|   |                               |                    |                    |         |                                 |                                       |
| Incluse of Observation Manual Annual State  | PLANS PR                      | EPARATION          |                    |         | •                               |                                       |
| Index of Sheets / Location Map / Summary of Q<br>Bridge Cross section existing and proposed |                               |                    | T                  | 12.0    | 120                             | \$1,118.00                            |
| Bridge pheeing plan   |                               |                    |                    | 6.0     | 6.0                             | \$556.00                              |
| General Notes / Desire Orberts / Desi   |                               |                    |                    | 8.0     | 8.0                             | V \$744.00                            |
| General Notes / Design Oriteria / Constr. Notes<br>Bridge Plan Shaet                        |                               |                    |                    | 8.0     | 8.0                             | \$744.00                              |
| Bridge Elevation  |                               |                    | I                  | 16.0    | 16.0                            | \$1,488.00                            |
| Substructure Pien   |                               |                    |                    | 4.0     | 14.0                            | \$372.00                              |
| Pile data table / solls borings   |                               |                    |                    | 8.0     | 8.0                             | \$744.00                              |
| Finish grade plan   |                               |                    |                    | 4.0     | 4.0                             | \$372.00                              |
| End bent plan & elevation   |                               |                    |                    | 8.0     | 8.0                             | \$744.00                              |
| End bent details / connection to existing structure   | ļ.                            | 2                  |                    | 8.0     | 8.0                             | \$744.00                              |
| bar bending diagrams / bill of reinforcing &  | 3                             | ļ                  | T                  |         |                                 |                                       |
| duantities  | 1                             | 1                  | 1                  |         |                                 | 1                                     |
| - AAA KEIGO   |                               |                    |                    | 32.0    | 32.0                            | \$2,976.00                            |

32.0 32.0 \$2,976.00

Sub total \$ 10, 602.00

\* Analysis based on maximum (2) different configurations Additional runs will be considered additional services

TOTAL ENGINEERING FEES \$82,089.00

| ACTIVITY   |           | SEMOR<br>Enginiser | ENGINEEI<br>INTERN | CAD         | TOTAL<br>HOURI<br>BY   | COST<br>BY           |  |  |  |
|--|-----------|--------------------|--------------------|-------------|------------------------|----------------------|--|--|--|
|  | \$195.00  | \$150,00           | \$75.00            | \$93.00     |                        |                      |  |  |  |
| PLANS PREPARATION CONTINUED  |           |                    |                    |             |                        |                      |  |  |  |
| Intermediate bent plan & elevation   |           |                    |                    | 8.0         | 8.0                    | \$744.00             |  |  |  |
| Intermediate bent details , bar bending diagram<br>& quantities & connection to existing | 5         |                    | 1                  | 1           |                        | 07                   |  |  |  |
| Superstructure typical cross section showing   |           |                    |                    | 32.0        | 32.0                   | \$2,976.00           |  |  |  |
| deck levout & closure pours  |           |                    |                    |             |                        |                      |  |  |  |
| Precest slab layout plan view with post  |           | <u> </u>           |                    | 4.0         | 4.0                    | \$372.00             |  |  |  |
| tension details & lawout   | 1         |                    |                    | 1           |                        |                      |  |  |  |
| Precast stab plan elevations spans 1.8.3   |           | +                  | <u> </u>           | 8.0         | 8.0                    | \$744.00             |  |  |  |
| Precast slab plan elevations snan 2  |           | <del> </del>       | f                  | 8.0         | 8.0                    | \$744.00             |  |  |  |
| Precast slab details bar bending diagram, bill   |           | 1                  | <u> </u>           | 8,0         | 8.0                    | \$744.00             |  |  |  |
| of reinforcing steel & quantities  |           | 1                  | 1                  | 32.0        | 32.0                   |                      |  |  |  |
| Sheet pile well details, notes, closure pour   |           |                    | <u> </u>           | 320         | 32.0                   | \$2,976.00           |  |  |  |
| details, miec. berrier & sidewalk & railing  |           | 1                  |                    | 1           | 1                      |                      |  |  |  |
| details, ber bending diagrams, bill of   |           |                    | 1                  | ļ           |                        |                      |  |  |  |
| reinforcing schedule   |           |                    | 1                  | 16.0        | 16.0                   | S1.488.00            |  |  |  |
| Approach slab layout sheet   |           |                    | 1                  | 4.0         | 4.0                    | \$372.00             |  |  |  |
| Index sheets (600, 601, 614, 618, 700-1, 700-2,<br>810, 820-1, 820-2)                    | 1         |                    |                    |             |                        |                      |  |  |  |
| Subtatel Plans Preparation   |           | l                  |                    | 18.0        | 18.0                   | \$1,574.00           |  |  |  |
|  |           |                    |                    |             |                        | \$23,436.00          |  |  |  |
|  |           | [                  |                    |             |                        |                      |  |  |  |
| LW.D.D. permitting   | 2.0       | G BRUDGE O         | ILY                |             |                        |                      |  |  |  |
| U.S. Army COE Permit   | 2.0       | 4.0                |                    | 4.0         | 10.0                   | \$1,362.00           |  |  |  |
| Subtotal Permitting  | 2.0       | 4.0                |                    | 8.0         | N14.0                  | \$1,734.00           |  |  |  |
|  |           |                    |                    |             |                        | \$3,096.00           |  |  |  |
| QUANTITA   | S & ESTIM | AGES / QUAL        | TY CONTRO          |             | I                      |                      |  |  |  |
|  | 2.0       | 4.0                | 32.0               | <u> </u>    | V 38.0                 | V                    |  |  |  |
| Subtotal Quantities Estimates & QC   |           |                    | 04.0               |             |                        | \$3,390.00           |  |  |  |
|  |           |                    |                    |             | <b>├</b> ────          | \$3,390.00           |  |  |  |
| Tradewinds (4) POUND   | ATION DES | IGN FOR MA         | T ARMS "           | ·           | <u> </u>               |                      |  |  |  |
| Metaleuca (4)  | 8.0       | 24.0               | 12.0               | 20          | 45.0 1                 | \$6,246.00           |  |  |  |
| Modify Head (2 locations)  | 8.0       | 24.0               | 12.0               | 20          |                        | \$6,246.00           |  |  |  |
| Sublotal Foundation Design   | 4.0       | 12.0               | 6.0                | 1.0         | 23.0                   | \$3,123.00           |  |  |  |
|  |           |                    |                    |             |                        | \$15,615.00          |  |  |  |
|  | 807       | ULVERT             |                    |             |                        |                      |  |  |  |
| Headwell Design  | 2.0       | 8.0                |                    |             |                        |                      |  |  |  |
| Plen / Elevation / Details   | 20        | 6.0                |                    | 24.0        | × 8.0                  | \$1,290.00           |  |  |  |
| Slope Protection   |           | 2.0                |                    | 27.0        | ~ 320                  | \$3,622.00           |  |  |  |
| Permit Support   | 20        |                    | 4.0                |             | _                      | \$300.00<br>\$890.00 |  |  |  |
| Sublotal Box Culvert   |           |                    |                    |             | - 0.0                  | \$5,802.00           |  |  |  |
|  |           |                    |                    | <u> </u>    | ├ <b>─</b> ── <b>ि</b> |                      |  |  |  |
| TOTAL MANHOURS   | 62.0      | 252.0              | V 66.0             | 293.0       | ę73.0                  |                      |  |  |  |
| DIRECT LABOR COST  | 12,090.00 | \$37,800.00        | \$4,950.00         | \$27,249.00 | - Y                    | \$82,089.00          |  |  |  |

BRIDGE DESIGN ASSOCIATES, INC. HAVERHILL ROAD BRIDGE OVER L-14 CANAL June 16, 2010 HOURLY BREAKDOWN OF SERVICES EXHIBIT "A"

# PROFESSIONAL SURVEYING SERVICES

November 8, 2010

Mr. Hank Deibel ARCADIS U.S., Inc. 2081 Vista Parkway West Palm Beach, FL 33411

#### Re: Haverhill Road Diamond View Elementary School to 1000' North of Lake Worth Road Surveying Services

Dear Mr. Deibel:

Thank you for the opportunity to provide you with the following services for the subject site. This proposal is based on documentation and information provided by your office. We will review any title work supplied by you. The scope of services is as follows:

#### SCOPE OF SERVICES

# I. HORIZONTAL PROJECT NETWORK CONTROL

Using the information supplied by Palm Beach County, we will establish the Right-of-Way for Haverhill Road. A traverse will be run through the route and all found monumentation will be tied in. The survey will be oriented to Palm Beach County horizontal control (NAD 83/90 Adjustment). The Palm Beach County Survey Department will supply all the sectional control information along the proposed route.

The limits of the survey are from Station 147+00 on County project 98503 (1070'± south of Nautica Lakes Blvd.) to 1000' north of Lake Worth Road.

# II. VERTICAL PROJECT NETWORK CONTROL

A level run will be performed along the route using the existing Palm Beach County benchmarks (NAVD 1988). Benchmarks will be set along the route, not exceeding 1,200 feet apart. All benchmarks will be set outside of the proposed right of way, where they are not likely to be disturbed..

## III. BASELINE LAYOUT

We will lay out the baseline at 100-foot intervals setting appropriate points at each station. The baseline will be laid out within the limits of the 1.7 mile route. These baseline points will be used in the topographic and cross section phase to locate features and facilitate checks.

## IV. REFERENCE POINTS

We will reference the baseline at intervals not exceeding 1,400 feet along the route. These points will be used to replace disturbed baseline stations. We propose to set seven (7) references.

Deibel November 8, 2010 Page 2

# V. SECTION TIES AND PROPERTY TIES

We will tie in section corners and property corners along the route to check the present alignment of Haverhill Road. We will try to locate as many corners as possible to positively establish the current right of ways.

## VI. SIDE STREET SURVEYS

A topographic survey showing center line elevations at 50' intervals and high & low points will be done on all side streets to 300 feet from the right of way line of Haverhill Road. This survey will show the edge of pavement and all drainage structures on the side streets.

### VII. TOPOGRAPHY

A topographic survey will be performed along the route. This survey will tie in all visible features such as, but not limited to, signs, light poles, guardrails, utilities, walks, edge of pavement, curbing, striping, drainage structures, etc. These locations will show all features within the corridor from right of way to right of way extending to 25 feet outside the proposed right of way if provided by the County.

# VIII. CROSS SECTIONS

Cross sections will be done along the route at 100-foot intervals and at inlet locations. These cross sections will cover the roadway to the right of way lines and extend to 25 feet outside of the proposed right of way (if provided by the County).

