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CLERK OF THE BOARD
OF COUNTY COMMISSIONERS
MIAMI-DADE COUNTY, FLORIDA

Memorandum

MIAMI-DADE COUNTY

Date: February 2, 2016

Agenda Item No. 8(L)(4)

To: Honorable Chairman Jean Monestime
and Members, Board of County Commissioners

From: Carlos A. Gimenez
Mayor

Subject: Contract Award Recommendation in the amount of $327,800.21 between Robayna and Associates Inc. and Miami-Dade County, for the Project Entitled Design Services for the Replacement of the North Miami Avenue Bridge (No. 874035) North of NW 146 Street

Resolution No. R-119-16

Recommendation

This recommendation for Award for Professional Services Agreement (PSA) Contract No. 20140028 has been prepared by the Public Works and Waste Management Department (PWWM) and is recommended for approval.

Delegation of Authority

The authority of the County Mayor or County Mayor's designee to execute and implement this contract is consistent with those authorities granted under the Code of Miami-Dade County. No additional delegation of authority is being requested within the body of this contract.

Scope

PROJECT NAME: Design Services for the Replacement of the North Miami Avenue Bridge (No. 874035) North of NW 146 Street

PROJECT NO: E14-PWWM-05

CONTRACT NO: 20140028

PROJECT DESCRIPTION: PWWM has the need to establish one (1) Non-exclusive Professional Services Agreement (PSA) to provide engineering design and post-design services in the preparation of complete construction documents for the replacement of the existing North Miami Avenue Bridge (No. 874035). The work includes, but is not limited to, roadway approaches including traffic circles, traffic study, maintenance of traffic, utility impacts, geotechnical investigations, preparation of any required special provisions, quantities, cost estimates, load rating, permits, and all of the necessary incidental items for a complete project.

The Consultant will also be required to prepare and submit for approval a Bridge Report after consultation with County staff and prior to plans preparation, describing the project limits, typical sections, possible design exceptions, methods of construction and utility relocations, and the results of the public involvement efforts required by County Ordinances.

/

PROJECT LOCATION: Design Services for the Replacement of the North Miami Avenue Bridge (No. 874035) North of NW 146 Street

PRIMARY COMMISSION DISTRICT: District 2 Jean Monestime

APPROVAL PATH: Board of County Commissioners

USING DEPARTMENT: Public Works and Waste Management

MANAGING DEPARTMENT: Public Works and Waste Management

Fiscal Impact/Funding Source

The fiscal impact will be approximately $327,800.21 for the design services for the bridge replacement. The work is to be funded using Road Impact Fee Funding (RIF) District 3. The estimated future construction cost is $ 3,220,000.00 and will also be funded using RIF District 3.

FUNDING SOURCES:

SOURCES	PROJECT NO.	AMOUNT
RIF 3	20140028	$327,800.21

OPERATIONS/ MAINTENANCE COST IMPACT / FUNDING: This agreement is for design services. Once the project is constructed there will be no fiscal impact on the maintenance and operations cost.

LIFE EXPECTANCY OF ASSET: The life expectancy is approximately 75 years.

PTP FUNDING: No

GOB FUNDING: No

ARRA FUNDING: No

CAPITAL BUDGET PROJECTS:

CAPITAL BUDGET PROJECT # - DESCRIPTION	AMOUNT
601990-Replacement of North Miami Avenue N/O NW 146 Street Bridge (#874035); Capital budget Book page 53; Fiscal Year (FY) 2014-15 Funds available $156,000.00 (Design); FY 2015-16 Funds available $857,000.00; (Design and Construction); FY 2016-17 Funds available $2,414,000.00 (Construction)	$327,800.21

PROJECT TECHNICAL CERTIFICATION REQUIREMENTS:

CODE	DESCRIPTION
3.02	HIGHWAY SYSTEMS – HIGHWAY DESIGN PRIME
3.03	HIGHWAY DESIGN – BRIDGE DESIGN PRIME
3.09	HIGHWAY SYSTEMS – SIGNING, PAVEMENT MARKING, AND CHANNELIZATION
9.01	SOILS, FOUNDATIONS AND MATERIALS TESTING – DRILLING, SUBSURFACE INVESTIGATIONS AND SEISMOGRAPHIC SERVICES
9.02	SOILS, FOUNDATIONS AND MATERIALS TESTING – GEOTECHNICAL AND MATERIALS ENGINEERING SERVICES
15.01	SURVEYING AND MAPPING – LAND SURVEYING

SUSTAINABLE BUILDINGS ORDINANCE: (I.O. NO. 8-8)

Did the Notice to Professional Consultants contain specific language requiring compliance with the Sustainable Buildings Program? N/A

PROPOSALS RECEIVED:

Two (2) Proposals

CONTRACT PERIOD:

730 calendar days including 365 calendar days for post-design services during construction. This Agreement shall remain in full force and effect for two (2) years after the date of execution or until completion of all project phases, whichever occurs last, unless terminated by mutual consent of the parties hereto.

IG FEE INCLUDED IN BASE CONTRACT: Yes

ART IN PUBLIC PLACES: No

BASE ESTIMATE:

$188,181.82. This estimate was based on the design effort for the bridge replacement only and did not include the addition of a traffic circle at the north approach and modifications to the existing traffic circle at the south approach to accommodate bicycle facilities. After review of the project and the consultant's proposal, PWWM decided it would be more economical and efficient to include these services within this consultant contract.

BASE CONTRACT AMOUNT: $ 298,000.19

CONTINGENCY ALLOWANCE: (SECTION 2-8.1 MIAMI-DADE COUNTY CODE)	TYPE	PERCENT	AMOUNT	COMMENT
	Design	10%	$29,800.02	
	Total		$29,800.02	

TOTAL DEDICATED ALLOWANCE: $0.00

TOTAL AMOUNT: $327,800.21

Track Record/Monitor

SBD HISTORY OF VIOLATIONS: None.

Due diligence was conducted in accordance with the Internal Services Department's Procurement Guidelines to determine responsibility, including verifying corporate status and performance and compliance data. The lists that were reviewed include: convicted vendors, debarred vendors, delinquent contractors, suspended vendors, and federal excluded parties. There were no adverse findings relating to Consultant responsibility. This information is being provided pursuant to Resolution R-187-12.

EXPLANATION: On June 4, 2014 a Notice to Professional Consultants (NTPC) was issued under a full and open competition. Two (2) firms submitted proposals on July 25, 2014. Section 3.2 of the NTPC states, "In the event the County receives fewer than three proposals, or fewer than three proposals are determined to be responsive and responsible to perform the required services, the County may proceed with the number of proposal(s) received which are determined to be responsive and responsible, provided that the County has conducted an analysis of market availability for subject services and determined at its sole discretion that there is no further market availability or immediate interest to provide subject services. Furthermore, in the event that the County receives fewer than three proposals, the County at its sole discretion may extend the proposal submittal deadline date." The submittal deadline date was extended and no additional proposals were received. As a result of the compliance review conducted by the Small Business Development Division (SBD) of the Internal Services Department, Network Engineering Services, Inc. d/b/a Bolton, Perez and Associates (Bolton Perez) was found non-compliant with the contract measure required for this solicitation and was eliminated from further evaluation. The Competitive Selection Committee (CSC) met on August 27, 2014 and reviewed and evaluated the one (1) proposal. At

this meeting, it was determined that Robayna and Associates, Inc. met the minimum qualifications and demonstrated its relevant experience with the project as required by the NTPC. The CSC evaluated and ranked the firm and decided by a unanimous vote to recommend the selection of Robayna and Associates, Inc. to the Mayor for approval to negotiate a contract.

Negotiations with the firm commenced on March 3, 2015 and concluded on March 23, 2015.

SUBMITTAL DATE: July 25, 2014

ESTIMATED NOTICE TO PROCEED: July 15, 2015

PRIME CONSULTANT: Robayna and Associates Inc.

COMPANY PRINCIPALS: Rafael Robayna

COMPANY QUALIFIER: Rafael Robayna

COMPANY EMAIL ADDRESS: rrobayna@robayna.com

COMPANY STREET ADDRESS: 5723 NW 158 Street

COMPANY CITY-STATE-ZIP: Miami Lakes, Florida 33014

YEARS IN BUSINESS: 32 years

PREVIOUS CONTRACTS WITH COUNTY IN THE LAST FIVE YEARS: According to the Firm History Report provided by the Internal Services Department's Small Business Development Division, Robayna and Associates Inc. has been awarded one (1) contract with the County with a total value of $19,800.00.

SUB-CONSULTANTS: Triangle Associates Inc. (TAI), HR Engineering Services (HRES)

MINIMUM QUALIFICATIONS EXCEED LEGAL REQUIREMENTS: No

REVIEW COMMITTEE: Signoff Date: 4/28/2014

APPLICABLE WAGES (RESOLUTION NO. R-54-10): **No**

REVIEW COMMITTEE ASSIGNED CONTRACT MEASURES:

TYPE	GOAL	COMMENT
Small Business Enterprise - A/E Tier 1 Set Aside		
CWP	Not Applicable	

MANDATORY CLEARING HOUSE: No

CONTRACT MANAGER: Marcos R. Redondo, P.E.

PROJECT MANAGER: Marcos R. Redondo, P.E.

BACKGROUND: The existing bridge (No. 874035) was built in 1947 and it is located on North Miami Avenue, north of NW 146 Street. The bridge has numerous deficiencies such as cracks on the deck and in the supporting caps and piles, corrosion of the supporting steel beams, expansion joint deterioration, and embankment slope protection deterioration. The bridge is classified as functionally obsolete, as it does not meet current criteria for loading, crash standards for the bridge railings and approach guardrails, and does not provide for bicycle facilities. The new bridge will provide bicycle facilities and wider sidewalks. Moreover, the approach intersections will be modified to include a traffic circle and provide bicycle facilities.

DEPARTMENT FINANCE: _____ 5/11/15
PWWM FINANCE OFFICER **DATE**

INDEX CODES:

BUDGET APPROVAL FUNDS AVAILABLE: _____ 6/16/15
OMB DIRECTOR **DATE**

APPROVED AS TO LEGAL SUFFICIENCY: _____ 12/14/15
COUNTY ATTORNEY **DATE**

APPROVED FOR EXECUTION: _____ 7/28/15
CARLOS A. GIMENEZ
MAYOR **DATE**

Small Business Development Division
Project Worksheet

Project/Contract Title:	DEISIGN SERVICES FOR THE REPLACEMENT OF THE NW 32 AVENUE BRIDGE (NO. 874032) NORTH OF NW 151 STREET	Received Date:	04/04/2014
Project/Contract No:	E14-PWWM-06	Funding Source:	
Department:	PUBLIC WORKS DEPARTMENT	ROAD IMPACT FEE	
Estimated Cost of Project/Bid:	$100,000.00	Resubmittal Date(s):	
Description of Project/Bid:	To establish one (1) Non exclusive Professional Services Agreement (PSA) to provide engineering design and post-design services in the preparation of a complete construction document for the replacement of the existing NW 32 Avenue (Bridge No. 874032). The project shall include the complete replacement of the bridge. The work includes, but is not limited to roadway approaches, maintenance of traffic, utility impacts, geotechnical investigations, preparation of any required special provisions, quantities, cost estimates, load rating, permits, to name a few.		

Contract Measures Recommendation

Measure	Program	Goal Percent
1st Tier Setaside	CBE	100.00%

Reasons for Recommendation

This project meets all the criteria set forth in I.O. # 3-32, Section V.

SIC 871 - Architectural and Engineering Services

Technical Category: 0302-Highway Systems-Highway Design; 0303-Highway Systems-Bridge Design; 0309-Highway Systems-Signing, Pavement Marking, Channel; 0901-Drilling Subsurface Investigations & Seismographic; 0902-Geotechnical & Materials Engineering Services; 1501-Surveying And Mapping-Land Surveying

Small Business Contract Measure Recommendation

Subtrade	Cat.	Estimated Value	% of Items to Base Bid	Availability
	CBE	$100,000.00	100.00%	
Total		$100,000.00		

Living Wages: YES [ ] NO [X]

Responsible Wages: YES [ ] NO [X]

Responsible Wages and Benefits applies to all construction projects over $100,000 that do not utilize federal fund. For federally funded projects, unless prohibited by federal or state law or disallowed by a governmental funding source, the HIGHER wage between Davis Bacon and Responsible Wages and Benefits shall apply.

REVIEW RECOMMENDATION

Tier 1 Set Aside _____ Tier 2 Set Aside _____

Set Aside _____ Level 1 _____ Level 2 _____ Level 3 _____

Trade Set Aside (MCC) _____ Goal _____ Bid Preference _____

No Measure _____ Deferred _____ Selection Factor _____

CWP _____

SBD Director

4/29/14
Date

DBDR0090 v.20130116

REPLACEMENT OF NW 32 AVENUE N/O NW 151 STREET BRIDGE (#874032) **PROJECT #: 602450**

DESCRIPTION: Bridge replacement
LOCATION: Road Impact Fee District 3 — District Located: 1
Opa-locka — District(s) Served: Countywide

REVENUE SCHEDULE:	PRIOR	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	FUTURE	TOTAL
Road Impact Fees	0	750	2,050	0	0	0	0	0	2,800
TOTAL REVENUES:	**0**	**750**	**2,050**	**0**	**0**	**0**	**0**	**0**	**2,800**
EXPENDITURE SCHEDULE:	**PRIOR**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**FUTURE**	**TOTAL**
Planning and Design	0	75	25	0	0	0	0	0	100
Construction	0	675	2,025	0	0	0	0	0	2,700
TOTAL EXPENDITURES:	**0**	**750**	**2,050**	**0**	**0**	**0**	**0**	**0**	**2,800**

WIDEN WEST 24 AVENUE FROM WEST 52 STREET TO WEST 76 STREET **PROJECT #: 602680**

DESCRIPTION: Widen road from two lanes to five lanes on 1.5 miles of roadway
LOCATION: Road Impact Fee District 09 — District Located: 12
Hialeah — District(s) Served: 12

REVENUE SCHEDULE:	PRIOR	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	FUTURE	TOTAL
Road Impact Fees	2,200	1,083	0	0	0	0	0	0	3,283
TOTAL REVENUES:	**2,200**	**1,083**	**0**	**0**	**0**	**0**	**0**	**0**	**3,283**
EXPENDITURE SCHEDULE:	**PRIOR**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**FUTURE**	**TOTAL**
Construction	2,200	1,083	0	0	0	0	0	0	3,283
TOTAL EXPENDITURES:	**2,200**	**1,083**	**0**	**0**	**0**	**0**	**0**	**0**	**3,283**

REPLACEMENT OF SW 136 STREET E/O SW 72 AVENUE BRIDGE (#874420) **PROJECT #: 602690**

DESCRIPTION: Bridge replacement
LOCATION: Road Impact Fee District 5 — District Located: 8
Unincorporated Miami-Dade County — District(s) Served: Countywide

REVENUE SCHEDULE:	PRIOR	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	FUTURE	TOTAL
Road Impact Fees	0	41	376	1,085	0	0	0	0	1,502
TOTAL REVENUES:	**0**	**41**	**376**	**1,085**	**0**	**0**	**0**	**0**	**1,502**
EXPENDITURE SCHEDULE:	**PRIOR**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**FUTURE**	**TOTAL**
Planning and Design	0	41	13	0	0	0	0	0	54
Construction	0	0	363	1,085	0	0	0	0	1,448
TOTAL EXPENDITURES:	**0**	**41**	**376**	**1,085**	**0**	**0**	**0**	**0**	**1,502**

MEMORANDUM

(Revised)

TO: Honorable Chairman Jean Monestime
and Members, Board of County Commissioners

DATE: February 2, 2016

FROM: Abigail Price-Williams
County Attorney

SUBJECT: Agenda Item No. 8(L)(4)

Please note any items checked.

