PROFESSIONAL ENGINEERING SERVICES NON-CONTINUING SERVICES SAMPLE AGREEMENT 145-0317-NC

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SECTION 1
INTENT OF AGREEMENT

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES FOR

BECKETT BRIDGE REPLACEMENT (BRIDGE No. 154000) – ENGINEERING CONSULTING SERVICES

THIS AGREEMENT, entered into on the 14TH day of September, 20 16, between PINELLAS COUNTY, a political subdivision of the State of Florida, hereinafter referred to as the COUNTY, represented by its Board of County Commissioners, and, Hardesty & Hanover, LLC with offices in Tampa, Florida hereinafter referred to as the CONSULTANT.

WITNESSETH, That:

WHEREAS, Pinellas County, herein referred to as the COUNTY, requires **PROFESSIONAL ENGINEERING SERVICES** associated with support to develop plans and specifications and perform all other professional engineering services as may be required during the construction of the Beckett Bridge Replacement project (Bridge No. 154000) located within Tarpon Springs in Pinellas County, Florida; and

WHEREAS, the COUNTY desires the CONSULTANT provide PROFESSIONAL ENGINEERING SERVICES requisite to the development of the PROJECT; and

WHEREAS, the CONSULTANT has expressed the willingness and ability to provide the aforementioned Services.

NOW THEREFORE, the COUNTY and the CONSULTANT, in consideration of the mutual covenants hereinafter set forth, agree as follows:

SECTION 2
SCOPE OF PROJECT

2.1 PROJECT DESCRIPTION AND PROFESSIONAL REQUIREMENTS

The PROJECT consists of Professional Engineering Services for the replacement of the Beckett Bridge (No. 154000) in Pinellas County, Florida. The replacement bridge shall be designed for a minimum design service life of 75 years. The PROJECT limits for construction are along Riverside Drive from just west of Chesapeake Drive to just east of Pampas Avenue as required to tie new construction with the existing pavement on each end of the project. For the purposes of this Agreement the term PROJECT shall include all areas of proposed improvements, all areas that may reasonably be judged to have an impact on the PROJECT, and all PROJECT development phases and the services and activities attendant thereto. It is not the intent of this Agreement to identify the exact limits or details involved in providing satisfactorily completed PROJECT construction documents. The CONSULTANT shall provide the following professional services to prepare construction plans, specifications, and complete applications for and receive all federal, state, and local permits required for construction of the PROJECT. The PROJECT design shall be based on the following data:

In accordance with the attached Exhibit A, Scope of Services, the CONSULTANT shall develop plans, acquire all permits, develop construction specifications, cost estimates, and perform all other professional engineering services as may be required for final design of the PROJECT, including drainage improvements, and construction of ADA compliant sidewalks, ramps and driveways along the roadway.

The bridge replacement consists of a new bascule channel span and fixed concrete approach spans. The CONSULTANT shall design the PROJECT replacement in accordance with the recommendations included in the Beckett Bridge PD&E Study and associated public documents, including the Memorandum of Agreement dated February 2, 2015 associated with 36 CFR Part 800 regulation implementing Section 106 of the National Historic Preservation Act, as amended by subsequent recommendations as documented by the public involvement process.

Drainage Improvements required to accommodate roadway, sidewalk and bridge construction shall be designed in accordance with Pinellas County Ordinances and Southwest Florida Water Management District (SWFWMD) regulations for differing storm events (i.e., ten year, etc.). All required permits shall be obtained by the engineering CONSULTANT. Plans shall be prepared in accordance with Civil 3D Pinellas County Kit Requirements.

a) Required Deliverables

- All Services specified in this AGREEMENT will comply with Pinellas County's requirement to utilize Civil 3D Pinellas County Kit Requirements (latest version).
- Construction plans will be provided via Civil 3D file (eTransmit) and electronically as PDF's for each transmittal phase.
- The final plans shall be provided electronically in DWG and PDF format, plus two (2) paper prints (one half size and one full size) signed and sealed by a Professional Engineer certified in the State of Florida. Services requiring Computer Assisted Design and Drafting (CADD) and/or Geographic Information Systems (GIS) shall utilize AutoCAD Civil 3D and/or ESRI ArcMap 10.3 or latest version supported by Pinellas County.
- All technical specifications required for construction of project.

2.2 PROJECT PHASES

All project phases shall be completed on or before the milestone dates provided in the COUNTY approved PROJECT design schedule referenced in Exhibit A.

2.3 CONSULTING RESPONSIBILITIES

A. It is the intention of the COUNTY that the CONSULTANT is held accountable for its work, including checking and review of plans, and that submittals are complete.

B. Without additional compensation, the CONSULTANT shall be responsible for the accuracy of the work and shall promptly correct its errors and omissions and assist the COUNTY in Contractor claims and/or litigation related to errors and omissions. Acceptance of the work by the COUNTY will not relieve the CONSULTANT of the responsibility for subsequent correction of any errors and the clarification of any ambiguities.

C. The CONSULTANT represents that it has secured or will secure, at its own expense, all personnel necessary to complete this Agreement; none of whom shall be employees of or have any contractual relationship with the COUNTY. Primary liaison with the COUNTY will be through the CONSULTANT'S Project Manager. All of the services required hereunder will be performed by the CONSULTANT or under the CONSULTANT'S supervision, and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under law to perform such services.

D. The CONSULTANT shall endorse all reports, calculations, contract plans, and survey data. Services shall be prepared under the direction of an engineer registered in the State of Florida and qualified in the required discipline. Products or services performed or checked shall be signed and sealed by the CONSULTANT'S Florida registered engineer.

E. The CONSULTANT shall be responsible for the preparation of a PROJECT design schedule, prepared in Microsoft Project 2013 or later, which shows a breakdown of all tasks to be performed, and their relationship in achieving the completion of each phase of work. A bar chart schedule showing overall PROJECT time frames should also be prepared. These schedules must be submitted for COUNTY approval within ten (10) days of the initial PROJECT Notice to Proceed. These schedules will be used to verify CONSULTANT performance in relationship to Fees claimed and to allow the COUNTY'S Project Manager to monitor the CONSULTANT'S efforts. The CONSULTANT shall be responsible for any updates to these schedules and for documenting in writing to the COUNTY any major deviations in the actual versus estimated PROJECT time frames.

F. The CONSULTANT shall respond, in writing, to all review comments made by the COUNTY, and shall incorporate appropriate design adjustments into the PROJECT, in a timely manner, resulting from the review exchange.

2.4 GENERAL DESIGN CONDITIONS

2.4.1 The CONSULTANT shall coordinate and solicit appropriate input, with the knowledge of the COUNTY.

2.4.2 All design data, plans, and drawings shall be delivered electronically in accordance with Pinellas County's requirement to utilize Civil 3D Pinellas County Kit Requirements (latest version); as well as providing reproducible hard copies of plans and drawings. All specification and other documents shall be delivered electronically and or on a CD ROM, in Microsoft Word or Excel format as required, in addition to reproducible hard copies.

2.4.3 Not used.

2.4.4 The CONSULTANT shall develop acceptable alternates to any and all design recommendations that may be declared unacceptable.

2.5 GOVERNING SPECIFICATIONS REGULATIONS AND PERTINENT DOCUMENTS

The PROJECT shall be designed by the CONSULTANT in accordance with applicable industry standards. The CONSULTANT shall be responsible for utilizing and maintaining current knowledge of any laws, ordinances, codes, rules, regulations, standards, guidelines, special conditions, specifications, or other mandates relevant to the PROJECT or the services to be performed.

SECTION 3
SERVICES TO BE FURNISHED BY THE CONSULTANT

3.1 SEE EXHIBIT A – SCOPE OF SERVICES.

3.2 BIDDING PHASE

The CONSULTANT shall prepare with the COUNTY'S assistance the necessary bidding information, bidding forms, the conditions of the contract, and the form of agreement between the COUNTY and the Contractor. The CONSULTANT also, shall bear the cost of two (2) complete sets of documents (plans and specifications), two (2) of which shall be signed and sealed by the CONSULTANT as original record sets for the PROJECT. Each sheet in the two (2) construction plans print sets shall be signed, sealed and dated. The title sheet only of the two (2) specifications sets shall be signed, sealed, and dated. Additionally, any required addenda shall be signed, sealed, and dated.

3.2.1 The CONSULTANT, following the COUNTY'S review of the Construction Documents and of the latest Statement of Probable Construction Cost, shall be available to assist the COUNTY in obtaining bids, and in preparing and awarding construction contracts for each bid package. The CONSULTANT shall assist conducting pre-bid conferences, and shall prepare a Bid Tabulation spreadsheet following receipt of bids.

3.2.2 If the Advertisement for bids has not commenced within sixty (60) days after the CONSULTANT submits the approved Construction Documents to the COUNTY, any fixed limit of Construction Cost established as a condition of this Agreement shall be adjusted to reflect any change in the general level of prices which may have occurred during that period of time in construction industry. The adjustment shall reflect changes between the date of submission of the Construction Documents to the COUNTY and the date on which the Advertisement for Bids occurred.

3.2.3 The CONSULTANT shall prepare any required addenda to construction plans and specifications on the PROJECT during the bidding phase affecting the CONSULTANT'S plans and specifications. The CONSULTANT shall also provide any addenda during the Construction Phase in sufficient quantity to distribute to all necessary parties as determined by the COUNTY. Addenda material shall be placed in envelopes by the CONSULTANT for mailing by the COUNTY. The CONSULTANT shall also furnish certified mail receipt material and prepare mailing labels. The COUNTY shall mail all addenda.

3.3 CONSTRUCTION PHASE

All contact and/or communication from the CONSULTANT to the Contractor shall be coordinated with the knowledge of the COUNTY.

A. Construction Consultation Services

1. Processing, review, approval and distribution of shop drawings, product data, samples and other submittals required by the Contract Documents.

2. Maintenance of master file of submittals with duplicate for COUNTY.

3. Construction Field Observation Services consisting of visits to the site as frequent as necessary, but not less than once every week, to become generally familiar with the progress and quality of the work and to determine in general if the work is proceeding in accordance with the Contract Documents and prepare related reports and communications. Provide written report of each visit. This field observation requirement shall include any sub-consultants at appropriate construction points.

4. Review for comment or approval any and all proposal requests, supplemental drawings and information and change orders.

5. Review for correctness Contractors pay requests for the COUNTY.

6. Prepare, reproduce and distribute supplemental drawings, specifications and interpretations in response to requests for clarification by the Contractor or the COUNTY as required by construction exigencies. Response to any request must be received by the COUNTY within twenty-four (24) hours of request, or the next available working day when the request is prior to a weekend or holiday.

7. Review, upon notice by the Contractor that work is ready for final inspection and acceptance.

8. Notify the COUNTY of any deficiencies found in follow-up reviews.

9. Evaluate all testing results and make recommendations to the COUNTY.

10. Assist in the establishment by the COUNTY of programs of operation and maintenance of the physical plant and equipment.

11. Arrange for and coordinate instructions on operations and maintenance of equipment in conjunction with manufacturer's representatives.

12. Prepare an operation and maintenance manual for the COUNTY'S use.

13. The CONSULTANT shall visit the project as necessary, but at a minimum of three (3) month, six (6) month and upon construction completion in order to certify that the permit conditions have been met satisfactorily. This shall not relieve the CONSULTANT of other needed visits to the project should specific issues arise.

14. Assistance in the training of the facility operation and maintenance personnel in proper operations, schedules, procedures and maintenance inventory.

15. Prepare as-built record drawings, based on information furnished by the Contractors including significant changes in the work made during construction. The CONSULTANT will provide one (1) set of signed and sealed prints and one (1) CADD disk of the as-built record construction documents.

16. Transmit certified as-built record drawings and general data, appropriately identified, to the COUNTY within thirty (30) days following completion of construction.

17. Consult with, and recommend solutions to, the COUNTY during the duration of warranties in connection with inadequate performance of materials, systems, and equipment under warranty.

18. Review facilities or equipment prior to expiration of warranty period(s) to ascertain adequacy of performance, materials, systems and equipment.

19. Document noted defects or deficiencies and assist the COUNTY in preparing instructions to the Contractor for correction of noted defects.

20. The Contractor shall provide the CONSULTANT with all the required project close out material for CONSULTANT'S use in the warranty period services.

21. The Contractor shall have prime responsibility in the warranty period for all services herein. The CONSULTANT shall assist, consult, observe review and document as noted.

3.4 PROVISIONS RELATED TO ALL PHASES

3.4.1 The CONSULTANT will investigate and confirm in writing to the COUNTY, to the best of the CONSULTANT'S knowledge, conformance with all applicable local public and utility regulations.

3.4.2 The CONSULTANT will coordinate work designed by various disciplines.

3.4.4 The CONSULTANT shall submit to the COUNTY design notes and computations to document the design conclusions reached during the development of the construction plans.

a. One (1) hard copy and one electronic file in PDF format of the design notes and computations shall be submitted to the COUNTY with the design development review plans. When the plans are submitted for final review, the design notes and computations corrected for any COUNTY comments shall be resubmitted. At the PROJECT completion, a final set of the design notes and computations, properly endorsed by the CONSULTANT, shall be submitted with the record set of plans and tracings.

b. The design notes and calculations shall include, but not be limited to, the following data:

1) Design criteria used for the PROJECT.
2) Roadway geometric calculations
3) Structural calculations.
4) Drainage calculations.
5) Traffic design calculations
6) Traffic control calculations
7) Calculations as required by provisions of the Florida Energy Conservation Manual (Department of General Services), latest revision.
8) Calculations showing probable cost comparisons of various alternatives considered.
9) Documentation of decisions reached resulting from meetings, telephone conversations or site visits.
10) Other PROJECT-related correspondences as appropriate.

3.4.5 Each set of plans for the PROJECT shall be accurate, legible, complete in design, suitable for bidding purposes and drawn to scales acceptable to the COUNTY. The completed plans shall be furnished on reproducible material and in a format, which is acceptable to the COUNTY.

3.4.6 The CONSULTANT shall make such reviews, visits, attend such meetings and conferences and make such contacts as are necessary for the proper preparation of plans and specifications for the PROJECT.

3.4.7 The COUNTY in no way obligates itself to check the CONSULTANT'S work and further is not responsible for maintaining project schedules.

3.4.8 Intentionally Omitted.

3.4.9 The CONSULTANT must be familiar with the intent, thoroughness, safety factors and design assumptions of all structural calculations.

3.4.10 All work prepared and/or submitted shall be reviewed and checked by a CONSULTANT (Architect/Engineer) registered in Florida. All plans shall be signed and sealed by the Professional CONSULTANT in responsible charge.

3.5 PERMIT APPLICATIONS AND APPROVALS

3.5.1 The CONSULTANT shall prepare all permit applications, data and drawings required for submittal BY THE COUNTY for approval of local, state and federal agencies.

3.5.2 The CONSULTANT shall, at no additional cost to the COUNTY, make all reasonable and necessary construction plans revisions required to obtain the necessary permit approvals for construction of the PROJECT.

3.5.3 For the purpose of ensuring the timely approval of all permits necessary for the construction of the PROJECT, the CONSULTANT shall schedule the necessary contacts and liaison with all agencies having permit jurisdiction over the PROJECT, and shall furnish, on a timely basis, such plans, data and information as may be necessary to secure approval of the required permits.

3.6 COORDINATION WITH UTILITY SERVICES AND AFFECTED PUBLIC AGENCIES

3.6.1 The requirements of the various utility services shall be recognized and properly coordinated with the PROJECT design.

3.6.2 Drainage investigations and drainage design shall be coordinated with any city or drainage district that may be affected by or have an effect on the PROJECT.

SECTION 4
SERVICES TO BE FURNISHED BY THE COUNTY

4.1 The COUNTY shall provide the following for the CONSULTANT'S use and guidance:

A. Copies of existing maps, existing aerial photographs, as-built construction plans and data pertinent to the PROJECT design, which the COUNTY may have in its possession.

B. Reproducibles of the COUNTY Engineering Department Standard Drawings applicable to the PROJECT.

C. Sample copies of the COUNTY standard contract documents and specifications.

D. Preparation of legal (front-end) section of the specifications.

SECTION 5
PRESENTATIONS, PUBLIC MEETINGS AND TECHNICAL LIAISON

The following services shall be provided at no additional cost to the COUNTY:

5.1 Prior to the commencement of design activities, the COUNTY will conduct with the CONSULTANT a pre-design conference for the purpose of discussing issues relative to the PROJECT, plans preparation and submittal procedures and to convey to the CONSULTANT such items provided for under Section 4 as may be required and available at that time.

5.2 The CONSULTANT shall make presentations to the COUNTY'S Director of Public Works or designee as often as reasonably requested and at any point in the PROJECT development should issues arise which make additional presentations other than those listed elsewhere in this Agreement, in the COUNTY'S best interest.

5.3 The CONSULTANT shall participate in Monthly PROJECT Conferences with COUNTY staff personnel. The meetings will be scheduled by the COUNTY at a location provided by the COUNTY.

5.4 The CONSULTANT shall attend, as technical advisor to the COUNTY all meetings or hearings conducted by permitting agencies or public bodies in connection with any permit required for the construction of the PROJECT, and shall prepare all presentation aids, documents and data required in connection with such meetings or hearings, and at the discretion of the COUNTY, shall either plead the COUNTY'S case or provide engineering and technical assistance to the COUNTY in its pleading of the case.

5.5 The CONSULTANT shall keep accurate minutes of all meetings and distribute copies to all attending. These meetings shall be set up through the COUNTY and appropriate COUNTY staff shall attend.

SECTION 6
PAYMENT GUIDELINES AND CATEGORY OF SERVICES

6.1 BASIC SERVICES

The services described and provided for under Sections 2, 3 and Exhibit A shall constitute the Basic Services to be performed by the CONSULTANT under this Agreement.

6.2 OPTIONAL SERVICES

Services noted in Exhibit A of this Agreement as "Optional" shall constitute the Optional Services to be performed by the CONSULTANT under this Agreement. Optional Services shall be rendered by the CONSULTANT only upon written authorization by the COUNTY's Executive Director of the Department of Public Works, or designee.

6.3 CONTINGENCY SERVICES

When authorized in writing by the COUNTY'S Director of Public Works or designee, the CONSULTANT shall furnish services resulting from unforeseen circumstances not anticipated under Basic Services due to minor changes in the PROJECT scope.

Compensation for any Contingency Services assignments shall be negotiated between the COUNTY and the CONSULTANT at the time the need for services becomes known.

6.4 ADDITIONAL SERVICES

When executed by the County Administrator or Board of County Commissioners as an amendment to this Agreement, the CONSULTANT shall provide such additional services as may become necessary because of changes in the Scope of PROJECT. Additional Services shall be classified as any change beyond the Contingency Services upset limit for compensation.

6.5 INVOICING

The CONSULTANT may submit invoices for fees earned on a monthly basis. Such invoicing shall be supported by a Progress Report showing the actual tasks performed and their relationship to the percentage of fee claimed for each phase. Billings within each phase of work shall be for the percentage of work effort completed to date for that phase. The COUNTY shall make payments to the CONSULTANT for work performed in accordance with the Local Government Prompt Payment Act, Section 218.70 et. seq., F.S.

The CONSULTANT shall provide copies of supporting receipts/invoices/billing documentation. Self-performed reimbursable work shall be reimbursed at the firm's standard hourly rates for all related services. A breakdown of man hours and billing rates shall be provided with each invoice. An hourly rate sheet is attached (Exhibit B).

Should an invoiced amount for fees earned appear to exceed the work effort believed to be completed, the COUNTY may, prior to processing of the invoice for payment, require the CONSULTANT to submit satisfactory evidence to support the invoice.

All progress reports shall be mailed to the attention of the designated Project Manager, Department of Public Works, 14 S. Ft. Harrison Ave, Clearwater, FL 33756.

SUPPLIER shall submit invoices for payment due as provided herein with such documentation as required by Pinellas County and all payments shall be made in accordance with the requirements of Section 218.70 *et. seq,* Florida Statutes, "The Local Government Prompt Payment Act." Invoices shall be submitted to the address below unless instructed otherwise on the purchase order, or if no purchase order, by the ordering department:

Finance Division Accounts Payable
Pinellas County Board of County Commissioners
P. O. Box 2438
Clearwater, FL 33757

Each invoice shall include, at a minimum, the Supplier's name, contact information and the standard purchase order number. The County may dispute any payments invoiced by SUPPLIER in accordance with the County's Dispute Resolution Process for Invoiced Payments, established in accordance with Section 218.76, Florida Statutes, and any such disputes shall be resolved in accordance with the County's Dispute Resolution Process.

Fees for contingent or additional services authorized shall be invoiced separately, and shall be due and payable in full upon the presentation of satisfactory evidence that the corresponding services have been performed.

SECTION 7
COMPENSATION TO THE CONSULTANT

7.1 For the BASIC SERVICES provided for in this Agreement, as defined in Section 3.10, the COUNTY agrees to pay the CONSULTANT as follows:

A Lump Sum Fee of: Fifty-Five Thousand Nine Hundred Eighty Eight and 00/100 Dollars ($55,988.00) for the Task 1 – General Task Phase of the PROJECT.

A Lump Sum Fee of: One Hundred Forty-Nine Thousand Thirty-Six and 00/100 Dollars ($149,036.00) for the Task 2 – Roadway Phase of the PROJECT.

A Lump Sum Fee of: One Hundred Nine Thousand Four Hundred Thirty-Seven and 00/100 Dollars (109,437.00) for the Task 3 – Drainage Phase of the PROJECT.

A Lump Sum Fee of: One Hundred Fifty-Three Thousand Five Hundred Eighty-Three and 00/100 Dollars ($153,583.00) for the Task 4 – Environmental Permitting Phase of the PROJECT.

A Lump Sum Fee of: Twenty-Five Thousand Three Hundred Five and 00/100 Dollars ($25,305.00) for the Task 5 – HAER Documentation Phase of the PROJECT.

A Lump Sum Fee of: Nine Thousand Forty-Four and 00/100 Dollars ($9,044.00) for the Task 6 – Utilities Coordination Support Phase of the PROJECT.

A Lump Sum Fee of: One Million Three Hundred Fourteen Thousand One Hundred Ninety-Seven and 00/100 Dollars ($1,314,197.00) for the Task 7 – Structures Phase of the PROJECT.

A Lump Sum Fee of: One Hundred Twenty-Two Thousand Three Hundred Ninety-Nine and 00/100 Dollars (122,399.00) for the Task 8 – Geotechnical Phase of the PROJECT.

A Lump Sum Fee of: Eight Thousand Nine Hundred Eighty-Nine and 00/100 Dollars ($8,989.00) for the Task 9 – Survey Phase of the PROJECT.

A Lump Sum Fee of: Two Hundred Eighteen Thousand Six Hundred One and 00/100 Dollars ($218,601.00) for the Task 10 – Public Involvement Phase of the PROJECT.

A Not to Exceed Amount of: Two Hundred Twenty-Three Thousand Eight Hundred Seventy-One and 00/100 Dollars ($223,871.00) for the Task 11 – Post Design Services Phase of the PROJECT which shall be invoiced on an hourly basis.

A Not to Exceed Amount of: Ten Thousand Three Hundred Eighty-One and 00/100 Dollars ($10,381.00) for the Task 12 – Bid Phase of the PROJECT which shall be invoiced on an hourly basis.

The above fees shall constitute the total not to exceed amount of Two Million Four Hundred Thousand Eight Hundred Thirty-One and 00/100 Dollars **($2,400,831.00)** to the CONSULTANT for the performance of Basic Services. All man hours are billed per the established and agreed hourly rates. The hourly rates are fully loaded and include all labor, overhead, expenses and profit of any nature including travel within the Tampa Bay Metropolitan Statistical area. Travel outside of that area will be reimbursed in accordance with Section 112.061 F.S.

7.2 For the OPTIONAL SERVICES provided for in the Agreement, as defined in Exhibit A, the COUNTY agrees to pay the CONSULTANT as follows:

A Lump Sum Fee of: One Hundred Eighteen Thousand Six Hundred Twenty-Two and 00/100 Dollars **($118,622.00)** for the Task 13a – Bridge Tender control House Design of the PROJECT.

7.3 For any CONTINGENCY SERVICES performed, the COUNTY agrees to pay the CONSULTANT, a negotiated fee based on the assignment, up to a maximum amount not to exceed Two Hundred Fifty Thousand and 00/100 Dollars **($250,000.00)** for all assignments performed.

7.4 Total agreement amount Two Million Seven Hundred Sixty Nine Thousand Four Hundred Fifty-Three and 00/100 Dollars **($2,769,453.00)**.

7.5 For any ADDITIONAL SERVICES, the COUNTY agrees to pay the CONSULTANT a negotiated total fee based on the work to be performed as detailed by a written amendment to this Agreement.

7.6 In the event that this Agreement is terminated under the provisions of this contract the total and complete compensation due the CONSULTANT shall be as established by the COUNTY based on the COUNTY'S determination of the percentage of work effort completed to date of termination.

SECTION 8
PERFORMANCE SCHEDULE

Time is of the essence in this Agreement. The CONSULTANT shall plan and execute the performance of all services provided for in this Agreement in such manner as to ensure their proper and timely completion in accordance with the following schedule:

8.1 The services to be rendered by the CONSULTANT shall be commenced upon receipt from the COUNTY of written "NOTICE TO PROCEED."

8.2 All project phases shall be completed on or before the milestone dates provided in the COUNTY approved PROJECT design schedule referenced in Exhibit A.

8.3 The CONSULTANT shall not be held responsible for delays in the completion of the PROJECT design when the COUNTY causes such delays. The COUNTY reviews related to the above submittals shall not exceed twenty-one (21) days.

SECTION 9
AUTHORIZATION FOR CONTINGENT OR ADDITIONAL SERVICES

9.1 The CONTINGENCY services provided for under this Agreement shall be performed only upon prior written authorization from the Director of Public Works or designee.

9.2 The ADDITIONAL services provided for under this Agreement shall be performed only upon approval of the County Administrator or Board of County Commissioners.

9.3 The CONSULTANT shall perform no services contemplated to merit compensation beyond that provided for in this Agreement unless such services, and compensation therefore, shall be provided for by appropriate written authorization or amendment(s) to this Agreement.

SECTION 10
FIRMS AND INDIVIDUALS PROVIDING SUBCONSULTING SERVICES

The COUNTY reserves the right to review the qualifications of any and all subconsultants, and to reject any subconsultant in a proper and timely manner, deemed not qualified to perform the services for which it shall have been engaged. Any subconsultant not listed as part of the prime consultants team at time of award must be approved by the Director of Purchasing prior to performing any service.

SECTION 11
SATISFACTORY PERFORMANCE

All services to be provided by the CONSULTANT under the provisions of this Agreement, including services to be provided by subcontractors, shall be performed to the reasonable satisfaction of the COUNTY'S Director of Public Works or designee.

SECTION 12
RESOLUTION OF DISAGREEMENTS

12.1 The COUNTY shall reasonably decide all questions and disputes, of any nature whatsoever, that may arise in the execution and fulfillment of the services provided for under this Agreement.

12.2 The decision of the COUNTY upon all claims, questions, disputes and conflicts shall be final and conclusive, and shall be binding upon all parties to this Agreement, subject to judicial review.

SECTION 13
CONSULTANT'S ACCOUNTING RECORDS

13.1 Records of expenses pertaining to all services performed shall be kept in accordance with generally accepted accounting principles and procedures.

13.2 The CONSULTANT'S records shall be open to inspection and subject to examination, audit, and/or reproduction during normal working hours by the COUNTY'S agent or authorized representative to the extent necessary to adequately permit evaluation and verification of any invoices, payments or claims submitted by the CONSULTANT or any of his payees pursuant to the execution of the Agreement. These records shall include, but not be limited to, accounting records, written policies and procedures, subcontractor files (including proposals of successful and unsuccessful bidders), original estimates, estimating worksheets, correspondence, change order files (including documentation covering negotiated settlements), and any other supporting evidence necessary to substantiate charges related to this Agreement. They shall also include, but not be limited to, those records necessary to evaluate and verify direct and indirect costs (including overhead allocations) as they may apply to costs associated with this Agreement. The COUNTY shall not audit payroll and expense records on task assignments paid by lump sum fee.

13.3 For the purpose of such audits, inspections, examinations and evaluations, the COUNTY'S agent or authorized representative shall have access to said records from the effective date of the Agreement, for the duration of work, and until three (3) years after the date of final payment by the COUNTY to the CONSULTANT pursuant to this Agreement.

13.4 The COUNTY'S agent or authorized representative shall have access to the CONSULTANT'S facilities and all necessary records in order to conduct audits in compliance with this Section. The COUNTY'S agent or authorized representative shall give the CONSULTANT reasonable advance notice of intended inspections, examinations, and/or audits.

SECTION 14
OWNERSHIP OF PROJECT DOCUMENTS

Upon completion or termination of this Agreement, all records, documents, tracings, plans, specifications, maps, evaluations, reports and other technical data, other than working papers, prepared or developed by the CONSULTANT under this Agreement shall be delivered to and become the property of the COUNTY. The CONSULTANT, at its own expense, may retain copies for its files and internal use. The COUNTY shall not reuse any design plans or specifications to construct another project at the same or a different location without the CONSULTANT'S specific written verification, adaptation or approval.

