

RESOLUTION NO. 2022 – 4023

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF MIAMI SPRINGS, FLORIDA, APPROVING THE ISSUANCE OF A WORK ORDER TO BERMELLO, AJAMIL & PARTNERS, INC. FOR THE DEVELOPMENT OF A VULNERABILITY ASSESSMENT AND ADAPTATION ACTION PLAN IN AN AMOUNT NOT TO EXCEED \$174,600; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on March 8, 2021, the City of Miami Springs (the “City”) Council adopted Resolution No. 2021-3899 approving an agreement (the “Agreement”) with Bermello Ajamil & Partners, Inc. (the “Consultant”) pursuant to Request for Qualifications No. 01-19/20 for continuing professional services relating to architectural and engineering services; and

WHEREAS, in August 2022, the Florida Department of Environmental Protection (“FDEP”) awarded the City a Resilient Florida Grant (the “Grant”) in the amount of \$174,600 to develop a Vulnerability Assessment and Adaptation Action Plan (the “Project”); and

WHEREAS, in order to comply with the terms and conditions of the Grant, the City solicited and the Consultant provided the proposal attached hereto and incorporated herein as Exhibit “A” (the “Proposal”), in an amount not to exceed \$174,600, to provide the following services for the Project: collection of background data (including critical asset inventory, critical community and emergency facilities, and topographic data); analysis of flood modeling data; development of a vulnerability assessment report; development of an adaptation action plan; preparation of a Peril of Flood Comprehensive Plan Amendment to ensure compliance with Section 163.3178(2), Florida Statutes; and creation of elevation surveys for the City’s critical assets (collectively, the “Services”); and

WHEREAS, the City will be reimbursed for the Services for the Project within the 2022-2023 fiscal year budget through Grant funds awarded to the City by FDEP; and

WHEREAS, the City Council wishes to authorize the City Manager to issue a work order to the Consultant for the Project, consistent with the Proposal and the Agreement, in an amount not to exceed \$174,600; and

WHEREAS, the City Council finds that this Resolution is in the best interest and welfare of the residents of the City.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF MIAMI SPRINGS, FLORIDA, AS FOLLOWS:

Section 1. Recitals. The above recitals are confirmed, adopted, and incorporated herein and made a part hereof by reference.

Section 2. Approval. That the City Council hereby authorizes the City Manager to issue a work order to the Consultant for the Project, consistent with the Proposal and the Agreement, and to expend budgeted funds in an amount not to exceed \$174,600.

Section 3. Effective Date. That this Resolution shall be effective immediately upon adoption.

The foregoing Resolution was offered by Councilman Best who moved its adoption. The motion was seconded by Councilman Vazquez and upon being put to a vote, the vote was as follows:

Vice Mayor Dr. Walter Fajet	<u>YES</u>
Councilman Bob Best	<u>YES</u>
Councilwoman Jacky Bravo	<u>YES</u>
Councilman Dr. Victor Vazquez	<u>YES</u>
Mayor Maria Puente Mitchell	<u>YES</u>

PASSED AND ADOPTED this 22nd day of August, 2022.



MARIA PUENTE MITCHELL
MAYOR

ATTEST:



ERIKA GONZALEZ, MMC
CITY CLERK



APPROVED AS TO FORM AND LEGAL SUFFICIENCY
FOR THE USE AND RELIANCE OF THE CITY OF MIAMI SPRINGS ONLY:



WEISS SEROTA HELFMAN COLE & BIERMANN, P.L.
CITY ATTORNEY

August 8, 2022

City of Miami Springs

A. INTRODUCTION

The City of Miami Springs (City) has requested Bermello Ajamil and Partners (BA) under their existing A/E consulting agreement to prepare a scope of work (SOW) for the grant management and design of the Resilient Florida Grant #22PLN51.

In 2021, the legislature passed a statute, Section 380.093, F.S. to create a new program called Resilient Florida. One element of the program is the Resilient Florida Grant program to fund resilience planning and projects to protect critical assets from future flood risk. In reviewing the statute and in conversations with City staff, it was determined that a vulnerability assessment would need to be prepared to meet the requirements in Section 380.093(3), F.S. related to vulnerability assessment that identifies the risks to critical assets and prepares the City for future FDEP implementation/adaptation grants.