_____ **"3-Day Rule" for committees applicable if raised**

_____ **6 weeks required between first reading and public hearing**

_____ **4 weeks notification to municipal officials required prior to public hearing**

_____ **Decreases revenues or increases expenditures without balancing budget**

_____ **Budget required**

_____ **Statement of fiscal impact required**

_____ **Statement of social equity required**

_____ **Ordinance creating a new board requires detailed County Mayor's report for public hearing**

_____ **No committee review**

_____ **Applicable legislation requires more than a majority vote (i.e., 2/3's ____, 3/5's ____, unanimous _____) to approve**

✓ **Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required**

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 8(L)(4)
2-2-16

RESOLUTION NO. R-119-16

RESOLUTION APPROVING A CONTRACT AWARD IN THE AMOUNT OF $327,800.21 TO ROBAYNA AND ASSOCIATES INC. FOR DESIGN SERVICES FOR THE PROJECT ENTITLED REPLACEMENT OF THE NORTH MIAMI AVENUE BRIDGE (NO. 874035) NORTH OF NW 146 STREET PROJECT NO. E14-PWWM-05; CONTRACT NUMBER 20140028; AND AUTHORIZING THE MAYOR OR MAYOR'S DESIGNEE TO EXECUTE SAME

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that this Board approves the award of a contract to Robayna and Associates, Inc. in the amount of $ 327,800.21 for Design Services for the Project entitled "Replacement of the North Miami Avenue Bridge (No. 874035) North of NW 146 Street" (Project No. E14-PWWM-05; Contract No. 20140028) and authorizes the Mayor or Mayor's designee to execute the contract, substantially in the form attached hereto.

The foregoing resolution was offered by Commissioner **Sally A. Heyman**, who moved its adoption. The motion was seconded by Commissioner **José "Pepe" Diaz** and upon being put to a vote, the vote was as follows:

Jean Monestime, Chairman **aye**
Esteban L. Bovo, Jr., Vice Chairman **aye**

Bruno A. Barreiro	**aye**	Daniella Levine Cava	**aye**
Jose "Pepe" Diaz	**aye**	Audrey M. Edmonson	**aye**
Sally A. Heyman	**aye**	Barbara J. Jordan	**aye**
Dennis C. Moss	**aye**	Rebeca Sosa	**absent**
Sen. Javier D. Souto	**absent**	Xavier L. Suarez	**aye**
Juan C. Zapata	**aye**		

//

The Chairperson thereupon declared the resolution duly passed and adopted this 2nd day of February, 2016. This resolution shall become effective upon the earlier of (1) 10 days after the date of its adoption unless vetoed by the County Mayor, and if vetoed, shall become effective only upon an override by this Board, or (2) approval by the County Mayor of this Resolution and the filing of this approval with the Clerk of the Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF
COUNTY COMMISSIONERS

HARVEY RUVIN, CLERK

By: Christopher Agrippa
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.

Hugo Benitez

NON-EXCLUSIVE PROFESSIONAL SERVICES AGREEMENT

Design Services for the Replacement of the NW 32nd Avenue Bridge (No. 874032) North of NW 151st Street
PROJECT No. E14-PWWM-06

THIS NON-EXCLUSIVE AGREEMENT is entered into this ___ day of _____, 20____, by and between Miami-Dade County, a political subdivision of the State of Florida, hereinafter referred to as the "COUNTY", and Robayna and Associates, Inc., hereinafter referred to as the "ENGINEER".

W I T N E S S E T H:

For and in consideration of the mutual agreements hereinafter contained, the COUNTY hereby retains the ENGINEER, and the ENGINEER hereby covenants to provide, the professional services prescribed herein in connection with the design services for the replacement of the NW 32nd Avenue Bridge (No. 874032) north of NW 151st Street.

PROFESSIONAL SERVICES AGREEMENT

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APPENDIX

EXHIBIT "A" MINIMUM REQUIREMENTS FOR PLANS SUBMITTAL 45-46

AFFIDAVITS

ARCHITECTURE & ENGINEERING UTILIZATION REPORT

SECTION I - COUNTY OBLIGATIONS

The Director of the Public Works and Waste Management Department, hereinafter referred to as the "Director", shall issue written authorization to proceed to the ENGINEER for each section of the work to be performed thereunder. In case of emergency, the COUNTY reserves the right to issue oral authorization to the ENGINEER with the understanding that written confirmation shall follow immediately thereafter.

The COUNTY agrees that its Public Works and Waste Management Department shall furnish to the ENGINEER any plans and other data available in the COUNTY files pertaining to the work to be performed under this Agreement. Information shown on such plans or data shall be that which has been made available to the COUNTY, and shall be provided to the ENGINEER without guarantee regarding its reliability and accuracy; the ENGINEER shall be responsible for independently verifying such information if it shall be used by the ENGINEER to accomplish the work undertaken pursuant to this Agreement.

The Director reserves the right to guarantee the accuracy of information provided by the COUNTY to the ENGINEER. When such guarantee is provided in writing, the ENGINEER shall not be compensated for independent verification of said information.

The COUNTY agrees to provide the following material, data, or services as required in connection with the work to be performed under the terms of this Agreement:

1. COUNTY standard construction details applicable to the project.

2. All standard sections of the contract documents and compilation of the final bidding documents.
3. Administration of bidding procedures including advertisement for bids and recommendations of award of the construction contract in cooperation with the ENGINEER.
4. Administration of construction except as otherwise provided herein.

SECTION II - PROFESSIONAL SERVICES

The ENGINEER agrees to perform professional services in connection with the project as indicated in the following (refer to Exhibit "A" for submittal requirements):

A. Master Plan Phase

Upon receipt of written authorization from the Director to proceed with the Master Plan Phase of the project, the ENGINEER shall visit the site of the proposed work and become thoroughly familiar with all conditions and Federal, State and Local laws, Development and Environmental issues affecting the work; prepare and submit to the COUNTY a Master Plan containing recommendations for roadway and bridge "Typical Sections", alignment, drainage system, point of intersection to adjacent roadway as well as to prepare and conduct public involvement meetings to inform the residents and neighboring organizations of proposed construction. To accomplish the work described under

this phase, the ENGINEER shall observe the following requirements:

1. Strive to complete the work on the project within the time allowed by maintaining adequate staff of qualified personnel on the work at all times.
2. Comply with all Federal, State, and local laws or ordinances applicable to the work.
3. Cooperate fully with the COUNTY in the proper coordination and scheduling of all phases of the work.
4. Report the status of the project to Director upon request and hold all drawings, calculations and related work open to the inspection of the Director or his authorized agent at any time.
5. Submit to the Director one (1) review copy of the Master Plan phase report for the project. Upon approval, furnish the COUNTY with two (2) copies of the final Master Plan phase report. The quality and legibility of all copies shall meet the approval of the Director.

B. Design Phase

Upon receipt of written authorization from the Director to proceed with the project, the ENGINEER shall prepare preliminary Engineering data, including sketches and drawings, based on recommendations from the Master Plan Phase; perform such other services as are mutually agreed to be necessary or desirable to advance the project; and assist the COUNTY in obtaining approval of preliminary design work from any local, state or federal agency having an interest in the project. The ENGINEER

shall prepare final complete construction plans for the project in accordance with current COUNTY and FDOT standards, to be used for the receipt of bids, which shall include, but not limited to, development of design plans for the full replacement of the existing N. Miami Avenue Bridge, survey, geotechnical investigation, preparation of any required Special Provisions, quantities, cost estimates, load rating, roadway widening, traffic circles, resurfacing, drainage, sidewalks, bicycle facilities, curb and gutter, street lighting, signalization, pavement markings & signing, maintenance of traffic, utility coordination, permitting and public involvement.

To accomplish the work described under this phase, the ENGINEER shall observe the Following:

1. Strive to complete the work on the project within the time allowed by maintaining adequate staff of qualified personnel at all times.
2. Comply with all Federal, State and local laws and ordinances applicable to roadway and bridge design.
3. Prepare necessary sketches to accompany COUNTY applications for any required County, State or Federal agency permits.
4. Cooperate fully with the COUNTY in the proper coordination and scheduling of all phases of the work.
5. Prior to final approval by the Director, complete a preliminary check of construction plans through any

County, City, State, or Federal agency from which a permit or other approval is required.

6. Cooperate fully with the COUNTY to inform all utility owners with facilities in the vicinity of the proposed work and provide information relative to any required utility adjustments or relocations. The ENGINEER will assist the COUNTY in conducting a utility coordination meeting with utility owners to resolve all utility conflicts and other utility issues. The ENGINEER shall provide two sets of prints for each utility company prior to the meeting. The ENGINEER shall be responsible for preparation and distribution of meeting minutes. The ENGINEER shall provide adequate design and coordination to accommodate utilities in order to avoid claims and delays during construction.

7. Report the status of the project to the Director upon request and hold all drawings, calculations and related work open to the inspection of the Director or his authorized agent at any time.

8. Submit to the Director two final sets of check prints for the project at the 30%, 60%, 90% and 100% completion milestones. Upon approval of 100% plans, furnish the COUNTY with four (4) signed and sealed ½ size, 11"x17" bound sets of prints of the final construction plans, CAD electronic files in a format approved by the COUNTY, drainage report, and all computation books. The quality and legibility of all prints shall meet the approval of the Director. At a

minimum the construction Documents shall consist of the following as outlined in Exhibit A:

- Roadway Plans
- Structural plans

9. Prepare and submit to the COUNTY an Opinion of Probable Construction Cost, at the 90% and 100% completion milestones, of the proposed project design.

10. The ENGINEER agrees that the quality of the work performed by the ENGINEER and by all subcontractors shall be in accordance with the standards customarily provided by an experienced and competent professional engineering organization rendering the same or similar services, and agrees to guarantee compliance of the work with all applicable industry standards and regulations.

11. The ENGINEER agrees to provide upon request, a certified payroll of employees performing work under this Agreement, as reported to the IRS.

12. The ENGINEER agrees to provide employees performing work under this Agreement with health care benefits.

C. Construction Phase

The ENGINEER agrees to provide the following services during the Construction Phase of the project, as requested by the COUNTY.

1. Attendance at pre-bid and pre-construction meetings.
2. Periodic general engineering Consultation and advice.
3. Review and approval of shop drawings.
4. Field meetings during construction.
5. Response to Contractors Request for Information (RFIs) during pre-bid and during construction.

6. Post-design services if required during construction.

SECTION III - TIME FOR COMPLETION

The ENGINEER agrees to complete the services to be rendered pursuant to this Agreement as indicated in the following:

A. Master Plan Phase

The services to be rendered by the ENGINEER under the Master Plan Phase of the project shall commence upon receipt of a written Notice to proceed from the Director, and shall be completed within six (6) months.

A reasonable extension of time shall be granted in the event there is a delay on the part of the COUNTY in fulfilling its part of the Agreement or should a Force Majeure, as defined herein, render performance of the ENGINEER's duties impossible. Such extensions of time shall not be cause for any claim by the ENGINEER for extra compensation.

B. Design Phase

The services to be rendered by the ENGINEER under the Design Phase of the project shall commence upon receipt of a written Notice to proceed from the Director, and shall be completed within twelve (12) months. A reasonable extension of time shall be granted in the event there is a delay on the part of the COUNTY in fulfilling its part of the Agreement or should a Force Majeure, as defined herein, render performance of the ENGINEER's duties impossible. Such extensions of time shall not be cause for any claim by the ENGINEER for extra compensation.

C. Construction Phase

The services to be rendered by the ENGINEER under the Construction Phase of the project shall begin at the time the construction contract is awarded and shall be considered completed upon final acceptance of the construction by the COUNTY. Compensation shall be for only those services requested by the Director or his designee, and is not guaranteed.

SECTION IV - FORCE MAJEURE

Force Majeure shall mean an act of God, epidemic, lightning, earthquake, fire, explosion, hurricane, flood or similar occurrence, strike, an act of a public enemy, or blockade, insurrection, riot, general arrest or restraint of government and people, civil disturbance or similar occurrence, which has had or may reasonably be expected to have a material adverse effect on the rights and obligations under this Agreement, and which, by the exercise of due diligence, such parties shall not have been able to avoid. Such acts or events DO NOT INCLUDE inclement weather (except as noted above) or the acts or omissions of material men, suppliers, or subconsultants/subcontractors, unless such acts or omissions are otherwise encompassed by the definition set forth above.

No party hereto shall be liable for its failure to carry out its obligations under the Agreement during a period when such party is rendered unable, in whole or in part, by Force Majeure to carry out such obligations, but the obligation of the party or

parties relying on such Force Majeure shall be suspended only during the continuance of any inability so caused and for no longer period of said unexpected or uncontrollable event, and such cause shall, so far as possible, be remedied with all reasonable dispatch. It is further agreed and stipulated that the right of any party hereto to excuse its failure to perform by reason of Force Majeure shall be conditioned upon such party giving, to the other party or parties, written notice of its assertion that a Force Majeure delay has commenced within ten (10) working days after such commencement, unless there exists good cause for failure to give such notice, in which event, failure to give such notice shall not prejudice any party's right to justify any non-performance as caused by Force Majeure unless the failure to give timely notice causes material prejudice to the other party or parties.

SECTION V - COMPENSATION

The COUNTY agrees to pay and the ENGINEER agrees to accept, for services rendered pursuant to this Agreement, fees and other compensation as stipulated by the following:

A. Professional Services Fee

1. Master Plan and Public Involvement Plan Phase

For service rendered pursuant to the Master Plan Phase in accordance with the terms and conditions of this Agreement, the ENGINEER shall receive the following fees:

For the complete study and preparation of a Master Plan with recommendations for bridge and

roadway "Typical Section(s)", alignment(s), traffic circles, drainage system, connection to adjacent roadways and Public-Meetings as well as requirements for maintenance of traffic, utilities, retaining walls and ADA access.

The COUNTY shall compensate the ENGINEER for the preparation and implementation of a Public Involvement Plan (PIP) in order to minimize the impact from the construction project; and meeting the requirements established under Miami-Dade County Resolution No. R-134-10. The fee for this Master Plan and Public Involvement work shall be the lump sum fee of **$14,712.90**

2. Design Phase

For services rendered pursuant to the Design Phase, in accordance with the terms and conditions of this Agreement, the ENGINEER shall receive the following fees:

For the implementation of the Master Plan recommendations, completion of design and preparation of construction plans and specifications, and all incidental work thereto as necessary for construction of all project elements to include but not limited to the new bridge, the lump sum fee of **$ 133,198.66**.

3. Construction Phase

In accordance with the terms and conditions of this Agreement, including responses to pre-bid RFIs and

preconstruction meetings, shop drawing reviews, and all incidental work thereto, general engineering consultation and advice, field meetings during construction, and post-design services, the fee shall not exceed **$ 21,958.42**. Compensation shall be for only those services requested by the Director or his designee, and is not guaranteed.

4. Total Fee

The total of all regular fee payments to the ENGINEER under this Agreement shall be **$ 169,869.98**, the sum of A1, A2 and A3 above, providing that no additional work, as defined by Section VI of this Agreement, is requested or authorized by the Director.

B. Compensation for Other Services

The COUNTY shall compensate other services or goods provided by the ENGINEER and others working in conjunction with the ENGINEER as stipulated by the following:

1. Printing and Reproduction

The COUNTY shall reimburse the ENGINEER for the cost of printing project plan sheets required for utility coordination, master plan and other required submittals. The total cost to the COUNTY for this reproduction service shall not exceed **$ 2,418.40.**

2. Land and Engineering Field Survey

The COUNTY shall make direct payment to the ENGINEER for the land and engineering field survey work required in connection with the project. The cost of all required land and engineering field survey for the project shall be the lump sum fee of **$_9,496.68**.