SECTION 15
INSURANCE COVERAGE AND INDEMNIFICATION

15.1 The Contractor must maintain insurance in at least the amounts required in the Request for Proposal throughout the term of this contract. The contractor must provide a Certificate of Insurance in accordance with Insurance Requirements of the Request for Proposal, evidencing such coverage prior to issuance of a purchase order or commencement of any work under this Contract. See Section C Insurance Requirements – Attached

15.2 If the CONSULTANT is an individual or entity licensed by the state of Florida who holds a current certificate of registration under Chapter 481, Florida Statutes, to practice architecture or landscape architecture, under Chapter 472, Florida Statutes, to practice land surveying and mapping, or under Chapter 471, Florida Statutes, to practice engineering, and who enters into a written agreement with the COUNTY relating to the planning, design, construction, administration, study, evaluation, consulting, or other professional and technical support services furnished in connection with any actual or proposed construction, improvement, alteration, repair, maintenance, operation, management, relocation, demolition, excavation, or other facility, land, air, water, or utility development or improvement, the CONSULTANT will 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 Agreement.

SECTION 16
EQUAL EMPLOYMENT OPPORTUNITY CLAUSE
FOR CONTRACTS NOT SUBJECT TO EXECUTIVE ORDER 11246

In carrying out the contract, the CONSULTANT shall not discriminate against employee or applicant for employment because of race, color, religion, sex or national origin.

SECTION 17
INDEPENDENT CONTRACTOR STATUS AND COMPLIANCE WITH THE IMMIGRATION REFORM AND CONTROL ACT OF 1986

CONSULTANT acknowledges that it is functioning as an independent contractor in performing under the terms of this Agreement, and it is not acting as an employee of COUNTY. CONSULTANT acknowledges that it is responsible for complying with the provisions of the Immigration Reform and Control Act of 1986, located at 8 U.S.C. Section 1324, et seq., and regulations relating thereto. Failure to comply with the above provisions of this contract shall be considered a material breach and shall be grounds for immediate termination of the contract.

SECTION 18
PROHIBITION AGAINST CONTINGENT FEE

The CONSULTANT warrants that he has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT to solicit or secure this Agreement, and that he has not paid or agreed to pay any person, company, corporation, individual, or firm other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, gift or any other consideration, contingent upon or resulting from the award or making of this Agreement.

SECTION 19
TRUTH IN NEGOTIATIONS

By execution of this Agreement, the CONSULTANT certifies to truth-in-negotiations and that wage rates and other factual unit costs supporting the compensation are accurate, complete and current at the time of contracting. Further, the original contract amount and any additions thereto shall be adjusted to exclude any significant sums where the COUNTY determines the contract price was increased due to inaccurate, incomplete or non-current wage rates and other factual unit costs. Such adjustments must be made within one (1) year following the end of the contract.

SECTION 20
SUCCESSORS AND ASSIGNS

The CONSULTANT shall not assign, sublet, or transfer his interest in this Agreement without the written consent of the COUNTY.

SECTION 21
INTEREST ON JUDGMENTS

In the event of any disputes between the parties to this Agreement, including without limitation thereto, their assignees and/or assigns, arising out of or relating in any way to this Agreement, which results in litigation and a subsequent judgment, award or decree against either party, it is agreed that any entitlement to post judgment interest, to either party and/or their attorneys, shall be fixed by the proper court at the rate of five percent (5%), per annum, simple interest. Under no circumstances shall either party be entitled to pre-judgment interest. The parties expressly acknowledge and, to the extent allowed by law, hereby opt out of any provision of federal or state statute not in agreement with this paragraph.

SECTION 22
TERMINATION OF AGREEMENT

22.1 The COUNTY reserves the right to cancel this Agreement, without cause, by giving thirty (30) days prior written notice to the CONSULTANT of the intention to cancel. Failure of the CONSULTANT to fulfill or abide by any of the terms or conditions specified shall be considered a material breach of contract and shall be cause for immediate termination of the contract at the discretion of COUNTY. Alternatively, at the COUNTY'S discretion, the COUNTY may provide to CONSULTANT thirty (30) days to cure the breach. Where notice of breach and opportunity to cure is given, and CONSULTANT fails to cure the breach within the time provided for cure, COUNTY reserves the right to treat the notice of breach as notice of intent to cancel the Agreement for convenience.

22.2 If COUNTY terminates the Agreement for convenience, other than where the CONSULTANT breaches the Agreement, the CONSULTANT'S recovery against the COUNTY shall be limited to that portion of the CONSULTANT'S compensation earned through date of termination, together with any costs reasonably incurred by the CONSULTANT that are directly attributable to the termination. The CONSULTANT shall not be entitled to any further recovery against the COUNTY, including but not limited to anticipated fees or profit on work not required to be performed.

22.3 Upon termination, the CONSULTANT shall deliver to the COUNTY all original papers, records, documents, drawings, models, and other material set forth and described in this Agreement.

22.4 In the event that conditions arise, such as lack of available funds, which in the COUNTY'S opinion make it advisable and in the public interest to terminate this Agreement, it may do so upon written notice.

SECTION 23
AGREEMENT TERM

This Agreement will become effective on the date of execution first written above and shall remain in effect for **one thousand eight hundred twenty five (1,825)** consecutive calendar days, or five (5) years from the commencement date on the Notice to Proceed unless terminated at an earlier date under other provisions of this Agreement, or unless extended for a longer term by amendment.

SECTION 24
CONFLICT OF INTEREST

24.1 By accepting award of this Contract, the CONSULTANT, which shall include its directors, officers and employees, represents that it presently has no interest in and shall acquire no interest in any business or activity which would conflict in any manner with the performance of services required hereunder, including as described in the CONSULTANT'S own professional ethical requirements. An interest in a business or activity which shall be deemed a conflict includes but is not limited to direct financial interest in any of the material and equipment manufacturers suppliers, distributors, or contractors who will be eligible to supply material and equipment for the PROJECT for which the CONSULTANT is furnishing its services required hereunder.

24.2 If, in the sole discretion of the County Administrator or designee, a conflict of interest is deemed to exist or arise during the term of the contract, the County Administrator or designee may cancel this contract, effective upon the date so stated in the Written Notice of Cancellation, without penalty to the COUNTY.

SECTION 25
ENTIRE AGREEMENT

This Agreement represents, together with all Exhibits and Appendices, the entire written Agreement between the COUNTY and the CONSULTANT and may be amended only by written instrument signed by both the COUNTY and the CONSULTANT.

SECTION 26
PUBLIC ENTITY CRIMES

CONSULTANT is directed to the Florida Public Entity Crime Act, Fla. Stat. 287.133, and Fla. Stat. 287.135 regarding Scrutinized Companies, and CONSULTANT agrees that its bid and, if awarded, its performance of the agreement will comply with all applicable laws including those referenced herein. CONSULTANT represents and certifies that CONSULTANT is and will at all times remain eligible to bid for and perform the services subject to the requirements of these, and other applicable, laws. CONSULTANT agrees that any contract awarded to CONSULTANT will be subject to termination by the County if CONSULTANT fails to comply or to maintain such compliance.

SECTION 27
PUBLIC RECORDS

Contractor acknowledges that information and data it manages as part of the services may be public records in accordance with Chapter 119, Florida Statutes and Pinellas County public records policies. Contractor agrees that prior to providing services it will implement policies and procedures to maintain, produce, secure, and retain public records in accordance with applicable laws, regulations, and County policies, including but not limited to the Section 119.0701, Florida Statutes. Notwithstanding any other provision of this Agreement relating to compensation, the Contractor agrees to charge the County, and/or any third parties requesting public records only such fees allowed by Section 119.07, Florida Statutes, and County policy for locating and producing public records during the term of this Agreement.

If the contractor has questions regarding the application of Chapter 119, Florida Statues, to the Contractor's duty to provide public records relating to this contract, contact the Pinellas County Board of County Commissioners, Purchasing Department, Operations Manager custodian of public records at 727-464-3311, purchase@pinellascounty.org, Pinellas County Government, Purchasing Department, Operations Manager, 400 S. Ft. Harrison Ave, 6th Floor, Clearwater, FL 33756

SECTION 28
GOVERNING LAW AND AGREEMENT EXECUTION

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

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

Hardesty & Hanover, LLC

By: _____
Print Name: James M. Phillips III
Title: Bridge Practice Lead Date: 7/29/16

ATTEST:

By: _____
Print Name: Patricia Sikowski
Title: Notary Date: 7/29/16

(CORPORATE SEAL)

PATRICIA SIKOWSKI
Notary Public State of Florida
Commission # FF 993894
My Comm. Expires Sep 12 2020

PINELLAS COUNTY, by and through its Board of County Commissioners

By: _____
Name CHARLIE JUSTICE Date: 9-14-16
Chairman

ATTEST:
Ken Burke, clerk of the Circuit Court

By: _____
Deputy Clerk Date: 9-14-16

SEAL

APPROVED AS TO FORM

By: _____
Office of the County Attorney

Exhibit A

TASK ORDER
SCOPE OF SERVICES

ENGINEERING CONSULTING SERVICES
Contract No. 145-0317-NC (SS)

For

Beckett Bridge Replacement

County PID: 001037A

Prepared for:

Pinellas County Public Works
Transportation Engineering
14 S. Ft. Harrison Ave.
Clearwater, FL 33756

Prepared by:

Hardesty & Hanover, LLC
18302 Highwoods Preserve Parkway, Suite 114
Tampa, FL 33647

July 19, 2016

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SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES

This Exhibit forms an integral part of the agreement between Pinellas County (hereinafter referred to as the COUNTY) and Hardesty & Hanover, LLC, (hereinafter referred to as the CONSULTANT) relative the transportation facility described as follows:

I. PROJECT TITLE

Professional Engineering Services for the Beckett Bridge Replacement Final Design Including Public Involvement.

II. OBJECTIVE

The objective of this Exhibit is to define the responsibilities of the CONSULTANT and the COUNTY in connection with the design and preparation of a full set of construction plans for the replacement of the Beckett Bridge. The construction plans shall include the roadway transition from the existing roadway typical section to the new typical section through the bridge.

III. PROJECT DESCRIPTION

The CONSULTANT shall provide construction plans and public involvement services for the proposed replacement of the Beckett Bridge in Pinellas County, Florida. The bridge consists of a bascule channel span and fixed concrete approach spans. These two bridge elements are referred to herein as Bridge and/or Structure. The CONSULTANT shall design the replacement in accordance with the recommendations included in the Beckett Bridge PD&E Study and associated public documents, including the Memorandum of Agreement dated February 2, 2015 associated with 36 CFR Part 800 regulation implementing Section 106 of the National Historic Preservation Act, as amended by subsequent recommendations as documented by the public involvement process.

IV. PROJECT SCOPE OF WORK

Pinellas County is seeking the professional services of an engineering consultant to design; prepare plans; acquire permits; develop construction specifications; develop construction cost estimates; and provide engineering services for the replacement of the Beckett Bridge, construction of ADA compliant sidewalks, ramps and driveways along the roadway. Drainage Improvements required to accommodate roadway, sidewalk and bridge construction shall be designed in accordance with Pinellas County Ordinances and Southwest Florida Water Management District (SWFWMD) regulations for differing storm events (i.e., ten year, etc.). All required permits shall be obtained by the engineering CONSULTANT. Plans shall be prepared in accordance with Civil 3D Pinellas County Kit Requirements. The project limits for construction are along Riverside Drive from just west of Chesapeake Drive to just east of Pampas Avenue as required to tie new construction with the existing pavement on each end of the project. The replacement bridge shall be designed for a minimum design service life of 75 years.

Required Deliverables

- Civil 3D file (eTransmit) of construction plans and electronically as PDF's for each transmittal phase. The final plans shall be provided electronically in DWG and PDF format, plus two (2) paper prints (one half size and one full size) signed and sealed by a Professional Engineer certified in the State of Florida.
- All technical specifications required for construction of project – signed and sealed.

The design services include the following Tasks:

1. General Tasks
2. Roadway
3. Drainage
4. Environmental Permitting
5. HAER Documentation
6. Utilities Coordination Support
7. Structures
8. Geotechnical
9. Survey
10. Public Involvement
11. Post Design Services
12. Bidding Phase Services
13. Optional Services

Task 1: GENERAL TASKS

Coordination, Meetings and Field Reviews
The CONSULTANT shall attend regular project meetings including: a pre-design/kick-off meeting; field reviews, project progress meetings, coordination meetings, technical meetings, and utility coordination meetings. The CONSULTANT shall provide all graphics, animations and narrations required to depict the project or any other aspect related to it. The CONSULTANT shall prepare agendas and keep accurate minutes of all meetings and distribute copies to all attendees.

Quality Control Plan
The CONSULTANT shall provide a project specific quality control plan detailing their quality control process and staff performing the work.

Design Criteria Memorandum
The CONSULTANT shall provide a listing of roadway, drainage and structures design criteria and standard values to be utilized for the design development, as well as the source reference documents from which the criteria and standards values are derived and shall be submitted to the COUNTY Project Manager prior to the CONULTANT beginning project design tasks.

The CONSULTANT shall submit a request for variance for design criteria not conforming to the minimum Pinellas County Land Development Codes and AASHTO Greenbook requirements.

Cost Estimate & Quantities
The CONSULTANT shall develop a construction cost estimate for the project. These estimates shall be based on the best engineering assumptions available at the time of the respective plans submittal. CONSULTANT shall provide an updated cost estimate with each phase submittal.

The CONSULTANT shall prepare bid quantities that include all bid items, which comprise the project design. Bid items shall be referenced to COUNTY & Florida Department of Transportation (FDOT) measurement and pay items as applicable. Bid proposal sheets to be included in the contract documents shall be prepared by the COUNTY based on the CONSULTANT's quantities.

Preliminary bid quantities and opinion of probable construction costs shall be submitted with the 60% and 100% design review submittals. Final quantities and final estimate of probably construction costs shall be submitted with the Final design review submittal Construction costs are to be based on the most current cost available at the time of the Final deliverable and obtained from the COUNTY utilizing similar bid unit costs.

Bidability and Constructability Review
The CONSULTANT shall provide bidability and constructability reviews as follows:

- Perform a constructability review as part of the 60% and 100% Plans reviews.
- Perform a bidability review as part of the 100% Plans review.

Specifications Package Preparation Support
The CONSULTANT shall assist the COUNTY in preparation of a complete specifications package. The CONSULTANT shall provide applicable Technical Special Provisions for work not covered by the COUNTY's Technical Specifications or the FDOT Standard Specifications for Road and Bridge Construction and the workbook of implemented modifications. The CONSULTANT will review of all required COUNTY and FDOT supplemental specifications as applicable for all items and areas of work. The CONSULTANT shall utilize the appropriate COUNTY approved pay item structure.

Task 2: ROADWAY

The CONSULTANT shall analyze, document and prepare Roadway plans in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums. The roadway plans shall be prepared in a Plan/Profile format. In recognition of the tight right-of-way constraints the limits of the project shall be minimized to the full extent possible on the bridge approaches. The limits shall be long enough to ensure a safe transition from the existing typical section to the proposed bridge typical section. Consideration for ADA compliant sidewalks, ramps and driveways along both sides of the roadway shall be included. Design variations shall be identified and submitted for approval by the COUNTY during the 30% submittal.

Typical Section:
The typical section shall be consistent with the appropriate requirements of the Pinellas County codes and the Florida Greenbook.

Pavement Design:
The pavement design shall utilize the Pinellas County Public Works Pavement Guidelines dated April 2008.

Reference cross sections:
The CONSULTANT shall establish and develop cross section design files in accordance with the COUNTY Civil 3D CADD manual and FDOT Plans Preparation manual. Assume sections every 50 ft. for earthwork.

Design Exceptions & Variations:
The CONSULTANT shall prepare and document necessary Design Exceptions and Variations in the Roadway Design Documentation

Reference drawing scales:

a. Drainage Map Location Plan: (Scale 1" = 200')
b. Plan and Profiles: (Horizontal Scale 1" = 20' or 40')(Vertical Scale: As appropriate to clearly show information)
c. Plan Sheet: (Scale 1" = 20' or 40')
d. Cross-Sections: (Horizontal 1" = 5')(Vertical 1" = 5') or ((Horizontal 1" = 10')(Vertical 1" = 5')
e. Drainage Structures: (Horizontal 1" = 5')(Vertical 1" = 5').

Soil Boring Locations:
The CONSULTANT shall indicate the locations of soil borings on the plans.

Traffic Control Analysis and Plans:

The CONSULTANT shall design a safe and effective Traffic Control Plan to move vehicular traffic during all phases of construction. Traffic control phasing shall be developed in accordance with recommendations contained in the Beckett Bridge PD&E Study. It is anticipated that the construction will require a detour of the bridge. Detour routes shall be prepared and presented to the public depicting the traffic control scheme. Components of the Traffic Control Plan anticipated are as follows:

- General Notes
- Allowable staging areas in the ROW
- Detour and Maintenance of Traffic (MOT) Plans
- Signing Details

Horizontal and Vertical Master Files:
The CONSULTANT shall design the geometrics using the design standards that give proper consideration to the design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, aesthetics, pedestrian and bicycle concerns, ADA requirements, elder road user policy, and scope of work. At a minimum, the Florida Greenbook Standards (2013) shall be met.

Sidewalk and bridge grades shall be limited to 5% maximum to comply with Americans with Disabilities Act (ADA) guidelines for walkways without landings. The design profile and typical section shall be such that existing driveways and intersections are maintained.

Roadway and Signing and Marking Plans:
The CONSULTANT shall analyze, document, and prepare Signing and Pavement Marking plans in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums. The CONSULTANT shall develop roadway plan sheets necessary to define the work on the roadway approaches to support the bridge replacement. Plan sheet elements anticipated for the project are as follows:

- Key Sheet
- General Notes
- Typical Sections
- Detail Sheets
- Summary of Quantities
- Plan/Profile Sheet
- Cross Sections
- Driveway Sections/Profiles
- Traffic Control Plans
- Utility Adjustment Sheet
- Signing and Pavement Marking Plan

Design Documentation:
The CONSULTANT shall provide Design Documentation to the COUNTY with each submittal consisting of roadway design calculations, quantity backup printouts, and other supporting documentation developed during the development of the plans. The design calculations submitted shall adequately address the complete design of all roadway elements. These calculations shall be neatly and logically presented on digital media or, at the COUNTY's request, on 8 ½"x11" paper and all sheets shall be numbered. A cover sheet indexing the contents of the calculations shall be included and the CONSULTANT engineer shall sign and seal that sheet. All computer programs and parameters used in the design calculations shall include sufficient backup information to facilitate the review task.

Field Reviews:
The CONSULTANT shall perform a field review of the project site.

Technical Meetings:
The CONSULTANT shall attend technical meetings necessary to coordinate the development of the roadway and bridge plans. The CONSULTANT shall provide a meeting agenda for COUNTY review 2 business days prior to each meeting and shall provide written minutes of each meeting within 7 business days of the meeting for COUNTY approval prior to distribution to attendees. Meetings anticipated are as follows:

- Kickoff meeting
- Phase review meetings
- Utility Coordination meetings

Task 3: DRAINAGE

The CONSULTANT shall analyze and document drainage tasks in accordance with applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums that are appropriate for the project. All conceptual design work shall comply with the requirements of the appropriate regulatory agencies. The CONSULTANT shall coordinate fully with the appropriate permitting agencies and the COUNTY's staff. All activities and submittals should be coordinated through the COUNTY's Project Manager. The work shall include engineering analysis for any or all of the following:

Bridge Hydraulics:
Prepare a Bridge Hydraulics Memorandum for the bridge structure crossing Whitcomb Bayou. The CONSULTANT shall perform the following proposed bridge hydraulic modeling effort for this project:

- Data collection- perform field review; review Bridge Inspection Reports; review Bridge Scour Evaluation Reports (phase I through IV if available); obtain scour, drainage and flooding history from maintenance staff; research flooding history, including storm surges which the bridge has been exposed to; review existing bridge plans and repair plans for substructure location and geometry
- Compute the hydrology, including design discharge, storm surge hydrograph and flood stage elevations to be used in the hydraulic calculations.
- Construct an unsteady state, one- (or two-) dimensional hydraulic model. The model shall be utilized to simulate the storm surge through the bridge opening and compute the velocities and hydraulic properties under the design condition.
- Establish the proposed bridge minimum low member elevation and recommend the bridge length that will perform in a manner equal to or greater than the existing bridge structure.
- Perform a preliminary stream stability assessment per the FHWA Engineering Circular HEC 20, entitled Stream Stability at Highway Structures.
- Compute predicted scour based on the FHWA Engineering Circular HEC 18, entitled Evaluating Scour at Bridges and the FDOT Scour Manual. Calculations include determination the sediment transport regime (e.g. live-bed vs. clear water scour), based on the project area soils and HEC-RAS hydraulic parameters. Scour predictions shall be performed for the 100-year and 500-year storm event.
- Evaluate the deck drainage to ensure gutter spread does not exceed allowable width. Due to the bridge length, scuppers shall not be allowed and inlet recommendations shall be determined for the bridge ends.
- Prepare a Bridge Hydraulics Recommendation Sheet (BHRS).

The effect of the storm surge on this structure is anticipated to be limited. The surge will be constrained as it flows from the Gulf into Anclote River, as well as when it is redirected into Whitcomb Bayou before reaching the bridge. The surge will also be dissipated along Cross Bayou since this body of water does not have an outlet. Whitcomb Bayou will experience a tidal surge.

The effect of future sea level rise (SLR) should be evaluated in accordance with the Tampa Bay Climate Science Advisory Panel's Recommended Projection of Sea Level Rise in the Tampa Bay Region (August 2015) and discussed in the Design Documentation Report.

Study of Flooding Conditions at the West End of the Bridge:
The CONSULTANT shall review and analyze the basin draining toward the intersection of Riverside Drive and Chesapeake Drive (with extents approximately 500 feet west of the intersection along Riverside Drive, north of the intersection to Doric Court, and to the pond located approximately 300 feet south of the intersection) and prepare a brief memorandum outlining solutions, including incorporation of flows into the project storm sewer. COUNTY concurrence on the approach is needed before final design of the project drainage systems.

Design of Stormsewer System:
The CONSULTANT shall design roadway stormsewer system at bridge approaches and bridge deck drainage to accommodate the new bridge footprint. It is assumed that no stormwater management facilities shall be required on the bridge approaches.

Technical Drainage Memorandum
The CONSULTANT shall prepare a draft Technical Drainage Memorandum to accompany the 60% submittal. The Final Technical Drainage Memorandum shall be submitted with the 100% submittal.

Drainage Plans:
The CONSULTANT shall develop drainage plan sheets necessary to define the work on the roadway approaches to support the bridge replacement. Plan sheet elements anticipated for the project are as follows:

- Drainage Maps
- Drainage Summary Sheets
- Drainage Structure Sections
- Erosion Control Plans, Notes and Details
- Storm Water Pollution Prevention Plan

Drainage Design Documentation Report:
Compile drainage design documentation into report format. Include documentation for all of the drainage design tasks and associated meetings and decisions.

Field Reviews:
The CONSULTANT shall perform a field review of the project site.

Technical Meetings:
The CONSULTANT shall attend technical meetings necessary to coordinate the development of the roadway and bridge plans. The CONSULTANT shall provide a meeting agenda for COUNTY review 2 business days prior to each meeting and shall provide written minutes of each meeting within 7 business days of the meeting for COUNTY approval prior to distribution to attendees. Meetings anticipated are as follows:

- SWFWMD Pre-Application Meeting (1)
- Utility Coordination Meeting (1)
- COUNTY Coordination Meetings (2)

Task 4: ENVIRONMENTAL PERMITTING

The CONSULTANT shall prepare permit applications, technical data and supporting documentation for all permits to be submitted by the COUNTY. The CONSULTANT shall acquire all state and federal permits for the proposed project. Upon completion of the 30% design phase, the CONSULTANT shall contact the COUNTY Permit Coordinator to schedule pre-application meetings with applicable permitting agencies to identify specific permitting requirements for the project. The CONSULTANT shall attend all pre-application meetings with COUNTY staff. The CONSULTANT shall provide a pre-application meeting agenda to COUNTY for review 2 business days prior to each meeting, and shall provide written minutes of each meeting within 7 business days of the meeting for COUNTY approval prior to distribution to attendees.

The CONSULTANT shall visit the project site with COUNTY and respective regulatory agencies, as necessary, to determine the applicability of permits. The CONSULTANT shall establish the landward extent of state and federal jurisdictional wetlands and surface waters pursuant to all current state and federal regulations and standards. The CONSULTANT shall conduct an environmental analysis and in-water surveys to identify endangered or threatened species, species of special concern, and the presence or absence of submerged aquatic vegetation, within the proposed project limits. The CONSULTANT shall prepare a Technical Memorandum for the COUNTY detailing the results of the environmental analysis and in-water surveys.

The CONSULTANT shall prepare assessments of the value of wetlands proposed for impact. Assessments shall be done using the current Uniform Mitigation Assessment Methodology (UMAM), or other current method, as required by SWFWMD and the USACE. The CONSULTANT shall conduct field reviews with COUNTY and SWFWMD/USACE staff to verify the limits of the surveyed jurisdictional limits. If requested by the permitting agencies, a signed & sealed Specific Purpose Survey shall be obtained by the CONSULTANT and provided to COUNTY.

The CONSULTANT shall prepare application forms, narratives, calculations, exhibits, permit drawings, etc. necessary for all permit application submittals. The CONSULTANT shall submit the completed draft permit applications to the COUNTY for review and signature after receiving and incorporating comments from the 60% design QC review, unless agreed upon otherwise by the COUNTY. The following permits are anticipated:

a. Statewide Environmental Resource Permit from Southwest Florida Water Management District
b. United States Coast Guard (USCG) Bridge Permit
c. United States Army Corps of Engineers (USACE), Nationwide 15

The CONSULTANT shall prepare all required documentation necessary for a USCG Bridge Permit application.

The CONSULTANT shall develop conservation measures to mitigate for impacts to protected species and management strategies to insure that protected species are not adversely affected during construction. The CONSULTANT shall prepare all documentation necessary to facilitate Interagency Cooperation under the Endangered Species Act: Section 7 Consultation.

The CONSULTANT shall coordinate with COUNTY Permit Coordinator until all permits are obtained. The CONSULTANT shall prepares responses to all agency requests for additional information (RAI), including completion of design revisions that may be required to secure the required permits, and provide draft response packages to COUNTY Permit Coordinator. The CONSULTANT shall coordinate with COUNTY Permit Coordinator to meet with the regulatory agencies as necessary to resolve permitting issues.

If mitigation for wetland impacts is required, CONSULTANT shall prepare mitigation planting plans, narratives, and other documentation that may be required by the permitting agencies. CONSULTANT shall coordinate with COUNTY Permit Coordinator to submit mitigation plans to the permitting agencies.

Although not required by permitting agencies, COUNTY requires all wet littoral ponds be planted. As such, CONSULTANT shall prepare planting plans for wet littoral ponds and provide to COUNTY Permit Coordinator. This deliverable shall be separate from, and in addition to, the construction plans.

The CONSULTANT will provide to the COUNTY, as-built survey requirements for Permit Certification prior to Final Plans Submittal.

Task 5: HAER DOCUMENTATION

Prior to the salvage of the engineering elements and demolition of the bridge, CONSULTANT will perform the following documentation of the Beckett Bridge (FDOT Bridge No. 154000; FMSF No. 8PI12017) in accordance with Historic American Engineering Record (HAER) standards;

Drawings – Select drawings of the existing bridge plans, as available, will be scanned and provided in an acceptable format. CONSULTANT will coordinate with the COUNTY to locate bridge drawings and duplicate them. Bridge documentation that took place during the PD&E will be utilized as a source for this task.

Photographs – CONSULTANT will make photographs with large-format negatives of context and views from all sides of the bridge and approaches, roadway and deck views, and noteworthy features and details. All negatives and prints will be processed to meet archival standards. One photograph of a principal elevation shall include a scale.

Written Data – CONSULTANT will prepare a report with narrative description of the bridge, summary of significance, and historical context (primarily derived from the 2012 Cultural Resource Assessment Survey).

Task 6: UTILITIES COORDINATION SUPPORT

Utility Coordination:
The COUNTY is responsible for coordinating its design work with public and private Utility Agency/Organization (UAO) having existing and/or planned facilities within the limits of the project.

The COUNTY shall provide the UAO's project plans and/or Civil 3D files at the 60% and 100% complete design phases, as drafted by the CONSULTANT. In the event that the project files are larger than UAO's email servers allow (Generally 10MB), the CONSULTANT shall be responsible for electronic plan and/or Civil 3D file transfer as directed by the COUNTY. At the 60% complete design phase, the UAO's shall be instructed to return a set of plans to the COUNTY showing their utility relocations/adjustments, new facility designs, existing utility facilities to remain and utility facilities to be removed. The COUNTY's and CONSULTANT's utility coordination responsibilities shall continue throughout the design process to assist with resolving potential utility conflicts.