On the curb and gutter we will obtain elevations on the front of curb, the flow line as well as the face and back of curb. We will also obtain the center line elevations of the driveways at 5' intervals 25' beyond the proposed right-of-way.

Along the route there are two major intersections, Lake Worth Road and Melaleuca Lane. At these intersections, we will need to do a plateau grid obtaining elevations at the intersecting edge of pavement lines in roadway.

#### IX. ASBUILTS

We will attempt to get asbuilt information on all the pipes leading out of any storm structures found. When obtaining readings on the drainage structures, we will be sure to locate the rim and grate elevations, inverts and bottom elevations, pipe material, sizes and direction of flow as well as showing the next upstream and downstream structure. We will obtain these elevations for the approximately 40 structures.

# X. BRIDGE SURVEY & LWDD SURVEY

It may be necessary to expand the existing structure over the L-13 & L-14 canals and this will require an added effort from us. We will do a detailed drawing of the existing structure and obtain elevations and locations. We will measure elevations of abutments, bridge piers and obtain soundings across the canal under direction from Arcadis. We will measure six (6) cross sections over the L-13 canal Deibel November 8, 2010 Page 3

and five (5) cross sections over the L-14 canal (as depicted on the sketch supplied by you) to obtain Lake Worth Drainage District permits. We will produce a drawing showing these sections at  $1^{"} = 10$ ' scale to satisfy the LWDD requirements.

## XI. TREE SURVEY

In order to satisfy the requirements, we will need to locate all the planted trees within the right of way. These will be shown on the CADD file produced with species, canopy diameter and caliper sizes and a tree survey will be produced.

**Optional Services:** 

| • | Legal Descriptions and Sketches (15 | @ \$500 each) |
|---|-------------------------------------|---------------|
| ٠ | Mast Arm Utility Pothole Survey     | G activ cacaj |

> \$7,500.00 > \$7,476.00

### XII. CLOSURE

A CAD drawing will be produced which will show all the features located. We propose to provide Arcadis with an AutoCAD file in the version requested. Any additional work will be done on an hourly basis as approved by you. The proposed cost for this project 15 \$70,049.00 \$55,073.00 for the Roadway Survey, \$7,476.00 for the Mast Arm Utility Pothole Survey, and \$7,500.00 for Legal Descriptions & Sketches) as per Attachment 'A'. Please do not hesitate to call me with any questions you might have regarding this proposal. We look forward to working with you on this project.

Sincerely,

Brown & Phillips, Inc.

2 phillip 12

John E. Phillips III, P.L.S. Principal

JEP/mb

| Accepted This | Day Of | . 2010. |
|---------------|--------|---------|
|---------------|--------|---------|

ARCADIS U.S., Inc.

By: \_\_\_\_\_

| Print Name: |  |
|-------------|--|
|             |  |

| ATTACHMENT "A"   |  |
|--|--|
| Haverhill Road   |  |
| Diamond View Elementary School to 1000' North of Lake Worth Road |  |

| ATTACHMENT "A"  |
|---|
| Haverhill Road  |
| Diamond View Elementary School to 1000' North of Lake Words D |

|         | Haverhill Road  |
|---------|---|
| Diamond | View Elementary School to 1000' North of Lake Worth R |

Description: Roadway Survey Size: 10346' Date of Proposal: November 8, 2010 F

| TASK                                | 3 MAN<br>FIELD | CADD       |              |            | -                                     |
|-------------------------------------|----------------|------------|--------------|------------|---------------------------------------|
| Horizontal Project Network          | 20             | ТЕСН       | TECH         | PLS        | COMMENTS                              |
| Control<br>Baseline Layout 100' Sta |                |            | 25           | 15         | Establish control<br>and right-of-way |
|                                     | 11             |            | 9            | 1          | Lay out baseline at                   |
| Vertical Project Network            | 21             |            | 6            |            | 100' intervals<br>Set benchmarks      |
| Control                             |                |            |              |            | along corridor                        |
| Reference Points                    | 7              |            |              |            | 1,200' min                            |
| ,                                   | /              |            | 3            |            | Set references at                     |
|                                     |                |            |              |            | PC, P1, PT and<br>intersections       |
| Section Ties                        | 5              |            | 1            | 2          | Tie in PBCo                           |
| Subd. & Properties Ties             |                |            |              |            | horizontal control                    |
| outout de l'roperties Ties          | 10             |            | 5            | 3          | Tie in adjoining                      |
| Side Street Surveys                 | 28             |            |              | _          | property corners                      |
|                                     | 20             |            | 8            | 1          | CL side streets to                    |
| Topography                          | 75             |            | 15           | 4          | 300' down street                      |
|                                     |                |            | 1.5          |            | Locate all above<br>ground features   |
| Driveways                           |                |            |              |            | and striping                          |
| Dilveways                           | 13             |            | 4            | 1          | CL @ 5' intervals                     |
|                                     |                |            |              |            | to 25' beyond edge                    |
| Cross-Sections                      | 70             |            |              |            | of driveway                           |
|                                     | ,,,,           |            | 10           | 3          | At 100' intervals to                  |
|                                     |                |            |              |            | 25' outside R/W                       |
|                                     |                |            |              |            | and at inlets,<br>(including          |
|                                     |                |            |              |            | soundings on canal                    |
|                                     |                |            |              |            | and intersection                      |
| Asbuilts                            | 21             |            |              |            | plateau)                              |
|                                     | 21             |            | 10           | 2          | Asbuilt storm                         |
| Special Surveys                     | 15             | 8          | 5            | +          | structures                            |
| Bridge Survey & LWDD                |                |            |              | 2          | Detail of structure                   |
| Survey                              |                |            |              | 1          | over L-13 & L-14<br>and LWDD survey   |
| CADD Base Drawing                   |                | 45         | 10           | 10         | Prepare cadd                          |
| Tree Survey                         |                |            |              |            | drawing                               |
| ···· Jury                           | 10             | 5          | 2            | 1          | Located planted                       |
|                                     |                | 1          |              | 1          | trees in R/W (type,                   |
| Total Hours                         | > 306          | 58         | V 113        | V 45       | canopy, trunk dia.)                   |
| Rate/Hour                           | L              |            |              | v 43       |                                       |
|                                     | \$125.00       | ▶\$66.00   | \$70.00      | \$113.00   |                                       |
| ub-total                            | \$38,250.00    | \$3,828.00 | \$7,910.00   | \$5,085.00 |                                       |
| otal Price                          |                | L          | 555 073 nn   |            |                                       |
|                                     |                |            | A 2001010100 | ンチュラ       | 44% muldy                             |

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## ATTACHMENT "A" (CONT'D.) Haverhill Road Diamond View Elementary School to 1000' North of Lake Worth Road

Description: Optional Services Size:

Date of Proposal: November 8, 2010

| TASK  | 3 MAN<br>FIELD | CADD<br>TECH | SURVEY<br>TECH | PLS             | 00101    |  |  |  |
|---|----------------|--------------|----------------|-----------------|----------|--|--|--|
| Special Survey:<br>Mast Arm Utility Pothole             | 40             |              | 16             | 12              | COMMENTS |  |  |  |
| Survey  |                | -            |                |                 |          |  |  |  |
|   | +              |              |                |                 |          |  |  |  |
| Total Hours   | 40             |              |                |                 |          |  |  |  |
|   | 40             |              | 16             | 12              |          |  |  |  |
| Rate/Hour   | \$125.00       | > \$66.00    | ▶ \$70.00      | <b>\$113.00</b> |          |  |  |  |
| Sub-total   | \$5,000.00     | \$0.00       | v \$1,120.00   |                 |          |  |  |  |
|   |                | \$0.00       | 51,120.00      | \$1,356.00      |          |  |  |  |
| Total Price Utility Pothole<br>Survey:                  | \$7,476.00     |              |                |                 |          |  |  |  |
| Legal Descriptions &<br>Sketches<br>(15 @ \$500.00 ea.) | × \$7,500.00   |              |                |                 |          |  |  |  |

- \* 2.744° multiple

IVFS1WaarsWollyWy DocumentsPROPOSALSVBY COMPANY/ARCADISVHaverbill Road revised Nov 8 2010 doc



October 19, 2010 September 22, 2010 June 18, 2010

ARCADIS 2081 Vista Parkway West Palm Beach, FL 33411

Attn: Mr. Hank Deibel, Jr., PE, Associate Vice President

Re: Proposal for Geotechnical Services Proposed Roadway Widening, Mast Arms and Drainage Improvement Haverhill Road from 1000 ft South of Nautica Lakes Blvd to Lake Worth Road Palm Beach County, Florida TSF Proposal No.: 1006-249 (revised 2)

Dear Hank:

As requested, TIERRA SOUTH FLORIDA, INC. (TSF) is pleased to submit this proposal for the above-referenced project. The proposal is based on the an email dated September 22, 2010 from Mr. Hank Deibel, Jr., P.E. of Arcadis. This proposal includes an outline of our proposed scope of work, an estimate of the total fees, and our anticipated schedule for completion of the work.

# PROPOSED SCOPE OF WORK

All work performed by TSF will be in general accordance with Palm Beach County and FDOT standards. The proposed scope work for the improvement is as follow (revised by PBC):

- 1) We understand that the project will include 7,000 linear feet of roadway widening. We propose to drill a total 40 auger borings, 32 to a depth 6 feet and 8 to a depth of 15 feet at 200 foot interval.
- 2) The proposed mast arms, TSF will perform four (4) Standard Penetration Test (SPT) borings to a depth of 30 feet at the corner of Melaleuca and Lake Worth Road for the proposed mast arms.
- 3) Bridge Widening, we proposed to drill two (2) SPT borings to a depth of 60 feet below existing grade

#### ARCADIS TSF Proposal No. 1006-249

- 4) We understand that a two acre pond is being considered, we proposed drill four (4) SPT borings to a depth of 20 feet.
- 5) Perform pavement cores, pavement evaluation and provided recommendations for pavement design and milling and resurfacing.
- 6) Additionally, we propose to perform four (4) Borehole Permeability tests per SFWMD Standards. (Optional Services)

Boring locations will be approximately located in the field by our personnel by measuring distances with a tape from known reference points. Elevations at boring locations can be interpreted from topographic plans if furnished by others.

Prior to drilling at the project site, TSF will notify the local utility companies and request that underground utilities be marked. Our experience, however, is that the utility companies will not mark privately owned utilities. Our proposal assumes that private utility lines will be located in the field by others prior to mobilization of the drill rig.

Upon completion of the field exploration, laboratory testing will be performed on selected samples. The study will be summarized in accordance with the FDOT's Soil and Foundation Manual.

