

WORK ORDER No. 11 FOR PROFESSIONAL SERVICES

TO: BCC Engineering, Inc.
6401 SW 87th Avenue, Suite 200
Miami, Florida 33173
(305) 670-2350

DATE: October 30, 2017

The City of Doral authorizes the firm of BCC Engineering, Inc. to proceed with the provision of professional engineering services for the pavement analysis and pavement design of NW 117 Ave between NW 25 St and NW 34 St. The work should be performed in accordance with the contract provisions contained in the Continuing Professional Services Agreement between BCC Engineering, Inc. and the City of Doral dated February 2, 2015, and the attached Proposal submitted by your firm for the above referenced project.

SCOPE OF SERVICES AND SCHEDULE:

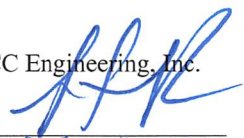
The scope of the project will be as described in the attached proposal dated October 27, 2017 from BCC Engineering, Inc. The schedule requires that Phase 1 be completed within twenty-one (21) calendar days of NTP. Proceeding with Phase 2 design will be based on recommendations from Phase 1 report. All limitations of time set forth in this Work Order are of the essence. The performance of services associated with this Work Order will be executed on a lump sum basis with a not to exceed amount of \$12,635.91 (Phase 1 \$8,225.11 and Phase 2 \$4,410.80).

You are required by the Continuing Service Agreement to begin work subsequent to the execution of this Work Order, or as directed otherwise. If you fail to begin work subsequent to the execution of this Work Order, the City of Doral will be entitled to disqualify the Proposal, and revoke the award.



Work Order incorporates the terms and conditions set forth in the Continuing Services Agreement dated February 2, 2015 between the parties as though fully set forth herein. In the event that any terms or conditions of this Work Order conflict with the Continuing Services Agreement, the provisions of this specific Work Order shall prevail and apply. This Work Order is not binding until the City of Doral agrees and approves this Work Order.

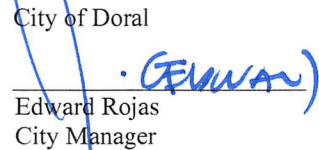
IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and date first above written, in three (3) counterparts, each of which shall, without proof or accounting for the other counterpart be deemed an original Contract.

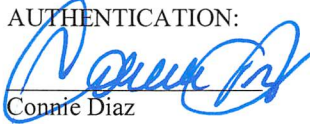
CONSULTANT: BCC Engineering, Inc.

BY: 
NAME: LUIS A. RODRIGUEZ
TITLE: VICE PRESIDENT

WITNESSES: SEAL:

- 1. 
- 2. 

OWNER: City of Doral
BY: 
NAME: Edward Rojas
TITLE: City Manager

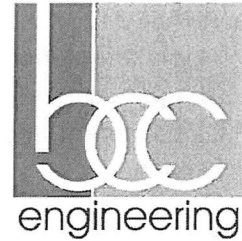
AUTHENTICATION:
BY: 
NAME: Connie Diaz
TITLE: City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY FOR THE SOLE USE
OF THE CITY OF DORAL:

BY: 
NAME: WEISS, SEROTA, HELFMAN, COLE,
BIERMAN & POPOK, PL
TITLE: City Attorney

October 27, 2017

Mr. Jorge Gomez, PE
City of Doral
8401 NW 53rd Terrace
Doral, FL 33166



Reference: **City of Doral – Proposal for Pavement Rehabilitation**

Dear Mr. Jorge Gomez:

Thank you for the opportunity to present this proposal to provide pavement rehabilitation at NW 117th Avenue from NW 25th Street to NW 34th Street for the City of Doral. The services under this task authorization will be provided by one of our sub-consultants Intertek-PSI.

Scope of Services

Please refer to Exhibit “A” for a detailed proposal for PHASE 1 and Exhibit “B” for a detailed proposal for PHASE 2.

Basic Services Fee

A grand total amount of \$12,635.91 for PHASE 1 and PHASE 2 as listed below:

PHASE 1

Intertek-PSI proposes to provide the above scope of service for a not-to-exceed time and materials fee of \$5,880.10. See Scope of Services on attached Exhibit A for summary of tasks and cost of service.

A “Sub-Consultant Management Fee” in the amount of 10% of the PSI fees (\$588.01) is included on this proposed amount and will the amount will be pro-rated and included on each invoice.