Utility Adjustment Plans:
The CONSULTANT shall prepare utility adjustment sheets as part of the project plan set to show existing public and private utility facilities remain in place, new utility facilities to be constructed and utility facilities to be removed. Utility adjustment plans shall be prepared on screened reproducible copies of the plan and profile sheets, cross section sheets, drainage structure sheets and signalization plans if applicable. The CONSULTANT is to identify all potential utility conflicts or constructability issues (i.e. OSHA clearance issues with equipment relating to overhead power lines) based on the data provided within the Survey, horizontal and vertical field investigations and information provided by the UAO's. The 100% design review submittal shall include final utility adjustment plans that reflect the final disposition of all public and private utilities. Any subsequent utility conflicts are to be resolved and all final design revisions complete at the final design submittal.

Utility Coordination Meetings:
The CONSULTANT shall attend utility coordination meetings to be held after the 60% design submittal and prior to the 100% final design submittal. The COUNTY shall be responsible for organizing these meetings. The COUNTY shall prepare formal correspondence issuing project plans and/or Civil 3D files as outlined above. The COUNTY shall moderate the meeting. The CONSULTANT shall discuss the project design (roadway, sidewalk, drainage, etc.) with particular emphasis on potential utility conflicts and constructability concerns. The CONSULTANT shall prepare detailed minutes and distribute to all attendees. Representation at the meeting should consist of internal COUNTY stakeholders, CONSULTANT engineering staff and UAO's with facilities located and/or planned within the project limits.

The CONSULTANT shall coordinate with the COUNTY and UAO's to determine areas of apparent conflict or constructability concerns and request Subsurface Utility Engineering (SUE) activities (Conflict Resolution) to confirm whether or not a conflict exists and to what degree. A conflict matrix itemizing utility conflicts by company shall be prepared by the CONSULTANT and submitted to the COUNTY. The COUNTY shall distribute to necessary UAO's. Four weeks on average shall be allowed for each UAO to respond with appropriate resolution.

Final Arrangements to Utilities (Final Plans):
The COUNTY shall transmit the necessary legal drafts and documents to each UAO as required.

Review and Acceptance:
The CONSULTANT shall be responsible for making all necessary reviews and acceptance of utility related materials including but not limited to, Utility Right of Way Permitting, Joint Project Agreement Plans and technical specifications.

Certification for FDOT LAP Agreement Projects:
The COUNTY shall certify the following: All utility negotiations (full exception of each agreement, technical special provisions, etc.) have been completed with arrangements made for utility work to be undertaken and completed as required for proper coordination with the physical construction schedule.

OR

An on-site inspection was made and no utility relocation work shall be involved.

OR

Plans were sent to the UAO's and no relocations/adjustments are required.

Task 7: STRUCTURES

Bridge Design:

The CONSULTANT shall design a replacement bridge in accordance with the recommendations of the completed Beckett Bridge PD&E Study, as documented in the Preliminary Engineering Report and Memorandum of Agreement (MOA) with the State Historic Preservation Officer (SHPO). The replacement bridge will be approximately the same length as the existing bridge and not restrict the existing waterway.

The CONSULTANT shall design the replacement bridge in accordance with the Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (commonly known as the "Florida Greenbook".) and the FDOT Structures Manual as appropriate, including the following referenced standards, guidelines and/or manuals:

Americans with Disabilities Act (ADA) Standards for Accessible Design
American Association of State Highway Transportation Officials (AASHTO) – Roadside Design Guide
AASHTO – A Policy for Geometric Design of Highways and Streets
AASHTO – Highway Safety Manual
Federal Highway Administration (FHWA) - Manual on Uniform Traffic Control Devices (MUTCD)
FDOT Bridge Hydraulics Handbook
AASHTO AWS D1.1/ANSI Structural Welding Code – Steel
AASHTO D1.5/AWS D1.5 Bridge Welding Code
American Institute of Steel Construction (AISC) Manual of Steel Construction
AASHTO Load and Resistance Factor Design (LRFD) Bridge Design Specifications and Interims
AASHTO LRFD Movable Highway Bridge Design Specifications and Interims
AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, and Interims.
AASHTO Manual for Condition Evaluation and Load and Resistance Factor Rating (LRFR) of Highway Bridges
FDOT Bridge Load Rating Manual
Florida Building Code (for Control House/Kiosk Facilities)
National Fire Protection Association (NFPA) - Life Safety Code
NFPA 70 - National Electrical Code
NFPA 101 - Life Safety Code

The replacement bridge shall include the following features:

Movable Span – The Bridge will feature a single-leaf, rolling-lift bascule span over the main channel as required by the MOA with SHPO.

Control System – Relay based control system without a programmable logic controller. The elevation of the control system shall be sufficiently high to prevent water intrusion.

Approach Spans - Fixed concrete approach spans.

The CONSULTANT will prepare and submit for review a Bridge Development Report addressing the following:

Movable Span Layout – movable span deck type (deck to have a solid, slip resistant riding surface for vehicles, cyclists and pedestrians), structural framing system, typical section, preliminary counterweight sizing, preliminary sizing of rolling-lift tread and track system, evaluation of span drives (conventional span mounted machinery with rack/pinion drive vs pier mounted machinery with crank/link drive).

Tender's Facilities Study – evaluate control house/kiosk vs deck level control station.

Approach Span Type and Layout – evaluate precast prestressed concrete slabs and precast prestressed concrete beam superstructures of various span lengths. Consider cost, duration of construction, long term serviceability and aesthetics.

Substructure – evaluate bents and pier of either cast-in-place or precast concrete construction. Consider opportunities for aesthetic implementation and expedition of construction.

Foundation Type – evaluate drilled shafts and driven steel pipe pile foundations for the approach spans, bascule pier, and rest pier.

Construction Cost Estimates – prepare cost estimates for comparison and evaluation of alternatives.

Construction & Detour Durations – evaluate alternatives with regard to reducing the detour duration.

Report – summarize BDR in a concise report with recommendations for the structure type and arrangement. Address aesthetics, cost, reliability, durability, maintainability, constructability, safety and detour duration.

The CONSULTANT shall prepare bridge plans sheets necessary to define the bridge replacement work. Plan sheet elements anticipated for the project are as follows:

- Index of Drawings
- General Notes
- Summary of Quantities
- General Plan & Elevation(s)
- Bridge Hydraulics Recommendation Sheet
- Report of Core Borings
- Foundation Layout(s)
- Fender System Layout & Details
- Demolition Plans
- Traffic Rail Details
- Pedestrian Rail Details
- Bulkhead Plans & Details
- Abutment Details
- Pier Details
- Finish Grade Elevations
- Superstructure Plans and Details
- Bearing Details
- Joint Details
- Bascule Pier Plans & Details

- Bascule Leaf Plans & Details
- Bascule Machinery Plans and Details
- Electrical Power & Control Plans & Details
- Retaining Wall Plans & Details
- Bridge Architectural Plans and Details

The CONSULTANT shall provide Design Documentation to the COUNTY with each submittal consisting of structural design calculations and other supporting documentation developed during the development of the plans. The design calculations submitted shall adequately address the complete design of all structural elements. These calculations shall be neatly and logically presented on digital media or, at the COUNTY's request, on 8 ½"x11" paper and all sheets shall be numbered. The final design calculations shall be signed and sealed by a Florida-licensed professional engineer. A cover sheet indexing the contents of the calculations shall be included and the engineer shall sign and seal that sheet. All computer programs and parameters used in the design calculations shall include sufficient backup information to facilitate the review task.

The CONSULTANT's Plans shall incorporate measures to maintain passage of boats currently requiring an open center span.

The CONSULTANT's Plans shall make provisions for the erosion protection of the bridge approaches and embankments.

Load Rating:
The CONSULTANT shall complete the bridge load rating of the final bridge configuration in accordance with the FDOT's latest Bridge Load Rating Procedures. The FDOT Computer Load Rating Programs may be used for the bridge types and components they are capable of rating. The load rating documentation must include all final calculations, computer printouts and an FDOT Load Rating Summary Sheet. The Load Rating documentation shall be submitted with the Final Plans Package.

Technical Special Provisions:
The CONSULTANT shall provide Technical Special Provisions for all bridge items of work not covered by the FDOT's Specifications. Technical Special Provisions shall be submitted on standard size sheets. The final Technical Special Provisions shall be signed and sealed by a Florida-licensed professional engineer.

Task 8: GEOTECHNICAL

Geotechnical services for this task shall be provided by a SUBCONSULTANT to the CONSULTANT as previously approved by the COUNTY. Geotechnical services provided by the CONSULTANT shall support the design of proposed improvements and shall consist of the following:

- Perform a site reconnaissance.
- Coordinate boring locations with utility providers.
- Perform test borings to support the project roadway, wall and drainage improvements
- Perform up to six (6) Standard Penetration Test (SPT) bridge borings located in the waterway (4) and at the bridge abutments (2) to a maximum depth of 100 feet or into 30 feet of refusal (50 blows per 6 inches of penetration) subsoil conditions.
- Obtain Rock Cores from the limestone substrata.
- Obtain sediment samples from Whitcomb Bayou for gradation and corrosion parameter testing.
- Obtain asbestos samples, if possible, from bridge bearing pads.
- Prepare a geotechnical report that summarizes the services provided, and provides geotechnical engineering evaluations and recommendations to support the bridge design.

Task 9: SURVEY

The COUNTY Surveyor shall provide all existing survey data. The COUNTY shall re-establish survey control for the contractor during construction if necessary. COUNTY to provide all additional topo surveys as required for final design. COUNTY to provide sketches and legal descriptions for right of way acquisition. COUNTY to perform all designates and locates for utilities other than subaqueous. CONSULTANT to provide SUE for determining existing subaqueous UAO locations crossing the waterway.

Task 10: PUBLIC INVOLVEMENT

The CONSULTANT will organize and coordinate meetings with an Aesthetic Committee, consisting of representatives of the COUNTY, City of Tarpon Springs, Tarpon Springs Historic Society and US Coast Guard, as well as other stakeholders identified by the COUNTY. Meetings shall consist of Board of County Commissioner (BOCC) Meetings, Aesthetic Committee workshops, small group meetings and a Public Workshop.

County Commission Meetings – The CONSULTANT will attend Board of County Commissioner Meetings as needed throughout the project to assist the COUNTY's Project Manager in updating the Board on project status and answer technical questions. For scoping purposes attendance at six BOCC meeting is anticipated.

Aesthetic Committee Workshops – The CONSULTANT will prepare graphics and present project information, record comments and summarize responses as detailed below.

Small Group Meetings - The CONSULTANT will attend small group meetings and be prepared to discuss the project. Graphics for small group meetings will be those prepared for the Workshops or similar. For scoping purposes, attendance at six small group meetings is anticipated.

The CONSULTANT shall perform services necessary to facilitate the COUNTY's ability to hold a public meeting with local residents and stakeholders to review and obtain public input regarding the proposed design. Services for the public meeting are as follows:

Workshop Graphics – The CONSULTANT shall prepare presentation boards for the public workshop as follows:

- Typical Section Board
- Detour Board
- Existing Photos Board
- Aesthetic Renderings

The CONSULTANT shall provide reduced draft plots of all workshop graphics to the COUNTY for review prior to the workshop.

- Newsletter/Fact Sheet Preparation – The CONSULTANT shall prepare a Newsletter/Fact Sheet for the public workshop that shall provide recipients with information on the project, alternatives considered and details regarding the public workshop date and location. The CONSULTANT shall provide a copy of the Newsletter/Fact Sheet to the COUNTY for review and approval 45 days prior to the public workshop. The CONSULTANT shall perform the mail out 30 days prior to the public workshop.
- Workshop Coordination – The CONSULTANT shall coordinate with COUNTY staff regarding selection of an appropriate site for the workshop, COUNTY required notifications and mailing lists.
- Pre-Workshop Coordination Meeting - At least 15 business days prior to the public workshop, the CONSULTANT shall attend a coordination meeting with COUNTY staff to review the workshop graphics to be presented at the public workshop.

Staff from the CONSULTANT shall attend the public workshop to provide information to residents and present information as directed by the COUNTY. A minimum of three staff from the CONSULTANT shall attend the meeting with one of those staff anticipated to be an administrative assistance to operate the sign-in table. Attendance by the CONSULTANT's project manager is mandatory.

For the workshop the CONSULTANT shall prepare the following materials:

- Sign-in Sheets
- Comment Forms
- Newsletters/Fact Sheets
- Name badges for COUNTY and CONSULTANT attendees

The CONSULTANT shall conduct the workshop in an interactive meeting with the public.

The CONSULTANT shall document and provide a summary of the public workshop to the COUNTY.

Following the public workshop, the CONSULTANT shall submit an evaluation of the Public's selected alternative summarized as an Addendum to the Phase 2 Bridge Replacement Study Report. The Addendum should include a Workshop Summary that includes a minimum of the following:

- A brief narrative summary of the information provided at the workshop
- Copies of all workshop materials presented to the public.
- A copy of all comments provided by the public.

The CONSULTANT shall provide web page support throughout the project as necessary, including but not limited to, supporting a public-facing website to provide a historic account of the bridge.

Aesthetics Development:
The COUNTY will identify the membership of a project Aesthetics Committee. The CONSULTANT shall coordinate with the Aesthetics Committee to develop a site specific, context sensitive solution. The following key steps will be implemented by the CONSULTANT to engage the local stakeholder group and establish stakeholder buy-in.

a) Structural Type Analysis: The CONSULTANT will analyze different structural configurations and make recommendations for the project. The preferred structural form will be then introduced to the stakeholders along with different thematic and architectural detailing options to ensure that the ultimate bridge that is delivered meets their vision for the aesthetic of the project.

b) Aesthetic Themes Development: CONSULTANT will work with the chosen bridge type to develop an array of potential architectural themes for the project. Those themes will include such as neoclassical architecture, harmony with nature, and modern design as identified in meeting(s) with the Aesthetics Committee. Development architectural themes will include schematic renderings which depict how each one of the themes can manifest itself within this particular setting. The CONSULTANT will present the schematic renderings to the Aesthetic Committee and provide them an opportunity to review and comment on this information so that the design team can arrive at an applicable theme for the project.

c) Stakeholder Review Period: The CONSULTANT will solicit input and consensus during the Aesthetic Committee meetings. The CONSULTANT will distribute meeting information, including the different proposed themes and renderings to the COUNTY, in advance of meetings to allow for review.

The CONSULTANT shall develop and implement a context sensitive and aesthetic bridge design that is derived primarily from the form, scale and proportion of the structure and appropriate use of detailing, textures and colors. The level of aesthetics shall be Level Two in accordance with the FDOT PPM, Chapter 26. The design should feature proper relationships of key dimensions such as the placement, size and geometry of the structural members. The following references may be used as guidance:

- Aesthetic Bridge Users Guide, Maryland Department of Transportation
- Aesthetic Guidelines for Bridge Design, Minnesota Department of Transportation

The COUNSULTANT shall identify representative, significant engineering elements from the Beckett Bridge suitable for salvaging. In consultation with the COUNTY and with input from the Aesthetics Committee, these elements may be incorporated into the final design of the bridge. The COUNTY has the final say as to what elements shall be incorporated into the final design and which elements shall be salvaged for display.

The CONSULTANT shall also ensure the historic bridge plaque is incorporated into and constructed as a part of the new bridge and shall be visible to pedestrians.

Aesthetics Meetings:
The CONSULTANT shall coordinate and attend the following meetings prior to the Public Workshop:

a) 1st Aesthetics Committee Meeting: During this meeting CONSULTANT and COUNTY will have an interactive discussion with the stakeholders regarding the thematic applications for the project and seek their opinions and input. Stakeholders will be encouraged to share their opinions and the opinions of their constituent groups. CONSULTANT will discuss how themes might be combined or refined in order reflect the combined stakeholders vision. The goal of this meeting is to establish an overarching theme and/or vision statement for the project.

   Develop Large-scale Aesthetic Options: Following the 1st Aesthetic Committee meeting, the CONSULTANT will develop options which combine the bridge types selected for the project and the architectural theme. The focus of this exploration will be centered on the major architectural components such as piers, superstructure, overlooks, colors, textures, and overall form. CONSULTANT will also begin to introduce some secondary aesthetic elements such as railing and surface treatments for review with the stakeholders.

   Stakeholder Review Period: Information related to the upcoming stakeholder meeting will be circulated in advance so that the stakeholders can share this information with their constituent groups. The CONSULTANT will outline what decisions will be made at the upcoming meeting so that the stakeholders can formulate opinions prior to arriving at the meeting. During this review time the CONSULTANT will be available to discuss the information with stakeholders to ensure that the stakeholders understand the information and find out if there are any additional questions that can be answered in advance of the meeting.

b) 2nd Aesthetics Committee Meeting: This meeting will consist of an interactive conversation about the material manifestation of primary structural and architectural components for the bridge. Focus will be centered on the kinds of experiences that that are to be created for each of the different user types. For example, the discussions will examine how pedestrians walking on top of the bridge will experience and interact with the structure and the surrounding environment.

Develop Small-scale Aesthetic/ Lighting Options: The CONSULTANT's architectural design team will develop multiple options for architectural detailing including barriers, pedestrian railings, pathway lighting, aesthetic lighting, signage, and seating. The CONSULTANT will prepare an assessment of sidewalk lighting on the bridge, including options and cost. These options will build upon the theme and vision of the stakeholders to ensure a meaningful user experience.

Stakeholder Review Period: The information in support of the upcoming stakeholders meeting will be circulated in advance. During this review time the CONSULTANT will be available to discuss the information with stakeholders to ensure that the stakeholders understand the information and find out if there any additional questions that can be answered in advance of the meeting.

c) 3rd Aesthetics Committee Meeting: During this meeting the CONSULTANT will review the options for architectural details with the Aesthetics Committee. The discussion will center on how details such as railing, lighting and surface treatments can affect the kind of experience that will be realized by the users on the bridge. At the completion of this meeting, the direction will be set for final details of the structure.

Finalize Aesthetics Plan: The CONSULTANT will prepare an aesthetics plan that will document the decisions that were made by the stakeholders during this process. It will also serve as a guide for the team during final design and construction to ensure that the aesthetic goals and intent of the project are met. This document will include renderings which represent the colors, finishes, textures and forms that were developed with the stakeholders.

d) 4th Aesthetic Committee Meeting: This will be the final stakeholder meeting and is an opportunity to present the aesthetics plan and the project in its totality to the stakeholder group. This is an important final step because to validate the aesthetic decisions that have been made to this point.

Task 11: POST DESIGN SERVICES

As authorized, the CONSUTLANT shall perform post design services, including plans updates, review of submittals including requests for information, non-conformance reports, shop drawings and construction procedures, attend COUNTY pre-construction meeting, participate in monthly construction progress meetings, and witness bridge commissioning.

This task shall be compensated on an hourly basis with a limit not to exceed as shown in Section V.

Task 12: BID PHASE SERVICES

The CONSULTANT shall prepare any required addenda to construction plans and specifications on the PROJECT during the bidding phase affecting the CONSULTANT's plans and specifications.

The CONSULTANT shall compare contractor's bids, review bids, and provide written recommendation for award of the construction contract within ten (10) days of bid opening.

This task shall be compensated on an hourly basis with a limit not to exceed as shown in Section V.

Task 13: OPTIONAL SERVICES

The following tasks are optional services to be provided by the CONSULTANT upon authorization by the COUNTY Director of Public Works or designee. Optional Service tasks cannot be executed without written authorization from the COUNTY's Director of Public Works or designee.

Task 13a: If authorized, the CONSULTANT shall prepare final designs for a bridge tenders control house/kiosk. If required, this task shall be compensated as a Lump sum.

V. COMPENSATION

For the services performed under this scope of services the CONSULTANT shall be compensated based on the Lump Sum amounts as detailed in Exhibit B – Estimate of Work Effort and Cost.

Task 1	General Tasks	$ 55,988.00	Lump Sum
Task 2	Roadway	$ 149,036.00	Lump Sum
Task 3	Drainage	$ 109,437.00	Lump Sum
Task 4	Environmental Permitting	$ 153,583.00	Lump Sum
Task 5	HAER Documentation	$ 25,305.00	Lump Sum
Task 6	Utilities Coordination Support	$ 9,044.00	Lump Sum
Task 7	Structures	$ 1,314,197.00	Lump Sum
Task 8	Geotechnical	$ 122,399.00	Lump Sum
Task 9	Survey	$ 8,989.00	Lump Sum
Task 10	Public Involvement	$ 218,601.00	Lump Sum
Total Lump Sum Tasks		$ 2,166,579.00	Lump Sum
Task 11	Post Design Services – Not to Exceed	$ 223,871.00	Hourly Basis
Task 12	Bid Phase Services - Not to Exceed	$ 10,381.00	Hourly Basis
Total Not to Exceed Tasks		$ 234,252.00	Hourly Basis
Total Contract		$ 2,400,831.00	
OPTIONAL SERVICES			
Task 13a	Bridge Tender Control House/Kiosk Design	$ 118,622.00	Lump Sum
Total Contract + Optional Services		$ 2,519,453.00	

VI. CONTINGENCY SERVICES

When authorized in writing by the COUNTY's Director of Public Works or designee, the CONSULTANT shall furnish services resulting from unforeseen circumstances not anticipated under Basic Services due to minor changes in the PROJECT scope. Contingency Services may also include, but not be limited to, additional BOCC workshop or presentation(s) and additional public meetings.

Compensation for any Contingency Services assignments shall be negotiated between the COUNTY and the CONSULTANT at the time the need for services becomes known.

VII. ADDITIONAL SERVICES

When executed by the County Administrator or Board of County Commissioners as an amendment to this Agreement, the CONSULTANT shall provide such additional services as may become necessary because of changes in the Scope of PROJECT. Additional Services shall be classified as any change beyond the Contingency Services upset limit for compensation.

IX. SCHEDULE

The conceptual plan and preliminary design and construction cost opinion shall be provided to the COUNTY within three weeks from notice to proceed. The CONSULTANT shall also provide a Microsoft Project Schedule with updates to be included with each monthly invoice submittal.

CONSULTANT's services shall commence upon receipt of written notice to proceed issued by COUNTY. CONSULTANT shall complete the final design in accordance with the following or better project schedule:

PROJECT SCHEDULE

Milestone	Due Date After receive the NTP & Survey
15% Line & Grade Submittal 30 day COUNTY review	75 Calendar Days
30% Bridge & Roadway Plans & BDR	120 Calendar Days
60% Complete Plans Submittal 30 day COUNTY review	285 Calendar Days
100% Complete Plans Submittal 30 day COUNTY review	510 Calendar Days
Final Plans Submittal	560 Calendar Days

COUNTY design review period is thirty calendar days from the date of each milestone submittal. The CONSULTANT shall also provide responses to COUNTY review comments for the various required submittals. Any other delays beyond CONSULTANT's control shall be documented in writing by CONSULTANT and submitted to COUNTY for consideration to grant a schedule time extension.

Roadway plans design reviews shall occur at the conceptual (15% line and grade), 30% Phase, 60% Phase, 100% phases and final complete phases. Drainage maps shall be submitted with 30% and subsequent submittals. CONSULTANT shall submit a draft of the special conditions with the 60% design review submittal and final versions at the 100% design review submittal. Bid quantities and opinion of probable construction cost shall be submitted. The requirements for each design review shall be as specified in the COUNTY's "Checklists for Design Review Submittals". CONSULTANT shall continue its design work during the review periods. CONSULTANT shall respond to the COUNTY's design review comments in writing and by making corresponding revisions to the plans. If requested by the COUNTY, the CONSULTANT shall attend phase review meetings to discuss comments. Written responses and plans revisions are to be included with the next design review submittal. CONSULTANT shall respond to regulatory agencies review comments in the same manner. Design revisions are to be completed by CONSULTANT at no additional time and/or cost unless the revisions result from COUNTY making changes to the horizontal or vertical alignment or other changes or similar impact to the project design. In such cases, COUNTY shall evaluate the CONSULTANT's request for additional time and/or compensation. COUNTY may require CONSULTANT to make plans revisions and resubmit the plans at the same phase of completion if it is found that the plans do not meet the requirements of the" Checklist for Review Submittals". No additional time shall be allotted to the CONSULTANT's schedule if a resubmittal is required.

X. INVOICES & PROGRESS REPORTS

Invoicing shall take place monthly and will include a progress report summarizing the work completed during the invoice period as well as a schedule update. The CONSULTANT shall pre-submit invoices to the Project Manager prior to an official monthly submittal. The final invoice will be marked ``FINAL" on the invoice and be accompanied by a letter from the CONSULTANT stating that this is the Final Invoice and that compensation for tasks completed, as described in the Scope of Services Agreement, is now concluded.

XI. SUBMITTALS

The CONSULTANT shall furnish the plans and documents described below for submittals at 15%, 30%, 60%, 100% and Final to the COUNTY in order to adequately control, coordinate, and approve the project. The COUNTY shall have thirty (30) days for review and comment for each submittal.

15% Line and Grade

- Typical Section – Roadway
- Typical Section – Bridge
- Navigation Clearances - Bridge
- Plan & Profile

30% Submittal:

- Roadway Plans
    - Key Sheet
    - Drainage Map
    - General Notes
    - Typical Section
    - General Plan & Profile
    - Cross Sections
    - Temporary Traffic Control Plans
- Structures Plans
    - General Notes
    - Plan and Elevation
    - Bridge Hydraulics Recommendation Sheet
    - Bridge Typical Sections
    - Foundation Layout(s)
    - Pier/Bent Sheets
    - Movable Span Elevation, Clearance Diagram and Section
    - Machinery Plan and Elevation
    - Wall Control Drawings
    - Sequence of Construction
    - Preliminary aesthetic details
- Engineer's Estimate
- Comment Responses
- Documentation –
    - Roadway Design Documentation
    - Bridge Development Report
    - Draft Bridge Hydraulics Memorandum
    - Environmental Coordination Documentation
    - Draft Geotechnical Report

60% Submittal:

- Roadway Plans (in addition to 30% deliverables)
    - Summary of Quantities
    - Summary of Drainage Structures
    - Drainage Structures

    - Roadway Soil Survey
    - Stormwater Pollution Prevention Plan
    - Utility Adjustment Sheets
- Signing and Pavement Marking Plans
- Structures Plans (in addition to 30% deliverables)
    - Summary of Quantities
    - Boring Logs
    - Demolition Plans
    - Traffic Rail Details
    - Draft Technical Special Provisions
- Architectural Plans
- Design Documentation
    - Roadway Design Documentation
    - Drainage Design Documentation
    - Permit Packages
- Draft Technical Drainage Memorandum
- Final Geotechnical Report
- Final Bridge Hydraulics Technical Memorandum
- Engineer's Estimate
- Comment Responses

100% Submittal:

- Roadway Plans,
- Signing and Pavement Marking Plans
- Structures Plans
- Bridge Architectural Plans
- Final Drainage Technical Memorandum
- Design Documentation
    - Roadway Design Documentation
    - Drainage Design Documentation
    - Draft Utility Work Schedules
- Engineer's Estimate
- Technical Special Provisions
- Comment Responses

Final Plans:

- Roadway Plans
- Signing and Pavement Marking Plans
- Structural Plans
- Architectural Plans
- Design Documentation
    - Final Roadway Design Documentation
    - Final Drainage Design Documentation
    - Final Environmental Documentation
    - Utility Work Schedules
- Engineers Estimate
- Specifications/Technical Special Provisions
- Comment Responses
- Load Rating Documentation

Public Workshop Materials:

- Workshop newsletter/fact sheet
- Workshop graphics
    - Typical section board
    - Existing photos board
- Final Public Workshop Summary Report

Project Staff Hour Summary

Name of Consultant: Hardesty & Hanover, LLC

Beckett Bridge (No. 154000) Replacement 145-0317-NC (SS)

		Project Staff Hours													
Activity No.	**Activity**	Enter Firm Name	Janus	Touchstone Architecture	Intera, Inc.	Omni Communications, LLC	Tierra, Inc.	HDR, Inc.	Sub 7	Sub 8	Sub 9	Sub 10	Sub 11	Sub 12	**Total Hours**
na	1. General Tasks (LS)	240	16	80	0	0	0	0							336
na	2. Roadway (LS)	1136	0	0	0	0	0	0							1136
na	3. Drainage (LS)	490	0	0	330	0	0	0							820
na	4. Environmental Permits (LS)	72	0	0	0	0	28	928							1028
na	5. HAER Documentaion (LS)	0	215	8	0	0	0	0							223
na	6. Utility Coordination (LS)	0	0	0	0	70	0	0							70
na	7. Structures (LS)	8612	0	0	0	0	0	1,230							9842
na	8. Geotechnical (LS)	40	0	0	0	0	473	0							513
na	9. Survey (LS)	0	0	0	0	18	0	0							18
na	10. Public Involvement (LS)	514	0	952	0	0	0	0							1466
na	11. Post Design Services (CP)	1616	0	0	0	0	0	0							1616
na	12. Bid Phase Services (CP)	56	0	0	0	0	0	0							56
na	13a. Bridge Tender Control House Design (	384	0	560	0	0	0	0							944
na		0													0
na	0	0													0
na	0	0													0
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Project Total		**13,160**	**231**	**1,600**	**330**	**88**	**501**	**2,158**	**0**	**0**	**0**	**0**	**0**	**0**	**18,068**
27	Survey Field Crew Days	0													0

Notes: 1. Staff hours for prime consultant come directly from each discipline's worksheet.
2. Staff hours for subconsultants are to be entered manually into columns D through O.
3. For workbooks prepared by subconsultants, their project hours will be totaled in column C.