A geotechnical engineer will evaluate the results of all drilling and laboratory testing. A report will be issued that contains the exploration data, a discussion of the site and subsurface conditions, percolation test results, recommendations for pavement design, foundation design for the bridge, soil parameters for the mast arms design, recommendation for pond construction and a discussion of some construction considerations.

### **ESTIMATED FEES**

It is proposed that the fee for the performance of the services outlined above be determined on a unit price basis in accordance with the attached Fee Schedule and that the work be performed pursuant to TSF's General Conditions enclosed herewith and incorporated into this proposal. The estimated fees for the project are attached.

2

ARCADIS TSF Proposal No. 1006-249

Our estimate covers the work needed to present our findings and recommendations in a formal report. Not included are reviews of drawings, preparation of construction specifications, special conferences and any other work requested after submittal of our report.

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# SCHEDULE AND AUTHORIZATION

TSF will proceed with the work after receipt of a signed copy of this proposal. With our present schedule, we can commence work within several days of project approval (weather permitting and permit approval). The fieldwork will take about three weeks to complete. The written report can be submitted about three weeks after completion of the field exploration, depending on the extent of the laboratory-testing program. Verbal preliminary recommendations can be made to appropriate parties prior to submittal of the written report.

We at TSF appreciate the opportunity to submit this proposal and look forward to working with you on this project. If you should have any questions concerning our proposal, please contact our office.

Respectfully submitted,

TIERRA SOUTH FLORIDA, INC.

Raj Krishnasamy, P.E. Principal Geotechnical Engineer/ President

Attachments: 1. Fee Estimate

| AUTHORIZED BY: |       | INVOICE TO: |
|----------------|-------|-------------|
| Name:          | Firm: |             |
| Title:         | Name: |             |

ARCADIS TSF Proposal No. 1006-249

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| Date: | Address: |
|-------|----------|
|       |          |

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## TIERRA SOUTH FLORIDA, INC. STRUCTURES

| I.    | FIELD INVESTIGATION<br>Mobilization of Men and Equipment                   | Unit   | # of Units | S  | Unit Price | Total            |
|-------|--|--------|------------|----|------------|------------------|
|       | Truck-Mounted Equipment  | Trip   | 1          | \$ | 350.00     | \$<br>350.00     |
|       | SPT Borings 0 - 50 ft depth  | L.F.   | 240        | \$ | 12.00      | \$<br>2,880.00   |
|       | Grout Boreholes 0 - 50 ft depth  | L.F.   | 240        | \$ | 5.50       | \$<br>1,320.00   |
|       | Casing Allowance 0 - 50 ft depth   | L.F.   | 180        | \$ | 7.00       | \$<br>1,260.00   |
|       | Percolation Test   | Test   | 0          | \$ | 275.00     | \$<br>0.00       |
|       | Roadway Auger Borings  | L.F.   | 0          | \$ | 9.00       | \$<br>0.00       |
|       | Traffic Control<br>(1-man crew with safety equipments)                     | Day    | 2          | \$ | 1200.00    | \$<br>2,400.00   |
| n.    | LABORATORY TESTING   |        |            |    |            |                  |
|       | Visual Examination by Staff Engineer                                       | Hour   | 4          | \$ | 85.00      | \$<br>> 340.00   |
|       | Natural Moisture Content Tests   | Test   | 4          | \$ | 10.00      | \$<br>∽ 40.00    |
|       | Grain-Size Analysis - Full Gradation                                       | Test   | 4          | \$ | 60.00      | \$<br>240.00     |
|       | Grain-Size Analysis - Single Sieve   | Test   | 0          | \$ | 30.00      | \$<br>0.00       |
|       | Organic Content Tests  | Test   | 0          | \$ | 45.00      | \$<br>0.00       |
|       | Atterberg Limit Tests  | Test   | 0          | \$ | 70.00      | \$<br>0.00       |
|       | Environmental Tests (pH, sulfates, chlorides, resistivity)                 | Set    | 4          | \$ | 185.00     | \$<br>740.00     |
| MI.   | FIELD ENGINEERING AND TECHNICAL SE<br>Site Recon./Utility Coordination/MOT | RVICES |            |    |            |                  |
| IIIA. | Sr. Engineering Technician<br>ENGINEERING AND TECHNICAL SERVICE            | Hour   | 12         | \$ | 65.00      | \$<br>▶ 780.00   |
|       | Principal Engineer   |        |            |    |            |                  |
|       |  | Hour   | 4          | \$ | 145.00     | \$<br>580.00     |
|       | Senior Geotechnical Engineer   | Hour   | 12         | \$ | 125.00     | \$<br>> 1,500.00 |
|       | Project Engineer   | Hour   | 16         | \$ | 115.00     | \$<br>1,840.00   |
|       | Draftperson  | Hour   | 8          | \$ | 60.00      | \$<br>480.00     |
|       |  |        |            |    |            | $\sim$           |

TOTAL FEE FOR GEOTECHNICAL SERVICES-Bridge & Mast Arms

14,750.00

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# TIERRA SOUTH FLORIDA, INC. ROADWAY & POND

| I.    | FIELD INVESTIGATION<br>Mobilization of Men and Equipment               | Unit   | # of Unit | s  | Unit Price      | Total                      |
|-------|--|--------|-----------|----|-----------------|----------------------------|
|       | Truck-Mounted Equipment  | Trip   | 1         | \$ | · 350.00 \$     | 350.00                     |
|       | SPT Borings 0 - 50 ft depth  | L.F.   | 80        | \$ | 12.00 \$        |                            |
|       | Grout Boreholes 0 - 50 ft depth  | L.F.   | 80        | \$ |                 | √ 960.00                   |
|       | Casing Allowance 0 - 50 ft depth                                       | L.F.   | 0         |    | 5.50 \$         | ∕∿ 440.00                  |
|       | Percolation Test   | Test   |           | \$ | 7.00 \$         | 0.00                       |
|       | Roadway Auger Borings  |        | 0         | \$ | 275.00 \$       | 0.00                       |
|       | Pavement Cores   | L.F.   | 312       | \$ | 9.00 \$         | ∕ 2,808.00                 |
|       |  | Each   | 8         | \$ | 85.00 \$        | ▶ 680.00                   |
|       | Generator Rental   | Day    | 2         | \$ | 150.00 \$       | > 300.00                   |
|       | Pavement Evaluation  | Hour   | 6         | \$ | 100.00 <b>S</b> | 600.00                     |
|       | Traffic Control<br>(1-man crew with safety equipments)                 | Day    | 2         | \$ | 1200.00 \$      | 2,400.00                   |
| 11.   | LABORATORY TESTING   |        |           |    |                 |                            |
|       | Visual Examination by Staff Engineer                                   | Hour   | 4         | \$ | 85.00 <b>\$</b> | 340.00                     |
|       | Natural Moisture Content Tests   | Test   | 6         | \$ | 10.00 \$        | 60.00                      |
|       | Grain-Size Analysis - Full Gradation                                   | Test   | 6         | \$ | 60.00 \$        | 360.00                     |
|       | Grain-Size Analysis - Single Sieve                                     | Test   | 0         | \$ | 30.00 <b>\$</b> |                            |
|       | Organic Content Tests  | Test   | 6         | \$ | ·               | 0.00                       |
|       | LBR  | Test   |           |    | 45.00 \$        | 270.00                     |
|       |  | Test   | 3         | \$ | 300.00 \$       | 900.00                     |
|       | Environmental Tests (pH, sulfates, chlorides, resistivity)             | Set    | 0         | \$ | 185.00 \$       | 0.00                       |
| 111.  | FIELD ENGINEERING AND TECHNICAL SE<br>Site Recon JUtility Coordination | RVICES |           |    |                 |                            |
|       | Sr. Engineering Technician   | Hour   | 12        | \$ | 65.00 \$        | 780.00                     |
| 111A. | ENGINEERING AND TECHNICAL SERVICE                                      | S      |           |    | •               | / 50.00                    |
|       | Pavement Evaluation Report   | LS     | 1         | \$ | 1000.00 \$      |                            |
|       | Principal Engineer   | Hour   |           |    |                 | 1,000.00                   |
|       |  | FICUE  | 3         | \$ | 145.00 \$       | <ul><li>✓ 435.00</li></ul> |

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# TIERRA SOUTH FLORIDA, INC. ROADWAY & POND

| Senior Geotechnical | Engineer              | Unit<br>Hour | # of Units<br>6 | \$      | Unit Price<br>125.00 |    | Total     |
|---------------------|-----------------------|--------------|-----------------|---------|----------------------|----|-----------|
| Project Engineer    |                       |              | •               | ¥       | 125.00               | Þ  | ▶ 750.00  |
|                     |                       | Hour         | 20              | \$      | 115.00               | \$ | 2,300.00  |
| Draftperson         |                       | Hour         | 9               | \$      | 60.00                | \$ | 540.00    |
|                     | TOTAL FEE FOR GEOTECH | NICAL SERVI  | CES-Roadw       | ay & Po | ond                  | \$ | 16,273.00 |

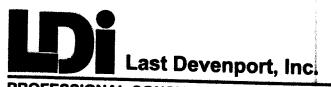
# TIERRA SOUTH FLORIDA, INC. PERCOLATION TESTS (OPTIONAL)

| I.    | FIELD INVESTIGATION   | Unit    | # of Uni | ts | Unit Price |    | Total       |
|-------|---|---------|----------|----|------------|----|-------------|
|       | Mobilization of Men and Equipment<br>Truck-Mounted Equipment          | Trip    | 1        | \$ | 350.00     | \$ | > 350.00    |
|       | SPT Borings 0 - 50 ft depth   | L.F.    | 0        | \$ | 12.00      | \$ | 0.00        |
|       | Grout Boreholes 0 - 50 ft depth                                       | L.F.    | 0        | \$ | 5.50       | \$ | 0.00        |
|       | Casing Allowance 0 - 50 ft depth                                      | L.F.    | 0        | \$ | 7.00       | \$ | 0.00        |
|       | Percolation Test  | Test    | 4        | \$ | 275.00     | \$ | ∖, 1,100.00 |
|       | Roadway Auger Borings   | L.F.    | 0        | \$ | 9.00       | \$ | 0.00        |
|       | Pavement Cores  | Each    | 0        | \$ | 85.00      | \$ | 0.00        |
|       | Generator Rental  | Day     | 0        | \$ | 150.00     | \$ | 0.00        |
|       | Pavement Evaluation   | Hour    | 0        | \$ | 100.00     | 5  | 0.00        |
|       | Traffic Control<br>(1-man crew with safety equipments)                | Day     | 0        | \$ | 1200.00    | \$ | 0.00        |
| N.    | LABORATORY TESTING  |         |          |    |            |    |             |
|       | Visual Examination by Staff Engineer                                  | Hour    | 1        | \$ | 85.00      | \$ | 85.00       |
|       | Natural Moisture Content Tests  | Test    | 0        | \$ | 10.00      | \$ | 0.00        |
|       | Grain-Size Analysis - Full Gradation                                  | Test    | 0        | \$ | 60.00      | \$ | 0.00        |
|       | Grain-Size Analysis - Single Sieve                                    | Test    | 0        | \$ | 30.00      | \$ | 0.00        |
|       | Organic Content Tests   | Test    | 0        | \$ | 45.00      | \$ | 0.00        |
|       | LBR   | Test    | 0        | \$ | 300.00     | \$ | 0.00        |
|       | Environmental Tests (pH, sulfates,<br>chlorides, resistivity)         | Set     | 0        | \$ | 185.00     | \$ | 0.00        |
| т.    | FIELD ENGINEERING AND TECHNICAL S<br>Sile Recon./Utility Coordination | ERVICES |          |    |            |    |             |
| IIIA. | Sr. Engineering Technician  | Hour    | 4        | \$ | 65.00      | \$ | 260.00      |
| шА,   | ENGINEERING AND TECHNICAL SERVICI                                     | ES .    |          |    |            |    |             |
|       | Pavement Evaluation Report  | LS      | 0        | \$ | 1000.00 \$ | ;  | 0.00        |
|       | Principal Engineer  | Hour    | 0        | \$ | 145.00     | \$ | 0.00        |

