

PROJECT SUMMARY

The owner/applicant, Martin Casado, is requesting coastal permit amendment for construction of an underground soldier-pier and tieback system on the subject property located at 8 Ocean Avenue, Bolinas CA. Off-site disturbances and improvements and 2022/2023 winter weather events have continued to cause erosion on the subject property including: an unmitigated/improper site disturbance on neighboring property to the east; and a permitted retaining wall on the west that needs attention at the assumed property line. Consistent with the original coastal permit approval (Project ID P2942) on April 15, 2021, this amendment is required to protect the main residence at 8 Ocean (as well as the neighboring residence at 105 Terrace). Although, existing and proposed infrastructure is located near the bluff face, these improvements are not proposed to protect accessory structures and are located specifically to arrest erosion that will cause impacts to the residence foundation if not as promptly implemented.

The proposed project would include after the fact permitting of one on site pier and tieback system, a 64-foot section on the east side (down-coast), and one new improvement, an approximate 140-foot section on the west side (up-coast). In addition, the project requires constructing a new nine-foot section of soldier piers, including a singular tieback to help reinforce the area adjacent to the erosion on the eastern property boundary and protect existing residential structures and infrastructure. The existing residence was constructed prior to the California Coastal Act of 1976. The project site includes a 3.32-acre single-family residential parcel consisting of mainly ornamental landscaping, coastal bluff, and beach. No other improvements or modifications to the subject property is proposed. No modifications or increase in existing residential structures is proposed.

The proposed project has been re-designed to respond to California Coastal Commission comments following a May 2021 coastal permit approval from the County of Marin. The proposed amendment follows the guidelines set forth for coastal development in Marin County, and the policies and guidelines presented in the newly adopted Local Coastal Program Unit I and the Bolinas Gridded Mesa Community Plan. As the new LCP still does not have any language regarding environmental hazards, this includes ensuring that the proposed construction is consistent with the Marin County Municipal Code (Interim) Section 22.57.130I(k) for shoreline protective works. No sensitive habitat or features would be disturbed, and no trees would be removed as a result of the project. The proposed project would feature only underground or at grade improvements and would not be visible from the beach below.

Project Goals and Objectives

The overall goal for the proposed project is to make improvements that will enable using the subject property for the next 40+ years by arresting localized erosion caused by site disturbance occurring on neighboring properties.

The objectives for the proposed project are:

1. Permit an underground soldier-pile pier and tieback support system to prevent localized erosion and protect two single-family dwellings.

2. Permit improvements to reduce the accelerated rate of localized erosion adjacent to the bluff face.
3. Eliminate potentially hazardous conditions (areas exposed by erosion or landsliding) on 20 Ocean Avenue to the east, and 105 Terrace to the west.
4. Relieve the economic burden to the two homeowners.

The proposed project is consistent with the 2015 Marin Countywide Plan, the Marin County Local Coastal Program Unit I, the Bolinas Community Area Plan (1978), and the California Coastal Act (1976).

PROJECT DESCRIPTION

GENERAL INFORMATION:

APN:	193-172-17
Countywide Plan:	C-SF5 (Coastal, Single-family, 1 unit/1.5 acres)
Community Plan:	Bolinas Community Area Plan
Zoning:	C-RA B2 (Coastal, Single-family residential, 10,000-sf minimum lot size
Lot size:	3.32 acres – 144,619 sq ft
Adjacent Land Uses:	Residential, bluff, beach, Pacific Ocean
Vegetation:	Non-native grassland, coastal scrub, unmaintained landscape ornamentals
Topography and Slope:	Moderately to steeply sloping
Environmental Hazards:	N/A

Project Location

The proposed project at 8 Ocean Avenue, Bolinas, CA, (APNs: 193-172-17) is located in the unincorporated Bolinas community in west Marin. The site is located adjacent to the coastal strand/beach to the south and Ocean Avenue to the north. The site is accessed via Ocean Avenue, off Terrace Avenue, an unmaintained County road. Figure 1 and 2, Vicinity Map and Project Location Map, above, indicates the project site and its relationship to the surrounding community.

