

Less than 1 Foot Rise Certification

Client/Owner: Edmund & Bonnie Blackwell
Contractor: Unknown
Property Description: 2.87 Acres in Columbia County, FL
Structure(s) in Flood Area: Not Specified
Parcel ID#: 00-00-00-00856-003

Impact of Storage Volume Reduction - Calculations

Flood Map for Property: 12023C 0458C
Elevation of 100 yr flood: 33.00 NAVD88, Zone AE
Length of river reach between
BFE -4 feet and BFE +1 foot: 3.66 miles = 19,320 ft
Width of floodplain: 1,694 ft
Effective Flood Area: $1,694 \text{ ft} \times 19,320 \text{ ft} = 32,728,000 \text{ ft}^2$

Depth of proposed Fill\Obstruction: Less than 10ft
Area of proposed Fill\Obstruction: Less than 2.87 acres (125,000 ft²)
Volume of proposed Fill\Obstruction: Less than $10 \text{ ft} \times 125,000 \text{ ft}^2 = 1,250,000 \text{ ft}^3$
Flood Elevation Increase
due to reduction of storage volume: $1,250,000 \text{ ft}^3 / 32,728,000 \text{ ft}^2 = \mathbf{0.0382 \text{ ft}}$

I hereby certify that construction of the proposed structure(s), fill, and/or obstruction(s) as specified in this letter will not cause the flood waters of the surrounding area to rise greater than 1 foot due to a reduction in storage volume. The property is not inside any regulatory floodway.

David Winsberg

David M. Winsberg
PE# 68463, CA# 29596
July 13, 2021



ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1-9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A - PROPERTY INFORMATION				FOR INSURANCE COMPANY USE	
A1. Building Owner's Name Edmund & Bonnie Blackwell				Policy Number:	
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 978 SW Washington Avenue				Company NAIC Number:	
City Fort White		State Florida		ZIP Code	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Lot 38, 39 & 40 Unit 11, Three Rivers Estates					
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Accessory</u>					
A5. Latitude/Longitude: Lat. _____ Long. _____ Horizontal Datum: ☐ NAD 1927 ☐ NAD 1983					
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.					
A7. Building Diagram Number _____					
A8. For a building with a crawlspace or enclosure(s):					
a) Square footage of crawlspace or enclosure(s) _____ sq ft					
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade _____					
c) Total net area of flood openings in A8.b _____ sq in					
d) Engineered flood openings? ☐ Yes ☐ No					
A9. For a building with an attached garage:					
a) Square footage of attached garage _____ sq ft					
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade _____					
c) Total net area of flood openings in A9.b _____ sq in					
d) Engineered flood openings? ☐ Yes ☒ No					
SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number 120070			B2. County Name Columbia		B3. State Florida
B4. Map/Panel Number 0458	B5. Suffix C	B6. FIRM Index Date Feb 4 2009	B7. FIRM Panel Effective/ Revised Date Feb 4 2009	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) 33.0
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: ☒ FIS Profile ☐ FIRM ☐ Community Determined ☐ Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No Designation Date: _____ ☐ CBRS ☐ OPA					

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.			Policy Number:
City	State	ZIP Code	Company NAIC Number

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☒ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction

*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: NA Vertical Datum: _____

Indicate elevation datum used for the elevations in items a) through h) below.

☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source: _____

Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

- | | | | |
|---|-------|-------------------------------|---------------------------------|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor) | _____ | ☐ feet | ☐ meters |
| b) Top of the next higher floor | _____ | ☐ feet | ☐ meters |
| c) Bottom of the lowest horizontal structural member (V Zones only) | _____ | ☐ feet | ☐ meters |
| d) Attached garage (top of slab) | _____ | ☐ feet | ☐ meters |
| e) Lowest elevation of machinery or equipment servicing the building
(Describe type of equipment and location in Comments) | _____ | ☐ feet | ☐ meters |
| f) Lowest adjacent (finished) grade next to building (LAG) | _____ | ☐ feet | ☐ meters |
| g) Highest adjacent (finished) grade next to building (HAG) | _____ | ☐ feet | ☐ meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support | _____ | ☐ feet | ☐ meters |

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

Were latitude and longitude in Section A provided by a licensed land surveyor? ☐ Yes ☒ No ☐ Check here if attachments.

