

CONSULTING SERVICES WORK AUTHORIZATION

DATE: August 29, 2022

CONSULTANT: WGI, Inc.

WORK AUTHORIZATION NO. 3 FOR CONSULTING SERVICES

This Work Authorization, when executed, shall be incorporated in and become an integral part of the “Agreement between City of Coconut Creek and WGI, Inc. for Professional Services” dated August 29, 2022.

I. PROJECT DESCRIPTION

The CITY desires to have WGI, Inc. (“CONSULTANT”), prepare a Vulnerability Assessment that will not only identify current concerns but also concerns for the future. We will examine flooding and heat with an additional focus on the social concerns of both. This assessment will give us direction for Capital Improvement Projects (CIP), help us to fine-tune our Climate Action Plan and resilience response, qualify the City for State grants, and provide the State of Florida with data it needs to comprehensively plan for the future. The assessment has an outreach component to effectively include the community and bring awareness of the process and the outcomes.

The scope for the Vulnerability Assessment is largely mandated by the State through legislation established in the Florida State Statutes. The City has opted to include a heat study to identify areas in need of relief, areas that also have a social aspect that exacerbates the heat, and potential remedies..

II. SCOPE OF SERVICES AND COSTS

See Proposal from WGI, Inc. attached hereto as Exhibit “A”.

III. COMPLETION DATE

This Work Authorization is approved contingent upon the CITY’S acceptance of and satisfaction with the completion of the services rendered with a projected completion date of one year from the date of receipt of authorization from CITY. If the CITY in its sole discretion is unsatisfied with the services provided in the Work Authorization, the CITY may terminate the Agreement without incurring any further liability. The CONSULTANT shall commence work after issuance of the notice to proceed.

IV. NOT A DESIGN-BUILD AGREEMENT

CONSULTANT shall not bid for any construction components associated with this Project.

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CITY OF COCONUT CREEK, FLORIDA

By: _____
Karen M. Brooks, City Manager

ATTEST:

Approved as to Legal Sufficiency
and Form:

By: _____
Joseph J. Kavanagh, City Clerk

By: _____
Terrill C. Pyburn, City Attorney

CONSULTANT:

By: _____
Signature of President/Owner

ATTEST:

(Corporate Secretary)

Type/Print Name of President/Owner

Type/Print Name of Corporate Secretary

(CORPORATE SEAL)



August 30, 2022

Linda D. Whitman, RLA, Senior Planner
City of Coconut Creek
4800 W. Copans Road
Coconut Creek, FL 33063

LWhitman@coconutcreek.net

Re: Coconut Creek Vulnerability Assessment

Dear Linda,

WGI, Inc. (WGI) is pleased to provide this proposal to Coconut Creek (CITY) for professional services on the above referenced project. Our scope of services and corresponding fees are detailed below. In addition, it is agreed that WGI's services will be performed pursuant to WGI's "Contract Terms and Conditions," titled "Architecture, Landscape Architecture, Planning and Urban Design Services, RFQ No. 10-06-21-11", dated January 18,2022.

SCOPE OF SERVICES

I. Kickoff Lump Sum \$5,290.00

A. Kickoff Meeting

This phase initiates an internal kick off meeting between the WGI team, City staff, and administration to gain an understanding of issues that need to be addressed with the Vulnerability Assessment (VA). The meeting will discuss availability and methodology for data collection, establish project goals, finalize the schedule, create key milestones, and establish deliverables. The kickoff meeting will include representatives from critical departments and committees. This meeting will be conducted in person.

B. Previous Planning Analysis

In this phase, WGI will analyze previous planning documents identified in the kickoff meeting as being pertinent to the VA's development. Planning documents may include the 2018 Stormwater Master Plan, Coconut Creek Green Plan, wastewater master plans, roadway network, and any other sustainability plans conducted by the City.

Task / Deliverables

WGI will produce and submit the following deliverables to the City.

- *Kick off meeting minutes and sign-in sheet*
- *Overview summery analysis of planning documents*
- *Timeline*

II. Public Outreach

Lump Sum \$10,225.00

A. Conduct Steering Committee Meetings

The team will utilize the City's established Ambassador Program as a "steering committee" The primary goal of the steering committee meetings is to assist in reviewing the objectives of the project, review draft materials, provide input for study direction, assist in identifying geographic context, appropriate modeling methodologies, assist in identifying available data and resources, identify relevant assets, and review project findings and recommendations. Up to three (3) steering committee meetings will be conducted to provide guidance at critical decision points throughout the project process. Meetings will be conducted in-person at the regularly schedule Ambassador Program meetings.

