

WORK ORDER No. 5 FOR PROFESSIONAL SERVICES

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

DATE: December 3, 2021

The City of Doral authorizes the firm of BCC Engineering, LLC to provide professional engineering design services for the provision of necessary support for the required Conditional Letter of Map Revision (CLOMR) for Doral Central Park. Where BCC Engineering, Inc. is a prequalified provider of professional engineering services selected in accordance with Consultant Competitive Negotiation Act (CCNA) requirements and approved by the City Council in October 2020 through Resolution 20-243. The work should be performed in accordance with the contract provisions contained in the Continuing Professional Services Agreement between BCC Engineering, LLC and the City of Doral dated January 4, 2021, and the attached Proposal dated November 16, 2021 and submitted by your firm for the above referenced project.

SCOPE OF SERVICES AND SCHEDULE:

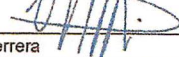
The scope of the project will be as described in the attached proposal from BCC Engineering, LLC dated November 16, 2021, for the CLOMR support for Doral Central Park. The schedule requires the scope of work to be completed within two (2) months after receiving the effective model from FEMA. All limitations 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 not to exceed the amount of \$59,577.40. Funding for this Work Order will be provided through the City's Parks Bond Program.

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.

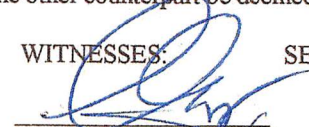
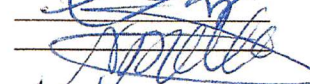
Work Order incorporates the terms and conditions set forth in the Continuing Services Agreement dated January 4, 2021, between the parties as though fully set forth herein. In the event that any terms or conditions of this Work Order conflict with the Continuing Services Agreement, the provisions of this specific Work Order shall prevail and apply. 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.

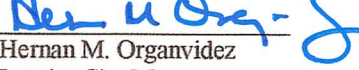
CONSULTANT: BCC Engineering, LLC

BY: 
NAME: Victor H. Herrera
TITLE: Sr. Vice President

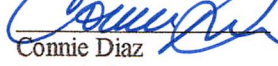
WITNESSES: SEAL:

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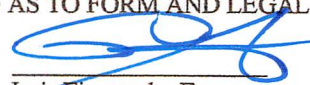
OWNER: City of Doral

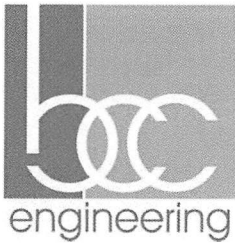
BY: 
NAME: Hernan M. Organvidez
TITLE: Interim City Manager

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: Luis Figueredo, Esq
TITLE: City Attorney



November 16, 2021

Ms. Stephanie Bortz, CFM
City of Doral
8401 NW 53rd Terrace
Doral, FL 33166

Reference: CITY OF DORAL CENTRAL PARK CLOMR APPLICATION SUPPORT

Ms. Bortz:

Thank you for the opportunity to present this Service Order proposal for Professional Engineering Services associated with supporting the City of Doral (City) with finalizing the Central Park Conditional Letter of Map Revision (CLOMR) application. This Service Order will be an integral part of the Continuing Professional Engineering Services Agreement (RFQ No. 2017-21) between the City and BCC Engineering, Inc (BCC). This Service Order defines the scope of work, schedule, compensation, scope of work exclusions, and scope of work assumptions for this project's professional engineering services.

I. SCOPE OF WORK

The Scope of Work is comprised of the following essential tasks:

- Task 1 – Data Collection, Evaluation, and Coordination
- Task 2 – Existing Conditions Model Refinements
- Task 3 – Proposed Conditions Flood and Inundation Map Development
- Task 4 – Technical Memorandum and Application Support

Task 1 - Data Collection, Evaluation, and Coordination

BCC will attend a project kick-off meeting with the City to introduce key project staff and discuss the goals and objectives for the project. BCC will prepare and distribute the minutes of this meeting.