3. Soil Survey

The COUNTY shall make direct payment to the ENGINEER for soil survey work requested and approved by the ENGINEER as mutually agreed with the COUNTY to be necessary for the design of the project. All required soil survey work for the project shall the lump sum fee of **$_18,166.86**.

C. Total Compensation

The total of all costs associated with accomplishing the work under the terms of this Agreement shall be **$_199,951.82**, the sum of fees set forth in A and B above, providing that no additional work, as defined by Section VI of this Agreement, is requested or authorized by the Director.

SECTION VI - ADDITIONAL WORK

The COUNTY agrees to pay, and the ENGINEER agrees to accept, for additional work performed under the terms of this Agreement, fees in accordance with the following:

A. Additional Work

In the event changes are requested by the COUNTY to the construction documents after said documents have been approved and accepted by the COUNTY, additional Construction Phase services are required, or contingencies necessitate the performance of other additional work by the ENGINEER, and a Notice to Proceed authorizing additional work is issued by the Director, fees and other compensation for such services shall be computed in accordance with one or a combination of the methods outlined below:

1. Fee as a Multiple of Direct Salary Cost and Fixed Hourly Rate.

   The fee for engineering services rendered by the ENGINEER's personnel, principals excluded, shall be computed based on the direct salary cost, as reported to the Internal Revenue Service, for the time of said personnel engaged directly in the work, times negotiated multipliers of 2.85 for office personnel and 2.20 for field personnel. This fee shall constitute full compensation to the ENGINEER for costs incurred in the performance of the work such overhead, fringe benefits, operating margin and all other costs not covered by reimbursable expenses.

2. Fees Based on Fixed Hourly Rates

   The fee for services rendered by the ENGINEER's principals shall be computed based on the fixed hourly rate of $ 140.

The above listed fixed hourly rate for Principals shall be applied to the time spent on requested work by the following principal of the firm:

Rafael Robayna

3. Lump Sum Fee

The fee for any requested portion of work may, at the option of the COUNTY, be a lump sum mutually agreed upon by the COUNTY and the ENGINEER and stated in the written Notice to Proceed. Lump sum fees may or may not include reimbursable expenses.

4. Reimbursable Expenses

The ENGINEER shall be compensated for certain work related expenditures not covered by fees for engineering services, provided such expenditures are previously authorized by the Director. Reimbursable expenses may include:

a. Expenses for document reproduction, rental of specialized equipment, and purchase of special instruments necessary for the efficient performance of the work, provided that such instruments remain the property of the COUNTY upon work completion. These expenses shall be reimbursed on a direct cost basis.

b. Expenses for travel, transportation and subsistence outside Miami Dade County will be reimbursed according to the provisions of Florida

Statutes Section 112.061, as presently written or hereafter amended.

B. Allowance Account

The total of all fee payments to the ENGINEER for additional work shall be as allowed under the Allowances/Contingency Ordinance No. 00-65.

The project is a Professional Services Agreement for the design of a facility on public property; therefore an estimated Allowance Account of **$ 19,995.18** is permissible, per Miami-Dade County Code Section 2-8.1. This Allowance Account will be used by the COUNTY for unforeseen conditions necessitating additional design, resulting in additions to the basic fee and additional/reimbursable service fees.

SECTION VII - TOTAL PROJECT COST

The total Project Cost set forth in Section V and Section VI above, under the terms of this Agreement, shall be **$ 219,947.00**.

SECTION VIII - METHODS OF PAYMENT

The COUNTY agrees to make monthly or partial payments to the ENGINEER for all authorized work performed during the previous calendar month or other mutually agreed invoicing period. The ENGINEER agrees to provide copies of any records necessary to

substantiate payment requests to the COUNTY. Payments shall be made in accordance with the following methods:

A. Master Plan and Public Involvement Plan Phase

1. The ENGINEER shall submit duly certified invoices in triplicate to the Director.

2. The amount of the invoices submitted shall be the prorated amount due for all work performed to date under this phase, determined by applying the percentage of the work completed, as certified by the ENGINEER, to the total lump sum fee for this phase of the work. Invoiced reimbursable expenses must be substantiated by copies of receipts and other documentation, as necessary.

3. The amount of the partial payment due for the work performed to date under this phase shall be an amount calculated in accordance with Paragraph 2 above, less five per cent (5%) of the amount thus determined, which shall be withheld by the COUNTY as retainage, less previous payments, and less Inspector General to date.

4. The retained amount shall be paid in full to the ENGINEER upon issuance of a work order by the Director for the Design Phase work, but under no circumstances shall this amount be retained longer than four months after the date of final acceptance of the Master Plan Phase work by the Director.

B. Design Phase

1. The ENGINEER shall submit duly certified invoices in triplicate to the Director.

2. The amount of the invoices submitted shall be the prorated amount due for all work performed to date under this phase, determined by applying the percentage of the work completed, as certified by the ENGINEER, to the total lump sum fee for this phase of the work. Invoiced reimbursable expenses must be substantiated by copies of receipts and other documentation, as necessary.

3. The amount of the partial payment due for the work performed to date under this phase shall be an amount calculated in accordance with Paragraph 2 above, less five per cent (5%) of the amount thus determined, which shall be withheld by the COUNTY as retainage, less previous payments, and less Inspector General to date.

4. The retained amount shall be paid in full to the ENGINEER upon issuance of a work order by the Director for the Construction Phase, but under no circumstances shall this amount be retained longer than four months after the date of final acceptance of the Design Phase work by the Director.

C. Construction Phase

1. The ENGINEER shall submit duly certified invoices in triplicate to the Director. Each invoice shall be referenced to the particular Notice to Proceed for Construction Services.

2. The amount of invoices submitted shall be comprised of the amounts due for all services performed monthly

and/or incurred to date in connection with the authorized work, less previous payments. The amounts due shall be calculated in accordance with Subsections VI.A.1. and VI.A.2. Invoiced reimbursable expenses must be substantiated by copies of receipts and other documentation, as necessary.

D. Additional Work

1. Estimated Professional Fees and/or Reimbursable Expenses

a. The ENGINEER shall submit duly certified invoices in triplicate to the Director. Each invoice shall be a be referenced to the particular Notice to Proceed which authorized the services performed and/or expenses incurred.

b. The amount of invoices submitted shall be comprised of the amounts due for all services performed and/or reimbursable expenses incurred to date in connection with authorized work, less previous payments. The amounts due for professional services and/or reimbursable expenses shall be calculated in accordance with Subsections VI(A)(1) and VI(A)(3) hereof, respectively. Invoiced reimbursable expenses must be substantiated by copies of receipts and other documentation as necessary.

2. Lump Sum Fee

a. The ENGINEER shall submit duly certified invoices in triplicate to the Director. Each invoice shall be referenced to the particular Notice to Proceed which

authorized the services performed and/or expenses incurred.

b. The amount due of invoices submitted shall be calculated by applying the percentage of the total work completed to date to the authorized lump sum, and subtracting any previous payments. Invoiced reimbursable expenses must be substantiated by copies of receipts and other documents as necessary.

SECTION IX - RIGHT OF DECISIONS

All services shall be performed by the ENGINEER to the satisfaction of the Director, who shall decide all questions, difficulties, and disputes of whatever nature which may arise under or by reason of this Agreement, the prosecution and fulfillment of the services thereunder, and the character, quality, amount and value thereof. The Director's decisions upon all claims, questions and disputes shall be final, conclusive and binding upon the parties hereto unless such determination is clearly arbitrary or unreasonable. Adjustments of compensation and time for completion of services thereunder, due to any major changes in the work, which might become necessary or be deemed desirable as the work progresses, shall be left to the absolute discretion of the Director. Any review in court shall limited to whether the Director has abused his or her discretion.

SECTION X - OWNERSHIP OF DOCUMENTS

All notes, correspondence, documents, designs, drawings, cost estimates, renderings, calculations, specifications, models, photographs, reports, surveys, investigations, and any other documents and copyrights thereto for Services performed or produced in the performance of this Agreement, whether in paper or other hard copy medium or in electronic medium, except with respect to copyrighted standard details and designs owned by the ENGINEER or owned by a third party and licensed to the ENGINEER for use and reproduction, shall become the property of the COUNTY without restrictions or limitations. However, the COUNTY may grant an exclusive license of the copyright to the ENGINEER for reusing and reproducing copyrighted materials or portions thereof as authorized by the COUNTY in advance and in writing. In addition, the ENGINEER shall not disclose, release, or make available any document to any third party without prior written approval from COUNTY. The ENGINEER shall warrant to the COUNTY that he/she has been granted a license to use and reproduce any standard details and designs owned by a third party and used or reproduced by the ENGINEER in the performance of this Agreement. All drawings shall be AutoCAD format in a version acceptable to the Department, produced by computer in files maintained on disks. When each individual section of work requested pursuant to this Agreement is completed and accepted, all of the above data shall be delivered to the Director. Nothing contained herein shall be deemed to exclude any document from Chapter 119 of the Florida Statutes.

SECTION XI - REUSE OF DOCUMENTS

The ENGINEER may reuse data from other sections of the work included in this Agreement provided irrelevant material is deleted. The Director shall not accept any reused data containing an excess of irrelevant material, which has no connection with the applicable portion of the work. The COUNTY shall not re-use design documents on other projects not contemplated under this Agreement. Any such re-use shall be at the COUNTY's sole risk without legal liability to the ENGINEER.

SECTION XII - CORRECTIONS TO CONTRACT DOCUMENTS

For any services provided under this agreement, the ENGINEER shall prepare, without added compensation, all necessary supplemental documents to correct errors, omissions, and/or ambiguities which may exist in the plans and Contract Documents prepared by the ENGINEER including the documents prepared by its sub-consultants. Compliance with this Article shall not be construed to relieve the ENGINEER from any liability resulting from any such errors, omissions, and/or ambiguities in the plans and Contract Documents and other documents or Services related thereto.

The ENGINEER must adhere to the approved budget, and all changes resulting from design errors and omissions will be catalogued by the Public Works and Waste Management Department and will be shared with the members of selection committees for future projects. In addition, whenever the total cost to the Department for design errors and omissions is deemed excessive, the COUNTY

will make claims for reimbursement from the ENGINEER and its insurance company.

SECTION XIII - COURT APPEARANCES AND CONFERENCES

Nothing in this Agreement shall obligate the ENGINEER to prepare for or appear in litigation on behalf of the COUNTY except in consideration of additional compensation. The amount of such compensation shall be mutually agreed upon and embodied in a Supplemental Agreement subject to approval by the Board of County Commissioners. Only upon said approval of a Supplemental Agreement, and subsequent receipt of written authorization from the Director, shall the ENGINEER be obligated to Court appearances.

SECTION XIV - NOTICES

Any notices, reports or other written communications from the ENGINEER shall be considered delivered when posted by certified mail or delivered in person to the Director. Any notices, reports or other communications from the COUNTY to the ENGINEER shall be considered delivered when posted by certified mail to the ENGINEER at the last address left on file with the COUNTY or delivered in person to said ENGINEER or the ENGINEER's authorized representative.

SECTION XV - ABANDONMENT

In the event the COUNTY causes abandonment, cancellation, or suspension of the projects or parts thereof, the ENGINEER shall be compensated for all services rendered consistent with the terms of this Agreement up to the time the ENGINEER receives written notification of such abandonment, cancellation or suspension. This compensation shall be determined on the basis of the percentage of the total services, which have been performed at the time the ENGINEER receives such notice. In the event partial payment has been made for professional services not performed, the ENGINEER shall return such sums to the COUNTY within ten (10) days after receipt of written notice that such sums are due.

SECTION XVI - AUDIT RIGHTS

The COUNTY reserves the right to audit the records of the ENGINEER related to this Agreement at any time during the prosecution of the work included herein and for a period of three (3) years after final payment is made. The ENGINEER agrees to provide copies of any records necessary to substantiate payment requests to the COUNTY, including but not limited to audited financial statements, balance sheets and other financial records. In the event an audit undertaken pursuant to this section reveals improper, inadvertent, or mistaken payments to the ENGINEER, the ENGINEER shall remit such payments to the COUNTY. The COUNTY shall retain all legal and equitable rights with respect to recovery of payments.

SECTION XVII - INSPECTOR GENERAL (IG) AND INDEPENDENT PRIVATE SECTOR INSPECTOR GENERAL (IPSIG):

According to Section 2-1076 of the Code of Miami-Dade County, Miami-Dade County has established the Office of the Inspector General (IG) which may, on a random basis, perform audits, inspections, and reviews of all County/Trust contracts. This random audit is separate and distinct from any other audit by the County. To pay for the functions of the Office of the Inspector General, any and all payments to be made to the Contractor/Engineer under this contract will be assessed one quarter (1/4) of one (1) percent of the total amount of the payment, to be deducted from each progress payment as the same becomes due unless, as stated in the Special Conditions, this Contract is federally or state funded where federal or state law or regulations preclude such a charge. The Contractor/Engineer shall in stating its agreed process be mindful of this assessment, which will not be separately identified, calculated or adjusted in the proposal or bid form. The audit cost shall also be included in all change orders and all contract renewals and extensions.

The Miami-Dade Office of Inspector General is authorized to investigate County affairs and empowered to review past, present and proposed County and Public Health Trust programs, accounts, records, contracts and transactions. In addition, the Inspector General has the power to subpoena witnesses, administer oaths, require the production of witnesses and monitor existing projects and programs. Monitoring of an existing project or program may include a report concerning whether the project is on time, within budget and in conformance with plans, specifications and

applicable law. The Inspector General shall have the power to audit, investigate, monitor, oversee, inspect and review operations, activities, performance and procurement process including but not limited to project design, bid specifications, (bid/proposal) submittals, activities of the (Contractor/ Vendor/ Consultant/Engineer), its officers, agents and employees, lobbyists, County and Public Health Trust staff and elected officials to ensure compliance with contract specifications and to detect fraud and corruption.

Upon ten (10) days written notice to the Contractor/Engineer shall make all requested records and documents available to the Inspector General for inspection and copying. The Inspector General shall have the right to inspect and copy all documents and records in the (Contractor/Vendor/Consultant/Engineer's) possession, custody or control which in the Inspector General's sole judgment, pertain to performance of the contract, including, but not limited to original estimate files, change order estimate files, worksheets, proposals and agreements from and with successful subcontractors and suppliers, all project-related correspondence, memoranda, instructions, financial documents, construction documents, (bid/proposal) and contract documents, back-change documents, all documents and records which involve cash, trade or volume discounts, insurance proceeds, rebates, or dividends received, payroll and personnel records and supporting documentation for the aforesaid documents and records.

The Contractor/Engineer shall make available at its office at all reasonable times the records, materials, and other evidence

regarding the acquisition (bid preparation) and performance of this contract, for examination, audit, or reproduction, until three (3) years after final payment under this contract or for any longer period required by statute or by other clauses of this contract. In addition:

1. If this contract is completely or partially terminated, the Contractor/Engineer shall make available records relating to the work terminated until three (3) years after any resulting final termination settlement; and

2. The Contractor/Engineer shall make available records relating to appeals or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

The provisions in this section shall apply to the (Contractor/Vendor/Consultant/Engineer), its officers, agents, employees, subcontractors and suppliers. The (Contractor/Vendor/Consultant/Engineer) shall incorporate the provisions in this section in all subcontracts and all other agreements executed by the (Contractor/Vendor/Consultant/Engineer) in connection with the performance of this contract.