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# TIERRA SOUTH FLORIDA, INC. PERCOLATION TESTS (OPTIONAL)

| Senior Geotechnical Engineer | Unit<br>Hour | # of Units  |         | Unit Price | Totai          |
|------------------------------|--------------|-------------|---------|------------|----------------|
| Project England              | 1 IOUI       | 2           | \$      | 125.00     | \$<br>250.00   |
| Project Engineer             | Hour         | 0           | \$      | 115.00     | \$<br>0.00     |
| Draftperson                  | Hour         | 1           | \$      | 60.00      | \$<br>60.00    |
| TOTAL FEE FOR G              | EOTECHNICAL  | SERVICES-Pe | rc Tesl | 3          | \$<br>2,105.00 |



# PROFESSIONAL CONSULTING SERVICES

November 2, 2010

Attn: Hank Deibel, P.E. Arcadis 2081 Vista Parkway West Palm Beach, FL 33411

# Re: HAVERHILL ROAD FROM THE L-14 CANAL TO LAKE WORTH ROAD LDi Proposal No. 10-017

#### Dear Mr. Deibel:

Thank you for the opportunity to provide you with this proposal for services you requested on November 1, 2010. Our services will include:

## A.1. Design of the proposed surface water management system in accordance with the Palm Beach County Roadway Production Division and regulatory agency requirements and as follows:

- Acquire and review all available studies, plans, and permits pertaining to the project, as provided by Palm Beach County Roadway Production Division, and as available at SFWMD and LWDD.
- Review SFWMD permit files, including all existing development in the vicinity of the project.
- Coordination with project team to obtain additional information as needed to supplement available data.
- Conduct field investigations as necessary to facilitate review of existing conditions.
- Perform site evaluations and surface water management hydraulic analyses of existing drainage systems.
- Perform storm sewer analyses for the proposed conditions. Perform pipe sizing calculations based upon water surface elevation data provided by Palm Beach County.
- Design of proposed storm sewer system.
- Prepare a surface water management report for submission to Palm Beach County Roadway Production Department, SFWMD, LWDD and if required USACOE.
- Schedule and attend project coordination and meetings with client, and project team, and regulatory agencies.

Hank Deibel, P.E. Haverhill Road from the L-14 Canal to Lake Worth Road Page 2 November 2, 2010

- Respond to SFWMD, LWDD and ERM requests for additional information including up to two written responses to each agency. Advise client if additional services outside the scope of this proposal are necessary, and assist client in obtaining such services.
- Prepare a Pond Siting Report analyzing alternative locations for the required detention ponds.

STORMWATER MANAGEMENT DESIGN SERVICES A.1.

# **B. SPECIAL CONDITIONS**

- Proposal based on scope of services you requested on November 1, 2010. B.1. Submission of this proposal does not guaranty or warrant that the site may be **B.2**. developed as represented by the client. Specific engineering requirements and
- regulations may preclude development of the Site as indicated. Structural, geotechnical, environmental, and surveying services are excluded **B.3**.
- from this scope of services.
- B.4. Agency review fees are not included in this proposal

# C. GENERAL CONDITIONS

# C.1. OWNERSHIP OF DOCUMENTS

Last Devenport, Inc. will retain ownership of the original documents pertaining to this project and will not release copies of same without authorization from client or client's agent. If client fails to perform its obligations under this contract, then client will not be provided with copies of the documents and client will return any documents to LDi.

# C.2. INVOICING AND METHOD OF PAYMENT

Work will be billed on approximately the first day of each month based on a proration of work completed to date. Such monthly invoice shall be paid in full by client within thirty (30) days of invoice date unless, within such thirty (30) day period, client notifies LDi in writing of its objection to the amount of said invoice. Such notice shall be accompanied by payment of any undisputed portion of said invoice. If written objection is not received within thirty (30) days it shall constitute approval of invoice by client. If the payment is not received within thirty (30) days of billing date, a late charge will be added to the invoice in the amount of 1 1/2 percent per month on the outstanding balance. If payment is not received within sixty (60) days of the billing date, work will be suspended on the project until the outstanding invoice(s) are paid in full.

.....\$17.101.65

Hank Deibel, P.E. Haverhill Road from the L-14 Canal to Lake Worth Road Page 3 November 2, 2010

# C.3. WORK NOT SPECIFIED

Work not specified in the "Scope of Services" will not be performed absent a written authorization by client to do the additional work. The authorization shall contain, where possible, the price of the additional work. However, there are situations where LDi cannot provide a specific price because of unforeseeable conditions inherent in the nature of the additional work. In such an event, LDi can only provide a best estimate of the price.

## C.4. HOURLY CHARGES

**.** . . . . .

These hourly rates are subject to adjustment every six (6) months. Hourly work when authorized by client will be performed at the following rates:

| Principal/Senior Project Manager | \$450 00h        |
|----------------------------------|------------------|
|                                  | • • • • • • • •  |
| Senior Project Engineer          | \$125.00/hour    |
| Project Engineer/DRO Coordinator | . \$ 100.00/hour |
|                                  |                  |
|                                  |                  |
|                                  |                  |
| Field Representative             | \$ 65.00/hour    |
| Engineering Assistant            | \$ 75.00/hour    |
| Engineering Assistant            | \$ 50.00/hour    |

# C.5. CONSTRUCTION SERVICES

If LDi provides professional service during the construction phase of the project, LDi shall not be responsible for and shall not have control over means, methods, techniques, sequences, or procedures or for safety precautions and programs, in connection with the work on the project. Last Devenport, Inc. shall not be responsible for any contractor or subcontractor's failure to carry out work in accordance with the contract documents.

# C.6. PERMIT FEES, REPRODUCTION CHARGES AND REIMBURSABLE EXPENSES

The Total Contract Price does not include the payment of any governmental agency submittal or processing fees. The cost of these fees and any costs incurred by this office for printing, reproduction and other reimbursable expenses will be billed to the client monthly at cost plus 10 percent.

## C.7. COST ESTIMATES

Client hereby acknowledges that LDi does not warrant that estimates of probable construction costs provided by LDi will not vary from actual costs incurred by client.

Hank Deibel, P.E. Haverhill Road from the L-14 Canal to Lake Worth Road Page 4 November 2, 2010

## C.8. ACCEPTANCE/ASSIGNMENT

This proposal must be accepted within thirty (30) days of its date. If not accepted within that time period, LDi reserves the right to re-evaluate the terms and conditions contained herein. This contract is not assignable to or assumable by any third party without the prior written consent of LDi.

## C.9. TIME OF PERFORMANCE/PROJECT SCHEDULE

Last Devenport, Inc. will proceed expeditiously in prosecuting the contract work described herein. However, in no event will LDi be liable for any delay damages.

#### C.10. TERMINATION

Either party, with or without cause, shall have the right to terminate this contract upon giving the other party seven (7) days written notice. If the client cancels this contract, then client shall pay LDi all unpaid invoices in addition to a final invoice for work completed from the date of the last invoice to the date that LDi receives written notice of termination, plus all project related expenses. In the event that client claims that LDi failed to perform under the terms of the contract, then client agrees that LDi's liability shall not, in any event, exceed the amount of the Total Contract Price stated herein.

## C.11. LIMITATION OF LIABILITY

To the fullest extent permitted by law, and not withstanding any other provision of this Agreement, the total liability, in the aggregate, of the Design Professional and the Design Professional's officers, directors, partners, employees, agents and subconsultants, and any of them, to the Client and anyone claiming by, through or under the Client, for any and all claims, losses, costs or damages of any nature whatsoever arising out of, resulting from or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability, breach of contract or warranty, express or implied, of the Design Professional or the Design Professional's officers, directors, employees, agents or subconsultants, or any of them, shall not exceed the total compensation received by the Design Professional under this Agreement, or the total amount of \$50,000.00 whichever is greater.

## C.12. DISPUTES: ARBITRATION

Claims or disputes arising out of or relating to this Agreement, or breach thereof, shall be subject to and decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect, unless the parties agree otherwise. Venue for any arbitration proceeding will be in Palm Beach County, Florida.

## C.13. MERGER

This Agreement represents the entire and integrated agreement of the parties and supercedes all prior negotiations, representations or agreements, either written or oral.

Hank Deibel, P.E. Haverhill Road from the L-14 Canal to Lake Worth Road Page 5 November 2, 2010

## C.14. GOVERNING LAW

This Agreement shall be governed by the law of the State of Florida.

If the proposed work and fees contained herein are agreeable with you, please sign the enclosed copy of this letter, and return same to our office. Should you have any questions regarding the above, please do not hesitate to contact this office.

