



Meeting Date: May 20, 2024

**TO:** Marco Island City Council  
**FROM:** Kelli DeFedericis, CFM, Floodplain Coordinator  
**DATE:** May 10, 2024  
**RE:** 230 Polynesia Ct., Marco Island, Floodplain Variance

**PROJECT DESCRIPTION:**

This variance request is requested by Kevin Williams Construction, Inc. (CBC 1254223) on behalf of their client who is the owner of 230 Polynesia Court, the Kristen Evans Living Trust. Building permit SF-22-02623.

The applicant is requesting a variance for Chapter 26-flood section 26-90(b)(2). The finished floor elevation is 8.6' NAVD, the required elevation is 9' NAVD.

The permit application was approved based on the flood zone at the time of application which was flood zone AE (Area Elevation) with a base flood elevation of 7' NAVD (North America Vertical Datum). As referenced in Chapter 26 the required minimum finished floor elevation for new construction in flood zone AE 7' NAVD, is 9' NAVD. This structure has a final finished floor elevation of 8.6' NAVD, below the required elevation of 9' NAVD due to a surveying error.

**A message from the original surveyor David Hyatt, PSM of Marco Surveying and Mapping –**

*“In June of 2022 Marco Surveying & Mapping performed a survey of 230 Polynesia Court. The process of the survey resulted in a procedural error that resulted in the elevations of the initial survey and the project control too low by 0.5 feet. What we understood to be a 9.1 elevation on our benchmark, was actually an 8.6, At the time of the foundation location the elevations were checked from that benchmark and checked against the project control, failing to indicate that the foundation was too low. This error was completely unintentional and inadvertent.”*

**Sec. 26-37. - Variances and appeals. Considerations for issuance of a Variance**

(f) *Considerations for issuance of variances.* In reviewing requests for variances, the Marco Island City Council shall consider all technical evaluations, all relevant factors, all other applicable provisions of the Florida Building Code, this ordinance, and the following:

- (1) The danger that materials and debris may be swept onto other lands resulting in further injury or damage;**  
All machinery servicing the structure must be elevated to the required elevation of 9' NAVD.
- (2) The danger to life and property due to flooding or erosion damage;**  
The finished floor elevation is 8.6' NAVD, above the 100-year storm at the time of building application approval; and above the Florida Building Code requirement of base flood elevation plus one foot (8' NAVD).
- (3) The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners;**  
The finished floor elevation is 8.6' NAVD, above the 100-year storm at the time of building application approval; and above the Florida Building Code requirement of base flood elevation plus one foot (8' NAVD).

**(4) The importance of the services provided by the proposed development to the community;**

This is a residential property, there will be no public services provided.

**(5) The availability of alternate locations for the proposed development that are subject to lower risk of flooding or erosion;**

The structure is fully constructed. The elevation certificate provided at the time the foundation was poured certified the finished floor elevation was compliant at 9.1' NAVD.

**(6) The compatibility of the proposed development with existing and anticipated development;**

The finished floor elevation will have no adverse impact to adjacent properties.

**(7) The relationship of the proposed development to the comprehensive plan and floodplain management program for the area;**

There are no floodplain development requirements within the comprehensive plan, that would be affected by this decision or approval of the variance.

**(8) The safety of access to the property in times of flooding for ordinary and emergency vehicles;**

There is no adverse effect to the property due to the finished floor elevation.

**(9) The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and**

The 100-yr storm elevation at the time of construction was 7' NAVD. The finished floor elevation is above the 100-yr storm, with a finished floor elevation of 8.6' NAVD.

**(10) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets and bridges.**

There is no adverse effect to public property.

*(g) Conditions for issuance of variances.* Variances shall be issued only upon:

**(1) Submission by the applicant, of a showing of good and sufficient cause that the unique characteristics of the size, configuration, or topography of the site limit compliance with any provision of this ordinance or the required elevation standards;**

yes

**(2) Determination by the Marco Island City Council that:**

**a. Failure to grant the variance would result in exceptional hardship due to the physical characteristics of the land that render the lot undevelopable; increased costs to satisfy the requirements or inconvenience do not constitute hardship;**

Yes, the house is fully constructed.

**b. The granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nor create nuisances, cause fraud on or victimization of the public or conflict with existing local laws and ordinances; and**

No

**c. The variance is the minimum necessary, considering the flood hazard, to afford relief.**

Yes, the house is fully constructed.

**(3) Receipt of a signed statement by the applicant that the variance, if granted, shall be recorded in the office of the clerk of the court in such a manner that it appears in the chain of title of the affected parcel of land; and**

This item must be completed to issue the Certificate of Completion

**(4) If the request is for a variance to allow construction of the lowest floor of a new building, or substantial improvement of a building, below the required elevation, a copy in the record of a written notice from the floodplain administrator to the applicant for the variance, specifying the difference between the base flood elevation and the proposed elevation of the lowest floor, stating that the cost of federal flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation (up to amounts as high as \$25.00 for \$100.00 of insurance coverage), and stating that construction below the base flood elevation increases risks to life and property.**

This letter will be provided upon Council's determination.

**STAFF ANALYSIS:**

**Floodplain Review and approval**

Original Flood Insurance Rate Map 05/16/2012 Base Flood Elevation AE 7' NAVD

Florida Building Code (7<sup>th</sup> edition) Requirement – Base flood elevation plus one foot

Original plan review approval – 05/27/2022 – Finished floor elevation approved 9' NAVD

Under-construction elevation certificate approved – 01/10/2023 certified the finished floor elevation of 9.1' NAVD

With the adoption of the 2024 Flood Insurance Rate Map (FIRM), the base flood elevation increased from 7' NAVD to 9' NAVD. Whether the structure has a finished floor elevation of 8.6' NAVD and or 9' NAVD, it would still fall within FEMA's 50% threshold. If constructed new today the required finished floor elevation would be 10' NAVD.

With the algorithm of Risk Rating 2.0:

1. I am not able to advise if approving the variance will have an adverse effect to any future flood insurance policy.
2. I cannot confirm if the issuance of the variance will have an adverse effect on the Community Rating System's discount.
3. I cannot confirm if the structure will be added to FEMA's National Violation Tracker list. I have reached out to FEMA for clarification.

With the increase in the base flood elevation, it cannot be determined if this structure will endure any future flooding as it is now below the 100-year storm; with regard to the new flood insurance rate map dated 02/08/2024. However, this property is not located within a *repetitive loss area*\*. (Map enclosed)

*\* An NFIP-insured structure that has had at least 2 paid flood losses of more than \$1,000 each in any 10-year period since 1978.*

**STAFF RECOMMENDATION:**

By approval of the floodplain variance and due to the nature of the error staff believes there will be no adverse effect to the adjacent properties.

Any future additions, conversions or added machinery that services the structure must be elevated to the required elevation at the time of the original permit issuance; 9' NAVD. No future additions, conversion or added machinery can be installed at the elevation of 8.6' NAVD.

If approved the applicant must submit updated plans to reflect the true finished floor elevation. Any plan that reflects the approved elevation of 9' NAVD, must be updated to reflect the final finished floor elevation of 8.6' NAVD.