Nothing in this section shall impair any independent right to the County to conduct audits or investigative activities. The provisions of this section are neither intended nor shall they be construed to impose any liability on the Owner by the (Contractor/Vendor/Consultant/Engineer) or third parties.

Exception: The above application of one quarter (1/4) of one percent fee assessment shall not apply to the following contracts: (a) IPSIG contracts; (b) contracts for legal services; (c) contracts for financial advisory services; (d) auditing contracts; (e) facility rentals and lease agreements; (f) concessions and other rental agreements; (g) insurance contracts; (h) revenue-generating contracts; (i) contracts where an IPSIG is assigned at the time the contract is approved by the Trust; (j) professional service agreements under $1,000; (k) management agreements; (l) small purchase orders as defined in Miami-Dade County Administrative Order 3-2; (m) federal, state and local government-funded grants; and (n) inter-local agreements.

Nothing contained above shall in any way limit the powers of the Inspector General to perform audits on all Trust contracts including, but not limited to, those contracts specifically exempted above.

Independent Private-Sector Inspector General (IPSIG)

The attention of the Contractor/Engineer is hereby directed to the requirements of AO 3-20 and R-516-96; the Owner shall have the right but not the obligation to retain the services of an independent private-sector inspector general (IPSIG) who may be engaged to audit, investigate, monitor, oversee, inspect and review the operations, activities and performance of the Contractor/Engineer and Owner in connection with this contract. The scope of services performed by an IPSIG may include, but are not limited to, monitoring and investigating compliance with

Contract Specifications; project costs; and investigating and preventing corruption and fraud.

The IPSIG may perform its services at all levels of the contracting and procurement process, including but not limited to project design, establishment of bid specifications, bid submittals, activities of Contractor/Engineer, its officers, agents and employees, lobbyists, County staff and elected officials.

Upon (10) ten days written notice to Contractor/Engineer from an IPSIG, the Contractor/Engineer shall make all requested records and documents available to the IPSIG for inspection and copying. The IPSIG shall have the right to examine all documents and records in the Contractor's/Engineer's possession, custody or control which, in the IPSIG's sole judgment pertain to performance of the Contract, including but not limited to, original estimate files; change order estimates files; worksheets; proposals and agreements from and with successful and unsuccessful Contractor/Engineer and suppliers; all project-related correspondence, memoranda, instructions, financial documents, construction documents, bid and contract documents, back-charge document; all documents and records which involve cash, trade or volume discounts, insurance proceeds, rebates, or dividends received; payroll and personnel records; and supporting documentation for the aforesaid documents and records.

The provisions in this Section shall apply to the Contractor/Engineer, its officers, agents and employees. The Contractor/Engineer shall incorporate the provisions in this section in all subcontracts and all other agreements executed by the Contractor/Engineer in connection with the performance of this

agreement. Nothing in this contract shall impair any independent right of the County to conduct audit or investigative activities. The provisions of this Section are neither intended nor shall they be construed to impose any liability on the County by the Contractor/Engineer or third parties.

SECTION XVIII - SUB-CONTRACTING

The ENGINEER shall not subcontract, assign or transfer any work under this Agreement without the written consent of the Director. When applicable and upon receipt of such consent in writing, the ENGINEER shall cause the names of the firms responsible for the major portions of each separate specialty of the work to be inserted in the pertinent documents or data.

In addition, and as applicable, the ENGINEER agrees to comply with the Miami-Dade COUNTY Ordinance 01-103 and Implementing Order 3-32 regarding the Community Business Enterprise (CBE) program. The established CBE participation measure is 100% CBE First Tier Set-Aside.

A. Sub-consultant(s)

The Sub-consultant(s) authorized to perform professional services associated with this Agreement are:

Triangle Associates, Inc.

HR Engineering Services, Inc.

SECTION XIX - WARRANTY

The ENGINEER warrants that the services furnished to the COUNTY under this Agreement shall conform to the quality expected of and usually provided by the profession in the State

of Florida applicable to the design, inspection and construction of Public Works and Waste Management Department projects including roadway and bridge structures.

The Engineer warrants that no companies or persons, other than bona fide employees working solely for the ENGINEER or the COUNTY authorized sub-consultants, have been retained or employed to solicit or secure this Agreement or have been paid or guaranteed payment of any fees, commissions, percentage fees, gifts or any other considerations contingent upon or resulting from the award or making of this Agreement. The ENGINEER also warrants that no COUNTY personnel, whether full-time or part-time employees, have or shall be retained or employed in any capacity, by the ENGINEER or the COUNTY approved sub-consultants, to accomplish the work contemplated under the terms of this Agreement. For breach or violation of this warranty, the Director shall have the right to annul this Agreement without liability.

SECTION XX - TERMINATION OF AGREEMENT AND SANCTIONS FOR CONTRACTUAL VIOLATIONS

It is expressly understood and agreed that the COUNTY may terminate this Agreement, in total or in part, without cause or penalty, by thirty (30) days prior notification in writing from the Director; in which event the COUNTY's sole obligation to the ENGINEER shall be payment in accordance with Sections V and VI, for those units or sections of the work previously authorized.

Such payment shall be determined on the basis of the hours or the percentage of the total work performed by the ENGINEER up to the time of termination. In the event partial payment has been made for professional services not performed, the ENGINEER shall return such sums to the COUNTY within ten (10) days after receipt of written notice that said sums are due. Upon termination, the COUNTY may, without penalty or other obligations to the ENGINEER, elect to employ others to perform the services.

Proposal and contract documents shall provide that, notwithstanding any other penalties for firms that have discriminated in violation of Article VII of Chapter 11A of the Code, the County may terminate the contract or require the termination or cancellation of the sub-consultant contract. In addition, a violation by a respondent or sub-consultant to the respondent, or failure to comply with the Administrative Order (A.O.) 3-39 may result in the imposition of one or more of the sanctions listed in the A.O.

SECTION XXI - DURATION OF AGREEMENT

This Agreement shall remain in full force and effect for a period of two (2) years after its date of execution or until completion of all project phases, whichever occurs last, unless terminated by mutual consent of the parties hereto or as provided in other Sections of this agreement.

SECTION XXII - DEFAULT

In the event the ENGINEER fails to comply with the provisions of this Agreement, the Director may declare the ENGINEER in

default by thirty (30) days prior written notification. In such event, the ENGINEER shall only be compensated for any professional services completed as of the date written notice of default is served. In the event partial payment has been made for incomplete professional services, the ENGINEER shall return such sums to the COUNTY within ten (10) days after receipt of written notice that said sums are due. The ENGINEER shall not be compensated for professional services, which have been performed but not completed by the time the Director declares a default. In the event the COUNTY prevails in litigation to enforce or defend the provisions of this or any other Section of this Agreement, the COUNTY shall be compensated by the ENGINEER for reasonable attorney's fees and court costs.

Scrutinized Companies - By executing this Agreement through a duly authorized representative, the ENGINEER certifies that the CONSULTANT is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, as those terms are used and defined in sections 287.135 and 215.473 of the Florida Statutes. The County shall have the right to terminate this Agreement for default if the ENGINEER is found to have submitted a false certification or to have been, or is subsequently during the term of the Agreement, placed on the Scrutinized Companies for Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List.

SECTION XXIII - INDEMNIFICATION AND INSURANCE

Engineer shall indemnify and hold harmless the County and its officers, employees, agents and instrumentalities from any and all liability, losses or damages, including attorneys' fees and costs of defense, which the County or its officers, employees, agents or instrumentalities may incur as a result of claims, demands, suits, causes of actions or proceedings of any kind or nature arising out of, relating to or resulting from the performance of this Agreement by the Engineer or its employees, agents, servants, partners principals or subcontractors. Engineer shall pay all claims and losses in connection therewith and shall investigate and defend all claims, suits or actions of any kind or nature in the name of the County, where applicable, including appellate proceedings, and shall pay all costs, judgments, and attorney's fees which may issue thereon. Engineer expressly understands and agrees that any insurance protection required by this Agreement or otherwise provided by Engineer shall in no way limit the responsibility to indemnify, keep and save harmless and defend the County or its officers, employees, agents and instrumentalities as herein provided.

The Engineer shall furnish to the Public Works and Waste Management Department, 111 NW 1st Street, 15th floor, Miami, Florida 33128, Certificate(s) of Insurance which indicate that insurance coverage has been obtained which meets the requirements as outlined below:

A. Worker's Compensation Insurance for all employees of the Engineer as required by Florida Statute 440.

B. Public General Liability Insurance on a comprehensive basis in an amount not less than $300,000 combined single limit per occurrence for bodily injury and property damage. Miami-Dade County must be shown as an additional insured with respect to this coverage.

C. Automobile Liability Insurance covering all owned, non-owned and hired vehicles used in connection with the work, in an amount not less than $300,000 combined single limit per occurrence for bodily injury and property damage.

D. Professional Liability Insurance in an amount not less than $1,000,000 per claim.

All insurance policies required above shall be issued by companies authorized to do business under the laws of the State of Florida, with the following qualifications:

The company must be rated no less than "A-" as to management, and no less than "Class VII" as to financial strength by A.M. Best Company, Oldwick, New Jersey, or its equivalent, subject to the approval of the County Risk Management Division.

or

The company must hold a valid Florida Certificate of Authority as shown in the latest "List of All Insurance Companies Authorized or Approved to Do Business in Florida" issued by the State of Florida Department of Financial Services.

SECTION XXIV - TRUTH IN NEGOTIATION CERTIFICATION OF WAGE RATES

In accordance with Florida Statute 287.055,5(a) the ENGINEER hereby certifies and warrants that wage rates and other factual unit costs, as submitted in support of the compensation provided in Sections V and VI are accurate, complete and current as of the date of this Agreement. It is further agreed that said compensation shall be adjusted to exclude any significant costs where the COUNTY shall determine that the price of services was increased due to inaccurate, incomplete or unclear wage rates or other factual unit costs. All such compensation adjustments shall be made within one (1) year from the date of final billing or acceptance of the work by the COUNTY, whichever is later.

SECTION XXV - ORDINANCES

The ENGINEER agrees to abide and be governed by all Applicable Laws. Applicable Laws shall mean, whether singular or plural, all federal, state, county and local status, codes, laws, rules, regulations, ordinances, orders and standards applicable to the Agreement, any other such law hereafter enacted, and any rules adopted pursuant thereto, as all such laws and rules may be amended from time to time. The ENGINEER agrees to abide and be governed by Dade County ordinances which

may have a bearing on the work contemplated hereunder, including but not necessarily limited to: Ordinance No.72-82 (Conflict of Interest), Ordinance No. 77-13 (Financial Disclosure), Ordinance No. 82-37 (Affirmative Action Plan), Ordinance No. 90-133 (Disclosure of Ownership, Collective Bargaining Agreement, and Employee Wages, Health Care Benefits, Race, National Origin and Gender), Ordinance No. 91-142 (Family Leave) as amended by Ordinance No. 92-91, Superseded by Ordinance No. 93-118 (Family Leave Act), Ordinance No. 92-15 (Drug-Free Workplace), Resolution No. R-1049-93 (Affirmative Action Plan Furtherance and Compliance), Ordinance No. 94-73 (Value-Analysis and Life Cycle Costing) and Resolution No. R 385-95 (policy prohibiting contracts with firms violating the A.D.A. and other laws prohibiting discrimination on the basis of disability), Ordinance No. 95-178 (Entity must submit Delinquent or Currently due Fees or Taxes Affidavit), Ordinance No. 97-35 (policy of Fair Subcontracting Practices), Ordinance No. 98-30 (County Contractors Employment and Procurement Practices), Ordinance No. 97-104 (Listing of Subcontractors and Suppliers on County Contracts), Ordinance No. 97-172 (Ordinance amending Section 2-10.4 requiring certain agreements for Professional Architectural and Engineering Services to include Value Analysis as part of the base scope of services), Ordinance No. 97-215 (Establishing the Office of the Inspector General), Resolution No. R-1006-97 (Approving A.O. No.3-24 for Responsible Wages and Benefits in accordance with Ordinance No. 90-143), Resolution No. R-1206-97, Ordinance No. 98-106 (Cone of Silence), Resolution No. R-516-96 and Administrative Order 3-20 (Independent Private Sector Inspector General (IPSIG) Services), which are incorporated

herein by reference, as if fully set forth herein, in connection with the ENGINEER's obligations hereunder.

The ENGINEER shall comply with the procedures contained in the FALSE CLAIMS Ordinance Miami Dade County Code Article XV Section 21-255 through 21-266; prohibiting presentation, maintenance, or prosecution of false or fraudulent claims against Miami-Dade County; requiring forfeiture of any claim containing false or fraudulent allegations or statements; imposing penalties for submission of false or fraudulent claims; providing both county and private enforcement.

The ENGINEER shall comply with the financial disclosure requirements of Ordinance No. 77-13 by having on file or filing within thirty (30) days of the execution of this Agreement one of the following with the Miami-Dade County Elections Department, P.O. Box 521550, Miami, Florida 33152-1550:

1. A source of income statement.
2. A current certified financial statement.
3. A copy of the ENGINEER's current Federal Income Tax Return.

SECTION XXVI - VALUE ANALYSIS

County Administrative Order 3-26 (AO) establishes the threshold and guidelines for performing Value Analysis/Engineering (VA/E) studies on Miami-Dade County construction contracts. The AO states that a formal VA/E study is not mandated for those projects whose construction cost estimate is below the Five Million Dollar ($5,000.000.00) threshold. The AO further states

that principles and objectives of a VA/E study may be utilized for such projects in an informal manner. Therefore, with respect to this requirement, VA/E review may be conducted on an informal basis by County staff or an independent consultant under contract to the County and supervised by the Project Manager. The ENGINEER shall participate in these reviews pursuant to this Agreement.

SECTION XXVII - AFFIRMATIVE ACTION

The ENGINEER's Affirmative Action Plan submitted pursuant to Ordinance 82-37and County Code 2-8.1.5 as approved by the Internal Services Department and any update thereof, are hereby incorporated as contractual obligations of the ENGINEER to Miami-Dade County thereunder. The ENGINEER shall undertake and perform the affirmative actions specified herein. The Director may declare the ENGINEER in default of this agreement for failure of the ENGINEER to comply with the requirements of this paragraph.

SECTION XXVIII - UTILIZATION REPORT (UR)

Pursuant to Implementing Order 3-32 Community Business Enterprise (CBE-A&E) Program and Administrative Order 3-39 Standard Process for Construction of Capital Improvements, Acquisition of Professional Services, Construction Contracting, Change Orders and Reporting, the ENGINEER is required to file utilization reports (UR) with the Miami-Dade County contracting department monthly, unless designated otherwise. URs are required to accompany every invoice. The UR should indicate the amount of contract monies received and paid to the ENGINEER, including

payments to Sub-consultant(s) (if applicable). The UR format can be found at http://www.miamidade.gov/business/library/forms/ae-ur-form.pdf. Invoices shall not be considered valid without said form.

SECTION XXIX- PROMPT PAYMENT

The ENGINEERS's attention is directed to Miami-Dade County Section 2-8.1.4, providing for expedited payments to small businesses by county agencies and the Public Health Trust; creating dispute resolution procedures for payment of county and Public Health Trust obligations; and requiring the ENGINEER to issue prompt payments, and have the same dispute resolution procedures as the COUNTY, for all small business subcontractors. Failure of the ENGINEER to issue prompt payment to small businesses, or to adhere to its dispute resolution procedures, may be cause for suspension, termination, and debarment, in accordance with the terms of the county contract or Public Health Trust contract and debarment procedures of the COUNTY.