Topography and Landform

The highest point of the property, the eastern edge of the subject property, is approximately 172-feet above sea level (asl) NAVD '88. The lowest elevation is approximately 0 feet asl NAVD '88 in the southern area of the site where the property meets the Pacific Ocean. The location for the proposed improvement is located approximately within the 165' to 169' asl contours of the subject property along the eastern edge of the existing development above the bluff face. In this location, a small landslide has formed in an northeast to southwest diagonal to the main bluff face, as a result of improper site work on the neighboring property. The topography where is generally sloping from the north to the south, until the bluff face at elevation 160' asl, where the bluff drops to the beach below. The yard area

adjacent to the main residence actually slopes south to north (from 171' at the bluff face to 169' at the residence).

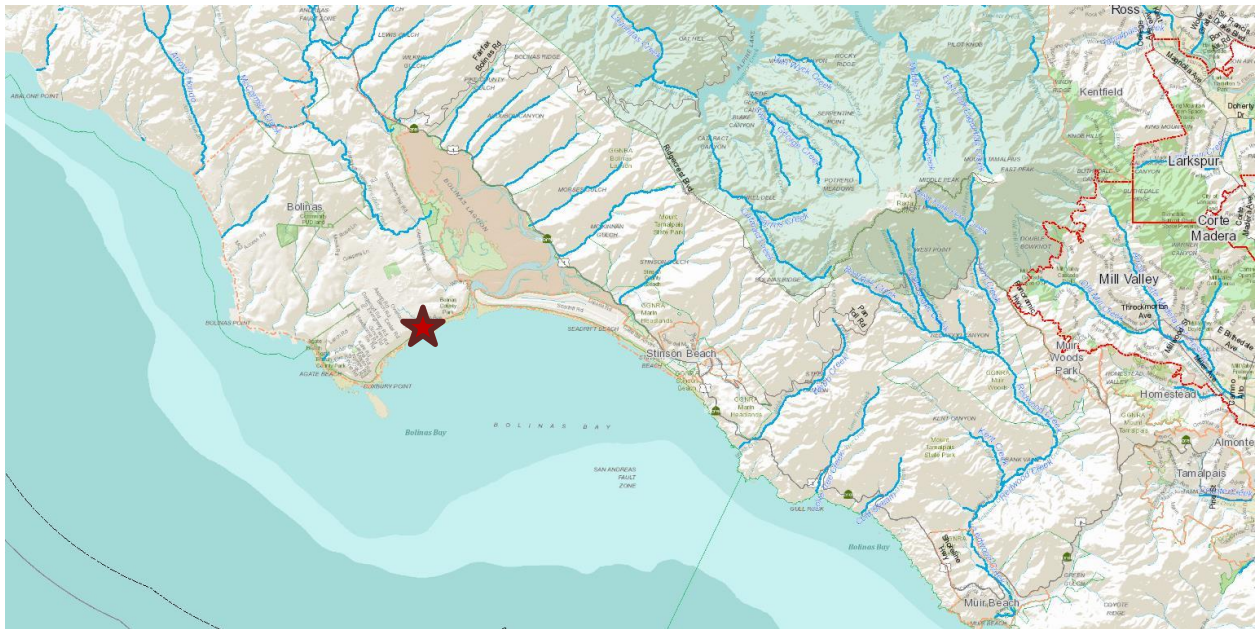


Figure 1: Vicinity Map

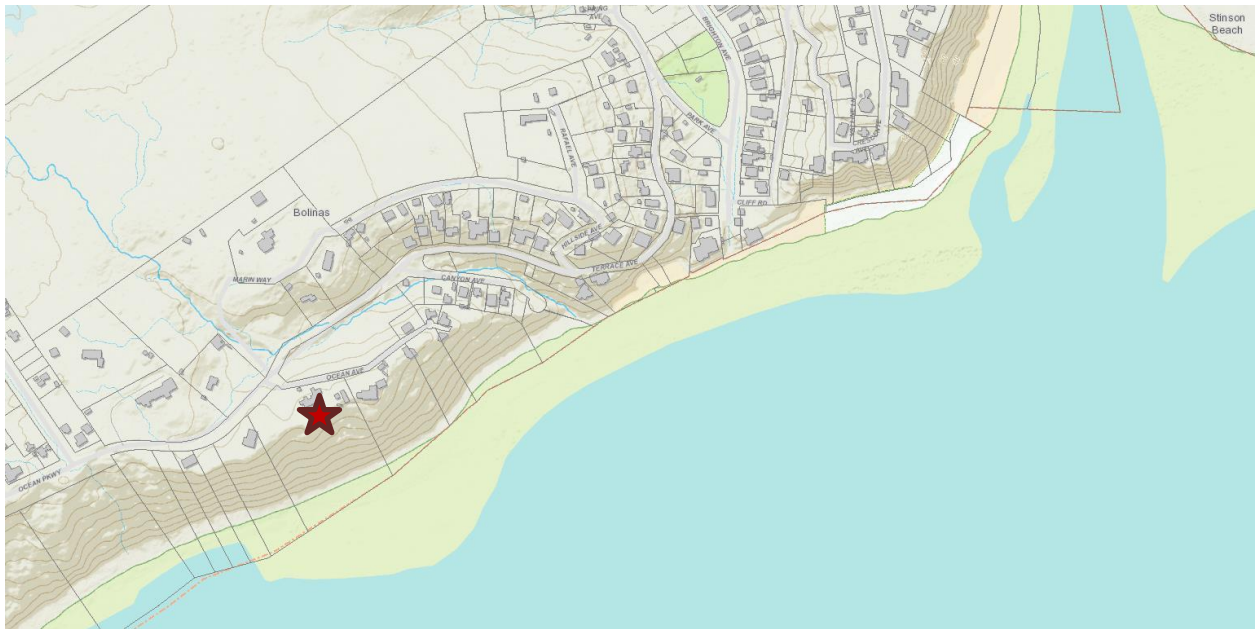


Figure 2: Project Location Map

Existing and Adjacent Land Uses

The project site is currently developed with a single-family residence constructed in 1958. The Countywide Plan's land use designation for the property is Coastal Single Family (C-SF5 -, Low Density

Residential Coastal Zone). The County's zoning designation is (C-RA-B2, Coastal Residential, 10,000 sq ft minimum lot size).

The vegetation of the project area is typical of rural developed properties on the Marin Coast with a mixed mosaic of intentional landscaping, escaped ornamentals, and naturalized weeds. The regional vegetation is a mix of undeveloped to residential developed properties of prairies, annual grasslands, coastal scrubs, and coastal woodland groves. The majority of the developed portion of the site is characterized as disturbed or developed landscaped/grassland.

Property Constraints

The proposed project does not include any disturbance within setbacks or sensitive habitats. The proposed project includes construction of an underground pier and tieback system with minimal grading or excavation required. No vegetation would be removed as a result of the project.

Proposed Project