Also 16 hours of engineering services from BCC Engineering is included on this proposed amount for a total amount of \$1,757.00. These are for the analysis of the results from the geotechnical exploration and will be used for preliminary pavement design and recommendations for next steps.

PHASE 1 Total Amount is \$8,225.11.

Exhibit “A” is attached to and made a part of this Agreement. We hope this Proposal meets your expectations and we look forward to working with you on this Project.

PHASE 2

Upon completion of PHASE 1 and a recommendation of a pavement design package shall be submitted. The package will include pavement type selection and all necessary coordination to resolve issues related to pavement design. See Scope of Services on attached Exhibit "B" for summary of tasks and cost of service.

Exhibit "B" is attached to and made a part of this Agreement.

PHASE 2 Total Amount is \$4,410.80

Sincerely,

BCC ENGINEERING, INC.



Luis Rodriguez, P.E.
Project Manager

Exhibit "A"

**Intertek-PSI Fee Proposal
BCC Engineering Fee Proposal**

October 20, 2017

BCC ENGINEERING

6401 SW 87th Ave., Suite 200
Miami, Florida 33173

Attention: Mr. Alain De Quesada

Re: Proposal for Geotechnical Engineering Services
NW 117th Ave Roadway Rehabilitation
City of Doral, Miami-Dade County, Florida
PSI Proposal No.: 0397-225592

Dear Mr. De Quesada:

In accordance with your email dated, October 16, 2017, **Professional Service Industries Inc., (PSI), an Intertek Company**, is pleased to submit this proposal to perform a geotechnical engineering study for the above referenced project. Included herein is our understanding of the proposed project along with a scope of services, fee estimate and anticipated schedule to complete the requested scope of services.

We understand the proposed project consists of rehabilitating the segment of NW 117th Avenue roadway alignment between Northwest 25th Street and NW 34th Street in Miami-Dade County. Based on review of available aerial imagery, we understand the roadway segment to be rehabilitated is approximately 3,000 feet long. Please note that Maintenance of Traffic (MOT) will be required for this project.

Based on our experience with field work in this area and review of the available USDA Soil Survey map, we anticipate encountering organic soils along the referenced roadway segment.

PSI proposed to drill a total of twenty-three (23) Standard Penetration Test (SPT) borings to a depth of approximately 6 feet below grade, staggered left and right of the alignment centerline (one boring per 100 lineal feet along the first 1,500 feet roadway segment from south to north, and one boring per 200 lineal feet along the remaining roadway segment) in accordance with FDOT Soils and Foundation Handbook guidelines.

The SPT borings will be performed with truck-mounted drill rig using rotary drilling procedures. Samples of the in-place materials will be recovered with a standard split barrel driven with a 140-pound hammer falling 30 inches (the Standard Penetration Test in accordance with ASTM D1586). After completion of drilling, all boreholes will be grout sealed with a mixture of Portland cement and bentonite, and the site generally cleaned.

Underground utility clearance will be required prior to commencing the drilling of the borings. Therefore, PSI will contact "Sunshine One-Call" Service to obtain underground public utility clearance.

A geotechnical engineer will review the soil samples recovered from the borings and will select samples to be tested for physical properties such as moisture content, fines content and organic content, if deemed necessary. The results of the field work and laboratory tests will be summarized in a report of geotechnical services.

The report will specifically contain information listed below:

1. A site vicinity map depicting the location of the project.
2. A boring location plan showing the SPT boring locations.
3. Report of SPT borings (FDOT format) showing the subsurface and groundwater conditions.

Our study can begin one (1) day after we receive authorization to proceed. We will start drilling after underground utilities have been located and identified, which will take three (3) to four (4) work days. The drilling work should be completed within two (2) work days. The written report of the subsurface exploration and engineering evaluation will be available within one (1) week following the field demobilization. We estimate that our study will be completed in two (2) to three (3) weeks from notice to proceed.

Based on our general knowledge of the subsurface conditions at the site and our understanding of your requirements, we propose to complete the requested subsurface exploration and geotechnical engineering evaluation described herein for a not to exceed fee of **\$5,880.10**. Attached is our loaded rates and a cost breakdown detailing the above fee. Also, attached is the staff hour estimate using the FDOT guidelines.

PSI appreciates your continued consideration of our firm for this project. To formally authorize us, kindly indicate so by sending a BCC Engineering, Inc. Subconsultant services work order to our Miami office.