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Beckett Bridge (No. 154000) Replacement
County: Pinellas
Pinellas County Proposal No. 145-0317-NC (SS)
FAP No.: NA

Consultant Name: Hardesty & Hanover, LLC
Consultant No.: Hardesty & Hanover, LLC
Date: 5/12/2016
Estimator: Jim Phillips

Staff Classification	Hours From "SH Summary - Firm"	Project Manager	Chief Eng.	Sr. Eng.	Sr. Proj. Eng.	Project Eng.	Engineer	EIT	Senior Tech.	PIO	Clerical	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$249.00	$244.00	$170.00	$133.00	$110.00	$108.00	$89.00	$92.00	$149.00	$55.00	$0.00	$0.00			
1. General Tasks (LS)	240	48	48	48	60	12	12	7	0	0	5	0	0	240	$ 43,318	$180.49
2. Roadway (LS)	1,136	23	57	227	227	250	114	227	0	0	11	0	0	1,136	$ 149,036	$131.19
3. Drainage (LS)	490	10	25	98	98	106	49	98	0	0	4	0	0	490	$ 64,398	$131.42
4. Environmental Permits (LS)	72	14	7	36	0	0	15	0	0	0	0	0	0	72	$ 12,934	$179.64
5. HAER Documentaion (LS)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -	-
6. Utility Coordination (LS)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -	-
7. Structures (LS)	8,812	344	890	1,292	2,067	1,292	1,033	1,033	689	0	172	0	0	8,812	$ 1,187,036	$135.51
8. Geotechnical (LS)	40	1	18	23	0	0	0	0	0	0	0	0	0	40	$ 8,063	$201.58
9. Survey (LS)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -	-
10. Public Involvement (LS)	514	194	51	26	26	26	28	26	26	103	10	0	0	514	$ 94,899	$184.63
11. Post Design Services (CP)	1,616	97	65	323	323	404	323	65	0	0	16	0	0	1,616	$ 223,871	$138.53
12. Bid Phase Services (CP)	56	11	11	22	3	3	3	0	0	0	3	0	0	56	$ 10,381	$185.38
13a. Bridge Tender Control House Design (OS)	384	4	8	114	84	56	58	58	0	0	0	0	0	384	$ 51,306	$133.61
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -	-
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -	-
Total Staff Hours	13,160	746	976	2,209	2,888	2,153	1,633	1,514	715	103	221	0	0	13,160		
Total Staff Cost		$185,754.00	$238,632.00	$375,530.00	$384,104.00	$236,830.00	$176,364.00	$134,746.00	$65,780.00	$15,347.00	$12,155.00	$0.00	$0.00		**$1,825,242**	**$138.70**

Notes:
1. Fee includes Lump Sum and Cost Plus tasks as well as Optional Services

LS = Lump Sum
CP = Cost Plus
OS = Optional Services Lump Sum

2. Subconsultant fees rounded to the nearest dollar

	Lump Sum	Cost Plus	Optional	Totals
SALARY RELATED COSTS:	$ 1,539,684	$ 234,252	$ 51,306	$ 1,825,242
SUBTOTAL ESTIMATED FEE (PRIME):	**$ 1,539,684**	**$ 234,252**	**$ 51,306**	**$ 1,825,242**
Subconsultant: Janus	$ 25,900	$ -	$ -	$ 25,900
Subconsultant: Touchstone Architecture	$ 135,777	$ -	$ 67,316	$ 203,093
Subconsultant: Intera, Inc.	$ 45,039	$ -	$ -	$ 45,039
Subconsultant: Omni Communications, LLC	$ 18,033	$ -	$ -	$ 18,033
Subconsultant: Tierra, Inc.	$ 117,206	$ -	$ -	$ 117,206
Subconsultant: HDR, Inc.	$ 284,940	$ -	$ -	$ 284,940
Subconsultant: Reserved	$ -	$ -	$ -	$ -
GRAND TOTAL ESTIMATED FEE:	**$ 2,166,579**	**$ 234,252**	**$ 118,622**	**$ 2,519,453**

Beckett Bridge Design
Summary of Fee by Task

		Consultant / Fee							Totals
Task	Description	H&H	Janus	Touchstone	Intera	Omni	Tierra	HDR	
Task 1	General Tasks	$ 43,318	$ 2,523	$ 10,147					$ 55,988
Task 2	Roadway	$ 149,036							$ 149,036
Task 3	Drainage	$ 64,398			$ 45,039				$ 109,437
Task 4	Environmental Permitting	$ 12,934					$ 2,870	$ 137,779	$ 153,583
Task 5	HAER Documentation		$ 23,377	$ 1,928					$ 25,305
Task 6	Utilities Coordination Support					$ 9,044			$ 9,044
Task 7	Structures	$ 1,167,036						$ 147,161	$ 1,314,197
Task 8	Geotechnical	$ 8,063					$ 114,336		$ 122,399
Task 9	Survey					$ 8,989			$ 8,989
Task 10	Public Involvement	$ 94,899		$ 123,702					$ 218,601
Task 11	Post Design Services – Not to Exceed	$ 223,871							$ 223,871
Task 12	Bid Phase Services - Not to Exceed	$ 10,381							$ 10,381
Task 13a	Bridge Tender Control House Design	$ 51,306		$ 67,316					$ 118,622
		$ 1,825,242	$ 25,900	$ 203,093	$ 45,039	$ 18,033	$ 117,206	$ 284,940	$ 2,519,453

Total of Lump Sum Tasks	$ 1,539,684	$ 25,900	$ 135,777	$ 45,039	$ 18,033	$ 117,206	$ 284,940	$ 2,166,579
Total of Not to Exceed Tasks	$ 234,252	$ -	$ -	$ -	$ -	$ -	$ -	$ 234,252
Total Contract								$ 2,400,831
Total Optional Services	$ 51,306	$ -	$ 67,316	$ -	$ -	$ -	$ -	$ 118,622
Total Contract + Optional Services								**$ 2,519,453**

Hardesty & Hanover, LLC
Staff-Hour Tabulation

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

Project Activity 1: General Tasks

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	Jim Phillips, PE	

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					See Tab 10
3.1.1	Not Used	LS	1	0	0	
3.1.2	Not Used	LS	1	0	0	
3.1.3	Not Used	LS	1	0	0	
3.1.4	Not Used	EA	6	0	0	
3.1.5	Not Used	EA	4	0	0	
3.1.6	Not Used	EA	6	0	0	
3.1.7	Not Used	LS	1	0	0	
3.1.8	Not Used	LS	1	0	0	
3.1.9	Not Used	LS	1	0	0	
3.1.10	Not Used	LS	1	0	0	
3.1.11	Not Used	LS	1	0	0	
3.1.12	Not Used	LS	1	0	0	
	3.1 Public Involvement Subtotal				**0**	
3.2	Coordination Meetings & Field Reviews	LS	1	68	68	See listing below
3.3	Quality Control Plan	LS	1	16	16	
3.4	Design Criteria Memorandum	LS	1	16	16	
3.5	Cost Estimate & Quantities	LS	1	20	20	Hours here are for sumarizing, detailed efforts are included in the discipline items. 4 hours for preliminary, 8 hours each for 60% and 100% submittals
3.6	General Meetings	LS	1	0	0	Included in 3.1
3.7	Constructability Review & Bidability Reviews	LS	1	80	80	Bridge (40), Civil (24), Report (16)

Project Activity 1: General Tasks

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

3.8	Not Used	LS	0	0	0	
3.9	Specifications Package Preparation and Suppory	LS	1	40	40	Detailed specifications preparation is included in the discipline items
3.10	Not Used	LS	1	0	0	
3.11	Not Used	LS	1	0	0	
3.12	Not Used	LS	1	0	0	
3. Project Common and Project General Tasks Total					**240**	

3.6 - General Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments
Project Kickoff Meeting	EA	1	12	12	Two attendees 4 hrs each, 4 hrs for meeting notes
Progress Meetings	EA	5	4	20	One attendee 4 hrs each including meeting notes
Utility Coordination Meetings	EA	2	4	8	
Environmental Permit Meetings	EA	1	4	4	
USCG Meeting	EA	1	8	8	
HAER Documentation	EA	1	2	2	
	EA	0	0	0	
	EA	0	0	0	
	EA	0	4	0	
	EA	0	4	0	
	EA	0	0	0	
	EA	0	0	0	
Survey	EA	1	2	2	
Photogrammetry	EA	0	0	0	
ROW & Mapping	EA	0	0	0	
Landscape Architecture	EA	0	0	0	
Architecture	EA	4	2	8	
Geotechnical	EA	1	4	4	

Project Activity 1: General Tasks

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

Phase Reviews	EA	0	4	0	
Field Reviews	EA	0	0	0	Included in Structures
General Meetings		17		68	Total General Meeting Hours carries to Task 3.6 above

Project Activity 2a: Roadway Analysis

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Christina Newcomb, PE**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	1	16	16	Typical Section Memo
4.2	Pavement Type Selection Report	LS	1	0	0	NA - Per PC Pavement Guidelines
4.3	Pavement Design Package	LS	1	0	0	NA - Per PC Pavement Guidelines
4.4	Cross-Slope Correction	LS	1	0	0	NA
4.5	Horizontal /Vertical Master Design Files	LS	1	260	260	Lower end of middle range rounded up to first mile
4.6	Access Management	LS	1	0	0	NA
4.7	Roundabout Evaluation	LS	1	0	0	NA
4.8	Roundabout Final Design Analysis	LS	1	0	0	NA
4.9	Cross Section Design Files	LS	1	50	50	Short Length - used mid range X 2 for 50 ft. spacing x 0.25 for project length
4.10	Traffic Control Analysis	LS	1	60	60	Level II analysis, general notes, staging area, MOT, signing details, detours
4.11	Master TCP Design Files	LS	1	40	40	Detour & Phasing
4.12	Design Variations and Exceptions	LS	1	24	24	Lane width
4.13	Design Report	LS	1	60	60	Provided at 30%, 60%, 90% and Final
4.14	Quantities	LS	1	70	70	
4.15	Cost Estimate	LS	4	8	32	One per submittal
4.16	Technical Special Provisions	LS	1	0	0	NA
4.17	Other Roadway Analyses	LS	1	0	0	NA
			Roadway Analysis Technical Subtotal		**612**	

Project Activity 2a: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.18	Field Reviews	LS	1	16	16	2 field reviews, 2 people, 4mh each
4.19	Monitor Existing Structures	LS	1	0	0	
4.20	Technical Meetings	LS	1	39	39	Meetings are listed below
4.21	Quality Assurance/Quality Control	LS	1%	0.36	36	
4.22	Independent Peer Review	LS	%	0%	0	
4.23	Supervision	LS	%	5%	31	
			Roadway Analysis Nontechnical Subtotal		**122**	
4.24	Coordination	LS	%	0%	0	
				4. Roadway Analysis Total	**734**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Typical Section	EA	0	0	0		0
Pavement	EA	0	0	0		0
Access Management	EA	0	0	0		0
15% Line and Grade	EA	0	0	0		0
Driveways	EA	0	0	0		0
Local Governments (cities, counties, MPO)	EA	1	8	8		0
Work Zone Traffic Control	EA	0	0	0		0
30/60/90/100% Comment Review Meetings	EA	0	0	16		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**24**	**Subtotal Project Manager Meetings**	**0**
Progress Meetings	EA	3	5	15	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**39**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 4.17

Carries to Tab 3

Project Activity 2b: Roadway Plans

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing		Print Name	Signature / Date
Pinellas County			
Hardesty & Hanover, LLC		Christina Newcomb, PE	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.1	Key Sheet		Sheet	1	10	10	
5.2	Summary of Pay Items Including Quantity Input		Sheet	2	6	12	Pay Items for all tasks
5.3	Typical Section Sheets						
5.3.1	Typical Sections		EA	3	8	24	3 typicals: 1 reconstruction per approach and 1 M/R/transition
5.3.2	Typical Section Details		EA	1	4	4	
5.4	General Notes/Pay Item Notes		Sheet	1	24	24	Review and edit PC notes
5.5	Summary of Quantities Sheets		Sheet	3	5	15	Tabulations / Tables
5.6	Project Layout		Sheet	0	0	0	NA
5.7	Plan/Profile Sheet		Sheet	3	6	18	40 scale - project 1300 ft. long
5.8	Profile Sheet		Sheet	0	0	0	NA
5.9	Plan Sheet		Sheet	0	0	0	NA
5.10	Special Profile		Sheet	1	22	22	Curb retourns at Pampas, Venetian, Chesapeake
5.11	Back-of-Sidewalk Profile Sheet		Sheet	1	6	6	One side on each approach
5.12	Interchange Layout Sheet		Sheet	0	0	0	NA
5.13	Ramp Terminal Details (Plan View)		Sheet	0	0	0	NA
5.14	Intersection Layout Details		Sheet	0	0	0	NA
5.15	Special Details		EA	2	6	12	Sidewalk and Wall
5.16	Cross-Section Pattern Sheet(s)		Sheet	0	0	0	NA

Project Activity 2b: Roadway Plans

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.17	Roadway Soil Survey Sheet(s)		Sheet	1	1	1	
5.18	Cross Sections		EA	31	0.5	16	None along bridge (1000 ft@ 50') plus 1/begin/end and 1/bridge interface at each approach plus 7 dwy sections
5.19	Temporary Traffic Control Plan Sheets		Sheet	4	8	32	local plus regional detour
5.20	Temporary Traffic Control Cross Section Sheets		EA	0	0	0	NA
5.21	Temporary Traffic Control Detail Sheets		Sheet	6	8	48	Blow-ups for mobilization/laydown
5.22	Utility Adjustment Sheets		Sheet	3	8	24	
5.23	Selective Clearing and Grubbing Sheet(s)		Sheet	0	0	0	NA
5.24	Project Network Control Sheet(s)		Sheet	0	0	0	NA
5.25	Environmental Detail Sheets		Sheet	0	0	0	NA
5.26	Utility Verification Sheet(s) (SUE Data)		Sheet	0	0	0	By OmNi
					Roadway Plans Technical Subtotal	**268**	
5.27	Quality Assurance/Quality Control		LS	%	7%	19	
5.28	Supervision		LS	%	5%	13	
					5. Roadway Plans Total	**300**	

Project Activity 2c: Signing and Pavement Marking Analysis

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Christina Newcomb, PE**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
19.1	Traffic Data Analysis	LS	1	4	4	
19.2	No Passing Zone Study	LS	1	0	0	
19.3	Reference and Master Design File	LS	1	40	40	
19.4	Multi-Post Sign Support Calculations	EA	1	0	0	
19.5	Sign Panel Design Analysis	EA	1	0	0	
19.6	Sign Lighting/Electrical Calculations	EA	1	0	0	
19.7	Quantities	LS	1	8	8	
19.8	Cost Estimate	LS	3	4	12	
19.9	Technical Special Provisions	LS	1	0	0	
19.10	Other Signing and Pavement Marking	LS	1	0	0	Assume gate operations included in bridge plans
Signing and Pavement Marking Analysis Technical Subtotal					**64**	
19.11	Field Reviews	LS	1	4	4	
19.12	Technical Meetings	LS	0	0	0	NA
19.13	Quality Assurance/Quality Control	LS	%	5%	3	
19.14	Independent Peer Review	LS	%	0%	0	
19.15	Supervision	LS	%	5%	3	
Signing and Pavement Marking Analysis Nontechnical Subtotal					**10**	
19.16	Coordination	LS	%	0%	0	
19. Signing and Pavement Marking Analysis Total					**74**	

Project Activity 2c: Signing and Pavement Marking Analysis

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments	
Technical Meetings		**Units**	**No of Units**	**Hours/ Unit**	**Total Hours**	**PM Attendance at Meeting Required?**	**Number**
Sign Panel Design		EA	0	0	0		0
Queue Length Analysis		EA	0	0	0		0
Local Governments (cities, counties)		EA	0	0	0		0
Other Meetings		EA	0	0	0		0
Subtotal Technical Meetings					**0**	**Subtotal Project Manager Meetings**	0
Progress Meetings		EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings		EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings					**0**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 19.12

Carries to Tab 3

Project Activity 2d: Signing and Pavement Marking Plans

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Christina Newcomb, PE**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
20.1	Key Sheet		Sheet	0	0	0	0	NA
20.2	Summary of Pay Items Including TRNS•Port Input		LS	1	0		0	NA
20.3	Tabulation of Quantities		Sheet	1	8	1	8	
20.4	General Notes/Pay Item Notes		Sheet	1	6	1	6	
20.5	Project Layout		Sheet	0	0	0	0	NA
20.6	Plan Sheet		Sheet	3	4	3	12	
20.7	Typical Details		EA	0	0		0	NA
20.8	Guide Sign Worksheet(s)		EA	0	0		0	NA
20.9	Traffic Monitoring Site		EA	0	0		0	NA
20.10	Cross Sections		EA	0	0		0	NA
20.11	Special Service Point Details		EA	0	0		0	NA
20.12	Special Details		LS	1	0		0	NA
20.13	Interim Standards		LS	1	0		0	NA
Signing and Pavement Marking Plans Technical Subtotal						**5**	**26**	
20.14	Quality Assurance/Quality Control		LS	%	5%		1	
20.15	Supervision		LS	%	5%		1	
20. Signing and Pavement Marking Plans Total						**5**	**28**	

Project Activity 2e: Signalization Analysis

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Christina Newcomb, PE**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
21.1	Traffic Data Collection	LS	1	0	0	
21.2	Traffic Data Analysis	PI	0	0	0	
21.3	Signal Warrant Study	LS	1	0	0	
21.4	System Timings	LS	1	0	0	
21.5	Reference and Master Signalization Design File	PI	0	0	0	
21.6	Reference and Master Interconnect Communication Design File	LS	1	0	0	
21.7	Overhead Street Name Sign Design	EA	0	0	0	
21.8	Pole Elevation Analysis	LS	1	0	0	
21.9	Traffic Signal Operation Report	LS	1	0	0	
21.10	Quantities	LS	1	0	0	
21.11	Cost Estimate	LS	1	0	0	
21.12	Technical Special Provisions	LS	1	0	0	
21.13	Other Signalization Analysis	LS	1	0	0	
Signalization Analysis Technical Subtotal					**0**	
21.14	Field Reviews	LS	1	0	0	
21.15	Technical Meetings	LS	1	0	0	Meetings are listed below
21.16	Quality Assurance/Quality Control	LS	%	0%	0	
21.17	Independent Peer Review	LS	%	0%	0	
21.18	Supervision	LS	%	0%	0	
Signalization Analysis Nontechnical Subtotal					**0**	

Project Activity 2e: Signalization Analysis

21.19	Coordination	LS	%	0%	0	
	21. Signalization Analysis Total				**0**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
FDOT Traffic Operations	EA	0	0	0		0
FDOT Traffic Design	EA	0	0	0		0
Power Company (service point coordination)	EA	0	0	0		0
Maintaining Agency (cities, counties)	EA	0	0	0		0
Railroads	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**0**	**Subtotal Project Manager Meetings**	0
Progress Meetings	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**0**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 21.15

Carries to Tab 3

Project Activity 2f: Signalization Plans

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Christina Newcomb, PE**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
22.1	Key Sheet		Sheet	0	0	0	0	
22.2	Summary of Pay Items Including Designer Interface (TRNS•Port) Input		Sheet	0	0	0	0	
22.3	Tabulation of Quantities		Sheet	0	0	0	0	
22.4	General Notes/Pay Item Notes		Sheet	0	0	0	0	
22.5	Plan Sheet		Sheet	0	0	0	0	
22.6	Interconnect Plans		Sheet	0	0	0	0	
22.7	Traffic Monitoring Site		EA	0	0		0	
22.8	Guide Sign Worksheet		EA	0	0		0	
22.9	Special Details		Sheet	0	0	0	0	
22.10	Special Service Point Details		EA	0	0		0	
22.11	Mast Arm/Monotube Tabulation Sheet		PI	0	0		0	
22.12	Strain Pole Schedule		PI	0	0		0	
22.13	TCP Signal (Temporary)		EA	0	0		0	
22.14	Temporary Detection Sheet		PI	0	0		0	
22.15	Utility Conflict Sheet		Sheet	0	0	0	0	
22.16	Interim Standards		LS	1	0		0	
	Signalization Plans Technical Subtotal					**0**	**0**	
22.17	Quality Assurance/Quality Control		LS	%	0%		0	
22.18	Supervision		LS	%	0%		0	
	22. Signalization Plans Total					**0**	**0**	

Project Activity 2g: Lighting Analysis

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	1	0	0	
23.2	Lighting Design Analysis Report	LS	1	0	0	
23.3	Aeronautical Evaluation	LS	1	0	0	
23.4	Voltage Drop Calculations	LS	1	0	0	
23.5	FDEP Coordination and Report	LS	1	0	0	
23.6	Reference and Master Design Files	LS	1	0	0	
23.7	Temporary Lighting	LS	1	0	0	
23.8	Design Documentation	LS	1	0	0	
23.9	Quantities	LS	1	0	0	
23.10	Cost Estimate	LS	1	0	0	
23.11	Technical Special Provisions	LS	1	0	0	
23.12	Other Lighting Analysis	LS	1	0	0	
	Lighting Analysis Technical Subtotal				**0**	
23.13	Field Reviews	LS	1	0	0	
23.14	Technical Meetings	LS	1	0	0	
23.15	Quality Assurance/Quality Control	LS	%	0%	0	
23.16	Independent Peer Review	LS	%	0%	0	
23.17	Supervision	LS	%	0%	0	
	Lighting Analysis Nontechnical Subtotal				**0**	
23.18	Coordination	LS	%	0%	0	
	23. Lighting Analysis Total				**0**	

Project Activity 2g: Lighting Analysis

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
FDOT Lighting Design	EA	0	0	0		0
FDOT Traffic Design	EA	0	0	0		0
Power Company (service point coordination)	EA	0	0	0		0
Maintaining Agency (cities, counties)	EA	0	0	0		0
Airport authority	EA	0	0	0		0
FDEP Lighting (coast areas)	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**0**	**Subtotal Project Manager Meetings**	**0**
Progress Meetings	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	--
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Raview Meetings is manually entered on General Task 3*	--
Total Meetings				**0**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 23.14

Carries to Tab 3

2h. Lighting Plans

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
24.1	Key Sheet		Sheet	0	0	0	0	
24.2	Summary of Pay Items Including Designer Interface (TRNS•Port) Input		Sheet	0	0	0	0	
24.3	Tabulation of Quantities		Sheet	0	0	0	0	
24.4	General Notes/Pay Item Notes		Sheet	0	0	0	0	
24.5	Pole Data, Legend and Criteria		Sheet	0	0	0	0	
24.6	Service Point Details		Sheet	0	0	0	0	
24.7	Project Layout		Sheet	0	0	0	0	
24.8	Plan Sheet		Sheet	0	0	0	0	
24.9	Special Details		Sheet	0	0	0	0	
24.10	Temporary Lighting Data and Details		Sheet	0	0	0	0	
24.11	Traffic Control Plan Sheets		Sheet	0	0	0	0	
24.12	Interim Standards		LS	1	0		0	
					Lighting Plans Technical Subtotal	**0**	**0**	
24.13	Quality Assurance/Quality Control		LS	%	0%		0	
24.14	Supervision		LS	%	0%		0	
					24. Lighting Plans Total	**0**	**0**	

Project Activity 3a: Drainage Analysis

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Christina Newcomb, PE**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.1	Drainage Map Hydrology	Per Map	1	12	12	Low range
6a.2	Base Clearance Report	Per Location	0	0	0	N/A Pavement at or above existing
6a.3	Pond Siting Analysis and Report	Per Basin	0	0	0	None Anticipated
6a.4	Design of Cross Drains	EA	0	0	0	NA
6a.5	Design of Ditches	Per Ditch Mile	0	0	0	NA
6a.6	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	0	0	0	NA
6a.7	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)	Per Cell	0	0	0	NA
6a.8	Design of Floodplain Compensation	Per Floodplain Basin	0	0	0	NA
6a.9	Design of Storm Drains	EA	13	2.5	33	Midrange - 4 inlets at bridge ends plus 3@chesapeake, 2 @ pampas, 2 @ venetioan
6a.10	Optional Culvert Material	EA	0	0	0	NA
6a.11	French Drain Systems	Per Cell	0	0	0	NA
6a.12	Drainage Wells	EA	0	0	0	NA
6a.13	Drainage Design Documentation Report	LS	1	8	8	Storm tabs inserted in roadway doc
6a.14	Bridge Hydraulic Report	EA	0	0	0	By others

Project Activity 3a: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.15	Temporary Drainage Analysis	LS	1	0	0	NA
6a.16	Cost Estimate	LS	3	4	12	
6a.17	Technical Special Provisions	LS	1	0	0	NA
6a.18	Other Drainage Analysis	LS	1	200	200	Study and alt analysis of flooding at Chesapeake, Memo with attachments
			Drainage Analysis Technical Subtotal		**265**	
6a.19	Field Reviews	LS	2	8	16	
6a.20	Technical Meetings	LS	1	44	44	Meetings are listed below
6a.21	Environmental Look-Around (ELA) Meeting	LS	1	0	0	
6a.22	Quality Assurance/Quality Control	LS	%	7%	19	
6a.23	Independent Peer Review	LS	%	0%	0	
6a.24	Supervision	LS	%	5%	13	
			Drainage Analysis Nontechnical Subtotal		**92**	
6a.25	Coordination	LS	%	2%	7	
				6a. Drainage Analysis Total	**364**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Base Clearance Water Elevation	EA	0	0	0		0
Pond Siting	EA	0	0	0		0
Agency	EA	2	4	8		0
Local Governments (cities, counties)	EA	2	4	8		0
FDOT Drainage	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**16**		**0**
Progress Meetings	EA	4	4	16	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	3	4	12	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**44**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 6.19

Carries to Tab 3

3b. Drainage Plans

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Christina Newcomb, PE**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
6b.1	Drainage Map (Including Interchanges)		Sheet	1	24	24	Midrange
6b.2	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	By others
6b.3	Summary of Drainage Structures		Sheet	1	24	24	Midrange
6b.4	Optional Pipe/Culvert Material		Sheet	0	0	0	NA
6b.5	Drainage Structure Sheet(s) (Per Structure)		EA	11	2.5	28	
6b.6	Miscellaneous Drainage Detail Sheets		Sheet	1	12	12	
6b.7	Lateral Ditch Plan/Profile		Sheet	0	0	0	NA
6b.8	Lateral Ditch Cross Sections		EA	0	0	0	NA
6b.9	Retention/Detention Ponds Detail Sheet(s)		Sheet	0	0	0	NA
6b.10	Retention Pond Cross Sections		EA	0	0	0	NA
6b.11	Erosion Control Plan Sheet(s)		Sheet	3	6	18	NA
6b.12	SWPPP Sheet(s)		Sheet	1	6	6	
					Drainage Plans Technical Subtotal	**112**	
6b.13	Quality Assurance/Quality Control		LS	%	7%	8	
6b.14	Supervision		LS	%	5%	6	
					6. Drainage Plans Total	**126**	

Project Activity 4: Environmental Permits

Estimator:

Beckett Bridge (No. 154000) Replacement
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Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Permits, Compliances and Clearances					
8.1	Preliminary Project Research	LS	1	0	0	
	Permits					
8.2	**Field Work**					
8.2.1	Pond Site Alternatives	per pond site	0	0	0	
8.2.2	Establish Wetland Jurisdictional Lines and Assessments	LS	1	0	0	
8.2.3	Species Surveys	LS	1	0	0	
8.2.4	Archeological Surveys	LS	1	0	0	
8.3	Agency Verification of Wetland Data	LS	1	0	0	
8.4	**Complete And Submit All Required Permit Applications**					
8.4.1	Complete and Submit All Required Wetland Permit Applications	LS	1	0	0	
8.4.2	Complete and Submit All Required Species Permit Applications	LS	1	0	0	
8.5	Prepare Dredge and Fill Sketches (as needed)	LS	1	16	16	
8.6	Prepare USCG Permit Sketches	LS	1	40	40	
8.7	Prepare Water Management District Right-of-Way Occupancy Permit	LS	1	0	0	
8.8	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	1	0	0	
8.9	Prepare Tree Permit Information	LS	1	0	0	
8.10	Mitigation Design	LS	1	0	0	
8.11	Mitigation Coordination and Meetings	LS	1	0	0	
8.12	Other Environmental Permits	LS	1	0	0	