The project includes the permitting of two sections of an underground soldier-pier and tieback system to prevent further localized erosion to the southwest and southeast of the existing residential structure. In addition, construction of a nine-foot section at the eastern property boundary will complete the overall soldier-pier system to prevent further erosion. Pursuant to MCMC Section 22.72.015i, the proposed improvements are located within the side yard setback but will be constructed underground or at grade. The proposed improvements are designed to protect the existing primary residence against future environmental hazards for an additional 40+ years. In addition, the proposed improvements will ensure the stability of both the 8 Ocean residence as well as the residence at 105 Terrace. Without completion of the western (up-coast) wall, the viability of both 8 Ocean and 105 Terrace are at extreme risk from increased precipitation during the 2022/2023 winter storm events.

Scott Stevens of Miller Pacific Engineering (MPEG) provided a subsequent geotechnical analysis in November 2022. In the November 2022 MPEG statement, the new design will ensure stability for both 8 Ocean and 105 Terrace. Without this upcoast wall improvement, the residences at both properties would be susceptible to erosion from storm events. The upcoast wall would entail drilling 19 concrete encased steel soldier pile pier and tieback system and a 140-foot-long grade beam to protect 105 Terrace and 8 Ocean. Proposed construction would involve drilling soldier piles approximately 8'-0" on center approximately 24 inches in diameter and estimated to be approximately 40-feet in length. Six-inch diameter Steel tie-back cables would be directionally drilled into bedrock at depths of 70' minimum at conventional track-mounted drilling rigs can easily access the site and be used to drill piers at the subject property. Drilling of proposed piers would create limited spoils that would be reencountered on-site as needed. This new design is compatible with original observations of existing geologic site conditions, analysis of historical aerial photos, and review of prior studies in the area from Robert Settgest of Geoengineering, Inc. and William Moore.