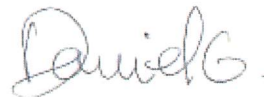
Respectfully Submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Certificate of Authorization No: 3684



Morgan Dickinson, P.E.
Regional Engineer/Principal Consultant



Daniel Gonzalez, E.I.
Staff Engineer

Attachments:

Loaded Rates/Fees Breakdown
FDOT Staff Hour Estimate



LOADED RATES/FEES BREAKDOWN
 NW 117th AVE ROADWAY REHABILITATION BETWEEN NW 25TH ST & NW 34TH ST
 DORAL, MIAMI-DADE COUNTY, FLORIDA
 PSI PROPOSAL NO. 0397-225592

I. Field Exploration

Description	UNIT	QTY	RATE	TOTAL
Mobilization of Truck Mounted Equipment	Each	1.00	\$ 350.00	\$ 350.00
SPT- Truck 0-50 Ft	Foot	138.00	\$ 13.00	\$ 1,794.00
Grout- Truck 0-50 Ft	Foot	138.00	\$ 3.00	\$ 414.00
Maintenance of Traffic (MOT)	Day	2.00	\$ 250.00	\$ 500.00
				\$ 3,058.00

II. Laboratory Testing

Description	UNIT	QTY	RATE	TOTAL
Fines Content Determination	Each	5.00	\$ 30.00	\$ 150.00
Organic Content Test	Each	5.00	\$ 30.00	\$ 150.00
Moisture Content Tests	Each	5.00	\$ 10.00	\$ 50.00
				\$ 350.00

III. Engineering Services

Description	UNIT	QTY	RATE	TOTAL
Senior Engineer	Hour	5.00	\$ 150.00	\$ 750.00
Project Engineer	Hour	8.38	\$ 95.00	\$ 796.10
Senior Engineering Technician	Hour	14.38	\$ 50.00	\$ 719.00
CADD/Computer Technician	Hour	4.14	\$ 50.00	\$ 207.00
Secretary/Clerical	Hour	-	\$ 45.00	\$ -
		31.90		\$ 2,472.10

TOTAL ESTIMATED FEES **\$ 5,880.10**



Project Activity 35: Geotechnical

Total Quality. Assured.

Estimator: Daniel Gonzalez (PSI, Inc.)
PSI PROPOSAL NO. 0397-225592

NW 117th AVE ROADWAY REHABILITATION BETWEEN NW 25TH ST & NW 34TH ST

Task_35.x	Description	Units	Qty	Hrs/Unit	Total Hours	Job Class	Notes
01	Document Collection and Review	LS					
02	Develop Detailed Boring Location Plan	LS	1.00	1.00	1.00	Project Engineer	
03	Stake Borings/Utility Clearance	Boring	30.00	0.30	9.00	Senior Engineering Technician	
05	Coordinate and Develop MOT Plans for Field Investigation	EA	1.00	4.00	4.00	Senior Engineering Technician	
06	Drilling Access Permits	Location					
07	Property Clearances	EA					
08	Groundwater Monitoring	EA					
09	LBR/Resilient Modulus Sampling	EA					
10	Coordination of Field Work	100 lf of boring	1.00	1.38	1.38	Senior Engineering Technician	
11	Soil and Rock Classification - Roadway	100 lf of boring	1.00	1.38	1.38	Project Engineer	
12	Design LBR	LS					
13	Laboratory Data	100 lf of boring					
14	Seasonal High Water Table	Boring					
15	Parameters for Water Retention Areas	EA					
16	Delineate Limits of Unsuitable Material	Cross-section					
17	Electronic Files for Cross-Sections	100 lf of boring					
18	Embankment Settlement and Stability	EmbankBoring					
20	Stormwater Vol Recovery and/or Backgrnd Seepage Analysis	EA					
21	Geotechnical Recommendations	LS					
22	Pavement Condition Survey and Pavement Evaluation Report	LS					
23	Preliminary Roadway Report	LS					
24	Final Report	EA	1.00	6.00	6.00	Project Engineer	
24	Final Report	EA	1.00	2.00	2.00	Senior Engineer	
25	Auger Boring Drafting	100 lf boring					
26	SPT Boring Drafting	100 lf boring	1.38	3.00	4.14	CADD/Computer Technician	
TOTAL ROADWAY					28.90		

