TOWN OF KIAWAH ISLAND V-ZONE DESIGN CERTIFICATE

Owner Name _____ Policy Number (Insurance Use) _____
Building Address _____ TMS _____
Permit No _____

SECTION I: Flood Insurance Rate Map (FIRM) Information

Community No. _____ Panel No. _____ Suffix _____ FIRM Date _____ FIRM Zone(s) _____

SECTION II: Elevation Information Used for Design

Note: This section documents the elevations/depths used or specified in the design – it does not document surveyed elevations and is not equivalent to the as-built elevations required to be submitted during and after construction.

1. FIRM Base Flood Elevation (BFE)…….. _____ feet*
2. Community's Design Flood Elevation (DFE)…….. _____ feet*
3. Elevation of the Bottom of Lowes Horizontal Structural Member…… _____ feet*
4. Elevation of Lowest Adjacent Grade…….. _____ feet*
5. Depth of Anticipated Scour/Erosion used for Foundation Design……. _____ feet*
6. Embedment Depth of Pilings or Foundation Below Lowest Adjacent Grade……. _____ feet*

*Indicate elevation datum used in 1-4: ☐NGVD29 ☐NAVD88 ☐Other _____

SECTION III: V Zone Design Certification Statement

I certify that: (1) I have developed or reviewed the structural design, plans, and specifications for construction of the above-referenced building and (2) that the design and methods of construction specified to be used are in accordance with accepted engineering standards of practice** for meeting the following provisions:

- The bottom of the lowest horizontal structural member of the lowest floor (excluding piles and columns) is elevated to or above the BFE to include the Town's current freeboard requirements.
- The pile and column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of the wind and water loads acting simultaneously on all building components. Water loading values used are those associated with the base flood.*** Wind loading values are in accordance with the Section 14-173 (h) of the Town's Flood Ordinance.
- The potential for scour and erosion at the foundation has been anticipated for conditions associated with the base flood, including wave action.

SECTION IV: Breakaway Wall Design Certification Statement

Note: This section must be certified by a registered engineer or architect. Breakaway walls shall be designed to have a resistance of no less than 10psf and no more than 20psf. CMU foundation walls shall be constructed in accordance with Section 14-173 (h) of the Town's ordinance.

I certify that: (1) I have developed or reviewed the structural design, plans, and specifications for construction of breakaway walls to be constructed under the above-referenced building and (2) that the design and methods of construction specified to be used are in accordance with accepted engineering standards of practice** for meeting the following provisions:

- Breakaway wall collapse shall result from a water load less than that which would occur during the base flood***.
- The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (see section III).
- Hydrostatic venting is incorporated into the design of the breakaway foundation wall system utilizing engineered flood openings and quantity is sufficient to provide 1 square inch of net opening per square feet of floor area to be wet proofed.

SECTION V: Certification and Seal

This certification is to be signed and sealed by a registered professional engineer or architect authorized by law to certify structural designs. I certify the V Zone Design Certification Statement (Section III) and ____ the Breakaway Wall Design Certification Statement (Section IV, check if applicable).

Certifier's Name _____ License Number _____
Title _____ Company _____
Address _____

PLACE SEAL HERE

_____ _____
Signature Date

TOWN OF KIAWAH ISLAND BREAKAWAY WALL AS-BUILT CERTIFICATE

Owner Name _____ Policy Number (Insurance Use) _____
Building Address _____ TMP _____
Permit No _____

SECTION I: Flood Insurance Rate Map (FIRM) Information

Community No. _____ Panel No. _____ Suffix _____ FIRM Date _____ FIRM Zone(s) _____

SECTION II: Elevation Information Retrieved from Finished Construction Elevation Certificate

1. FIRM Base Flood Elevation (BFE)…….. _____ feet*
2. Community's Design Flood Elevation (DFE)…….. _____ feet*
3. Elevation of the Bottom of Lowes Horizontal Structural Member…… _____ feet*
4. Elevation of Lowest Adjacent Grade…….. _____ feet*

*Indicate elevation datum used in 1-4: ☐NGVD29 ☐NAVD88 ☐Other _____

SECTION III: Breakaway Wall Design Certification Statement

Note: This section must be certified by a registered engineer or architect. Breakaway walls shall be designed to have a resistance of no less than 10psf and no more than 20psf. CMU foundation walls shall be constructed in accordance with Section 14-173 (h) of the Town's ordinance.

I certify that: (1) I have developed or reviewed the structural design, plans, and specifications for construction of breakaway walls to be constructed under the above-referenced building and (2) that the design and methods of construction specified to be used are in accordance with accepted engineering standards of practice** for meeting the following provisions:

- Breakaway wall collapse shall result from a water load less than that which would occur during the base flood***.
- The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components.
- Engineered hydrostatic venting has been installed in the breakaway wall system. The hydrostatic venting conforms to the required 1 square inch of net opening per square foot of floor are to be wet proofed.

Square feet of floor area_____ Net square inch of opening for each Hydrostatic vent _____

Total number of hydrostatic vents installed _____

SECTION IV: Certification and Seal

This certification is to be signed and sealed by a registered professional engineer or architect authorized by law to certify structural designs. I certify the Breakaway Wall Design Certification Statement (Section III, check if applicable).

Certifier's Name _____ License Number _____
Title _____ Company _____
Address _____

PLACE SEAL HERE

_____ _____
Signature Date