



**TO:** Marco Island City Council

**FROM:** Kelli DeFedericis, CFM, Floodplain Coordinator

**DATE:** August 19, 2024

**RE:** 230 Polynesia Ct., Marco Island, Floodplain Variance

**PROJECT DESCRIPTION:**

This variance is requested by Kevin Williams Construction, Inc. (CBC 1254223) on behalf of their client for building permit SF-22-02623. The contractor is requesting to allow the machinery servicing the structure to remain at elevation 8.7' NAVD, which is below the required elevation of 9' NAVD. This variance request is for Chapter 26-flood section 26-97 Other Development (a)(5); *Have mechanical, plumbing, and electrical systems above the design flood elevation or meet the requirements of ASCE 24, whichever is greater, except that minimum electric service required to address life safety and electric code requirements is permitted below the design flood elevation provided it conforms to the provisions of the electrical part of building code for wet locations*

The permit was issued in 2022 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 elevation for new mechanical, plumbing, and electrical systems are to be above the design flood elevation or meet the requirements of ASCE 24. For this property the minimum would be 9' NAVD, and the machinery was installed at 8.7' NAVD.

**STAFF ANALYSIS:**

Staff used the below criteria to review the variance request.

**Sec. 26-37. - Variances and appeals.**

(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;**  
The danger arises when the equipment becomes debris from the force of the flood waters.
- (2) The danger to life and property due to flooding or erosion damage;**  
The danger arises when the machinery servicing the structure becomes submerged in the flood waters making it inoperable. Inoperable machinery makes the house inhabitable.
- (3) The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners;**  
Machinery that is below the required elevation has a greater chance of being submerged in flood water rendering it inoperable.
- (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;**

Yes, there is an alternative and that is to elevate the machinery.

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

Proposed (new) development would require the machinery to be 10' NAVD.

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

Policy 6.1.2.1

All development and major redevelopment shall be consistent with the flood-resistant construction requirement in the Florida Building Code and applicable flood plain management regulations set forth in 44 CFR part 60.

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

Machinery elevation would not affect access to the property unless it became debris.

**(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 design flood elevation for Marco Island, in this area is 9' NAVD. For comparison the flood risk increased from the 2012 maps to the 2024 from AE 7' NAVD to 10' 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;**

The contractor has not provided good and sufficient cause that the unique characteristics of the size, configuration or topography limits the ability of elevation.

**(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;**

No. Failure to grant the variance would not result in exceptional hardship.

**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**

Yes. Machinery below the required elevation could create a nuisance and become debris. Machinery submerged in water can make the equipment not operable, having an adverse impact to the livability of structure.

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

Contractors on the island have demonstrated time and time again they have the capability to elevate all necessary machinery servicing the structure.

**(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**

If approved, 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 variance request is to allow the machinery servicing the structure to be below the required elevation. This line item does not apply.

**Staff Recommendation:**

*Staff Recommends denial based on the below findings:*

1. The contractor has not provided good and sufficient cause that the unique characteristics of the size, configuration or topography limits the ability of elevation.
2. The danger arises when the equipment becomes debris from the force of the flood waters.
3. The danger arises when the machinery servicing the structure becomes submerged in the flood waters making it inoperable. Inoperable machinery makes the house inhabitable.
4. Machinery that is below the required elevation has a greater chance of being submerged in flood water rendering it inoperable.
5. This is a residential property, there will be no public services provided.
6. Yes, there is an alternative and that is to elevate the machinery.
7. Proposed (new) development would require the machinery to be 10' NAVD.
8. Machinery elevation would not affect access to the property unless it became debris.
9. The 100-yr storm elevation at the time of construction was 7' NAVD. The design flood elevation for Marco Island, in this area is 9' NAVD. For comparison the flood risk increased from the 2012 maps to the 2024 from AE 7' NAVD to 10' NAVD.
10. There is no adverse effect to public property.
11. The contractor has not provided good and sufficient cause that the unique characteristics of the size, configuration or topography limits the ability of elevation.
12. Failure to grant the variance would not result in exceptional hardship.
13. Machinery below the required elevation could create a nuisance and become debris. Machinery submerged in water can make the equipment not operable, having an adverse impact to the livability of structure.
14. Contractors on the island have demonstrated time and time again they have the capability to elevate all necessary machinery servicing the structure.