**Scope of Work**

**Development of Wind Speed Line Maps Web Viewer for the Florida Building Code, 7th Edition (2020)**

The State of Florida Department of Business and Professional Regulation

Florida Building Commission

and

University of Florida, GeoPlan Center

Project Leader: Katherine Norris, Univ. of Florida

# Introduction

The University of Florida, GeoPlan Center shall provide Geographic Information System (GIS) technical assistance in creating and maintaining a wind speed line map web viewer for the State of Florida. The web map will display the wind speed contours as depicted in the draft Florida Building Code, 7th Edition (2020) Figure 1609.3(1-4) for Risk Category I-IV Buildings and Structures. The web map viewer will be made publicly available until July 31, 2021. The project will be led by Katherine Norris, at the University of Florida.

# Tasks

1. The Contractor shall create a statewide wind speed line map web viewer utilizing GIS data and relevant data (datasets from the Florida Geographic Data Library such as the Risk Category I-IV Wind Speed Lines, Statewide 2019 Parcels, FEMA DFIRM Flood Hazards, along with major roads and major rivers that were used in determining the exact location of the local wind speed lines for local jurisdictions. The web viewer functionality will include address matching.
2. The Contractor shall update the Statewide 2019 Parcel’s tabular information to include each of its Wind Speed Risk Category I-IV designations. The designation for each parcel (over 10,000,000 records) shall be determined by its centroid location.
3. The Contractor shall update the web viewer with new FEMA DFIRM data during the winter of 2020, as well as update the Statewide 2020 Parcel information when available in the spring of 2021.

# Method of Payment

# A purchase order will be issued to the University of Florida/GeoPlan Center. This project shall start on the date of execution of the purchase order and end at 11:59pm on June 30, 2021. The purchase order shall not exceed $20,000.00 and shall cover all costs for labor, materials, and overhead. Payment will be made for the study after the Contract Manager, Program Manager, and the Commission’s Structural Technical Advisory Committee (TAC) have approved the final report.

# Deliverables

1. An interim status report shall be prepared and delivered to the Florida Building Commission on March 31, 2021. The interim report shall address each task as enumerated above and will summarize the project progress to date.
2. A final report shall be prepared and delivered no later than June 1, 2021. The final report shall address each task as enumerated.
3. A publicly available web map as described in the tasks above made available till July 31, 2021.

# Performance Measures and Financial Consequences

The GeoPlan Center is solely and uniquely responsible for the satisfactory performance of the tasks and completion of the deliverables as described in this Scope of Work.

Failure to complete the tasks and deliverables in the time and manner specified in Sections 2 and 4 shall result in a non-payment of invoice until corrective action is completed as prescribed by the program manager or contract manager.

# Contract Manager and Program Manager

The Contract Manager for this purchase order is Barbara Bryant and the Program Manager is Mo Madani.

**Purpose and Need**

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**Introduction**

During the course of the 2019-2020 project, Update and Development of Wind Speed Line Maps for the Florida Building Code, 7th Edition (2020), it was determined that less than 20% of the counties in the state were using an in-house GIS system to determine the wind speed risk category for each parcel that went through their development review process. Counties with larger operating budgets were simply ingesting the state-provided GIS files into their web mapping systems to provide the wind speed lines “As Is” to the general public. This allowed them to more quickly and accurately follow the FBC wind speed mapping figures by providing results on a parcel-by-parcel basis.

The remaining counties without readily accessible in-house GIS capabilities based their decisions on county level PDF maps, to determine the wind speed load requirements for each parcel. However, we determined that a state level map viewer, similar to the one developed to aid with the 2019-2020 project, could assist smaller counties and municipalities wanting to follow a similar process.

In the project’s final report, we suggest that FBC develop a state level web-map viewer to display the four Risk Category I-IV Wind Speed Lines and statewide parcels. This online map viewer could also include datasets such as the FEMA Flood Hazard Zones of the Digital Flood Insurance Rate Map. Both the statewide parcels and FEMA flood hazards datasets are updated yearly and are publicly available from Florida Geographic Data Library, which is housed at the GeoPlan Center.