The vulnerability assessment will include an analysis of the vulnerability of and risks to critical assets, including regionally significant assets, owned or managed by the City. The assessment will focus on the following components:

1. Climate threat and hazards analysis will source publicly available data from recent relevant peer-reviewed reports and databases.
2. Critical assets will be evaluated in the vulnerability assessment and adaptation planning based on existing conditions, future conditions, and all modeling consistent with Section 380.093(3), F.S., and potential economic losses or values.
3. Final Report to document the findings and provide the City with a roadmap for making the community more resilient.

B. OBJECTIVE

This project will address the Peril of Flood recommendations and will assess exposure and sensibility vulnerability of the City's infrastructure critical assets for compliance with Section 380.093(3)(d) and will ensure that any future capital planning process incorporates the impact of flood risks due to climate change. This project will provide geodatabase, modeling, critical asset inventory, vulnerability assessment and an Adaptation Action Plan to evaluate and prioritize a dashboard of adaptation strategies with input from stakeholders

C. PROJECT LOCATION

Project is located in the City of Miami Springs within Miami-Dade County, Florida.

D. WORK BREAKDOWN SCHEDULE

Task 1: Acquire Background Data

Task Description: A list of critical assets, as defined by s.380.093.F.S., will be compiled from existing available sources of data and mapped into a GIS Database. The critical asset inventory will consider transportation and evacuation routes, wastewater, stormwater, drinking water, and other important utility facilities. Critical community and emergency facilities such as schools, law enforcement facilities, and government facilities as well as natural, cultural and historical sources within the City boundaries will also be considered for the overall GIS database of the critical assets.

Topographic data such as existing surveys and LiDAR data will be compiled from existing public data sources such as Miami-Dade County and the National Oceanic and Atmospheric Administration database to aid in the creation of a digital elevation model to support the vulnerability analyses. Data gaps will be identified to support additional data collection as required to conduct the vulnerability analysis. The collected topographic data will be adjusted to refer to the North American Vertical Datum of 1988 (NAVD88).

Task Deliverable(s): A technical report should be prepared outlining the data compiled and findings of the gap analysis; a summary of recommendations to address the identified data gaps and actions taken to rectify them, if applicable; GIS files with appropriate metadata of the data compiled, to include locations of critical assets owned or maintained by the county/municipality and regionally significant assets, classified as defined in s. 380.093(2) 1-4, F.S.:

Task 2: Draft Vulnerability Assessment, Exposure Analysis

Task Description: In order to conduct the exposure analysis, a Digital Elevation Model (DEM) will be created using the topographic data compiled under the Background Data task. The digital elevation model will be referenced to the North American Vertical Datum of 1988 (NAVD88). Using the created DEM, flood depths due to tidal flooding, storm surge flooding, and to the extent practicable rainfall-induced flooding will be derived under current and future conditions. To the extent practicable, compound flooding will be considered, likely as a combination of tidal and storm surge flooding.

The aforementioned future conditions flood depths will consider two sea level rise projections: the 2017 National Oceanic and Atmospheric Administration (NOAA) Intermediate-Low and Intermediate-High. The future conditions will also consider two planning horizons: 2040 and 2070. Sea level data will be taken from the Virginia Key NOAA Station (Station ID XYZ), which is within the vicinity of the municipality. PDF maps of the flood depths under the different planning horizons and associated sea level rise projections will be developed for inclusion in the vulnerability analysis report. A GIS database of the electronic mapping data used to illustrate the flooding and sea level rise impacts will also be produced.

Task Deliverable(s):

A draft vulnerability assessment report documenting the modeling process, type of models utilized and resulting tables and maps illustrating flood depths for each flood scenario; GIS files with results of exposure analysis for each flood scenario, with appropriate metadata identifying the methods used to create the flood layers. GIS files and associated metadata must adhere to Resilient Florida's GIS Data and Metadata Standards (see Appendix C).

Task 3: Vulnerability Assessment, Sensitivity Analysis

Task Description: In this task, the City will prepare a vulnerability sensitivity analysis, which will include technical and socioeconomic assessments of different alternatives available to apply for sea level rise and flood conditions and their impacts to local residents. Based on the flood mapping depths, a sensitivity analysis of the critical infrastructure assets vulnerability will be conducted relative to the infrastructure's existing elevations. The critical infrastructure assets flood depth under the current and future conditions will be

evaluated. This vulnerability assessment will help identify and encourage the development of best practices, redevelopment principles, engineering solutions, and site-development techniques that may reduce losses due to flooding and resultant claims filed under insurance policies issued in Florida (as established by the Federal Emergency Management Agency).