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	Environmental Clearances/Reevaluations					
8.13	**Technical support to Department for Environmental Clearances and Reevaluations (use when consultant provides technical support only)**					
8.13.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.13.2	Archaeological and Historical Features	LS	1	0	0	
8.13.3	Wetland Impact Analysis	LS	1	0	0	
8.13.4	Essential Fish Habitat	LS	1	0	0	
8.13.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.13.8	Section 7 or Section 10 Consultation	LS	1	0	0	
8.14	**Preparation of Environmental Clearances and Reevaluations (use when consultant prepares all documents associated with reevaluation)**					
8.14.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.14.2	Archaeological and Historical Features	LS	1	0	0	
8.14.3	Wetland Impact Analysis	LS	1	0	0	
8.14.4	Essential Fish Habitat	LS	1	0	0	
8.14.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.14.8	Section 7 or Section 10 Consultation	LS	1	0	0	
8.15	Contamination Impact Analysis	LS	1	0	0	
8.16	Asbestos Survey	LS	1	0	0	
Environmental Permits, Compliance, and Clearances/Reevaluations Technical Subtotal					**56**	
8.17	Technical Meetings	LS	1	8	8	Meetings are listed below
8.18	Quality Assurance/Quality Control	LS	%	8%	4	
8.19	Supervision	LS	%	8%	4	
Environmental Permits, Compliance and Clearances Nontechnical Subtotal					**16**	
8.20	Coordination	LS	%	0%	0	
8. Environmental Permits, Compliance and Clearances Total					**72**	

Project Activity 4: Environmental Permits

Estimator:

Beckett Bridge (No. 154000) Replacement
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Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
WMD	EA	0	0	0		0
NMFS	EA	0	0	0		0
USACE	EA	0	0	0		0
USCG	EA	1	8	8		0
USFWS	EA	0	0	0		0
FFWCC	EA	0	0	0		0
FDOT	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**8**	**Subtotal Project Manager Meetings**	**0**
Progress Meetings	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**8**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 8.18

Project Activity 7a: Structures Summary and Miscellaneous Tasks and Drawings

Task No.	Task	Units	Design and Production Staffhours				Comments
			No. of Units	Hours per Unit	No. of Sheets	Total	
	General Drawings						
9.1	Key Sheet and Index of Drawings	Sheet	2	16	2	32	
9.2	Project Layout	Sheet	1	12	1	12	
9.3	General Notes and Bid Item Notes	Sheet	2	20	2	40	
9.4	Miscellaneous Common Details	Sheet	4	24	4	96	
9.5	Incorporate Report of Core Borings	Sheet	1	8	1	8	
9.6	Existing Bridge Plans	LS	1	12		12	
9.7	Assemble Plan Summary Boxes and Quantities	LS	1	16		16	
9.8	Cost Estimate	LS	1	40		40	
9.9	Technical Special Provisions	LS	1	260		260	Movable Bridge Structures, Machinery, Electrical, Demo & Operation, Control House
	Structures - Summary and Miscellaneous Tasks and Drawings Subtotal				10	516	

Task No.	Task	Total	Task 7b	Task 7c	Task 7d	Task 7e	Task 7f	Task 7g	NA	NA	NA
10-16	Bridge 1	7159	1016	456	0	5275	192	220			
10-16	Bridge 2	0									
10-16	Bridge 3	0									
10-16	Bridge 4	0									
10-16	Bridge 5	0									
10-16	Bridge 6	0									
10-16	Bridge 7	0									
10-16	Bridge 8	0									
10-16	Bridge 9	0									
10-16	Bridge 10	0									
17	Not Used	0								0	
18	Not Used	0									0
	Structures Technical Subtotal	7159	1016	456	0	5275	192	220	0	0	0

Project Activity 7a: Structures Summary and Miscellaneous Tasks and Drawings

Task No.	Task	Units	No. of Units	Hours per Unit	Total	Comments
9.10	Field Reviews	LS	2	6	12	
9.11	Technical Meetings	LS	1	4	4	Meetings are listed below
9.12	Quality Assurance/Quality Control	LS	%	8%	614	This should be (5% to 10%) x ("Structures - Summary and Miscellaneous Tasks and Drawings Subtotal, cell G21" + "Structures Technical Subtotal, cell C35")
9.13	Independent Peer Review	LS	1	0	0	Included in General Task Reviews
9.14	Supervision	LS	%	4%	307	This should be (3% to 7%) x ("Structures - Summary and Miscellaneous Tasks and Drawings Subtotal, cell G21" + "Structures Technical Subtotal, cell C35")
Structures Nontechnical Subtotal					937	
9.15	Coordination	LS	1	0	0	
9. Structures - Summary and Miscellaneous Tasks and Drawings Nontechnical and Coordination Total					1453	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
BDR Coordination/Review	EA	1	4	4		0
90/100% Comment Review	EA	0	0	0		0
Aesthetics Coordination	EA	0	0	0		0
Regulatory Agency	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Utility Companies	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				4		0
Progress Meetings	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				4	**Total Project Manager Meetings (carries to Tab 3)**	0

Estimator:

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Hardesty & Hanover, LLC	**Jim Phillips, PE**	

Task No.	Task	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	General Requirement						
10.1	Bridge Geometry	LS	1	40		40	
10.2	Ship Impact Data Collection	LS	1	0		0	
10.3	Ship Impact Criteria	EA	1	4		4	
	Superstructure Alternatives						
10.4	Short Span Concrete Bridge	EA ALT	0	0		0	Approach spans by HDR
10.5	Medium Span Concrete Bridge	EA ALT	0	0		0	
10.6	Long Span Concrete Bridge	EA ALT	0	0		0	NA
10.7	Structural Steel Bridge	EA ALT	0	0		0	NA
	Foundation & Substructure Alternatives						
10.8	Pier/Bent	EA Type	3	16		48	Rest Pier, End Bent, Int. Bent
10.9	Shallow Foundations / GRS Abutments	EA Type	0	0		0	
10.10	Deep Foundations	EA Foundation Evaluated	2	12		24	Piles, Shafts
	Movable Span						
10.11	Data Collection and Design Criteria	LS	1	16		16	
10.12	Movable Span Geometrics and Clearances	LS	1	16		16	
10.13	Deck System Evaluation	LS	1	16		16	
10.14	Framing Plan Development	LS	1	24		24	
10.15	Main Girder Preliminary Design	LS	1	40		40	
10.16	Conceptual Span Balance/Counterweight	LS	1	24		24	

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10.17	Support System Development	LS	1	24		24	
10.18	Drive Power Calculations	LS	1	32		32	
10.19	Drive System Development	LS	1	32		32	
10.20	Power and Control Development	LS	1	24		24	
10.21	Conceptual Pier Design	LS	1	24		24	Bascule Pier
10.22	Foundation Analysis (FL PIER)	LS	1	40		40	
10.23	Tender Visibility Study	LS	1	16		16	
	Other BDR Issues						
10.24	Aesthetics	LS	1	80		80	3D files for Aesthetic Renderings
10.25	TCP/Staged Construction Requirements	LS	1	24		24	Hours for Movable - Accelerated Bridge, Approach Spans by HDR
10.26	Constructibility Requirements	LS	1	4		4	NA
10.27	Load Rating for damaged/widened structures	EA Unit	1	0		0	
10.28	Quantity and Cost Estimates	EA ALT	1	4		4	Summarize data from HDR / H&H
10.29	Quantity and Cost Estimates - Movable Span	LS	1	40		40	
10.30	Wall Type Justification	LS	1	16		16	Retaining Walls, Bulkheads
	Report Preparation						
10.31	Exhibits	EA SHEET	1	24		24	GP&E - Approach Typicals by HDR
10.32	Exhibits - Movable Span	EA SHEET	17	16		272	Movable Plan & Elev, Section, Clearance Diagram, Framing Plan, Drive Mach (2), Pier Plan & Section (6), Visibility Study (2), Sequence Diagram, Control House Elev & Floor Plans (2)
10.33	Report Preparation	LS	1	40		40	
10.34	Report Preparation - Movable Span	LS	1	60		60	
10.35	BDR Submittal Package	LS	1	8		8	
	10. Structures - Bridge Development Report Total					**1016**	

Project Activity 7c: Structures- Short Span Concrete

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Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	General Layout Design and Plans						
12.1	Overall Bridge Final Geometry	LS	1	0		0	
12.2	Expansion/Contraction Analysis	EA Unit	0	0		0	by HDR
12.3	General Plan and Elevation	Sheet	1	40	1	40	
12.4	Construction Staging	Sheet	0	0	0	0	
12.5	Approach Slab Plan and Details	Sheet	2	20	2	40	
12.6	Miscellaneous Details	Sheet	3	16	3	48	Approach Bridge Railing (3) included - gate, signal, barrier gate details by HDR
	End Bent Design and Plans						
12.7	End Bent Geometry	EA End Bent	2	8		16	
12.8	End Bent Structural Design	EA Design	2	16		32	
12.9	End Bent Plan and Elevation	Sheet	2	16	2	32	
12.10	End Bent Details	Sheet	2	12	2	24	
	Intermediate Bent Design and Plans						
12.11	Bent Geometry	EA Bent	2	6		12	
12.12	Bent Stability Analysis	EA Analysis	2	14		28	
12.13	Bent Structural Design	EA Design	2	16		32	
12.14	Bent Plan and Elevation	Sheet	2	12	2	24	
12.15	Bent Details	Sheet	4	12	4	48	Includes Gate & Barrier Supports

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	Miscellaneous Substructure Design and Plans						
12.16	Foundation Layout	Sheet	2	32	2	64	
	Miscellaneous Superstructure Design and Plans						
12.17	Finish Grade Elevation Calculation	LS	1	0		0	by HDR
12.18	Finish Grade Elevations	Sheet	0	0	0	0	
	Cast-in-Place Slab Bridges						
12.19	Bridge Deck Design	EA Unit	0	0		0	by HDR
12.20	Superstructure Plan	Sheet	0	0	0	0	
12.21	Superstructure Sections and Details	Sheet	0	0	0	0	
	Prestressed Slab Unit Bridges						
12.22	Prestressed Slab Unit Design	EA Design	0	0		0	by HDR
12.23	Prestressed Slab Unit Layout	Sheet	0	0	0	0	
12.24	Prestressed Slab Unit Details and Schedule	Sheet	0	0	0	0	
12.25	Deck Topping Reinforcing Layout	Sheet	0	0	0	0	
12.26	Superstructure Sections and Details	Sheet	0	0	0	0	
	Reinforcing Bar List						
12.27	Preparation of Reinforcing Bar List	Sheet	1	16	1	16	Substructure included - superstructure by HDR
	Load Rating						
12.28	Load Ratings	EA Unit	0	0		0	by HDR
	12. Structures - Short Span Concrete Bridge Total				**19**	**456**	

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Hardesty & Hanover, LLC	**Jim Phillips, PE**	

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Final Design Bascule Pier						
16.1	Pier Deck	LS	1	32		32	
16.2	Leaf/Pier Clearance Diagrams	EA Diagram	3	12		36	Centerline, Joints, Railings
16.3	Load Shoe Columns	LS	1	24		24	Rear Anchorage Columns for Rolling Lift
16.4	Trunnion Columns	LS	1	24		24	Track Girder Supports for Rolling Lift
16.5	Foundations	LS	1	60		60	Bascule Pier and Rest Pier
16.6	Footing	LS	1	40		40	
16.7	Seal	LS	1	16		16	
16.8	Back Wall (Approach Span Bearings) Closed Piers Only	LS	1	24		24	
16.9	Bascule Pier Deck Elevations	EA Pier	1	16		16	
	Bascule Pier Dimensions - Detailing						
16.10	Pier Plan Views	Sheet	2	24	2	48	plan at deck, below deck
16.11	Pier Elevation Views	Sheet	4	20	4	80	Back, sides (2), Front
16.12	Pier Sections	Sheet	7	20	7	140	Long (4), Trans (3)
	Bascule Pier Reinforcing Details						
16.13	Pier Reinforcing	Sheet	11	24	11	264	Above Sections, plus 4 detail sheets
	Bascule Pier Miscellaneous Details						
16.14	Pier Barrier Details	Sheet	2	20	2	40	
16.15	Stair Details	Sheet	2	20	2	40	
16.16	Handrail Details	Sheet	2	20	2	40	
16.17	Ladder and Hatch Details	Sheet	1	24	1	24	
16.18	Pier Equipment	Sheet	1	24	1	24	
16.19	Bascule Pier Notes and Summary of Quantities	Sheet	1	16	1	16	
16.20	Miscellaneous Details	Sheet	1	24	1	24	

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	Bascule Leaf Design						
16.21	Deck Design	LS	1	24		24	
16.22	Sidewalk Design	LS	1	24		24	
16.23	Stringer Design	LS	1	24		24	
16.24	Typical Floorbeam Design	LS	1	24		24	
16.25	End Floorbeam Design	LS	1	16		16	
16.26	Deep Floorbeam Design	LS	1	24		24	
16.27	Sidewalk Bracket Design	LS	1	0		0	
16.28	Roadway Bracket Design	LS	1	24		24	
16.29	Main Girder Influence Lines	LS	1	32		32	
16.30	Main Girder Design	LS	1	24		24	
16.31	Trunnion Girder Design	LS	1	24		24	Track Girder
16.32	Main Girder Camber Data	LS	1	16		16	
16.33	Leaf Lateral Bracing Design	LS	1	24		24	
16.34	Counterweight Design	LS	1	80		80	
16.35	Live Load Shoe Design	LS	1	16		16	
16.36	Barrier Design	LS	1	0		0	
16.37	Deck Elevations	LS	1	16		16	
16.38	Balance Calculations	LS	1	50		50	

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	Bascule Leaf Detailing						
16.39	Bascule GP&E	Sheet	1	20	1	20	
16.40	Bascule Leaf Notes	Sheet	1	28	1	28	
16.41	Framing Plan	Sheet	1	24	1	24	
16.42	Flooring Plan and Details	Sheet	4	20	4	80	
16.43	Typical Section and Finish Grade Elevations	Sheet	2	16	2	32	
16.44	Girder Elevation	Sheet	1	24	1	24	
16.45	Girder Details	Sheet	2	24	2	48	
16.46	Camber Layout	Sheet	1	16	1	16	
16.47	Floor Beams	Sheet	4	20	4	80	
16.48	Counterweight Girder/Box	Sheet	4	24	4	96	
16.49	Trunnion Girder	Sheet	1	24	1	24	track giders
16.50	Cylinder Girder	Sheet	2	32	2	64	Crank Arm Girders / Connections
16.51	Lateral Bracing Details	Sheet	3	18	3	54	
16.52	Counterweight Bracing Details	Sheet	2	24	2	48	
16.53	Joint Details	Sheet	2	24	2	48	
16.54	Traffic Barrier Details	Sheet	2	24	2	48	
16.55	Pedestrian Rail and Support Details	Sheet	2	16	2	32	
16.56	Curb and Sidewalk Details	Sheet	0	0	0	0	
16.57	Barrier and Sidewalk Bracket Details	Sheet	0	0	0	0	
16.58	Counterweight Details	Sheet	1	24	1	24	
16.59	Stress Table or Influence Lines	Sheet	0	0	0	0	
	Mechanical Design						
16.60	Final Power Requirements	LS	1	40		40	
16.61	Trunnion Assembly	LS	1	40		40	tread plates
16.62	Span Locks	LS	1	80		80	tail locks
16.63	Sump Pumps	LS	1	20		20	

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	Mechanical Drive Design						
16.64	Drive Shafts, Couplings, Keys, Bearings and Supports	LS	1	80		80	
16.65	Rack & Pinion, Bearings and Supports	LS	1	200		200	Includes Crank Arm Assemblies
16.66	Drive Train	LS	1	120		120	
16.67	Motor Brakes & Machinery Brakes	LS	1	24		24	
	Hydraulic Drive Design						
16.68	Hydraulic Drive	LS	1	0		0	
	Machinery Detailing						
16.69	Machinery Layout	Sheet	1	24	1	24	
16.70	Machinery Elevation	Sheet	1	24	1	24	
16.71	Machinery Section	Sheet	1	32	1	32	
16.72	Trunnion Assembly	Sheet	2	30	2	60	Track & Tread Details
16.73	Drive Details	Sheet	4	32	4	128	Support Weldments, Crank Arms, shafting, reducers
16.74	Span Locks	Sheet	4	32	4	128	
	Electrical Design						
16.75	Load Analysis	LS	1	40		40	
16.76	Power Distribution	LS	1	80		80	
16.77	Drive Equipment	LS	1	60		60	
16.78	Bridge Controls	LS	1	275		275	
16.79	Grounding	LS	1	32		32	
16.80	Lightning and Surge Suppression	LS	1	40		40	
16.81	Pier Lighting	LS	1	24		24	

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

	Electrical Detailing						
16.82	Electrical Plan and Elevation	Sheet	2	16	2	32	
16.83	Electrical Symbols and Abbreviations	Sheet	1	12	1	12	
16.84	Single/Three Line Diagram	Sheet	6	20	6	120	
16.85	Panelboard and Light Fixture Schedules	Sheet	2	12	2	24	
16.86	Wire and Conduit Schedules and Diagrams	Sheet	6	20	6	120	
16.87	Control Desk/Panel Layout	Sheet	1	40	1	40	
16.88	Control Schematics	Sheet	26	24	26	624	
16.89	PLC Logic	Sheet	0	0	0	0	
16.90	Communication System	Sheet	1	32	1	32	
16.91	Navigation Lighting Details	Sheet	1	10	1	10	
16.92	Pedestrian Gate, Traffic Gate and Barrier Details	Sheet	3	10	3	30	
16.93	Submarine Cable	Sheet	2	16	2	32	
16.94	Miscellaneous Details	Sheet	12	24	12	288	Sequence Diagram, Limit Switches, MCC, Pier Layouts (2), Pier Lighting (4), CCTV
	Control House						
16.95	Architectural Design	LS	1	0		0	See Task 13a
16.96	Architectural Details	Sheet	0	0	0	0	
16.97	Structural Design	LS	1	0		0	
16.98	Structural Details	Sheet	0	0	0	0	
16.99	HVAC/Plumbing Design	LS	1	0		0	NA
16.100	HVAC/Plumbing/Electrical Cables	Sheet	0	0	0	0	Plumbing, Cable Supports
	Reinforcing Bar Lists						
16.101	Preparation of Reinforcing Bar List	Sheet	3	12	3	36	
	Load Rating						
16.102	Load Ratings	LS	1	80		80	
	16. Structures - Movable Span Total				**149**	**5275**	

Project Activity 7f: Retaining Walls

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	General Requirements						
17.1	Key Sheet	Sheet	1	16	1	16	
17.2	Horizontal Wall Geometry	Per Wall	2	12		24	
	Permanent Proprietary Walls						
17.3	Vertical Wall Geometry	Per Wall	0	0		0	
17.4	Semi-Standard Drawings	Sheet	0	0	0	0	
17.5	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	
17.6	Details	Sheet	0	0	0	0	
	Temporary Proprietary Walls						
17.7	Vertical Wall Geometry	Per Wall	0	0		0	
17.8	Semi-Standard Drawings	Sheet	0	0	0	0	
17.9	Wall Plan and Elevations (Control Drawings)	Sheet	0	0	0	0	
17.10	Details	Sheet	0	0	0	0	
	Cast-in-Place Retaining Walls						
17.11	Design	EA Design	1	16		16	
17.12	Vertical Wall Geometry	EA Wall	4	8		32	
17.13	General Notes	Sheet	1	8	1	8	
17.14	Wall Plan and Elevations (Control Drawings)	Sheet	4	12	4	48	
17.15	Sections and Details	Sheet	1	32	1	32	
17.16	Reinforcing Bar List	Sheet	1	16	1	16	

Project Activity 7f: Retaining Walls

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

	Other Retaining Walls and Bulkheads						
17.17	Design	EA Design	0	0		0	
17.18	Vertical Wall Geometry	EA Wall	0	0		0	
17.19	General Notes, Tables and Misc. Details	Sheet	0	0	0	0	
17.20	Wall Plan and Elevations	Sheet	0	0	0	0	
17.21	Details	Sheet	0	0	0	0	
	17. Structures - Retaining Walls Total				**8**	**192**	

Project Activity 7g: Miscellaneous Structures

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Concrete Box Culvert						
18.1	Concrete Box Culverts	EA	0	0		0	
18.2	Concrete Box Culverts Extensions	EA Extension	0	0		0	
18.3	Concrete Box Culvert Data Table Plan Sheets	Sheet	0	0	0	0	
18.4	Concrete Box Culvert Special Details Plan Sheets	Sheet	0	0	0	0	
	Strain Poles						
18.5	Steel Strain Poles	Initial Config	0	0		0	
		EA Add'l Config	0	0		0	
18.6	Concrete Strain Poles	Initial Config	0	0		0	
		EA Add'l Config	0	0		0	
18.7	Strain Pole Data Table Plan Sheets	Sheet	0	0	0	0	
18.8	Strain Pole Special Details Plan Sheets	Sheet	0	0	0	0	
	Mast Arms						
18.9	Mast Arms	EA Design	0	0		0	
18.10	Mast Arms Data Table Plan Sheets	Sheet	0	0	0	0	
18.11	Mast Arm Special Details Plan Sheets	Sheet	0	0	0	0	
	Overhead/Cantilever Sign Structures						
18.12	Cantilever Sign Structures	EA Design	0	0		0	
18.13	Overhead Span Sign Structures	EA Design	0	0		0	
18.14	Special (Long Span) Overhead Span Sign Structures	EA Design	0	0		0	
18.15	Monotube Overhead Sign Structure	EA Design	0	0		0	
18.16	Bridge Mounted Signs (Attached to Superstr.)	EA Design	0	0		0	
18.17	Overhead and Cantilever Sign Structures Data Table Plan Sheets	Sheet	0	0	0	0	
18.18	Overhead and Cantilever Sign Structures Special Details Plan Sheets	Sheet	0	0	0	0	
	High Mast Lighting						
18.19	Non-Standard High Mast Lighting Structures	EA Design	0	0		0	
18.20	High Mast Lighting Special Details Plan Sheets	Sheet	0	0	0	0	

Project Activity 7g: Miscellaneous Structures

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

	Noise Barrier Walls (Ground Mount)						
18.21	Horizontal Wall Geometry	EA Wall	0	0		0	
18.22	Vertical Wall Geometry	EA Wall	0	0		0	
18.23	Summary of Quantities - Aesthetic Requirements	Sheet	0	0	0	0	
18.24	Control Drawings	Sheet	0	0	0	0	
18.25	Design of Noise Barrier Walls Covered by Standards	EA Design	0	0		0	
18.26	Design of Noise Barrier Walls Not Covered by Standards	EA Design	0	0		0	
18.27	Aesthetic Details	LS	1	0		0	
	Special Structures						
18.28	Fender System	LS	1	40		40	
18.29	Fender System Access	LS	1	40		40	
18.30	Special Structures	LS	1	140		140	Bulkheads
18.31	Other Structures	LS	1	0		0	
	18. Structures - Miscellaneous Total				**0**	**220**	

8. Geotechnical

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County	**Jim Phillips**	
Consultant Name	**Hardesty & Hanover, LLC**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
	Roadway					
35.1	Document Collection and Review	LS	1	0	0	
35.2	Develop Detailed Boring Location Plan	LS	1	0	0	
35.3	Stake Borings/Utility Clearance	Boring	0	0	0	
35.4	Muck Probing	Crew Day	0	0	0	
35.5	Coordinate and Develop MOT Plans for Field Investigation	EA	0	0	0	
35.6	Drilling Access Permits	Location	0	0	0	
35.7	Property Clearances	EA	0	0	0	
35.8	Groundwater Monitoring	EA	0	0	0	
35.9	LBR/Resilient Modulus Sampling	EA	0	0	0	
35.10	Coordination of Field Work	100 lf of boring	0	0	0	
35.11	Soil and Rock Classification - Roadway	100 lf of boring	0	0	0	
35.12	Design LBR	LS	1	0	0	Only if LBR tests are required
35.13	Laboratory Data	100 lf of boring	0	0	0	
35.14	Seasonal High Water Table	Boring	0	0	0	
35.15	Parameters for Water Retention Areas	EA	0	0	0	
35.16	Delineate Limits of Unsuitable Material	Cross-section	0	0	0	
35.17	Electronic Files for Cross-Sections	100 lf of boring	0	0	0	Duplication of Roadway Effort?
35.18	Embankment Settlement and Stability	Embankment Boring	0	0	0	
35.19	Monitor Existing Structures	LS	1	0	0	

8. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.20	Stormwater Volume Recovery and/or Background Seepage Analysis	EA	0	0	0	Duplication of Drainage Effort?
35.21	Geotechnical Recommendations	LS	1	0	0	
35.22	Pavement Condition Survey and Pavement Evaluation Report	LS	1	0	0	
35.23	Preliminary Roadway Report	LS	1	0	0	
35.24	Final Report	EA	0	0	0	
35.25	Auger Boring Drafting	100 lf boring	0	0	0	
35.26	SPT Boring Drafting	100 lf boring	0	0	0	
			Roadway Geotechnical Subtotal		**0**	
	Structures					
35.27	Develop Detailed Boring Location Plan	LS	1	0	0	
35.28	Stake Borings/Utility Clearance	Boring	0	0	0	
35.29	Coordinate and Develop MOT Plans for Field Investigation	EA	0	0	0	
35.30	Drilling Access Permits	Location	0	0	0	
35.31	Property Clearances	EA	0	0	0	
35.32	Collection of Corrosion Samples	EA	0	0	0	
35.33	Coordination of Field Work	100 lf of boring	0	0	0	
35.34	Soil and Rock Classification - Structures	100 lf of boring	0	0	0	
35.35	Tabulation of Laboratory Data	100 lf of boring	0	0	0	
35.36	Estimate Design Groundwater Level for Structures	EA	0	0	0	
35.37	Selection of Foundation Alternatives (BDR)	Bridge boring	0	0	0	
35.38	Detailed Analysis of Selected Foundation Alternate(s)	Bridge boring	0	0	0	See Basis for reducing by 35.35
35.39	Bridge Construction and Testing Recommendations	Bridge boring	0	0	0	
35.40	Lateral Load Analysis (Optional)	Bridge boring	0	0	0	Duplication of Structural Effort?
35.41	Walls	Wall Boring	0	0	0	
35.42	Sheet Pile Wall Analysis (Optional)	Wall Boring	0	0	0	Duplication of Structural Effort?
35.43	Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations	Boring	0	0	0	

8. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.44	Box Culvert Analysis	EA	0	0	0	
35.45	Preliminary Report - BDR	EA	0	0	0	
35.46	Final Report - Bridge and Associated Walls	EA	0	0	0	
35.47	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA	0	0	0	
35.48	SPT Boring Drafting	100 lf of boring	0	0	0	
35.49	Other Geotechnical	LS	1	0	0	
			Structural Geotechnical Subtotal		**0**	
			Geotechnical Technical Subtotal		**0**	
35.50	Technical Special Provisions	EA	0	0	0	
35.51	Field Reviews	LS	1	0	0	
35.52	Technical Meetings	LS	1	0	0	Meetings listed below
35.53	Quality Assurance/Quality Control	LS	1	40	40	Independent Peer Review of Foundation Design
35.54	Supervision	LS	1	0	0	
			Geotechnical Nontechnical Subtotal		**40**	
35.55	Coordination	LS	%	0%	0	
				35. Geotechnical Total	**40**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with County	EA	0	0	0		0
Boring Layout Approval	EA	0	0	0		0
Attend in BDR Review Meeting	EA	0	0	0		0
30/60/90% Submittal Review	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**0**	**Subtotal Project Manager Meetings**	0
Progress Meetings	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**0**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 33.18

Carries to Tab 3

Project Activity 10: Public Involvement

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					
3.1.1	Public Workshop & Precoordination Meeting	LS	1	106	106	Workshop Prep/Plan (48), PreMtg (16), Workshop (3 x 6hrs), Summary Report (24)
3.1.2	Notifications	LS	1	16	16	
3.1.3	Prepare Mailing Lists	LS	1	16	16	
3.1.4	BOCC Meetings	EA	2	8	16	4 hrs prep, 4 hrs mtg
3.1.5	Aesthetic Committee Workshops	EA	4	32	128	Plan/Prep (16), Attend (2 x 4), Summary (8)
3.1.6	Small Group Meetings	EA	4	12	48	4 hrs prep, 4 hrs mtg x 2 staff
3.1.7	Presentation Graphics	LS	1	16	16	Existing Conditions Board, other boards by THG, Touchstone
3.1.8	PowerPoint Presentation / Bridge Models & Graphics	LS	1	144	144	Develop Presentation (80), Modify for 4 meetings (4 x 16)
3.1.9	Newsletter / Factsheet for public workshop	LS	1	24	24	
3.1.10	Public Meeting Attendance/Followup	LS	1	0	0	
3.1.11	Other Agency Meetings	LS	1	0	0	
3.1.12	Web Site	LS	1	0	0	

Project Activity 10: Public Involvement

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
				3.1 Public Involvement Subtotal	514	
3.2	Not Used	LS	1	0	0	
3.3	Not Used	LS	1	0	0	
3.4	Not Used	LS	1	0	0	
3.5	Not Used	LS	1	0	0	
3.6	Not Used	LS	1	0	0	
3.7	Not Used	LS	1	0	0	
3.8	Not Used	LS	1	0	0	
3.9	Not Used	LS	1	0	0	
3.10	Not Used	LS	1	0	0	
3.11	Not Used	LS	1	0	0	
3.12	Not Used	LS	1	0	0	
				3. Project Common and Project General Tasks Total	514	

Project Activity 11: Post Design Services

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	Design and Production Staffhours			Comments
			No. of Units	Hours per Unit	Total	
	General Drawings					
11.1	Project Management	Month	24	4	96	
11.2	Respond to Requests for Information	EA	120	2	240	
11.3	Respond to Non-Conformance Reports	EA	20	4	80	
11.4	Review Submittals	EA	200	4	800	
11.5	Attend Progress Meetings	EA	18	4	72	Assume one per month for 18 months
11.6	Make Site Visits to Observe the Work	EA	24	4	96	Assume 2 per month for 12 months
11.7	Make Site Visits to Observe Functional Testing	EA	2	24	48	Assume (3 persons, 2 days) for functional checkout
11.8	Make Shop Visits to Observe the Work	EA	13	8	104	Assume kickoff meetings at steel fab shope plus 4 misc visits; kickoff at elec. fab shop plus 2 shop tests; kickoff at mech fab shop plus 2 visits and 2 shop tests.
11.9	Plans Updates	EA	2	40	80	Assume 2 updates at 40 hours each
11.10	Not Used	LS	1	0	0	
11.11	Not Used	LS	1	0	0	
	Structures - Summary and Miscellaneous Tasks and Drawings Subtotal				1616	

Notes: Post design services above are an estimate. Actual efforts will vary depending upon the quality and number of submittals, schedule and other variables. Reimbursement will be on a cost plus basis.