Settgest and Moore provided geotechnical evaluation in 2020 and 2021, and determined the natural rate of bluff retreat in the middle of the project site has been nearly static for over twenty years. The

proposed project has been evaluated for code consistency pursuant to Marin County Development Code (MCMC) Interim § 22.57.130I(k) Shoreline Protection. Given the existing conditions adjacent to the subject property, and pursuant to MCMC § 2.57.130I(k)(2), shoreline protective works are allowable based on the following criteria:

2. Standards and requirements for shoreline protective works. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline process shall be permitted only when:

- a. Required to serve coastal-dependent uses or to protect existing structures (constructed before adoption of the LCP).*
- b. No other nonstructural alternative is practical or preferable.*
- c. The condition causing the problem is site specific and not attributable to a general erosion trend, or the project reduces the need for a number of individual projects and solves a regional erosion problem.*
- d. The structure will not be located in wetlands or other significant resource or habitat area, and will not cause significant adverse impacts to fish or wildlife.*
- e. There will be no reduction in public access, use and enjoyment of the natural shoreline environment, and construction of a structure will preserve or provide access to related public recreational lands or facilities.*
- f. The structure will not restrict navigation, mariculture or other coastal use and will not create a hazard in the area in which it is built.*

Per the Marin County Assessor's records, and stated above, the existing residence was constructed in 1958, prior to the drafting of the California Coastal Act. Mr. Moore and Settgest concluded that given the slide area off property, no alternative is feasible or practical and that site observations indicate the major contributor to erosion is site specific due to the unmitigated erosion caused by activities on the adjacent property. The proposed construction perpendicular to the property boundary will prevent near future erosion issues for the subject property and would potentially eliminate the need for multiple individual projects. Furthermore, permitting the final nine-foot section will reinforce existing improvements constructed in 2007.

There is no public access to the shoreline below where proposed improvements would be constructed, and the proposed improvement would not result in impacts to navigation, maricultural or any other coastal use. Finally, construction is expected to only occur from the elevated portions of the property, and no construction impacts would be required on the bluff face or at beach level. The buried piers will help protect the slope from future failure.

The proposed project also includes an additional nine-foot long soldier pile pier and tieback system to protect the existing structures on the east (downslope) side of the property. Proposed construction would involve drilling soldier piles approximately 4'-0" on center approximately 24 inches in diameter and embedded 5 feet into bedrock. Steel piers are estimated to be approximately 40-feet in length. Six-inch diameter Steel tie-back cables would be directionally drilled into bedrock at depths of 70' minimum

at Conventional track-mounted drilling rigs can easily access the site and be used to drill piers at the subject property. Drilling of proposed piers would create limited spoils that would be reencountered on-site as needed.

Drainage and Impervious surfaces

As part of the proposed project no new drainage plan is required to convey surface run-off and run-off from existing structures. Run-off is currently directed northwest away from the bluff where it will be redirected through the existing drainage dispersion towards the north (away from the bluff face). No new impervious surfaces are proposed as part of the project.

LOCAL COASTAL PROGRAM UNIT I CONSISTENCY

Marin County Local Coastal Program, Implementation Plan Section 22.70.070

A. Coastal Access:

The development area on the property is not located adjacent to a coastal area that is identified by the Local Coastal Program, Unit I, as an area where public access is desirable or feasible. Proposed improvements are located on areas of the project site that would not be used for access to the beach below.

B. Wildlife Habitat / Protection of Native Plant Communities:

The project area does not have the potential to support special-status wildlife; therefore, the proposed project plans within the project area will not result in impacts to special-status wildlife. No improvements are proposed off the property or in areas adjacent to any potential sensitive habitats. No improvements are proposed off the property or in areas adjacent to any potential sensitive habitats or special-status plants. No vegetation removal or site disturbance is proposed for natural areas. No improvements are proposed off the property or in areas adjacent to any potential sensitive habitats. There will be no impact to stream areas.