Task Deliverable(s):

Final vulnerability assessment report detailing the findings of the exposure analysis and the sensitivity analysis, including visual presentation of the data via maps and tables, based on the statutory scenarios and standards; an initial list of critical and regionally significant assets that are impacted by flooding, prioritized by area or immediate need, specifying for each asset which flood scenario(s) it was impacted by.

Task : 4 Adaptation Action Plan

Task Description: Under this task, the baseline conditions determined in previous tasks will be analyzed in further detail in accordance to statutory requirements, relative to high tides, storm surges and Sea Level Rise (SLR) impacts and adaption strategies, to prepare and prioritize strategies considering the following considerations:

- Flooding and drainage problems including stormwater management and drainage, flooding city-owned and private infrastructure (e.g. marina, roads, septic tanks, sewage pump stations)
- Level of protection relative to sea level rise and king tides, including fortify residences, raising roads and homes, build higher seawalls and bulkheads among other soft (green alternatives preferred) and hard alternatives.
- Environmental review. Impacts to environmental resources including beaches and dunes, wetlands and upland habitats, wildlife (e.g. sea turtles, shorebirds and wading birds, marine species) mangroves and seagrass. The City of Miami Springs will obtain a list of threatened and endangered species and designated critical habitats that might be present in the project area.
- Evaluate increased shoreline erosion in the Adaptation Action Area (AAA) and the use of soft engineering alternatives
 - like a natural resource-based shoreline armoring or protection system and beach nourishment
- Coastal, social vulnerability and vulnerability of historic resources
- Existing City Zoning Code and land use considerations. Review land use plans with resiliency guidelines as anticipating action to direct new developments away from vulnerable areas; evaluate land conservation and conservation easements, as necessary. Strategic redevelopment to safer areas.
- Building Form Aesthetics and Urban design considerations
- Permit feasibility
- Potential phasing of future adaption
- Operational impacts and maintenance assessment
- Service life
- Overall resiliency
- Social vulnerability. An assessment of any impact or environmental effects on minority or low-income residents and evaluate project features that will mitigate such effect.

Deliverables: The Grantee will provide the final Adaptation Plan or Report.

Final Adaptation Action Plan detailing the summaries of key vulnerabilities presented in the final vulnerability assessment report, critical circumstances unique to the community, potential responses to key vulnerabilities listed in report, and any legal reference materials if applicable.

Task 5: Public Outreach and Regional Collaboration

Task Description: In two public meetings supplemented with live polling as well as on-line surveys will focus on informing the public on vulnerabilities and adaptation options and addressing climate change and sea level rise to be incorporated into future plans and policies. All materials will be produced in English and Spanish.

The focus of the public meetings will be to educate local residents and other stakeholders, about the risks of flooding in their community. It will present a suite of flood resiliency/adaptation strategies possible. The meetings will use live audience polling to present images of the flood resilience solutions to gain the residents' preferences. The meetings will also catalyze a continuing dialogue with the residents of Miami Springs to make sure they are an integral part of the solution.

Meeting #1:

Upon completion of the Vulnerability Assessment, the City staff, shall organize a public meeting/workshop in coordination with local residents and other stakeholders to present an educational PowerPoint which will address the findings from the final Vulnerability Assessment report, and perform a live polling survey. Under this Task, the City shall prepare the invitation, draft/final agendas, create the live polling survey as well as handle the meeting minutes. The materials shall be electronically distributed for comments by City of Miami Springs staff.

Meeting #2:

Upon completion of the Adaptation Action Plan the City staff, shall organize a public meeting/workshop to present the educational PowerPoint which will give the proposed flood resiliency/adaptation alternatives, and then perform a live polling survey. Under this Task, the City shall prepare the invitation, draft/final agendas, create the live polling survey as well as handle the meeting minutes. The materials shall be electronically distributed for comments by City of Miami Springs staff.

Deliverables: The Grantee will provide the following: 1) meeting agenda, including location, date, time of meeting, and list of all attendees; 2) meeting sign-in sheets with attendee names and affiliation (i.e. local stakeholder, resident, steering committee member, local government staff); 3) Meeting summary which includes all attendee input/recommendations and meeting outcomes, 4) a copy of the file or weblink of the video or audio recording from the meeting, if applicable; 5) all meeting materials such as presentations, surveys, and invitation announcements.

Task 6: Peril of Flood Comprehensive Plan Amendment

Task Description: The City will prepare a redevelopment component in its Comprehensive Plan to fully comply with Section 163.3178(2)(f), Florida Statutes, as recommended by Department of Economic Opportunity (DEO).