B. Public Outreach Meeting

WGI will conduct a public meeting to present the findings of Task I and Task III. This meeting will give the public the opportunity to provide input on the analysis and reconsider methodologies and assumptions used in the analysis for refinement. The public will be asked to provide feedback on areas they believe should be prioritized for resilience projects.

Task II Deliverables

WGI will produce and submit the following deliverables to the City.

- Steering Committee meeting minutes and sign-in sheets
- Public outreach meeting materials and presentation
- Public outreach meeting results/summary

III. Acquire Background Data

Lump Sum \$28,500.00

The WGI team will work with the City to research and compile the data required for the development of the vulnerability assessment including;

- Critically significant assets including facilities and infrastructure;
- Topographic data; and
- Flood scenario-related data.

A. Critically Significant Assets

The inventory will include:

1. Transportation assets (bridges, bus terminals, major roadways, rail facilities, and RR bridges);
2. Critical infrastructure (waste water collection facilities, lift stations, stormwater treatment facilities, and stormwater network facilities);
3. Sub-surface infrastructure (roadway base, exfiltration trench capacity, drainage well capacity, hydraulic structure capacity);
4. Stormwater pumps, (drinking water facilities, solid/hazardous waste facilities, communications infrastructure, and disaster debris management sites);
5. Critical emergency and community facilities (schools, colleges, community centers, correctional facilities, disaster recovery centers, emergency medical facilities, emergency operational facilities, fire stations, healthcare facilities, hospitals, law enforcement facilities, government offices, affordable housing, and risk shelters);

6. Natural, cultural, and historic topographic data will be collected including conservation land, parks, shorelines, waterways, surface water, wetlands, and historic or cultural assets and
7. This data will be collected in GIS format through the City, Florida Geospatial Open Data, Florida Division of Emergency Management, USGS, NOAA, or other reputable sources.

B. Topographic Data

Topographic data will be sourced from existing data. New data collection is not included with the scope of work but can be provided as an additional service if necessary, including mobile and aerial LiDAR.

C. Flood scenario data

This data will include:

1. Precipitation data;
2. Groundwater level data;
3. Sea level rise (SLR) projections for 2040 and 2070;
4. Tidal datums and tidal flooding;
5. Storm surge;
6. River channel/canal cross-sections;
7. Land use data; and
8. Evapotranspiration data;

Task III Deliverables

WGI will produce and submit the following deliverables to the City:

- *Technical memo outlining data compiled*
- *Locations of critical assets*
- *GIS metadata files of data compiled as directed by the City GIS Coordinator*

IV. Additional Vulnerability Analysis

Lump Sum \$7,600.00

In addition to the regulated VA elements, WGI will conduct a Heat Vulnerability Analysis

This analysis will identify those areas most vulnerable to extreme heat and will include:

- Analysis of the built environment, including major mobility hubs and bus stops;
- Socioeconomic Demographics; and
- Human health factors.

Task IV. Deliverables

WGI will produce and submit the following deliverables to the City:

- *Technical memo outlining data compiled*
- *Locations of critical assets*
- *GIS metadata files of data compiled*

V. Draft Vulnerability Assessment

Lump Sum \$41,950.00

A. Exposure Analysis

WGI will conduct an exposure analysis to identify the depth of water caused by flooding. New modeling or data collection is not included with the scope of work but can be provided as an additional service if necessary, including the engagement of WGI's ICPR4 modeling and Real Time Flood Forecasting (FTFF) model.

B. Sensitivity Analysis

WGI will conduct a sensitivity analysis to determine the impact flooding will have on community assets which may include vulnerable social demographics, structures, and economic functions. The analysis will include an evaluation of the impact of flooding on each asset type at each flood scenario and assign a risk level. The risk level will be determined by the percentage of land area inundated and number of critical assets affected. New modeling or data collection is not included with the scope of work but can be provided as an additional service if necessary, including WGI's RTFF model and associated dashboard.

C. Identify Focus Areas

WGI will synthesize the data from Tasks I thru V to identify areas with substantial risk of flooding.

Task V. Deliverables

WGI will produce and submit the following deliverables to the City.

- *Technical report of data collection and analysis (Draft Vulnerability Assessment) with supporting maps and tables*
- *List of critical assets that are impacted.*
- *Supporting GIS files*

VI. Final Vulnerability Assessment

Lump Sum \$24,925.00

A. Report, Maps, and Tables

WGI will refine the draft vulnerability report based on feedback obtained in the public outreach meeting. The final report will include:

- Detailed findings;
- Graphics, maps, and tables based on the scenarios and standards outlined in the technical guide;
- A final list of critically significant assets that are impacted by flooding; and
- Identify priority areas that need immediate investment of capital improvement projects.