C. Environmental Hazards – (See below)

D. Agriculture / Mariculture:

The project entails the construction of a retaining wall to protect two single-family residence sand is located within an area governed by a conventional residential zoning district, C-RA-B2 (Coastal, Residential/Agriculture, B combining). Although, this zoning designation allows for agricultural uses, the proposed project is required to preserve future land uses and not to supplant potential agriculture opportunities. As the project does not entail agricultural or maricultural uses, the project is consistent with this section.

E. Water Resources:

The Bolinas Community Public Utilities District currently serves the subject property. No water usage is required for the proposed development. Additionally, an engineered grading and drainage plan depicting and describing best management practices and a storm water control plan would be required prior to the issuance of a building permit for the project.

Though the project entails minor alterations of the site, the project has been sited on the most landward portions of the site and would not require disturbance to portions of the site containing sandy beach (at Ocean level).

F. Community Design:

The proposed project includes the development of an underground pier and tieback system to ensure stability for an existing single-family residence built prior to 1970. The project site is not located on or near a visually prominent ridgeline. The project would not block views of the ocean. The project has been sited such that it would preserve views of the ocean as seen from public viewing places such as the terminus of Overlook on the mesa. Views of the distant Mount Tamalpais to the northeast of the subject property from the ocean would not be further affected than existing conditions as the project is set back from the seaward portion of the property and in alignment with the existing pattern of residential development in the neighborhood. As such, the project is consistent with the Bolinas Community Standards pursuant to Marin County Implementation Plan Section 22.66.050, LUP policies related to development in Bolinas.

G. Community Development:

The project site is located within a developed residential neighborhood located along the bluff face near the mesa in the community of Bolinas. The project entails the construction of an underground retaining wall with the governing residential zoning district, C-RA-B2 (Coastal, Residential, Single-family). Therefore, the project is consistent with this finding.

H. Energy:

The project does not include improvements to residential structures and therefore would not be required to satisfy all energy-saving standards as required by the County's Building and Safety Division prior to the issuance of a building permit. However, best management practices would be employed to limit ground disturbance during construction and to recycle materials as needed. The project is consistent with the LUP energy policies (LUP Policies EH-2.1, EH-2.3, and CD-2.8) because it would be constructed in conformance with County energy efficiency standards, as verified during review of the Building Permit application.

I. Housing:

The proposed project includes the development of an underground pier and tieback system to ensure stability for an existing single-family residence built prior to 1970. The proposed project would not result in the removal or demolition of low and/or moderate-income housing. The project is consistent with the LUP housing policies to address low- and moderate-income

housing needs in the Coastal Zone (LUP Policies C-HS-1) because the project does not entail the demolition of existing deed restricted affordable housing and would not affect the available housing stock in the surrounding community.

J. Public Facilities and Services:

The subject property has an existing water meter from the Bolinas Public Utilities District and an existing individual on-site sewage disposal system. No improvements or modifications are proposed for the existing residential structures. The proposed improvement is located to the southeast of on-site septic systems and would be significantly set back (over 130-feet) from the dispersal field located to the north of the existing residence.

K. Transportation:

The project is currently accessed from Ocean Avenue via Terrace Avenue and would not entail any alterations or impacts to existing roadway facilities or public parking facilities. The project is consistent with the LUP transportation policies (C-TR-1 and C-TR-2) because the project would not entail any alterations to existing roadway facilities or result in impacts to the scenic quality of Highway One or other coastal roads.

L. Historic Resource Preservation / Archaeological Resources:

The subject property is not located within the designated historic preservation boundaries for Bolinas as identified in the Marin County Historic Study for the Local Coastal Program, Unit I. Furthermore, although there are existing structures over 50 years old, the proposed project is to protect existing improvements by shoring site-specific areas of erosion. The proposed development project does not entail site disturbance in this portion of the property. As required by Marin County Code, in the event archeological or paleontological resources are uncovered during construction, all work shall immediately cease, and the services of a qualified consulting archeologist be engaged to assess the value of the resource and to develop appropriate mitigation measures.