Project Activity 12: Bid Phase Services

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	Design and Production Staffhours			Comments
			No. of Units	Hours per Unit	Total	
	General Drawings					
12.1	Attend Pre-Bid Meeting	EA	1	8	8	Two people, 4 hours each
12.2	Respond to Contractor Questions	LS	1	16	16	
12.3	Prepare Addenda	LS	1	16	16	
12.4	Review Bids and provide written recommendations	LS	1	16	16	
12.5	Not Used	LS	1	0	0	
12.6	Not Used	LS	1	0	0	
	Structures - Summary and Miscellaneous Tasks and Drawings Subtotal				56	

Project Activity 13a: Control House

Estimator:
Bridge Identifier (Number or Name):

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Hardesty & Hanover, LLC	**Jim Phillips, PE**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Control House						
13.0	Project Manatement & Coordination	LS	1	16		16	
13.1	Architectural Design	LS	1	0		0	
13.2	Architectural Details	Sheet	0	0	0	0	
13.3	Structural Design	LS	1	40		40	
13.4	Structural Details	Sheet	6	32	6	192	
13.5	HVAC/Plumbing Design	LS	1	0		0	NA
13.6	HVAC/Plumbing/Electrical Cables	Sheet	3	32	3	96	Plumbing, Cable Supports
13.7	QA/QC	LS	1	24		24	
	Reinforcing Bar Lists						
13.8	Preparation of Reinforcing Bar List	Sheet	2	8	2	16	
16. Structures - Movable Span Total					**2**	**384**	

Janus Research, Inc.
Summary

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Beckett Bridge (No. 154000) Replacement
County: Pinellas
Pinellas County Proposal No.: 145-0317-NC (SS)
FAP No.: NA

Consultant Name: Janus Research, Inc.
Consultant No.: enter consultants proj. number
Date: 5/13/2016
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary Firm"	Project Manager	Chief Archaeologist	Senior Architectural Historian	Architectural Historian	CADD/Computer Tech	Senior Archaeologist	Secretary/Clerical	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$189.32	$103.52	$126.02	$50.76	$60.36	$68.59	$46.64	$0.00	$0.00	$0.00	$0.00	$0.00			
1. General Tasks	16	8	0	6	0	0	0	0	0	0	0	0	0	16	$2,523	$157.67
2. Roadway	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
3. Drainage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
4. Environmental Permits	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
5. HAER Documentation	215	30	2	95	68	16	2	2	0	0	0	0	0	215	$22,506	$104.68
6. Utility Coordination	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
Total Staff Hours	231	38	2	103	68	16	2	2	0	0	0	0	0	231		
Total Staff Cost		$7,194.16	$207.04	$12,980.06	$3,451.68	$965.76	$137.18	$93.28	$0.00	$0.00	$0.00	$0.00	$0.00		$25,029	$108.35

Check = $25,029.16

SALARY RELATED COSTS:			$25,029
OVERHEAD:	0%		$0
OPERATING MARGIN:	0%		$0
FCCM (Facilities Capital Cost Money):	0.00%		$0
EXPENSES:	Large Format Costs		$871
SUBTOTAL ESTIMATED FEE:			**$25,900**
Survey (Field) 0	4-man crew days @ $ - / day		$0
Geotechnical Field and Lab Testing			$0
SUBTOTAL ESTIMATED FEE:			**$25,900**
Optional Services			$0
GRAND TOTAL ESTIMATED FEE:			**$25,900**

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

Janus Research, Inc.
Staff-Hour Tabulation

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

Project Activity 1: General Tasks

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Janus Research, Inc.	Janus	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					
3.1.1	Public Workshop & Precoordination Meeting	LS	1	0	0	
3.1.2	Notifications	LS	1	0	0	
3.1.3	Prepare Mailing Lists	LS	1	0	0	
3.1.4	BOCC Meetings	EA	6	0	0	
3.1.5	Aesthetic Committee Workshops	EA	4	0	0	
3.1.6	Small Group Meetings	EA	6	0	0	
3.1.7	Presentation Graphics	LS	1	0	0	
3.1.8	PowerPoint Presentation	LS	1	0	0	
3.1.9	Newsletter / Factsheet for public workshop	LS	1	0	0	
3.1.10	Public Meeting Attendance/Followup	LS	1	0	0	
3.1.11	Other Agency Meetings	LS	1	0	0	
3.1.12	Web Site	LS	1	0	0	
	3.1 Public Involvement Subtotal				**0**	
3.2	Constructability Review	LS	1	0	0	
3.3	Bidability Review	LS	1	0	0	
3.4	Specifications Package Preparation	LS	1	0	0	
3.5	Value Engineering (Multi-Discipline Team) Review	LS	1	0	0	
3.6	General Meetings	LS	1	16	16	See listing below
3.7	Plans Update	LS	1	0	0	

Project Activity 1: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.8	Post Design Services	LS	1	0	0	
3.9	Digital Delivery	LS	1	0	0	
3.10	Risk Assessment Workshop	LS	1	0	0	
3.11	Railroad, Transit, and/or Airport Coordination	LS	1	0	0	
3.12	Other Project General Tasks	LS	1	0	0	
3. Project Common and Project General Tasks Total					**16**	

3.6 - General Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments
Project Kickoff Meeting	EA	0	0	0	
Progress Meetings	EA	0	0	0	
Utility Coordination Meetings	EA	0	0	0	
Environmental Permit Meetings	EA	2	8	16	Janus Research - 2 meetings, 2 people attending, 4 hrs each meeting (prep, travel and attendance)
USCG Meeting	EA	0	0	0	
HAER Documentation	EA	0	0	0	
	EA	0	0	0	
	EA	0	0	0	
	EA	0	0	0	
	EA	0	0	0	
	EA	0	0	0	
	EA	0	0	0	
Survey	EA	0	0	0	
Photogrammetry	EA	0	0	0	
ROW & Mapping	EA	0	0	0	
Landscape Architecture	EA	0	0	0	
Architecture	EA	0	0	0	
Geotechnical	EA	0	0	0	
Phase Reviews	EA	0	0	0	
Field Reviews	EA	0	0	0	
General Meetings		2		16	Total General Meeting Hours carries to Task 3.6 above

5. HAER Documentation

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Janus Research, Inc.		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
25.1	Data Collection	LS	1	0	0	
25.2	Site Inventory and Analysis	LS	1	0	0	
25.3	Planting Design	LS	1	0	0	
25.4	Irrigation Design	LS	1	0	0	
25.5	Hardscape Design	LS	1	0	0	
25.6	Plan Summary Boxes	LS	1	0	0	
25.7	Cost Estimates	LS	1	0	0	
25.8	Technical Specification Provisions	LS	1	0	0	
25.9	HAER Documentation	LS	1	145	145	Prior to the salvage of the engineering elements and demolition of the bridge, Janus Research will perform the following documentation of the Beckett Bridge (FDOT Bridge No. 154000; FMSF No. 8PI12017) in accordance with Historic American Engineering Record (HAER) standards. (1) Drawings – Select drawings of the existing bridge plans, as available, scanned and provided in an acceptable format. Janus Research work with the team to locate bridge drawings and duplicate. Coordination with the FDOT, County, and appropriate engineering firms will be necessary. However, as part of the Bridge documentation that took place in 2012, it appears that plans have been located and will be reproduced for this task(2) Photographs – Photographs with large-format negatives of context and views from all sides of the bridge and approaches, roadway and deck views, and noteworthy features and details. All negatives and prints will be processed to meet archival standards. One photograph of a principal elevation shall include a scale(3) Written Data – Report with narrative description of the bridge, summary of significance, and historical context (primarily derived from the 2012 Cultural Resource Assessment Survey). It is important to note that HAER documentation is precise and requires the use of specific equipment and materials as well as archival processing. These costs are included in the costs estimate for Direct Expenses. Additionally a boat will be needed for photography, and H&H will be providing the boat and boat operator for this purpose.
Landscape Architecture Analysis Technical Subtotal					**145**	
25.10	Outdoor Advertising	LS	1	0	0	
25.11	Field Reviews	LS	1	0	0	

5. HAER Documentation

25.12	Technical Meetings / Public Meetings	LS	1	56	56	Meetings are listed below
25.13	Quality Assurance/Quality Control	LS	%	5%	7	
25.14	Independent Peer Review	LS	%	0%	0	
25.15	Supervision	LS	%	5%	7	
Landscape Architecture Analysis Nontechnical Subtotal					**70**	
25.16	Project Coordination	LS	%	0%	0	
25.17	Interdisciplinary Coordination	LS	%	0%	0	
25. Landscape Analysis Total					**215**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Pinellas Co. (kickoff, concept review)	EA	1	4	4	yes	0
Maintaining Agency (cities, counties)	EA	1	4	4	yes	0
Utility Owners	EA	0	0	0		0
Local Agency for Tree Removal	EA	0	0	0		0
Local Citizen Group(s)	EA	0	0	0		0
Aesthetics Committee Meetings	EA	4	12	48	yes	0
Subtotal Technical Meetings				**56**	**Subtotal Project Manager Meetings**	0
Progress Meetings	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**56**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 25.12

Carries to Tab 3

Touchstone Architecture
Summary

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Beckett Bridge (No. 154000) Replacement
County: Pinellas
Pinellas County Proposal No.: 145-0317-NC (SS)
FAP No.: NA

Consultant Name: Touchstone Architecture
Consultant No.: enter consultants proj. number
Date: 5/11/2016
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary Firm"	Not Used	Prin. Bridge Architect	Bridge Architect	Support/ Production	Clerical	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$0.00	$229.57	$76.94	$52.91	$64.10	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00			
1. General Tasks			24	44		12								80	$9,864	$120.80
2. Roadway														0	$0	
3. Drainage														0	$0	
4. Environmental Permits														0	$0	
5. HAER Documentaion			8											8	$1,837	$229.57
6. Utility Coordination														0	$0	
7. Structures														0	$0	
8. Geotechnical														0	$0	
9. Survey														0	$0	
10. Public Involvement			328	384	216	24								952	$117,811	$123.75
11. Post Design Services														0	$0	
12. Bid Phase Services														0	$0	
13a. Bridge Tender Control House Design			160	240	120	40								560	$64,110	$114.48
13b. Hydrographic Channel Survey														0	$0	
														0	$0	
														0	$0	
Total Staff Hours	0	0	520	668	336	76	0	0	0	0	0	0	0	1,600		
Total Staff Cost		$0.00	$119,376.40	$51,395.92	$17,777.76	$4,871.60	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		$193,422	$120.89

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

		Lump Sum	Cost Plus	Optional
SALARY RELATED COSTS:		$ 129,312	$ -	$ 64,110
OVERHEAD:	0%	$ -		
OPERATING MARGIN:	0%	$ -		
FCCM (Facilities Capital Cost Money):	0.00%	$ -		
EXPENSES:	5.00%	$ 6,466	$ -	$ 3,206
SUBTOTAL ESTIMATED FEE:		$ 135,777	$ -	$ 67,316
Survey (Field)		$ -		
Geotechnical Field and Lab Testing		$ -		
SUBTOTAL ESTIMATED FEE:		$ 135,777	$ -	$ 67,316
Optional Services		$ -		
GRAND TOTAL ESTIMATED FEE:		$ 135,777	$ -	$ 67,316

Touchstone Architecture
Staff-Hour Tabulation

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

0

Estimate Detail Sheet

Task Description	Company	Estimated By	Discipline	Rev	Date
Beckett Bridge (No. 154000) Replacement	Touchstone Architecture	Bradley Touchstone	Bridge Aesthetics		

Task #	Sub-Task		Description	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P		
1	**General Tasks**																			
	1.1		Pre-Design / Kickoff Meeting	8		8														
	1.2		Aesthetic Related Specifications Package	16		36						12								
5	**User Documentation**																			
	5.1		Provide Architectural Review and Comment	8																
10	**Public Involvement**																			
	10.1		Attend 2 County Commission Meetings	16			16													
	10.2		Attend 2 Small Group Meetings	16			16													
	10.3		Newsletter/ Fact Sheets (by PRIME)																	
	10.4		Workshop Coordination (by PRIME)																	
	10.5		Pre-Workshop Meetings Via Teleconference	16		16														
	10.6		Compile Input Summary and Comments from 4 Workshops	32			64													
	10.7		**AESTHETICS DEVELOPMENT**																	
		10.7.1	Structural Type Analysis	16		24														
		10.7.2	Aesthetics Theme Development	24		40	24													
			Design and 3 Renderings each for 3 different Concepts																	
		10.7.3	Aesthetics Committee Meeting #1 (Prep and Attendance)	24		16	12													
		10.7.4	Develop Large Scale Aesthetics Options	40		80	24													
			Oblique Aerial View																	
			Elevation View																	
			Deck View																	
			Detail View																	
		10.7.5	Stakeholder Review Period	8																
		10.7.6	Aesthetics Committee Meeting #2 (Prep and Attendance)	16		16	12													
		10.7.8	Small Scale Aesthetics/ Lighting Options	40		80	24													
			Revise Renderings																	
			Provide 1 Night Image for 2 Lighting Concepts																	
			Illustrations/ Renderings for Railing and Ornamentation Details																	
		10.7.9	Stakeholder Review Period	8																
		10.7.10	Aesthetics Committee Meeting #3 (Prep and Attendance)	16		16	12													
		10.7.11	Finalize Aesthetics Plan	40		80						24								
		10.7.12	Aesthetics Committee Meeting #4 (Prep and Attendance)	16		16	12													
13	**Optional Services**																			
	13.a		Bridge Tender Control House Architectural Design/ Plans																	
			Total Hours	360	0	428	216	0	0	0	0	36	0	0	0	0	0	0		1,040

Intera, Inc.
Summary

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Beckett Bridge (No. 154000) Replacement
County: Pinellas
Pinellas County Proposal No.: 145-0317-NC (SS)
FAP No.: NA

Consultant Name: Intera, Inc.
Consultant No.: enter consultants proj. number
Date: 5/11/2016
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary Firm"	Project Manager	Chief Eng.	Sr. Eng.	Engineer	Project Engineer	Secretary/ Clerical	PIO	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$179.08	$199.51	$155.27	$107.69	$122.81	$52.74	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00			
1. General Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
2. Roadway	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
3. Drainage	330	60	10	80	126	48	4	0	0	0	0	0	0	330	$45,039	$136.48
4. Environmental Permits	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
5. HAER Documentaion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
6. Utility Coordination	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
7. Structures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
8. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
9. Survey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
10. Public Involvement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
11. Post Design Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
12. Bid Phase Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
13a. Bridge Tender Control House Design	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
13b. Hydrographic Channel Survey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
Total Staff Hours	330	60	10	80	126	48	4	0	0	0	0	0	0	330		
Total Staff Cost		$10,744.80	$1,995.10	$12,421.60	$13,771.52	$5,894.88	$210.96	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		$45,039	$136.48

Check = $45,038.86

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

SALARY RELATED COSTS:			$45,039
OVERHEAD:	0%		$0
OPERATING MARGIN:	0%		$0
FCCM (Facilities Capital Cost Money):	0.00%		$0
EXPENSES:	0.00%		$0
SUBTOTAL ESTIMATED FEE:			**$45,039**
Survey (Field)	0	4-man crew d: $ - / day	$0
Geotechnical Field and Lab Testing			$0
SUBTOTAL ESTIMATED FEE:			**$45,039**
Optional Services			$0
GRAND TOTAL ESTIMATED FEE:			**$45,039**

Intera, Inc.
Staff-Hour Tabulation

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

Project Activity 6a: Drainage Analysis

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Intera, Inc.		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.1	Drainage Map Hydrology	Per Map	0	0	0	
6a.2	Base Clearance Report	Per Location	0	0	0	
6a.3	Pond Siting Analysis and Report	Per Basin	0	0	0	
6a.4	Design of Cross Drains	EA	0	0	0	
6a.5	Design of Ditches	Per Ditch Mile	0	0	0	
6a.6	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	0	0	0	
6a.7	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)	Per Cell	0	0	0	
6a.8	Design of Floodplain Compensation	Per Floodplain Basin	0	0	0	
6a.9	Design of Storm Drains	EA	0	0	0	
6a.10	Optional Culvert Material	EA	0	0	0	
6a.11	French Drain Systems	Per Cell	0	0	0	
6a.12	Drainage Wells	EA	0	0	0	
6a.13	Drainage Design Documentation Report	LS	1	0	0	
6a.14	Bridge Hydraulic Report	EA	1	280	280	BHR development includes steady state flow and unsteady storm surge modeling, incorporation of sea level rise, wave modeling, scour calculation, and wave force calculation.

Project Activity 6a: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.15	Temporary Drainage Analysis	LS	1	0	0	
6a.16	Cost Estimate	LS	1	0	0	
6a.17	Technical Special Provisions	LS	1	0	0	
6a.18	Other Drainage Analysis	LS	1	0	0	
				Drainage Analysis Technical Subtotal	**280**	
6a.19	Field Reviews	LS	1	4	4	
6a.20	Technical Meetings	LS	1	8	8	Meetings are listed below
6a.21	Environmental Look-Around (ELA) Meeting	LS	1	0	0	
6a.22	Quality Assurance/Quality Control	LS	%	5%	14	
6a.23	Independent Peer Review	LS	%	0%	0	
6a.24	Supervision	LS	%	5%	14	
				Drainage Analysis Nontechnical Subtotal	**40**	
6a.25	Coordination	LS	%	3%	10	
				6a. Drainage Analysis Total	**330**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Base Clearance Water Elevation	EA	0	0	0		0
Pond Siting	EA	0	0	0		0
Agency	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
FDOT Drainage	EA	0	0	0		0
Other Meetings	EA	1	8	8		0
Subtotal Technical Meetings				**8**		**0**
Progress Meetings	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	--
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	--
Total Meetings				**8**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 6.19

Carries to Tab 3

Omni Communications, LLC
Summary

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project:	Beckett Bridge (No. 154000) Replacement	Consultant Name:	Omni Communications, LLC
County:	Pinellas	Consultant No.:	enter consultants proj. number
Pinellas County Proposal No.:	145-0317-NC (SS)	Date:	5/12/2016
FAP No.:	NA	Estimator:	insert name

Staff Classification	Total Staff Hours From "SH Summary Firm"	Project Engineer	Designer	Project Manager	Sec. Clerical	Sr. Surveyor	Surveyor & Mapper	Sr. Project Engineer	Utility Coordinator	Sr. Utility Coordinator	Survey Technician	Staff Classification 11	Staff Classi-	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$0.00	$0.00	$0.00	$72.00	$155.00	$125.00	$0.00	$125.00	$139.00	$0.00	$0.00	$0.00			
1. General Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
2. Roadway	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
3. Drainage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
4. Environmental Permits	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
5. HAER Documentaion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
6. Utility Coordination	70	0	0	0	0	0	0	0	49	21	0	0	0	70	$9,044	$129.20
7. Structures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
8. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
9. Survey	18	0	0	0	0	2	3	0	3	2	8	0	0	18	$1,338	$74.33
10. Public Involvement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
11. Post Design Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
12. Bid Phase Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
13a. Bridge Tender Control House Design	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
13b. Hydrographic Channel Survey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
Total Staff Hours	88	0	0	0	0	2	3	0	52	23	8	0	0	88		
Total Staff Cost		$0.00	$0.00	$0.00	$0.00	$310.00	$375.00	$0.00	$6,500.00	$3,197.00	$0.00	$0.00	$0.00		$10,382.00	$117.98

Lump Sum Fee

SUBTOTAL ESTIMATED FEE:				$ 10,382
SUE Designating	0	3-man crew d: $ 1,757.74	/ day	$ -
SUE Locating	2.25	3-man crew d: $ 1,937.66	/ day	$ 4,360
Survey (Field)	2.25	3-man crew d: $ 1,462.73	/ day	$ 3,291
SUBTOTAL ESTIMATED FEE:				**$ 18,033**

Optional Services

SUBTOTAL ESTIMATED FEE:	$ -
	$ -
SUBTOTAL ESTIMATED FEE:	$ -

Total Fee $ 18,033

Omni Communications, LLC
Staff-Hour Tabulation

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

Project Activity 6: Utilities

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Omni Communications, LLC	**Brent Postma**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
7.1	Utility Kickoff Meeting	LS	1	0	0	N/A
7.2	Identify Existing Utility Agency Owners (UAO(s))	LS	1	6	6	OSP permit review, design ticket
7.3	Make Utility Contacts	LS	1	0	0	N/A
7.4	Exception Processing	LS	1	0	0	N/A
7.5	Preliminary Utility Meeting	LS	1	0	0	N/A
7.6	Individual/Field Meetings	LS	1	4	4	one field meeting after 60% submittal
7.7	Collect and Review Plans and Data from UAO(s)	LS	1	0	0	N/A
7.8	Subordination of Easements Coordination	LS	1	0	0	N/A
7.9	Utility Design Meeting	LS	1	8	8	agenda, meeting minutes, attendance
7.10	Review Utility Markups & Work Schedules, and Processing of Schedules & Agreements	LS	1	12	12	Review UWS and forward to EOR for there review.
7.11	Utility Coordination/Followup	LS	1	24	24	follow up with UAO's throughout design effort
7.12	Utility Constructability Review	LS	1	16	16	review of plans set in relation to construction schedule vs UAO UWS's
7.13	Additional Utility Services	LS	1	0	0	N/A
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0	N/A
7.15	Contract Plans to UAO(s)	LS	1	0	0	N/A
7.16	Certification/Close-Out	LS	1	0	0	N/A
7.17	Other Utilities	LS	1	0	0	N/A
				7. Utilities Total	**70**	

Project Activity 6: Utilities

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff (see 7.1)	EA	0	0	0		0
Preliminary Meeting (see 7.5)	EA	0	0	0		0
Individual UAO Meetings (see 7.6)	EA	0	0	0		0
Field Meetings (see 7.6)	EA	0	0	0		0
Design Meeting (see 7.9)	EA	0	0	0		0
Other Meetings *(this is automatically added into Utilities Total (cell F27))*	EA	0	0	0		0
Total Meetings				**0**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to Tab 3

9a. Survey

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Omni Communications, LLC	Brent Postma	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.1	Horizontal Project Control (HPC)									
	2-Lane Roadway	Mile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.2	Vertical PC / Bench Line									
	2-Lane Roadway	Mile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.3	Alignment and Existing R/W Lines									
		Mile			0.00		0.00		0.00	
27.4	Aerial Targets			Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
27.5	Reference Points	"A"		Units/Day						
	2-Lane Roadway	EA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
	Reference Points	"B"		Units/Day						
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	

9a. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.6	Topography/DTM (3D)									
		Mile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
27.7	Planimetric (2D)									
		Mile			0.00		0.00		0.00	
27.8	Roadway Cross-Sections/Profiles									
		Mile			0.00		0.00		0.00	
27.9	Side Street Surveys									
27.10	Underground Utilities									
	Designates	Mile/Site	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Locate (SUE Level A) the water main and force main at each end of the water and 100 north and south of each waters edge for a total of 8 locates.
	Locates	Point	8	0.25	2.00	1.50	3.00	3.00	6.00	
	Survey		100%	2.00	2.00	1.50	3.00	3.00	6.00	
27.11	Outfall Survey									
		Mile			0.00		0.00		0.00	
27.12	Drainage Survey			Units/Day						
		EA			0.00		0.00		0.00	
27.13	Bridge Survey									
	Minor / Major	EA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
27.14	Channel Survey									
		EA			0.00		0.00		0.00	
27.15	Pond Site Survey									
		EA			0.00		0.00		0.00	
27.16	Mitigation Survey									
		Mile			0.00		0.00		0.00	
27.17	Jurisdiction Line Survey									
		Mile			0.00		0.00		0.00	
27.18	Geotechnical Support			Units/Day						
		EA			0.00		0.00		0.00	

9a. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.19	Sectional / Grant Survey									
		Corner			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.20	Subdivision Location									
		Block			0.00		0.00		0.00	
27.21	Maintained R/W									
		Mile			0.00		0.00		0.00	
27.22	Boundary Survey									
		EA			0.00		0.00		0.00	
27.23	Water Boundary Survey									
		EA			0.00		0.00		0.00	
27.24	R/W Staking / R/W Line									
		EA	0	0.00	0.00	0.00	0.00	0.00	0.00	
		Mile			0.00		0.00		0.00	
27.25	R/W Monumentation									
		Point			0.00		0.00		0.00	
27.26	Line Cutting									
		Mile			0.00					
27.27	Work Zone Safety									
			0.125	4.00	0.50					
27.28	Miscellaneous Surveys									
					0.00		0.00		0.00	
Survey Subtotal				**Crew Days**	**4.5**	**Field Support Hours**	**6**	**Office Support Hours**	**12**	
27.29	Supplemental Surveys									THE % FOR SUPPLEMENTAL WILL BE DETERMINED AT NEGOTIATIONS. THIS ITEM CAN ONLY BE USED IF AUTHORIZED IN WRITING BY THE DISTRICT SURVEYOR
				5	0		0		0	
27.30	Document Research	Units								
									0	
27.31	Field Reviews	Units								
									0	

9a. Survey

Task No.	Task	Units	No of Units	Field Crew Days/Unit	Crew Days	Field Support Hours / Crew Days	Field Support Hours	Office Support Hours / Crew Days	Office Support Hours	Comments
27.32	Technical Meetings	LS								
			0.00						0	
27.33	Quality Assurance / Quality Control	LS								
								5%	0	
27.34	Supervision	LS								
								5%	0	
27.35	Coordination	LS								
								3%	0	
		27. Survey Total		Crew Days	5	Field Support Hours	6	Office Support Hours	12	

SPLS =
PLS =
Office Support =
Total Hours = 18

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with FDOT	EA	0	0	0		0
Baseline Approval Review	EA	0	0	0		0
Network Control Review	EA	0	0	0		0
Vertical Control Review	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Final Submittal Review	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**0**	**Subtotal PM Meetings**	0
Progress Meetings (if required by FDOT)	EA	0	0	0	**	- -
Phase Review Meetings	EA	0	0	0	**	- -
Total Meetings				**0**	**Total PM Mtgs (carries to Tab 3)**	**0**

Carries to 27.32 | Carries to Tab 3

**** Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3**

Tierra, Inc.
Summary

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

Fee Sheet - Sub

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Beckett Bridge (No. 154000) Replacement
County: Pinellas
Pinellas County Proposal No.: 145-0317-NC (SS)
FAP No.: NA

Consultant Name: Tierra
Consultant No.: enter consultants proj. number
Date: 5/13/2016
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary - Firm"	Project Manager	Senior Engineer	Chief Scientist	Senior Project	Geotech Engineer	Engineering Intern	Senior Scientist	Designer	Sr. Eng Technician	Geotech Technician	Secretary Clerical	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$166.50	$171.00	$137.04	$141.64	$113.81	$96.62	$115.65	$93.32	$82.61	$66.39	$72.00	$0.00			
1. General Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
2. Roadway	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
3. Drainage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
4. Environmental Permits	28	1	0	3	0	0	0	11	3	4	4	2	0	28	$2,870	$102.49
5. HAER Documentaion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
6. Utility Coordination	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
7. Structures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
8. Geotechnical	473	24	47	9	66	47	142	0	38	47	47	6	0	473	$52,685	$111.34
9. Survey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
10. Public Involvement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
11. Post Design Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
12. Bid Phase Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
13a. Bridge Tender Control House Design	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
13b. Hydrographic Channel Survey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	$0.00
Total Staff Hours	501	25	47	12	66	47	142	11	41	51	51	8	0	501		
Total Staff Cost		$4,162.50	$8,037.00	$1,644.48	$9,348.24	$5,349.07	$13,720.04	$1,272.15	$3,826.12	$4,213.11	$3,385.89	$576.00	$0.00		$55,534.60	$110.85