Task_35.x	Description	Units	Qty	Hrs/Unit	Total Hours	Job Class	Notes
27	Develop Detailed Boring Location Plan	LS					
28	Stake Borings/Utility Clearance	Boring					
29	Coordinate and Develop MOT Plans for Field Investigation	EA					
30	Drilling Access Permits	Location					
31	Property Clearances	EA					
32	Collection of Corrosion Samples	EA					
33	Coordination of Field Work	100 lf of boring					
34	Soil and Rock Classification - Structures	100 lf of boring					
35	Tabulation of Laboratory Data	100 lf of boring					
36	Estimate Design Groundwater Level for Structures	EA					
37	Selection of Foundation Alternatives (BDR)	Bridge boring					
38	Detailed Analysis of Selected Foundation Alternate(s)	Bridge boring					
39	Bridge Construction and Testing Recommendations	Bridge boring					
40	Lateral Load Analysis (Optional)	Bridge boring					
41	Walls	Wall Boring					
42	Sheet Pile Wall Analysis (Optional)	Wall Boring					
43	Design Soil Param. for Signs, Signals, High MLs, & Strn Poles & Geo Recom.	Boring					
44	Box Culvert Analysis	EA					
45	Preliminary Report - BDR	EA					



Project Activity 35: Geotechnical

Total Quality Assured.

45	Preliminary Report - BDR	EA
47	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA
47	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA
47	Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights	EA
48	SPT Boring Drafting	100 lf of boring
49	Other Geotechnical	LS

TOTAL STRUCTURAL

28.90

TOTAL ROADWAY AND STRUCTURAL

Task_35.x	Description	Units	Qty	Hrs/Unit	Total Hours	Job Class	Notes
50	Technical Special Provisions	EA	-	-	-		
51	Field Reviews	LS	-	-	-		
52	Technical Meetings	LS	-	-	-		
53	Quality Assurance/Quality Control	LS	28.90	2%	1.00	Senior Engineer	
54	Supervision	LS	28.90	2%	1.00	Senior Engineer	
55	Coordination	LS	28.90	2%	1.00	Senior Engineer	
56	Optional Preliminary Contamination Assessment	LS	-	-	-		
TOTAL NON-TECHNICAL					3.00		
TOTAL GEOTECHNICAL STAFF-HOURS					31.90		

Technical Meetings	UOM	Qty	Hrs/Unit	Total
Kickoff Meeting with FDOT	EA	-	-	-
Boring Layout Approval	EA	-	-	-
Attend in BDR Review Meeting	EA	-	-	-
30/60/90% Submittal Review	EA	-	-	-
Other Meetings	EA	-	-	-
Subtotal Tech Meeting 1				
Progress Meetings	EA	-	-	-
Phase Review Meetings	EA	-	-	-
Subtotal Tech Meeting 2				
Total Meetings				

JOB CLASS	Roadway	Structural	Non-Tech	Grand Total
Senior Engineer	2.00	-	3.00	5.00
Project Engineer	8.38	-	-	8.38
Secretary/Clerical	-	-	-	-
Senior Engineering Technician	14.38	-	-	14.38
CADD/Computer Technician	4.14	-	-	4.14
Totals	28.90	-	3.00	31.90
TOTAL PCT	90.60%	0.00%	9.40%	100.00%

FEE QUOTATION PROPOSAL

Consultant's Name: BCC Engineering, Inc.
 Project Number: N/A
 Project Length: 2 Intersections
 Project Description: Pavement Rehabilitation at NW 117th Avenue from NW 25th Street to NW 34th Street

Prepared by: L. Rodriguez, P.E.
 Date: 6/13/2017

STAFF HOURS

Activity	Principal Engineer	Project Manager	Sr. Engineer	Project Engineer	Eng. Tech (CADD Tech)		Staff Hours by Activity	Salary Cost for Activity
Distribution	0%	6%	6%	88%	0%		100%	
	0	0	0	0	0	0	0	\$0
1 Engineering Services	0	0.5	1.0	14.5	0	0	16	\$1,757
	0	0	0	0	0	0	0	\$0
	0	0	0	0	0	0	0	\$0
	0	0	0	0	0	0	0	\$0
	0	0	0	0	0	0	0	\$0
	0	0	0	0	0	0	0	\$0
TOTAL HOURS	0	1	1	15	0	0	16	\$1,757
Rates	\$190.00	\$170.00	\$149.35	\$105.01	\$69.60			
Totals S-H and Cost	\$0.00	\$85.00	\$149.35	\$1,522.65	\$0.00	\$0.00	\$1,757.00	\$109.81