M. Parks, Recreation/Visitor Facilities:

The project is not located within the C-VCR zoning district and the proposed improvements would not have any impact upon recreation of visitor facilities. The proposed improvements are underground and require minimal excavation for drilled piers. and would not be visible from public viewing areas in Bolinas or areas along coast. There would be no impacts to visual resources, as viewed from any public street or public viewing location, as a result of this project.

Environmental Hazards: Marin County Interim Code Sections 22.56.130I.H, 22.56.130I.K, and 22.56.130I.L.

Dune Protection:

The proposed project does not have dunes or related resources on or near the site. The proposed project would have no impact on sensitive dune habitats. The project site is not located in a dune protection area as identified by the Natural Resources Map for Unit I of the Local Coastal Program.

Shoreline Protection:

The proposed project includes the underground construction of a pier and tieback system to arrest localized erosion as a result of improvements and disturbance on neighboring properties. Development of the proposed improvement would not directly impact natural erosion of the shoreline below, and south of the project area.

Geologic Hazards:

The subject property is not located in an area of geologic hazards as indicated on the Geologic Hazards Map for Unit I of the Local Coastal Program, and is not located within the delineated boundaries of the San Andreas Fault Zone as identified on the Alquist-Priolo special Studies Map.

According to the Marin County Soil Survey (USDA 1978), there are two soil series on the site; Xerorthents-urban land and rock outcrop-Xerorthents. Xerorthents type is used to describe the highly variable, disturbed soils, in this case, urban flatlands and the rock outcrops of the bluff face. Below the bluffs, the soil type is characterized as beaches.

Most of the property is characterized by a Monterey formation. The proposed project includes grouted tiebacks that will be drilled into the Monterey formation to depths beyond the assumed depth of bedrock. The Settgest/Moore report details observed recommendations.

The property is sloped from northwest to the southeast. The localized erosion and landsliding is encroaching from each side of the property: uncontrolled site disturbance on the southeast, and a new improvement on the southeast that contributes to new landsliding. Proposed construction would include limited spoils required for excavation of the two drilled piers. Limited spoils could be recontoured after constructions to reduce visual impacts associated with construction activities or dispersed within the site. No excavation materials would be off-hauled from the project site.

COMPLIANCE WITH COUNTY PLANS AND ORDINANCES

2015 Marin Countywide Plan:

The proposed project is consistent with the Marin Countywide Plan (CWP) for the following reasons:

BIO-1.1 Protect Wetlands, Habitat for Special-Status Species, Sensitive Natural Communities, and Important Wildlife Nursery Areas and Movement Corridors.

The proposed project is consistent with this policy because it would not entail development or disturbance within on-site wetlands, habitat or sensitive natural communities.

BIO-1.3 Protect Woodlands, Forests, and Tree Resources.

The proposed project is consistent with this policy because it would not entail the irreplaceable removal of a substantial number of mature, native trees. No native vegetation removal is required for the proposed project.

BIO-2.2 Limit Development Impacts.

The proposed project is consistent with this policy because it would not entail development or disturbance within existing habitat for special-status species of plants or animals.

BIO-2.3 Preserve Ecotones.

The proposed project is consistent with this policy because it would not alter riparian corridors, wetlands, baylands, or woodlands.

BIO-2.7 Protect Sensitive Coastal Habitat.

The proposed project is consistent with this policy because it would not entail the disturbance or removal of sensitive coastal habitats. The majority of the project site would remain undeveloped with proposed improvements occurring in areas of existing disturbance or low-habitat value.

BIO-3.1 Protect Wetlands.

The proposed project is consistent with this policy because it would not encroach into any potential sensitive habitats. According to County GIS records, the proposed improvements are over 100 feet from the Pacific Ocean.

BIO-4.6 Control Exotic Vegetation.

The proposed project is consistent with this policy because it would help control invasive and diseased on-site vegetation through the removal of invasive species and creation of a drainage plan. Only native plantings would be included as part of any landscaping plan.

BIO-4.20 Minimize Runoff.

The proposed project is consistent with this policy because it would incorporate Best Management Practices (BMP's) and other associated drainage features to effectively treat and control stormwater and impervious surfaces runoff.

WR-1.3 Improve Infiltration.

The project is consistent with this policy and would not result in substantial soil erosion or discharge of sediments or pollutants into surface runoff and would comply with the Marin County standards and best management practices required by the Department of Public Works.