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

SALARY RELATED COSTS:	$	55,535
SUBTOTAL ESTIMATED FEE:	$	55,535
Asbestos Field and Lab	$	550
Geotechnical Field and Lab Testing	$	61,121
SUBTOTAL ESTIMATED FEE:	$	117,206
Optional Services	$	-
GRAND TOTAL ESTIMATED FEE:	$	117,206

Tierra, Inc.
Staff-Hour Tabulation

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

Task 4. Environmental Permitting

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Consultant Name	Tierra	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Permits, Compliances and Clearances					
8.1	Preliminary Project Research	LS	1	0	0	
	Permits					
8.2	**Field Work**					
8.2.1	Pond Site Alternatives	per pond site	0	0	0	
8.2.2	Establish Wetland Jurisdictional Lines and Assessments	LS	1	0	0	
8.2.3	Species Surveys	LS	1	0	0	
8.2.4	Archeological Surveys	LS	1	0	0	
8.3	Agency Verification of Wetland Data	LS	1	0	0	
8.4	**Complete And Submit All Required Permit Applications**					
8.4.1	Complete and Submit All Required Wetland Permit Applications	LS	1	0	0	
8.4.2	Complete and Submit All Required Species Permit Applications	LS	1	0	0	
8.5	Prepare Dredge and Fill Sketches (as needed)	LS	1	0	0	
8.6	Prepare USCG Permit Sketches	LS	1	0	0	
8.7	Prepare Water Management District Right-of-Way Occupancy Permit	LS	1	0	0	
8.8	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	1	0	0	
8.9	Prepare Tree Permit Information	LS	1	0	0	

Task 4. Environmental Permitting

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
8.10	Mitigation Design	LS	1	0	0	
8.11	Mitigation Coordination and Meetings	LS	1	0	0	
8.12	Other Environmental Permits	LS	1	0	0	
	Environmental Clearances/Reevaluations					
8.13	**Technical support to Department for Environmental Clearances and Reevaluations (use when consultant provides technical support only)**					
8.13.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.13.2	Archaeological and Historical Features	LS	1	0	0	
8.13.3	Wetland Impact Analysis	LS	1	0	0	
8.13.4	Essential Fish Habitat	LS	1	0	0	
8.13.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.13.6	Section 7 or Section 10 Consultation	LS	1	0	0	
8.14	**Preparation of Environmental Clearances and Reevaluations (use when consultant prepares all documents associated with reevaluation)**					
8.14.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.14.2	Archaeological and Historical Features	LS	1	0	0	
8.14.3	Wetland Impact Analysis	LS	1	0	0	
8.14.4	Essential Fish Habitat	LS	1	0	0	
8.14.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.14.6	Section 7 or Section 10 Consultation	LS	1	0	0	
8.15	Contamination Impact Analysis	LS	1	0	0	
8.16	Asbestos Survey	LS	1	25	25	Obtain Asbestos samples of bearing pads if accessible and letter report
	Environmental Permits, Compliance, and Clearances/Reevaluations Technical Subtotal				**25**	
8.17	Technical Meetings	LS	1	0	0	Meetings are listed below

Task 4. Environmental Permitting

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
8.18	Quality Assurance/Quality Control	LS	%	5%	1	
8.19	Supervision	LS	%	5%	1	
Environmental Permits, Compliance and Clearances Nontechnical Subtota					**2**	
8.20	Coordination	LS	%	3%	1	
8. Environmental Permits, Compliance and Clearances Total					**28**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
WMD	EA	0	0	0		0
NMFS	EA	0	0	0		0
USACE	EA	0	0	0		0
USCG	EA	1	8	8		0
USFWS	EA	0	0	0		0
FFWCC	EA	0	0	0		0
FDOT	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**8**	**Subtotal Project Manager Meetings**	**0**
Progress Meetings	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	--
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	--
Total Meetings				**8**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

8. Geotechnical

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
Consultant Name		

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
	Roadway					
35.1	Document Collection and Review	LS	1	4	4	USDA, USGS, Potentiometric surface maps, existing plans, existing pile driving records, existing geotech data, etc.
35.2	Develop Detailed Boring Location Plan	LS	1	4	4	Total roadway length approximately 900 feet
35.3	Stake Borings/Utility Clearance	Boring	13	0.3	4	Pavement coring required - 4 cores with 5 ft. Hand Auger
35.4	Muck Probing	Crew Day	0	0	0	No geotechnical data required for drainage considerations
35.5	Coordinate and Develop MOT Plans for Field Investigation	EA	1	4	4	Maintenance of traffic required for pavement coring operations
35.6	Drilling Access Permits	Location	0	0	0	Total 13 hand augers to depths of 5 feet includes augers completed at pavement core locations
35.7	Property Clearances	EA	0	2	0	13 augers @ 5 feet = 65 feet of auger borings
35.8	Groundwater Monitoring	EA	0	4	0	
35.9	LBR/Resilient Modulus Sampling	EA	1	4	4	
35.10	Coordination of Field Work	100 lf of boring	0.65	1	1	
35.11	Soil and Rock Classification - Roadway	100 lf of boring	0.65	2	1	
35.12	Design LBR	LS	1	4	4	Only if LBR tests are required
35.13	Laboratory Data	100 lf of boring	0.65	1	1	
35.14	Seasonal High Water Table	Boring	3	1	3	
35.15	Parameters for Water Retention Areas	EA	0	0	0	
35.16	Delineate Limits of Unsuitable Material	Cross-section	2	1	2	
35.17	Electronic Files for Cross-Sections	100 lf of boring	0.65	1	1	
35.18	Embankment Settlement and Stability	Embankment Boring	0	0	0	
35.19	Monitor Existing Structures	LS	0	0	0	

8. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.20	Stormwater Volume Recovery and/or Background Seepage Analysis	EA	0	0	0	
35.21	Geotechnical Recommendations	LS	1	8	8	
35.22	Pavement Condition Survey and Pavement Evaluation Report	LS	1	8	8	
35.23	Preliminary Roadway Report	LS	1	16	16	
35.24	Final Report	EA	1	20	20	
35.25	Auger Boring Drafting	100 lf boring	0.65	3	2	
35.26	SPT Boring Drafting	100 lf boring	0	4	0	
			Roadway Geotechnical Subtotal		87	
	Structures					
35.27	Develop Detailed Boring Location Plan	LS	1	8	8	6 Bridge Standard Penetration Test (SPT) borings; 2 on land and 4 from barge mounted equipment
35.28	Stake Borings/Utility Clearance	Boring	10	0.5	5	6 Bridge Standard Penetration Test (SPT) borings; Average test boring depth at 100 feet = 600LF of SPT
35.29	Coordinate and Develop MOT Plans for Field Investigation	EA	1	8	8	4 Gravity walls (one each quadrant of bridge)
35.30	Drilling Access Permits	Location	1	4	4	4 wall Standard Penetration Test (SPT) borings; 4 borings with average test boring depth at 20 feet = 80LF of
35.31	Property Clearances	EA	0	0	0	Total SPT borings equal 10 test borings with total of 600 LF + 80 LF = 680 LF
35.32	Collection of Corrosion Samples	EA	4	1	4	
35.33	Coordination of Field Work	100 lf of boring	6.8	1	7	
35.34	Soil and Rock Classification - Structures	100 lf of boring	6.8	2	14	
35.35	Tabulation of Laboratory Data	100 lf of boring	6.8	1	7	
35.36	Estimate Design Groundwater Level for Structures	EA	0	0	0	
35.37	Selection of Foundation Alternatives (BDR)	Bridge boring	9	4	36	
35.38	Detailed Analysis of Selected Foundation Alternate(s)	Bridge boring	9	8	72	
35.39	Bridge Construction and Testing Recommendations	Bridge boring	9	2	18	
35.40	Lateral Load Analysis (Optional)	Bridge boring	9	2	18	FB Multipier Parameters and Review of Lateral analyses by the Structural Engineer
35.41	Walls	Wall Boring	4	4	16	4 Gravity walls (one each quadrant of bridge)
35.42	Sheet Pile Wall Analysis (Optional)	Wall Boring	0	2	0	
35.43	Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations	Boring	0	1	0	

8. Geotechnical

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
35.44	Box Culvert Analysis	EA	0	6	0	
35.45	Preliminary Report - BDR	EA	1	16	16	
35.46	Final Report - Bridge and Associated Walls	EA	2	24	48	48 hrs (total) = 32 hrs for bridge (60% and 100%) + 16 hrs for permanent walls (for 60% and 100%)
35.47	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA	0	40	0	
35.48	SPT Boring Drafting	100 lf of boring	6.8	4	27	
35.49	Other Geotechnical	LS	1	0	0	
				Structural Geotechnical Subtotal	**308**	
				Geotechnical Technical Subtotal	**395**	
35.50	Technical Special Provisions	EA	0	0	0	
35.51	Field Reviews	LS	2	6	12	
35.52	Technical Meetings	LS	1	12	12	Meetings listed below
35.53	Quality Assurance/Quality Control	LS	%	5%	20	
35.54	Supervision	LS	%	5%	20	
				Geotechnical Nontechnical Subtotal	**64**	
35.55	Coordination	LS	%	3%	14	
				35. Geotechnical Total	**473**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Kickoff Meeting with County	EA	0	0	0		0
Boring Layout Approval	EA	0	0	0		0
Attend in BDR Review Meeting	EA	0	0	0		0
30/60/90% Submittal Review	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**0**	**Subtotal Project Manager Meetings**	0
Progress Meetings	EA	4	3	12	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**12**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Carries to 33.18

Carries to Tab 3

HDR, Inc.
Summary

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Beckett Bridge (No. 154000) Replacement
County: Pinellas
Pinellas County Proposal No.: 145-0317-NC (SS)
FAP No.: NA

Consultant Name: HDR, Inc.
Consultant No.: enter consultants proj. number
Date: 5/11/2016
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary Firm"	Project Manager	Chief Eng.	Sr. Eng.	Project Engineer	EIT	Senior Designer	Designer	CADD Technician	Staff Classi-fication 9	Staff Classi-fication 10	Staff Classi-fication 11	Staff Classi-fication 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$0.00	$227.70	$172.80	$125.00	$93.60	$0.00	$95.00	$72.90	$0.00	$0.00	$0.00	$0.00			
1. General Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
2. Roadway	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
3. Drainage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
4. Environmental Permits	928	0	0	557	278	0	0	0	93	0	0	0	0	928	$137,779	$148.47
5. HAER Documentaion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
6. Utility Coordination	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
7. Structures	1,230	0	82	246	301	369	0	0	252	0	0	0	0	1,230	$147,160	$119.64
8. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
9. Survey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
10. Public Involvement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
11. Post Design Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
12. Bid Phase Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
13a. Bridge Tender Control House Design	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
13b. Hydrographic Channel Survey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	-
Total Staff Hours	2,158	0	82	803	579	369	0	0	345	0	0	0	0	2,158		
Total Staff Cost		$0.00	$14,117.40	$138,758.40	$72,375.00	$34,538.40	$0.00	$0.00	$25,150.50	$0.00	$0.00	$0.00	$0.00		$284,940	$132.04

Check = $284,940

SALARY RELATED COSTS:	$284,940
SUBTOTAL ESTIMATED FEE:	**$284,940**
Survey (Field)	$0
Geotechnical Field and Lab Testing	$0
SUBTOTAL ESTIMATED FEE:	**$284,940**
Optional Services	$0
GRAND TOTAL ESTIMATED FEE:	**$284,940**

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

Project Activity 4: Environmental Permits

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
HDR, Inc.		

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Permits, Compliances and Clearances					
8.1	Preliminary Project Research	LS	1	24	24	Research existing documentation including reports, PD&E documents, tidal ranges, MHW/MLW elevations, previous agency involvement, listed species data.
	Permits					
8.2	**Field Work**					
8.2.1	Pond Site Alternatives	per pond site	1	0	0	Not Applicable.
8.2.2	Establish Wetland Jurisdictional Lines and Assessments	LS	1	56	56	Field work to determine the landward of extent of wetlands and other surface waters within, and adjacent to, the project footprint from the project beginning to end. Surveys will also include snorkel / SCUBA surveys to determine presence / absence of submerged aquatic vegetation (seagrasses) that may be present within, and adjacent to, the project limits. Tasks include UMAM assessments, completion of agency forms, survey coordination, and production of wetland / surface water aerials.
8.2.3	Species Surveys	LS	1	0	0	Will be performed in conjunction with 8.2.2
8.2.4	Archeological Surveys	LS	1	0	0	
8.3	Agency Verification of Wetland Data	LS	1	24	24	Hours include preparation for field work and conducting 3 separate field meetings with SWFWMD, USACE and NMFS.
8.4	**Complete And Submit All Required Permit Applications**					
8.4.1	Complete and Submit All Required Wetland Permit Applications	LS	1	272	272	Environmental Scientist hours only. Does not include drainage engineering hours. Includes production and submittal of SWERP Application to SFWMD, USACE Form 4345 and County / Regulatory Agency coordination. Hours include responses to agency Requests for Additional Information (RAIs).
8.4.2	Complete and Submit All Required Species Permit Applications	LS	1	0	0	Not Applicable.
8.5	Prepare Dredge and Fill Sketches (as needed)	LS	1	24	24	CADD hours only.
8.6	Prepare USCG Permit Sketches	LS	1	0	0	CADD hours only. - - Sketches to be provided by H&H
8.7	Prepare Water Management District Right-of-Way Occupancy Permit	LS	1	0	0	Not Applicable.

Project Activity 4: Environmental Permits

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
HDR, Inc.		

8.8	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	1	0	0	Not Applicable.
8.9	Prepare Tree Permit Information	LS	1	0	0	Not Applicable.
8.10	Mitigation Design	LS	1	90	90	Mitigation Bank not available for this project. Hours include UMAM assessments to determine mitigation area needed and production of a Mitigation Siting Technical Memo to identify most feasible, County-owned land to perform mitigation. Hours include production of mitigation grading and planting plans, quantities, mitigation monitoring plan and permit application submittals to SWFWMD and USACE.
8.11	Mitigation Coordination and Meetings	LS	1	24	24	Meetings with County and regulatory agencies during mitigation siting activities and development of mitigation plan.
8.12	Other Environmental Permits	LS	1	180	180	Production and submittal of USCG Bridge Permit application per the October 2011 USCG Bridge Permit Application Guide. Hours include coordination and responses to USCG RAIs.
	Environmental Clearances/Reevaluations					
8.13	**Technical support to Department for Environmental Clearances and Reevaluations (use when consultant provides technical support only)**					
8.13.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.13.2	Archaeological and Historical Features	LS	1	0	0	
8.13.3	Wetland Impact Analysis	LS	1	0	0	
8.13.4	Essential Fish Habitat	LS	1	80	80	This Environmental Clearance task would be considered as anOptional Service if required by the NMFS. Activities would include analysis of impacts to EFH, production of the EFH Report and submittal / coordination with USACE and NMFS.
8.13.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.13.6	Section 7 or Section 10 Consultation	LS	1	32	32	This Environmental Clearance task would be considered as anOptional Service if required. Hours would include coordination with USACE, NMFS, USFWS and FWC.
8.14	**Preparation of Environmental Clearances and Reevaluations (use when consultant prepares all documents associated with reevaluation)**					
8.14.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.14.2	Archaeological and Historical Features	LS	1	0	0	
8.14.3	Wetland Impact Analysis	LS	1	0	0	

Project Activity 4: Environmental Permits

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
HDR, Inc.		

8.14.4	Essential Fish Habitat	LS	1	0	0	
8.14.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.14.6	Section 7 or Section 10 Consultation	LS	1	0	0	
8.15	Contamination Impact Analysis	LS	1	0	0	
8.16	Asbestos Survey	LS	1	0	0	
Environmental Permits, Compliance, and Clearances/Reevaluations Technical Subtotal					**806**	
8.17	Technical Meetings	LS	1	24	24	Meetings are listed below
8.18	Quality Assurance/Quality Control	LS	%	5%	40	
8.19	Supervision	LS	%	5%	40	
Environmental Permits, Compliance and Clearances Nontechnical Subtotal					**104**	
8.20	Coordination	LS	%	2%	18	
8. Environmental Permits, Compliance and Clearances Total					**928**	

Project Activity 4: Environmental Permits

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
HDR, Inc.		

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
WMD	EA	2	4	8		0
NMFS	EA	1	4	4		0
USACE	EA	1	4	4		0
USCG	EA	1	4	4		0
USFWS	EA	1	4	4		0
FFWCC	EA	0	0	0		0
FDOT	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**24**	**Subtotal Project Manager Meetings**	**0**
Progress Meetings	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	--
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	--
Total Meetings				**24**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

HDR, Inc.
Staff-Hour Tabulation

Beckett Bridge (No. 154000) Replacement
Pinellas County Proposal No.: 145-0317-NC (SS)

Project Activity 7a: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
HDR, Inc.		

Task No.	Task	Units	Design and Production Staffhours				Comments
			No. of Units	Hours per Unit	No. of Sheets	Total	
	General Drawings						
9.1	Key Sheet and Index of Drawings	Sheet	1	4	1	4	Provided info to H&H to place on their sht
9.2	Project Layout	Sheet	0	0	0	0	n/a
9.3	General Notes and Bid Item Notes	Sheet	1	16	1	16	Approaches only
9.4	Miscellaneous Common Details	Sheet	0	0	0	0	By H&H
9.5	Incorporate Report of Core Borings	Sheet	0	0	0	0	By H&H
9.6	Existing Bridge Plans	LS	0	0		0	By H&H
9.7	Assemble Plan Summary Boxes and Quantities	LS	1	8		8	Approaches only
9.8	Cost Estimate	LS	1	24		24	Approaches only
9.9	Technical Special Provisions	LS	1	24		24	Fiber reinforced concrete deck
	Structures - Summary and Miscellaneous Tasks and Drawings Subtotal				2	76	

Task No.	Task	Total	Task 7b	Task 7c	Task 7d	Task 7e	Task 7f	Task 7g	Task 16	Task 17	Task 18
10-16	Bridge 1	992	336	656	0	0	0	0	0		
10-16	Bridge 2	0									
10-16	Bridge 3	0									
10-16	Bridge 4	0									
10-16	Bridge 5	0									

Project Activity 7a: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
HDR, Inc.		

10-16	Bridge 6	0									
10-16	Bridge 7	0									
10-16	Bridge 8	0									
10-16	Bridge 9	0									
10-16	Bridge 10	0									
17	Retaining Walls	0								0	
18	Miscellaneous Structures	0									0
	Structures Technical Subtotals	992	336	656	0	0	0	0	0	0	0

Task No.	Task	Units	No. of Units	Hours per Unit	Total	Comments
9.10	Field Reviews	LS	1	8	8	2 ppl x 4 hrs
9.11	Technical Meetings	LS	1	0	0	Meetings are listed below
9.12	Quality Assurance/Quality Control	LS	1	0	42	
9.13	Independent Peer Review	LS	1	0	0	
9.14	Supervision	LS	%	5%	52	
	Structures Nontechnical Subtotal				102	
9.15	Coordination	LS	1	60	60	
	9. Structures - Summary and Miscellaneous Tasks and Drawings Nontechnical and Coordination Total				238	

Project Activity 7a: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
HDR, Inc.		

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
BDR Coordination/Review	EA	0	0	0		0
90/100% Comment Review	EA	0	0	0		0
Aesthetics Coordination	EA	0	0	0		0
Regulatory Agency	EA	0	0	0		0
Local Governments (cities, counties)	EA	0	0	0		0
Utility Companies	EA	0	0	0		0
Other Meetings	EA	0	0	0		0
Subtotal Technical Meetings				**0**		**0**
Progress Meetings	EA	0	0	0	*PM attendance at Progress Meetings is manually entered on General Task 3*	--
Phase Review Meetings	EA	0	0	0	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	--
Total Meetings				**0**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

Project Activity 7b: BDR

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
HDR, Inc.		

Task No.	Task	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	General Requirement						
10.1	Bridge Geometry	LS	1	12		12	approach geometry
10.2	Ship Impact Data Collection	LS	1	0		0	RE: PER Section 3.2.8 - no potential for ship impact
10.3	Ship Impact Criteria	EA	1	0		0	RE: PER Section 3.2.8 - no potential for ship impact
	Superstructure Alternatives						
10.4	Short Span Concrete Bridge	EA ALT	4	8		32	Flat slab C-I-P Precast Prestressed Slab Bridge w/fiber reinf deck FL Slab Beam Bridge w/conc reinf deck Inverted T-beams
10.5	Medium Span Concrete Bridge	EA ALT	1	12		12	FIB 36 option
10.6	Long Span Concrete Bridge	EA ALT	0	0		0	
10.7	Structural Steel Bridge	EA ALT	0	0		0	
	Foundation & Substructure Alternatives						
10.8	Pier/Bent	EA Type	1	24		24	by H&HPier and EB, cip and precast options (4 ea)
10.9	Shallow Foundations / GRS Abutments	EA Type	0	0		0	n/a
10.10	Deep Foundations	EA Foundation Evaluated	1	12		12	by H&HDrilled Shafts and Pile Foundation (2 ea)
	Movable Span						
10.11	Data Collection and Design Criteria	LS	1	0		0	n/a
10.12	Movable Span Geometrics and Clearances	LS	1	0		0	n/a
10.13	Deck System Evaluation	LS	1	0		0	n/a
10.14	Framing Plan Development	LS	1	0		0	n/a
10.15	Main Girder Preliminary Design	LS	1	0		0	n/a
10.16	Conceptual Span Balance/Counterweight	LS	1	0		0	n/a

Representing	Print Name	Signature / Date
Pinellas County		
HDR, Inc.		

10.17	Support System Development	LS	1	0		0	n/a
10.18	Drive Power Calculations	LS	1	0		0	n/a
10.19	Drive System Development	LS	1	0		0	n/a
10.20	Power and Control Development	LS	1	0		0	n/a
10.21	Conceptual Pier Design	LS	1	0		0	n/a
10.22	Foundation Analysis (FL PIER)	LS	1	0		0	n/a
10.23	Tender Visibility Study	LS	1	0		0	n/a
	Other BDR Issues						
10.24	Aesthetics	LS	1	16		16	Higher aesthetic expected
10.25	TCP/Staged Construction Requirements	LS	1	4		4	Traffic closed
10.26	Constructibility Requirements	LS	1	48		48	Access is an issue, conc delivery, erection (24); Research, evaluation, and development of suprerstructure ABC methodology and solution (24)
10.27	Load Rating for damaged/widened structures	EA Unit	1	0		0	n/a
10.28	Quantity and Cost Estimates	EA ALT	5	16		80	
10.29	Quantity and Cost Estimates - Movable Span	LS	1	0		0	n/a
10.30	Wall Type Justification	LS	0	24		0	by H&HSea wall, MSE, sheet pile wall determination (1 ea)
	Report Preparation						
10.31	Exhibits	EA SHT	3	16		48	Plan/Elev view, cross-section (2)
10.32	Exhibits - Movable Span	EA SHT	0	0		0	n/a
10.33	Report Preparation	LS	1	48		48	
10.34	Report Preparation - Movable Span	LS	1	0		0	n/a
10.35	BDR Submittal Package	LS	1	0		0	
	10. Structures - Bridge Development Report Total					**336**	

Project Activity 7c: Structures- Short Span Concrete

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
HDR, Inc.		

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	General Layout Design and Plans						
12.1	Overall Bridge Final Geometry	LS	1	16		16	
12.2	Expansion/Contraction Analysis	EA Unit	2	4		8	east and west approach
12.3	General Plan and Elevation	Sheet	2	24	2	48	east and west approach
12.4	Construction Staging	Sheet	1	16	1	16	
12.5	Approach Slab Plan and Details	Sheet	1	8	1	8	
12.6	Miscellaneous Details	Sheet	2	24	2	48	drainage details&expansion jts; Load rating sht
	End Bent Design and Plans						
12.7	End Bent Geometry	EA End Bent	1	4		4	by H&H in collaboration w/ HDR
12.8	End Bent Structural Design	EA Design	0	0		0	by H&H
12.9	End Bent Plan and Elevation	Sheet	0	0	0	0	by H&H
12.10	End Bent Details	Sheet	0	0	0	0	by H&H Evaluate precast option details
	Intermediate Bent Design and Plans						
12.11	Bent Geometry	EA Bent	1	4		4	by H&H in collaboration w/ HDR
12.12	Bent Stability Analysis	EA Analysis	0	0		0	by H&H RE: PER Section 3.2.8 - no potential for ship impact
12.13	Bent Structural Design	EA Design	0	24		0	by H&H
12.14	Bent Plan and Elevation	Sheet	0	12	0	0	by H&H
12.15	Bent Details	Sheet	0	24	0	0	by H&H Evaluate precast option details

Project Activity 7c: Structures- Short Span Concrete

Estimator:

Beckett Bridge (No. 154000) Replacement
145-0317-NC (SS)

Representing	Print Name	Signature / Date
Pinellas County		
HDR, Inc.		

	Miscellaneous Substructure Design and Plans						
12.16	Foundation Layout	Sheet	0	16	0	0	by H&H
	Miscellaneous Superstructure Design and Plans						
12.17	Finish Grade Elevation Calculation	LS	1	8		8	
12.18	Finish Grade Elevations	Sheet	3	12	3	36	east and west approach, data tables, approach slabs
	Cast-in-Place Slab Bridges						
12.19	Bridge Deck Design	EA Unit	0	0		0	n/a
12.20	Superstructure Plan	Sheet	0	0	0	0	n/a
12.21	Superstructure Sections and Details	Sheet	0	0	0	0	n/a
	Prestressed Slab Unit Bridges						
12.22	Prestressed Slab Unit Design	EA Design	10	16		160	7 typ 5', 2 typ 4', 1 custom; 2 span lengths
12.23	Prestressed Slab Unit Layout	Sheet	1	12	1	12	no pt
12.24	Prestressed Slab Unit Details and Schedule	Sheet	2	12	2	24	east/west approaches
12.25	Deck Topping Reinforcing Layout	Sheet	2	12	2	24	east/west approaches
12.26	Superstructure Sections and Details	Sheet	2	12	2	24	sidewalk details, topping and barrier details, slab deflection details, etc.
	Reinforcing Bar List						
12.27	Preparation of Reinforcing Bar List	Sheet	2	8	2	16	east/west approaches
	Load Rating						
12.28	Load Ratings	EA Unit	10	20		200	5 panels load rated per span, say 2 unequal spans
	12. Structures - Short Span Concrete Bridge Total				**18**	**656**	

EXHIBIT B - HOURLY RATES

Hardesty & Hanover
engineering that moves you

18302 Highwoods Preserve Parkway, Suite 114, Tampa, FL 33647
T 813.304.2385 • F 813.304.2387
www.hardesty-hanover.com

February 3, 2016

Pinellas County Public Works
400 South Ft. Harrison, Sixth Floor
Clearwater, FL 33756

Attn: Ms. Sue Steele

Re: Fee Schedule
Beckett Bridge replacement (Bridge No. 154000) – Engineering Consulting Services
Contract No. 145-0317-NC

Dear Ms. Steele:

Hardesty & Hanover, LLC (H&H) has updated our fully burdened hourly rate documentation to reflect Exhibit B. We have also blended the rates of The Heimburg Group, Inc., and H&H to reflect the acquisition of THG by H&H. Blending accounted for the fact that the bridge work is approximately 80% of the effort and the civil work is approximately 20% of the effort. All other rates remain as previously submitted. The fully burdened rates are listed below in Exhibit B for Hardesty & Hanover, LLC, and are attached for our subconsultants.

EXHIBIT B – Fully Burdened Hourly Rates	
Job Classification	Proposed Rate ($/hr)
Project Manager	$249.00
Chief Engineer	$244.00
Senior Engineer	$170.00
Senior Project Engineer	$133.00
Project Engineer	$110.00
Engineer	$108.00
Engineer in Training	$89.00
Senior Technician	$92.00
Public Information Officer	$149.00
Clerical	$55.00

Please call or email me if you wish to discuss or require additional information.

Respectfully Submitted,

Hardesty & Hanover, LLC

James M. Phillips III, PE
Bridge Practice Lead

HDR

EXHIBIT B

HDR Engineering, Inc.