Sincerely.

an U Ronald W. Last, P.E President

**ACCEPTANCE OF PROPOSAL:** The above fees, terms, conditions and specifications are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

THIS PROPOSAL ACCEPTED BY

NAME AND TITLE

FIRM NAME

DATE

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|  |             | Rate              | Hours        | Rate            | Hours                                  | Hourly<br>Rate | NI-4            | Total Staff   | Salary Cost by   |
| 1. Acquire Permits   | 2           | \$ 46.20          | 4            | \$ 34.65        | 110018                                 | Rate           | Notes           | Hours   | Activity   |
| 2. Review SFWMD Files  | 2           | \$46.20           | 8            | \$ 34.65        |  |                |                 | <u>↓</u>  | \$ 231.00  |
| 3.Coordinate With Team   | 6           | \$46.20           | 2            | \$ 34.65        | · · · · · · · · · · · · · · · · · · ·  |                |                 | the second se | \$ 369.60  |
| 1. Field Investigation   | 4           | \$ 46.20          | 4            | \$ 34.65        | ·····                                  |                |                 |   | \$ 346.50  |
| 5. Hydraulic Analyses of Existing System   | 12          | \$ 46.20          | 4            | \$ 34.65        |  |                |                 | ••••••••••••••••••••••••••••••••••••••  | \$ 323.40  |
| 3. Pipe Sizing Calculations  | 12          | \$ 46.20          | 8            | \$ 34.65        | ·····                                  |                |                 |   | \$ 693.00  |
| . Design Proposed Storm Sewer  | 8           | \$46.20           | 8            | \$ 34.65        | ************************************** |                | And             |   | \$ 831.60  |
| . Surface Water Management Report  | 14          | \$46.20           | 4            | \$ 34.65        |  |                |                 |   | \$ 646.80  |
| Attend Coordination Meetings   | 4           | \$ 46.20          | 2            | \$ 34.65        |  |                |                 |   | \$ 785.40  |
| 0. Respond To Agencies RFI's   | 8           | \$ 46.20          | 7            | \$ 34.65        |  |                |                 |   | \$ 254.10  |
| 1. Pond Siting Report  | 8           | \$ 46.20          | 8            | \$ 34.65        |  |                |                 |   | \$ 612.15  |
|  |             |                   |              |                 |  |                |                 |   | \$ 646.80  |
| Subtotal   | <b>∖</b> 80 |                   | × 59         | Γ               | 0                                      |                |                 | 0   | \$ 5,740.35  |
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V \* 2, 98 % milkiplin

W:\Projects\08-029\_45th Street\Docs\10-017 Estimate of Work



November 16, 2010

Mr. Hank Deibel ARCADIS 2081 Vista Parkway West Palm Beach, Florida 33411

Re: SCOPE OF SERVICES AND ASSOCIATED FEE ESTIMATE Haverhill Road South of LWDD L-14 Canal to Lake Worth Road Palm Beach County, Florida Scheda Proposal No. 1813.20.P

Dear Mr. Deibel:

Scheda Ecological Associates, Inc. (Scheda) is pleased to present this scope of services and estimated fee for providing environmental consulting services to support the final design and permitting that will be undertaken by ARCADIS for the above referenced project. It is our understanding that the construction activities requiring environmental permits include filling of the drainage ditch on the east side of Haverhill Road south of Melaleuca Lane, widening of the Haverhill Road bridge over the L-14 Canal, and the extension of the existing 60-inch culverts into the L-13 Canal. A biological characterization of the proposed detention pond site locations will also be needed to determine whether wetlands or other protected natural resources occur on these sites. Scheda scientists are familiar with this project, have field-reviewed the corridor on numerous occasions, and are experienced in conducting field assessments and permitting projects such as this.

#### Task Description

#### SCOPE OF SERVICES

## 1.0 FIELD DATA COLLECTION

On-site delineations of wetlands and Other Surface Waters (OSW), as defined by the South Florida Water Management District (SFWMD), will be conducted for the drainage ditch on the southeast corner of Haverhill Road and Melaleuca Lane and the proposed detention pond sites.

#### 1.1 In-House Data Collection

Scheda will collect and review all pertinent data prior to conducting field reviews. Available data will be derived from materials that include USGS Quadrangle maps, National Wetland Inventory Mapping data, NRCS soil maps, Federal and State protected species resources, and coordination with County environmental scientists for updated wetland, protected species, and nesting data.

5892 East Fowler Avenue - Tampa, Florida 33617 TEL / 813.969.9800 - FAX / 813.989.9670

6151 Lake Osprey Drive, Suite 313; Sarasota, Florida 34240 TEL / 941.373.1547 FAX / 941.373.1401

1486-E Skees Road West Palm Beach, Florida 33411 TEL / 561.689.9198 · FAX / 561.668.9005 Mr. Hank Deibel Scheda Proposal 1813.20.P November 16, 2010 Page 2 of 4

## 1.2 Field Delineation of Wetlands and/or OSW

Scheda biologists will delineate the top of bank acreage of the drainage ditch on the southeast corner of Haverhill Road and Melaleuca Lane using GPS. Any wetlands identified in the proposed detention site parcels will be delineated in accordance with Federal and State criteria (Federal Manual for Identifying and Delineating Jurisdictional Wetlands, 1987, Chapter 62-340 of the Florida Administrative Code, and Chapter 84-446, Laws of Florida). Any identified wetlands will be flagged, their boundaries marked with GPS, and classified in accordance with the U.S. Fish and Wildliffe Service's National Wetland Inventory classification system. In addition, Scheda biologists will characterize the wetland areas as per dominant vegetation and overall quality. Site-specific data will be compiled into the Unified Mitigation Assessment Methodology (UMAM) data sheets.

#### 1.3 Agency Field Reviews

Scheda will forward appropriate information, along with a formal request for a field review of the wetland lines to the USACE and SFWMD. Scheda will conduct the field review, and submit/coordinate final documentation to receive agency approval of the wetland jurisdictional lines.

## 1.4 Coordination with the Surveyor / CADD Design

Scheda will forward appropriate information to the surveyor and/or client's CADD department in order to accurately depict wetland and OSW jurisdictional lines on the survey and engineering documents. Scheda will review these documents for accuracy. If revisions are required, written comments will be provided to the surveyor/ CADD engineer in memorandum format.

#### 2.0 REPORT PREPARATION

Scheda will draft a Natural Resources Report of the survey areas summarizing the results of the field assessment. This will ultimately be included with the environmental permit applications. Any wetlands or protected habitats will be characterized, sized, and depicted on an aerial basemap to be included with the report.

# 3.0 ASSISTANCE WITH ENVIRONMENTAL PERMIT APPLICATIONS

## 3.1 Permit Application Data Support

Scheda will provide the necessary permit application information for OSW and/or wetland related issues (if applicable).

## 3.2 Pre-Application Meetings

Scheda will coordinate and attend formal pre-application meetings with SFWMD and USACE, as well as local permitting agencies (if needed), to present the project and receive comments related to natural resource and stormwater permitting.

5892 East Fowler Avenue - Tampa, Florida 33617 TEL / 813.989.9600 - FAX / 813.989.9670

6151 Laka Oaprey Drive, Suite 313; Sarasota, Florida 34240 TEL / 941.373.1547 FAX / 941.373.1401

1486-E Skees Road -West Palm Beach, Florida 33411 TEL / 561.689.9196 - FAX / 561.686.9005 Mr. Hank Deibel Scheda Proposal 1813.20.P November 16, 2010 Page 3 of 4

#### 3.3 Agency Coordination and RAIs

Scheda will assist in responding to two (2) Requests for Additional Information (RAI) from each agency (4 total).

## FEE ESTIMATE

The fee estimate is detailed on the enclosed fee tabulation sheet (Attachment A) and totals \$5,370.00 for basic services and \$337.00 for reimbursable expenses. This will be considered a lump sum fee estimate that will not be exceeded without prior written authorization from the client. Please note that the following assumptions were used for development of the scope of services and associated fee estimate:

- 1. All required survey, geotechnical, and engineering services will be performed by others.
- 2. The Client or others will be responsible for all permit application fees, including
- any delineation, application and survey review fees.
- 3. The area to be surveyed consists of the proposed detention site locations (approximately 4.5 acres) and the drainage ditch on the southwest corner of Haverhill Road and Melaleuca Lane. These areas are easily accessible.
- 4. The field work can be accomplished in one field day.
- 5. A maximum of two rounds of RAI responses are anticipated for this project. Should more RAI responses be needed, a supplemental fee estimate will be submitted to the Client.
- 6. Tree relocation and associated County relocation permits are not included with this fee estimate. If these services are needed, a separate fee estimate will be submitted to the Client.
- 7. It is anticipated that this project will impact no wetlands (only Other Surface Waters) and therefore wetland impact mitigation will not be required. If mitigation is needed, a separate fee estimate will be submitted for the wetland functionality assessment (UMAM), creation of a mitigation plan, mitigation design (if needed), and coordination of mitigation activities with the County.

Scheda scientists can begin work immediately upon receiving your authorization. If these terms and conditions are satisfactory, please authorize the work by signing below and returning one copy to our office within 30 days of the date first written above. Upon receipt of such signature, this document shall constitute a binding agreement. I look forward to working with you on this

> 2 East Fowler Avenue - Tampa, Florida 33617 TEL / 813.989.9600 - FAX / 813.989.9670 5892 East Fo

6151 Lake Osprey Drive, Suite 313; Sarseot TEL / 941.373.1547 FAX / 941.373.1401 a, Florida 34240

1486-E Skees Road -West Palm Beach, Florida 33411 TEL / 561.689.9196 · FAX / 561.688.9005

Mr. Hank Deibel Scheda Proposal 1813.20.P November 16, 2010 Page 4 of 4

Thank you for the opportunity to provide this scope and fee. Please feel free to contact me if you have any questions or require additional information.

Sincerely,

SCHEDA ECOLOGICAL ASSOCIATES, INC.

Greg Juszli, MS Senior Environmental Manager West Palm Beach Office

| The above terms are accepted as stated on this day of, 20 | )1 | ľ | ( | ۵ |
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Signature

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5892 East Fowler Avenue - Tampa, Florida 33617 TEL / 813.989.9600 - FAX / 813.989.9670

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1486-E Skees Road -West Palm Beach, Florida . 33411 TEL / 581.689.9198 • FAX / 581.688.9005

#### DIRECT EXPENSES

SCHEDA ECOLOGICAL ASSOCIATES, INC.

#### Haverhill Road Proposal No. 1813.20.P

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#### DIRECT EXPENSES SCHEDA ECOLOGICAL ASSOCIATES, INC.

#### Haverhill Road Proposal No. 1813.20.P

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HAVERHILL ROAD (Bouth of LWDD L-14 Canal to Lake Worth Road)

8/20/2010 rev 11/01/10

| Haverhill Littoral Planting |  |
|-----------------------------|--|
| Job Number:                 | Studio Sprout, inc.  |
| Palm Beach County, Florida  | P.O. Box 420   |
|                             | Jupiter, FL 33468 30 30 10 10 10 10 10 10 10 10 10 10 10 10 10 |
|                             | Tel: 561-747-3462  |
|                             | Fax: 561-747-0281  |
|                             | Website: www.studio-sprout.com                                 |
|                             | PROJECT DESCONDICAL Develop of Literat Develop Day             |

PROJECT DESCRIPTION: Develop a Littoral Planting Plan for a 2 acre stormwater pond with monitoring reports.