B. Public Presentation

WGI will present the final VA to the City in a public meeting.

Task VI Deliverables

WGI will produce and submit the following deliverables to the City.

- *Final Vulnerability Assessment Document*
- *Geodatabase of all shapefiles used in the production of the assessment*
- *PowerPoint presentation to City Commission.*

Respectfully submitted,
WGI, Inc.



Jeff Brophy, PLA
VP

CLIENT'S CORPORATE ATTESTATION: If signing this Proposal on behalf of a corporate entity, I hereby affirm that such entity is correctly identified above, and is legally valid, active, and duly licensed and authorized to conduct business in the state where the project is located. I also affirm that I am duly authorized and have legal capacity to execute this Proposal and bind the corporate entity.

AUTHORIZATION FOR CREDIT CHECK: By signing this Proposal, I hereby authorize WGI to conduct a credit check or obtain a credit report with respect to CLIENT (as identified in this Proposal) for purposes of WGI providing services to CLIENT.

Corporate Representative:

Name (Printed)

This Proposal accepted this ____ day of _____, 2022

By _____
Name (Signature)
City of Coconut Creek

Please provide the following billing information:

Name / Company Name

Billing Address

City

State

Zip

Contact Name

Email Address

Phone Number

Fax Number



Project Name: Coconut Creek Vulnerability Assessment	WGI													
Client: City of Coconut Creek	Principal Engineer		Senior Engineer		Senior Planner		Planner		Drafter/GIS		Sustainability Specialist		Total	
Date: 08/29/22	\$250		\$190		\$170		\$125		\$110		\$160			
Prepared by: Angela Biagi	hours	fees	hours	fees	hours	fees	hours	fees	hours	fees	hours	fees	hours	fees
I. Kickoff														
A. Kickoff Meeting	2	\$500	2	\$380	2	\$340	2	\$250	2	\$220		\$0	10	\$1,690
B. Previous Planning Analysis		\$0	10	\$1,900	10	\$1,700		\$0		\$0		\$0	20	\$3,600
Phase Subtotal	2	\$500	12	\$2,280	12	\$2,040	2	\$250	2	\$220	0	\$0	30	\$5,290
II. Public Outreach														
A. Conduct Steering Committee Meetings (3 in-person meetings)		\$0		\$0	20	\$3,400	30	\$3,750		\$0	5	\$800	55	\$7,950
B. Public Outreach Meeting (1 virtual meeting)		\$0		\$0	5	\$850	5	\$625		\$0	5	\$800	15	\$2,275
Phase Subtotal	0	\$0	0	\$0	25	\$4,250	35	\$4,375	0	\$0	10	\$1,600	70	\$10,225
III. Aquire Background Data														
A. Critically Significant Assets	10	\$2,500	10	\$1,900	30	\$5,100		\$0	30	\$3,300		\$0	80	\$12,800
B. Topographic Data		\$0		\$0		\$0		\$0	40	\$4,400		\$0	40	\$4,400
C. Flood Scenario Data	20	\$5,000	10	\$1,900		\$0		\$0	40	\$4,400		\$0	70	\$11,300
Phase Subtotal	30	7500	20	3800	30	5100	0	0	110	12100	0	0	190	\$28,500
IV. Additonal Vulnerability Analysis														
Heat Vulnerability Analysis		\$0		\$0	30	\$5,100	20	\$2,500		\$0		\$0	50	\$7,600
Phase Subtotal	0	0	0	0	30	5100	20	2500	0	0	0	0	50	\$7,600
V. Draft Vulnerabilty Assessment														
A. Exposure Analysis		\$0	20	\$3,800	25	\$4,250		\$0	35	\$3,850		\$0	80	\$11,900
B. Sensitivity Analysis		\$0	20	\$3,800	25	\$4,250		\$0	35	\$3,850		\$0	80	\$11,900
C. Identify Focus Areas	25	\$6,250	20	\$3,800	25	\$4,250		\$0	35	\$3,850		\$0	105	\$18,150
Phase Subtotal	25	6250	60	11400	75	12750	0	0	105	11550	0	0	265	\$41,950
VI. Final Vulnerability Assessment														
A. Report, Maps, Tables	20	\$5,000		\$0	20	\$3,400	50	\$6,250	55	\$6,050		\$0	145	\$20,700
B. Public Presentation	5	\$1,250	5	\$950	5	\$850	5	\$625		\$0	5	\$550	25	\$4,225
Phase Subtotal	25	6250	5	950	25	4250	55	6875	55	6050	5	550	170	\$24,925
PROJECT TOTAL													\$118,490	