WR-2.3 Avoid Erosion and Sedimentation

The project is consistent with this policy and would not result in substantial soil erosion or discharge of sediments or pollutants into surface runoff because the drainage improvements would comply with the Marin County standards and best management practices required by the Department of Public Works.

DES-4.1 Preserve Visual Quality.

The project would be consistent with CWP aesthetic policies and programs because it would protect scenic quality and views of ridgelines and the natural environment from adverse impacts related to development. Although the proposed project would entail physical development near the bluff, views towards the Pacific Ocean would generally remain unchanged. Proposed structures would not be visible from any public vantage point or beach area.

Bolinas Community Area Plan (1978):

The proposed project is not located on the gridded mesa; therefore, the following Bolinas Community Area Plan (BCAP) criteria shall be used to determine the appropriate policies necessary to implement the plan. The proposed project is consistent with the BCAP for the following reasons:

Land Use: *Any new construction proposed for environmentally sensitive or potentially dangerous areas, including single family construction, shall be assessed in relation to its impacts (Cliff Erosion Zone, Drainage Patterns, and slope policy areas, Alquist-Priolo Seismic Safety Zone, Coastal Commission Permit Zone, Marin Countywide Plan Conservation Zone, and suitability of soils for septic systems.*

The project would be consistent with this policy because the proposed project includes a geotechnical engineering site assessment concluding that the proposed improvement would not impact any areas susceptible to landslides or bluff erosion.

Geologic Considerations – Bolinas Peninsula Slope, Landslide, and Cliff Erosion Policies (D):

This policy shall have the following basic elements:

- A. *Marin County slope policy shall continue in effect*
- B. *Special engineering reports shall be required for all construction proposed in areas of the following description:*
 - a. *Slopes of 25% or greater*
 - b. *Prone to landslides*
 - c. *Within a zone extending inland from the top edge of all sea cliffs (usable life of a house considered to be 40 years)*
Zone Depth
Little Mesa to Duxbury Reef:
2/ft yr x 40 yrs. = 80 ft.

The project would be consistent with this policy because the existing structures are more than 50 feet from top of bluff. Robert Settgast and William Moore prepared a geotechnical investigation of the subject property and concluded that a localized slide is formed by site specific localized erosion due to poor maintenance and encroachments of the neighboring properties. Scott Stephens of Miller Pacific Engineering Group further confirmed the site conditions and the proposed improvements to protect the foundations of two existing residences.

California Coastal Act:

ARTICLE 4 – MARINE ENVIRONMENT

Section 30235 Construction altering natural shoreline

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

The project would be consistent with this section because the proposed project is required to protect two existing structures constructed prior to development of the Coastal Act. Furthermore, the proposed project has been designed to minimize impacts to sensitive vegetation or resources and would not degrade these areas nor would it result in adverse impacts to local shoreline sand supply.

ARTICLE 5 - LAND RESOURCES

Section 30240 Environmentally sensitive habitat areas; adjacent developments

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The project would be consistent with this section because the proposed design has been developed based on an evaluation of all the potential land constraints. The project has been designed to minimize impacts to sensitive vegetation and would not degrade these areas.

ARTICLE 6 - DEVELOPMENT

Section 30250 Location; existing developed area

(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

The project would be consistent with this section because the proposed design has been developed based on an evaluation of all the potential land constraints. The project has been designed to minimize areas of new disturbance and is located near existing developed areas. The project has water for domestic and fire protection purposes, has adequate access, and would be situated away from streams and sensitive vegetation.

Section 30251 Scenic and visual qualities

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

The project would be consistent with this section because the proposed project is designed to minimize visual projections or intrusions above ridgelines or views through the project site. The project proposes minimal alterations to natural landforms and would not be seen from public vantage points.

Section 30253 Minimization of adverse impacts

New development shall do all of the following:

- a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

- c) *Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.*
- d) *Minimize energy consumption and vehicle miles traveled.*
- e) *Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.*

The project would be consistent with this section because the proposed project has been designed based on existing soil, drainage and woodland conditions. The proposed construction plan will assure stability and structural integrity and further preserve existing structures on and off-site. Furthermore, proposed improvements plans have been designed to limit substantially altering the existing natural landforms.