Schedule of Rate Values
(Revised 1-11-2016)

Beckett Bridge Replacement (Bridge No. 154000) – Engineering Consulting Services

Contract No. 145-0317-NC (SS)

JOB CLASSIFICATION	ORIGINAL PROPOSED LOADED RATE	REVISED PROPOSED LOADED RATES	JUSTIFICATION
Chief Engineer	$ 250.00	$ 227.70	10% reduction accepted
Senior Planner	$ 170.00	$ 154.80	10% reduction accepted
Senior Engineer	$ 190.00	$ 172.80	10% reduction accepted
Planner	$ 115.00	$ 103.50	10% reduction accepted
Project Engineer	$ 125.00	$ 125.00	Request no change to originally proposed rate; rate is less than both Statewide and District 7 averages
Engineering Intern	$ 105.00	$ 93.60	10% reduction accepted
Designer	$ 100.00	$ 95.00	Willing to accept a 5% reduction to proposed rate; new rate is less than both Statewide and District 7 75% quartile
Engineering Technician	$ 81.00	$ 72.90	10% reduction accepted
Chief Scientist	$ 150.00	$ 150.00	Request no change to originally proposed rate; rate is less than both Statewide and District 7 averages
Senior Scientist	$ 125.00	$ 111.60	10% reduction accepted
Secretary/Clerical	$ 65.00	$ 61.75	Willing to accept a 5% reduction to proposed rate; new rate is less than both Statewide and District 7 averages

hdrinc.com

5426 Bay Center Drive, Suite 400, Tampa, FL 33609
T 813.282.2300 F 813.282.2430

EXHIBIT B

JANUS MAIN OFFICE
1107 N. Ward Street
Tampa, FL 33607

— EST. 1979 —

Tel. 813.636.8200
Fax 813.636.8212
janus@janus-research.com

Tampa Bay • Miami • Ft. Myers • Atlanta

Wage Rates by Job Classification and Employee
JANUS RESEARCH

Rate Schedule for Beckett Bridge Replacement (Bridge No 154000)

Contract No. 145-0317-NC (SS)

Job Classification	Personnel Name	Current Raw Hourly Rate	Fully Burdened Rate
Project Manager	Ken Hardin	$92.00	$189.32
Chief Archaeologist	Kathleen Hoffman	$37.73	$103.52
Senior Archaeologist	Adam Schieffer	$25.00	$68.59
Archaeologist	Brian Tillesen	$14.00	$38.41
Senior Architectural Historian	Amy Streelman	$45.93	$126.02
Architectural Historian	Jason Newton	$18.50	$50.76
CADD/Computer Tech	Shawn Barkley	$22.00	$60.36
GIS Specialist	Anya Frashuer	$20.00	$54.87
Clerical/Secretary	Anthony Thompson	$17.00	$46.64

Signature

Kenneth Hardin
Printed Name (President)

October 27, 2015
DATE

INTERA
GEOSCIENCE & ENGINEERING SOLUTIONS

INTERA Incorporated
2114 NW 40th Terrace, Suite A1
Gainesville, Florida, USA 32605
352.392.2323

January 11, 2016

James M. Phillips III, PE
Bridge Practice Lead
Hardesty & Hanover
18302 Highwoods Preserve Pkwy, Ste 114
Tampa, FL 33647

RE: EXHIBIT B — Beckett Bridge Replacement (Bridge No. 154000) – Engineering Consulting Services Contract No. 145-0317-NC (SS)

Dear Mr. Phillips,

INTERA Incorporated (INTERA) is pleased to submit the following summary of understanding regarding INTERA's role on the above referenced project and proposed rate schedule. INTERA will provide coastal engineering and bridge hydraulic services as a subconsultant to Hardesty & Hanover. INTERA will be responsible for the development and submittal of the Bridge Hydraulics Report for the Beckett Bridge Replacement structure. The Bridge Hydraulic Report will be prepared in accordance with the guidance in the FDOT Bridge Hydraulics Handbook. The bridge location across Whitcomb Bayou (Minetta Branch of the Anclote River) near the coast implies that the design hydraulic parameters will be associated with hurricane generated storm surge up the river to the project site. INTERA will construct and calibrate a hydrodynamic model of the waterway and surrounding area. The model will simulate the storm surge associated with the design, base, and check event return periods. These simulations will provide both design clearances and the means to calculate scour at the bridge substructure. INTERA will also develop the design wave climate at the bridge and develop wave forces on the bridge superstructure (if required). Additionally, INTERA will provide recommendations for the bridge abutment protection to resist both storm surge related currents and wave impact. INTERA will summarize all procedures, results, and recommendations in a Bridge Hydraulics Report meeting all FDOT requirements.

Table 1 presents INTERA's fully burdened rate schedule. The rates are listed by staff classification. Please contact me if you require supporting documentation or wish to discuss our role.

Table 1 INTERA Incorporated Fully Burdened Rate Schedule

Staff Classification	Fully Burdened Rate
Chief Engineer	$ 199.51
Engineer	$ 107.59
Project Engineer	$ 122.81
Project Manager	$ 179.08
Secretary/Clerical	$ 52.74
Senior Engineer	$ 155.27

Sincerely,

Mark Gosselin, Ph.D., P.E.

INTERA Incorporated

Director of Hydraulics and Coastal Modeling

Omni Communications
Schedule of Rates
Exhibit "B"

Service	Unit	Rate
Three (3) Person Locating Crew	Daily	$1,757.74
Three (3) Person Designating Crew	Daily	$1,937.66
Sr. Utility Coordinator	Hourly	$139.00
Secretary/Clerical	Hourly	$72.00
Utility Coordinator	Hourly	$125.00
Senior Surveyor & Mapper	Hourly	$155.00
Surveyor & Mapper	Hourly	$125.00
Three (3) Person Survey Crew	Daily	$1,462.73

OMNI Communications
President

01/04/16 - Revised
Date

Item Description	Unit	Unit Price
Geotechnical Field Investigation		
612-Geo Mobilization Drill Rig Truck Mount	Each	$ 350.00
614-Geo Mobilization Mudbug/All Terrain Vehicle	Each	$ 700.00
610-Geo Mobilization Drill Rig Track Mount	Each	$ 2,925.00
418-Geo Drill Crew Support Vehicle	Day	$ 160.00
609-Geo Mobilization Drill Rig Barge Mount	Each	$ 7,138.00
405-Geo Barge (Owned)	Day	$ 2,500.00
618-Geo Mobilization Support Boat	Each	$ 500.00
Geo Support Safety Boat	Day	$ 500.00
619-Geo Mobilization Tri-Pod	Each	$ 1,125.00
419-Geo Drilling Crew 2-Person	Hour	$ 135.00
420-Geo Drilling Crew 3-Person	Hour	$ 185.00
Geo SPT Truck 0-50 Ft	LF	$ 12.90
Geo SPT Truck 50-100 Ft	LF	$ 17.00
Geo SPT Truck 100-150 Ft	LF	$ 31.00
Geo SPT Truck 150-200 Ft	LF	$ 39.00
478-Geo SPT Truck-Mud Bug 0-50 Ft	LF	$ 15.20
479-Geo SPT Truck-Mud Bug 50-100 Ft	LF	$ 18.10
480-Geo SPT Truck-Mud Bug 100-150 Ft	LF	$ 32.00
481-Geo SPT Truck-Mud Bug 150-200 Ft	LF	$ 42.00
473-Geo SPT Barge/Track/Amphibious 000-050 Ft	LF	$ 21.50
474-Geo SPT Barge/Track/Amphibious 050-100 Ft	LF	$ 28.90
475-Geo SPT Barge/Track/Amphibious 100-150 Ft	LF	$ 53.00
476-Geo SPT Barge/Track/Amphibious 150-200 Ft	LF	$ 70.00
Geo Grout Boreholes- Truck 0-050 Ft	LF	$ 5.25
Geo Grout Boreholes- Truck 50-100 Ft	LF	$ 7.00
Geo Grout Boreholes- Truck 100-150 Ft	LF	$ 10.25
Geo Grout Boreholes- Truck 150-200 Ft	LF	$ 14.00
440-Geo Grout Boreholes- Truck/Mud Bug 000-050 Ft	LF	$ 6.25
441-Geo Grout Boreholes- Truck/Mud Bug 050-100 Ft	LF	$ 8.00
442-Geo Grout Boreholes- Truck/Mud Bug 100-150 Ft	LF	$ 13.10
443-Geo Grout Boreholes- Truck/Mud Bug 150-200 Ft	LF	$ 18.00
435-Geo Grout Boreholes- Barge/Track/Amphibious 000-050 Ft	LF	$ 8.50
436-Geo Grout Boreholes- Barge/Track/Amphibious 050-100 Ft	LF	$ 11.25
437-Geo Grout Boreholes- Barge/Track/Amphibious 100-150 Ft	LF	$ 17.25
438-Geo Grout Boreholes- Barge/Track/Amphibious 150-200 Ft	LF	$ 25.00
Geo Temp Casing 3" Truck 0-050 Ft	LF	$ 8.50
Geo Temp Casing 3" Truck 50-100 Ft	LF	$ 10.25
Geo Temp Casing 3" Truck 100-150 Ft	LF	$ 12.25
Geo Temp Casing 3" Truck 150-200 Ft	LF	$ 15.00
488-Geo Temp Casing 3" Truck/Mud Bug 000-050 Ft	LF	$ 10.30
489-Geo Temp Casing 3" Truck/Mud Bug 050-100 Ft	LF	$ 14.00
490-Geo Temp Casing 3" Truck/Mud Bug 100-150 Ft	LF	$ 17.50
491-Geo Temp Casing 3" Truck/Mud Bug 150-200 Ft	LF	$ 22.00

Item Description	Unit	Unit Price
483-Geo Temp Casing 3" Barge/Track/Amphibious 0-050 Ft	LF	$ 14.50
484-Geo Temp Casing 3" Barge/Track/Amphibious 50-100 Ft	LF	$ 17.50
485-Geo Temp Casing 3" Barge/Track/Amphibious 100-150 Ft	LF	$ 20.00
486-Geo Temp Casing 3" Barge/Track/Amphibious 150-200 Ft	LF	$ 25.00
463-Geo Rock Coring Truck/Mud Bug 000-050 Ft less than 4" ID	LF	$ 45.00
465-Geo Rock Coring Truck/Mud Bug 050-100 Ft less than 4" ID	LF	$ 52.00
467-Geo Rock Coring Truck/Mud Bug 100-150 Ft less than 4" ID	LF	$ 60.00
453-Geo Rock Coring Barge/Track/Amphibious 000-050 Ft less than 4" ID	LF	$ 48.00
455-Geo Rock Coring Barge/Track/Amphibious 050-100 Ft less than 4" ID	LF	$ 64.00
457-Geo Rock Coring Barge/Track/Amphibious 100-150 Ft less than 4" ID	LF	$ 80.00
459-Geo Rock Coring Barge/Track/Amphibious 150-200 Ft less than 4" ID	LF	$ 94.00
427-Geo Extra SPT Samples-Truck/Mud Bug 000-050 Ft	Each	$ 71.00
428-Geo Extra SPT Samples-Truck/Mud Bug 050-100 Ft	Each	$ 71.00
429-Geo Extra SPT Samples-Truck/Mud Bug 100-150 Ft	Each	$ 85.00
430-Geo Extra SPT Samples-Truck/Mud Bug 150-200 Ft	Each	$ 85.00
422-Geo Extra SPT Samples-Barge/Track/Amphibious 000-050 Ft	Each	$ 71.00
423-Geo Extra SPT Samples-Barge/Track/Amphibious 050-100 Ft	Each	$ 71.00
424-Geo Extra SPT Samples-Barge/Track/Amphibious 100-150 Ft	Each	$ 85.00
425-Geo Extra SPT Samples-Barge/Track/Amphibious 150-200 Ft	Each	$ 85.00
519-Geo Undisturbed Samples Truck/Mud Bug 000-050 Ft	Each	$ 200.00
520-Geo Undisturbed Samples Truck/Mud Bug 050-100 Ft	Each	$ 200.00
521-Geo Undisturbed Samples Truck/Mud Bug 100-150 Ft	Each	$ 200.00
522-Geo Undisturbed Samples Truck/Mud Bug 150-200 Ft	Each	$ 200.00
515-Geo Undisturbed Samples Barge/Track/Amphibious 000-050 Ft	Each	$ 200.00
516-Geo Undisturbed Samples Barge/Track/Amphibious 050-100 Ft	Each	$ 200.00
517-Geo Undisturbed Samples Barge/Track/Amphibious 100-150 Ft	Each	$ 200.00
518-Geo Undisturbed Samples Barge/Track/Amphibious 150-200 Ft	Each	$ 200.00
401-Geo Auger Borings- Hand & Truck/Mud Bug	LF	$ 10.50
402-Geo Auger Borings- Track	LF	$ 12.00
432-Geo Field Permeability 0-10 Ft (Open - End Borehole Method)	Each	$ 290.00
Flagman and Barricades 2-Man Crew Own Equipment	Day	$ 890.00
450-Geo Piezometer 2" 000-050 Ft	LF	$ 44.00
445-Geo Grouted Monitor Well 2" 000-050 Ft	LF	$ 6.25
Piezometer Permit Cost Actual	Each	Actual
403-Geo Backhoe (Owned)	Day	$ 600.00
416-Geo Dozer (Owned)	Day	$ 800.00
Site Clearing to Access Boring or Test Locations	Hour	$ 210.00
407-Geo Chainsaw (Owned)	Day	$ 28.00
415-Geo Double Ring Infiltration (ASTM D3385)	Each	$ 525.00
434-Geo Ground Penetrating Radar (GPR)	Day	$ 2,800.00

Item Description	Unit	Unit Price
Asphalt and Concrete Pavement Coring		
209-Asphalt Pavement Coring – 4" dia with Base Depth Check	Each	$ 125.00
210-Asphalt Pavement Coring – 4" dia without Base Depth Check	Each	$ 110.00
211-Asphalt Pavement Coring – 6" dia with Base Depth Check	Each	$ 125.00
212-Asphalt Pavement Coring – 6" dia without Base Depth Check	Each	$ 110.00
305-Concrete Pavement Coring - 4" Dia	Each	$ 110.00
306-Concrete Pavement Coring - 6" Dia	Each	$ 110.00
603-Mobilization Asphalt Coring equipment	Each	$ 250.00
606-Mobilization Concrete Coring	Each	$ 250.00
Geotechnical Soil Laboratory Testing		
812-Soils Materials Finer than 200 Sieve (FM 1-T011)	Test	$ 42.00
817-Soils Moisture Content Laboratory (AASHTO T 265)	Test	$ 10.00
821-Soils Particle Size Analysis (AASHTO T 88) (Including Hydrometer)	Test	$ 131.00
822-Soils Particle Size Analysis (AASHTO T 88) (No Hydrometer)	Test	$ 67.00
805-Soils Corrosion Series (FM 5-550 through 5-553)	Test	$ 175.00
825-Soils pH Soil or Water (FM 5-550)	Test	$ 35.00
829-Soils Resistivity Soil or Water (FM 5-551)	Test	$ 46.00
800-Soils Chloride Soil or Water (FM 5-552)	Test	$ 46.00
833-Soils Sulfate Soil or Water (FM 5-553)	Test	$ 48.00
819-Soils Organic Content Ignition (FM 1 T-267)	Test	$ 42.00
Atterberg Limit Tests (AASHTO T-89 and T-90) Combined	Test	$ 130.00
826-Soils Plastic Limit & Plasticity Index (AASHTO T 90)	Test	$ 70.00
811-Soils Liquid Limit (AASHTO T 89)	Test	$ 60.00
823-Soils Permeability Constant Head (AASHTO T 215)	Test	$ 175.00
824-Soils Permeability Falling Head (FM 5-513)	Test	$ 175.00
827-Soils Proctor Modified (FM 1-T 180)	Test	$ 115.00
828-Soils Proctor Standard (AASHTO T 99)	Test	$ 111.00
832-Soils Splitting Tensile Strength of Rock Cores (ASTM D3967)	Test	$ 138.00
838-Soils Unconfined Compression - Rock (ASTM D7012, Method C)	Test	$ 138.00
803-Soils Consolidation - Constant Strain (ASTM D4186)	Test	$ 580.00
804-Soils Consolidation - Extended Load Increments (AASHTO T216)	Each	$ 50.00
806-Soils Direct Shear Consolidated Drained/ Point AASHTO T 236	Test	$ 250.00
810-Soils Limerock Bearing Ratio (LBR)(FM 5-515)	Test	$ 340.00

Item Description	Unit	Unit Price
Misc Asphalt and Concrete Testing		
100-Aggregate Acid Insol Retained 200 Sieve (FM 5-510)	Test	$ 90.00
101-Aggregate Carbonates and Organic Matter (FM 5-514)	Test	$ 90.00
102-Aggregate Organic Impurities in Sand for Concrete (AASHTO T 21)	Test	$ 40.00
103-Aggregate Shell Content of Coarse Aggregate (FM 5-555)	Test	$ 55.00
104-Aggregate Sieve Analysis of Fine and Coarse Aggregate (AASHTO T 27)	Test	$ 41.00
105-Aggregate Soundness (AASHTO T 104)	Test	$ 275.00
107-Aggregate Total Moisture Content by Drying (AASHTO T-255)	Test	$ 9.60
108-Aggregate Unit Mass and Voids (AASHTO T 19)	Test	$ 50.00
200-Asphalt Bulk Specific Gravity (FM 1-T 166)	Test	$ 25.10
201-Asphalt Content (FM 5-563)	Test	$ 136.00
203-Asphalt Gradation & Content (FM 1-T 030 & FM 5-563)	Test	$ 187.00
204-Asphalt Gradation (FM 1-T 030)	Test	$ 51.00
207-Asphalt Los Angeles (LA) Abrasion Small Agg (FM 1-T 096)	Test	$ 270.00
300-Concrete Beam Flexural Testing (ASTM C78)	Test	$ 31.00
301-Concrete Compressive Compressive Strength of Grout\Mortar (ASTM C 109)	Test	$ 13.00
302-Concrete Cylinder Curing, Capping & Breaking (ASTM C39)	Test	$ 12.00
303-Concrete Drilled Cores and Sawed Beams (ASTM C42)	Test	$ 38.00
Contamination Test Units		
850-EDR Report	Each	$ 500.00
852-Organic Vapor Analyzer (OVA)	Day	$ 150.00
854-Handheld GPS	Per Day	$ 80.34
856-Field Sampling Kit (soil)	Each	$ 75.00
858-Field Sampling Survey Kit (water)	Each	$ 75.00
860-Power Auger Boring (includes decontamination to a depth of 25 feet)	Foot	$ 11.90
862-BTEX and MTBE (Method 8260)	Each	$ 65.00
864-Organochlorine Pesticides (Method 8081)	Each	$ 100.00
866-Organophosphorous Pesticides (Method 8141)	Each	$ 125.00
868-Chlorinated Herbicides (Method 8151)	Each	$ 100.00
870-Volatile Organics (Method 8260)	Each	$ 95.00
872-Volatile Organics BTEX/MTBE(Method 8260)	Each	$ 60.00
874-Semi-Volatiles (Method 8270)	Each	$ 200.00
876-Polyaromatic Hydrocarbons (Method 8270)	Each	$ 100.00
878-TPH Method FL-Pro	Each	$ 65.00
880-RCRA 8 Metals (Method 6010/7471)	Each	$ 65.00
882-RCRA Metals Individual (Method 6010/7471)	Each	$ 9.00
884-Mercury Individual (Method 6010/7471)	Each	$ 25.00
886-Ultr Low Trace Mercury GW Individual (Method 1631)	Each	$ 75.00
888-Arsenic (Method 6010/7471)	Each	$ 9.00
890-SPLP/TCLP Metals	Each	$ 198.00
892-Asbestos Samples	Each	$ 15.00
894-Polychlorinated Biphenals (8082)	Each	$ 75.00

Item Description	Unit	Unit Price
Engineering, CEI and Technical Support Services		
Project Manager	Hour	$ 166.50
Senior Engineer	Hour	$ 171.00
Chief Scientist	Hour	$ 137.04
Senior Project Engineer	Hour	$ 141.64
Geotechnical Engineer	Hour	$ 113.81
Engineering Intern	Hour	$ 96.62
Senior Scientist	Hour	$ 115.65
Designer	Hour	$ 93.32
Sr Engineering Technician	Hour	$ 82.61
Geotechnical Technician	Hour	$ 66.39
Secretary/Clerical	Hour	$ 72.00

TOUCHSTONE
ARCHITECTURE

Date: 3 November 2015

To: Pinellas County Public Works
Attn: Sue Steele
400 South Ft. Harrison, Sixth Floor
Clearwater, FL 33756

Re: Beckett Bridge Replacement (Bridge No. 154000) – Engineering Consulting Services
Contract No. 145-0317-NC (SS)
Adjusted 2012 Billable Rates

From: Bradley C. Touchstone, AIA

Dear Ms. Steele,

Below are our proposed fully burdened billing rates for the above referenced project based on our current salary rates, overhead rate, and profit.

Exhibit B - Hourly Rates

Classification	Hourly Rate
Principle Bridge Architect	$229.57
Bridge Architect	$76.94
Support/ Production	$52.91
Clerical	$64.10

If you have any questions or need any additional information please do not hesitate to call.

Best regards,

Bradley C. Touchstone

Bradley C. Touchstone, AIA
President
Touchstone Architecture

3011-1 Powell Road, Tallahassee, FL 32308
Ph. 850.656.7326
FL License # 26000708

SECTION C – LIMITATION ON LIABILITY, INDEMNIFICATION, AND INSURANCE REQUIREMENTS

1. INSURANCE:

a) Proposal submittals should include, the Proposers current Certificate(s) of Insurance in accordance with the insurance requirements listed below. If Proposer does not currently meet insurance requirements, proposer/bidder/quoter shall also include verification from their broker or agent that any required insurance not provided at that time of submittal will be in place within 10 days after award recommendation.

b) Within 10 days of **contract award** and prior to commencement of work, Proposer shall email certificate that is compliant with the insurance requirements to CertsOnly-Portland@ebix.com. If certificate received with proposal was a compliant certificate no further action may be necessary. It is imperative that proposer include the unique identifier, which will be supplied by the County's Purchasing Department. The Certificate(s) of Insurance shall be signed by authorized representatives of the insurance companies shown on the Certificate(s). **A copy of the endorsement(s) referenced in paragraph 3.(d) for Additional Insured shall be attached to the certificate(s) referenced in this paragraph.**

c) No work shall commence at any project site unless and until the required Certificate(s) of Insurance are received and approved by the County. Approval by the County of any Certificate(s) of Insurance does not constitute verification by the County that the insurance requirements have been satisfied or that the insurance policy shown on the Certificate(s) of Insurance is in compliance with the requirements of the Agreement. County reserves the right to require a certified copy of the entire insurance policy, including endorsement(s), at any time during the RFP and/or contract period.

d) All policies providing liability coverage(s), other than professional liability and workers compensation policies, obtained by the Proposer and any subcontractors to meet the requirements of the Agreement shall be endorsed to include Pinellas County Board of County Commissioners as an Additional Insured.

e) If any insurance provided pursuant to the Agreement expires prior to the completion of the Work, renewal Certificate(s) of Insurance and endorsement(s) shall be furnished by the Proposer to the County at least thirty (30) days prior to the expiration date.

(1) Proposer shall also notify County within twenty-four (24) hours after receipt, of any notices of expiration, cancellation, nonrenewal or adverse material change in coverage received by said Proposer from its insurer. Notice shall be given by certified mail to: Pinellas County, c/o Ebix BPO, PO Box 257, Portland, MI, 48875-0257; be sure to include your organization's unique identifier, which will be provided upon notice of award. Nothing contained herein shall absolve Proposer of this requirement to provide notice.

(2) Should the Proposer, at any time, not maintain the insurance coverages required herein, the County may terminate the Agreement, or at its sole discretion may purchase such coverages necessary for the protection of the County and charge the Proposer for such purchase or offset the cost against amounts due to proposer for services completed. The County shall be under no obligation to purchase such insurance, nor shall it be responsible for the coverages purchased or the insurance company or companies used. The decision of the County to purchase such insurance shall in no way be construed to be a waiver of any of its rights under the Agreement.

f) The County reserves the right, but not the duty, to review and request a copy of the Contractor's most recent annual report or audited financial statement when a self-insured retention (SIR) or deductible exceeds $50,000.

g) If subcontracting is allowed under this RFP, the Prime Proposer shall obtain and maintain, at all times during its performance of the Agreement, insurance of the types and in the amounts set forth; and require any subcontractors to obtain and maintain, at all times during its performance of the Agreement, insurance limits as it may apply to the portion of the Work performed by the subcontractor; *but in no event will the insurance limits be less than $500,000 for Workers' Compensation/Employers' Liability, and $1,000,000 for General Liability and Auto Liability if required below.*

(1) All subcontracts between Proposer and its subcontractors shall be in writing and are subject to the County's prior written approval. Further, all subcontracts shall (1) require each subcontractor to be bound to Proposer to the same extent Proposer is bound to the County by the terms of the Contract Documents, as those terms may apply to the portion of the Work to be performed by the subcontractor; (2) provide for the assignment of the subcontracts from Proposer to the County at the election of Owner upon termination of the Contract; (3) provide that County will be an additional indemnified party of the subcontract; (4) provide that the County will be an additional insured on all insurance policies required to be provided by the subcontractor except workers compensation and professional liability; (5) provide waiver of subrogation in favor of the County and other insurance terms and/or conditions as outlined below; (6) assign all warranties directly to the County; and (7) identify the County as an intended third-party beneficiary of the subcontract. Proposer shall make available to each proposed subcontractor, prior to the execution of the subcontract, copies of the Contract Documents to which the subcontractor will be bound by this Section C and identify to the subcontractor any terms and conditions of the proposed subcontract which may be at variance with the Contract Documents.

h) Each insurance policy and/or certificate shall include the following terms and/or conditions:

(1) The Named Insured on the Certificate of Insurance and insurance policy must match the entity's name that responded to the solicitation and/or is signing the agreement with the County. If Proposer is a Joint Venture per Section A. titled Joint Venture of this RFP, Certificate of Insurance and Named Insured must show Joint Venture Legal Entity name and the Joint Venture must comply with the requirements of Section C with regard to limits, terms and conditions, including completed operations coverage.

(2) Companies issuing the insurance policy, or policies, shall have no recourse against County for payment of premiums or assessments for any deductibles which all are at the sole responsibility and risk of Contractor.

(3) The term "County" or "Pinellas County" shall include all Authorities, Boards, Bureaus, Commissions, Divisions, Departments and Constitutional offices of County and individual members, employees thereof in their official capacities, and/or while acting on behalf of Pinellas County.

(4) The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by County or any such future coverage, or to County's Self-Insured Retentions of whatever nature.

(5) All policies shall be written on a primary, non-contributory basis.

(6) Any Certificate(s) of Insurance evidencing coverage provided by a leasing company for either workers compensation or commercial general liability shall have a list of covered employees certified by the leasing company attached to the Certificate(s) of Insurance. The County shall have the right, but not the obligation to determine that the Proposer is only using employees named on such list to perform work for the County. Should employees not named be utilized by Proposer, the County, at its option may stop work without penalty to the County until proof of coverage or removal of the employee by the contractor occurs, or alternatively find the Proposer to be in default and take such other protective measures as necessary.

(7) Insurance policies, other than Professional Liability, shall include waivers of subrogation in favor of Pinellas County from both the Proposer and subcontractor(s).

i) The minimum insurance requirements and limits for this Agreement, which shall remain in effect throughout its duration and for two (2) years beyond final acceptance for projects with a Completed Operations exposure, are as follows:

SECTION C – LIMITATION ON LIABILITY, INDEMNIFICATION, AND INSURANCE REQUIREMENTS

(1) Workers' Compensation Insurance

Limit	Florida Statutory
Employers' Liability Limits	
Per Employee	$ 500,000
Per Employee Disease	$ 500,000
Policy Limit Disease	$ 500,000

(2) Commercial General Liability Insurance including, but not limited to, Independent Contractor, Contractual Liability Premises/Operations, Products/Completed Operations, and Personal Injury.

Limits	
Combined Single Limit Per Occurrence	$ 1,000,000
Products/Completed Operations Aggregate	$ 1,000,000
Personal Injury and Advertising Injury	$ 1,000,000
General Aggregate	$ 1,000,000

(3) Business Automobile or Trucker's/Garage Liability Insurance covering owned, hired, and non-owned vehicles. If the Proposer does not own any vehicles, then evidence of Hired and Non-owned coverage is sufficient. Coverage shall be on an "occurrence" basis, such insurance to include coverage for loading and unloading hazards, unless Proposer can show that this coverage exists under the Commercial General Liability policy.

Limit	
Combined Single Limit Per Accident	$ 1,000,000

(4) Professional Liability (Errors and Omissions) Insurance with at least minimum limits as follows. If "claims made" coverage is provided, "tail coverage" extending three (3) years beyond completion and acceptance of the project with proof of "tail coverage" to be submitted with the invoice for final payment. In lieu of "tail coverage", Proposer may submit annually to the County, for a three (3) year period, a current certificate of insurance providing "claims made" insurance with prior acts coverage in force with a retroactive date no later than commencement date of this contract.

Limits	
Each Occurrence or Claim	$ 3,000,000
General Aggregate	$ 3,000,000

For acceptance of Professional Liability coverage included within another policy required herein, a statement notifying the certificate holder must be included on the certificate of insurance and the total amount of said coverage per occurrence must be greater than or equal to the amount of Professional Liability and other coverage combined.

(5) Property Insurance Proposer will be responsible for all damage to its own property, equipment and/or materials.