Phone: 386-755-7449 Fax: 888-522-0030 david@winsberginc.com

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

3.66 miles = 19,320 ft

BFE -1 foot and BFE +1 foot:

1,694 ft

Width of floodplain: Effective Flood Area:

1,694 ft * 19,320 ft = 32,728,000 ft²

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 $10ft * 125,000 ft^2 = 1,250,000 ft^3$

Flood Elevation Increase

due to reduction of storage volume:

 $1,250,000 \text{ ft}^3 / 32,728,000 \text{ ft}^2 = 0.0382 \text{ ft}$

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 M. Winsberg

PE# 68463, CA# 29596

July 13, 2021



U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency National Flood Insurance Program

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

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 | | | | | | | RANCE COMPANY USE | | |
|---|---------------------------|------------------------|------------|-----------------------------------|----------------------|-----------------------------------|---|--|--|
| A1. Building Owner's Name | | | | | | | ber: | | |
| | Edmund & Bonnie Blackwell | | | | | | | | |
| A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. | | | | | | | IAIC Number: | | |
| 978 SW Washington Avenue | | | | | | | | | |
| City | • | | | | | | | | |
| Fort White Florida A3. Property Description (Let and Block Numbers, Tax Bersel Number Legal Description, etc.) | | | | | | | | | |
| 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.) Accessory | | | | | | | | | |
| 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? | | | | | | | | | |
| 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 | | | | | | | | | |
| | SE | CTION B - FLOOD I | INSURA | NCE RATE | MAP (FIRM) INF | ORMATION | | | |
| B1. NFIP Community Name & Community Number | | | | B2. County Name | | | B3. State | | |
| 120070 | | | Columbia | | | Florida | | | |
| B4. Map/Panel Number | B5. Suffix | B6. FIRM Index Date | Effe | RM Panel ective/ vised Date | B8. Flood Zone(s) | B9. Base Flood E (Zone AO, use | Base Flood Elevation(s) (Zone AO, use Base Flood Depth) | | |
| 0458 | С | Feb 4 2009 | Feb 4 2009 | | AE | 33.0 | | | |
| B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: | | | | | | | | | |
| □ FIRM □ Community Determined □ Other/Source: □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ | | | | | | | | | |
| B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 X 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 | FOR INSURANCE COMPANY USE | | | | | | | | |
|---|-----------------------------|---------------------------|------------------------------|--|--|--|--|--|--|
| Building Street Address (including Apt., Unit, Suite, and/or | Policy Number: | | | | | | | | |
| City Sta | te 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 区 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, crawlsp | ace, or enclosure floor) | · | feet meters | | | | | | |
| b) Top of the next higher floor | | - | feet meters | | | | | | |
| c) Bottom of the lowest horizontal structural member | er (V Zones only) | · | feet meters | | | | | | |
| d) Attached garage (top of slab) | ** | | feet meters | | | | | | |
| e) Lowest elevation of machinery or equipment sen (Describe type of equipment and location in Com | vicing the building iments) | | feet meters | | | | | | |
| f) Lowest adjacent (finished) grade next to building | (LAG) | | feet meters | | | | | | |
| g) Highest adjacent (finished) grade next to building | feet meters | | | | | | | | |
| h) Lowest adjacent grade at lowest elevation of dec 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 lice | censed land surveyor? | ☐ Yes ⊠ No | ☐ Check here if attachments. | | | | | | |
| Certifier's Name | License Number | | WILL WAY | | | | | | |
| David M. Winsberg, PE Title | 68463 | | | | | | | | |
| Engineer | | | Prava | | | | | | |
| Company Name Winsberg Inc. | | | Wisheling | | | | | | |
| Address PO Box 2815 | | | 7-19902/ | | | | | | |
| City Lake City | State Florida | ZIP Code 32056 | | | | | | | |
| Signature Windberg | 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:

- 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
 I square inch for each square foot of enclosed area;
 - 3. The bottom of each opening shall be no more than I ft above the adjacent ground level;
 - 4. Openings shall not be less than 3 in. in any direction in the plane of the wall;
 - 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:

- 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;
- 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;
- 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;
- 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