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| Services Provided                  | Principal   | Sr. Landscape  | Professional Staff           | Technical Staff  | Total Hours             | Total Cost  |
|------------------------------------|---|--|------------------------------|--|-------------------------|---|
|                                    |   |  | 的复数建行的 白白色                   | andar (1973) a sa  |                         | R. Sheet C. Starley   |
| Aesting                            |   |  |                              |  |                         | n on wan leek neddor fragsio Webs   |
| Vesting                            | , deeper lang ook in 1900 noer in ook 120 in 190  | and a state of the second state of the | an in an all is a straight a | and the second |                         | A Links Class Hickory   |
| Site Visit                         | ·/  |  | <u></u>                      |  | 0                       | <b>\$</b>   |
| Coordination with Surveyor         |   |  | <u> </u>                     |  | 1                       | \$ 85.  |
| Base Plan                          |   | <u> </u>   | <u> </u>                     | ······   | 0                       | \$ -  |
| Review by Senior Staff             | · · · · · · · · · · · · · · · · · · ·   |  |                              | 4  | 4                       | \$ 260.0  |
|                                    | - <b>f</b>  |  | Total Llaur Altauran         |  | 0                       | · · ·   |
| reliminary Plan                    |   |  |                              | for Orientation Activitie  |                         | \$ 345.0  |
| relminary Plan                     | an an the second state of the s |  |                              |  |                         | 1. 18 C. 18 C. 19 |
| ketches                            | +   |  |                              |  | 0                       | \$ -  |
| cost Estimate                      |   |  |                              |  | 0                       | \$ .  |
| feeting                            |   |  |                              |  | 0                       | \$ .  |
| faterial Selections                |   |  |                              |  | 0                       | \$.   |
| endered Plan and Elevations        | +   |  |                              |  | 0                       | \$ .  |
| eview Board Meeting                |   |  |                              |  | 0                       | \$  |
| eview by Senior Staff              |   |  |                              |  | 0                       | \$  |
|                                    |   |  | Total Linux Alle             | - 4 B 8  | 0                       | \$ -  |
| ard Line Conceptual Plan           |   |  | I DIER MOUR Allowanci        | e for Preliminary Design   | 0                       | \$ -  |
| and Line Conceptual Plan           |   | en destre stresses so  |                              |  | A SHARE STORE           | States of the Calif   |
| te Verification                    |   |  |                              |  | 0                       | \$ -  |
| eview & Refine Material Selections |   |  |                              |  | 0                       | \$ -  |
| Iditional Sketches                 |   |  |                              |  | 0                       | \$ -  |
| efinement of Cost Estimate         |   |  |                              | ·  | 0                       | \$  |
| estings                            |   |  |                              |  | 0                       | \$ .  |
| nalize Material Selections         |   |  |                              |  |                         | \$ -  |
| eview by Senior Staff              | <u> </u>  |  |                              |  |                         | \$.   |
|                                    |   | 1  | Total III                    |  | 0                       | s .   |
| Paraged & Balancia Develting       |   |  | Total Hour Allowance fo      | or Design Development  | 0                       | \$ -  |
| ee Removal & Relocation/Demolition |   | State & State Begins - H. S. S. S. S.  |                              |  | 1. T. T. B. B. B. S. W. |   |
| aking Plan                         | <b>├───</b>   |  |                              |  | 0                       | \$ -  |
| anting Plan                        |   |  |                              |  | 0                       | \$  |
| alnage Plan                        |   |  | 8                            | 14   | 22                      | \$ 1,590.00   |
| ahting Plan                        | ┝──── <b>─</b>  | ······   |                              |  |                         | 5 -   |
| igation Plan                       | <u> </u>  |  |                              |  | Ö                       | \$  |
| Indiscape Details                  |   |  |                              |  | 0                       | s .   |
| anting Details                     |   |  |                              |  | 0                       |   |
| hting Details                      |   |  |                              | 2  |                         | <b>130.00</b>   |
| gation Details                     |   |  |                              |  | 0                       |   |
| al Site Verification               |   |  |                              |  | 0                       |   |
| vised Cost Estimate                |   |  |                              |  | 0                       |   |
| eting                              |   |  |                              |  | 0                       | -   |
| visions                            |   |  |                              |  | 0                       | -   |
| ditional Meeting(s)                |   |  |                              |  | 0 1                     | •   |
| ditional Revisions                 |   |  |                              | ·  | 0                       | -   |
| ecification Book                   |   |  |                              |  | 0                       | -   |
| view by Senior Staff               | T   |  |                              |  | 0                       | · · ·   |
|                                    |   |  | ance for Construction Do     |  | V I                     | 130.00  |

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#### 8/20/2010 rev 11/01/10

Haverhill Littoral Planting

| Job Number:                |   | Studio Sprout, Inc.            |                  |
|----------------------------|---|--------------------------------|------------------|
| Paim Beach County, Florida | • | P.O. Box 420                   |                  |
|                            |   | Jupiter, FL 33468              | <u>initantit</u> |
|                            |   |                                |                  |
|                            |   | Fax: 561-747-0281              | 53-4662 1.       |
|                            |   | Websits: www.studio-sprout.com |                  |
|                            |   |                                |                  |

| Services Provided                         | Principal                     | Sr. Landacape   | Professional Staff                                 | Technical Staff   | Total Hours                       | Total Cost  |
|---|-------------------------------|---|--|---|-----------------------------------|---|
|   |                               |   |  |   | an anna an an an Annan Caisch     | an sanas sa s  |
| Preparation of Bid Package                |                               | e state i transmissione a state i state | an de Salad La deserver.                           | era, Like Melanda   | and the state of the state of the |   |
| Pre-bid Conterence with Contractors       |                               | - <del> </del>  |  |   | 0                                 | \$ -  |
| Bid Review & Contractors Recommendation   |                               |   |  |   | 0                                 | \$  |
| Contract Negotiation                      |                               |   |  |   | 0                                 | \$ -  |
|   |                               |   | Total Hour Allow                                   | ince for Bid Solicitation   |                                   | 5   |
| CPre-Construction Meeting(s)              | Section of the section of the |   |  |   |                                   |   |
| Pre-Construction Meeting(s)               |                               |   | an a           | and the second secon |                                   | ·注意开始的学习最高学生。   |
| Site Visits(s) Project Administration     |                               |   | 18   | 3   |                                   |   |
| Material Coordination                     |                               |   |  |   |                                   | 1,555.00  |
|   |                               |   |  | ·····   | ō                                 |   |
|   |                               | Total Hour Alk  | wance for Construction &                           | Installation Monitoring   | V 19 1                            | 1.555.00  |
| Evaluation                                |                               | alter Alterity of a surger  | the the second stand and the second states and the | Beach Sold and second of  | en alternation and an             |   |
| Manual                                    |                               |   |  |   | 0 1                               | an an ann an tha ann an tha ann an thair an thai |
| Site Visits                               |                               |   |  |   | 0 1                               |   |
| Maintenance Administration & Coordination |                               |   |  |   | 0 \$                              | -   |
|   |                               |   | Total Hour Allowance for I                         | Animten and Anth Mine   | 0 3                               | •   |
|   |                               |   | Sub-Total:   | namenance Activities  | 0 3                               |   |
|   |                               | 30  | 24x36" prints @\$3.00                              |   | 40 8                              | 3,750.00  |
|   |                               |   | Grand Total:                                       |   |                                   | 90.00   |
| Special Notes                             | : Does not include Irrigation | on Plans,   |  |   |                                   | 3,840.00  |

Deliverables: 2 sets preliminary plans, 4 sets construction documents, digital transmission.

| Ees Summery<br>Orientation Activities<br>Preliminary Design Activities<br>Design Development<br>Construction Documentation Activities<br>Bid Solicitation | * s<br>* s<br>* s | 345.00                        | I have read and agree to the attached terms an<br>Summary on this Page. | id fees as listed in the Fee |
|---|-------------------|-------------------------------|---|------------------------------|
| Construction & Installation Monitoring<br>Maintenance Activities<br>30 - 24x38° prints @\$3.00<br>Grand Total   |                   | 1,555.00<br>90.00<br>3,840.00 | Client  | Date<br>11/2/2010<br>Date    |

# EXHIBIT "D"

| 11/16/2010 |
|------------|
|------------|

## Engineering & Public Works Roadway Production PARTICIPATION FOR MWBE/SBE CONSULTANTS

Contract

## Project Name: Haverhill Road from S. of LWDD L-14 Canal to

Prime Consultant: Arcadia U.S., Inc.

Project No.: 2010503

Telephone No.: (561) 697-7000

Prime Contact Person:

Resolution Date: 01/11/2011 Res

Department: Engineering & Public Works

Res #: <u>R2011-</u>

Type / Description of Name / Address / Telephone of Minority Sub-Consultant Contract Dollar Amount for Sub-Consultant Work Performed by Sub-Consultant Black Hispanic Other Women White Male Bridge Design Associates, Inc. Structural (Bridge) 1402 ROYAL PALM BEACH BLVD BLDG 200 MWBE 0.00 0.00 0.00 0.00 ROYAL PALM BEACH, FL 33411 (561) 686-3660 SBE 0.00 0.00 0.00 0.00 82.089.00 Brown & Phillips, Inc. Surveyor Surveyor 901 NORTHPOINT PKY STE 119 MWBE 0.00 0.00 0.00 0.00 WEST PALM BEACH, FL 33407 (561) 615-3988 SBE 70,049.00 0.00 0.00 0.00 0.00 Last Devenport, Inc. **Civil Engineering** 901 NORTHPOINT PKY STE 120 MWBE 0.00 0.00 0.00 0.00 WEST PALM BEACH, FL 33407 (561) 615-6567 SBE 0.00 0.00 0.00 0.00 17,101.65 STUDIO SPROUT, INC. Landscaping P.O. BOX 420 MWBE 0.00 0.00 0.00 0.00 JUPITER, FL 33468 (561) 747-3462 SBE 0.00 0.00 0.00 3,840.00 0.00 Scheda Ecological Associates, Inc. Environmental 1486 E SKEES RD MWBE 0.00 0.00 0.00 5,707.00 WEST PALM BEACH, FL 33411-2622 (561) 689-9198 SBE 0.00 0.00 0.00 0.00 0.00

