To: Mayor Farrer and the Honorable Members of the City Council

Prepared by: Jorge Rubalcava, Associate Civil Engineer

Reviewed by: Robert DuBoux, Public Works Director/ City Engineer

Approved by: Reva Feldman, City Manager

Date prepared: January 8, 2020  Meeting date: January 27, 2020

Subject: Floodplain Variance – 22000 Pacific Coast Highway

RECOMMENDED ACTION: Adopt Resolution No. 20-03 granting a variance from the floodplain coastal high hazard requirements for the construction of a bulkhead within a coastal floodplain at 22000 Pacific Coast Highway.

FISCAL IMPACT: There is no fiscal impact associated with the recommended action.

WORK PLAN: This item was not included in the Adopted Work Plan for Fiscal Year 2019-2020. This project is part of normal staff operations.

DISCUSSION: An application for development at 22000 Pacific Coast Highway has been submitted for the demolition of two existing beachfront single-family residences and construction of a new 9,563 single family residence. The new two-story single-family residence consists of shoreline protection, a new on-site wastewater treatment system (OWTS), and the construction of a new bulkhead (Coastal Development Permit Application No. 17-044). The project was reviewed by the Public Works Department and did not conform to the City’s floodplain management regulations because a new bulkhead is proposed to be built within a coastal high hazard area. The applicant seeks a variance to permit the bulkhead to be built within the coastal high hazard zone to protect the proposed OWTS.

The subject property is located in a Federal Emergency Management Agency (FEMA) identified Special Flood Hazard Area (SFHA), as shown on the attached map. More specifically, the proposed bulkhead is proposed to be located within a coastal high hazard area, Zone VE-18. Since the proposed development is within a FEMA designated SHFA, the improvements must conform to the City’s Floodplain Management Ordinance (M.M.C Chapter 15.20) and FEMA guidelines. The proposed bulkhead, however, is
prohibited within a coastal high hazard area under an elevated structure per MMC Section 15.20.150 (C) which reads as follows:

“All new construction and substantial improvement shall have the space below the lowest floor free of obstructions or constructed with breakaway walls as defined in Section 15.20.040 of this chapter. Such enclosed space shall not be used for human habitation and will be usable solely for parking of vehicles, building access or storage.”

The applicant has requested a variance (Attachment No. 4) from the requirements of MMC Section 15.20.150 (C) in order to construct a bulkhead as protection for the OWTS disposal field. The applicant has considered all possible alternatives for the OWTS, including alternative locations, seepage pits, hauling of the waste off-site, none of which prove feasible. The OWTS as designed is the smallest possible to meet the code requirements, including groundwater separation. The OWTS dispersal field has been designed to be located on the property as far landward as possible. Because of the size of the lot and the coastal floodplain delineation, there are no other feasible alternatives for the OWTS.

The floodplain management regulations do provide for a variance to be considered. The conditions for a variance are specified in Section 15.20.200 of the MMC. In accordance with the MMC, variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

Findings
The determinations made for each condition for a variance as specified in Section 15.20.200 of the MMC are as follows:

A. Generally, variances may be issued for new construction, substantial improvement, and other proposed new development to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing that the procedures of Sections 15.20.060 to 15.20.090 and Sections 15.20.100 to 15.20.180 of this chapter have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.

The development includes the demolition of two existing beachfront single-family homes and the construction of a new single-family residence, a new OWTS, and a new bulkhead, bounded by residential properties on the east and west, the Pacific Ocean to the south, and Pacific Coast Highway to north. The provisions of MMC Sections 15.20.060 to 15.20.090 and Sections 15.20.100 to 15.20.180 have been considered. The proposed improvements for 22000 Pacific Coast Highway would otherwise comply with each of the requirements of the floodplain regulations other than for what is being considered for a bulkhead in the coastal high hazard area.
B. Variances may be issued for the repair or rehabilitation of "historic structures" (as defined in Section 15.20.040 of this chapter) upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

The requested variance does not involve a historic building.

C. Variances shall not be issued within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result.

The requested variance is for a structure that would not be located within a regulatory floodway.

D. Variances shall only be issued upon a determination that the variance is the minimum necessary considering the flood hazard, to afford relief. "Minimum necessary" means to afford relief with a minimum of deviation from the requirements of this chapter. For example, in the case of variances to an elevation requirement, this means the city council need not grant permission for the applicant to build at grade, or even to whatever elevation the applicant proposes, but only to that elevation which the city council believes will both provide relief and preserve the integrity of this chapter.

The variance requested is the minimum necessary for development of the property. The structure can comply with the Floodplain Management Ordinance in all other aspects. Without protection for the OWTS, the development of the property as proposed is not possible.

