**Scope of Work**

**Review and Development of Recommendations for Strengthening the Wind and Storm Surge Requirements of the Florida Building Code (Code-Plus)**

The State of Florida Department of Business and Professional Regulation

Florida Building Commission

and

University of Florida, Engineering School of Sustainable Infrastructure and Environment

(ESSIE)

Project Leader: David O. Prevatt, PhD Civil Eng., F. ASCE, Univ. of Florida

# Introduction

The University of Florida, Engineering School of Sustainable Infrastructure and Environment (ESSIE) shall review the available academic, industry, design, and public policy literature related to the revision of the Florida Building Code’s wind and storm surge provisions since 2007. ESSIE will compare the current requirements of the Florida Building Code with the recommendations and guidelines in this literature to develop recommendations on strengthening the wind provisions and storm surge provisions of the Florida Building Code. The project will be led by David O. Prevatt, Associate Professor of Civil Engineering, at the University of Florida.

# Tasks

1. The Contractor shall review all literature identified by the Florida Building Commission and its staff related to the wind and storm surge provisions of the Florida Building Code.
2. The Contractor shall compare the strength of the wind and storm surge requirements in the literature identified by the Florida Building Commission and its staff with the wind and storm surge requirements of the Florida Building Code, 6th Edition (2017).
3. The Contractor shall interview at least three building officials to identify and report on structures built with stronger requirements than those found in the Florida Building Code, 6th Edition (2017). The interviews shall also include questions related to the cost effectiveness of building to stronger wind and storm surge requirements than those found in the Florida Building Code, 6th Edition (2017).
4. The Contractor shall interview at least three contractors that routinely build structures based on stronger wind and storm surge requirements than those found in the Florida Building Code, 6th Edition (2017) for the purpose of determining the realities and cost effectiveness of building to stronger wind and storm surge requirements than those found in the Florida Building Code, 6th Edition (2017).
5. The Contractor shall perform a site-specific hurricane hazard analyses for at least one location in the 35 coastal counties of Florida in order to develop recommendations for increases to coastal wind speed requirements. These recommendations shall be compared to the wind speeds in ASCE 7-16 for a 700 year, 1700 year, and a 3,000 year wind speed event.
6. The Contractor shall extract storm damage data from its existing datasets of building observations made during Hurricane Irma and Hurricane Michael for the purpose of creating a subset of structures built to stronger wind and storm surge requirements than those found in the Florida Building Code, 6th Edition (2017).
	* 1. The Contractor shall extract any available data from the building permitting records of the property appraiser related to stronger wind and storm surge requirements.
		2. The Contractor shall compare the performance of those structures built to stronger requirements than those found in the Florida Building Code, 6th Edition (2017) against homes built to the requirements of the Florida Building Code.
7. The Contractor shall develop and present recommendations to the Florida Building Commission for strengthening the wind and storm surge requirements of the Florida Building Code.

# Method of Payment

# A purchase order will be issued to the University of Florida/ Engineering School of Sustainable Infrastructure and Environment (ESSIE). This project shall start on the date of execution of the purchase order and end at 11:59pm on December 1, 2019. The purchase order shall not exceed $108,182, 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 report shall be prepared and delivered to the Florida Building Commission on October 31, 2019. The interim report will summarize the project progress to date.
2. A final report shall be prepared and delivered no later than December 1, 2019. The final report will provide a summary of the Contractor’s meetings with building officials, a summary of interview with codes-plus contractors, a summary of existing wind and storm surge related literature, and recommendations for strengthening the wind and storm surge provisions of the Florida Building Code.

# Performance Measures and Financial Consequences

ESSIE 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.