SECTION XXX- PERFORMANCE EVALUATION

Performance evaluations of the services rendered under this Agreement shall be performed by the Department and shall be utilized by the COUNTY as evaluation criteria for future solicitations.

SECTION XXXI - ETHICS

"Pursuant to Sec. 2-11.1(y) of the Code of Miami-Dade County, the Ethics Commission has jurisdiction over contractors and vendors. The ENGINEER must provide the Ethics Commission with a written report regarding its compliance with any restrictions contained in the advisory opinion issued by the Ethics Commission to the ENGINEER, sub-consultants or teams members within ninety days of the issuance of each work order. The reports must be submitted to , Executive Director, Commission on Ethics and Public Trust, 19 West Flagler Street, Suite 820, Miami, FL 33130."

SECTION XXXII ENTIRETY OF AGREEMENT

This writing embodies the entire agreement and understanding between the parties hereto, and there are no other agreements and understandings, oral or written with reference to the subject matter hereof that are not merged herein and superseded hereby.

No alteration, change, or modification of the terms of this Agreement shall be valid unless made in writing, signed by both parties hereto, and approved by the Board of County Commissioners.

This Agreement, regardless of where executed, shall be governed by and construed according to the laws of the State of Florida, and venue shall be in Miami-Dade County, Florida.

IN WITNESS WHEREOF the parties hereto have executed these presents this _____ day of _____ 20 ____.

ATTEST:

HARVEY RUVIN,
CLERK OF THE BOARD

By: _____

ATTEST:

By: _____
Rafael L. Robayna, Secretary

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF
COUNTY COMMISSIONERS

By: _____

Carlos A. Gimenez
County Mayor

ROBAYNA AND ASSOCIATES, INC.

By: _____
Rafael L. Robayna, President

(CORPORATE SEAL)

STATE OF FLORIDA
COUNTY OF MIAMI-DADE

The foregoing instrument was acknowledged before me this 13th **day of** April **2015, by** Rafael L. Robayna **as President, and** Rafael L. Robayna **, as Secretary, of** Robayna and Associates, Inc. **, a** Florida Corporation **, on behalf of the corporation. He/She/They is/are personally known to me or has/hasn't/have/haven't produced identification and did/did not take an oath.**

MARIA M MONTILLA
MY COMMISSION # EE157742
EXPIRES January 08, 2016
(407) 398-0153 FloridaNotaryService.com

_____
Notary Public
Serial Number
EE 157742

Approved as to form
and legal sufficiency.

_____
Assistant County Attorney

Exhibit A

Minimum Requirements for Plans Submittal

Master Plan:

- Roadway Plans: Typical Sections, Alignment, Project layout (preliminary plan-profile), Drainage System Map, Connection to Adjacent Roadways, Preliminary Traffic Control Plans and phasing.
- Structures Plans: Environmental and site considerations, Vertical and horizontal clearances (existing and proposed) Disposition of existing structure, Vertical and horizontal geometry, Typical section, , Bridge deck drainage considerations, Stream bottom profile, Conceptual geotechnical data, Phase Construction Impacts, and Construction time.
- Prepare and Conduct Public Meeting.
- Preliminary Cost Estimate.

30% Submittal:

- Roadway Plans: Typical Sections, Survey (Completed), Back of Sidewalk Profile, Plan and Profiles (Proposed horizontal road layout to include existing topography & utilities, Right of Way, geometry, survey reference points, vertical layout to include existing PGL & utilities), Geotechnical Evaluation (Completed), Traffic Study (Completed, if required), Cover Sheet, Cross Sections (Existing), Indicate service point for lighting.
- Structures Plans: Geotechnical Report, Hydraulic Report, General Notes Sheet, Plan and Elevation Sheet, Substructures, Superstructure, Retaining Walls, Bridge Hydraulics Recommendation Sheet, Report of core borings, Proposed construction sequence and methods, Preliminary foundation layouts and installation table.

60% Submittal:

- Roadway Plans: Key Sheet, Plan and Profile (Proposed PGL, Drainage structures and French Drain), Drainage Report (final), Drainage Structures Sheets (showing utilities, Summary of Quantities, Cross Sections (proposed), Plateau Intersections - Major streets, Minor Intersecting Street Profiles, Pavement Markings and Signing (without complete tabulation of quantities), Signalization Plans (without complete tabulation of quantities & details), Signalization Plans (without complete tabulation of quantities & details), Landscaping Plans (without details) (if required).
- Structures Plans: Substructure Submittal Plan & Elevation, Bridge Hydraulics Recommendation Sheet, Boring Logs, Foundation layout, foundation installation notes,

Substructure Plans, and draft technical specifications, Final concrete outlines of all individual components, major reinforcing steel, final post-tensioning layouts (if required), bearing details, details of congested areas, details of unique features, accessible pedestrian facilities details, and other details as required.

90% Submittal:

- Completion of all items submitted at 60% and resolution of all review comments from previous submittals.
- Permit Sketches.
- Roadway Plans: Miscellaneous details and tabulation of quantities (roadway, drainage, lighting, markings and signage, signalization, landscaping, etc.), Maintenance of Traffic and phasing plans, Cost Estimate.

- Structures Plans: This submittal shall include prints of the completed plans, Summary of Pay Items (complete with quantities), design calculations, Final Geotechnical Report, Addendums to Hydraulic Report and, if appropriate, Technical Special Provisions.

100% Plans Submittal:

- Complete design to reflect the review comments from the 90% submittal.

Project Final Submittal Requirements

- Final design to reflect the review comments from the 100% submittal.
- Cad Files in the Miami Dade Community Public Works and Waste Management's format.
- Computation Books.
- Drainage Report (signed and Sealed).
- Survey Books.
- Final Cost Estimates.
- Four half size sets (11"X17") of plans (signed and sealed)
- Two full size sets (22"X34") of plans (signed and sealed)
- One set of half size (11"X17") mylar originals (4 mill thick) w/signed coversheet.
- Soil survey report (signed and sealed).
- Structure geotechnical report.

MIAMI-DADE COUNTY

MIAMI-DADE COUNTY – INTERNAL SERVICES DEPARTMENT (ISD)
ISD FORM NO. 9 – Fair Subcontracting Policies
(Section 2-8.8 of the Miami-Dade County Code)

FAIR SUBCONTRACTING PRACTICES

In compliance with Section 2-8.8 of the Miami-Dade County Code, the Proposer submits the following detailed statement of its policies and procedures for awarding subcontracts:

Robayna and Associates' (RAA) goal is to serve our clients with the best possible professional services, at the best value and to utilize the best sub-consultants with the specific expertise and talent to satisfy the scope of services of a particular project. To this end we select our team based on fair practices in the early stages of our teambuilding efforts taking in consideration the following selection criteria:

RAA will always make every effort possible to hire qualified SBE/CBE sub-consultants for all contracts that require outside services.

RAA will verify that the sub-consultants have the technical certifications and licenses required to provide specific professional services.

RAA will check the sub-consultants' reputation and tract record in completing similar assignments to assure that the best product quality is achieved.

RAA will make and assessment of the sub-consultants and discuss with them their manpower and capabilities to assure they feel comfortable with been able to achieve the project task involved within a reasonable time schedule.

Small firms that already have tact record of successfully working with us in other projects will be also considered, provided they meet all the requirements above.

Robayna and Associates' Management will provide fair evaluation of our sub-consultants with the emphasis in hiring qualified local firms with proper qualifications and capabilities to perform the required services within schedule. RAA understands that partnering with upcoming local firms with the required talent is in the best interest of the community and is crucial to the projects' success.

RAA understands the need and share the Goal with Miami-Dade County to create opportunities for local talent to participate in local projects. It is the Goal of Robayna and Associates, Inc. to work together with our clients to give fair opportunities to match them with qualified talent to better our community and provide solutions to upcoming challenges.

I hereby certify that the foregoing information is true, correct and complete.

Signature of Authorized Representative: _____

Title: President Date: 4-10-2015

Proposer's Name: Robayna And Associates, Inc.

Miami-Dade County
Internal Services Department

Affirmation of Vendor Affidavits

In accordance with Ordinance 07-143 amending Section 2-8.1 of the Code of Miami-Dade County, effective June 1, 2008, vendors are required to complete a new Vendor Registration Package, including a Uniform Affidavit Packet (Vendor Affidavits Form), before being awarded a new contract. The undersigned affirms that the Vendor Affidavits Form submitted with the Vendor Registration Package is current, complete and accurate for each affidavit listed below.

Contract No. : ISD E14-PWWM-06 **Federal Employer Identification Number (FEIN):** 59-2119073

Contract Title: DESIGN SERVICES FOR THE REPLACEMENT OF THE NW 32nd AVENUE BRIDGE (No. 874032) NORTH OF NW 151st STREET.

Affidavits and Legislation/ Governing Body

1.	***Miami-Dade County Ownership Disclosure*** *Sec. 2-8.1 of the County Code*	6.	***Miami-Dade County Vendor Obligation to County*** *Section 2-8.1 of the County Code*
2.	***Miami-Dade County Employment Disclosure*** *County Ordinance No. 90-133, amending Section 2.8-1(d)(2) of the County Code*	7.	***Miami-Dade County Code of Business Ethics*** *Article 1, Section 2-8.1(i) and 2-11(b)(1) of the County Code through (6) and (9) of the County Code and County Ordinance No 00-1 amending Section 2-11.1(c) of the County Code*
3.	***Miami-Dade County Employment Drug-free Workplace Certification*** *Section 2-8.1.2(b) f the County Code*	8.	***Miami-Dade County Family Leave*** *Article V of Chapter 11 of the County Code*
4.	***Miami-Dade County Disability Non-Discrimination*** *Article 1, Section 2-8.1.5 Resolution R182-00 amending R-385-95*	9.	***Miami-Dade County Living Wage*** *Section 2-8.9 of the County Code*
5.	***Miami-Dade County Debarment Disclosure*** *Section 10.38 of the County Code*	10.	***Miami-Dade County Domestic Leave and Reporting*** *Article 8, Section 11A-60 11A-67 of the County Code*

RAFAEL L. ROBAYNA — Printed Name of Affiant

PRESIDENT — Printed Title of Affiant

Signature of Affiant

ROBAYNA AND ASSOCIATES, INC. — Name of Firm

04/13/2015 — Date

5723 N.W. 158TH STREET, MIAMI LAKES — Address of Firm

FL — State

33014 — Zip Code

Notary Public Information

Notary Public – State of Florida County of Miami-Dade

Subscribed and sworn to (or affirmed) before me this Thirteen day of, April 20 15.

by Rafael L. Robayna He or she is personally known to me ✓ or has produced identification ☐

Type of identification produced

Signature of Notary Public

EE157742 — Serial Number, if any

Maria Montilla — Print or Stamp of Notary Public

January 08, 2016 — Expiration Date

Notary Seal

MARIA M MONTILLA
MY COMMISSION # EE157742
EXPIRES January 08, 2016
(407) 398-0153 FloridaNotaryService.com

60

ROBAYNA
AND ASSOCIATES INC.
ENGINEERS - PLANNERS - SURVEYORS

5723 NW 158 Street
Miami Lakes, FL 33014
T 305-823-9316 F 305-823-1569

ISD E14-PWWM-06
Scope of Services & Fee Quotation for Design Services for the Replacement of the NW 32 Avenue Bridge (No. 874032) North of NW 151 Street

Date: 2015-03-06

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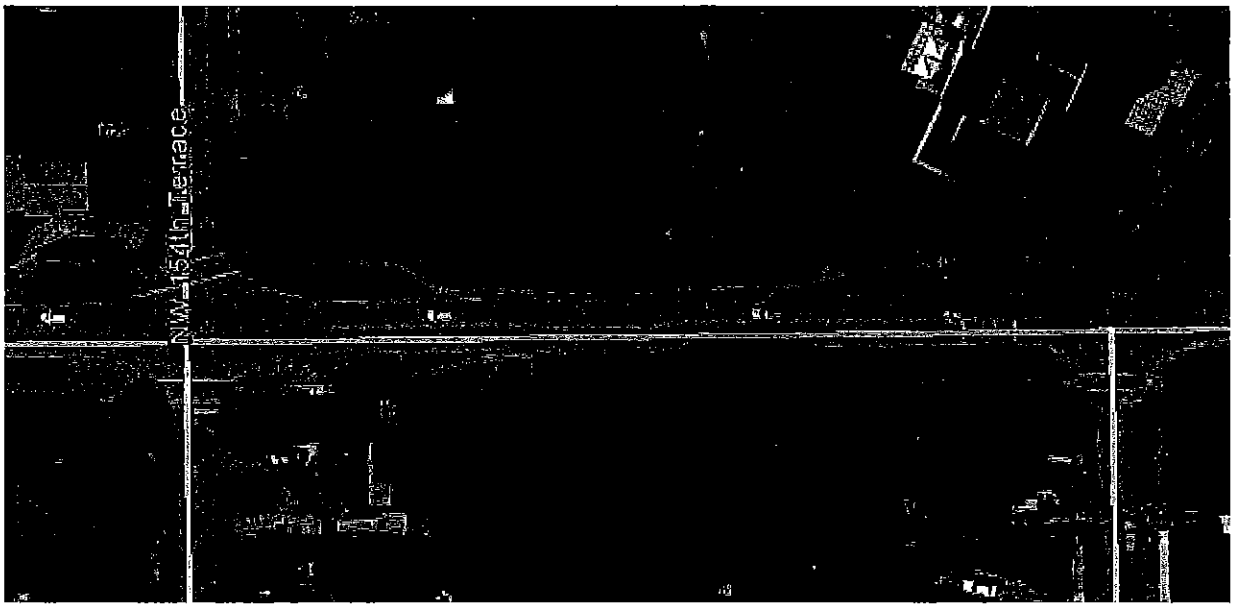
Project Overview

The project will involve replacement of the Public Works and Waste Management Department's bridge cataloged as No. 874032. The bridge provides for vehicular and pedestrian traffic to cross the Biscayne Canal, also known as the C-8 Canal. At present the existing bridge is a 4 span – 80 foot bridge with sidewalks and two way traffic. The replacement bridge will have two traffic lanes, two bike lanes for future bike paths, and two sidewalks. The alignment of the bridge is proposed to be analyzed and possibly remain as is, but the full span will be increased to remove a constriction that exists at the canal where the bridge is located. Miami-Dade County has requested that the bridge have 3 spans which is subject to permit agency approval and utility coordination. By reference the information found within Exhibit A of the Non-Exclusive Professional Service Agreement is included here in as well as applicable information found within the design approach previously provided to the County.

This project is located within the City of Miami Gardens in Section 16, Township 52 South, and Range 41 East.



Scope of Services Summary

- Data Collection
- Master Planning
- 30% Plan Submittal
- 60% Plan Submittal
- 90% Plan Submittal
- 100% Plan Submittal
- Final Project Document
- Bidding and Pre-construction Services
- Post-Design Services

Data Collection

Geotechnical Testing

The information collected and tested for this project is listed below and attached in the Fee Quotation. A maintenance of traffic will be prepared for the work within the roadway because of limited clearance from the aerial utilities located adjacent to the SFWMD right-of-way.

The following samples will be collected (a more detailed list of tests are found attached in the HRES Scope of Services):

- 2 roadway borings, each to the depth of 6 feet
- 2 percolation tests, usual open hole methods to a depth of 15 feet
- 2 pavement cores near the roadway borings
- 2 LBR samples
- 2 SPT samples to a depth of 70 feet

Land and hydrographic surveying

As per the coordination with the County a topographic survey for this project will begin at the intersection of NW 154th Terrace and continue through the existing bridge to the intersection of NW 156th Street. The approximate distance of the route to be surveyed is approximately, 550 feet. As part of the Survey the embankments to the west and east of the bridge along both the north and south of the bridge will be surveyed to establish the limits of the constriction. The hydrographic survey for this project will collect two cross sections at each side of the project. One to define the full section of the canal at each side of the bridge as well one near the bridge at each side to define the scope of work necessary to widen the canal.