E. Variances shall only be issued upon a
   1. Showing of good and sufficient cause pertaining to unusual characteristics of the property;
   2. Determination that failure to grant the variance would result in exceptional "hardship" (as defined in Section 15.20.040 of this chapter) to the applicant; and
   3. Determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create a nuisance (as defined in Section 15.20.040, see "Public safety or nuisance"), cause fraud or victimization (as defined in Section 15.20.040) of the public, or conflict with existing local laws or ordinances.

1. Approximately 50% of the property is located within a coastal high hazard zone (FEMA Flood Zone VE-18) that leaves no area to construct the OWTS system to meet the City's Floodplain Management Ordinance.
2. Hardship applies as there are no other alternatives that would allow the OWTS without protection from a bulkhead.

3. The granting of the variance is considered to not create a significant increase in flood heights. The variance would not result in additional threats to public safety or create extraordinary public expense as the development is to occur on private property and the property owner would be fully responsible for the proposed improvements. The variance would not create a nuisance as the variance would not result in anything that is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstruct the free passage or use, in the customary manner, of any navigable lake, river, bay, stream, canal, or basin based on the design of the proposed bulkhead. The proposed bulkhead is to be constructed on a separate concrete pile foundation independent of the pile foundation for the residential structure.

**F. Variances may be issued for new construction, substantial improvement, and other proposed new development necessary for the conduct of a functionally dependent use provided that the provisions of subsections A through E of this section are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and does not result in additional threats to public safety and does not create a public nuisance.**

Subsections A through E have been considered and determinations made in regard to the bulkhead as indicated above. The single-family residence shall meet the requirements of the City’s Floodplain Management Ordinance.

**G. Upon consideration of the factors and purposes of this chapter, the City Council may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.**

The applicant will be required to submit detailed plans for the proposed bulkhead for the review and approval of staff prior to issuance of building permits. Staff recommends the following conditions be imposed:

1. The bulkhead shall be located no further seaward than deemed necessary.

2. The bulkhead shall be designed on an independent foundation separate from the foundation of the residential structure.

3. The variance shall become effective only upon issuance of a Coastal Development Permit for the property at 22000 Pacific Coast Highway

The Council may wish to impose other specific conditions.
In granting a variance, from the terms of a floodplain management regulation, the Council should consider FEMA’s policy that variances from flood elevation or other requirements in the Floodplain Management Ordinance should be rare because a variance can create an increased risk to life and property. FEMA’s policy is that it may review a community's findings justifying the granting of variances, and, if that review indicates a pattern inconsistent with the objectives of sound floodplain management, FEMA may take appropriate action up to and including suspending the community from the National Flood Insurance Program.

ATTACHMENTS:

1. Resolution No. 20-03
2. FEMA Flood Map
3. Site Plan
4. Request for Variance letter dated July 31, 2019
The City Council of the City of Malibu does hereby find, order, and resolve as follows:

SECTION 1. Recitals.

A. An application for development at 22000 Pacific Coast Highway has been submitted for the demolition of two existing beachfront single-family residences and construction of a new 9,563 single family residence. The new two-story single-family residence consists of shoreline protection, a new on-site wastewater treatment system (OWTS), and the construction of a new bulkhead (Coastal Development Permit Application No. 17-044).

B. The development as proposed includes a bulkhead within a coastal floodplain as delineated in the preliminary Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps.

C. The project applicants have requested a variance for the construction of a bulkhead within a coastal floodplain.

D. The conditions for a granting of a floodplain variance are specified in Section 15.20.200 of the Malibu Municipal Code (M.M.C.)

E. The conditions for a variance as specified in Section 15.20.200 of the M.M.C. has been considered. The required determinations are made as follows:

1. Generally, variances may be issued for new construction, substantial improvement, and other proposed new development to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing that the procedures of Sections 15.20.060 to 15.20.090 and Sections 15.20.100 to 15.20.180 of this chapter have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.

The development includes the demolition of two existing beachfront single-family homes and the construction of a new single-family residence, a new OWTS, and a new bulkhead, bounded by residential properties on the east and west, the Pacific Ocean to the south, and Pacific Coast Highway to north. The provisions of MMC Sections 15.20.060 to 15.20.090 and Sections 15.20.100 to 15.20.180 have been considered. The proposed improvements for 22000 Pacific Coast Highway would otherwise comply with each of the requirements of the floodplain regulations other than for what is being considered for a bulkhead in the coastal high hazard area.
2. Variances may be issued for the repair or rehabilitation of "historic structures" (as defined in Section 15.20.040 of this chapter) upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

The requested variance does not involve a historic building.