Exhibit c

Page 1

1 alucipayulli 23/0

11/16/2010

Engineering & Public Works Roadway Production

## PARTICIPATION FOR MWBE/SBE CONSULTANTS

Contract

| Tierra South Fiorida, Inc.<br>2765 VISTA PKY STE 9 | Geotechnical<br>Geotechnical | MWBE     | 0.00      | 0.00 | 0.00      | 0.00     |           |
|--|------------------------------|----------|-----------|------|-----------|----------|-----------|
| WEST PALM BEACH, FL 33411<br>(561) 687-8539        |                              | SBE      | 0.00      | 0.00 | 33,128.00 | 0.00     | 0.00      |
|  | То                           | tal MWBE | 0.00      | 0.00 | 0.00      | 5,707.00 |           |
|  |                              | %        |           |      |           | 1.07     |           |
|  | То                           | tal SBE  | 70,049.00 | 0.00 | 33,128.00 | 3,840.00 | 99,190.65 |
| Total Contract Amount of Authorization             | 530,297.48                   | %        | 13.20     |      | 6.24      | 0.72     | 18.70     |

Exhibit c Page 2

| RODU         | CER  |                        | CATE OF L                  | JABII               | JTY II                          | NSURANC             | E  | DATE(MM/DD<br>05/14/   | /mm)                  |
|--------------|--|------------------------|----------------------------|---------------------|---------------------------------|---------------------|--|--|-----------------------|
| F<br>5<br>5  | on Risk Services<br>ranklin TN Office<br>D1 Corporate Cent<br>uite 300<br>ranklin TN 37067         | e<br>tre Drive         |                            | C                   | RTIFICAT                        | E DOES NOT AM       | D AS A MATTER OF<br>ON THE CERTIFIC<br>END, EXTEND OR A<br>HE POLICIES BELO          | INFORMATIC   |                       |
|              | (866) 283-7122   | FAX - ()               | <u>347) 953-5390</u>       | EN                  | SURERS AI                       | FORDING COVI        | RAGE   |  | NAIC                  |
| INSURI<br>Al | RCADIS U.S., Inc.  |                        |                            | INS                 | URERA: L                        | exington Insu       | rance Company  |  | 19437                 |
| Ð.<br>H      | 30 Plaza Dr Ste 2<br>ighlands Ranch CC   | 100<br>1 80129-2379 us | A                          | INS                 | URER B:                         |                     | ······································   |  |                       |
|              |  |                        | -                          |                     | URER C:                         |                     |  |  |                       |
|              |  |                        |                            |                     | URER D                          |                     |  |  |                       |
|              | RAGES  |                        |                            |                     | URER E:                         | applies per         | terms and condit   | tions of the   |                       |
| AOGI         | POLICIES OF INSURANCE<br>REQUIREMENT, TERM C<br>AIN, THE INSURANCE A<br>REGATE LIMITS SHOWN        |                        |                            |                     | NAMED ABO                       | VE FOR THE POLIC    | Y PERIOD INDICATED.<br>HIS CERTIFICATE MAY<br>JSIONS AND CONDITIO                    | NOTWITHSTAN<br>BE ISSUED OR 1<br>NS OF SUCH POI  | DING<br>MAY<br>JCIES. |
| IR IN        | SRD TYPE OF INSU   | RANCE                  | POLICY NUMBER              | POLI                | Y EFFECTIVE                     | POLICY EXPIRATIO    | LIMITS SHO   | WN ARE AS RI   | QUESTE                |
| T            | GENERAL LIABILITY  |                        |                            | DATE                | MM/DD/YYYY                      | DATE(MM/DD/YYYY     | ·  | LIMITS   |                       |
|              |  | ENERAL LIABILITY       |                            |                     |                                 |                     | EACH OCCURRENCE  |  |                       |
|              | CLAIMS MADE  | OCCUR                  |                            |                     |                                 |                     | PREMISES (Ea occurrence)<br>MED EXP (Any one person                                  |  |                       |
|              |  |                        |                            |                     |                                 |                     | PERSONAL & ADV INJUR   | the second s |                       |
|              | GEN'L AGGREGATE  | LIMIT APPLIES PER:     |                            |                     |                                 |                     | GENERAL AGGREGATE  |  |                       |
|              | D POLICY   | JECT LOC               |                            |                     |                                 |                     | PRODUCTS - COMP/OP A   | 66   |                       |
|              | AUTOMOBILE LIABILI   |                        |                            |                     |                                 |                     |  |  |                       |
|              |  |                        |                            |                     |                                 |                     | COMBINED SINGLE LIME<br>(En accident)  | т  |                       |
|              | ALL OWNED AUT  |                        | •                          |                     |                                 |                     | BODILY INJURY<br>( Per person)   |  |                       |
|              | HIRED AUTOS<br>NON OWNED AUT   | os                     |                            |                     |                                 |                     | BODILY INJ.RY<br>(Per accident)  |  |                       |
|              |  |                        |                            |                     |                                 |                     | PROPERTY DAMAGE<br>(Per accident)  |  |                       |
|              | GARAGE LIABILITY   |                        |                            |                     |                                 |                     | AUTO ONLY - EA ACCIDE  | NT   |                       |
|              |  |                        |                            |                     |                                 |                     | OTHER THAN EA A  | 22   |                       |
|              |  |                        |                            |                     |                                 |                     | AC EACH OCCURRENCE   | ×  |                       |
|              |  | LAIMS MADE             |                            |                     |                                 |                     | AGGREGATE  |  |                       |
|              | DEDUCTIBLE   |                        |                            |                     |                                 |                     |  |  |                       |
| -            | IKERS COMPENSATION AS  |                        |                            |                     |                                 |                     |  |  |                       |
| EMI          | PROPRIETOR / PARTNER / E   | 1/15                   |                            |                     | [                               |                     | WC STATU. OT<br>TORY LIMITS E  | rH-  |                       |
| OFFI<br>(Mas | CER/MEMBER EXCLUDED?   |                        |                            |                     |                                 |                     | E.L. EACH ACCIDENT   |  |                       |
| If yes       | describe under SPECIAL PRO   |                        |                            |                     |                                 |                     | E.L. DISEASE-POLICY LIMI   |  |                       |
|              | OTHER  |                        | 48990<br>. & Poll. Liabili | 06/0                | 1/2010                          |                     | ach Claim  | <u> </u>   | 000,000               |
| <u> </u>     | Contractor Poll  |                        |                            |                     |                                 |                     | nnual Aggregate<br>IR/Deductible (1)   | \$5,   | 000,000               |
| rega<br>the  | NOF OPERATIONSLOCATH<br>ring Design Service<br>te Limit is the finsured. The Limit<br>ICATE HOLDER | and an pr              | vjects with Pal            | 厳 氏長みたわっ            | County                          | Enn brofonde        |  |  | ons                   |
| Pa           | Im Beach County  |                        |                            | CANCEL              | LATION                          |                     |  |  |                       |
| -            | ard of County Co<br>th: Japann Dean  |                        |                            | SHOULD AND DATE THE | ly of the abo<br>leof, the issu | VE DESCRIBED POLIC  | ES BE CANCELLED BEFOR  | E THE EXPIRATION   |                       |
| 23           | 00 North Jog Roa<br>st Palm Beach FL   | d .                    |                            | BUT FAILER          | FTODOSO                         | E TO THE CERTIMICAT | NDEAVOR TO MAIL<br>HOLDER NAMED TO THE<br>GATION OR LIABILITY<br>IR REPRESENTATIVES. | LEPT.  |                       |

C1988-2009 ACORD name and logo are registered marks of ACORD

Attachment to ACORD Certificate for ARCADIS U.S., Inc. The terms, conditions and provisions noted below are hereby attached to the captioned certificate as additional description of the coverage afforded by the insurer(s). This attachment does not contain all terms, conditions, coverages or exclusions contained in the policy.

INSURED

1

Т

ARCADIS U.S., Inc. 630 Plaza Dr Ste 200 Highlands Ranch CO 80129-2379 USA

| INSURER |  |
|---------|--|
| INSURER |  |
| INSURER |  |
| INSURER |  |
| INSURER |  |

#### **ADDITIONAL POLICIES**

If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.

| INSR | ADD'L |                       |                                     | -                           | T                            |          |      |
|------|-------|-----------------------|-------------------------------------|-----------------------------|------------------------------|----------|------|
| LTR  | INSRD | TYPE OF INSURANCE     | POLICY NUMBER<br>POLICY DESCRIPTION | POLICY<br>EFFECTIVE<br>DATE | POLICY<br>EXPIRATION<br>DATE | u        | MITS |
|      |       | OTHER                 |                                     | 1                           | †                            |          | 1    |
|      |       | X Claims-Made         |                                     |                             |                              | 1        |      |
|      |       | X Professional Liabil |                                     |                             |                              | <u> </u> |      |
|      |       | X and Contractors     |                                     |                             |                              |          |      |
|      |       | X Pollution Liability |                                     |                             |                              |          |      |
|      |       |                       |                                     |                             |                              |          |      |
|      |       |                       |                                     |                             |                              |          |      |
|      | Τ     |                       |                                     |                             |                              |          |      |
|      | -+    |                       |                                     |                             |                              |          |      |
| -+   |       |                       |                                     |                             |                              |          |      |
|      |       |                       |                                     | 1 1                         |                              |          |      |

TION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS DESC

Liability: January 1, 1958 and Retro Date on Pollution Liability: September 26, 2000. Cancellation Provision shown herein is subject to shorter or longer time periods depending on the jurisdiction of, and reason for, the cancellation.