Utility Information Gathering

With the assistance of the County who would have requested the Sunshine One Call ticket, Robayna and Associates will coordinate for the collection, cataloguing and drafting of the utility information. Additionally, the as-built information collected will be adjusted to match the above ground features located during the survey. Data depiction will follow ASCE 38-02 Standard Guidelines and will have a quality of Level C as per the negotiation meeting. No electromagnetic, ground penetrating radar nor soft digs are budgeted herein.

Master Planning

With the topographic and utility information collected the team will begin preparing typical sections and establishing alignments that satisfy the County criteria while carefully taking into account the above ground existing utility crossings as well as any subaqueous crossing which may exist.

Due to the widening requested for inclusion of the bike paths, a transition will be made on the roadway to allow for the shift to include the striped bike lanes along the bridge. This is because at this point in

time there is no bike way and the widening is for future use. It is estimated that the transition will be approximately 75 feet in length. Additionally, the sidewalk transition and location will be established.

Traffic Control Plans for phasing is not feasible due to the bridge location and scope of replacement. A phasing plan will not be provided with this project. A road closure and detour route will be prepared using aerials for preliminary County review as well as the Public Meeting with the City of Miami Gardens and the County.

The structural component during the master plan phase will review the environmental and site considerations, vertical and horizontal clearances (existing and proposed), disposition of the existing structure, vertical and horizontal geometry, typical section, bridge deck drainage considerations, stream bottom profile, conceptual geotechnical data, phased construction impacts, and construction time. Additionally a description of specifications, design loads, and materials proposed for new bridge construction will be provided to the County.

Coordination with agencies involved in the permitting would also proceed in this stage to clarify any and all issues related to the provision of permits when the final master a plan and alignment is completed and approved.

As part of this phase of work, the Public Information and Public Involvement plan will be prepared and implemented with the parties directly impacted such as the schools, City and its residences. A public meeting will be prepared for and attended to inform them of the project, its impact and possible schedule. Any concerns voiced will be reviewed for applicability and coordinated with the County as need be.

Robayna and Associates, Inc. will work in developing a Public Information and Public Involvement Strategy and Plan following the following criteria:

- Define client objectives
- Defining residential neighborhood potential concerns
- Defining commercial owners concerns
- Preparing presentation materials, brochures, exhibits and media displays
- Media objective and strategy
- Advertising objectives and strategy
- Identifying key stakeholders
- Identifying best means of reaching stakeholders, and making them aware of positive aspects of the project.
- Addressing, prior to public meetings, the reduction of project impact on stakeholders
- Scheduling key meetings as necessary and as desired by client.

As part of the Master Planning an Opinion of Probable Cost will be prepared for the roadway, embankments and bridge components of the project.

Deliverables:

- Master Plan Concept
    - Typical Section
    - Alignment
- Preliminary Traffic Control Detour Concept
- Presentation Boards – Master Plan and Detour
- Public Information and Public Involvement Strategy
- Preliminary Cost Estimate
- Master Plan Report
    - Bridge Structural
    - Roadway Considerations

30% Plans Submittal

The 30% submittal will begin developing the Master Plan concept that has been approved by the County and that is in accordance with all of the regulatory agencies that have a say in the project. Bridge and Roadway plans will begin to take form. No traffic study will be prepared for NW 32nd Avenue, additionally, no lighting will be considered during the design, only conduits within the bridge structure for future use.

The required typical sections sheets will be updated with construction details. The profile grade line and back of sidewalk profile sheets will be prepared as well as establishment of drainage patterns that must be take into account.

Preliminary bridge design will be prepared and supporting documentation will be prepared to supplement the deliverables below.

Deliverables:

- Cover Sheet
- Typical Sections
- Existing Cross Sections
- Complete Survey
- Back of Sidewalk Profiles
- Plan and Profile Sheets with topography, utilities, right of way geometry, with existing PGL
- Roadway General Notes
- Geotechnical Report and Evaluation
- Hydraulic Report
- Structural Plan and Elevation Sheets
- Structural General Notes
- Substructure

- Superstructure
- Retaining Walls
- Bridge Hydraulic Recommendation Sheets
- Proposed Bridge Construction Sequence and Methods
- Preliminary Foundation layouts and Installation Table

60% Plans Submittal

At the 60% submittal recommendations made will be addressed, the final drainage report will be prepared and necessary drainage will be designed for the project. Roadway plans will take further form as the Profile Grade Line is designed by the team and the bridge profile is prepared. A tabulation of pay items with a preliminary summary of quantities will be prepared for the project. This does not include a complete set of quantities for Signing and Pavement Marking which will only have a summary of pay items.

The Structural Bridge plans will be further developed and details will be provided to match the

Deliverables:

- All Plans and Reports Previously Provided with Corrections and Changes
- Key Sheet
- Plan and Profile Sheets with Proposed PGL
- Drainage System – Drainage Structure Sheets with Utilities
- Summary of Quantities
- Pavement Marking and Signage -- Incomplete Quantities
- Preliminary Stormwater Pollution Prevention Plan and Notes
- Substructure Submittal Plan & Elevation,
- Bridge Hydraulics Recommendation Sheet
- Boring Logs
- Foundation layout
- Foundation installation notes
- Substructure Plans
- Draft technical specifications,
- Final concrete outlines of all individual components
- Major reinforcing steel
- Bearing details, details of congested areas, details of unique features, accessible pedestrian facilities details, and other details as required.

90% Plans Submittal

At this stage the team will address the comments and concerns which were brought up during the 60% submittal. The roadway plans will be completed with any miscellaneous details which are required to detail any ambiguous construction scope. The Signing and Pavement Marking Plans will be submitted with completed quantities. The final Maintenance of Traffic Detour will be prepared which in this case travels to 27th Avenue, SR-817, an FDOT roadway.

All permit sketches and electronic applications prepared for the County for the following permits:

- South Florida Water Management District
    - Joint Application for Federal Dredge and Fill Permit (SFWMD/FDEP/US-ACoE)
    - Modification of the Right of Way Occupancy Permit
- U.S. Army Corps of Engineers
    - Nationwide Permit
- Florida Department of Environmental Protection
    - Notice of Intent sketches and information for National Pollutant Discharge Elimination System. The contractor will need to submit the final version, but most information needed will be prepared.

Deliverables:

- Revised Plans
- Miscellaneous Details
- Summary of Pay Items and Quantities for: Bridge, Roadway, drainage, pavement marking and signage.
- Cost Estimate
- Road Closure and Traffic Detour Plans
- Bridge Design calculations
- Final Geotechnical Report
- Addendums to Hydraulic Report
- If appropriate, Technical Special Provisions

100% Plans Submittal

Final Design reflecting the 90% comments and any agency comments that may have come up during the permitting of the project.

Project Final Submittal

The final submittal for the project will include the following Deliverables:

- Final Plans for the Project
    - AutoCAD Format editable by Miami-Dade County Public Works and Waste Management Department
- Computation Books
- Drainage Report – Signed and Sealed
- Soil Survey Report – Signed and Sealed
- Structural Geotechnical Report – Signed and Sealed
- Survey Field Books
- Final Cost Estimate
- 4 Sets of 11x17 plans on 20 bond paper – signed and sealed

- 2 Sets of 22x34 plans on 20 bond paper – signed and sealed
- 1 Set of 11x17 plans on 4 mill thick mylar – signed cover sheet

Post Design Services

Bidding and Pre-Construction Conference

Robayna and Associates, Inc. and Triangle Associates, Inc., will assist and or coordinate, as required, in the bidding process, pre-construction meetings, shop drawings review and approval.

During the construction processes Robayna and Associates will assist the County with responding to Requests for Information made by the general contractor, review of contractor's pay requisition's and limited inspections in the event there are items which the County needs clarified and as necessary to verify the pay requisitions. At the close of the project Robayna and Associates and its Team will review the as-builts documents for final engineer certifications. Unforeseen items during construction will be addressed on an hourly basis and design modifications made as necessary to keep the project on schedule.

Fee Quotations – Robayna and Associates, Inc. Triangle Associates, Inc. & HR Engineering Services, Inc.

FEE QUOTATION PROPOSAL

Consultant's Name: Robayna and Associates, Inc.
Project Number: E14-PWMM-06
Project Name: Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET
Project Length:

Prepared by: O. Robayna
Date: 3/6/2015

STAFF HOURS

	Activity	Principal Engineer	Project Manager	Sr. Engineer	Engineer	Designer	CADD Tech.	Staff Hours by Activity	Salary Cost for Activity
	Distribution	**3%**	**9%**	**14%**	**18%**	**22%**	**34%**	**100%**	
1	Master Plan	4	12	19	24	29	45	133	$5,162.42
2	Roadway Plans	8	25	39	50	62	95	280	$10,868.26
3	Pavement Marking & Signing Plans	2	6	9	12	14	22	64	$2,484.17
4	Drainage and Dredge Plans	6	19	29	38	46	71	210	$8,151.19
5	Permitting	3	9	14	18	22	35	102	$3,959.15
6	Post Design Services	5	14	21	27	33	52	152	$5,899.91
	TOTAL HOURS	28	85	132	169	207	320	941	$36,525.10
	Rates	$65.00	$36.20	$55.00	$33.55	$38.46	$33.55		
	Totals S-H and Cost	**$1,834.95**	**$3,065.78**	**$7,245.70**	**$5,682.70**	**$7,961.99**	**$10,733.99**	**$36,525.10**	**$38.82**

TOTAL LUMP SUM FEE BREAKDOWN BY ACTIVITY	Amount
Survey (R&A)	$9,496.88
Geotechnical (HRES)	$18,166.56
Master Plan (R&A)	$14,712.90
Roadway Plans (R&A)	$30,974.53
Signing & Marking Plans (R&A)	$7,079.89
Drainage & Dredge Plans (R&A)	$23,230.90
Structural Plans (TAI)	$60,629.76
Permitting (R&A)	$11,283.58
Post Design Services (R&A)	$16,814.74
Post Design Services (TAI)	$5,143.68
Printing Expenses	$2,418.40
Maximum Lump Sum Fee	**$199,951.82**

TOTAL CONTRACT COST COMPUTATIONS	
Total Activity Salary Costs	$36,525.10
(a) Overhead Additives	
(a1) Combined O-H percent	185.0%
(a2) Combined O-H Cost	$67,571.44
Subtotal (Salary + Overhead)	$104,096.54
(b) Operating Margin Percent	$0
(b1) Operating Margin Cost - Fixed Fee	$0
Subtotal (Salary Related Cost)	$104,096.54

TOTAL LUMP SUM $104,096.54

TOTAL FEE R&A $104,096.54

COUNTY PROJ. NO.: E14-PWMM-06 F.A.P. **DESCRIPTION:**

Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH IN MILES : 0.1 **FEET :** 550 **LANES:** 2 **DIV'D:** No **URBAN:** Yes

ITEM	BASIS OF ESTIMATE	NO. OF UNITS		COUNTY RATES	ITEM COST	COMMENTS
Right of Way, Topographic and Hydrographic Survey						
Field Survey Crew Party of Three	Day	4		$ 1,267.71	$ 5,070.84	
Principal Land Surveyor	Hour	6		$ 159.00	$ 954.00	
Field Supervisor / Computer Surveyor	Hour	4		$ 96.44	$ 385.76	
CADD Technician	Hour	36		$ 85.73	$ 3,086.28	
Included above are the following tasks						
ROW Research						
Project Veritical and Horizontal Control						
Four Canal Cross Sections						
Topographic Survey from 156 St to 154 Terr						
Survey Total			0		**$ 9,496.88**	

14

Prepared By: Robayna and Associates, Inc Date: March 6, 2015

COUNTY PROJECT NO E14-PWMM-06 F.A.P. NO.: _____

DESCRIPTION: Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH IN MILES: _____ FEET : _____ LANES: 2

ESTIMATE OF OUT OF POCKET EXPENSES

Units	Submittals	Sets	8x11	11x17	22x34	Mylars 11x17	Mylars 22x34	8x11 color	11x17 color	Color Graphics Mounted
	Master Plan	2		8						
	Master Plan Report	2	24							
	Presentation Boards	2								2
	30% Submittal	2		98						
	60% Submittal	2		120						
	90% Submittal	2		120						
	100% Submittal	2		120						
	Final Submittal	2			120	120				
	Plans to Utility Companies	1		10						
	Plans to Permitting agencies	1		60						
	Plans to Other County Departments	3		168						
	Computation Book	2	34							
	In-House Printing & Plotting									
	TOTAL		58	704	120	120	0	0	0	2
	Unit Cost		$0.20	$0.45	$6.00	$10.00	$0.00	$0.69	$1.50	$85.00
	Costs		$11.60	$316.80	$720.00	$1,200.00	$0.00	$0.00	$0.00	$170.00

TOTAL
$2,418.40

COUNTY PROJ. NO.: E14-PWMM-06 F.A.P. DESCRIPTION:

Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH IN MILES : FEET : LANES: 2 DIV'D: No URBAN: Yes

ITEM	SCALE	BASIS OF ESTIMATE	NO. OF UNITS	NO. OF SHEETS	M - H UNITS	TOTAL M-H	COMMENTS
MASTER PLAN							
Bridge Alignment/Span	1"=20'	SHT	1	1	10	10	
Typical Section		SHT	1	1	6	6	
Detour Plans/Maint. of Traffic	1'=100'	SHT	1	1	9	9	
Public Involvement Public Information Plan		HRS	1		40	40	
Opinion of Probable Cost		HRS	1		8	8	
Meetings and Reviews		HRS	5		6	30	PWWM, DERM, SFWMD, ACOE (2 People 3 Hrs Each meeting)
Public Meeting		HRS	1		8	8	(1 meeting 2 people)
Master Plan Report		HRS	1		22	22	Will Include Design Critera for Project
MASTER PLAN				3		133	

Prepared By: Robayna and Associates, Inc. Date: March 6, 2015

COUNTY PROJ. NO.: E14-PWMM-06 **F.A.P.** **DESCRIPTION:**

Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH IN MILES : **FEET :** **LANES:** 2 **DIV'D:** No **URBAN:** Yes

ITEM	SCALE	BASIS OF ESTIMATE	NO. OF UNITS	NO. OF SHEETS	M - H UNITS	TOTAL M-H	COMMENTS
ROADWAY PLANS							
Cover/Key Map		SHT		1	6	6	
Typical Section		SHT		1	20	20	
Summary of Quantities		SHT		1	14	14	
Plan & Profile	1"=20'	SHT		1	40	40	
Back of Sidewalk Profiles		SHT		2	10	20	
Special Profiles		HRS	2		10	20	
Misc. Construction Details		SHT		2	10	20	
Detour Plans/Maint. of Traffic		HRS	1		24	24	
Cross-Section Sheets		SHT		3	18	54	
Opinion of Probable Cost		HRS	2		6	12	
Utility Conference		HRS	4		2	8	
Meetings and Reviews		HRS	5		6	30	Two individuals five times for 3 Hours
Field Reviews		HRS	2		6	12	Two individuals two times for 3 Hours
ROADWAY PLANS TOTALS				11		**280**	

Prepared By: Robayna and Associates, Inc. Date: March 6, 2015

COUNTY PROJ. NO.: E14-PWMM-06 F.A.P. _____ DESCRIPTION: _____

Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH IN MILES : _____ FEET : _____ LANES: 2 DIV'D: No URBAN: Yes