3. Variances shall not be issued within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result.

The requested variance is for a structure that would not be located within a regulatory floodway.

4. Variances shall only be issued upon a determination that the variance is the minimum necessary considering the flood hazard, to afford relief. "Minimum necessary" means to afford relief with a minimum of deviation from the requirements of this chapter. For example, in the case of variances to an elevation requirement, this means the city council need not grant permission for the applicant to build at grade, or even to whatever elevation the applicant proposes, but only to that elevation which the city council believes will both provide relief and preserve the integrity of this chapter.

The variance requested is the minimum necessary for development of the property. The structure can comply with the Floodplain Management Ordinance in all other aspects. Without protection for the OWTS, the development of the property as proposed is not possible.

5. Variances shall only be issued upon a
   a. Showing of good and sufficient cause pertaining to unusual characteristics of the property;
   b. Determination that failure to grant the variance would result in exceptional "hardship" (as defined in Section 15.20.040 of this chapter) to the applicant; and
   c. Determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create a nuisance (as defined in Section 15.20.040, see "Public safety or nuisance"), cause fraud or victimization (as defined in Section 15.20.040) of the public, or conflict with existing local laws or ordinances.

   1. Approximately 50% the property is located within a coastal high hazard zone (FEMA Flood Zone VE-18) that leaves no area to construct the OWTS system to meet the City’s Floodplain Management Ordinance.

   2. Hardship applies as there are no other alternatives that would allow the OWTS without protection from a bulkhead.
3. The granting of the variance is considered to not create a significant increase in flood heights. The variance would not result in additional threats to public safety or create extraordinary public expense as the development is to occur on private property and the property owner would be fully responsible for the proposed improvements. The variance would not create a nuisance as the variance would not result in anything that is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstruct the free passage or use, in the customary manner, of any navigable lake, river, bay, stream, canal, or basin based on the design of the proposed bulkhead. The proposed bulkhead is to be constructed on a separate concrete pile foundation independent of the pile foundation for the residential structure.

6. Variances may be issued for new construction, substantial improvement, and other proposed new development necessary for the conduct of a functionally dependent use provided that the provisions of subsections A through E of Section 15.020.200 are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and does not result in additional threats to public safety and does not create a public nuisance.

Subsections A through E have been considered and determinations made in regard to the bulkhead as indicated above. The single-family residence shall meet the requirements of the City’s Floodplain Management Ordinance.

SECTION 2. The City Council does hereby grant a variance for the construction of a bulkhead at 22000 Pacific Coast Highway within a coastal floodplain subject to the following conditions:

A. The bulkhead shall be located no further seaward than deemed necessary.

B. The bulkhead shall be designed on an independent foundation separate from the foundation of the residential structure.

C. The variance shall become effective only upon issuance of a Coastal Development Permit for the property at 22000 Pacific Coast Highway.

SECTION 3. The City Clerk shall certify to the passage and adoption of this resolution and enter it into the book of original resolutions.

PASSED, APPROVED, and ADOPTED this 27th day of January 2020.

KAREN FARRER, Mayor

ATTEST:

HEATHER GLASER, City Clerk
(seal)
APPROVED AS TO FORM:

THIS DOCUMENT HAS BEEN REVIEWED
BY THE CITY ATTORNEY’S OFFICE

CHRISTI HOGIN, City Attorney
July 31, 2019

Seek Estates LLC
15760 Ventura Blvd. Suite 1150
Encino, CA 91436

Subject: City of Malibu Variance Request
for New OWTS Protective Seawall within FEMA VE Zone
22000-22008 Pacific Coast Highway
Malibu, CA 90265
APN 4451-005-022
APN 4451-005-023

Our Job # 15119.SEE.WUS

Reference:

1. Wave Uprush Study / Coastal Engineering Report for New Residence
   22000-22008 Pacific Coast Highway
   Malibu, CA 90265
   APN 4451-005-022
   APN 4451-005-023
   By: Pacific Engineering Group
   Dated: September 2, 2016

2. Addendum #1 Wave Uprush Report
   Prepared by: Pacific Engineering Group
   Dated: March 24, 2017

3. Timber Bulkhead Seawall Plans
   22000-22008 Pacific Coast Highway
   Malibu, CA 90265
   Prepared by: Pacific Engineering Group
   Dated: February 2018

4. FEMA Flood Map (FIRM) ## 06037 C 1542G dated October 2016.

5. AOWTS Conformance Review Site Plan
   Prepared by: MKN
   Dated: March 27, 2017

1.0 Purpose

The purpose of this report is to formally request a City of Malibu Variance for the proposed timber bulkhead seawall intended to protect the proposed OWTS for a new single-family residence planned at the subject parcel.