As part of this task, BCC will also collect available data from the City to support the CLOMAR application. The anticipated data needed from the City are as follows:

- All information developed and prepared by Tetrattech, Inc. and 300 Engineers, Inc. as part of the initial CLOMAR application submitted to FEMA
- Lasted Central Park Conceptual design and Drainage Report in electronic format
- Percolation test results performed for the Central Park Design

BCC will also assist the City in addressing the following RFI comments from the FEMA September 22, 2021, letter as follow:

- RFI 2 BCC will assist the City in completing Form 1
- RFI 3 BCC to address RFI. Clarification from FEMA needed
- RFI 4 BCC to address RFI. Clarification from FEMA needed
- RFI 5 BCC to address RFI. Clarification from FEMA needed
- RFI 6 BCC to address RFI. Clarification from FEMA needed
- RFI 7 BCC to provide data
- RFI 8 BCC to provide information

Task 2 through 3 of the proposal will help address the RFIs outlined above

BCC will also assist the City in requesting the current effective hydrologic/hydraulic model and documentation used to establish the current FEMA Flood Insurance Rate Map (FIRM). BCC will review information obtained from FEMA.

This model will be for the South Florida Water Management District (SFWMD) C-6 Basins because the Central Park is located in the Basin. The model is assumed to be in the XP-SWMM model format. It is also assumed that the City will reimburse BCC for the fees needed to obtain this model and supporting documentation from FEMA.

Task 2 – Existing Conditions Model Refinements

BCC will refine the existing conditions XP-SWMM model to be obtained as part of Task 1. The refinements to the model will include:

- Sub-basin boundaries refinements in the vicinity of Central Park (assume 10 sub-basins to refine)
- Computing sub-basin curve numbers and time of concentrations
- Computing stage-storage relationships for the new sub-basins
- Adding interbasin weirs for newly formed sub-basins

These refinements are needed because the C-6 Basin XP-SWMM model simulates areas within municipalities in a relative course manner.

The refined model will be executed for the 100-year, 3-day storm event to verify that the flood elevations obtained by the effective model match the results of the effective model.

If the new FEMA FIRM maps are approved, BCC will need to request the new FEMA effective model, and work associated with this task will need to be redone. It is also assumed that the City will reimburse BCC for the fees needed to obtain the new effective model and supporting documentation from FEMA.

Task 3 – Proposed Conditions Flood and Inundation Map Development

BCC will perform the following activities as part of this task:

1. Incorporate the proposed Central Park stormwater management into the refined XP-SWMM model developed as part of Task 2
2. Run the updated model for the 100-year, 3-day design storm event
3. Prepare flood and inundation maps and tie these flood maps to the approved FIRM map flood zones

BCC will attend one meeting with the City to present the findings of this task. BCC will prepare and distribute the minutes of this meeting.

If the Central Park design is changed during this project, the work outlined as part of this task will need to be redone.

Task 4 – Technical Memorandum and Application Support

BCC will prepare a draft Technical Memorandum summarizing the activities performed as part of Tasks 1 through 3. One (1) electronic copy of the draft Technical Memorandum will be submitted for the City’s review and comments. BCC will attend one (1) meeting with the City to present the Technical Memorandum contents and obtain comments. BCC will prepare and distribute the minutes of this meeting.

Applicable comments from the City will be implemented in the final Technical Memorandum. BCC will submit once (1) an electronic copy of the final Technical Memorandum and provide applicable model files and GIS data in electronic format.

As part of this task, BCC will submit the final Technical Memorandum to FEMA for review and comments. After FEMA reviews the submitted documents, BCC will attend one meeting with FEMA and the City to discuss any comments provided by FEMA. BCC will prepare and distribute the minutes of this meeting. BCC will incorporate applicable comments from FEMA and submit the revised information to close out the CLOMAR application.

If FEMA approved new FIRM maps during this project or after completion of this project, the work outlined in the scope of work would need to be redone in part or in whole as needed.

II. SCHEDULE OF WORK – TIME OF PERFORMANCE

BCC shall complete the activities included in Task 1 through 4 within two (2) months after receiving the effective model from FEMA.

III. COMPENSATION

BCC will be compensated \$59,577.40 on a lump sum basis for performing the work detailed in the Scope of Work. Attachment A includes a detailed man-hour estimate for work outlined in the Scope of Work. The City will also be compensated BCC \$500 to request the effective model. If the new FEMA maps are implemented during this project, the City will compensate BCC \$500 if needed.