ITEM	SCALE	BASIS OF ESTIMATE	NO. OF UNITS	NO. OF SHEETS	M - H UNITS	TOTAL M-H	COMMENTS
GROUND SIGNING & MARKING							
Summary of Quantities		SHT		1	12	12	
Plan Sheets	1"=20'	SHT		1	32	32	
Opinion of Probable Cos		HRS	2		4	8	
Meetings and Review		HRS	2		6	12	Two individuals two times for 3 Hours
SIGNING & MARKING TOTALS				2		64	

Prepared By: Robayna and Associates, Inc. Date: March 6, 2015

COUNTY PROJ. NO.: E14-PWMM-06 F.A.P. DESCRIPTION:

Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH IN MILES : FEET : LANES: 2 DIV'D: No URBAN: Yes

ITEM	SCALE	BASIS OF ESTIMATE	NO. OF UNITS	NO. OF SHEETS	M - H UNITS	TOTAL M-H	COMMENTS
DRAINAGE & CANAL PLANS							
Drainage Map	1:20	SHT		1	8	8	
Drainage Design		HRS	1		14	14	
Drainage Structure Sheets	1:20	SHT		1	16	16	
Summary of Drainage Structure		HRS		1	12	12	
Canal Dredge Plan and Profiles		SHT		2	32	64	Including coordination with structual and SFWMD
Meetings / Review / Quality Control		HRS	2		6		Two Meetings with two people 3 hours long
Drainage Details		HRS		2	18	36	
Environmental Issues		HRS					None were found durring preliminary review of DERM files
Exfiltraion Trench Design		HRS	1		8	8	
Draiange Report		HRS	1		20	20	
Prepare SWPPP		HRS	1		16	16	
Opinion of Probable Cos		HRS	2		8	16	
DRAINAGE & CANAL PLANS TOTALS				7		210	

Prepared By: Robayna and Associates, Inc. Date: March 6, 2015

COUNTY PROJ. NO.: E14-PWMM-06 **F.A.P.** _____ **DESCRIPTION:** _____

Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH IN MILES : _____ **FEET :** _____ **LANES:** 2 **DIV'D:** No **URBAN:** Yes

ITEM	SCALE	BASIS OF ESTIMATE	NO. OF UNITS	NO. OF SHEETS	M - H UNITS	TOTAL M-H	COMMENTS
PERMITTING							
SFWMD Joint Application - Dredge		HRS	1		24	24	
SFWMD ROW Permit Modification		HRS	1		20	20	
US-ACOE Nationwide Permit		HRS	1		24	24	
FDEP NOI Exhibits and Data		HRS	1		12	12	
Agency Meetings							
SFWMD		HRS	1		10	10	Two People Per Meeting for three Hours + Driving Time to WPB
US-ACOE		HRS	1		6	6	Two People Per Meeting for three Hours
DERM		HRS	1		6	6	Two People Per Meeting for three Hours
R&A will prepare the applications for the agencies as MD-PWWM's Agent							
PERMITTING TOTAL						102	

Prepared By: Robayna and Associates, Inc. Date: March 6, 2015

COUNTY PROJ. NO.: E14-PWMM-06 F.A.P. _____ DESCRIPTION: _____

Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH IN MILES : _____ FEET : _____ LANES: 2 DIV'D: No URBAN: Yes

ITEM	SCALE	BASIS OF ESTIMATE	NO. OF UNITS	NO. OF SHEETS	M - H UNITS	TOTAL M-H	COMMENTS
POST DESIGN SERVICES							
Public Meeting		HRS	1		6	6	2 People for 3 Hours
Pre-Bid and Pre-Const. Meeting		HRS	1		6	6	2 People for 3 Hours
Shop Drawing Review		HRS	2		4	8	2 Reviews
Response to RFI's		HRS	6		3	18	Budget 10 RFI's
Plan Revisions		HRS	4		6	24	4 revision per unknown field conditions
Field Review		HRS	6		3	18	6 vistis budgeted
Pay Requisition Review		HRS	12		4	48	365 days of construction 12 field visits and 12 pay requisitions reviewed
Final Roadway, S&PM, Drainage and Canal As-built Certification		HRS	4		6	24	
POST DESIGN TOTAL						152	

Prepared By: Robayna and Associates, Inc Date: March 6, 2015

PRICE PROPOSAL FOR GEOTECHNICAL SERVICES

REPLACEMENT OF THE NW 32nd AVENUE BRIDGE (No. 874032) OVER C-8 CANAL (NORTH OF NW 151st STREET)
ISD CONTRACT NUMBER E14-PWWM-06
MIAMI-DADE PUBLIC WORKS AND WASTE MANAGEMENT
HRES PROJECT No.: HR14-1005R
MARCH 4, 2015

Notes:

Roadway: We are proposing the following geotechnical services:

a) 2 roadway borings, each to a depth of 6 feet.

b) 2 percolation tests, open hole method, each to a depth of 15 feet.

c) 2 pavement cores to be performed near the roadway borings.

d) 2 LBR tests and laboratory testing on soil samples selected from the roadway boring.

e) Require lane closures. Need signs, cones, arrow target. Personnel to perform the MOT. To be performed in conjuction with the bridge borings.

f) Laboratory testing should include moisture content, organic content, and grain size analysis tests.

g) Three copies of the formal geotechnical roadway report will be submitted signed and sealed. The report will contain:

Project Location Map, field exploration logs, site conditions, subsoil conditions, water table, methodology of test procedures, key classification, soil properties and symbols of the materials in a subsurface profile format, suitability of the existing soils, pavement core results, laboratory test results, and site preparation recommendations.

Bridge Replacement: We are proposing the following geotechnical services:

a) Performing 2 SPT borings, each to a depth of 70 feet.

b) Power lines run along the west and south sides of the existing bridge. Since the borings cannot be performed under or near the power lines, lane closures are required to perform the borings inside the existing roadway. The borings at the bridge will require partial lane closure and the help of two flagmen for traffic control. Need signs, cones, arrow target. The two borings are planned to be performed in two days in conjuction with the roadway borings and pavement cores. We need 10 hours per flagman per day. For 2 days, 20 hours per flagman (40 hours for a crew of two people).

b) Laboratory testing should include moisture content, organic content, and grain size analysis tests.

Three copies of the formal geotechnical bridge report will be submitted signed and sealed. The report will contain:

Project Location Map, field exploration logs, site conditions, subsoil conditions, water table, methodology of test procedures, key classification, soil properties and symbols of the materials in a subsurface profile format, driven pile axial capacity using the computer program FB-Deep, minimum pile tip elevation and formal Pile Data Table, test pile and construction recommendations.

The field work may take one week after proposal approval and underground utilities (takes about one week). The laboratory testing one week and the report preparation three weeks. The actual time required (field and office work) is about four to five weeks.

PRICE PROPOSAL FOR GEOTECHNICAL SERVICES

REPLACEMENT OF THE NW 32nd AVENUE BRIDGE (No. 874032) OVER C-8 CANAL (NORTH OF NW 151st STREET)

ISD CONTRACT NUMBER E14-PWWM-06

MIAMI-DADE PUBLIC WORKS AND WASTE MANAGEMENT

HRES PROJECT No.: HR14-1005R

MARCH 4, 2015

1. GEOTECHNICAL SERVICES (9.01)

	UNITS	# OF UNITS	UNIT RATE	TOTAL $	
A. Equipment Mobilization: 100 feet of drilling per mobilization. We will drill a total of 12 feet of roadway borings, 30 feet of percolation tests and 140 feet of bridge borings: A total of 12'+30'+140'=182 feet, or 2 mobilizations.	each	2	$364.00	$728.00	
B. Borings Standard Penetration per ASTM D-1586: Penetration Depth: 0 to 50': End Bent Borings: 2x50'=100 feet	feet	100	$20.80	$2,080.00	
B. Borings Standard Penetration per ASTM D-1586: Penetration Depth: 51 to 75': End Bent Borings: 2x(70'-50')=40 feet	feet	40	$24.96	$998.40	
C. Auger Boring per ASTM D-1452: 0 to 50 '=2x6=12 feet	feet	12	$15.60	$187.20	
H. Asphalt Cores, 2	each	2	$62.40	$124.80	
I. Percolation Tests: Open Hole Method, 2 tests	each	2	$501.60	$1,003.20	
J. Closing holes with grout. 12'+30'+2x70'=182 linear feet of SPT borings and percolation tests	feet	182	$8.32	$1,514.24	
Barricades, Signs, Cones, per day (not in contract)	day	2	$200.00	$400.00	
Engineering Technicians (2) to set barricades and serve as flagmen during the drilling of the 2 bridge borings, 2 roadway borings, 2 pavement cores, per hour. Estimating 2 days of work, 10 hours per day for each technician=20 hoursx2=40 hours	hour	40	$65.52	$2,620.80	
TOTAL FOR FIELD INVESTIGATION				***$9,656.64***	53%

5. Soils (9.02)

C. - Limerock Bearing Ratio, 2 tests	each	2	$364.00	$728.00	
G - Moisture Content Test	each	4	$39.52	$158.08	
H - Organic Content Test	each	4	$52.00	$208.00	
I - Grain Size per AASHTO T-27 (sieve only)	each	4	$66.56	$266.24	
U. - Resistivity Test (pH, Sulfates, Chlorides, Resistivity)	each	1	$149.76	$149.76	
TOTAL LABORATORY TESTING				***$1,510.08***	8%

23. ENGINEERING SERVICES

A. CAD Operator	hour	9	$72.80	$655.20	
B. Staff Engineer	hour	30	$88.04	$2,641.20	
C. Geotechnical Engineer for Pile Capacity Analysis	hour	26	$124.80	$3,244.80	
G. Engineering Technician	hour	7	$65.52	$458.64	
		72.0			
TOTAL ENGINEERING SERVICES				***$6,999.84***	39%
TOTAL GEOTECHNICAL FEES				***$18,166.56***	100%

ISD Contract No. E14-PWWM-06 HRES Project No. HR14-1005R

ATTACHMENT D - Proposal Breakdown: Labor and Field Expenses for Geotechnical Services

Position	Name & (Company)		Hourly Rate	Task								Total Labor (2+3+4+5)	Multiplied Costs (1 X 6)
			$	Hrs	$	Hrs	$	Hrs	$	Hrs	$	Hrs	$
			[1]	[2]		[3]		[4]		[5]		[6]	[7]
CADD Operator	Rodrigo Alba/HRES		72.80	9	$655.20		$0.0		$0.0		$0.0	9	$655.20
Staff Engineer	Sudheesh Thiyya kkandi/Nikhil Hegde/HRES		88.04	30	$2641.20		$0.0		$0.0		$0.0	30	$2641.20
Geotechnical Engineer	Liladhar Niraula, PE/Hernando R. Ramos/HRES		124.80	26	$3244.80		$0.0		$0.0		$0.0	26	$3244.80
Senior Engineer	Hernando R. Ramos/HRES		140.00	0	$0.00		$0.0		$0.0		$0.0	0	$0.00
Engineering Technician	Humberto Correa/HRES		65.52	7	$458.64		$0.0		$0.0		$0.0	7	$458.64
					$0.00		$0.0		$0.0		$0.0	0	$0.00
					$0.00		$0.0		$0.0		$0.0	0	$0.00
		Sub-totals		72	$6999.84	0	$0.0	0	$0.0	0	$0.0	72	$6999.84

Summary of Field Investigation Expenses				
Field Activity	**Units**	**# of Units**	**Unit Rate**	**Total**
Traffic Control-cones, Flags, Arrow Boards, Barricades, etc	day	2	$200.00	$400.00
Traffic Control-MOT Set-Up (Moving Barricades): 2 Flagmen, 2 days, 10 hours each=40 hours total	hr	40	$ 65.52	$2620.80
Mobilization of truck mounted rig	LS	2	$364.00	$728.00
Asphalt Core drilling for thickness measurement (including Asphalt patching) : 2	Core	2	$ 62.40	$124.80
SPT Borings (0 ft to 50 ft), Land: (calculate footage): end bents: 2x50'=100 feet	feet	100	$ 20.80	$2080.00
SPT Borings (51 ft to 75ft), Land: (calculate footage): end bents:2x20'=40 feet	feet	40	$ 24.96	$998.40
Auger Borings, roadway: 0 to 50' Land: (calculate footage): 2x6'=12 feet	feet	12	$ 15.60	$187.20
Grout-Seal Boreholes: 2x6'+2x70'=152 feet	feet	152	$ 8.32	$1264.64
Open Hole Percolation Test; performed in 6" diameter boreholes: 2 tests	each	2	$501.60	$1003.20
Closing Holes = (total depth of percolation tests): 2x15'=30 feet	each	30	$ 8.32	$249.60
Grain Size per AASHTO T-27; 1 every 1 SPT borings: 4 tests	Test	4	$ 66.56	$266.24
Material Finer than 200 Sieve per ASTM C-117; 1 every SPT borings: 4 tests	Test	0	$ 46.80	$0.00
Organic Content Test/Limerock per AASHTO T-267;1 every SPT borings: 4 tests	Test	4	$ 52.00	$208.00
Moisture Test: 1 every SPT borings: 4 tests	Test	4	$ 39.52	$158.08
Limerock Bearing Ratio (LBR)	Test	2	$364.00	$728.00
Corrosion Testing including resistivity, chlorides, pH and sulfates in accordance with California Meths 643-7 or FDOT 5-550 to FM 5-553: 1 per 1,500 linear feet of alignment	Test	1	149.76	$149.76
			Sub-Total of Field Investigation Expenses	$11166.72
			Total of Labor and Field Investigation	**$18,166.56**

Project Activity 30: Geotechnical

Estimator: Hernando R. Ramos, P.E. (HRES)

Replacement of the NW 32nd Avenue Bridge No. 874032 North of 151 st Street (over C-3 Canal)
Miami-Dade Public Works and Waste Management Department - Project E14-PWWM-06

Form Revised 6/6/05

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
			Roadway			
30.1	Document Collection and Review	LS	0	0	0	None Expected
30.2	Develop detailed boring location plan	LS	0	0	0	None Expected
30.3	Stake Borings/Utility Clearance	Boring	4	0.5	2	A total of 2 roadway borings to 6 feet each, 2 constant head percolation tests, each to a depth of 15 feet and 2 pavement cores. Engineering Technician. A total of 4 borehole locations.
0.0	Coordinate and develop MOT plans for field investigation	EA	0	0	0	None Expected
30.5	Drilling Access Permits	Location	0	0	0	County Project. HRES may not need a work permit.
30.6	Property Clearances	EA	0	0	0	None Expected
30.7	Groundwater Monitoring	EA	0	0	0	None Expected
30.8	LBR Sampling	EA	2	2	4	Engineering technician to collect 2 subgrade samples for LBR testing.
30.9	Coordination of Field Work	100 lf of boring	0.42	1.5	1	The drilling footage is as follows: 2 roadway borings to 6 feet and 2 percolation tests to 15 feet= 2x6'+2x15'=A total of 42 linear feet of drilling, or 0.42 units. Staff Engineer.
30.10	Soil and Rock Classification	100 lf of boring	0.42	2.25	1	Staff Engineer.
30.11	Determine Design LBR	LS	1	2	2	Staff Engineer
30.12	Tabulate all Laboratory Data	100 lf of boring	0.42	1.5	1	Staff Engineer.
30.13	Estimate Seasonal High Water Table	Boring	0	0	0	None Expected
30.14	Calculate Parameters for Water Retention Areas	EA	2	2	4	Staff Engineer
30.15	Delineate limits of Unsuitable Material	Cross-section	0	0	0	None Expected
30.16	CSV files for cross-sections	100 lf of boring	0	0	0	None Expected
30.17	Embankment settlement and Stability	Embankment Boring	0	0	0	None Expected
30.18	Stormwater Volume Recovery and/or Background Seepage Analysis	EA	0	0	0	None Expected
30.19	Geotechnical Recommendations	LS	0	0	0	None Expected
30.20	Preliminary Roadway Report and Pavement Evaluation Report	LS	0	0	0	None Expected
30.21	Final Report - Roadway	EA	1	15	15	Staff Engineer
30.22	Auger boring drafting	100 lf boring	0	0	0	None Expected
30.23	SPT boring drafting	100 lf boring	0.42	4	2	42 feet of roadway borings and percolation testing, 0.42 units. CADD Operator.
	Roadway Geotechnical Subtotal				**32**	