1.1 The OWTS as proposed is located at the most landward location feasible in conformance with City of Malibu LCP-LIP Section 10.4(J). The referenced OWTS plan prepared by MKN specifies that the proposed OWTS will consist of a septic tank, a 459.3 square foot leach field, and supportive distribution lines and boxes. Based on the referenced OWTS plan the OWTS as proposed is to be on the west side of the subject property below the proposed side yard.
The seaward extent of the proposed leach field shown on the referenced OWTS plan is approximately 66'-5" seaward of the Pacific Coast Highway right-of-way line.

1.2 The proposed timber bulkhead seawall will be located 72'-11" seaward of the Pacific Coast Highway right-of-way line at the most landward location feasible to protect the proposed OWTS. The proposed residence is designed as to not rely on the proposed timber bulkhead seawall for protection from coastal hazards such as wave uprush and/or beach scour and erosion. The proposed timber bulkhead seawall is located at the proposed location to allow a 5-foot setback distance in addition to an 18" filter rock layer from the edge of the OWTS leachfield in conformance with City of Malibu Environmental Health Department Guidelines.

1.3 The referenced FEMA Flood Map (FIRM) indicates that the VE Zone extends landward on the subject parcel to a location 65 feet seaward of the Pacific Coast Highway right-of-way line. Based on this map the proposed timber bulkhead seawall encroaches into the FEMA VE Zone by a distance of 7'-11". City of Malibu Public Works Department requires that all structures located within the VE zone and below the Base Flood Elevation (BFE) be designed as breakaway (with the exception of vertical piles). The proposed timber bulkhead seawall cannot be designed as a "breakaway" structure and still protect the proposed OWTS from coastal hazards. Therefore, a City of Malibu Variance is requested to allow the proposed timber bulkhead seawall to be constructed at the location proposed. The proposed timber bulkhead seawall will protect only the proposed OWTS.

2.0 Showing of Good and Sufficient Cause pertaining to Unusual Characteristics of the Subject Parcel

2.1 The subject parcel is located on Carbon Beach seaward of Pacific Coast Highway in the City of Malibu, California. Coastal Engineering Analysis performed by Pacific Engineering Group has established that the wave uprush limit of the subject parcel will extend to a location 10 feet landward of the Pacific Coast Highway right-of-way line. As such, the entire subject parcel is located within the wave uprush zone and any OWTS located on the subject parcel will require a shoreline protection device (seawall) to protect the OWTS from Coastal Hazards in conformance with City of Malibu Environmental Health Department Guidelines.

2.2 Both the proposed OWTS and the proposed Timber Bulkhead Seawall are located as far landward as feasible in conformance with City of Malibu LCP-LIP section 10.4 Guidelines. The proposed seawall has the smallest footprint feasible and protects only the proposed OWTS from coastal hazards. The proposed seawall is a vertical type shoreline protection device, and as such, conforms to the City of Malibu LCP-LIP Section 10.4 as the "Preferred" shoreline protection device.

2.3 There is no other location to construct the proposed OWTS or the proposed timber bulkhead seawall.

3.0 Failure to Grant the Variance would result in Exception Hardship

3.1 As stated above, since the entire subject parcel is within the wave uprush zone, any OWTS located on the subject parcel requires a shoreline protection device to protect the OWTS from Coastal Hazards in conformance with City of Malibu Environmental Health Department Requirements. Failure to allow for a variance will prevent the construction of the proposed timber bulkhead seawall, thus exposing the proposed OWTS to Coastal Hazards.

3.2 As stated above there is no other feasible location to locate the proposed OWTS and the proposed Timber Bulkhead Seawall. The only other alternative available would be the "no OWTS" alternative which would render the subject parcel unusable for residential development.

3.3 Granting the variance would not result in increase wave uprush or wave heights. Granting the variance will not increase exposure to coastal hazards to the proposed project or the existing adjacent properties.

3.4 The subject seawall as proposed has been examined and approved by City of Malibu Coastal Engineering Review, Environmental Health Review, Geology Review, City Planning Review, and Building and Safety Review, and found to conform to those department requirements and applicable code sections.
Based on the above discussion, Pacific Engineering Group requests that a City of Malibu Variance be granted for the proposed timber bulkhead seawall referenced above.

Please call us if you should have any questions regarding the results and findings of this report.

Respectfully submitted,

Pacific Engineering Group

Reg K. Browne PE
President
CE 40552

Project # 15119.SEE.WUS.ADD1
Seawall Variance Report
Date: July 31, 2019
22000-22008 Pacific Coast Highway
Malibu, CA 90265
APN 4451-005-022
APN 4451-005-023