| PROD                 | IIC PR        | CERT   | IFICATE OF L  |  |  |  | DATE(MM/DD/<br>12/28/2          | 2009   |
|----------------------|---------------|--|---|--|--|--|---------------------------------|--|
| 5                    | SO1<br>Suit   | Risk Services South, Ind<br>klin TN Office<br>Corporate Centre Drive<br>e 300<br>klin TN 37067 USA                             |   | CERTIFICAT   | TE DOES NOT AN   | D AS A MATTER OF I<br>PON THE CERTIFICA<br>IEND, EXTEND OR AL<br>HE POLICIES BELOW             | NFORMATIO<br>TE HOLDER.         |  |
| PHONE                |               | 56) 283-7122 P   | AX-(847) 953-5390   | INSURERS A   | FFORDING COV   | ERAGE  |                                 | NAIC   |
| A                    | ARCA          | DIS U.S., Inc.   |   |  | Greenwich Insu   |  |                                 | 22322  |
| H                    | igh           | Plaza Dr Ste 200<br>lands Ranch CD 80129-237   | 9 USA   |  | XL Specialty 1   | Insurance Co   |                                 | 37885  |
|                      |               |  |   | INSURER C  |  |  |                                 |  |
|                      |               |  |   | INSURER E  |  |  |                                 |  |
| COV                  | POL           | CIES OF INSUIDANCE LISTED DE   |   |  | ······································                       |  |                                 |  |
| AGG                  | ARIEG.        | CLES OF INSURANCE LISTED BELO<br>UREMENT, TERM OR CONDITION<br>THE INSURANCE AFFORDED BY T<br>ATE LIMITS SHOWN MAY HAVE BE     | WHAVE BEEN ISSUED TO TH<br>DF ANY CONTRACT OR OTHE<br>HE POLICIES DESCRIBED HEN<br>EN REDUCED BY PAID CLAIN | E INSURED NAMED AB<br>IR DOCUMENT WITH RU<br>LEIN IS SUBJECT TO AL<br>IS   | ove for the polic<br>espect to which 1<br>1. The terms, excl | USIONS AND CONDITION   | E ISSUED OR M<br>S OF SUCH POLI | AY<br>CIES.  |
|                      | CSRD          | TYPE OF INSURANCE  | POLICY NUMBER   | POLICY EFFECTIV  | T POLICY EXPERATIO   |  | N ARE AS RE                     | QUESTED  |
| ^                    |               | GENERAL LIABILITY  | GEC001076108<br>General Liability   | 01/01/2010   | 01/01/2011   | BACH OCCURRENCE  |                                 |  |
|                      |               | X COMMERCIAL GENERAL LIABELIT<br>CLAIMS MADE X OCCUR   | Concret Lisotity  |  |  | DAMAGE TO RENTED<br>PREMISES (En accurrence)<br>MED EXP (Any one pectan)                       |                                 | .000,000   |
|                      |               |  | -   |  | 1  | PERSONAL & ADV INJURY  | 51                              | <u>510,000</u> ,000  |
|                      |               | GENTL AGGREGATE LIMIT APPLIES PE   |   |  |  | GENERAL AGORBGATE  |                                 | 000,000  |
|                      |               |  | :   |  |  | PRODUCTS - COMPYOP AGG   | \$2,                            | 000,000  |
| •                    | Ĺ             | AUTOMOBILE LIABILITY   | AEC001075808<br>Auto (A05)  | 01/01/2010   | 01/01/2011   |  |                                 |  |
| •                    | ŀ             | ALL OWNED AUTOS  | AEC001719506  | 01/01/2010   | 01/01/2011   | COMBINED SINGLE LIMIT<br>(Es socident)   | \$1,                            | 000,000  |
|                      | ľ             | SCHEDULED AUTOS  | Mass Auto   |  | 0.7 0.7 2011   | BODILY INJURY<br>( Per person)   |                                 |  |
|                      | F             | X NON OWNED AUTOS<br>X Property Damage to Others   |   |  |  | BODELY INFURY<br>(Per accident)  |                                 |  |
| ╋                    |               | ARAGE LIABILITY  |   |  |  | PROPERTY DAMAGE<br>(Per socidant)  |                                 |  |
|                      | F             | ANY AUTO   |   |  |  | AUTO ONLY - EA ACCIDENT  |                                 |  |
| ╉╌                   |               | CESS / UMBRELLA LIABILITY  |   |  |  | OTHER THAN EA ACC<br>AUTO ONLY: ADG  |                                 |  |
|                      | Ľ             | OCCUR CLAIMS MADE  |   |  |  | EACH OCCURRENCE  |                                 |  |
|                      | F             | DEDUCTIBLE   |   | ŕ  |  | ACCELEGATE   |                                 |  |
|                      |               |  | RWD943516304  |  | 1  | ·····  |                                 |  |
| A201                 | PLOY<br>Y PRO | IS COMPANISATION AND<br>IRS' LIABILITY Y/N<br>PRIETOR / PARTNER / EXECUTIVE  | Workers Compensation<br>RwR943516704<br>State of Wisconsin  | 01/01/2010   |  | X WC STATUL OTH-<br>TORY LIMITS ER   | \$1.0                           | 0,000  |
|                      |               | MEMBER EXCLUDED*   | Sector MISCONSIN  |  |  | EL. DISEASE-EA EMPLOYEE  |                                 | 0,000  |
|                      |               | the under SPECIAL PROVISIONS below<br>HER  |   |  |  | E.L. DISEASE-POLICY LIMIT  | \$1,00                          | 0,000  |
| CRIPTIC              | ON OF         | OFERATIONS/LOCATIONS/VEHICLES/EX<br>9 Design Services for al   |   |  | _  |  |                                 |  |
| nee<br>miss<br>hitio | ion<br>mal    | Greations/Locations/vehicles/ex<br>g Design Services for al<br>ers, A Political Subdivi<br>Insureds as to General<br>TE HOLDER | l projects with Palm<br>sion of the State of<br>Liability and Automo  | Beach County.<br>Florida, its of<br>bile Liability.  | Palm Beach Co<br>Fficers, Emplo<br>The General               | unty Board of Cour<br>yees and Agents ar   | ty<br>e named as                | ZINGUCH CZUNG VAN  |
| - P2                 | ala i         | Reach Country  |   | ANCELLATION  |  |  | 18001 IE                        | 6  |
| 80<br>A1             | Dard<br>tta:  | of County Commissioners<br>Jaean Dean<br>North Jog Road<br>Palm Beach FL 33411 USA   | 1   | SHOULD ANY OF THE ABO<br>DATE THERBOP, THE ISS<br>30 DAYS WRITTEN NOTIC<br>BUT FAILURE TO DO SO SI<br>OF ANY KIND UPON THE R |  | ES DE CANCELLED BEFORE TI<br>NDEAVOR TO MAIL<br>HOLDER NAMED TO THE LEF<br>JATION OR LIARD ITY | E EXPERATION                    | The second s |
| ~9                   | -96           | Sala Beach FL 33411 USA  |   |  |  |  |                                 |  |
| ORD 2                | 25 (2)        | 09/01)   |   | AUTHORIZED REPRESENT   |  | . Rich Same  | South S                         |  |

C1988-2009 ACORD name and logo are registered marks of ACORD

Attachment to ACORD Certificate for ARCADIS U.S., INC. The terms, conditions and provisions noted below are hereby attached to the captioned certificate as additional description of the coverage afforded by the insurer(s). This attachment does not contain all terms, conditions, coverages or exclusions contained in the policy.

| rsured                                |                  |   | INSURER |             |          |
|---------------------------------------|------------------|---|---------|-------------|----------|
| ARCADIS U.S., Inc<br>630 Plaza Dr Ste |                  | n<br>Stephene (* 1997)<br>N <sup>eg</sup> r | INSURER | <del></del> |          |
| Highlands Ranch C                     | 0 80129-2379 USA |   | INSURER |             | <b>1</b> |
|                                       |                  | ÷٠<br>ب                                     | INSURER |             |          |
| an an Angelan<br>Iomraidh anns        |                  |   | INSURER |             |          |

## ADDITIONAL POLICIES

If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits. PECE ADOTL

| LTR | PSRD | TYPE OF PEURANCE | POLICY NUMBER<br>POLICY DESCRIPTION | POLICY<br>EFFECTIVE<br>DATE | POLICY<br>EXPIRATION<br>DATE | LONITS |
|-----|------|------------------|-------------------------------------|-----------------------------|------------------------------|--------|
|     |      |                  |                                     |                             |                              |        |
|     |      |                  |                                     |                             |                              |        |
|     |      |                  |                                     |                             |                              |        |
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|     |      |                  |                                     |                             |                              |        |
|     |      |                  |                                     |                             |                              |        |

ION OF OPERATIONS/LOCATIO SVEHICLES/EXCLUSIONS ADDED BY ENDORS

Description of overations/locations/vencles/exclusions aboed by endorsement/secial provisions Liability policies certified hereon are primary to other insurance available to the certificate holder, but only to the extent required by written contract with the insured, and always subject to the policy terms, conditions and exclusions. waiver of Subrogation is granted in favor of the Additional Insureds referring to General, Automobile Hiability and Workers Compensation as required by written contract but conditions and exclusions. Cancellation Provision shown herein is subject to the policy terms, periods depending on the jurisdiction of, and reason for, the cancellation.

|           | Task Name                 | Duration      | Start        |             | JECT NUMBER 201050                         |  |
|-----------|---------------------------|---------------|--------------|-------------|--|--|
| 0         |                           |               |              | Finish      | 2011<br>Jan Feb Mar Apr May Jun Jul Aug St | 2012<br>ap Oct Nov Dec Jan Feb Mar Apr May Jun Jul |
|           | Field Survey              | 66 days       | Mon 1/31/11  | Mon 5/2/1   |  |  |
| 1111      | 35% Plans                 | 44 days       | Tue 5/3/11   | Fri 7/1/1   |  |  |
|           | County Review             | 22 days       | Mon 7/4/11   | Tue 8/2/1   |  |  |
| 1917      | Pond Siting Report        | 22 days       | Wed 8/3/11   | Thu 9/1/1   |  |  |
|           | 65% Plans                 | 66 days       | Wed 8/3/11   | Wed 11/2/11 |  |  |
|           | County Review             | 22 days       | Thu 11/3/11  | Fri 12/2/11 |  |  |
|           | Signal Plans              | 22 days       | Wed 8/3/11   | Thu 9/1/11  | 2.444.000                                  |  |
|           | 96% Plans                 | 66 days       | Mon 12/5/11  | Mon 3/5/12  |  |  |
|           | County Review             | 22 days       | Tue 3/6/12   | Wed 4/4/12  |  |  |
|           | 100% Plans                | 22 days       | Thu 4/5/12   | Fri 5/4/12  |  |  |
|           | County Review             | 22 days       | Mon 5/7/12   | Tue 6/5/12  |  |  |
|           | FINAL PLANS               | 22 days       | Wed 6/6/12   | Thu 7/5/12  |  |  |
|           | FINAL COUNTY<br>REVIEW    | 22 days       | Fri 7/6/12   | Mon 8/6/12  |  |  |
|           | LWDD Permitting           | 132 days      | Thu 11/3/11  | Fri 5/4/12  |  |  |
|           | FDOT Permitting           | 110 days      | Thu 11/3/11  | Wed 4/4/12  |  |  |
|           | SFWMD Permitting          | 66 days       | Thu 11/3/11  | Thu 2/2/12  |  |  |
|           |                           |               |              |             |  |  |
|           |                           |               |              |             |  |  |
|           |                           |               |              |             |  |  |
|           |                           |               |              |             |  |  |
| t: HAVER  | Task<br>RHILL 12-6-10.mpp |               | Miles        | itone       | External Tasks                             |  |
| Tue 12/7/ | /10 Split                 | 1111422444466 | cheeres Sumi | mary        | External Mileston                          |  |