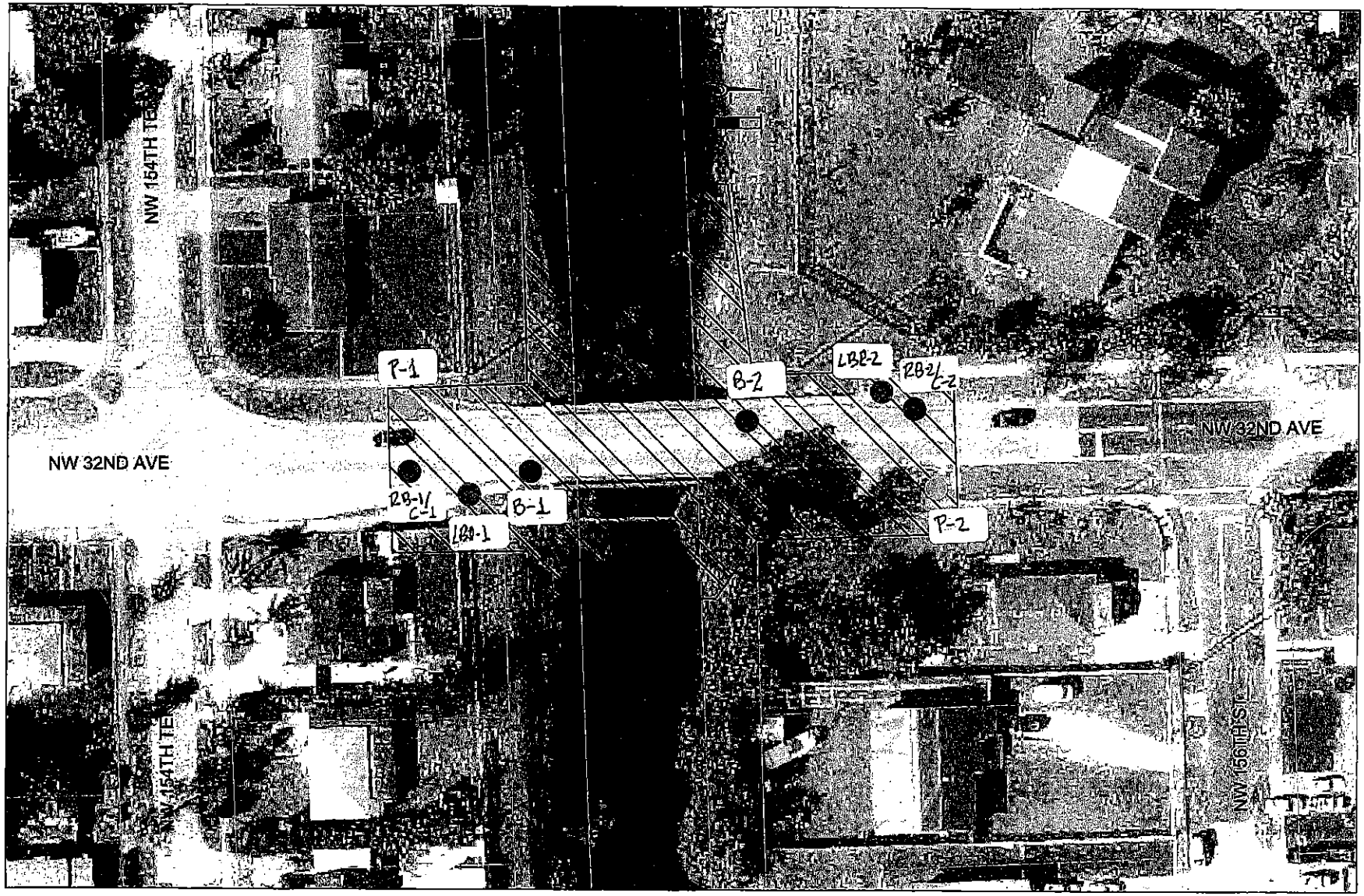
Project Activity 30: Geotechnical

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
			Structural			
30.24	Develop detailed boring location plan	LS	0	0	0	None Expected
30.25	Stake Borings/Utility Clearance	Boring	2	0.5	1	A total of 2 bridge borings, one per end bent (70 feet each). Engineering Technician. A total of 2 borehole locations.
30.26	Coordinate and develop MOT plans for field investigation	EA	0	0	0	None Expected
30.27	Drilling Access Permits	Location	0	0	0	To be provided by the county.
30.28	Property Clearances	EA	0	0	0	None Expected
30.29	Collection of corrosion samples	EA	0	0	0	None Expected
30.30	Coordination of Field Work	100 lf of boring	1.4	1.5	2	Performing 2 SPT borings: 2 to 70 feet deep=2x70'=140 linear feet, 1.4 units. Staff Engineer.
30.31	Soil and Rock Classification - Structures	100 lf of boring	1.4	2	3	Staff Engineer
30.32	Tabulate all Laboratory Data	100 lf of boring	1.4	0.5	1	Staff Engineer
30.33	Estimate Design groundwater level for structures	EA	0	0	0	None Expected
30.34	Evaluation and Selection of Foundation Alternatives (BDR)	Structure boring	0	0	0	None Expected
30.35	Detailed Analysis of Selected Foundation Alternate(s)	Structure boring	0	0	0	None Expected
30.36	Bridge Construction and Testing Recommendations	Structure boring	0	0	0	None Expected
30.37	Lateral Load Analysis	Structure boring	0	0	0	None Expected
30.38	Walls	Wall Boring	0	0	0	None Expected
30.39	Sheetpile wall Analysis	Wall Boring	0	0	0	None Expected
30.40	Design soil parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical recommendations.	Boring	0	0	0	None Expected
30.41	Box Culvert Analysis	EA	0	0	0	None Expected
30.42	Preliminary Report - BDR	EA	0	0	0	None Expected
30.43	Final Report - Structures	EA	1	20	20	Geotechnical Engineer for Pile Capacity Analysis

Project Activity 30: Geotechnical

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
30.44	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights.	EA	0	0	0	None Expected
30.45	SPT boring drafting	100 lf of boring	1.4	5	7	Performing 2 SPT borings: 2 to 70 feet deep=140 linear feet, 1.4 units. CADD Operator
30.46	Other Geotechnical	LS	0	0	0	None Expected
Structural Geotechnical Subtotal					**34**	
Geotechnical Technical Subtotal					**66**	
30.47	Specification Development and Review (TSP)	EA	0	0	0	
30.48	Field Reviews	LS	0	0	0	
30.49	Technical Meetings	LS	0	0	0	
30.50	Quality Assurance/Quality Control	LS	%	3%	2	Geotechnical Engineer
30.51	Supervision	LS	%	3%	2	Geotechnical Engineer
Geotechnical Nontechnical Subtotal					4	
30.52	Coordination	LS	%	3%	2	Geotechnical Engineer
30.53	Optional Preliminary Contamination Assessment	LS	0	0	0	
30. Geotechnical Total					**72**	

Description	Hours
Geotechnical Engineer	26
Staff Engineer	30
Engineering Technician	7
CADD Operator	9
Total	**72**



● Bridge Borings (2) to 70' ; ● Roadway Borings / Pavement Cores (2 each) to 6' ; ● Percolation Tests (2) to 15' ; ● LBE Samples (2)

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QUOTATION PROPOSAL (TRIANGLE ASSOCIATES INC.)

Consultant's Name: Triangle Associates. Inc.
Project Number: E14-PWWM-06
Project Name: Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET
Project Length:

Prepared by: Osiris Quintana
Date:

STAFF HOURS

	Activity	Principal Engineer	Project Manager	Sr. Engineer	Engineer	Designer	Sr. CADD Tech.	Staff Hours by Activity	Salary Cost for Activity
	Distribution	3%	9%	14%	18%	22%	34%	100%	
1	Master Plan	0	0	0	0	0	0	0	$ -
2	Utlity Coordination	0	0	0	0	0	0	0	$ -
3	Roadway Design	0	0	0	0	0	0	0	$ -
4	Drainage Design	0	0	0	0	0	0	0	$ -
5	Signing and Pavement Marking Design	0	0	0	0	0	0	0	$ -
6	Maintenance of Traffic	0	0	0	0	0	0	0	$ -
7	Permit Assitance	0	0	0	0	0	0	0	$ -
8	Post-Design Services	1	4	7	8	10	16	47	$ 1,804.80
9	Structural Plans	17	50	78	100	122	188	554	$ 21,273.60
	TOTAL HOURS	18	54	84	108	132	204	601	$ 23,078.40
	2014 Rates	$65.00	$55.00	$50.00	$40.00	$40.00	$25.00		
	Totals S-H and Cost	$1,171.95	$2,974.95	$4,207.00	$4,327.20	$5,288.80	$5,108.50	$23,078.40	$38.40

TOTAL LUMP SUM FEE BREAKDOWN BY ACTIVITY	Amount
Master Plan	$0.00
Utlity Coordination	$0.00
Roadway Design	$0.00
Drainage Design	$0.00
Signing and Pavement Marking Design	$0.00
Maintenance of Traffic	$0.00
Permit Assitance	$0.00
Post-Design Services	$5,143.68
Structural Plans	$60,629.76
Maximum Lump Sum Fee	$0.00

PERMIT/ Review fees are not included

TOTAL CONTRACT COST COMPUTATIONS

Total Activity Salary Costs		$23,078
(a) Overhead Additives		
(a1) Combined O-H percent		185.00%
(a2) Combined O-H Cost		$42,695
Subtotal (Salary + Overhead)		$65,773
(b) Operating Margin Percent		$0
(b1) Operating Margin Cost - Fixed Fee		
Subtotal (Salary Related Cost)		
Multiplier	2.85	$65,773
SUBTOTAL		$65,773.44
Expenses		
(a) Printing & Reproduction (Reimburseble)		
TOTAL FEE		$65,773.44
TOTAL FEE		$65,773.44

86

COUNTY PROJ. NO.: E14-PWWM-06 F.A.P. _____ DESCRIPTION: _____

Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH: _____ MILES _____ FEET LANES: 2 DIV'D: _____ URBAN: x

ITEM	SCALE	BASIS OF ESTIMATE	NO. OF UNITS	NO. OF SHEETS	M - H UNITS	TOTAL M-H	COMMENTS
POST DESIGN SERVICES							
Pre-Construction Coordination	LS	2	2	1	4	8	Pre-Contruction & Pre-Bid (Attend meeings @ 4 hrs per meeting)
Shop Drawing Review	EA	6	1	1	1	6	Structure shop Drawing
RFI's	EA	6	8	8	1	6	Structure shop Drawing
Inspections	EA	3	3		3	9	During Construction
Field Review	EA	3	3		2	6	Structure* (6 inspections @ 4 hrs.)
Plan revisions	EA	3	1		2	6	Structure
Final Certification	EA	1	1		6	6	Final
POST DESIGN SERVICES TOTAL						47	

LB

Prepared By: Triangle Associates Inc. Date: _____

COUNTY PROJ. NO.: E14-PWWM-06 F.A.P. _____ DESCRIPTION: Triangle Associates Inc. - Structural Design

Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH: _____ MILES _____ FEET LANES: 2 DIV'D: _____ URBAN: x

ITEM	SCALE	BASIS OF ESTIMATE	NO. OF UNITS	NO. OF SHEETS	M - H UNITS	TOTAL M-H	COMMENTS
STRUCTURAL PLANS							
Structural Design (Bridge Plans)	N/A	EA	26	26	3	78	
Plans Preparation		SHT	26	26	8	208	
Structural Details/Specs/Notes		SHT	26	26	8	208	
Cost estimates 30%		EA	1	1	5	5	
Cost estimates 60%		EA	1	1	5	5	
Cost estimates 90%		EA	1	1	6	6	
Permit SFWMD		EA	1	1	8	8	
Meetings with MiamiDade County		EA	3	3	6	18	
Meetings / Review		EA	3	3	6	18	
Note: no expenses have been added it such as printing, reproduction,mailing,courrier, or travel.							
STRUCTURAL PLANS TOTALS				88		554	

Prepared By: TriangleAssociates Inc. Date: 2/8/09

FEE QUOTATION PROPOSAL (TRIANGLE ASSOCIATES INC.)

Consultant's Name: Triangle Associates, Inc.
Project Number: E14-PWWM-06
Project Name: Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET
Project Length:

Prepared by: Osiris Quintana
Date: 3/4/2015

STAFF HOURS

	Activity	Principal Engineer	Project Manager	Sr. Engineer	Engineer	Designer	Sr. CADD Tech.	Staff Hours by Activity	Salary Cost for Activity
	Distribution	3%	9%	14%	18%	22%	34%	100%	
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2	Utlity Coordination	0	0	0	0	0	0	0	$ -
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6	Maintenance of Traffic	0	0	0	0	0	0	0	$ -
7	Permit Assitance	0	0	0	0	0	0	0	$ -
8	Post-Design Services	1	4	7	8	10	16	47	$ 1,804.80
9	Structural Plans	17	50	78	100	122	188	554	$ 21,273.60
	TOTAL HOURS	18	54	84	108	132	204	601	$ 23,078.40
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(a) Printing & Reproduction (Reimburseble)		
TOTAL FEE		$65,773.44
TOTAL FEE (TAI)		$65,773.44

COUNTY PROJ. NO.: E14-PWWM-06 F.A.P. _____ DESCRIPTION: _____

Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH: _____ MILES _____ FEET LANES: 2 DIV'I No URBAN: x

ITEM	SCALE	BASIS OF ESTIMATE	NO. OF UNITS	NO. OF SHEETS	M - H UNITS	TOTAL M-H	COMMENTS
POST DESIGN SERVICES							
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Field Review	EA	3	3		2	6	Structure* (6 inspections @ 4 hrs.)
Plan revisions	EA	3	1		2	6	Structure
Final Certification	EA	1	1		6	6	Final
POST DESIGN SERVICES TOTAL						47	

Prepared By: Triangle Associates Inc. Date: 3/4/2015

COUNTY PROJ. NO.: E14-PWWM-06 F.A.P. _____ DESCRIPTION: Triangle Associates Inc. - Structural Design

Replacement of Bridge No. 874032, NW 32 AVENUE N/O NW 151 STREET

LENGTH: _____ MILES _____ FEET LANES: 2 DIV'D: No URBAN: x

ITEM	SCALE	BASIS OF ESTIMATE	NO. OF UNITS	NO. OF SHEETS	M - H UNITS	TOTAL M-H	COMMENTS
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Structural Design (Bridge Plans)	N/A	EA	26	26	3	78	
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Cost estimates 90%		EA	1	1	6	6	
Permit SFWMD		EA	1	1	8	8	
Meetings with MiamiDade County		EA	3	3	6	18	
Meetings / Review		EA	3	3	6	18	
Note: no expenses have been added it such as printing, reproduction,mailing,courrier, or travel.							
STRUCTURAL PLANS TOTALS				88		554	

Prepared By: TriangleAssociates Inc. Date: 3/4/15