Certifier's Name David M. Winsberg, PE		License Number 68463		
Title Engineer				
Company Name Winsberg Inc.				
Address PO Box 2815				
City Lake City	State Florida	ZIP Code 32056		
Signature <i>David Winsberg</i>		Date 07-13-2021	Telephone 386-755-7449	Ext.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments (including type of equipment and location, per C2(e), if applicable)

Reinforcement shall be sufficient to prevent breakup of the slab during design conditions, even if the soil under the slab is undermined by erosion. Slabs-on-grade installed on structural fill shall be placed so that there is no loss of supporting soil during the design flood conditions.

Exception: When located under an elevated building, slabs-on-grade shall not be reinforced or use turned-down edges.

2.5.2 Footing Design

Footings shall support the structure during design flood conditions, including prolonged inundation and scour and erosion if expected during design flood conditions, to prevent flotation, collapse, and lateral movement.

Footings that are also intended to act as grade beams shall comply with the provisions of Section 4.5.9.

2.6 ENCLOSURES BELOW THE DESIGN FLOOD ELEVATION

Enclosed areas that are used solely for parking, building access, or storage shall be permitted below the DFE provided the enclosed areas meet the requirements of this section.

2.6.1 Required Openings in Foundation Walls

Foundation walls that enclose an area below the DFE, and that do not meet the dry-floodproofing requirements of Section 6.2, shall contain openings to allow for automatic entry and exit of floodwaters during design flood conditions. These openings shall meet the requirements of Section 2.6.2.

2.6.1.1 Openings in Breakaway Walls

Openings to allow for the automatic entry and exit of floodwaters during design flood conditions shall be installed in breakaway walls in flood hazard areas other than Coastal High Hazard Areas. Openings shall meet the requirements of Section 2.6.2 or Section 4.6.2.

Openings in breakaway walls in Coastal High Hazard Areas shall not be required.

2.6.2 Design of Openings

Openings shall meet the nonengineered requirements of Section 2.6.2.1 or the engineered opening requirements of Section 2.6.2.2.

2.6.2.1 Nonengineered Openings

Nonengineered openings shall meet the following criteria:

1. There shall be a minimum of two openings on different sides of each enclosed area; if a structure has more than one enclosed area below the DFE, each area shall have openings;
2. The total net area of all openings shall be at least 1 square inch for each square foot of enclosed area;
3. The bottom of each opening shall be no more than 1 ft above the adjacent ground level;
4. Openings shall not be less than 3 in. in any direction in the plane of the wall;
5. Any louvers, screens, or other opening covers shall not block or impede the automatic flow of floodwaters into and out of the enclosed areas; and
6. Openings meeting requirements 1 through 5 above installed in doors and windows are acceptable; however, doors and windows are not deemed to meet the requirements of this section.

2.6.2.2 Engineered Openings

Engineered openings shall meet the following criteria:

1. Each individual opening, and any louvers, screens, or other covers, shall be designed to allow automatic entry and exit of floodwaters during design flood or lesser flood conditions;
2. There shall be a minimum of two openings on different sides of each enclosed area; if a structure has more than one enclosed area below the DFE, each area shall have openings;
3. Openings shall not be less than 3 in. in any direction in the plane of the wall;
4. The bottom of each required opening shall be no more than 1 ft above the adjacent ground level;
5. The difference between the exterior and interior floodwater levels shall not exceed 1 ft;
6. In the absence of reliable data on the rates of rise and fall, assume a minimum rate of rise and fall of 5 ft/h; where an analysis indicates the rates of rise and fall are greater than 5 ft/h, the total net area of the required openings shall be increased to account for the higher rates of rise and fall; where