IV. SCOPE OF WORK EXCLUSIONS

The services outlined below are not included as part of the Scope of Work, although additional service orders can be executed to assist the City with these services if necessary:

1. Water quality modeling
2. Topographic or as-built surveys
3. Geotechnical assessments
4. Environmental assessments
5. Attend public workshops or meetings
6. Prepare LOMAR application
7. Develop detailed design plans for Central Park
8. Stormwater or environmental permitting
9. All other activities not explicitly outlined in the Scope of Work

V. SCOPE OF WORK ASSUMPTIONS

This proposal was also prepared with the following key assumptions:

1. If the Central Park design changes after Task 3 and/or 4 are completed, the work outlined in these tasks will need to be redone.
2. If FEMA adopts a new effective hydrologic/hydraulic model, the work performed as part of this proposal will have to be redone to prepare the LOMAR application.
3. The City will reimburse for the fees required to obtain the FEMA effective model and supporting documentation.

We look forward to assisting the City on this important project assignment. If you have any questions or need additional information, please do not hesitate to contact Victor Herrera, PE, or me at (305) 670-2350.

Sincerely

BCC ENGINEERING, INC.

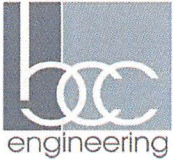


Alex Vazquez, PE, CFM

Director of Water Resources/Project Manager

Enclosures:

Attachment A – Fee Estimate



**CITY OF DORAL
CITY OF DORAL CENTRAL PARK CLOMR APPLICATION SUPPORT**

FEE ESTIMATE

Date Estimated: 11/16/2021

WORK ACTIVITY	BCC Staff by Category					TOTAL HOURS	TOTAL FEE	Comments/Assumptions
	Principal/QC	Project Manager	Sr. Project Engineer	Project Engineer	GIS Tech			
HOURLY RATE	\$200.00	\$180.00	\$160.50	\$105.30	\$80.00			
Task 1 – Data Collection, Evaluation, and Coordination		3	8	16		27	\$3,508.80	
Attend project kick-off meeting.	1		2			3	\$501.00	1 mtg, 2 eng, including meeting minutes
Collect and review available data			2	4		6	\$742.20	
Request effective model from FEMA and review documentation from FEMA		2	4	12		18	\$2,265.60	
Task 2 – Existing Conditions Model Refinements		6	24	128	28	186	\$20,650.40	
Refine sub-basin delineations		2	8	40	12	62	\$6,816.00	Assume 10 sub-basins
Compute sub-basin curve numbers and time of concentrations		1	4	20		25	\$2,928.00	
Compute stage-storage relationships for the new sub-basins		1	4	24	4	33	\$3,669.20	
Add interbasin weirs for newly formed sub-basins		1	4	32	12	49	\$5,151.60	
Run model for 100-year storm and review results.		1	4	12		17	\$2,085.60	
Task 3 – Proposed Conditions Flood and Inundation Map Development		6	18	84	24	132	\$14,734.20	
Incorporate the proposed Central Park in refined model		2	8	40	8	58	\$6,498.00	
Run model for 100-year storm and review results.		1	4	12		17	\$2,085.60	
Prepare flood and inundation maps and tie these flood maps to the approved FIRM map		2	4	32	16	54	\$5,651.60	
Attend meeting with City to review results		1	2			3	\$501.00	1 mtg, 2 eng, including meeting minutes
Task 4 – Technical Memorandum and Application Support	4	11	38	80	36	169	\$20,183.00	
Prepare draft Technical Memorandum	2	4	16	40	16	78	\$9,180.00	One electronic copy
Attend meeting with City memorandum		1	2			3	\$501.00	1 mtg, 2 eng, including meeting minutes
Prepare final Technical Memorandum and submit to FEMA for review	1	2	4	16	8	31	\$3,526.80	One electronic copy
Review and address comments from FEMA	1	4	16	24	12	57	\$6,975.20	
Attend meeting with FEMA to respond to comments		1	2			3	\$501.00	1 mtg, 2 eng, including meeting minutes
Total Hours	4	27	90	308	88			
Total Fee	\$800.00	\$4,860.00	\$14,445.00	\$32,432.40	\$7,040.00	517	\$59,577.40	