TOTAL LIMITING AMOUNT FEE BREAKDOWN BY ACTIVITY	Amount
Sub-Consultant Management Fee	\$588.01
Engineering Services	\$1,757.00
Geotechnical	\$5,880.10
	\$0.00
	\$0.00
	\$0.00
	\$0.00
TOTAL LIMITING AMOUNT FEE	\$8,225.11
OPTIONAL SERVICES	\$0.00
Maximum Limiting Amount Fee	\$8,225.11

TOTAL CONTRACT COST COMPUTATIONS	
Total Activity Salary Costs	\$1,757.00
(a) Overhead Additives	
(a1) Combined O-H percent	
(a2) Combined O-H Cost	\$0.00
Subtotal (Salary + Overhead)	\$1,757.00
(b) Operating Margin Percent	\$0.00
(b1) Operating Margin Cost - Fixed Fee	\$0.00
Subtotal (Salary Related Cost)	\$1,757.00
Expenses	
(a) Sub-Consultant Management Fee	\$588.01
(b) Tree Permit	\$0.00
(c) Preliminary Wetland Assessment	\$0.00
(d) Wetland Permitting/Mitigation	\$0.00
(e) Geotechnical	\$5,880.10
(f) Design Survey	\$0.00
(f) Boundary Survey	\$0.00
TOTAL LIMITING AMOUNT	\$8,225.11
TOTAL FEE	\$8,225.11

NOTE: OPTIONAL SERVICES FOR CONTAMINATION ARE NOT INCLUDED DUE TO UNCERTAINTY OF COST.

Exhibit "B"

BCC Engineering Fee Proposal

FEE QUOTATION PROPOSAL

Consultant's Name: BCC Engineering, Inc.
 Project Number: N/A
 Project Length: 2 Intersections
 Project Description: Pavement Rehabilitation at NW 117th Avenue from NW 25th Street to NW 34th Street

Prepared by: L. Rodriguez, P.E.
 Date: 6/13/2017

STAFF HOURS

Activity	Principal Engineer	Project Manager	Sr. Engineer	Project Engineer	Eng. Tech (CADD Tech)		Staff Hours by Activity	Salary Cost for Activity
Distribution	0%	4%	6%	90%	0%		100%	
1 Pavement Design	0	2	2	36	0	0	40	\$4,411
	0	0.0	0.0	0.0	0	0	0	\$0
	0	0	0	0	0	0	0	\$0
	0	0	0	0	0	0	0	\$0
	0	0	0	0	0	0	0	\$0
	0	0	0	0	0	0	0	\$0
	0	0	0	0	0	0	0	\$0
TOTAL HOURS	0	2	2	36	0	0	40	\$4,410.80
Rates	\$190.00	\$170.00	\$149.35	\$105.01	\$69.60			
Totals S-H and Cost	\$0.00	\$272.00	\$358.44	\$3,780.36	\$0.00	\$0.00	\$4,410.80	\$110.27

TOTAL LIMITING AMOUNT FEE BREAKDOWN BY ACTIVITY	Amount
Pavement Design	\$4,410.80
	\$0.00
	\$0.00
	\$0.00
	\$0.00
TOTAL LIMITING AMOUNT FEE	\$4,410.80
OPTIONAL SERVICES	\$0.00
Maximum Limiting Amount Fee	\$4,410.80

TOTAL CONTRACT COST COMPUTATIONS	
Total Activity Salary Costs	\$4,410.80
(a) Overhead Additives	
(a1) Combined O-H percent	
(a2) Combined O-H Cost	\$0.00
Subtotal (Salary + Overhead)	\$4,410.80
(b) Operating Margin Percent	\$0.00
(b1) Operating Margin Cost - Fixed Fee	\$0.00
Subtotal (Salary Related Cost)	\$4,410.80
Expenses	
(a) Sub-Consultant Management Fee	\$0.00
(b) Tree Permit	\$0.00
(c) Preliminary Wetland Assessment	\$0.00
(d) Wetland Permitting/Mitigation	\$0.00
(e) Geotechnical	\$0.00
(e) Design Survey	\$0.00
(f) Boundary Survey	\$0.00
TOTAL LIMITING AMOUNT	\$4,410.80
TOTAL FEE	\$4,410.80

NOTE: OPTIONAL SERVICES FOR CONTAMINATION ARE NOT INCLUDED DUE TO UNCERTAINTY OF COST.