The policy goal of this task will be to bring the City into full compliance with the Peril of Flood mandate. The City will review its Comprehensive Plan and Code of Ordinances to identify necessary additions and amendments to ensure compliance with Sec. 163.3178(2)(f) Fla. Statute ("Peril of Flood"). Local government Comprehensive Plans that are already in compliance with the statute will be reviewed as templates for potential modifications to the City's Plan.

Currently adopted surface water management level of service standards for drainage and local regulations regarding water management improvements will be reviewed in light of current and future conditions modeled for flooding within City boundaries.

The City's current rating under the Federal Emergency Management Agency (FEMA) Community Rating System (CRS) will be evaluated to determine the extent to which revised policies adopted to ensure Peril of Flood compliance can contribute to an enhanced score. In light of the modeled current and future conditions, the City will also consider opportunities for regulatory changes (if appropriate) which exceed flood resistant construction requirements in the Florida Building Code, as well as applicable flood plain management regulations outlined in 44 CFR part 60.

Deliverables: Draft comprehensive plan coastal management element language in strike-through and underlined format that satisfies the Peril of Flood requirements in Section 163.3178(2)(f), F.S. The draft comprehensive plan will include the following:

1. Examples of strategies, principles, and related engineering solutions that reduce flood risk in coastal areas when resulting from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise;
2. Use of best practices development and redevelopment principles, strategies, and engineering solutions that will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency;
3. Site development techniques and best practices that may reduce losses due to flooding and claims made under flood insurance policies issued in this state;
4. A requirement that development or redevelopment within the coastal areas be consistent with, or more stringent than, the flood-resistant construction requirements in the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. Part 60;
5. A requirement that any construction activities seaward of the coastal construction control lines established pursuant to Section 161.053, F.S., be consistent with Chapter 161, F.S.; and
6. Encouragement of local governments to participate in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for their residents.
7. The City's local mitigation strategy (LMS) and post-disaster redevelopment plan and their integration into the Miami-Dade County LMS will be reviewed based on the data and analysis developed through this planning effort

Task 7: Surveying for Elevation Certificates

Task Description: In order to adequately obtain the elevation of a critical asset, a professional surveying crew consisting of a chief surveyor and two surveying technicians, will need to perform a site visit to record the elevation information. The elevation is captured running the nearest available bench mark to the vicinity of the critical asset and utilizing a total station to properly document the elevation. This information is later presented in a complete elevation certificate document that will be signed and sealed by a Florida Registered Professional Surveyor and Mapper.

Task Deliverable(s):

List of the buildings where certificates were recorded. List should include the building address, critical asset type and asset class information. Copies of the Elevation Certificates shall be submitted to FDEM as required by Section 472.0366(2) of Fla Statutes

E. PROJECT TIMELINE AND BUDGET DETAIL:

The tasks must be completed by, and all deliverables received by, the corresponding task due date listed in the table below. Cost-reimbursable grant funding must not exceed the budget amounts indicated below. Requests for any change(s) must be submitted prior to the current task due date listed in the Project Timeline. Requests are to be sent via email to the Department's Grant Manager, with the details of the request and the reason for the request made clear.

Task No.	Task Title	Budget Category	DEP Amount	Local Amount	Total Amount	Task Start Date	Task Due Date
1	Acquired Background Data	Contractual Services	\$ 19,500	\$ 0	\$ 12,500	7/1/2021	3/31/2024
2	Draft Vulnerability Assessment, Exposure Analysis	Contractual Services	\$59,000	\$ 0	\$ 16,800	7/1/2021	3/31/2024
3	Vulnerability Assessment, Sensitivity Analysis	Contractual Services	\$ 15,000	\$ 0	\$ 19,500	7/1/2021	3/31/2024
4	Adaptation Action Plan	Contractual Services	\$39,800.	\$ 0	\$ 59,000	7/1/2021	3/31/2024
5	Public Outreach and Regional Collaboration	Contractual Services	\$ 12,500	\$0	\$39,800	7/1/2021	3/31/2024
6	Peril of Flood Comprehensive Plan Amendment	Contractual Services	\$16,800	\$ 0	\$ 15,000	7/1/2021	3/31/2024
7	Surveying for Elevation Certificates	Contractual Services	\$ 12,000	\$ 0	\$ 12,000	7/1/2021	3/31/2024
Total:			\$ 174,600	\$ 0	\$ 174,600		